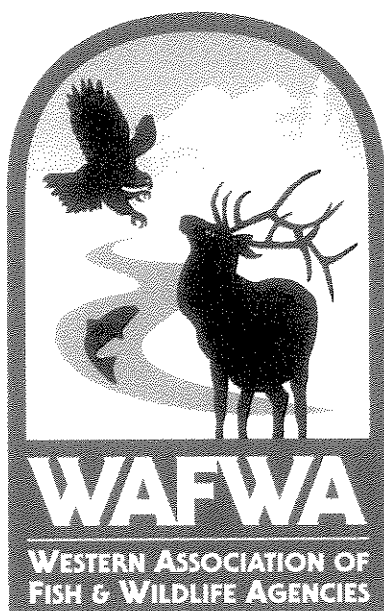


Fisheries Library

WESTERN ASSOCIATION OF FISH AND WILDLIFE AGENCIES

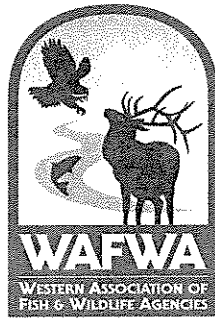
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MID-WINTER BUSINESS MEETING MINUTES AND RELATED DOCUMENTS

January 6-7, 2007
Tucson, Arizona





Mid-winter Business Meeting Minutes
January 6-7, 2007
Tucson, Arizona

President Duane Shroufe called the meeting to order at 3:00 P.M., January 6th. He asked Secretary Larry Kruckenberg to take roll call of member agencies. It showed the following:

Alaska.....	Lisa Evans
Alberta.....	Absent
Arizona.....	Duane Shroufe
British Columbia.....	Absent
California.....	Absent
Colorado.....	Bruce McCloskey
Hawaii.....	Paul Conry
Idaho.....	Steven Huffaker
Kansas.....	Keith Sexson
Montana.....	Larry Peterman
Nebraska.....	Kirk Nelson
Nevada.....	Russ Mason
New Mexico.....	Bruce Thompson
North Dakota.....	Roger Rostvet
Oklahoma.....	Richard Hatcher
Oregon.....	Virgil Moore
Saskatchewan.....	Absent
South Dakota.....	Emmett Keyser
Texas.....	Ruben Cantu
Utah.....	Jim Karpowitz
Washington.....	Bruce Bjork
Wyoming.....	Terry Cleveland
Yukon.....	Absent

The Secretary advised that a quorum was present, with 18 of 23 member agency representatives in attendance. The meeting continued.

1. ADDITIONS TO THE AGENDA

President Duane Shroufe asked if there were any changes or additions to the agenda. Paul Conry requested that he be allowed time to discuss Endangered Species Act

regulation reform. Bruce McCloskey said he needed a few minutes to discuss AFWA's prospectus involving the Wildlife and Energy Development Liaison position. President Shroufe indicated these items would be placed last on the agenda under other business.

2. JULY '06 BUSINESS MEETING MINUTES

President Duane Shroufe asked if there were any additions or corrections to the minutes of the July 26, 2006, business meeting of the Association. Hearing none, it was moved by Terry Cleveland, and seconded by Steven Huffaker, that the July 26, 2006, business meeting minutes be approved as written and previously distributed. The motion passed unanimously.

3. U.S. FISH AND WILDLIFE SERVICE REPORT

Tom Melius presented the report for the U. S. Fish and Wildlife Service (USFWS) from a national perspective. He mentioned several staffing changes involving the regional directors. Permanent appointments include Ren Lohofener in Region 1 (Portland), Benjamin Tuggle in Region 2 (Albuquerque), and Mitch King in Region 6 (Denver). Other staffing news included the retirement of Deputy Director Marshall Jones who has been replaced by Ken Stansell on an interim basis, and the departure of Interior's Matt Hogan who became Executive Director of the Association of Fish and Wildlife Agencies (AFWA) last September.

Mr. Melius also discussed the status of funding for FY 2007, given the fact that the Interior budget has not yet been approved. He explained a continuing resolution was in effect and that many questions remain as to its duration and scope. Mr. Melius noted that Congressional hearings are to commence shortly to determine the potential impacts of the continuing resolution should it extend for one year.

Mr. Melius stated that Director Dale Hall's priorities for the USFWS for the coming year include the Farm Bill, Fish Habitat Initiative and implementation of the State Wildlife Action plans.

Mr. Melius reported on avian influenza sampling efforts in Alaska. He said 18,000 samples were collected last year, with no positives found. He also reported the USFWS has proposed to protect the polar bear as a threatened species under the Endangered Species Act. This action has set into motion a 90-day public comment period.

Mitch King reported on the hunting lawsuit on refuges brought by the Human Society of the United States. It deals with an allegation that the USFWS failed to consider the cumulative impacts of hunting on refuges. Mr. King indicated this action has the possible effect of holding up any new refuges from commencing hunting programs until the matter is resolved by the courts, but not those that currently allow hunting.

Mr. King stated that a ruling is expected soon on Western Watershed's lawsuit involving the 12-month finding on sage grouse.

Mr. King also alerted directors within the boundaries of the Intermountain West Joint Venture that the USFWS is concerned about staffing, unobligated funds and other governance and operating issues surrounding the joint venture. He indicated the USFWS is attempting to resolve these issues and he encouraged the directors to get, and stay, more engaged in matters involving this or any other joint venture within their jurisdiction.

4. U.S. FOREST SERVICE REPORT

Chris Iverson presented the U. S. Forest Service (USFS) report. He reported on several policy issues including disease transmission from domestic to bighorn sheep, economic impacts of hunting and fishing on USFS-managed lands, energy development on national forests, grizzly bear conservation and recovery, the Healthy Forests Report, Canada lynx recovery and Forest Plan amendments, proposed *Forest Service Manual* amendment dealing with predator damage management in wilderness areas, piscicide applications on national forest system lands, the National Forest Management Act Planning Rule, black-tailed prairie dog conservation, roadless area conservation management, Rise to the Future Implementation Plan, travel management, and National Fish Habitat Initiatives – specifically trout initiatives. He distributed briefing papers on each of these topics which provide detailed status and contact information (see pages 20 - 39).

Predator damage management in wilderness areas generated the most discussion and concern, with the body convened expressing the view the amendment is too restrictive towards the states and does not sufficiently recognize state management authority. Russ Mason, in particular, had significant issues, having raised these with the Association's membership in advance of the business meeting. He asked for assurances that the amendment would not restrict states' jurisdiction or ability to exercise their mandated responsibility with respect to fish and wildlife in national forests. A number of options and suggested wording changes were offered and discussed. Mr. Iverson asked for, and was granted, time to consider these suggested changes. President Duane Shroufe asked Mr. Iverson to return during the other business portion of the agenda at which time the matter would be taken up again.

5. USGS/BRD REPORT

Elisabeth Brouwers presented the USGS/BRD report. She announced USGS has a new director – Mark Meyers. Among his priorities is the development of a Strategic Science Plan. Ms. Brouwers indicated new initiatives that will be forthcoming in the next few months include climate change, hydrologic and geologic hazards, human health, energy and mineral assessments, and water quality and quantity.

Ms. Brouwers referenced, though did not report specifically on, a handout that summarizes a listing and description of ongoing USGS/BRD project highlights in each of the western states (see pages 40 - 82).

6. BUREAU OF LAND MANAGEMENT

Jim Dryden presented the Bureau of Land Management (BLM) report. He reported on several staffing changes including Jim Hughes being named Acting Director, and the upcoming departure of Cal McCluskey who will retire in April.

Mr. Dryden indicated that in the yet-to-be announced President's proposed FY 2008 budget, that funding for BLM's wildlife and fisheries programs should be relatively stable.

Mr. Dryden discussed implementation of the Energy Policy Act of 2005, the National Vegetation Management Environmental Impact Statement, and the Plant Conservation Program and native plant materials developments. Handouts were provided for each of these topics which include current status and contact information (see pages 83 -86).

Mr. Dryden also advised the directors that two lawsuits have been filed on the new grazing rule. Issues center, among other things, on the exclusion of the public from the decision-making process, temporary permits and shared ownership of range improvements.

Mr. Dryden also discussed the *Policies and Guidelines for Fisheries and Wildlife Management in National Forest and Bureau of Land Management Wilderness Areas*. The document was signed by AFWA, USFS and BLM leadership in mid-2006, and sent out to the states by AFWA immediately thereafter. After questions about why the document hadn't received similar distribution to USFS and BLM offices and personnel, Mr. Dryden agreed to follow-up and determine the current status within those agencies.

7. NATIONAL PARK SERVICE REPORT

Bert Frost presented the National Park Service (NPS) report. He began by stressing the importance of communications and meeting periodically to discuss and resolve issues.

Mr. Frost announced leadership changes within the NPS that included new director Mary Bomar and Sue Masica as the new Chief of Staff. In addition, he noted that both Deputy Director slots are currently vacant.

On the budget front, Mr. Frost mentioned it is still too early to know the full impacts resulting from the continuing budget resolution. He also stated that a key initiative included in the FY 2008 budget is the inclusion of the Centennial Challenge – an attempt to assess the needs of the NPS over the next 100 years.

Mr. Frost identified avian influenza, climate change, energy development and threatened and endangered species as four priority issues facing the NPS at present. He also acknowledged the Association's 2006 resolution involving ungulate management within the national park system, but offered to defer that discussion until later on the business meeting agenda.

8. USDA/WILDLIFE SERVICES REPORT

David Bergman presented the Wildlife Services report on behalf of Jeff Green. In addition to more generally discussing issues involving mountain lions, wolves, feral pigs, disease work, staff changes, rabies program and avian influenza, a handout was provided to the directors that provided summary of Wildlife Services' activities in each western state (see pages 87 -91).

9. NATURAL RESOURCES CONSERVATION SERVICE REPORT

Wendell Gilgert presented the Natural Resources Conservation Service (NRCS) report. He gave a PowerPoint presentation that summarized NRCS program expenditures and opportunities on a state-by-state basis. His underlying message was that state wildlife agencies need to take greater advantage of the conservation provisions of the Farm Bill. Mr. Gilgert stated that while some states are highly engaged, others are not.

Mr. Gilgert also made mention of the fact that NRCS could use additional assistance from state wildlife agencies in the planning and permitting arena, and program implementation and monitoring. He cited the presence of 37 biologists from partner entities in NRCS offices – including the states – as being of great value for improving landowner participation in conservation programs.

10. BIGHORN SHEEP/DOMESTIC SHEEP INTERACTIONS

President Duane Shroufe introduced this topic by indicating that the Association had been contacted by BLM about the prospect of creating a working group to address this issue. More specifically, he stated that help was requested in developing agency guidelines that either had expired or were about to expire, and in need of revision. He noted the USFS had expressed similar interests.

Considerable discussion followed among the directors and assembled federal agency representatives about the status of the guidelines, the urgency in getting the matter addressed, and the value of this being taken on by the Association. Throughout the discussion, it kept surfacing that while, indeed, a framework for managing domestic sheep and goats in wild sheep habitat was important and there exists a sense of urgency in getting revised guidelines in place, the issues surrounding wild sheep are more complex and, in many cases, far more serious than those involving domestic sheep and goats.

Terry Cleveland floated a proposal that would establish a broader-focused Wild Sheep Working Group that, among its initial charges, would take up the issue of managing domestic sheep and goats in wild sheep habitat. He felt this approach would be preferable to creating a separate working group to address a single issue. The proposal gained favor because it appeared more consistent with the approach and reasoning behind already established working groups within the Association.

It was subsequently moved by Terry Cleveland, and seconded by Jim Karpowitz, that in an effort to enhance development of guidelines for wild sheep management, that a WAFWA-sponsored Wild Sheep Working Group, comprised of representatives of member agencies of the Association where wild sheep are found, and of the appropriate federal agencies whose lands provide habitat for wild sheep, be created and convened as soon as possible. The motion passed unanimously.

Discussion followed on the need for a Director Sponsor for this working group, as well as someone to lead this working group. Jim Karpowitz volunteered to be the Director Sponsor. Terry Cleveland volunteered Kevin Hurley from the Wyoming Game and Fish Department to serve as Chair of the working group. President Duane Shroufe's call for head nodding to signal concurrence with this leadership team showed universal acceptance.

In passing this motion, the following actions were agreed to by the Directors:

- 96). That the Association establish a Wild Sheep Working Group.*
- 97). That Jim Karpowitz serve as Director Sponsor for the Wild Sheep Working Group.*
- 98). That Kevin Hurley serve as Chair of the Wild Sheep Working Group.*
- 99). That management of domestic sheep and goats in wild sheep habitat be among the first of issues addressed by the Wild Sheep Working Group.*

The business meeting was suspended at 5:04 P.M., January 6th.

The business meeting was reconvened at 8:03 A.M., January 7th.

11. SECRETARY'S REPORT

Secretary Larry Kruckenberg indicated the past six months had been very busy, though this period is typically not as hectic as that encountered between January and July. He cited completion and distribution of the proceedings from the plenary sessions from the annual conference in Kananaskis, launching of the WAFWA website, completion of the business meeting-related action items emanating from the annual business meeting in Bismarck, and submission of three Multi-state Conservation Grants as some of the major activities since the last business meeting. A written Secretary's Report that contains additional information on the activities by the Secretary was distributed to the directors (see pages 92 - 93).

Secretary Kruckenberg also distributed a number of handouts including copies of the 2006-2007 Committee and Working Group Roster, the Status of Action Items 2006-2007 (see pages 94 - 100), and other correspondence to be discussed during the course of the business meeting.

It was moved by Steven Huffaker, and seconded by Bruce McCloskey, that the Secretary's report be accepted as presented. The motion passed unanimously.

12. TREASURER'S REPORT

Treasurer Stephen Barton presented the Association's financial report covering the period July 1 – December 31, 2006, which showed total assets for all funds at \$245,567.32 (see page 101). He indicated this amount does include \$38,979.57 in "open bills" that have been invoiced by the Association, but for which the funds have not yet been received. This compares to \$273,203.89 and \$1,623.51, respectively, at the end of the last fiscal year.

It was moved by Bruce McCloskey, and seconded by Keith Sexson, that the Treasurer's report, including the financial statement, be accepted as presented. The motion passed unanimously.

13. AFWA REPORT

Executive Director Matt Hogan presented the AFWA Report. He distributed the *Washington Staff Report* which provides additional details concerning major AFWA activities and initiatives (see pages 102 - 146). He explained the report had undergone revamping, with bolded text now included to depict new developments since the AFWA annual meeting in September.

Mr. Hogan thanked the directors for organizing the tour at Precision Shooting Equipment (PSE) the first day of the Association's mid-winter meeting. He indicated this action was consistent with the Statement of Principles that AFWA and the sporting industry had agreed upon last fall in an effort to encourage and instill a stronger partnership between the two entities.

Mr. Hogan stated that the USDA/APHIS' final CWD rule is still on hold. Implementation was delayed at AFWA's (and others) request.

Mr. Hogan indicated that activities involving the 2007 Farm Bill are expected to ramp up considerably in the coming months. The focus and construct of the bill is also likely to change because of the Congressional elections and changes in key leadership and majority status in committees.

Mr. Hogan reported on the success enjoyed by AFWA in sponsoring the inaugural class of recruits who are participating in the National Conservation Leadership Institute. He indicated the response has been overwhelmingly positive. Mr. Hogan encouraged the directors to start thinking about who from their respective agencies they will be nominating for the second class to commence later in 2007. Mr. Hogan stressed that emphasis on recruitment of participants should focus on the best and brightest candidates for future agency leadership roles.

Mr. Hogan announced that production of AFWA's first ever annual report is progressing nicely. He stated the report will be ready for release and distribution in March, 2007.

14. COMMISSIONERS' COMMITTEE REPORT

Chair Mike Golightly presented the Commissioners' Committee report. He indicated that 19 commission/board members from 10 different states attended the meeting, in addition to an equal number of directors and deputies, and federal agency representatives.

Mr. Golightly noted that it appeared the new meeting format wherein the committee focuses on several issue topics for an hour each at the meeting has gained considerable favor among members and was largely responsible for the increased attendance, especially among non-committee members. In that regard, he thanked the states of Colorado, Arizona and New Mexico for leading the presentations on invasive species, mountain lion protocol in urban settings, and energy development affects on wildlife, respectively. Mr. Golightly also announced the committee has selected two issue topics for its July, 2007, meeting which include: 1) Farm Bill – South Dakota has the lead; and 2) public wildlife on private land – Utah has the lead.

Mr. Golightly said commission/board members also shared updates on what has transpired in their respective jurisdictions during the past six months, and he urged directors and others to review the various state and province reports (see pages 147 -298).

Mr. Golightly reported that the committee is working with AFWA's Management Assistance Team (MAT) to update the *Commission Guidebook*. He stated that a small sub-committee has been tasked to work with MAT to complete the revisions to this popular reference manual. Mr. Golightly said he hoped the project will be completed by the annual conference and thus allow a joint commission/director training opportunity.

Mr. Golightly also reported on the committee's discussion with AFWA President Ed Parker aimed at securing greater standing and a venue at the annual AFWA conference so that commission/board members can convene and exchange information. He indicated this request was largely predicated on the successful model utilized by WAFWA. Mr. Golightly stated that President Parker agreed to support a meeting being held in Louisville in September, and that he is willing to encourage the directors to send a commission/board member to participate.

It was moved by Virgil Moore, and seconded by Steven Huffaker, that the Commissioners' Committee report be accepted as presented. The motion passed unanimously.

In passing this motion, the following actions were agreed to by the directors:

- 100). That the Commissioners' Committee focus on the Farm Bill and Public Wildlife on Private Land as its issue topics at the July, 2007, committee meeting.*

101). That South Dakota and Utah, respectively, assist the Commissioners' Committee in developing its agenda around these two topics.

102). That a Commissioners' Forum be held at the September, 2007, AFWA annual conference in Louisville, Kentucky.

15. CONTRIBUTING MEMBER REQUEST

Secretary Larry Kruckenberg indicated that President/CEO Miles Moretti had recently formally petitioned to have the Mule Deer Foundation become a contributing member of the Association. He stated all was in order and urged support of the request.

It was moved by Jim Karpowitz, and seconded by Bruce McCloskey, that the Mule Deer Foundation be granted contributing member status with the Association upon payment of its annual dues in the amount of \$350. The motion passed unanimously.

In passing this motion, the following actions were agreed to by the directors:

103). That the Mule Deer Foundation be granted contributing member status within the Association.

104). That the Mule Deer Foundation be billed for its 2007 annual dues in the amount of \$350.

16. MULE DEER WORKING GROUP REPORT

Chair Jim Heffelfinger presented the Mule Deer Working Group report. He announced the next meeting of the group will take place January 17-20, 2007, in conjunction with the Mule Deer Foundation/FNAWS/Sportsman for Habitat National EXPO in Salt Lake City, Utah.

Mr. Heffelfinger reviewed all of the current activities of the working group and provided a status report on each. A handout accompanied his oral report which provides additional details (see pages 299 -301).

Mr. Heffelfinger thanked Steven Huffaker for serving as the working group's Director Sponsor for the past two years, and he noted that Mr. Huffaker's retirement necessitates the naming of a replacement.

It was moved by Steven Huffaker, and seconded by Larry Peterman, that the Mule Deer Working Group report be accepted as presented. The motion passed unanimously.

In passing this motion, the following actions were agreed to by the directors:

105). That WAFWA member agencies allow their representative on the Mule Deer Working Group to attend the next meeting of the group scheduled for January 17-20, 2007.

106). That any comments on the Draft Habitat Guidelines for the Northern Forest, Coastal Rainforest and Intermountain West be provided to the lead authors by February 1, 2007.

17. THE WILDLIFE SOCIETY

Executive Director/CEO Michael Hutchins updated the directors on a number of changes at THE WILDLIFE SOCIETY (TWS) including the launching of a new publication *The Wildlife Professional*, a completely reorganized website, an aggressive campaign to increase the number of student TWS chapters, and changes in the format of TWS conferences. In particular, Mr. Hutchins pitched the idea of WAFWA contributing \$50,000 to help launch *The Wildlife Professional* and, in return, have WAFWA receive recognition for its donation. No action was taken on the proposal at the business meeting.

Mr. Hutchins acknowledged this was the first time in a long time that TWS had participated in a WAFWA meeting. He stressed the value of face-to-face communications and vowed to continue to participate in such venues in the future.

In hearing this report, the following action was agreed to by the directors:

- 107). That the Executive Committee review the TWS proposal that calls for WAFWA to contribute \$50,000 to help launch The Wildlife Professional.*

18. FOLLOW-UP TO JULY '06 BUSINESS MEETING

President Duane Shroufe provided an update on several major action items emanating from the July, 2006, business meeting. Specifically, he: 1) referenced and discussed the response from the USFWS to the Association's letter concerning potential conflicts regarding state-managed activities on National Wildlife Refuge System Lands in Nebraska, Idaho and Colorado; 2) acknowledged the response from the NPS to the Association's earlier letter involving NPS' authority to regulate public activities in park waterways – all-the-while expressing concern and frustration over the brevity and content of the response; and 3) as regards the proposed actions embedded in the resolution involving the Public Trust Doctrine, President Shroufe advised that he was assigning the Resource Information and Education Committee with the responsibility of initiating these efforts and reporting on progress at the July, 2007, business meeting.

As a result of hearing this report, the following action was agreed to by the directors:

- 108). That the Resource Information and Education Committee undertake the actions outlined in the Public Trust Doctrine resolution passed at the July, 2006, business meeting and report on progress at the July, 2007, business meeting.*

19. WESTERN BIRD CONSERVATION COMMITTEE REPORT

Chair Bruce McCloskey presented the Western Bird Conservation Committee report. He mentioned that given the multitude of issues currently being addressed by the committee, it is his view that its members need to meet twice a year. Mr. McCloskey also indicated that the Association should consider naming a Vice-Chair to assist in running the activities of this committee.

Mr. McCloskey suggested that the Association consider bringing its Sage and Columbian Sharp-tailed Grouse Technical Committee under the purview of the Western Bird Conservation Committee to increase the utility and effectiveness of that group in addressing issues of interest and concern to the directors, as well as enhance communications.

Mr. McCloskey urged the western states to get more involved in the U.S. North American Bird Conservation Initiative (NABSCI), as well as AFWA's Bird Conservation Committee.

Mr. McCloskey spoke to the immediate and long-term needs and actions of WAFWA member states and provinces as regards sage grouse. Topping the list is implementation of the *Greater Sage-Grouse Comprehensive Conservation Strategy*. He spoke again to the significance of that document and the formal signing and delivery of the *Strategy* to the USFWS the day prior.

Mr. McCloskey stressed the need for all future Association efforts involving sage grouse to continue to be coordinated through the Western Bird Conservation Committee.

Mr. McCloskey identified four current priorities for his committee: 1) get the draft federal legislation prepared to affect oversight, funding, and delivery of conservation measures outlined in the *Greater Sage-Grouse Comprehensive Conservation Strategy* (i.e. North American Sagebrush Ecosystem Conservation Act – a.k.a. NASECA; 2) modify and extend the Memorandum of Understanding between WAFWA and the federal agencies involving sage grouse conservation efforts that is due to expire at the end of June, 2007; 3) prepare and distribute a press release regarding the completion and availability of the *Greater Sage-Grouse Comprehensive Conservation Strategy* and achieve its broad distribution both electronically and in hard copy; and 4) begin working more closely with the Association's Mule Deer Working Group to achieve greater efficiencies from conservation measures aimed at both species, and other value-added benefits from working jointly on co-inhabited landscapes.

It was moved by Steven Huffaker, and seconded by Larry Peterman, that the Western Bird Conservation Committee report be accepted as presented. The motion passed unanimously.

In passing this motion, the following actions were agreed to by the directors:

109). That commencing in 2007, the Western Bird Conservation Committee meet twice a year.

110). That the Association's President name a Vice-Chair for the Western Bird Conservation Committee.

111). That the Association's Western States Sage and Columbian Sharp-tailed Grouse Technical Committee operate under the purview of the Western Bird Conservation Committee.

112). That future Association efforts directed at sage grouse be coordinated through the Western Bird Conservation Committee.

113). That the draft language for the North American Sagebrush Ecosystem Conservation Act (NASECA) be prepared and circulated to WAFWA's membership for review and eventual adoption.

114). That the MOU between WAFWA and the federal agencies involving sage grouse conservation efforts be modified and extended in advance of the July, 2007, business meeting and a status report be provided there.

115). That a news release announcing completion and availability of the Greater Sage-Grouse Comprehensive Conservation Strategy be prepared and distributed, along with subsequent broad distribution of the Strategy itself in both electronic and hard copy format to interested individuals and entities.

20. UNGULATE MANAGEMENT IN NATIONAL PARKS

Bruce McCloskey provided the directors with an update regarding the over population of elk in Rocky Mountain National Park and happenings since the Association adopted the *Ungulate Management in National Parks* resolution at its 2006 annual conference. He complimented AFWA staff for their efforts in furthering the dialogue regarding the need for action involving the use of public hunters when reduction efforts are undertaken. Mr. McCloskey noted that to date, 40 sporting organizations have gone on record as supporting the Colorado Division of Wildlife's and the Association's position, as has Congressman Udall from Colorado. Mr. McCloskey also said a meeting had been held with NPS leadership, though he was uncertain whether it will result in any favorable consideration of the proposal.

President Duane Shroufe called upon Bert Frost to provide the NPS' perspective. Mr. Frost indicated 64 or 390 park units and one national park – Grand Teton in Wyoming – currently allow hunting of some sort. He recounted the history of population reduction efforts in the past and the controversy associated with them, most notably elk in Yellowstone National Park.

Mr. Frost indicated that neither he nor other key staff had been aware of the aforementioned meeting with NPS leadership. He suggested they be included in any subsequent meetings on this topic. President Shroufe stated that Matt Hogan and Gary Taylor are attempting to convene another meeting and that Mr. Frost will be invited to participate.

Mr. Frost concluded that the use of public hunters in reduction efforts is going to be a difficult issue to resolve because of differing philosophies and mandates of the respective involved agencies. Mr. McCloskey countered that while true, Colorado is intent on seeking resolution that is favorable to their and other state wildlife agency interests.

In hearing this report, the following action was agreed to by the directors:

116). That any subsequent meetings between NPS leadership and AFWA/WAFWA/Colorado Division of Wildlife representatives involving ungulate management in national parks include NPS' Bert Frost as a participant.

21. STATE WILDLIFE GRANT PROGRAM CHANGES

Lisa Evans distributed both a draft letter and a draft resolution authored by the State of Alaska that call for consistent terms of advocacy for the State Wildlife Grant Program. Specifically, the documents advocated multi-year appropriations, greater flexibility and discretion towards the types of projects that qualify for SWG funding, and the need for a programmatic 3:1 federal/state matching requirement.

Lengthy discussion followed, especially as it relates to project eligibility and match requirements, with most directors concerned that any formal action on the part of WAFWA regarding the State Wildlife Grants Program could send a wrong message to Congress and, in the end, be counterproductive.

President Duane Shroufe inquired of Ms. Evans as to whether Alaska would be content to have WAFWA advance these recommendations as they relate to future, stand alone funding measures, or if it was Alaska's intent at this time to press for formal action as it relates solely to the State Wildlife Grants Program. Ms. Evans responded that given the discussion and reluctance from the convened directors, that future funding measures be the focus of the communications.

It was moved by Lisa Evans, and seconded by Virgil Moore, that Alaska revise the draft letter to AFWA President Ed Parker to indicate that future, stand alone legislation involving funding for the states be multi-year and sustainable, allow its use for education and wildlife viewing purposes, and include a 3:1 federal/state matching requirement. The motion passed unanimously.

In passing this motion, the following action was agreed to by the directors:

117). That Alaska (Lisa Evans) revise the draft letter to AFWA President Ed Parker defining consistent terms in advocacy for future, stand alone federal funding measures to the states to be multi-year and sustainable, allow its use for education and wildlife viewing purposes, and include a 3:1 federal/state matching requirement.

22. BE BEAR AWARE CAMPAIGN UPDATE

Chuck Bartlebaugh presented an update on the Be Bear Aware and Wildlife Stewardship Campaign. He noted that all of the regional associations and AFWA are supporting the campaign. Mr. Bartlebaugh stated the challenges are significant to overcome with approximately \$100 million being spent annually on inappropriate media messages that either subtly or blatantly encourage people to get up close and personal with wildlife. He noted, however, that through the partnership between all the entities involved in the campaign, there is the potential to reach the 151 million people who actively recreate on an annual basis with information and consistent messages about how to enjoy wildlife safely and responsibly.

Mr. Bartlebaugh was particularly encouraged that Boy Scouts of America and Girl Scouts of the USA have also joined the campaign, thus allowing access to bear avoidance and wildlife stewardship education to their eight million members.

23. ASSOCIATION REPRESENTATION

President Duane Shroufe opted to take up the next three items on the agenda in a single discussion as all related to ensuring adequate representation and leadership regarding the Association's operations and interests.

The first item to be addressed was finding a Director Sponsor for the Mule Deer Working Group, necessitated by the retirement of Steven Huffaker. Mr. Shroufe asked for a volunteer. Jim Karpowitz did so. Mr. Shroufe advised the audience that Mr. Karpowitz is the new Director Sponsor for the Mule Deer Working Group.

President Shroufe next announced he had recently appointed Virgil Moore to serve as Chair of the Inland and Marine Fisheries Committee, but that this was his first opportunity to make a formal announcement. Mr. Moore will replace Terry Crawforth who retired last July.

Finally, President Shroufe noted that Steven Huffaker's retirement also meant that a new WAFWA representative is needed to serve on the Council for Environmental Education's Project WILD Program Steering Committee. He asked for volunteers, however, there were none. He asked Mr. Huffaker if he would consider continuing to serve as WAFWA's representative. Mr. Huffaker answered affirmatively. Mr. Shroufe announced that Mr. Huffaker's role on the Project WILD Program Steering Committee will remain unchanged, and he looked forward to hearing regular updates from Mr. Huffaker at future meetings.

In hearing this report, the following actions were agreed to by the directors:

118). That Jim Karpowitz serve as the new Director Sponsor for the Mule Deer Working Group.

119). That Virgil Moore serve as the new Chair of the Inland and Marine Fisheries Committee.

120). That Steven Huffaker continue to serve as the Association's representative on the CEE Project WILD Program Steering Committee.

24. FERRETS, PRAIRIE DOGS AND RELATED ECOSYSTEM

Bill Van Pelt provided an update on the black-footed ferret five-year status review. Mr. Van Pelt represented WAFWA in that undertaking. He indicated the review concluded that there will be no change in status for the black-footed ferret. It will remain listed as an endangered species under protection of the federal Endangered Species Act. Mr. Van Pelt stated there are 665 black-footed ferrets surviving at this time.

Mr. Van Pelt also announced that the draft of the new *Black-footed Ferret Recovery Plan* is available for early review by agencies. The 238-page document will be the subject of

discussion at a special meeting in Fort Collins, Colorado, in February. His underlying message to the directors was to send a representative to the meeting and to stay engaged.

Deb O'Neill reported that both the Association's White-tailed and Gunnison's Prairie Dog Conservation Strategies should be completed by the end of January, 2007. She requested assistance from the directors in impressing upon their respective staff members involved in the Gunnison's planning effort how important it is for them to set aside any remaining differences and get the strategy completed.

Ms. O'Neill also advised the directors that the National Wildlife Federation, the original petitioner that called for the listing of the black-tailed prairie dog, has recently sent a letter expressing the view that they felt the states are losing focus on black-tailed prairie dog conservation efforts.

Ms. O'Neill said there is a need to formalize the Direct Sponsor role for the Prairie Ecosystem Initiative, especially given John Cooper's retirement and relinquishment of Chair responsibilities with the Habitat Committee. President Duane Shroufe advised the group that because Keith Sexson is the new Chair of the Habitat Committee, it seemed prudent for Mr. Sexson to also serve as Director Sponsor for this initiative.

In hearing this report, the following actions were agreed to by the directors:

121). That a conference call be held in early-February, 2007, to resolve any remaining issues associated with the completion of the Gunnison's Prairie Dog Conservation Strategy.

122). That Keith Sexson serve as the Director Sponsor for the Association's Prairie Ecosystem initiative.

25. HABITAT COMMITTEE REPORT

Chair Keith Sexson introduced Mark Fowden and the topic of restoring aspen in the West. He indicated this proposal was an action item emanating from the Habitat Committee's 2006 meeting.

Mr. Fowden indicated that several decades of research has shown the value and need to actively manage aspen. Increasingly, ecologists, wildlife biologists, foresters and other professionals within the USFS and BLM recognize the need to increase the scope of aspen restoration efforts. Yet, he said, that while federal land managers control the preponderance of aspen in the West, they require state and local partners to sustain efforts across time. Mr. Fowden stated that because wildlife and water are public trust responsibilities of each state, the states have a resource obligation to better manage aspen communities, too. He noted that because wildlife browsing by elk and deer can preclude restoration efforts in some instances, the states have a pivotal role in ensuring science-based restoration activities are implemented.

Mr. Fowden stated that while action is best accomplished locally, a West-wide, coordinated approach is needed to better provide a reliable source of funding for research and project implementation. He said agreement development (i.e. MOU) for state and

federal cooperation is also needed to ensure consistency of purpose across state and federal boundaries and the development of best management practices. Mr. Fowden indicated that the Habitat Committee proposes that over the next year, a sub-group of the Habitat Committee should explore these and other deliverables. He stated the group should prepare a report based on the need for further action, and, if there is a demonstrated need, the group would then draft formal recommendations for consideration by the Chair of the Habitat Committee and the directors by the January, 2008, business meeting.

It was moved by Keith Sexson, and seconded by Paul Conry, that a sub-group of the Habitat Committee be organized and convened to discuss aspen restoration in the West and whether there is a role that WAFWA should play. It was further moved that a report and recommendations be completed by the end of 2007, and presented at the January, 2008, mid-winter business meeting. The motion passed unanimously.

In passing this motion, the following actions were agreed to by the directors:

123). That a sub-group of the Habitat Committee take up the issue of aspen restoration in the West and whether there is a role that WAFWA should play.

124). That the sub-group prepare a report and recommendations by the end of 2007, and make a presentation to the directors at the January, 2008, business meeting.

26. PARC PROPOSAL

Eric Gardner discussed the history of Partners in Amphibian and Reptile Conservation (PARC), a diverse network of like-minded, citizens, professionals and organizations dedicated to herpetofaunal conservation. He indicated the mission of PARC is to conserve amphibians, reptiles and their habitats as integral parts of our ecosystem and culture through proactive and coordinated public/private partnerships. Mr. Gardner discussed some of the conservation tools and products available through PARC, including habitat management guidelines, and inventory and monitoring handbooks.

Mr. Gardner advanced a proposal from PARC that would include a partnership with the states to create a National PARC State Agencies Coordinator position, principally utilizing unspent State Wildlife Grant monies from participating states that would, in turn, be matched 1:1 with a \$50,000 cash match from Arizona and a \$50,000 in-kind match via the PARC network. He indicated that a letter would be forthcoming to the states in the near future asking for support and participation in this multi-state funding opportunity utilizing State Wildlife Grant funding and a match through PARC to support the coordinator position.

27. MOUNTAIN LION WORKING GROUP REPORT

Chair Russ Mason presented a report on behalf of the fledgling Mountain Lion Working Group. The group was organized at the request of the directors in July, 2006, in response to ongoing issues involving publication of the *Cougar Management Guidelines*. Mr.

Mason indicated the group had convened in mid-December and developed a set of recommendations for consideration by the directors.

Mr. Mason stated the group concluded that most of the information in the current *Cougar Management Guidelines* is useful for management, and that revision of the *Guidelines* is preferable to developing a second document independent of the *Guidelines*. In that regard, he said the working group is recommending that WAFWA partner with the original authors to revise the *Guidelines*, within the auspices of the Mountain Lion Workshop, and produce a draft second edition by January, 2009.

Mr. Mason also announced the composition of the Mountain Lion Working Group which includes Chuck Anderson (WY), Jerry Apker (CO), Kevin Bunnell (UT), Dorothy Fecske (ND), Dave Holderman (TX), Jonathan Jenks (SDSU), Tony Leif (SD), Fred Lindzey (UW-retired), Donald Martorello (WA), Ted McKinney (AZ), Steve Nadeau (ID), and Doug Updike (CA). He further indicated the western wildlife chiefs will be providing additional leadership to the working group.

It was moved by Steven Huffaker, and seconded by Bruce McCloskey, that the Mountain Lion Working Group proceed with revising the *Cougar Management Guidelines* in concert with the original authors, within the auspices of the Mountain Lion Workshop, and have a draft of the second edition by January, 2009. The motion passed unanimously.

In passing this motion, the following actions were agreed to by the directors:

125). That the Association partner with the original authors to revise the Cougar Management Guidelines.

126). That a draft of the second edition of the Cougar Management Guidelines be completed by January, 2009, and presented to the directors at that time.

28. WESTERN NATIVE TROUT INITIATIVE

Robin Knox presented the directors with an update on the Association's most recent initiative involving western native trout. He indicated that significant progress has already been made and the Western Native Trout Initiative (WNTI) continues to garner considerable interest and attract funding for on-the-ground projects. A detailed summary report of WNTI-related activities is found on pages 302 - 304.

Mr. Knox asked that the directors continue to support WNTI efforts through staff involvement in the Species Status Assessments and the Strategic Plan development, with the continued empowerment of the Chair of the Inland and Marine Fisheries Committee, and the WNTI Management Team to continue their guidance of WNTI.

In hearing this report, the following action was agreed to by the directors:

127). That to the extent possible, the directors continue to support staff involvement with WNTI-related activities on a broad range of fronts.

29. FY'08 FEDERAL BUDGET PRIORITIES

President Duane Shroufe recounted the new process that had been employed in this round of determining the Association's FY 2008 federal budget priorities, commencing with input from all of the committees and working groups last July. He indicated the Secretary had previously distributed the full compliment of suggestions that were received, numbering in excess of 60. Rather than take time to winnow the list at the business meeting, the President stated it was his preference to task Secretary Larry Kruckenberg, Treasurer Stephen Barton and Tina Cuning with developing a recommended short list of priorities, have the President review and concur or modify, then forward on to the AFWA Legislative and Federal Budget Committee.

The directors agreed with this approach. The final listing of FY 2008 federal budget priorities is found on pages 305 - 308.

In hearing this report, the following action was agreed to by the directors:

128). That the Association forward its final list of FY'08 federal budget priorities to the AFWA Legislative and Federal Budget Committee.

30. 2007-2008 MEETING UPDATES

President Duane Shroufe announced the 2007 annual conference will be held at the Radisson Woodlands Hotel in Flagstaff, Arizona, on July 7-12 (July 6th travel day for directors and commission/board members).

Emmett Keyser reported that the 2008 mid-winter meeting will be held January 4-6 (January 3rd travel day), at the Coronado Island Resort, Coronado, California.

Mr. Keyser stated that the 2008 annual conference will be held July 10-16, at the Best Western Ramkota Hotel and Conference Center, in Rapid City, South Dakota. He noted that additional information will be available at the 2007 annual conference in Flagstaff.

31. OTHER BUSINESS

Paul Conry said the Western Governors' Association is again signaling an interest in pushing ESA reform in the coming year. He noted that Wyoming Governor Dave Freudenthal has requested two or three top priority actions that should be advocated. Mr. Conry mentioned he is working with Terry Cleveland, Terry Johnson and Gary Taylor to provide that information. He assured the directors they will rely on the previously approved WAFWA/AFWA ESA reform recommendations to refine a short list for WGA's consideration. Mr. Conry mentioned that preliminary targets include focusing on listing and delisting as distinct population segments, providing states with incidental take authority, modifying Section 6 cooperative agreements to recognize states' authorities, and looking at the distinction between threatened and endangered.

Bruce McCloskey briefly discussed a prospectus being circulated by AFWA that would have AFWA hire a Wildlife and Energy Development Liaison. He indicated that to his knowledge, WAFWA hadn't been queried about this matter and he stated it might be a good idea to advise AFWA of the Association's position.

It was moved by Bruce McCloskey, and seconded by Virgil Moore, that the Association send a letter to AFWA supporting the prospectus involving the Wildlife and Energy Development Liaison, indicating WAFWA's desire to see the finished product, and being brought into and staying in the communications loop as this proposal moves forward and if/when it becomes a reality. The motion passed unanimously.

In passing this motion, the following action was agreed to by the directors:

129). That the Association send a letter to AFWA expressing support for the Wildlife and Energy Development Liaison position which is under consideration. Said letter to also request that WAFWA be brought into the communications loop as this proposal moves forward and remain so if/when it becomes a reality.

Chris Iverson returned to report on the USFS' suggested resolution of concerns voiced by WAFWA member agencies concerning the proposed agency directive entitled *Predator Damage Management in Wilderness Areas*. He reiterated there is a pressing need for the USFS to finalize the directive, but that he and others are sensitive to the concerns expressed by several states that believe the directive is too restrictive.

Mr. Iverson committed to make the following changes to help address these concerns: 1) to strengthen the preamble of the directive in such a way that is clearly recognizes the states' authority in conducting predator damage management in wilderness areas, and furthermore, to make certain additional narrative is included that specifies this authority extends to predator management actions intended to benefit all species – including game – not just restricted to threatened and endangered species.

From the discussion that followed, it appeared these changes addressed most of the concerns that had been expressed before and during the meeting. President Duane Shroufe noted that the proof will rest with how the directive is implemented. He stated if problems arise, the Association will be bringing the matter up again at a future meeting.

President Shroufe asked if there were any other items of business to be brought before the directors of the Association. Hearing none, he thanked his staff who had assisted with the meeting, social events, tours, and field trips. Mr. Shroufe then declared the meeting adjourned at 11:32 A.M.

Respectfully submitted,


Larry L. Kruckenberg
WAFWA Secretary



SUBJECT: Disease Transmission From Domestic To Bighorn Sheep

Issue: A building body of information exists demonstrating that dieoffs of bighorn sheep populations can occur as a result of diseases contracted from contact with domestic sheep. Published scientific literature and documented bighorn sheep dieoffs after contact with domestic sheep supports the relationship. However, there is renewed debate about the scientific support for the relationship and the nature of the agency policy regarding this issue.

Background:

In 2001, the Forest Service, reviewed the scientific background of the transmission of disease (esp. Pasturella) from domestic to wild bighorn sheep populations. As a result of the review, a process was developed to find management solutions to resolve conflicts between domestic sheep grazing activities and wild bighorn sheep populations. The 2001 agency letter has been viewed by some FS personnel and external partners as an agency policy on separation between bighorn and domestic sheep.

The issue of contact between domestic and wild sheep and the potential for fatal result to bighorn sheep populations has been a high profile issue in these areas:

- Sierra Nevada Bighorn sheep – the federally ESA listed Sierra Nevada Bighorn Sheep was the subject of ESA consultation negotiations between the FWS, FS and a permittee on the Humboldt-Toiyabe NF.
- Medicine Bow LMP Discretionary Review – the USDA Deputy Under Secretary conducted a Discretionary Review of the Chiefs appeal decision regarding the viability of bighorn sheep populations in the revised Medicine Bow NF Land Management Plan (LMP).
- Payette NF – The Chiefs appeal decision on the Payette NF revised LMP instructed the Payette NF to amend the LMP to provide for big horn sheep viability. The forest conducted a risk analysis of existing grazing allotments and the public review resulted in renewed debate about the nature of the disease transmission between domestic and bighorn. The Payette NF then sponsored a science panel of prominent veterinarians and wildlife disease specialists. They reviewed the risk analysis and published literature and developed 8 key consensus points, including the important conclusion that it is "...prudent to undertake management to prevent contact between these species..."

WAFWA is sponsoring a big horn sheep science workshop at Univ. of California in 2007 to identify key information needs regarding the Pasturella/sheep issue, identify priorities, and coordinate interagency research.

At the recent 2006 Get Wild Partners meeting at the Association of Fish and Wildlife Agencies, the agency was asked if the 2001 sheep policy was being followed by the field. The agency is currently reviewing the 2001 paper and transmission issue.

Current Strategy:

1. Revise the 2001 FS white paper describing the scientific background of the relationship of disease transmission from domestic sheep to wild bighorn sheep populations to incorporate the latest peer-reviewed scientific information, including the Payette Science Panel Review.
2. FS Research and Development will coordinate a scientific peer review of the revised sheep disease transmission paper to ensure the paper is based upon sound science.
3. Review current agency policy summarized in the 2001 paper. Revise policy as necessary. Cooperate with BLM and WAFWA in review of Forest Service policy.

Contact: Anne Zimmermann, Director, WFWARP, 202-205-1671
Janette Kaiser, Director, Range Management, 202-205-1185



SUBJECT: Economic Impacts of Hunting and Fishing Report

Subject: State and National Economic Impacts of Fishing, Hunting and Wildlife-Related Recreation on U.S. Forest Service-Managed Lands; Report to the Forest Service from the American Sportfishing Association.

Summary: This report quantifies the state and national economic effects of trips to National Forest System (NFS) lands made for the primary purpose of hunting, fishing, and wildlife-viewing activities. The study estimated that hunting, fishing, and wildlife-viewing on NFS lands resulted in annual expenditures of \$1.7 billion, supported 40,600 jobs, and contributed \$192 million in federal income tax receipts for local communities alone. The second approach included all expenditures and estimated that these activities resulted in an annual expenditure of \$7.7 billion, supported 189,000 jobs, and contributed \$874 million in federal income tax receipts. The results will prove useful within and outside the agency in promoting the conservation of fish and wildlife resources and elevating the need for continued support for these programs.

Background: Wildlife related visits are currently the second most popular activity on Forest Service lands resulting in over 36 million visits each year. The average economic contributions of fishing, hunting and wildlife-viewing activities for the years 2000-2003 are quantified. Estimates of visitor use were attained from the National Visitor Use Monitoring Program (NVUM) conducted by the Forest Service (FS) Recreation, Heritage and Wilderness Resources staff. Two different methods were used to assess economic contributions. The first method was more conservative and considered expenditures made within 50 miles of each FS unit. This method represented the economic contribution of FS-based recreation to local communities, but only marginally includes equipment such as binoculars, fishing tackle, firearms, etc that are likely purchased for other purposes. The second method includes all expenditures made in-state for wildlife-based recreation on NFS lands, representing the economic contribution statewide. Using this method, a portion of annual equipment expenditures are pro-rated to each trip.

Table 1. Economic contributions for both methods.

	Hunting		Fishing		Wildlife viewing	
	1 st method	2 nd method	1 st method	2 nd method	1 st method	2 nd method
Number of visits in millions	15.5		15.2		5.6	
Expenditures in millions	\$894	\$4200	\$592	\$2,200	\$168	\$1,300
Full and part-time jobs supported	21,500	97,000	14,500	57,500	4,700	34,500
Federal income tax in millions	\$111	\$502	\$66	\$263	\$15	\$109

Contact: Anne Zimmermann, Director Wildlife, Fish, Rare Plants, 202-205-1167
Bob Glasgow, Budget Coordinator WFW 202-205-0814

USDA Forest Service Update

January 2007



SUBJECT: Energy Development on National Forests

Energy Corridors: The Forest Service is working with the DOI, DOD, DOE, and DOC to establish west-wide energy corridors thru a programmatic environmental impact statement (PEIS) covering federal lands in eleven western states. The document identifies the centerline and width of the corridors, as well as the compatible uses associated with energy development on federal lands. The PEIS is scheduled for release for public review and comment May 2007. The PEIS does not authorize any construction and will identify preferred areas for future construction. The FEIS ROD will amend land use and resource management plans.

Geothermal Development: FS and BLM staffs are currently reviewing a draft Statement of Work for release under a Request for Proposals for the development of a programmatic Environmental Impact Statement. The tentative date for release of a Draft PEIS is February 2007.

Oil & Gas Leasing: The Act emphasizes the management of federal oil and gas leasing programs by the FS to ensure expeditious compliance with the NEPA. The BLM and FS signed a joint MOU for processing oil and gas leasing which includes: administrative procedures and line of authority for timely processing of oil and gas lease applications, surface use plans of operation, as well as a joint GIS database tracking system for leases and Applications for Permit to Drill. A proposed rule was published with a 30-day public comment period. The BLM is currently reviewing received comments along with the comments received from the earlier published Proposed Rule.

Hydropower: DOC, DOI, and USDA are implementing the revised hydropower rules in current relicensing efforts. The agency recently participated in the successful defense of the rule. The plaintiffs asserted that the revised rules violated the Federal Power Act and were an *impressible retroactive application* of Section 241 of the Energy Policy Act. The Western District Court granted the Departments' motion to dismiss and summary judgment in favor of the Departments. Results of this decision for the agency and the Department include:

- A benefit to future rulemaking related to the Energy Policy Act (in that the agency withstood challenges of retroactive rulemaking and necessity for "notice and comment" period for rulemaking);
- Progress towards a final hydropower rule and implementation of the Energy Policy Act (in that the agency does not have to "start over" and begin a "notice and comment" period for rulemaking);
- Does not "upset" the settlements the agency has reached regarding trail-type hearings requests (implementation of the Energy Policy Act, success of settlements); and

Wind Energy: The Forest Service is developing policy guidance to process requests to develop wind energy on NFS lands. Proposed guidance should be available in early 2007.

CONTACT: Rick Swanson, Special Projects Biologist, (202) 205-0886, rswanson@fs.fed.us

USDA Forest Service Update

January 2007



SUBJECT: Grizzly Bear Conservation and Recovery

SUMMARY: The U.S. Forest Service (USFS) is working with many partners to recover the grizzly bear, a threatened species under the Endangered Species Act. The grizzly bear occurs in and around six recovery zones in the lower 48 states. Current activities in each recovery zone are summarized below.

BACKGROUND: The grizzly bear occupies about two percent of its historic range in the continental U.S. The USFWS listed the species as threatened in 1975. A Recovery Plan was approved in 1982 and revised in 1993. Management oversight of grizzly bear recovery is performed by the Interagency Grizzly Bear Committee, a group of high-level managers from State and Federal agencies that was chartered by the under-Secretaries of Interior and Agriculture in 1983. Grizzly bears occur in four States (ID, MT, WA, and WY) and four Forest Service Regions (1, 2, 4, and 6). The Forest Service is the largest land manager within grizzly bear habitat as measured by acres managed. Cooperators in grizzly bear management include the National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service (USFWS), the U.S. Geological Survey (USGS), Bureau of Indian Affairs, four State Fish and Game agencies, the Provinces of British Columbia and Alberta, Parks Canada, numerous Indian Tribes, County Governments, private landowners, and non-governmental organizations.

Yellowstone – The Final Environmental Impact Statement and Record of Decision for amendments to the Bridger-Teton, Targhee, Beaverhead-Deerlodge, Gallatin, Custer, and Shoshone National Forest plans was released April 2006. Upon delisting of the grizzly in Yellowstone, the amendments will implement the Grizzly Bear Conservation Strategy adopted by the Interagency Grizzly Bear Committee which will replace the Yellowstone portion of the existing Recovery Plan. The draft rule proposing delisting of the grizzly bear was published by the Fish and Wildlife Service on November 17, 2005. The final rule is expected to be released in early 2007. The appeal period on the amendments ended July 3. Two administrative appeals were received and are being processed. A decision on the appeals is expected by November of 2006.

These Forest Plan amendments provide the “regulatory mechanism” for managing habitat for the bear on National Forest lands and implementing the Grizzly Bear Conservation Strategy.

- The Grizzly Bear Conservation Strategy includes the following elements: (1) Population Standards and Monitoring, (2) Habitat Standards and Monitoring, (3) Management and Monitoring of Grizzly Bear/Human Conflicts, (4) Information and Education, (5) Implementation and Evaluation, and (6) Biology and Monitoring Review.
- The Conservation Strategy is the product of over a decade of collaboration between the six National Forests, two National Parks, Fish and Wildlife Service, Bureau of Land Management, Tribal governments, County Governments, and the States of Wyoming, Idaho, and Montana and was signed by all parties except the Fish and Wildlife Service in

2003. The Fish and Wildlife Service will sign the Conservation Strategy in conjunction with the release of the final rule. The Conservation Strategy includes the State Grizzly Bear Management Plans for Wyoming, Idaho, and Montana. Yellowstone and Teton National Parks have modified their regulations to be consistent with the Strategy.

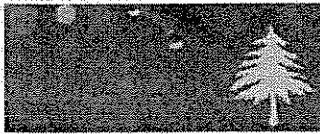
Northern Continental Divide - The grizzly population in the Northern Continental Divide (NCDE) ecosystem appears healthy and is expanding its range outside the recovery zone in all directions. No reliable analysis exists on the size of the population or its trend, however. The Forest Service is cooperating with USGS to complete a DNA population census for the 8 million acre NCDE, including the recovery zone and occupied habitat outside the recovery zone. Field work using hair-snagging techniques was completed in 2004. Lab analysis of DNA samples is ongoing. The work is being funded principally by special Congressional appropriations to USGS and USFS. Concurrently, USFS is cooperating with Montana Fish, Wildlife and Parks and USFWS on a long-term monitoring project to identify grizzly bear population trends in the area.

Cabinet-Yaak and Selkirk Recovery Zones - These small populations have been determined by USFWS to warrant uplisting to endangered status. Even though the populations are small, their distributions are expanding, particularly in the Selkirks. Population estimates appear to be slightly up in the Selkirks and slightly down in the Cabinet-Yaak, but inconclusive in both instances due to broad confidence intervals. New DNA research indicates the Selkirk population may be isolated from other Canadian populations. A few bears occupy habitats between the Cabinet-Yaak and NCDE, but DNA analysis has found no connection between these populations to date. Road access management direction in these two ecosystems was recently litigated, and the Forest Service prevailed on all counts in District Court. An appeal to the 9th Circuit is anticipated. Montana Fish, Wildlife and Parks augmented the Cabinet population with one bear from the NCDE in 2005 and another in 2006. These efforts continue in the future. Recent DNA evidence indicates that some of the four bears augmented into this area in the early 1990's still survive and have produced offspring. Additional funding to implement recovery actions is a critical need in these two ecosystems.

North Cascades - The North Cascades population is also warranted for uplisting to endangered. Few bears exist in the North Cascades. British Columbia has proposed augmenting the population north of the border. The proposal is controversial in both countries. Conservation efforts in the U.S. are concentrating on public information and education and cleaning up sanitation sites that could be attractants to bears.

Bitterroot - The USFWS completed an EIS and made the decision to reintroduce grizzly bears in the Bitterroot ecosystem in 2000. The Department of Interior put the decision on hold, and no action has been taken to implement it. A partnership among National Wildlife Federation, Defenders of Wildlife, National Forest Foundation, USFS and others is making major strides in cleaning up sanitation problems in the ecosystem. Agencies and NGOs are also active in public education.

CONTACTS: James Claar, National Grizzly Bear Coordinator, 406-329-3664, bsummerfield@fs.fed.us; Rebecca Aus, Forest Supervisor, Shoshone NF 307-527-6241 raus@fs.fed.us; Marc Bosch, National TES Program Manager 202-205-1220, mbosch@fs.fed.us



HEALTHY FORESTS

Healthy Forests Report

July 10, 2006

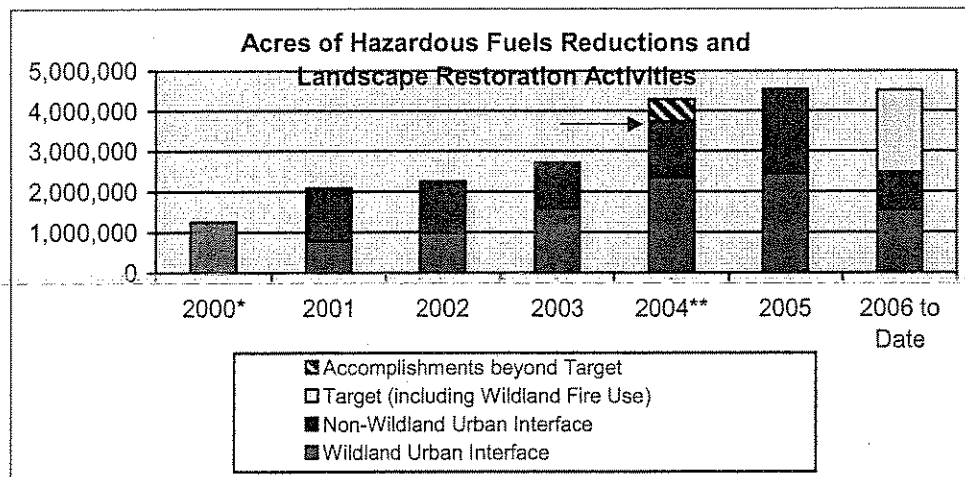
The Department of the Interior (DOI) and the USDA Forest Service implement the National Fire Plan (NFP) and Healthy Forests Initiative (HFI) in order to help save the lives of firefighters and citizens and to reduce the risk of catastrophic fire to our communities, forests, and rangelands.

HAZARDOUS FUELS REDUCTION & LANDSCAPE RESTORATION PROJECTS

An excessive accumulation of hazardous or unusually flammable fuels in our forests, woodlands, and grasslands is the root cause of the unprecedented fire risk facing our public lands. Land managers remove hazardous fuels via programs funded specifically for that purpose and in other programs whose principle goal is the achievement of a variety of resource management objectives that can be broadly labeled landscape restoration. Treatments occur both inside and outside the wildland urban interface (WUI).

1. Inside the WUI treatments reduce fuels around homes, communities, and resources to slow or stop wildland fires from threatening these high-value areas.
2. Beyond the WUI, treatments not only help protect communities by creating conditions that enable firefighters to more successfully suppress fires before they enter the WUI but also reduce fire severity and its impact on valued landscapes and natural resources.

Under Healthy Forests Initiative and the National Fire Plan, the Federal land management agencies have treated over 15 million acres of federal lands since 2000. These treatments have contributed to the reduced threat of catastrophic wildland fire.



* FY 2000 is used as a baseline for reporting, as the NFP was implemented in FY 2001.

Treatment location was not included in reporting prior to FY 2001.

** Acres treated under landscape restoration activities were not reported prior to FY 2004.

Table 1: Hazardous Fuels & Landscape Restoration Activities, FY 2006 (as of 7/14/06)

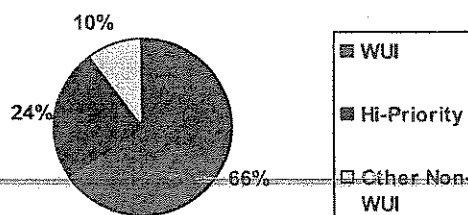
Treatment Type	Hazardous Fuels Appropriations		Landscape Restoration Appropriations		TOTAL
	Prescribed Fire	Mechanical & Other	Prescribed Fire	Mechanical & Other	
Forest Service	968,685	246,663	116,860	252,111	1,584,319
DOI	510,563	271,898	19,030	29,569	831,060
TOTAL	1,479,248	518,561	135,890	281,680	2,415,379

Note: Total does not include acres treated by Wildland Fire Use on Forest Service Lands or acres treated with State Fire Assistance funding.

Hazardous Fuels and Landscape Restoration Priorities

The Forest Service and the Department of the Interior design hazardous fuels reduction and landscape restoration activities to meet one of three objectives:

1. Directly reduce wildfire threats within the wildland urban interface.
2. Treat areas outside of the wildland-urban interface (non-WUI) that are at greatest risk of catastrophic wildland fire. These *high priority non-WUI treatments* reduce the risk of unwanted fire to natural resources, achieve other natural resource management objectives, and, in some cases also serve to protect WUI areas.
3. Maintain desired landscape conditions achieved through previous treatments outside the WUI in order to retain the associated benefits.



HEALTHY FORESTS AUTHORITIES

Implementation of activities under the HFI and HFRA authorities can be summarized as a three-step process:

1. NEPA Planning and Decisions – Activities that will require NEPA Decisions are identified (this generally occurs up to 3 years prior to actual project implementation). The planning is typically broad in scope, and may include multiple treatments.
2. Analysis and Preparation – Project preparation and design generally occur in the year prior to implementation. Project scope, location and treatment type are refined.
3. Treatment Planning and Accomplishment – Final planning and implementation occur.

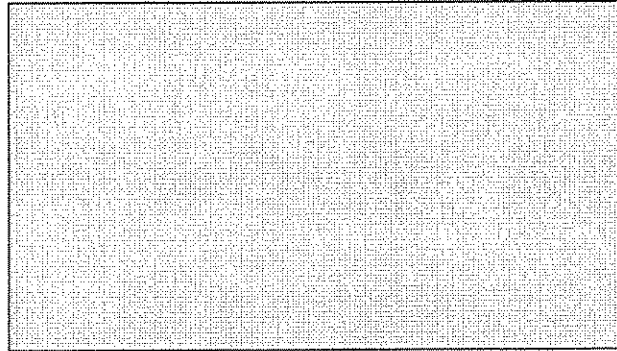
Table 2: Healthy Forests Activities, FY 2006

Treatments Planned	Treatments Completed	Acres Planned	HFI/HFRA Acres Completed
2,539	1,258	516,556	252,276

UTILIZATION OF FOREST BYPRODUCTS

Byproducts removed during hazardous fuels reduction and landscape restoration activities are often utilized in certain forest products (e.g., timber, engineered lumber, paper and pulp, furniture) and bio-energy and bio-based products (e.g., plastics, ethanol, and diesel). To date, the Forest Service and DOI have treated 534,463 acres mechanically; of these, 41% have included biomass utilization.

Biomass Utilization from All Mechanically Treated Acres



STEWARDSHIP CONTRACTS & AGREEMENTS AWARDED

Stewardship contracting includes natural resource management activities that improve land conditions. These projects shift the focus of federal forest and rangeland management towards a desired future resource condition. They are also a means for federal agencies to contribute to the development of sustainable rural communities, maintain healthy forest ecosystems, and provide a continuing source of local income and employment.

Table 3: Stewardship Contracts & Agreements

	Bureau of Land Management		Forest Service	
2003	2 contracts	300 acres	50 contracts	14,000 acres
2004	22 contracts	15,000 acres	64 contracts	42,000 acres
2005	58 contracts awarded	15,000 acres	45 contracts	35,500 acres
2006	15 contracts awarded	6,043 acres	39 contracts	31,000 acres
Total	295 contracts / agreements for 158,843 acres*			

*Not all projects in table above were authorized under HFRA.

HFRA TITLE IV: APPLIED RESEARCH

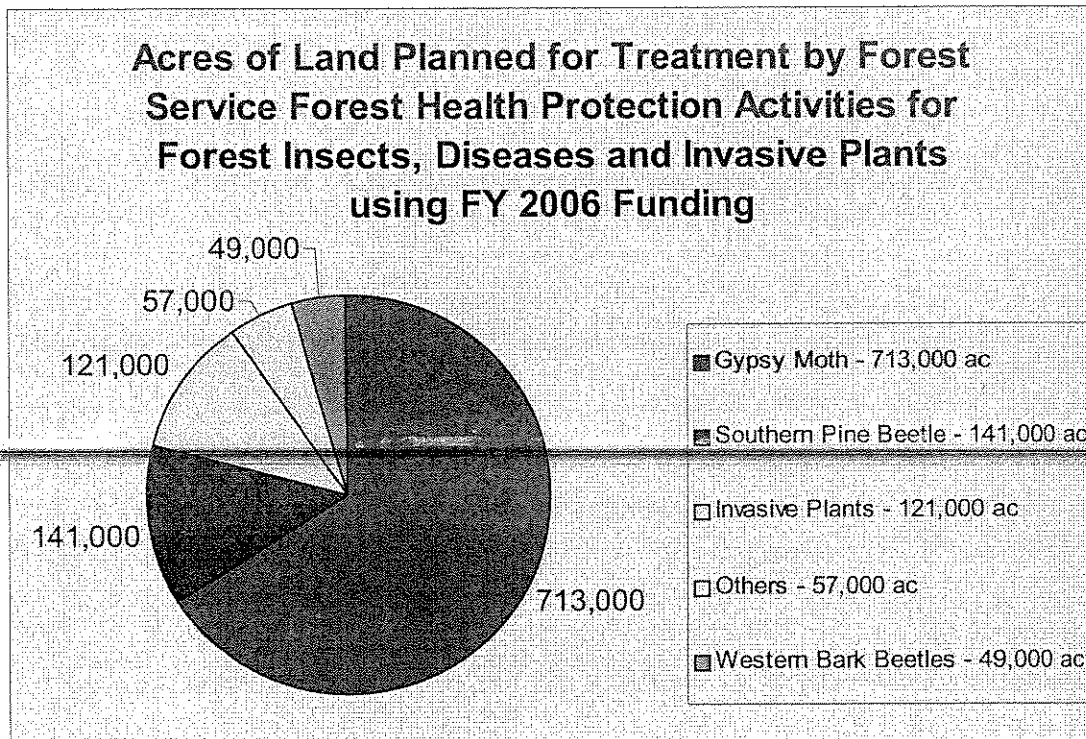
The Forest Service's applied research projects, in partnership with several universities and state forestry agencies, aim to conduct and evaluate different land management practices that reduce problems associated with the current outbreaks of insects and diseases and to translate that information for practicing professionals, landowners, and the public.

There are currently 6 Silvicultural Assessment and 6 Accelerated Information Gathering projects planned or underway. For more information of the Forest Service's Applied Research Projects under the Healthy Forests Restoration Act, please visit:

http://www.healthyforests.gov/applied_research/index.html

INVASIVE SPECIES AND FOREST HEALTH

In FY 2006, Forest Service Forest Health Protection activities include both prevention and suppression efforts and provided resources to restore lands impacted by native and nonnative forest pests on federal, state and private lands. Some of the nonnative pests addressed included: hemlock woolly adelgid, white pine blister rust, gypsy moth, sudden oak death, emerald ash borer, Asian long horned beetle, European wood wasp, cycad scale, wiliwili gall wasp and invasive plants. Over one million acres are planned to be treated as a result of Forest Health Protection efforts funded in FY 2006.



Though various nonnative species are being treated, the only data currently available regarding accomplishment are for gypsy moth where over 137,033 acres have been treated.

All projects planned for southern pine beetle and most for western bark beetles improve condition class. Nearly 141,000 acres for southern pine beetle and 33,000 acres for western bark beetles are proposed for thinning, planting, sanitation or site preparation treatments on state, private, and federal lands. These treatments improve condition class. To date, over 123,229 acres have been reported accomplished for southern pine beetle and 4,658 acres for western bark beetles.

FOREST SERVICE USE OF THE ESA COUNTERPART REGULATIONS

Since the training module on procedures, the Section 7 consultation standards of review, and monitoring was prepared in May, 2004, over 250 Forest Service line officers, and over 500 biologists have both taken the training and been certified to use the regulations. Through February, 2005, over 50 NFP projects had used the process, and the amount of use since then will be known in March, 2006. The one-year evaluation of counterpart regulation use is ongoing, and results of that will be used to make any needed improvements in the use of this important tool.

HEALTHY FORESTS AND COMMUNITIES

Community Wildfire Protection Planning in Nevada Fuels School Program

The Community Wildfire Protection Plan (CWPP) developed for White Pine County, Nevada included many recommendations to improve community protection from wildfire, including a fuels reduction component. Utilizing State Fire Assistant grant monies, Nevada Division of Forestry (NDF) took the lead with support and cooperation from the BLM, USFS, State of Nevada Department of Transportation (NDOT), White Pine County, the City of Ely and a private landowner.

NDOT hauled all the chips to the David E Norman Elementary School to be utilized as fuel for the biomass boiler. The USFS and NDF assisted in installing the boiler through the Fuels for Schools program. The three million BTU per hour steam heat plant provides heat for the original school building and two building additions. The plant uses approximately 150 tons of biomass per year. In addition to the biomass contributed by the BLM, the USFS and the NDF, the White Pine County School District has signed a free use agreement with the BLM for the 1,000 tons of biomass currently piled at Mt. Wilson. This will provide the fuel supply for the plant for approximately 6.6 years.

The project was funded by a combination of grants including \$340,000 from the Fuels For Schools program, and a \$250,000 earmark from U.S. Senator Harry Reid via the Department of Energy.

Please see the complete story with photos at
http://www.wflccenter.org/success_stories/84.php, and
<http://www.nevadarenewables.org/?section=biomass&subsection=projects&id=123>

Forest Service Biomass and Bioenergy Utilization Strategy to be Developed

The Forest Service has nominated a team from across the agency to develop a national Biomass and Bioenergy Utilization Strategy. In preparation for this effort, the team will be visiting the Apache-Sitgreaves National Forest and the San Bernardino National Forest in July, to assess successes in biomass utilization as well as what barriers exist.

The Team will be meeting in August to develop a draft strategy, which will then be shared with Forest Service partners to obtain input prior to finalization. The strategy is being developed to assist the Forest Service in maintaining healthy forests and in reducing the risk of wildfire around communities.

USDA Forest Service Update January 2007



SUBJECT: Canada Lynx Recovery and Forest Plan Amendments

SUMMARY: Canada lynx recovery activities are ongoing, and several National Forests are in the process of identifying and adopting lynx conservation measures as Forest Plan amendments under the National Forest Management Act. Two Draft Environmental Impact Statements (DEIS) were released to the public for review and comment, and Final EIS's are being prepared.

BACKGROUND: The Forest Service initiated lynx conservation and recovery actions through plan amendments and/or revisions based on several events: 1) the listing of the Canada lynx as a threatened species in 2000 through its range in the lower 48-states; 2) the 2005 Lynx Conservation Agreement between the U.S. Fish and Wildlife Service (FWS) and Forest Service incorporates the concept of "occupied" habitat. The Agreement, that was extended to 2011, is an interim measure meant to reduce or eliminate adverse effects of proposed projects to lynx and occupied habitat until long-term conservation measures are incorporated into land management plans. The Federal agencies have agreed to consider the Lynx Conservation Assessment and Strategy (LCAS, August 2000) in the design of projects and forest plan amendments and revisions to address risks to lynx. The LCAS is based on the most recent available science, and after 5-years it currently is being revised. Completion is expected in March, 2007.

The Forest Service is revising or amending 26 National Forest plans for lynx conservation:

- The Northern Rocky Mountain Lynx Amendment will add lynx recovery and conservation direction for 18 national forests in Montana, Idaho and Wyoming.
- The Southern Rocky Mountain Lynx Amendment will apply to eight national forests in Wyoming and Colorado.
- Both draft amendments and associated documents were released to the public for comment in January, 2004. Final EIS and decisions on the two amendments are expected in the first half of 2007.
- All amendment efforts are using best available information, including the Lynx Science Report, Lynx Conservation Assessment and Strategy recommendations, the Forest Service-FWS Conservation Agreement, the listing analysis, and other information.
- Twelve Forest Plans have been revised incorporating concepts from the LCAS to conserve lynx habitat.

On November 9, 2006 the U.S. Fish and Wildlife Service published a final rule designating critical habitat for Canada lynx. The rule did not designate any NFS lands because either Forest Plans already have been revised to incorporate lynx conservation measures, or National Forests are currently operating under the Lynx Conservation Agreement.

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Northern Rocky Mountain Lynx Amendment DEIS <http://www.fs.fed.us/r1/planning/lynx.html>
USFS National Forest Carnivore Program <http://www.fs.fed.us/r1/wildlife/carnivore/>
Southern Rocky Mountain Lynx Amendment DEIS <http://www.fs.fed.us/r2/projects/lynx/>



**SUBJECT: Proposed Forest Service Manual Amendment:
Predator Damage Management in Wilderness**

SUMMARY: The Forest Service (FS) is proposing to revise its directives on predator damage management in wilderness areas to conform agency direction regarding predator damage management with provisions in the 2004 Memorandum of Understanding (MOU) between the Animal and Plant Health Inspection Service, Wildlife Services Division (APHIS-WS) and the FS. The amendments would also conform FS direction for wilderness management with the wildlife directives section regarding animal damage management that were revised in 1995.

Background: The FS issued the draft rule for predator damage management in wilderness on June 7, 2006 for a 60-day comment period. The comment period was extended 30 days and closed on September 7, 2006. Over 80,000 comments were received and they are being reviewed to develop a final rule that should be available in spring, 2007.

The proposed directive changes to Forest Service Manual (FSM) 2323.33c and 2651 are intended to further refine and clarify agency roles and procedures for predator damage management activities on National Forest System.

The amendments to FSM 2323.33c would:

1. Recognize the authority of APHIS-WS and States to conduct predator damage management activities in wilderness.
2. Reaffirm agency policy for sustaining predator populations within ecosystems.
3. Provide a framework for the Forest Service and APHIS-WS to cooperate in development of annual work plans and management objectives, and preparing environmental analyses for predator damage management activities.
4. Revise the criteria for predator damage management in wilderness to include achievement of management goals and objectives for wildlife populations as identified for wilderness in forest or wilderness plans, or through other collaborative processes.
5. Clarify the responsibility of the Regional Forester to authorize the use of aircraft for predator damage management in wilderness.

FSM 2651.6 provides direction for predator management in wilderness. The proposed amendment to this section corrects an inadvertent error in current direction by clarifying that only one of the following 3 conditions must be met in order to engage in wildlife or fish damage management activities:

1. Protect public health and safety.
2. Protect Federally listed threatened or endangered species.
3. Prevent serious loss of domestic stock.

Current direction requires that conditions all be met before damage management activities may be implemented.

CONTACTS: Chris Iverson, Assistant Director Wildlife, TES, Rare Plants, Planning, civerson@fs.fed.us, (202) 205-3199, or Don Fisher, Wilderness and Wild & Scenic Rivers, dfisher@fs.fed.us, (202) 205-1414.

USDA Forest Service Update

January 2007



SUBJECT: Piscicide Applications on National Forest System Lands

Subject: Amendment of CFRs and revision of Forest Service Manual and Handbook to establish criteria for State piscicide use on National Forest System lands.

Background:

The Forest Service and State agencies have enjoyed long-standing and mutually beneficial partnerships in the protection and management of fish and wildlife populations on National Forest System lands. However, their cooperative efforts to apply piscicides in waters within National Forest lands have been difficult at times, due to pesticide application regulations. Current regulations and the variable interpretation of them across by field units, in combination with the special use authorization process, has resulted in project delays, including those proposed to address the threat of invasive aquatic species. At the Chief's direction, a proposed rule for the revision of the CFR on this subject has been completed.

Current Actions:

(1) The proposed amendment to the CFR, as published in the Federal Register, would result in three changes:

- **36 CFR 241** - Cooperative efforts with State agencies would no longer require a special use authorization for piscicide applications on NFS lands outside of designated Wild and Scenic Rivers and congressionally designated Wilderness and Wilderness Study areas subject to the State meeting specific criteria for exemption. Criteria include:
 - (a) Compliance with all Federal laws and regulations
 - (b) Consistency with the LRMP plus Aquatic Resource Recovery Plan and Species Plan
 - (c) Use of registered EPA piscicides and certified applicators
 - (d) Purpose of project is for management of aquatic resources
 - (e) Project is designed in concert with the local Forest to address any issues related to ecosystem functions and existing uses on NFS lands
 - (f) Project includes a plan for monitoring within 60 days of treatment
 - (g) State must report annually the amount of pesticides used on NFS lands
- **36 CFR 251** – A special use authorization is not required for the application of piscicides by State agencies (subject to the State meeting the criteria at 36 CFR 241).
- **36 CFR 261** – Identifies State piscicide applications as an exception to the prohibition of pesticide use on NFS lands (reference part 241 criteria) and allows for a closure order when such projects do not meet the criteria in part 241 or in the event of an emergency (e.g. fire), and may be used to prohibit State piscicide applications on NFS lands.

(2) Public comment period closes January 16, 2007.

(3) Final drafts of the Forest Service Manuals (Sections 2151, 2152, 2153, 2610, 2651 and 2719) and Handbook (2109.14) have been prepared to reflect these changes to the CFRs.

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James Capurso, acting National Fisheries Program Leader, jcapurso@fs.fed.us, 208-205-0951
Ron Dunlap, Assistant Director, Watershed, Fish, Air, rdunlap@fs.fed.us, 202-205-1790



SUBJECT: National Forest Management Act, Planning Rule

The regulations implementing the National Forest Management Act, originally developed in 1982 were revised two years ago. The final planning rule was published in the Federal Register on January 5, 2005 (FR v 70, no. 3 pp 1023-1061). The Directives that establish the administrative direction in how to implement the new planning rule were published on January 31, 2006.

Agency Policy Topics Related to 2005 Planning Rule Implementation

Endangered Species Act Consultation: Consultation under section ESA 7(a)(2) on an LMP is not appropriate because an LMP developed, amended, or revised using the 2005 Planning Rule is not a final agency decision, and by itself, has no effect on listed species or designated critical habitat that can be meaningfully evaluated. Consultation with the Fish and Wildlife Service & National Marine Fisheries Service will take place primarily during project development--when biologists and line officers can meaningfully gauge and evaluate impacts to listed species and critical habitat. Agency policy will also emphasize Section 7(a)(1) programmatic consultation on Forest Plans that focuses on developing programs for the conservation and recovery of listed species.

Species Conservation: The agency's Sensitive Species policy and related procedures contained in FS Manual 2670 will not be used for LMP revision, amendment, or implementation under the 2005 Planning Rule. The Sensitive Species policies will continue to be applied to forest plans developed, revised, and amended under the 1982 NFMA Planning Rule, as well as to projects and activities implementing such plans.

We have begun the process to amend FS Manual 2670, which will include ESA consultation, Sensitive Species, Species-of-Concern, and Species-of-Interest policies that fully support the agency's commitment to species' conservation under both the 1982 and 2005 Planning Rules.

The first revised Land Management Plans that use the 2005 Planning Rule are expected to be completed in early 2007. To date, two Forest Service Regions have released six Proposed Land Management Plans developed under the 2005 Rule for public comment:

Cimarron-Comanche.NGs – KS, CO	Bitterroot NF - MT
Flathead NF – MT	Kootenai NF – MT, ID
Lolo NF – MT	Idaho Panhandle NF - ID

In addition, notices of intent to revise under the 2005 Rule have been published for the following Land Management Plans: *Arizona:* Coronado NF; *Colorado:* GM-Uncompahgre-Gunnison NFs, San Juan NF, Pike- San Isabel NFs; *Mississippi:* NFs in Mississippi; *Montana:* Clearwater NF, Nez Perce NF; *Nevada:* Humbolt-Toiyabe NFs; *New Mexico:* Cibola NF (Grasslands); *North Carolina:* Uwharrie NF; *Oregon:* Malheur NF, Umatilla NF, Wallowa-Whitman NFs; *Utah:* Dixie NF, Fishlake NF, Manti-LaSal NFs, Ashley NF; *Washington:* Colville NF, Okanogan NF, Wenatchee NF; *Wyoming:* Shoshone NF

The 2005 Planning Rule, 2006 Directives and background information are available at:
<http://www.fs.fed.us/emc/nfma/index.htm>

CONTACT: Wayne Owen, Planning Biologist, wowen@fs.fed.us, (202) 205-1262

USDA Forest Service Update

January 2007



SUBJECT: Black-tailed Prairie Dog Conservation

SUMMARY: In 2004, acreage of black-tailed prairie dog (prairie dog) colonies on National Forest System (NFS) lands totaled over 71,000 acres. This was a substantial increase over the nearly 48,000 acres recorded in 2002. Extended drought in much of the Great Plains has led to large expansions of prairie dog colonies, although not necessarily prairie dog populations. In some areas, prairie dogs continue to be limited dramatically by outbreaks of sylvatic plague. Expansions have led to requests for lethal prairie dog control on NFS lands to reduce unwanted colonization onto adjoining non-federal lands. The Forest Service is working with states, other federal agencies, and other partners to continue conservation efforts and to promote integrated management actions for this species.

For NFS lands in Nebraska and much of South Dakota, a July, 2005 EIS and Record of Decision describe the conditions under which lethal and non-lethal control of prairie dogs will be carried out near the boundaries of federal and non-federal land. The Forest Service's management goal is to maintain some of the highest acreages of prairie dog colonies found on the Great Plains, while also conducting a good neighbor policy through timely prevention or elimination of unwanted prairie dog colony encroachment onto adjoining non-federal lands. In FY 2006, a total of 10,000 acres of prairie dog colonies on the ~~Nebraska NF in Nebraska and South Dakota were treated with rodenticide with an estimated 50-95%~~ control effectiveness. In the east half of the Buffalo Gap National Grassland, including Conata Basin, 5,180 acres were treated with estimated 70-90% control effectiveness.

The Nebraska National Forest is now doing environmental analysis and preparing an EIS to amend the LRMP to specify the desired range of acres of prairie dog colonies to meet various multiple use objectives, and to identify what actions may be taken if the acreage substantially falls below or exceeds the desired range. The expected completion is expected to be the end of 2007.

BACKGROUND: In 2000, the U.S. Fish and Wildlife Service determined that the prairie dog warranted listing under the Endangered Species Act. In August 18, 2004, the agency concluded that listing is not warranted due to recent distribution and abundance and trend data indicating that the threats to the species are not as serious as earlier believed. There are currently about 1.8 million acres of black-tailed prairie dog colonies. The prairie dog is a designated sensitive species and a Management Indicator Species on NFS lands, and as such, the Forest Service develops and implements appropriate management guidance and assesses the effects of all proposed activities on this species.

NFS lands are very important to prairie dog conservation and to other wildlife species associated with prairie dogs. NFS lands provide important habitats that assist states in achieving the goals for prairie dog acreage, as set forth in state prairie dog management plans. Most of the NFS lands in the Great Plains are potential habitat for the black-tailed prairie dog, and through forest plan revisions and cooperation with numerous partners and users the Forest Service identifies where to best provide quality prairie dog habitat. Management activities, such as livestock grazing management, land acquisition and consolidation, prairie dog translocations, colony monitoring, poisoning, and others, are conducted to maintain, increase or decrease prairie dog colonies in appropriate locations on NFS lands. The prairie dog receives special management emphasis at sites identified for reintroduction and recovery of the endangered black-footed ferret.

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USDA Forest Service Update

January 2007



SUBJECT: Roadless Area Conservation Management

Issue: Recent changes to the states petitioning process due to litigation.

Litigation History

The Roadless Area Conservation Rule (RACR) prohibiting road construction and timber harvesting with exceptions on 58.5 million acres of NFS lands was issued on January 12, 2001. Nine lawsuits were filed against the rule. In May 2001, Judge Lodge issued preliminary injunctions in the two Idaho cases barring implementation of the rule. The 9th Circuit Court reversed Judge Lodge's decision in December 2002. The RACR, therefore, became effective in April 2003. In June 2003, the government settled its case with Alaska by pledging to propose an exemption for the Tongass National Forest. This exemption was finalized in December 2003.

In July 2003, Judge Brimmer upheld Wyoming's challenge and declared promulgation of the RACR procedurally flawed under NEPA and substantively illegal under the Wilderness Act. He set the rule aside and permanently enjoined its application. His decision was appealed by environmental groups, but the appeal was dismissed as moot and his decision was vacated by the 10th Circuit Court after the State Petitions Rule was issued in May 2005.

Two lawsuits were filed in California challenging the State Petitions Rule: one by the States of California, New Mexico, Oregon, and Washington; the other by a coalition of environmental groups. On September 20, 2006, Magistrate Laporte set aside the State Petitions Rule, and reinstated the RACR including the Tongass amendment. In November, she clarified the Forest Service cannot: (1) approve or authorize any management activities in inventoried roadless areas that would be prohibited by the RACR, including issuing or awarding leases or contracts, and (2) approve or allow any surface use of a mineral lease issued after January 12, 2001 that has not already "commenced on the ground" and that would violate the RACR. The parties are awaiting further clarification from the court. The State of Wyoming has sought to re-open its case against the RACR, but the Wyoming District Court has not yet ruled on that motion.

State Petitions Status

The States of California, Idaho, New Mexico, North Carolina, South Carolina, and Virginia filed petitions under the State Petitions Rule. The North Carolina, South Carolina, and Virginia petitions were essentially the same as the RACR. California sought a "no net loss" policy for inventoried roadless lands. New Mexico wanted the RACR plus the inclusion of the 101,000 acres of the Valle Vidal.

After Magistrate Laporte's decision, all six states were encouraged to re-file their petition under the Administrative Procedure Act (APA). At this time only Idaho has resubmitted its petition. Colorado filed a petition under the APA in November. Utah may be filing a petition in the near future.

Contacts: Bill Supulski, Roadless Coordinator, 202-205-0948



SUBJECT: Rise to the Future Implementation Plan

SUMMARY: In 2003, the *Rise to the Future* Task Force Report issued 39 findings and recommendations to address programmatic and strategic objectives, accountability, and staffing within the Fisheries & Watershed Programs of the Forest Service. The Forest Service formed the Rise to the Future Implementation Team to address them. In 2005, the Implementation Team issued an internal plan that prioritized the report recommendations and integrated them with the Forest Services' Strategic Plan by proposing specific action items.

Over the last year, the Forest Service staff work to further develop and implement the plan has been gradual due to personnel transitions and intra-departmental consultation regarding implementation. The agency's drive and commitment to implementing the plan has recently been re-energized with Washington Office and Regional fisheries personnel committing to the completion of specific tasks with due dates.

BACKGROUND: The RTF Implementation Plan contains the following action items:

1. *Strategic Planning & Accountability* Action Items:

~~• Establishment of a Sportfishing Advisory Council~~

- Track planned budgets by activity area and planned accomplishments for the year.
- Prepare an annual stakeholder report.
- Provide opportunity in WO-WFW for travel.

2. *Sportfishing on National Forest Systems* Action Items

- Develop recreational sportfishing marketing strategies.

3. *Staffing & Professional Development* Action Item

- Develop and implement a comprehensive training program.

4. *Development & Use of Aquatic Information* Action Items

- Establish an oversight team to address data collection and storage.
- Annually communicate a summary of accomplishments to stakeholders.
- Identify and schedule opportunities to brief line managers and field staff.
- Evaluate ways Research Stations work with partners in identifying priority research.
- Appoint a fisheries/aquatic rep. to USDA Forestry Research Advisory Committee.
- Develop a proposal for an internal and external review of fish and aquatic research program to evaluate staffing, training, and implementation of research products.

5. *Partnerships* Action Items

- Increase the visibility of partnership tools.
- Gain approval for making the Wyden Amendment authority permanent.
- Highlight examples of work accomplished under Wyden Amendment authority.
- Regularly attend FISHNET meetings and develop a new partnership award
- Include information on partner contributions in annual reports
- Include partnership training in comprehensive FS training programs.

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USDA Forest Service Update

January 2007



SUBJECT: Travel Management

SUMMARY: Unmanaged recreation, including cross-country motor vehicle travel, is one of four key threats facing national forests and grasslands. On November 9, 2005, the Forest Service published a final travel management rule in the *Federal Register* (70 FR 68264). On June 8, 2006, the Forest Service Chief approved the national schedule for route and area designation covering all National Forest System units. Over the next four years, national forests will designate those roads, trails, and areas open to motor vehicle use.

BACKGROUND: Off-highway vehicles are a legitimate use of National Forest System lands – in the right places and when properly managed. The number and capabilities of these vehicles is increasing rapidly, and the agency must manage this use in order to sustain it.

The Forest Service's new travel management rule requires each national forest to designate those roads, trails, and areas open to motor vehicle use. Designations include class of vehicle and, if appropriate, time of year. Once designated routes and areas are identified on a motor vehicle use map, the rule prohibits motor vehicle use inconsistent with the designations. Decisions on individual routes and areas will be made by line officers at the local level, based on public involvement, site-specific analysis, and coordination with state, county, local, and tribal governments. The rule maintains pre-existing authorities for over-snow vehicles, which may be allowed, restricted, or prohibited at the local level.

The travel management rule exempts emergency and administrative use of motor vehicles and use under a written authorization such as a permit or contract. The rule also provides the responsible official with discretion to consider "limited use of motor vehicles within a specified distance of certain designated routes, if appropriate within specified time periods, solely for the purposes of dispersed camping or retrieval of a downed big game animal by an individual who has legally taken that animal" (36 CFR 212.519b)).

Changes to the forest transportation system will be based on appropriate site-specific environmental analysis and public involvement. Travel management decisions are typically made at the project level, rather than through the land management plan revision process.

The agency expects to publish draft directives for public comment shortly. Meanwhile, many national forests across the country are beginning the route designation process. Travel planning on each unit will reflect its particular history of past travel management decisions, its local community, and its environmental issues.

Key Messages

- OHVs are a legitimate use of NFS lands – in the right places, and properly managed
- Rule provides a national framework for local decision-making
- Designation will involve close collaboration with public, local government

The Forest Service Travel Management Implementation Schedule can be viewed at <http://www.fs.fed.us/recreation/programs/ohv/>

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USDA Forest Service Update January 2007



SUBJECT: National Fish Habitat Initiative (Trout Initiatives)

- The USDA-Forest Service manages 155 national forests across the country, covering nearly 200 million acres of land and water. This national treasure includes 220,000 miles of stream habitat and 2 million acres of lake habitat. Most of the Nation Forest System lands are headwaters to important fish habitats and these lands often serve as refugia for many species of fish.
 - The National Fish Habitat Initiative (NFHI) continues our legacy of working with AFWA, and the individual states, on fish and wildlife habitat management opportunities.
 - The Forest Service has been active on the NFHI Federal Caucus.
 - The Forest Service provided staff support for the NFHI Eastern Brook Trout Joint Venture status and threats assessment.
 - The Forest Service recently allocated \$20,000 (50/50 Eastern Brook Trout Joint Venture and the Western Native Trout Initiative).
-
- The National Forest System leadership appreciates the opportunity to partner in the National Fish Habitat Initiative.
 - The Regional Fish Program Managers are coordinating with Robin Knox on implementing the Western Trout Initiative.

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U.S. GEOLOGICAL SURVEY, BIOLOGICAL RESOURCES DISCIPLINE COMPILATION OF ONGOING PROJECT HIGHLIGHTS

Western Association of Fish and Wildlife Agencies
Mid Winter Meeting, January, 2007
Tucson, AZ

ALASKA

Evaluation of hazards and risk assessment of fugitive dust from metals extraction operations at Red Dog mines in Alaska: Operation of the Red Dog Mine is thought to pose health risks to Native Americans and wildlife resources of Cape Krusenstern National Monument due to dust and runoff from mining operations. A peer-reviewed evaluation was submitted in 2005 of a 450-page risk assessment by Teck Cominco Alaska. Submitted a study plan in 2006 to NPS to evaluate metal-contaminated dust on biota of the Krusenstern National Monument. Field sampling of snow, soil, vegetation, birds, and small mammals at impacted sites and reference sites; ongoing analyses to assess bioavailability of metals and associated sub-lethal effects on biota. [Columbia Environmental Research Center]

Investigation of contaminant effects of frog development at Kenai NWR, Alaska: Physical abnormalities among wood frog populations of Kenai NWR range to 32%; deformity is a suspected consequence of exposure contaminants. The refuge is the site of a major Alaskan oil field, and contamination is from refined and unrefined petroleum products, solvents, surfactants, and PCBs. Contaminants from mineral extraction and dioxin from the use of Agent Orange occurred within the refuge. Research will determine toxicity of complex environmental extracts from remote and developed locations. Sediment and SPMD samples were taken from 4 sites within developed areas and 4 sites in non-developed areas of the NWR. Lab tests with frog embryos determined toxicity as indicated by mortality, development, and condition of test organisms. Exposures to sediments collected at sites were toxic to developing wood frogs. Other tests indicated UV extract interaction resulting in inhibition of growth and metamorphosis. 2006 sediment samples will be used in toxicity tests to assess potential contaminant/UV interactions. [Columbia Environmental Research Center]

Status of the Polar Bear Population in the southern Beaufort Sea, U.S. and Canada. USGS and Canadian Wildlife Service scientists studied the polar bear population in the southern Beaufort Sea for USFWS. Changes in the sea ice habitats of polar bears led FWS to better understand population dynamics. Analyses show that the status of the southern Beaufort Sea polar bear population is changing. They could not detect whether the actual population size has changed, but other indicators of population status were declining, specifically cub survival and physical stature. The findings parallel those in the western Hudson Bay population, where changes in cub survival and stature preceded detection of an overall population decline. Those changes were correlated with a longer ice-free season in Hudson Bay. During the study, the ice-free season in the southern Beaufort Sea increased from 82 to 138 days.

Regehr, E.V., S.C. Amstrup, and I. Stirling. 2006. Polar Bear Population Status in the Southern Beaufort Sea. USGS Open-File Report 2006-1337. <http://pubs.usgs.gov/of/2006/1337/>. **Contact:** Steve Amstrup, 907-786-3424, samstrup@usgs.gov

Habitat Preferences of Loons in Alaska. USGS and colleagues modeled habitat preferences of yellow-billed loons in northern Alaska using landscape-scale habitat descriptors and information about loon presence. Yellow-billed loons were significantly more likely to be found on lakes that were larger, deeper,

connected to streams, and had more complex shorelines, or more aquatic vegetation along the shoreline. These tendencies are consistent with the lake's ability to support a dependable fish population. Fish are vital to the welfare of yellow-billed loons because adults feed young on fish captured solely from the breeding lake.

Earnst, S.L., Platte, R., Bond, L., 2006, A landscape-scale model of yellow-billed loon (*Gavia adamsii*) habitat preferences in northern Alaska: *Hydrobiologia*, 567:227-236. **Contact:** Susan Earnst, 208-426-5209, susan_earnst@usgs.gov [**Forest and Rangeland Ecosystem Science Center**]

Avian Influenza Surveillance and Research in Alaska. Because of Alaska's strategic location as a crossroads for Asian and North American flyways for migratory birds, many believe that, if highly pathogenic avian influenza (HPAI) arrives in North America via migratory birds, it will occur there and then spread south. In 2006, USGS, in partnership with USFWS, NPS, State of Alaska, USDA and others, undertook an aggressive program of surveillance and research related to HPAI. Surveillance sampling of live birds and subsistence- or sport-harvested birds occurred at more than 50 sites in Alaska. Sampling focused on 26 target species with strong connectivity to Asia (<http://alaska.usgs.gov>). More than 17,000 samples from migratory birds were taken in Alaska in 2006. USGS initiated research projects to 1) better understand migration pathways of wild birds that have potential to introduce HPAI into North America; 2) understand the relationship of avian influenza subtypes to patterns of geography, species and seasonality for use in predictive modeling; and 3) investigate wild bird mortality events to distinguish the role of HPAI versus other disease agents as cause of death.

USFWS/USGS. 2007. Sampling for highly pathogenic Asian H5N1 avian influenza in migratory birds in Alaska: results of 2006 field season. Progress Report, U.S. Fish and Wildlife Service (Region 7, Alaska) and U.S. Geological Survey, Alaska Science Center, Anchorage, Alaska. **Contact:** Dirk V. Derksen, 907-786-3531, dirk_derksen@usgs.gov [**Alaska Science Center**]

Goshawk Diet Affected by Forest Practices in Alaska. Northern goshawks are large hawks that live in mature forests; there are concerns about the effects of intensive logging on their populations. Recently, management of goshawks has focused on prey populations, recognizing that prey species and habitats are key conservation elements. USGS and colleagues conducted a study to describe the nesting-season diet of northern goshawks in southeast Alaska. In this region, goshawks relied on a few important prey species that can be affected by timber harvest. Goshawks ate similar types of prey as in other locations, supporting the idea that they are flexible when availability of prey changes. This adaptability appears to be limited, because goshawk fitness might be affected in an area that is prey-poor and that has had extensive landscape alteration due to timber harvest. Future studies could focus on how alteration of forest structure and landscape patterns affects the abundance of northern goshawk prey.

Lewis, S.B., Titus, K., Fuller, M.R., 2006, Northern goshawk diet during the nesting season in Southeast Alaska: *Journal of Wildlife Management*, 70(4):1151-1160. **Contact:** Mark Fuller, 208-426-4115, mark_fuller@usgs.gov [**Forest and Rangeland Ecosystem Science Center**]

Live Bird Surveillance. The live bird sampling strategy for 2006 followed the U.S. Interagency Strategy Plan (March 14, 2006), the Sampling Protocol for highly pathogenic avian influenza (HPAI) H5N1 in Alaska (March 1, 2006), and the Surveillance Strategy for the Pacific Flyway (March 21, 2006). As of Dec 8, 2006, a total of 14,119 live bird samples (11,595 from Alaska and 2,524 from the western continental U.S.) had been collected and tested for avian influenza viruses by matrix-PCR. Samples from Alaska were primarily from waterfowl, shorebirds, and passerines, while western U.S. samples were from waterfowl and shorebirds. No highly pathogenic H5N1 viruses were found, but low-pathogenicity viruses were found in 1.8% of samples overall. Of the samples tested, a number of H5 avian influenza subtypes have been identified [<http://wildlifedisease.nbi.gov/ai/LPAI-Table.jsp>] No samples tested by USGS have been found to be H5N1, but at least one has been found to be an H5N2 of low pathogenicity. From Alaska, 16,961 samples in 36 batches were received beginning in May 25, 2006 and ending on Nov, 9,

2006. On average, one batch was received every 4.2 days and the average size of a batch was 463 samples--average of slightly more than 100 samples a day. Due to the fact that testing has to adhere to the an agreed upon turn-around time of testing every sample within 72 hours of receipt, the testing could not be spread out over a number of days, but had to be done as batches were received from the field. The average time to results across all projects was 2.1 ± 1.7 days ($n=16,906$). 21 separate batches of samples from live birds captured in Alaska were received in the 2006 sampling year. A total of 11,288 birds were sampled. Fifteen batches of samples were received from Alaska from the subsistence and sport hunter-killed sampling strategy. A total of 5,673 samples were collected under the hunter harvest program. Live-bird surveillance strategy constituted 67% of samples and hunter-harvest consisted of 33% of total samples. [National Wildlife Health Center]

ARIZONA

Effects of antimycin A, Garlon, Roundup, Arsenal, copper, cadmium, and selenium on the threatened Chiricahua Leopard Frog (*Rana chiricahuensis*). This project is developing baseline toxicity data on a range of metals and pest control agents to ensure protection of the threatened Chiricahua leopard frog. Toxicity tests of 96 hrs were conducted with early and late developing frogs using herbicides, piscicides, and metals, and mortality, behavior, and physical condition were observed. Growth, development, time and mass at metamorphosis was measured during 45 day exposures. The 96 hr LC50 values exceeded expected environmental concentrations for piscicide and herbicide chemicals; toxicity of Cu and Se were within the range of documented field concentrations downwind of metal smelters. Chronic toxicity tests will be conducted in 2007. [Columbia Environmental Research Center]

Colorado River Endangered Fish. Field surveys on the Colorado River and Lake Mohave used boats and high-resolution digital aerial photography to count endangered razorback suckers. Boat surveys are a cost-effective alternative to fish sampling. To determine whether physical conditioning and predator recognition behavior could be enhanced in hatcheries and improve short-term stocking survival rates, razorback suckers were subjected to water velocities of 30 cm/s for 10 wks and given predator survival tests. Survival of velocity-conditioned fish exposed to predators was 22% greater than non-conditioned fish. The project demonstrated that predator avoidance by razorback suckers was a learned behavior, and physical conditioning improves survival. [Fort Collins Science Center]

Lake Havasu Fishery Management Memorandum of Understanding. USGS, BLM, BOR, USFWS, AZ Department of Game and Fish, and CA Fish and Game Department are signatories on an MOU signed in FY06 to implement the multi-agency Lake Havasu Fishery Enhancement Program, established to optimize habitat conditions for improved recreational fishing. The purpose is to oversee and make recommendations on the program, which included one-time stocking of 30,000 bonytail and 30,000 razorback suckers, endangered species native to the Colorado River. [Fort Collins Science Center]

Recovering the Lower Colorado River's endangered fish. Studies on the Lower Colorado River are documenting spawning requirements for native endangered razorback suckers and bonytail, and evaluating the use of predator-free, off-channel rearing ponds for young. Wild fish larvae are collected at spawning sites and relocated to "refugia," where juvenile fish can grow to more than 30 cm in length. When these larger fish are restocked to the main channel, losses to non-native fish predators are greatly reduced, and surviving fish live to reproduce. Biologists are working with USGWS hatcheries to determine whether exercise and predator-exposure techniques will improve the post-stocking survival of the fish. Studies and predation trials are conducted at Achii Hanyo Fish Facility near Parker, AZ. [Fort Collins Science Center]

Ecology of southwestern desert grassland birds. Endemic grassland birds have shown a steeper, more consistent, widespread decline than any other guild of North American bird species. Managers and conservationists need more information about the ecology of grassland birds that use the desert grasslands of the Southwest. Researchers are (1) evaluating habitat needs of wintering grassland birds and their response to management practices such as grazing; (2) comparing the response of wintering grassland birds and grassland structure to a large wildfire (2002 Ryan Wildfire) with data gathered pre-fire; and (3) determining breeding distribution and abundance of the Arizona Grasshopper Sparrow subspecies. [Fort Collins Science Center]

Arizona Cooperative Fish and Wildlife Research Unit.

- C. Conway has been working with AGFD, USFWS, and BLM to evaluate the use of prescribed fire as a management tool to improve habitat conditions for 2 species of endangered marsh birds on the lower Colorado River. Results have demonstrated that fire can be used to improve habitat conditions and increase numbers of Yuma clapper rails and California black rails. Conway has been developing standard methods to monitor marsh birds in North America which are being used by numerous Federal, State and local organizations across the continent.
- Melanie Culver's Conservation Genetics laboratory is involved in:
 - Species monitoring using genetic techniques and non-invasive sampling to detect presence and abundance of several endangered species (Mexican wolf, flat-tailed horned lizard, Arizona jaguar, and Delmarva fox squirrel).
 - Non-invasive monitoring and genetics is used to determine presence and abundance of cougars, in areas of Arizona with high risk of human interaction.
 - Molecular genetics is used to examine species-level taxonomic questions in endangered mollusks (Kanab ambersnail and Arizona Anodonta mussels).
 - Urban-wildlife interface surrounding Tucson, AZ is being used as a model to examine gene flow (or lack of) among populations of species that co-exist with dense human populations (bobcat, tiger, rattlesnake, skunk).
- Scott Bonar's aquatic program is editing a book, supported by nine federal, state and private organizations, that provides standard sampling methods for North American freshwater fishes. This book, sponsored by the American Fisheries Society, is being authored by 50 sampling experts from the United States, Canada and Mexico. It will be used by fisheries managers and scientists across North America to monitor inland fish populations. Bonar has written a book entitled "*The conservation professional's guide to working with people*", which provides to natural resources professionals methods for managing conflict, persuading people, negotiation, supervision, and other topics in social science. It is being published by Island Press and will be available in May.
- The aquatics lab has developed methods to propagate four endangered desert fishes - Gila chub, Mohave Tui Chub, Yaqui Chub and Yaqui topminnow. These methods will be used by state and federal agencies to rear these fish for recovery efforts. The aquatics lab has been collaborating with scientists from the former Soviet Union in testing methods to mechanically remove nonnative fish predators. Former Soviet biologists use additional techniques that have not been tried in the U.S.; these methods will be used by U.S. managers to help remove nuisance fish populations.

Stopover ecology and habitat use of migrating land birds in riparian forests in the southwestern United States. In western North America, migration patterns of neotropical land birds evolved within a landscape of a heterogeneous and patchy environments. Western migrant land birds appear to assess migrant routes and stop over habitats at four major scales: 1) genetically influenced corridor selection; 2) large-scale landscape features; 3) vegetation patches; and, 4) microhabitat selection within the vegetation patch. Within National Refuges along the lower Colorado River, these four scales are variously influenced by weather, plant species, structure, plant phenology patterns, and insect prey base. In

migrating neotropical migrant warblers examined in Sonora, Mexico and in Arizona, species arrival dates and numbers varied from year to year. Large-scale weather patterns and plant phenology cycles accounted for most of the variation. Once a microhabitat was selected, individual birds moved very little over the landscape during the stopover period. Stopover and bird foraging patterns were greatly influenced by plant species and phenological patterns of the selected microhabitat. Warbler species partitioned foraging habitat relative to foraging height, preferring native to introduced vegetation. Influences on location of warbler foraging within plant strata were related to abundances of leaf invertebrates that were significantly different among tree species and between native and introduced plants. It appears that large scale landscape features, along with vegetation species, structure, phenology, abundance, and insect prey base all play a role in structuring spring warbler migration patterns within National Wildlife Refuges along the Colorado River corridor. Charles Van Riper III, 520-626-7027, charles_van_riper@usgs.gov [Southwest Biological Science Center]

Endangered Colorado River fishes. In August 2005, USGS reported that, after many years of decline, the number of adult humpback chub in the Grand Canyon stabilized between 2001 and 2005 at an estimated 5,000 fish. USGS is working with FWS and Arizona Game and Fish Department to develop a recovery program for the endangered fish in the lower Colorado River basin with emphasis on humpback chub in the Grand Canyon. These efforts are an important part of recovering populations of sensitive and endangered big river fishes in the Colorado River.

USGS Fact Sheet (http://www.gcmrc.gov/files/pdf/fs_2006_3109.pdf) **Contact:** John Hamill, 928-556-7364, jhamill@usgs.gov [Southwest Biological Science Center]

CALIFORNIA

Mercury bioaccumulation in sediments, invertebrates and/or fish from lakes and reservoirs in areas of the western US: USBR requested a study to determine concentrations of mercury in whole body fish and fish muscle plugs from the South Fork of the Humboldt River near Elko in the Te-Moak Indian Reservation. Fish are regularly consumed by the Te-Moak Indians. The whole body fish mercury data will represent the total mercury body burden available to wildlife fish consumers; the fish muscle plug data will be used to evaluate human consumption risks. USBR will use data to make management decisions concerning fish harvests from the South Fork of the Humboldt River. Data will be provided to state and local agencies responsible for evaluating the potential risk to the public from fish consumption. [Columbia Environmental Research Center]

Salton Sea: Investigation of selenium and selenium species in water, sediment, and biota of irrigation drains: USGS has entered into a cooperative agreement with the Imperial Irrigation District (IID) to monitor Se in irrigation drains due to the presence of the endangered desert pupfish in some of the drains. The IID needed to know how much Se was present in each drain and where it was, i.e., how it was compartmentalized between water, sediment, and biota. Water samples from 29 drains were received in 2005 and 2006 and sediment, detritus, and biota samples were received in 2006. Data will be used by IID management to influence irrigation drain environments to protect pupfish populations. [Columbia Environmental Research Center]

Factors limiting populations of endangered suckers in the Upper Klamath Basin: Factors that regulate or limit recruitment processes in shortnose and Lost River suckers are not well defined, but researchers have suggested that overwintering survival of first-year suckers is crucial. An initial model that incorporates bioenergetic factors that affect winter survival was developed to predict optimal larval or juvenile growth and survival in the lake. Application of predictive models will enable managers to

explore how lake management and natural variation interact to establish year-class strength for shortnose and Lost River suckers. **[Columbia Environmental Research Center]**

Comparative Vegetation Mapping for Lassen Volcanic National Park. The USGS-NPS Vegetation Mapping Program is developing vegetation cover maps for most NPS units. New methodologies are needed to increase the speed and accuracy of vegetation mapping, reduce costs, and produce a quantitative-based vegetation database. FORT compared the aerial photo-interpretation methodology with the Discrete Classification Mapping Methodology (DCMM). DCMM may be a more accurate and efficient mapping methodology that NPS should consider for mapping medium-to-large parks. This is a collaborative effort involving FORT, NPS, Lassen Volcanic National Park, the Klamath Network, engineering-environmental Management, Inc. (e²M), and Geographic Resource Solutions. **[Fort Collins Science Center]**

Klamath River Modeling for FERC Re-licensing. Water supply and quality, as they pertain to anadromous fish life-cycle needs, are the principal components of modeling applications for the Systems Impact Assessment Model (SIAM) on the Klamath River. The FERC license for hydropower projects on the mainstem Klamath River below Upper Klamath Lake expired in March, 2006. SIAM analyzed fall Chinook salmon run-timing, spring flow variability, use of full-active reservoir storage potential to affect water temperature, hypothetical dam removal, restoring anadromous fish above the mainstem dams, historical fish production variability and fish production model sensitivity, potential for variable outlets to affect water temperature, and spring pulse flow effects. The model application did not identify any single source of mortality acting as a true "bottleneck." **[Fort Collins Science Center]**

Effects of West Nile Virus on Bird Populations. A collaborative effort between FORT and NWHC is monitoring raptors in Rocky Mountain Arsenal NWR and raptors and shorebirds at Sonny Bono Salton Sea NWR for WNV. The collaboration includes USFWS, Colorado State Parks, CO DOW, CA Department of Fish and Game, Denver and Aurora Water Districts, Platte River Power Authority, Fort Collins, CSU, and private landowners in Wellington, CO. In Colorado, the first 3 years of a study monitoring WNV impacts on American Kestrels has generated 2421 samples from 120 breeding adults and 260 nestlings every breeding season. Preliminary lab results indicate that no kestrels tested positive; 95% of adults and 10% of chicks tested positive for WNV antibodies. In 2005, antibody levels declined in adults (80% for breeding females, 55% for breeding males) but increased among nest broods from 1% to 34% of nests. In 2006, 839 samples from 384 kestrels were collected; final lab analysis is winter 2006. In 2006, preliminary field monitoring protocols assessed WNV surveillance on the Sonny Bono Salton Sea NWR and surrounding ag lands. In early 2006, we serologically sampled 200 American kestrels, 120 burrowing owls, and 400 shorebirds in the area to provide baseline information on prevalence of WNV in selected species. **[Fort Collins Science Center]**

Channel Island fox. USGS partnered with the USFWS, St. Louis Zoo Endocrinology Lab, Channel Islands National Park, and the University of Southern California to identify factors influencing breeding success and productivity in captive populations of the endangered Channel Island fox. In the Island Fox Recovery Strategy captive breeding was identified as crucial for the recovery of island fox populations; reproductive performance of captive populations has not been optimal. Knowledge on the reproductive failures could guide management decisions to better manage captive populations to generate animals for restoration to the islands. **[Northern Prairie Wildlife Research Center]**

White-tailed Kites then and now. USGS scientists are using stable isotope analyses to assess whether white-tailed kite prey base can be identified from feather and blood samples. If successful, this technique will be applied to historic museum specimens to determine whether severe population declines in the 1920s correlate with changing prey base related to land-use patterns in California. Conservation genetics

work will determine whether a genetic bottleneck occurred during this decline, and whether current kite populations differ from kites present in California before the 1920's. **[Fort Collins Science Center]**

Raising Shasta Dam: What if? Land managers are evaluating the effects of a proposed raising of Shasta Dam on downstream salmonid populations in the Sacramento River. Investigators will apply SALMOD, which predicts the effects of a time-series of flow and water temperature on growth and survival of Chinook salmon, near Red Bluff using available habitat descriptions and quantifications. The model will use simulated flows and temperatures that reflect potential reservoir operations that would accompany raising Shasta dam, and should enable a more accurate assessment of effects on salmon. Specifically, the model is evaluating tradeoffs in impacts of likely stream temperature changes at different points in the chinook salmon life-cycle. **[Fort Collins Science Center]**

Contaminants and Reproductive Success of Aquatic Birds at Edwards Air Force Base. A recent USGS study estimated exposure of nesting aquatic birds to contaminants at Edwards Air Force Base at the sewage lagoons that comprise Piute Ponds and evaluated impacts of contaminants on avian reproduction. Birds occupying higher trophic levels (black-crowned night-heron, white-faced ibis, and American avocet) bioaccumulated higher concentrations of contaminants in their eggs. Reproductive success and egg hatchability of night-herons and white-faced ibises were similar to results observed at other western colonies. Contaminant concentrations evaluated in the single deformed ibis embryo were considered insufficient to have caused deformities. African clawed frogs, a primary prey item for night-herons at Piute Ponds, had no detectable levels of any organochlorine pesticides (OCs), so it is likely that OCs in night-heron eggs were acquired from the wintering grounds, rather than from EAFB. The presence of isomers of DDT in ibis eggs indicated recent exposure, but invertebrates used for food by ibises were not sampled. Researchers concluded that contaminants did not cause the observed egg failures.

Hothem, R. L., J. J. Crayon, and M. A. Law. 2006. Effects of contaminants on reproductive success of aquatic birds nesting at Edwards Air Force Base, California. *Archives of Environmental Contamination and Toxicology* 51:711-719. **[Western Ecological Research Center]**

Central Valley Habitat Changes Affect Space Use by White-fronted Geese. During the past decade, changing agricultural practices and conservation programs have altered the landscape in the Central Valley, resulting in increased wintering habitat for waterfowl. Pacific greater white-fronted geese have altered their spatial use of the valley in response to these changes. After habitat changes, geese traveled shorter distances between roosting and feeding sites. Geese have shifted into basins with the greatest increases in area under rice cultivation; use of wetlands declined for roosting and feeding. Post-harvest flooded rice fields drew a higher proportion of roosting and feeding geese than did post-harvest burned rice fields, the former practice. Collaborators included the California Department of Fish and Game, USFWS, California Waterfowl Association, and Ducks Unlimited. Citation: Ackerman, J. T., J. Y. Takekawa, D. L. Orthmeyer, J. P. Fleskes, J. L. Yee, and K. L. Kruse. 2006. Spatial use by wintering greater white-fronted geese relative to a decade of habitat change in California's Central Valley. *Journal of Wildlife Management* 70:965-976. Publication Brief for Resource Managers: <http://www.werc.usgs.gov/pubbriefs/ackermanpbsep2006.html>. **Contact:** Josh Ackerman, 530-752-0485, jackerman@usgs.gov **[Western Ecological Research Center]**

Avian Influenza Surveillance in California. Shorebirds are highly susceptible to avian influenza, so USGS, USFWS, and Point Reyes Bird Observatory are testing dunlins, long-billed dowitchers, and western sandpipers in California for the virus. As of Nov. 9, 857 of targeted 1,200 samples were collected; 769 have been tested and all tested samples have been negative. Together with the University of California, Davis, and the Department of Homeland Security, USGS is evaluating the use of rapid analysis technologies for on-site confirmation of avian influenza outbreaks. USGS and USDA-APHIS are studying the relationship between body condition of waterfowl and avian influenza infection rates.

Contact: John Takekawa, 707-562-2000, john_takekawa@usgs.gov [Western Ecological Research Center]

Tracking Bobcat Movements in Southern California. Researchers from USGS and Colorado State University are studying bobcat movement in the greater San Joaquin Hills in Orange County, CA, in coordination with The Nature Conservancy, City of Irvine, State Parks, County Parks, and the Irvine Company. In a two-year study, the researchers will fit up to 13 bobcats with GPS collars to document their movement patterns to better understand how habitat fragmentation affects wide-ranging species. Color ear tags will enable visual identification by viewers and by "camera traps" along trails, and visitors are encouraged to report sightings of collared or unmarked bobcats. Contact: Erin Boydston, 714-508-4704, eboydston@usgs.gov [Western Ecological Research Center]

Salinity and Other Environmental Variables Influence the Composition of Fish Species Assemblages in Salt Ponds and Sloughs in South San Francisco Bay. Salinity and other environmental variables are largely responsible for structuring the fish assemblages in salt ponds and adjacent tidal creeks and sloughs in south San Francisco Bay. The ponds, originally constructed and operated for commercial salt production, are undergoing conversion to tidal wetlands. 14,415 fish representing 16 families and 22 species were captured. Gill nets caught topsmelt (*Atherinops affinis*), northern anchovy (*Engraulis mordax*), and leopard shark (*Triakis semifaciata*), whereas seines and minnow traps caught rainwater killifish (*Lucania parva*) and longjaw mudsucker (*Gillichthys mirabilis*). Cluster analysis of presence-absence data indicated that two assemblages were present, one characteristic of the ponds and the other of the sloughs. "Pond" fishes were represented by 13 species, whereas "slough" fishes were represented by 22 species, including the 13 species characteristic of ponds. Results indicate that the pond assemblage was derived from the slough assemblage. The two most important variables influencing species composition were 1) minimum distance that a fish must travel to reach a pond from the nearest slough and 2) salinity. As fish from creeks and sloughs enter and move through the interconnected ponds, environmental stress factors increase in severity until only the more tolerant species remain. Variations in water temperature and dissolved oxygen concentration contributed to species composition, although their effects are less pronounced than that of distance and salinity. Contact: Michael Saiki, 707-678-0682 ext. 617, michael_saiki@usgs.gov. [Western Fisheries Research Center]

Bird Diversity in Response to Distance from the Shoreline of the Salton Sea. Salton Sea provides nutrients in the form of hundreds of thousands of dead fish carcasses, brine flies, and windborne chemical compounds. The Salton Basin has become a critical habitat for aquatic and terrestrial fauna, especially migrating, breeding, and wintering birds, largely because California has lost 90% of its original wetlands. According to a USGS study, spatial patterns in landbird and shorebird diversity may depend on proximity to the shoreline of the sea. Bird diversity was highest nearest the shore and significantly lower away from the sea edge. Patterns of vegetation cover by dominant plants at the study area were related to proximity to the sea edge, but there was no correlation between bird diversity and vegetation cover. Despite a direct relationship, bird diversity and vegetation cover may be responding to inputs of water and nutrients from the sea. Increased soil moisture may allow for higher levels of primary productivity, especially in salt tolerant plants, which may allow for more food and habitat structure for birds.

Mendelsohn, M. B., W. I. Boarman, R. N. Fisher, and S. A. Hathaway. 2007. Diversity of terrestrial avifauna in response to distance from the shoreline of the Salton Sea. *Journal of Arid Environments* 68:574-587. <http://dx.doi.org/10.1016/j.jaridenv.2006.07.012>. **Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/mendelsohnpbdec2006.html> **Contact:** Mark Mendelsohn, 619-225-6428, mmendelsohn@usgs.gov [Western Ecological Research Center]

Soil and Plant Responses to Removal of Grazers from Mojave National Preserve. Ecosystem disturbances and recovery involve multiple processes that operate on many different scales. Large-bodied

grazers can disturb soil and vegetation through trampling, consumption of preferred plant species, and redistribution of nitrogen and other nutrients. USGS scientists and colleagues investigated how cover of invasive plants and soil stability varied during grazing by burros and cattle in the Mojave National Preserve and whether these patterns changed after grazers were removed. After accounting for variable rainfall, findings indicated there were grazing-related patterns in soil and vegetation. Although some grazing-related characteristics appeared to lessen over time (suggesting partial recovery), other characteristics remained unchanged, even one to two years after grazing ended.

Beever, E.A., Huso, M., Pyke, D.A., 2006, Multiscale responses of soil stability and invasive plants to removal of non-native grazers from an arid conservation reserve: *Diversity and Distributions*, 12(3):258-268. **Contact:** David Pyke, 541-750-7334, david_a_pyke@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Tree Mortality after Early and Late Season Burning. To restore forest structure and reduce the risk of large, intense fires in Sierra Nevada forests, managers have increasingly used prescription burning. Before EuroAmerican settlement, such fires burned in late summer and early fall. Legal and logistical constraints are causing managers to increasingly burn during late spring and early summer. To study fire effects by burn season, scientists from USGS, U.S. Forest Service, and University of California, Los Angeles examined effects resulting tree mortality and bark beetle attacks. They established replicate plots in an old-growth mixed conifer forest in the Sierra Nevada that had not burned for more than 120 years. Replicate plots had one of three treatments: early season burn, late season burn, or unburned control. Although prescribed burns resulted in significant mortality, especially of the smallest tree size classes, no mortality differences between early and late season burns were detected. Direct mortality from fire was associated with fire intensity. Secondary mortality from bark beetles was not significantly correlated with fire intensity, but in some cases, it showed slight increases with early season burns.

Schwilk, D. W., E. E. Knapp, S. M. Ferrenberg, J. E. Keeley, and A. C. Caprio. 2006. Tree mortality from fire and bark beetles following early and late season prescribed fires in a Sierra Nevada mixed-conifer forest. *Forest Ecology and Management* 232:36–45. Publication Brief for Resource Managers: <http://www.werc.usgs.gov/pubbriefs/schwilkpbsep2006.html>.

Contact: Dylan Schwilk, 559-565-3175, dschwilk@usgs.gov [Western Ecological Research Center]

Simulating the Effects of Frequent Fire on Southern California Shrublands. Fire frequency has been steadily increasing in coastal California because of ignitions at the growing wildland-urban interface. Although chaparral and sage scrub are resilient to a range of fire frequencies, short fire return intervals can threaten the persistence of some species. Because fire effects differ by plant functional type, USGS and partners have modified a forest succession model (LANDIS) to predict fire effects on 60,000 hectares of shrublands within the Santa Monica Mountains National Recreation Area. Model simulations predicted broad-scale differential impacts of repeated fire, similar to those observed, strongly suggesting that there may be serious ecological consequences from altered fire regimes in southern California. In particular, increasing fire frequency could result in substantial declines in obligate and facultative seeding native shrubs and their replacement by nonnative grass.

Syphard, A. D., J. Franklin, and J. E. Keeley. 2006. Simulating the effects of frequent fire on southern California coastal shrublands. *Ecological Applications* 16:1744–1756. **Publication Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/keeleypbnov2006.html>. **Contact:** Jon Keeley, 559-565-3170, jon_keeley@usgs.gov [Western Ecological Research Center]

USGS Research Included in New California Fire Ecology Book. USGS scientists contributed to a new book that synthesizes knowledge of the science, ecology, and management of fire in California. The book will serve as a textbook for students and reference book for managers and policy makers. Articles authored or co-authored by USGS scientists: “*Fire as a Physical Process*,” “*Sierra Nevada Bioregion*,”

"Fire as an Ecological Process," "The Future of Fire in California's Ecosystems," "Southeastern Deserts Bioregion", "Fire and Invasive Plant Species," and "South Coast Bioregion."
<http://www.ucpress.edu/books/pages/10085.html>.

Sugihara, N. G., J. W. van Wagtenonk, J. Fites-Kaufman, K. E. Shaffer, and A. E. Thode (eds.). 2006. *Fire in California's Ecosystems*. University of California Press, Berkeley. 596 p. **Contact:** Jan van Wagtenonk, 209-379-1306, jan_van_wagtenonk@usgs.gov [Western Ecological Research Center]

Habitat Models Facilitate Understanding of Species Distribution. Mapping species distributions across large areas can involve costly and time-consuming field work to conduct extensive surveys. New approaches using GIS to identify animal-habitat relationships allow biologists to estimate the probability of a species occupying unsurveyed regions. The USGS and collaborators developed statistical models to identify the primary environmental variables important to the California gnatcatcher, a federally listed threatened species living in southern California's coastal sage scrub. Using known locations of the gnatcatcher, they modeled and mapped the potential region-wide distribution of the species. Understanding habitat relationships and species distributions at the regional scale enables scientists to see how populations respond to natural and human-caused environmental changes. Using this approach, areas of high conservation value for a target species can be identified and prioritized for management actions. Rotenberry, J.T., Preston, K.L., Knick, S.T., 2006, GIS-based niche modeling for mapping species' habitats: *Ecology*, 87(6):1458-1464. **Contact:** Steven Knick, 208-426-5208, steve_knick@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Wildfire Management on a Human-Dominated Landscape. Since 1970, 12 of the nation's 15 most destructive wildfires have occurred in California, costing the insurance industry \$4.8 billion. The most destructive on record were the southern California firestorms of Oct 2003. California's fire regime is now dominated by human ignitions, which, coupled with rapid population growth, results in many people at risk to natural high-intensity wildfires. Chaparral fires have characterized this landscape long before human occupation, and twentieth-century fire management practices have been ineffective in preventing them. Fires need to be viewed as other uncontrollable natural disasters, with a focus on developing human infrastructure capable of minimizing their damage. Keeley, J. E. and C. J. Fotheringham. 2006. Wildfire management on a human-dominated landscape: California chaparral wildfires, pp. 69-75. *In* G. Wuerthner, Editor, *Wildfire — A Century of Failed Forest Policy*. Island Press, Covelo, CA. **Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/keeleyfbnov2006b.html>. **Contact:** Jon Keeley, 559-565-3170, jon_keeley@usgs.gov [Western Ecological Research Center]

Too Few Studies Assess Success of Desert Tortoise Recovery Actions. Numerous scientific investigations have been undertaken with the purpose of advancing the recovery of the desert tortoise. However, a new USGS report finds that few of these studies specifically evaluate the effectiveness of management actions taken for the recovery of this federally threatened species and that more scientifically-based follow-up monitoring of actions needs to be implemented.

Boarman, W. I. and W. B. Kristan. 2006. Evaluation of Evidence Supporting the Effectiveness of Desert Tortoise Recovery Actions. USGS Scientific Investigations Report 2006-5143:1-27; Boarman, W. I. and W. B. Kristan. 2006. Evaluation of Evidence Supporting the Effectiveness of Desert Tortoise Recovery Actions. USGS Scientific Inv. Report 2006-5143. <http://pubs.usgs.gov/sir/2006/5143/index.html>. Bill Boarman, 619-861-9450, conservation-science@cox.net [Western Ecological Research Center]

Spring Migration of Northern Pintails Assessed by Satellite Telemetry. Research by USGS has provided information about migration routes, timing, and destinations of northern pintails after they depart from major wintering regions in North America (northern Central Valley of California, Playa

Region and Gulf Coast of Texas, and southcentral New Mexico). Using satellite telemetry, researchers tracked migrating pintails from these wintering areas to stopover locations and ultimate nesting regions. Migration strategies differed by wintering regions, and four different strategies were used by pintails that wintered in California. A major spring staging area was identified for pintails that wintered in California but not for birds wintering in Texas or New Mexico. Collaborators were Ducks Unlimited, USFWS Region 2, Playa Lakes Joint Venture, and California Waterfowl Association.

Miller, M. R., J. P. Fleskes, J. Y. Takekawa, D. L. Orthmeyer, M. L. Casazza, and W. M. Perry. 2001. Satellite tracking of northern pintail spring migration from California, USA: the route to Chukotka, Russia. *Casarca* 7:229-233; Miller, M. R., J. Y. Takekawa, J. P. Fleskes, D. L. Orthmeyer, M. L. Casazza, and W. M. Perry. 2005. Spring migration of northern pintails from California's Central Valley wintering area tracked with satellite telemetry: routes, timing, and destinations. *Canadian Journal of Zoology* 83:1314-1332; Miller, M. R., J. Y. Takekawa, J. P. Fleskes, D. L. Orthmeyer, M. L. Casazza, D. A. Haukos, and W. M. Perry. 2005. Flight speeds of northern pintails during migration determined using satellite telemetry. *Wilson Bulletin* 117:364-374; Haukos, D. A., M. R. Miller, D. L. Orthmeyer, J. Y. Takekawa, J. P. Fleskes, M. L. Casazza, W. M. Perry, and J. A. Moon. 2006. Spring migration of northern pintails from Texas and New Mexico, USA. *Waterbirds* 29:127-136. **Publication Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/millerpbsep2006.html>. Michael Miller, 707-678-0682 x618, michael_r_miller@usgs.gov

COLORADO

Selenium in fish tissue of endangered species in Colorado River and tributaries by instrumental neutron activation: A large set of fish muscle plugs from fish inhabiting Stewart Lake and the Gunnison and Green Rivers of Colorado was received from USFWS personnel in Grand Junction, CO and Salt Lake City, UT and processed to the University of Missouri Reactor for analysis of the ⁷⁵Se. Data described the relationship between Se residues in hatchery fish, grow out ponds, and those stocked in rivers. An equation was derived for fish species to estimate Se residues in whole body and eggs from those measured in skeletal muscle. [**Columbia Environmental Research Center**]

Public Knowledge and Perception of Bats in Fort Collins, Colo. Bats are finding roosts in homes and buildings along the Colorado Front Range as urbanization diminishes availability of natural roosts and places people in greater contact and increased risk for disease transmission. This study with scientists from FORT, CSU, and CDC is expanding public knowledge, perceptions, and preferences of bats and disease transmission by investigating the human dimensions impacts of commensal bats and humans. This information is vital for managing bats and developing effective communications protocols regarding bat disease and ecology. [**Fort Collins Science Center**]

Ecology of Rabies Transmission in Commensal Bat Colonies. Bat biologists have completed field and laboratory phases on the ecology of rabies transmission in big brown bats. This work was funded primarily through a grant to CSU from NSF and the NIH Ecology of Infectious Diseases program, of which USGS was a founding partner. FORT determined the population dynamics and ecology of bats that roost in human-occupied buildings in Fort Collins, and coordinated field sampling of marked and released bats for serological studies of antibodies and determination of rabies virus in bat saliva. The 5-yr study ranged from molecular studies of genetic variants of the virus to seasonal migrations of the bats and integrated modeling to characterize overall rabies transmission dynamics. The study has revealed a unique capacity of bats to acquire a degree of immunity to rabies, typically considered fatal in mammals. The

application of passive integrated transponders for individual identification and remote monitoring of bats formed the foundation for determining bat survival rates (a key component of host dynamics) in relation to multiple ecological factors. The work is now concentrating on final data analysis and comprehensive modeling of the bat population-rabies-transmission system. **[Fort Collins Science Center]**

Bat Use of Coniferous Forests at Mesa Verde National Park. In FY06 1,000 bats were captured, identified and released as they drank or foraged over water. New distribution records for two species of bats were established, and use of Mesa Verde by a total of 15 species of bats was documented by 2006 capture records. Selected individuals of multiple species were radio-tracked to determine roosting locations of reproductively active females. Most bats favored roosting in rock crevices, particularly in steep canyon cliff faces. For these bats the recent wildfires in piñon-juniper woodlands may not have severely impacted roosting habitat. Research has revealed at least three maternity colony sites for spotted bats (*Euderma maculatum*) at Mesa Verde, the first records for Colorado. **[Fort Collins Science Center]**

Vegetation mapping for the Canyon de Chelly National Monument and Mesa Verde National Park. Vegetation cover maps are critical for managing park units and many parks currently have no or old maps. FORT collaborated with USGS-NPS VMP and the Southern Colorado Plateau Network to complete half of the photo-interpretation and all of the GIS automation to produce a draft vegetation cover map for Canyon de Chelly National Monument. FORT received eCognition-derived polygons to help determine the most appropriate set of eCognition polygons to use for mapping vegetation at Mesa Verde National Park. **[Fort Collins Science Center]**

Wild Horse and Burro Research for BLM. BLM is responsible for managing 229 wild horse and burro herds located across more than 88 millions acres of public land. Accurate herd counts lie at the heart of management decisions concerning herd and habitat health. Researchers are testing aerial survey techniques for more accurate population estimates and conducting field trials on immunocontraception. In 2006, scientists completed the final applications of fertility control to mares in two Herd Management Areas, and provided managers with pregnancy test results from treated mares in all three research herds. The fertility control applications in the Little Book Cliffs has decreased foaling rate by 43% in the last three years, reducing the physical and financial burdens associated with capture and removal strategies for population reduction. Behavioral and demographic data collected during FY06 provided real-time adaptive management information for BLM wild horse specialists. Tests of aerial population estimation techniques continued in FY06; FORT coordinated with BLM herd managers to conduct joint surveys on all flights. Models for analyzing the aerial survey data were refined in FY06 and applied to all recent survey results to improve estimation techniques. **[Fort Collins Science Center]**

Mountain Lion Research in Rocky Mountain National Park. The mountain lion is Colorado's top predator and one of Rocky Mountain National Park's most charismatic species. As park visitation increases, so does the likelihood of human-cat encounters. Information on the ecology and movements of park pumas is critical to managers. FORT and the Colorado Division of Wildlife are investigating the ecology and behaviour of lions. The CDOW study tested lion-killed mule deer for CWD, while the FORT study investigates birth and death rates, movement, home range, population dynamics, and mountain lion-human interactions. FORT is testing non-invasive capture methods. This year the research team captured 5 lions in and around the Park, fitted them with GPS collars and developed preliminary maps of habitat usage. They collected video footage of behavior at kill sites. **[Fort Collins Science Center]**

Population Genetics of Gunnison Sage-Grouse: Implications for Management. The newly described Gunnison Sage-Grouse is a species of concern because of marked declines in distribution and abundance. Loss and fragmentation of sagebrush habitat has caused remaining populations to be unusually small and isolated, hence genetically at risk. A range-wide DNA analysis of Gunnison Sage-Grouse populations was completed and these data used to assess population subdivision among Gunnison Sage-Grouse

populations and document levels of genetic diversity. The study provided information for a range-wide conservation plan, including suggestions for monitoring and maintaining genetic diversity. We are developing new markers specifically from Gunnison Sage-Grouse for use with low-quantity and -quality DNA samples. **[Fort Collins Science Center]**

Black-footed Ferret Recovery: Progress and Continuing Challenges. The USFWS requested assistance in jointly hosting a symposium to evaluate the progress of black-footed ferret recovery and identify next steps to advance recovery. The 2004 symposium provided a forum for organizing and disseminating information and bringing together technical experts and resource managers to collaboratively discuss necessary future actions. Information presented at this forum on ferret behavior, physiology, management requirements, available habitat, and factors affecting survival and recovery had not been readily available for use in recovery planning. In FY06 FORT staff produced proceedings, *Recovery of the Black-footed Ferret: Progress and Continuing Challenges*, which provides new knowledge generated from 15 years of management and research activities and supplies FWS with critical information for updating and planning future ferret recovery efforts. **[Fort Collins Science Center]**

Whirling Disease: Whirling disease is an affliction of young trout that has severely reduced naturally reproducing trout populations in Colorado. It is caused by a microscopic parasite associated with worms of the genus *Tubifex*, which can transmit the disease to young fish that feed on them. Researchers are working with the Colorado Division of Wildlife and Colorado State University to develop sediment transport models http://www.fort.usgs.gov/Research/research_tasks.asp?TaskID=832798S.1.0 of *Tubifex* habitat for identifying flow regimes and channel modifications that could reduce such habitats. Field work and modeling on reaches of two streams in no. Colorado were used to design channel modifications to isolate *Tubifex* habitat and lower the incidence of whirling disease. **[Fort Collins Science Center]**

Nitrogen Deposition. For 24 years, scientists have been studying the air, water, vegetation, and soil of mountain habitats within and around Rocky Mountain National Park to determine the consequences of nitrogen from atmospheric deposition <http://www.fort.usgs.gov/resources/spotlight/itsintheair/>. Results show nitrogen is accumulating in high-elevation ecosystems, bringing about shifts in plant and animal communities, decreases in soil fertility, and increases in algae growth. Sources of atmospheric nitrogen include automobile, power plant, and agricultural emissions. Scientists continue to evaluate the degree of impact and explore the pathways by which nitrogen moves through high-elevation ecosystems. **[Fort Collins Science Center]**

HAWAII

Socioeconomic Analysis of Alternative Transportation Planning for Kilauea Point National Wildlife Refuge, Kauai, Hawaii: A survey of visitors and the community for this refuge was conducted and a final report presented to FWS and Department of Transportation, who developed conceptual alternatives for an Alternative Transportation Plan. Refuge managers used the results to act on other issues, such as initiating a new fee booth. **[Fort Collins Science Center]**

Brown Treesnake Rapid-Response Training Workshops. The Brown Treesnake (BTS) is a destructive invasive species that became established on Guam in the 1940's. It has extirpated indigenous species, including most songbirds. To help prevent incursions on other snake-free islands in the Pacific region, USGS established the BTS Rapid Response Team (RRT). With local support and public assistance, the RRT can respond quickly to snake sightings with teams of visual searchers, snake traps, and other tools to capture and remove BTS from snake-free locations. RRT membership and member refresher training is ongoing through yearly workshops. Currently there are more than 40 team members located throughout

the Pacific region. All team members participate in intensive training on Guam, where they gain first-hand experience with BTS sighting and control measures, including response protocols, snake capture and handling, visual searching, and trapping techniques. The 20 participants in this year's courses represented the Hawaii Department of Agriculture, Maui Invasive Species Committee, Commonwealth of the Northern Mariana Islands Department of Land and Natural Resources, Palau Division of Agriculture, Federated States of Micronesia Agriculture Unit, Republic of the Marshall Islands Ministry of Resources and Development, and the U.S. Army at Kwajalein Atoll. [Fort Collins Science Center]

Impact of an introduced predatory coral-reef fish, the grouper *Cephalopholis argus*, on the native reef fish populations and on the aquarium fish industry in Hawaii. The non-native grouper species roi (*Cephalopholis argus*) was introduced in 1956 and has since become the dominant reef fish predator in the Main Hawaiian Islands (MHI). We determined the annual prey consumption by roi populations in 63 km² of nearshore habitat along the west coast of the Island of Hawaii, and compared it with the standing stock of prey and the take by the aquarium fish industry in this area. The calculation was based on the diet composition, daily ration, and population size of roi, which we determined from stomach content analysis of 286 roi collected at 17 sites in the MHI in 2003, gastric evacuation rate experiments with 16 live roi in mesocosms, and analysis of benthic habitat maps and visual censuses of roi and prey fish densities at 23 sites along the West coast of Hawaii. The roi population size in this area was 56,290 individuals with a total biomass of 34 tons. At a mean daily ration of 0.8% of own body weight, annual prey consumption by roi was 8.2 million reef fishes with a total biomass of 93.7 tons, and 5.5 tons of crustaceans. This was equivalent to 11.2% of total fish community standing stock biomass. Consumption was characterized by the large diversity of fish prey (16 families and 24 species identified from 286 roi samples), but at the same time, dietary importance of a limited number of families (>85% of the diet consisted of 5 families). Relative to take by the aquarium fish industry, roi consumption in areas open to aquarium fish collections removed larger numbers of fish (24 times the industry take), but was focused on smaller individuals (11.4g versus 25g). Roi consumption of Yellow Tang (*Zebrasoma flavescens*), which is the main species taken by the industry, was lower than industry take (33% of take by biomass and 73% by number), and again focused on smaller sized specimens. Our results suggested that roi consumption is likely to be an important factor shaping reef fish communities, and a particularly important source of mortality for the prey life history stages settler and early juvenile, and raise the question how prey communities can be resilient to predation pressure of such magnitude. [Jan Dierking, Hawaii Cooperative Fish and Wildlife Research Unit]

IDAHO

Trumpeter Swans: In the conterminous U.S., only one group of Trumpeter Swans has survived historic overexploitation and habitat loss in the tri-state region of Montana, Idaho, and Wyoming near Red Rock Lakes NWR. Using DNA sequence and microsatellite analyses, scientists are investigating whether the tri-state flock is genetically different from other flocks across the swan's range. They are documenting gene flow and genetic diversity among flocks to determine if they are distinct enough to justify moving birds and eggs between flocks as a part of ongoing restoration efforts. [Fort Collins Science Center]

Spawning, Substrate, and Salmon. Salmon are renowned for their ability to return to their birth stream to spawn a new generation. However, whether or not they return to specific sites (fine-scale homing) is not well studied. A USGS scientist co-authored a paper, from previous work with the U.S. Forest Service, examining the influences of sex and habitat fragmentation on fine-scale homing by Chinook salmon in the Middle Fork Salmon River (Idaho). The study analyzed the genetic relatedness of individual fish in the wilderness stream network. Male adult Chinook salmon roamed over long distances during spawning, whereas female salmon were considerably less mobile. Female salmon construct nests in stream

substrates and may thus be tied to more restricted locations. This study, one of the first to show fine-scale patterns of homing by salmon, has important implications for identifying population structure in salmon. Neville, H., Isaak, D., Dunham, J.B., Thurow, R., Rieman, B., 2006, Fine-scale natal homing and localized movement as shaped by sex and spawning habitat in Chinook salmon- Insights from spatial autocorrelation analysis of individual genotypes: *Molecular Ecology*, 15:4589-4602. **Contact:** Jason Dunham, 541-750-7397, jdunham@usgs.gov [**Forest and Rangeland Ecosystem Science Center**]

Recent Mallard Mortality Event. A large scale die-off of mallards along a small creek that borders agricultural lands took place in mid-Dec, 2006. The event was reported to the Idaho Department of Fish and Game (IDFG) by a hunter. Sick birds were reported to be gasping for breath, unable to vocalize and unable to sustain flight. By December 11, 2006, mortality has escalated to 1,500 birds; Dr. Mark Drew, Wildlife Veterinarian for the IDFG, called NWHC to report the mortality in mallard ducks. On Dec 13, 2006, the USFWS in ID sent 8 fresh carcasses – 7 mallards and 1 wigeon to the NWHC. NWHC was told that other wild birds in the region, such as golden eagles, geese, magpies and crows, were not affected. Necropsies and laboratory diagnostics were conducted at the NWHC. Although Newswire reports suggested pesticides or bacterial infection as possible causes of death, field observations, species restriction primarily to mallards, gross necropsies, and lab isolation indicate that aspergillosis (a fungal infection, specifically *Aspergillus fumigatus* is suspect) is the probable cause of death. Aspergillosis occurs when mallard ducks feed on waste grains, such as corn, that becomes moldy during inclement weather. Once the weather clears and the birds return to normal feeding behavior, such events normally end. [**National Wildlife Health Center**]

KANSAS

Risk assessment of perchlorate in surface and ground water in the Midwestern and Southwestern United States. EPA guidance on perchlorate is consistent with recommendations developed by NAS, but differences exist between EPA and states in recommended safe concentrations of perchlorate in surface water. Data were analyzed following a step-wise process that yielded a characterization of risks associated with perchlorate exposure, reflecting qualitative and quantitative outcomes from data analysis. An uncertainty analysis (including sensitivity analysis, as appropriate) was conducted to interpret risks associated with perchlorate across the variety of environmental matrices considered part of this reconnaissance study. A final report "*Perchlorate Reconnaissance Study: Preliminary Analysis of Risks Associated with Perchlorate in Surface Water and Ground Water in the Central Great Plains and Southwestern USA*" was completed Nov 2006. [**Columbia Environmental Research Center**]

Community characteristics of benthic invertebrates. In this study we developed macroinvertebrate community parameters for urban streams, large rivers, wetlands, and lotic ecosystems that have been subjected to specific anthropogenic disturbances such as acid mine drainage and nutrient enrichment. Urban watersheds in the central U.S., including the Kansas City Metropolitan area, were used in order to determine aquatic life use support, relative site quality, effects of rapid development and changes in land use, and declines in water quality. A final report was submitted to the Missouri DNR and USEPA Region 7 in Aug 2005.. [**Columbia Environmental Research Center**]

Status and trends, environmental ecology, and reproductive biology of the endangered Topeka Shiner (*Notropis topeka*). The Topeka shiner was listed as an endangered species by USFWS in 1998. Topeka shiners most often occur in pool and run areas of streams and are reported to spawn in pool habitats, over green sunfish (*Lepomis cyanellus*) and orangespotted sunfish (*Lepomis humilis*) nests, from late May through July in MO and KS. Males establish small territories on the periphery of these nests. Data concerning spawning behavior, larval stages, and subsequent development of the Topeka shiner are

lacking. The objective is to address questions associated with ecology and reproductive biology to facilitate recovery of the species for de-listing. Lab studies are being conducted to understand the effects of temperature, photoperiod, and substrate conditions on Topeka shiner reproductive behavior and habitat choice in order to identify optimal spawning conditions. In FY06, laboratory and mesocosm studies identified preferred substrates of males in spawning condition and temperature/photoperiod combinations that facilitate reproductive development. **[Columbia Environmental Research Center]**

Integrating Agriculture and Conservation. Assistance to FSA focused on lands enrolled in CRP and other conservation programs administered by USDA. In cooperation with Kansas Department of Wildlife and Parks, field data collection was completed on a 2-year study to determine effects of incidental cattle grazing on linear conservation practices associated with winter grazing of crop stubble fields. Results have the potential to show that conservation policies and viable economic uses are complementary uses of agricultural lands. FORT completed an investigation of the Farmable Wetlands Program and delivered a final report and presentation of management implications for these lands to FSA. In cooperation with NRCS, Colorado State University, and a private landowner, FORT investigated grazing to refine management of CRP grassland in the shortgrass steppe. This long-term study has the potential to refine agricultural conservation policies and make them more beneficial to agricultural operations and wildlife endemic to shortgrass ecosystems. Assistance was furnished to the Wildlife Management Institute and FSA pertaining to a National Corn Grower Association request for documentation of conservation program effectiveness in the Little Blue River watershed of KS and NE. Key findings highlighted the interest of landowners for continued participation in conservation programs, their desire for information describing local results, communication of this information to the general public, and the need for local assessments of the effectiveness of conservation policies. **[Fort Collins Science Center]**

The Lesser Prairie-Chicken has one of the most restricted ranges of North American grouse, having sustained marked reductions in suitable habitat over the past 100 years. What remains is a highly fragmented distribution throughout its range. Despite a slowing in the rate of habitat loss, populations have continued to decline range-wide, and the bird is considered a "warranted but precluded" threatened species by USFWS, whose managers are concerned that genetic diversity within individual populations <http://consngen.cr.usgs.gov/research/chicken.asp> might not be sufficient to maintain them. Using mitochondrial DNA sequence and nuclear microsatellite analyses on 3 Kansas populations of Lesser Prairie-Chicken, scientists are determining if this is the case. Results will help managers determine the best conservation practices for these birds at local and regional levels. **[Fort Collins Science Center]**

Protecting Playas: Playas are small, isolated wetlands found throughout the central and southern High Plains that support a significant portion of the region's biodiversity and are believed to play a vital role in recharging the Ogallala Aquifer. Agricultural activities in the Playa Lakes Region, including western Kansas, have led to severe degradation and loss of playas due to sedimentation. Contaminants in runoff such as nutrients and pesticides also threaten playas. Buffer strips of native grasses can protect playas from runoff that contains sediments and contaminants. Playa Lakes Joint Venture asked USGS to develop a literature synthesis http://www.fort.usgs.gov/Products/Publications/pub_abstract.asp?PubID=21485 and annotated bibliography http://www.fort.usgs.gov/Products/Publications/pub_abstract.asp?PubID=21488 summarizing what is known about grass buffers and their protective capabilities for isolated wetlands. **[Fort Collins Science Center]**

MONTANA

Influence of modified discharge and water temperature regimes from Fort Peck Dam on pallid sturgeon and other native fishes: Water temperature and turbidity loggers were positioned throughout

the Missouri River and lower Yellowstone River. 7,820 km of the Missouri River and lower Yellowstone River have been radio tracked since April, resulting in several hundred relocations of pallid sturgeon, shovelnose sturgeon, paddlefish, and blue suckers. 8,800 larval fish were identified in 2005 including 12 larval sturgeons. 1800 larval fish samples were collected during 2006. The majority of larval fish samples will be processed later; larval sturgeons have been identified from samples collected during daylight and darkness. Sampling for young-of-year sturgeon to quantify reproductive success was initiated, with two individuals to date. Sampling for young-of-year sturgeon will continue through early Sept. **[Columbia Environmental Research Center]**

Species, population, and habitat assessments for native cutthroat trout. Native trout populations have declined drastically throughout western America over the past century as a consequence of habitat degradation and nonnative species introductions. Restoration efforts are hampered by lack of comprehensive and integrated assessments of current resource status necessary to prioritize management actions. Numerous federal and state resource management agencies and non-governmental organizations have designated cutthroat trout as a "species of special concern" or a "sensitive species." Management actions have improved the probability of persistence of the cutthroat trout in some areas, but recent introductions of nonnative species (e.g., lake trout *Salvelinus namaycush*, New Zealand mud snail *Potamopyrgus antipodarum*, and *Myxobolus cerebralis* (whirling disease), and 7 yrs of drought in the northern Rocky Mountains have caused increased concern about numerous populations. Observed and predicted changes in climate and shrinking water resources will continue to exacerbate conflicts among water users throughout the western USA. **[Northern Rocky Mountain Science Center]**

Conservation requirements for wildlife of the Northern Rocky Mountains: The Interagency Grizzly Bear Study Team. The IGBST was established to investigate status and trend of the grizzly bear population; use of habitats by bears; and relationship of land management activities to the behavior and welfare of the bear population. Research on population trends and demography has been extensive. Results have provided insight into bear numbers and population trend and suggest increased numbers and expanding distribution of grizzlies. IGBST monitors production of important foods, part of the habitat based recovery criteria built into the Conservation Strategy. Foods monitored include ungulate carcasses, whitebark pine seeds, native cutthroat trout, and army cutworm moths. Abundance of foods is known to impact distribution and mortality of the bears. Annually, as directed by IGBC (min 25 collared females), the study team traps and collars bears; marked individuals are radiotracked to evaluate bear use of vegetation types, evaluate impacts of humans and development, provide estimates of reproduction and survival, and causes of mortality. Key findings: model-averaged estimate of number of unduplicated females suggests an increase in population; distribution of unduplicated females with cubs indicate expanding distribution; known and probable grizzly bear mortalities indicate expansion; spring carcass surveys on YNP ungulate winter ranges averaged 0.40 carcasses/km during 2006, carcasses/km were higher in 2006 than in previous 6 yrs; identified 51 army cutworm moth aggregation sites in GYE used by grizzly bears; whitebark pine cone production averaged 34 cones/tree on 19 transects; mountain pine beetle continues to impact whitebark pine in GYE. **[Northern Rocky Mountain Science Center]**

Conservation requirements for wildlife of the Northern Rocky Mountains: The Northern Continental Divide Grizzly Bear Project. Grizzly bear population in NW Montana is one of six threatened populations identified in the USFWS Grizzly Bear Recovery Plan (1993). Previous grizzly bear research has focused on specific issues in small areas, such as habitat use or the effects of roads on bears; little is known about the status of the entire population. Objectives are to use noninvasive sampling and DNA fingerprinting of grizzly bear hair to develop a statistically rigorous estimate of grizzly bear population size and assess variation in the density of bears. This is a large, cooperative effort involving 12 federal, state, and tribal agencies as well as private and corporate landowners, non-profit organizations, and universities. 545 unique grizzly bears have been identified based on DNA analysis of 33,000 hair samples collected in 2004; 307 female and 238 male bears; the largest concentration of

larger study, passive sampling devices are being used to measure organic chemicals dissolved in the water and potential estrogenic and/or androgenic effects that may occur due to prolonged exposure to those chemicals. Sample extracts were received at CERC in FY06 and are being processed. [Columbia Environmental Research Center, Columbia, MO]

Genetics Study Reveals Finer Details of Trout Populations. Landscape genetics is a new field that uses genetic techniques to understand how population processes like migration and population growth rates are affected by environmental features. USGS and colleagues used a landscape genetics approach to study Lahontan cutthroat trout in a complex stream network in the Great Basin. Overall, this work suggests that individual Lahontan cutthroat trout populations in streams are affected by a combination of landscape factors, such as habitat quality and the presence of migratory fish. Results show that landscape genetics can reveal unexpected processes, even within a system that is well studied using conventional methods. The subspecies of Lahontan cutthroat trout is listed as threatened under the Endangered Species Act, and results of this work will have important implications for recovery planning.

Neville, H., Dunham, J.B., Peacock, M., 2006, Landscape attributes and life history variability shape genetic structure of trout populations in a stream network: *Landscape Ecology*, v. 21, p. 901-916.

Contact: Jason Dunham, 541-750-7397, jdunham@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Landscape-scale Monitoring in the Great Basin. Recognizing the emerging need to understand, monitor, and predict landscape-level changes in the Great Basin, USGS initiated an integrated landscape monitoring project. Partners engaged will develop a comprehensive monitoring strategy, framework for data management, and analytical tools built around priority monitoring questions. This will include an assessment of landscape changes across the Great Basin based on functions of key ecosystem drivers. To detect landscape changes, they will develop and apply integrated scientific information, monitoring tools, and analysis techniques. The involvement of more than 30 professionals from all USGS disciplines and key natural resources management agencies make this a true interdisciplinary effort.

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NEW MEXICO

Determine the toxicological effects of degraded water quality on aquatic resources in the western United States: BOR, USFWS and the Middle Rio Grande Conservancy District are developing a sanctuary for the Rio Grande silvery minnow (*Hybognathus amarus*) in the floodplain of the Rio Grande near Albuquerque. The principal water source will be the Albuquerque Riverside Drain near the Barr Canal south of Bridge Street. The system will pump drain water into the sanctuary, but river water may also be used to achieve target water quality or quantity objectives. Preliminary on-site toxicity studies indicate that both drain and river water may be suitable water sources. Data may be useful during salvage operations in identifying pools where live silvery minnow may be present as well as those where lethal conditions exist and chances of finding live fish are low. Based on total ammonia concentrations, larvae were twice as sensitive as juveniles; data will be used to predict effects of brief exposures to elevated ammonia concentrations that occur in the Middle Rio Grande resulting from events at wastewater treatment plants and runoff from livestock operations. [Columbia Environmental Research Center]

Cerro Grande fire. Pre-wildfire fuel treatments (thinning, prescribed burning, and combinations) had variable effects on non-native plant species establishment following wildfire at regional (western US) scales. The Cerro Grande burn thinning resulted in significantly more non-native plant cover one season post-fire. In Colorado and New Mexico, more severe fire resulted in greater cover of non-native plant

species. Post-fire seeding on the Cerro Grande burn resulted in greater cover of non-native species. In general, post-fire seeding does not usually achieve desired stabilization and often results in the undesirable establishment of non-natives. **[Fort Collins Science Center,]**

Endangered Bat Conservation: 3 species of nectar- and pollen-feeding bats are critical to the health and maintenance of ecosystems in the borderland area. The lesser long-nosed bat and greater long-nosed bat are endangered, and the Mexican long-tongued bat is a candidate for listing. All three are jeopardized by vandalism and destruction of roosting sites, killing by humans, and loss of habitat and food resources. FORT completed a study of distribution, abundance, and roosting behavior of bats in SW New Mexico to inform BLM conservation and management activities affecting the bats and their associated desert ecosystems. Of substantial interest is the discovery of a natural cave roost on BLM land that houses the largest known colony in the U.S. comprising both lesser and greater long-nosed bats. 5,000 bats were counted exiting from one of the two known entrances to this new roost in the Big Hatchet Mountains 30 km east of the Animas roosts and outside the known range of both species. The discovery of additional roosts suggest that adequate roosting habitat for the two species in the region may be more common than was previously suggested, and that both species of long-nosed bat have more extensive ranges in SW NM than previously believed. **[Fort Collins Science Center]**

Fire and Drought. In the Jemez Mountains, scientists are investigating historic patterns of fire occurrence, drought, and vegetation to help land managers understand natural fire regimes and restore forests to less hazardous and more sustainable ecological conditions. In Los Alamos, USGS scientists are engaging wildfire-affected communities in fire education, recovery, and rehabilitation. Through the Volunteer Task Force, a multi-agency-sponsored community coalition based in Los Alamos, they are using their experience and expertise to help other fire-affected communities in the West do the same. **[Fort Collins Science Center]**

Tamarisk, or saltcedar, http://www.usgs.gov/invasive_species/plw/saltcedar.html is an exotic plant species that has invaded riparian areas throughout the West. Multi-agency efforts toward controlling and removing tamarisk are ongoing and more are proposed. USGS is working on several levels to assist Federal and State land and water management agencies in New Mexico. Tamarisk projects http://www.fort.usgs.gov/Research/research_tasks.asp?TaskID=8327BBQ.1.0 include leading cooperation among many involved agencies, tribes, and private groups; developing predictive models to estimate vegetation changes and their effects on water supply in response to different flow regimes; and researching tamarisk ecology and the effectiveness of different management, control, and removal processes. **[Fort Collins Science Center]**

NORTH DAKOTA

Potential biological invasions associated with interbasin water transfers: Transfer of water between basins may pose risks of transferring potentially invasive species. An extensive risk analysis of biotic transfers was conducted on the proposed diversion of Missouri River to the Red River of the North. The analysis considered ecological risk from the perspective of treatment technologies, materials, conveyance design and routing. Considerable overlap in biota exists between the Missouri and Red River watersheds. Biotic transfers by means other than engineered water diversions are likely. Risks vary with species of concern, means of water conveyance, and extent of water treatment. The likelihood of biotic invasions resulting from the failure of water diversion conveyance is greatly influenced by treatment processes, though nano- and micro-filtration technology would limit such probabilities. This risk assessment focused at the direction of stakeholders on specific species; the range of species evaluated encompassed the range of particulate sizes that would be addressed by various water treatment technologies. An

evaluation of engineering and pipeline routing options relative to the release of nonindigenous biota from water diversion conveyance was completed in Oct 2006. [Columbia Environmental Research Center]

Cottonwood Lake Study Area The 40th year of data collection (15th year of intensive biological sampling) was completed in FY 2006. Data are instrumental in quantifying and furthering understanding of factors influencing patterns of temporal and spatial patterns in prairie wetland ecosystems. The recently published "*Wetland Continuum Concept*" provides a framework for interpreting biological studies of wetlands that allows for the simultaneous consideration of temporal and spatial influences. In FY 2006, data from was used to test the efficacy of using various remotely sensed attributes in integrated landscape monitoring. [Northern Prairie Wildlife Research Center].

Invasive plants. Smooth brome (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*) and weedy forbs (e.g., leafy spurge [*Euphorbia escula*], Canada thistle [*Cirsium arvense*], and sweet clover *Melilotus spp.*) pose an imminent, widespread threat to the biodiversity of prairies managed by the USFWS. Based on recent surveys of Service-owned prairie in northwestern and north-central North Dakota, invasion by smooth brome and Kentucky bluegrass may be far more extensive than previously thought. A 2005 USFWS survey on grassland management issues indicated invasion by smooth brome as the chief habitat conservation concern. This rhizomatous, introduced grass rapidly out-competes native grasses and forbs, especially under extended periods of rest, and forms monotypic stands depauperate of structural variety and species diversity. Management attempts to suppress smooth brome, Kentucky bluegrass, and other cool-season invasive species have met with poor to inconsistent success, particularly in prairies naturally dominated by cool-season native plants and where rest has been the dominant management strategy. The USFWS Dakota Working Group has endorsed a broad-scale, adaptive approach because it provides a scientifically sound strategy for elucidating the ecology and management of native prairies in general and for controlling invasive plants such as smooth brome and Kentucky bluegrass in particular. A workshop entitled, "*The Brome Summit*" was held in FY 06 to begin preparation for the adaptive management experiments. [Northern Prairie Wildlife Research Center]

Sheyenne National Grassland USGS partnered with USDA Forest Service in FY 2004 to develop a tool for assessing plant communities in Sheyenne National Grassland. Implementation of methodologies described will allow US Forest Service to monitor sensitive plant communities within the National Grasslands and provide decision makers with information on plant community responses to environmental and management changes. The USFWS has expressed interest in developing the methodology to monitor plant communities on DOI lands, and Lacreek National Wildlife Refuge (NWR) has included this assessment methodology into the Refuge Comprehensive Conservation Plan. [Northern Prairie Wildlife Research Center]

Integrated Landscape Monitoring (ILM) Prairie Pilot. This is one of four pilot projects begun nationwide, initiated during FY2006 as a USGS Science Thrust. USGS is collaborating with several partner agencies including FWS, FSA, and NRCS to develop a national model to assess and quantify ecosystem services provided by these agencies in the Prairie Pothole Region. An interagency science team is evaluating the feasibility of measuring ecological services outcomes of conservation programs, identify appropriate monitoring strategies, and propose a strategy to model outcomes. [Northern Prairie Wildlife Research Center]

American white pelicans. USGS is collaborating with USFWS at three NWRs in ND, SD, and MT; with state wildlife agencies in ND and SD; with scientists at NWHC; with USDA National Wildlife Research Center; and with state health department officials in North Dakota to address conservation and management concerns related to American White Pelicans on their breeding grounds. Entomologists from Montana State University joined the research program in 2006. Center scientists have led 3 years of research and monitoring efforts, provided information to USFWS and Congress, and developed study

plans for additional years of data collection. At the request of USFWS Region 6, NPWRC organized and co-hosted a workshop on the American White Pelican. **[Northern Prairie Wildlife Research Center]**

Quickbird imagery. Analysis of three days of pan-sharpened multispectral Quickbird imagery using multi-scale object based segmentation and classification procedures to inventory and map plant communities for the southern portion of J. Clark Salyer NWR. The map legend identifies 10 plant communities; oak, aspen, and riparian woodlands, aspen, willow, other tall shrublands, snowberry shrubland, prairie, wet meadow, and wetland. Efforts are underway to reduce confusion among aspen woodland, riparian woodland, mesic tall shrub, and wet meadow plant communities. An accuracy assessment of the vegetation map and project products will be delivered to the USFWS FY 2007. **[Northern Prairie Wildlife Research Center]**

Estimating breeding duck response to the Conservation Reserve Program. Under CRP, environmentally sensitive cropland is retired to conserving uses such as introduced and native grasses, trees, restored wetlands, riparian buffers, and grass filters. These covers provide multiple benefits including creation of habitats for a wide set of wildlife species. Documentation of effects on wildlife species populations has been geographically isolated. FSA is required by statute to consider enhancement of wildlife habitat when selecting CRP offers. To date, performance measure has been the number of acres in various practices considered most beneficial to wildlife. This approach furnishes an indirect measure of animal response based on the assumption that wildlife responds favorably to beneficial changes in the quality and distribution of habitat. A better measure of CRP wildlife benefits are estimates related to changes in wildlife populations. NPWRC and the USFWS conducted analyses that showed that CRP contributed 2 million ducks annually to the fall population of five prairie nesting ducks species; CRP enhances wetland functioning and results in increased capacity of wetlands to support breeding duck pairs; loss of the CRP program would result in a 30% reduction in the capacity of PPR to support breeding ducks. **[Northern Prairie Wildlife Research Center]**

Wetland functions. USGS partnered with FSA and NRCS in FY2004 to quantify ecological derived from restoration programs in the prairie pothole region and to develop indicators of wetland functions that can be used to quantify services in the future. In FY2005, field work, data entry, physical and chemical determinations of field samples was completed. During FY 2006, a report was produced that characterized various services derived from restoration programs such as wildlife habitat enhancement, water quality improvement, sediment and chemical filtration, erosion and nutrient transport reduction, floodwater retention, and carbon sequestration. The goal of this study is to improve methodology for estimating and spatially depicting wetland storage volumes and developing approaches for simulating potential water storage capacity of restorable wetlands under various restoration, land use, and climatic scenarios. **[Northern Prairie Wildlife Research Center]**

Prairie Pothole Region birds. The Prairie Pothole Region is a key breeding ground and migration stopover for migratory waterfowl and shorebirds. The region is characterized by wet and dry cycles which have a dramatic impact on wetland conditions which affects both waterfowl production and use by other water birds. The region is undergoing major change due to agricultural intensification; resource managers require information on species habitat needs to ensure sufficient high quality habitat is maintained to sustain populations. Detailed information has been lacking on factors responsible for wide annual differences in waterfowl productivity related to water conditions and wetland habitat needs of arctic-nesting shorebird populations during their spring stopover in the PPR. We conducted studies to better assess needs of key species of migratory water fowl and shorebirds in the PPR. Scientists measured total body fat of three arctic-nesting sandpipers (Baird's sandpiper, semi-palmated sandpiper, and white-rumped sandpiper) during spring stopovers in the PPR and found it is a major fat deposition site for 2 of the 3 species; fat storage rates differed between years and between sexes in white-rumped sandpipers. Sandpipers store limited fat in the PPR during periods of severe drought. Semi-palmated and

white-rumped sandpipers acquired sufficient fat to meet energy needs for migration to the breeding grounds and part of the needs for reproduction. **[Northern Prairie Wildlife Research Center]**

Prairie Pothole Region wetland restoration. Sites restored are often farmed areas where native habitats were converted to facilitate production of agricultural crops. The goal of DOI has traditionally been to provide habitats for fish and wildlife; these restoration projects have an influence on carbon sequestration and greenhouse gas (GHG) emissions. Greenhouse gas mitigation through terrestrial carbon sequestration is a national priority and DOI land managers need to identify specific restoration techniques that maximize greenhouse mitigation and meet wildlife habitat and ecosystem objectives. Research evaluating DOI and USDA wetland restoration activities in PPR will quantify influence of land-use change on GHG relationships, identify environmental factors controlling carbon sequestration and GHG emission, and provide recommendations and decision support tools to maximize GHG benefits consistent with DOI goals for habitat restoration. This project will provide information for quantification of ecosystems services provided from conservation programs such as wildlife habitat, floodwater storage, sediment and nutrient reduction, and plant diversity; research will assess the magnitude of carbon sinks and sources and processes controlling them. The work will quantify carbon sequestration in wetlands systems, factors regulating carbon and greenhouse gas flux, and by evaluating techniques that enhance carbon sequestration, reduce GHG emissions, and provide concurrent ecological benefits. **[Northern Prairie Wildlife Research Center]**

Carbon markets. Beginning in FY 05, USGS NPWRC initiated studies to quantify the impact of USDO and USDA programs on carbon sequestration and greenhouse gas offsets (GHG) derived from restored wetlands and adjacent grasslands. The overall goal of this work will be to collect scientific information on GHG fluxes necessary to facilitate market development. Information derived from this research will be used by numerous partners and stakeholders interested in development of market-based solutions to offset GHG emissions. During FY 06 a second year of monitoring of GHG in 120 wetlands was completed. In collaboration with the Plains CO₂ Reduction (PCOR) Partnership managed by the Energy & Environmental Research Center, a study to evaluate the influence of alternative land-use practices (haying and grazing) on emission of nitrous oxide and methane in restored prairie wetlands was initiated. The overall goal of the Plains CO₂ Reduction (PCOR) Partnership is to assess the technical and economic feasibility of capturing and storing (sequestering) anthropogenic CO₂ emissions in the central interior of North America. The partnership is composed of 50 private and public sector groups from nine states and three Canadian provinces. **[Northern Prairie Wildlife Research Center, Jamestown, ND]**

OKLAHOMA

Population trends, environmental ecology, and reproductive biology of the federally listed as threatened Neosho madtom (*Noturus placidus*): CERC has provided information on the habitat requirements, ecology, and reproductive biology of the Neosho madtom that has led to an expansion of the current known range. Studies have indicated the importance of maintaining a minimum flow for improved Neosho madtom survival. Lab research demonstrates that Neosho madtom behavior, including courtship, is affected by temperature, photoperiod, and water flow. Field investigations have demonstrated that Neosho madtoms are found in the slow-flowing inundated section of river behind low-head dams and only in pockets of gravel in the scoured areas just below low-head dams. Direct losses of habitat have been attributed to reservoir construction at sites that may have historically harbored Neosho madtoms and gravel mining of known and potential sites. Indirect losses of Neosho madtom habitat have been attributed to reservoir operations. USGS is currently using USFWS long-term monitoring data to assess the effects of reservoir operations on populations and provide a model for microhabitat associations. CERC is working with the Tulsa Corps of Engineers in efforts to provide ecosystem

restoration support for stakeholders on the Neosho River in facilitating development of a plan for removal of one of the many low-head dams on the Neosho and Cottonwood rivers. CERC is working with the Peoria Indian Tribe of Oklahoma to develop Neosho madtom production capabilities to produce adequate numbers of Neosho madtoms so that they can be reintroduced in to reaches of the Neosho and Spring rivers from which they have been extirpated. [Columbia Environmental Research Center]

Seasonal and spatial distributions of phytoplankton in Fort Cobb Reservoir, OK. A greater understanding of the sources, loading, and effects of nutrients in runoff from the Fort Cobb Watershed is needed. USGS Biology sampled water quality and trophic status of the reservoir in April, June, and August to correlate with low flow nutrient loading assessments being conducted by Water. A minimum of 7 sampling sites were sampled. Phytoplankton taxonomy, chlorophyll a, phycocyanin, total nitrogen, total phosphorus, suspended solids, turbidity, and dissolved oxygen were measured. Additional reservoir sampling followed a high flow event to determine nutrient loading under extreme storm conditions. Geology will conduct one or more remote sensing surveys of the reservoir to compare to in-situ eutrophication assessment and nutrient loading assessments. Data will be merged with historic land use data to assist USDA, USEPA, BOR, and State of Oklahoma in developing a comprehensive watershed management plan and reservoir remediation strategy. [Columbia Environmental Research Center]

OREGON

Toxicity testing of Portland Harbor, Oregon sediment samples with the amphipod *Hyaella azteca* and the midge *Chironomus dilutus*: The project was completed and a report sent to NOAA and USFWS summarizing the results of the sediment toxicity testing conducted in 2005 with samples from Portland Harbor. Results are being used by NOAA and USFWS in an ecological risk assessment of contaminants associated with sediments in Portland Harbor. [Columbia Environmental Research Center]

Creating a Volunteer Network for Weed Data Collection on Refuges. USFWS needs statistically sound, cost-efficient surveys on invasive plants and animals on over 500 National Wildlife Refuges across the U.S. In cooperation with FWS, we developed and tested a volunteer network to map invasive species. Researchers developed sampling protocols, trained refuge staff, and advised volunteers from the local community to gather extensive field data on high priority weeds in the Hart Mountain Refuge, OR. We gathered plot data to create maps and models of key invaders and to guide further surveys, and created a generalized protocol, "*The Art and Science of Weed Mapping*," that will be published after expanding and testing the system in 3 additional refuges next year. [Fort Collins Science Center]

Investigation of Fuel Treatments on Ponderosa Pine Ecosystems in Oregon The Fire and Fire-Surrogates Group, a consortium of DOI, Federal, and other scientists and managers, asked NWRC to develop analysis models for the responses of forests in the Hungry Bob Management Unit in Oregon. This work, funded by the Joint Fire Sciences Program, seeks to evaluate the impacts of the President's Healthy Forest Initiative on forests nationwide. During FY2006, NWRC led a major effort to extract data from the Hungry Bob database to assess tree mortality and particularly fire-beetle interactions resulting from the experimental treatments. [National Wetlands Research Center]

Oregon Cooperative Fish and Wildlife Research Unit.

Research on Effects of Avian Predation on Recovery of ESA-listed Salmonids

- Dan Roby, Assistant Unit Leader, Wildlife, with the USGS-Oregon Cooperative Fish and Wildlife Research Unit, has for the last decade served as Team Leader and Program Chief for a collection of research projects that investigate the impact of avian predation on recovery of salmon and steelhead from the Columbia River basin. This research program resulted in the discovery that the largest

known Caspian tern colony in the world on Rice Island in the Columbia River estuary was responsible for losses of 10-12% of all juvenile salmonids from the Columbia River basin that survived to the estuary during out-migration. Roby used bioenergetics modeling to demonstrate that Caspian terns and other piscivorous birds nesting in the Columbia River estuary were causing annual losses of between 10 and 20 million juvenile salmonids from throughout the Columbia River basin. 13 of 20 evolutionarily significant units (ESUs) of salmonids from the basin are listed as threatened or endangered under the U.S. Endangered Species Act, and billions of dollars have been spent on restoration efforts.

- Roby and collaborators devised a management approach for reducing losses of juvenile salmonids to fish-eating birds by relocating the Caspian tern colony to another island (East Sand Island) closer to the ocean, where terns were expected to feed more on marine forage fishes and less on salmonids. This proposal was adopted by the Interagency Caspian Tern Working Group, comprised of resource management agencies such as the USFWS, NOAA Fisheries, U.S. Army Corps of Engineers, and various State and Tribal agencies. Relocating the Caspian tern colony succeeded in reducing Caspian tern predation on juvenile salmonids by 70%, or 6-9 million fewer salmonids consumed by Caspian terns annually. This comparatively inexpensive and innovative management action has to date reduced the mortality of juvenile salmonids to Caspian tern predation in the estuary by at least 35 million fish. The relocated tern colony experienced higher nesting success at the new colony site. The resource management agencies developed an EIS and long-range management plan based on Roby's proposal that Caspian tern colonies be restored at a number of sites outside the Columbia River estuary in order to further reduce tern reliance on juvenile salmonids from the Columbia Basin as a food supply.

Recent research findings:

The extent of stream rehabilitation efforts may be too small to allow one to see effects.

Rehabilitation projects should be at the basin tributary scale or larger.

Infrared videography techniques were developed that allow assessment of stream habitat quality, particularly with regard to temperature.

Estuaries were identified as sites where significant mortality can occur to out-migrating juvenile anadromous salmonids. Avian predators were found to be a significant source of mortality to smolts in the Columbia River estuary.

No surface freshwater, no matter how remote, appears to be free from contamination by synthetic chemicals. These chemicals likely originate via airborne sources and can have biological effects such as endocrine disruption on fishes.

Physiological indicators of stress in northwestern fishes such as stress (heat shock) proteins, components of the immune system and DNA gene chip microarrays appear useful to identify stressful environments, particularly those that are thermally challenged.

New Book Reveals Unique Perspectives on Fish Distribution in Rivers. Conventional studies of the distribution and abundance of fish in a river often are conducted at coarse scales, focusing on short sampling areas spaced at wide intervals. Such studies cannot address fundamental questions about the nature and variability of fish abundance between these zones. Investigations into the factors that influence this variability at both coarse and fine spatial scales could lead to more insight into predicting where fish gather. USGS and colleagues mapped fish distribution in several rivers and streams in Oregon, and findings are summarized in 2 chapters in a new book on influences of landscapes on stream habitats and biological organisms. Unexpected patterns were revealed that provided a unique perspective on fish distribution and emphasized the importance of diverse habitat.

Gresswell, R.E., Torgersen, C.E., Bateman, D.S., Guy, T., Hendricks, S.R., Wofford, J.E. A spatially explicit approach for evaluating relationships among coastal cutthroat trout, habitat, and disturbance in small Oregon streams, p. 457-471. Contact: Christian Torgersen, 206-616-1874, ctorgersen@usgs.gov
[Forest and Rangeland Ecosystem Science Center]

Influence of Alternative Harvest Methods on Small Mammals. A new USGS fact sheet summarizes how small mammals respond to dead wood in forests that are harvested with alternative methods. The fact sheet is one of a series about responses to changes in young western Oregon forests that is designed to help resource managers balance management needs, including timber and wildlife.

http://fresc.usgs.gov/products/papers/1640_CFER.pdf **Contact:** Janet Erickson, 541-737-6593, jerickson@usgs.gov [**Forest and Rangeland Ecosystem Science Center**]

Density Management and Riparian Buffer Study Available. For more than a decade, BLM has collaborated with USGS, the Cooperative Forest Ecosystem Research Program, and U.S. Forest Service on a density management and riparian buffer study. The primary goal is to demonstrate and test options for young forest management to meet Northwest Forest Plan objectives in western Oregon. A new USGS report describes study objectives, design, results, and next steps. In addition, there are summaries of collaborative studies being conducted, including vegetation response to density management treatments, headwater forest response to thinning, leave islands as refugia, and canopy gaps.

Cissel, J.H., Anderson, P., Berryman, S., Chan, S.S., Olson, D.H., Puettmann, K., Thompson, C., 2006, BLM Density Management and Riparian Buffer Study- Establishment Report and Study Plan: U.S. Geological Survey 2006-5087, p. 144. **Contact:** Janet Erickson, 541-737-6593, jerickson@usgs.gov [**Forest and Rangeland Ecosystem Science Center**]

SOUTH DAKOTA

South Dakota Cooperative Fish and Wildlife Research Unit

- Major activities relate to conservation of rare fishes, and inventory of river fishes and riverine habitats. The Unit is helping ND and SD agencies with fish studies with immediate conservation needs for State Conservation Plans, and proposes using the USGS Aquatic Gap Analysis protocols to help locate river reaches for conservation. A synthesis of the Unit's riverine fish inventory studies showed that several dozen native species have disappeared from one or more river drainages, and several species have disappeared from the state. On the positive side, some rare fishes are more common than thought and have been removed from State lists of species of concern (e.g., mudminnow, trout perch). The Unit is determining factors relating to survival of the endangered pallid sturgeon, including spawning and rearing habitat characteristics determined by underwater acoustic Doppler instruments, and laboratory studies on sturgeon energetics and growth, and vulnerability to predation. The Unit concluded that livestock watering dugouts may be compatible with Topeka shiner conservation – this is the nexus between agricultural livestock practices in riverine floodplains and the conservation of the endangered Topeka shiner.
- Since Ken Higgins (Wildlife Assistant) retired in January, the reports are mostly aquatic. When Ken was here, we had studies on agriculture/wildlife interactions, including high profile studies on windpower (bird mortality on turbines; we found none) and switchgrass for biofuels. He had a lot of data on CRP benefits to wildlife, which will be important for the upcoming Farm Bill, and his inventory of the remnant tallgrass prairie has been the basis of some new FWS programs.

Effects of yellow sweetclover on plant successional processes at Badlands National Park. This study is a partnership with Uconducted in partnership with NPS and the University of Minnesota, with additional support from NSF. Results indicate that yellow sweetclover enriches nitrogen availability in the characteristic Badlands Sparse vegetation type, and that enriched nitrogen levels can favor other invasive plants, including halogeton, a species toxic to the bighorn sheep the park is reintroducing.

[**Northern Prairie Wildlife Research Center**]

Wind Cave National Park. Natural rates of native vegetation recovery from disturbance in the semi-arid

Great Plains are slow, and undesirable species often invade disturbed areas. Field work for a 3-year study evaluating success of a re-vegetation project and experimental comparison of various seed mixtures for re-vegetation at Wind Cave National Park (SW SD) was completed. 5 years after planting, total plant cover of the previous re-vegetation project is similar to undisturbed vegetation, but species composition remains different. In the experimental planting, there was little difference in native or non-native plant cover among 5 different seed mixtures planted. This work showed park staff the amount of time it requires re-vegetation projects to become established. **[Northern Prairie Wildlife Research Center]**

Swift Foxes. A collaborative program by NPWRC scientists, Badlands National Park, South Dakota State University, and Turner Foundation is evaluating swift fox reintroduction programs, one in Badlands National Park and the other in central South Dakota (Bad River Ranch). As part of the reintroduction, a habitat suitability assessment model was developed; to date, no clear conclusions can be declared on success or failure of reintroduction. Rate of mortality is high; indigenous populations of swift foxes in other areas have sustained comparable mortality rates. The rate of reproduction is encouraging and if it continues, we expect populations from Bad River Ranch near Pierre and an isolated remnant population in SW South Dakota to be connected by the Badlands National Park population. We have achieved breeding of the first wild-born generation of foxes and survival/recruitment rates are approaching other wild self-sustaining populations and population growth. **[Northern Prairie Wildlife Research Center]**

TEXAS

U.S.-Mexico Border Environmental Health Initiative. USGS is developing a bi-national, web-based GIS containing natural resource data to further understanding of links between condition of the physical environment and environmental and human health issue. The web-based Internet Mapping Service (IMS) provides a geospatial interface with tools to allow manipulation of spatial data, and to serve as a data portal allowing users to integrate datasets into their analyses. **[Columbia Environmental Research Center]**

Assessment of impacts and stresses on the Edwards-Trinity springs ecosystem in Hays County, Texas: The project assessed impacts of projected changes to the Edwards Aquifer ecosystem, including land use, land cover, habitat loss, human population growth, and effects of increased environmental pollution on selected endangered species in the San Marcos Springs in Hays County. A simulation model incorporates information on species of concern, water quality/quantity data, and geology and geophysics. Data compiled provides a critical assessment of environmental variables that may affect populations of endangered species. Proposed environmental quality criteria developed by the USFWS will be used as benchmarks in the model to determine environmental impacts to endangered species. We have collected information on the distribution and status of wild rice, San Marcos salamander, fountain darter, and San Marcos gambusia. Data on contaminants have been compiled, particularly, TCE in water. Final results will be available in 2007 and will include description of the STELLA model, parameters used, simulation results, and projections of estimated population changes of endangered species by 2020 and 2040. **[Columbia Environmental Research Center]**

Why do cattle egrets nest in urban environments? Establishing causality and associated health hazard. Mixed-species heronries have become a nuisance in residential areas of central Texas and adjacent states. The concentration of thousands of nesting pairs, mostly cattle egrets, produces noise and odor problems, destroy nesting habitat, and be perceived as a threat to human health due to guano and dead birds. This research compares residential with non-residential heronries in the Post Oak Savannah and Blackland Prairie ecoregions of central Texas. Data were collected during 2006 breeding seasons on reproductive success, predation, and habitat characteristics of each heronry; active nests by species were counted and totaled or numbers of nesting pairs estimated visually or by use of a density function. Subsamples of nests were marked on photographic printouts and observations of nesting stage and brood

size collected weekly. Nest survivorship will be evaluated using Program MARK and SAS. Observations of predators, evidence of predation, locations of roosts, and implementation of management strategies were noted. Information will be used by State and Federal wildlife management agencies to manage nuisance heronries. **[Columbia Environmental Research Center]**

Grassland birds of U.S. Navy lands in southern Texas: Data on bird density and bird species richness were collected at grassland transects at Naval Air Station Corpus Christi, Naval Air Station Kingsville, Waldron Field, and Escondido Ranch. Transects were distributed in native prairies and grasslands dominated by exotic grass species. Data were collected from the same transects on vegetation density, ground cover composition, plant species richness, and shrub density. Since most overwintering bird species in Texas grasslands are granivorous, seeds were collected from subsets of transects to determine how seed abundance varies over time during the winter. Insects and other invertebrates were sampled in native and exotic-dominated grasslands to determine if insect density and diversity are associated with different types of grasses. **[Columbia Environmental Research Center]**

Gulf of Mexico Alliance. The Priority Habitat Information System (PHINS) is a state/federal partnership to provide habitat information and foundation geospatial data supporting implementation of the Gulf of Mexico Alliance Governors' Action Plan for Healthy and Resilient Coasts. Objectives of PHINS include improving State, local, and Federal resource management decision making through increased access and use of spatial data; linking Federal, State, and local project data, information, reports, and spatial data into a Gulf wide information access and delivery system; promoting collaboration among government agencies GIS entities, and promoting best practices and technology development partnership efforts. PHINS will consist of a web-based digital library containing reports, imagery, data, and synthesis products; the geospatial data viewer will generate online maps and include tools for navigating data, viewing and querying data attributes, overlaying, and printing maps. **[National Wetlands Research Center]**

Evaluate effects of prescribed burn and other management tools on coastal prairie community dynamics and restoration. Findings to date in Grace et al. (2005) *An Assessment of Prescribed Fire Effects at the USFWS Texas Mid-coast National Wildlife Refuge Complex*. USGS Open-File Report 2005-1287, <http://www.nwrc.usgs.gov/factshts/2005-1287-fire-in-coastal-texas-report.pdf> Historical records suggest that Native Americans and early Europeans contributed to widespread burning and settlement and introduction of large cattle led to reduced fires and increased shrub dominance. Development of inexpensive fire temperature logger systems, along with the development of training manuals and DVDs, provides fire characteristics to be part of routine monitoring. Efforts to control successional advance by Eastern Baccharis have mixed success and is not predictable. There is evidence that growing season burns are more likely to reduce baccharis densities as are fires followed by dry periods, monitoring of baccharis densities will greatly aid optimal allocation of effort. Results suggest that there may be a critical size below which fire control is attainable and above which Chinese tallow trees will be unlikely to be reduced. Surveys of grassland birds found that LeConte's sparrows were associated with prairies burned within the past 2 years, Sedge wrens were most likely to be found in the 3-yr-since-burn prairies, Savannah sparrows were associated with 1-year-since-burn conditions, and swamp sparrows were equally likely to be found at any locations sample. Rails demonstrate abilities to avoid and survive fire. **[National Wetlands Research Center]**

NBII Central Southwest/Gulf Coast Information Node. Researched, evaluated, and cataloged by topic and state 1200+ natural resource sites for the seven node states, emphasizing the Gulf Coast. In addition, added 50+ records to the conference and meeting catalog. Compiled 20 years of data related to flooding, forested wetland ecosystems, and migratory bird management (greentree reservoirs) on the FWS Felsenthal NWR. Created extensive portal site under Biodiversity and Vital Habitat section. Created

digital images of two unique photographic collections: coastal prairie species and regional botanical, bird, and wildlife images. **[National Wetlands Research Center]**

Forest and Marsh Ecology, Restoration, and Management. The primary objective is to quantitatively describe the ecological structure and function of wetland ecosystems, focusing on wetland forests and the Gulf Coastal Plain and Lower Mississippi River Valley and to analyze the effects of management and restoration on wetland functions such as water quality, carbon sequestration, and biodiversity. Other objectives are to assess forested and marsh wetland structure and function; evaluate effects of forest management practices on wetland ecosystems; evaluate the role of wetland forests in retaining and transforming river-borne nutrients and carbon. The study focuses on information needs of DOI management agencies with extensive wetland holdings and management responsibilities; other users include the forest industry, other Federal agencies like the Forest Service and NRCS and several States. Accomplishments include beginning of the radar and migratory bird project and development of a floodplain model. **[National Wetlands Research Center]**

Conservation requirements for colonial waterbirds. Colonial waterbirds are typically long-lived with life history characteristics that include delayed maturation, low annual fecundity, high levels of parental care, and increasing reproductive effort with age; these characteristics make them vulnerable to population crashes and extinctions. Colonial waterbirds often have narrow niche requirements for breeding, overwintering, and foraging, further increasing their vulnerability. USFWS request data on the relationship between blue crab abundance and overwintering survival of the endangered Whooping Crane at the Aransas/Matagorda National Wildlife Refuge complex. A methodology was developed that determined methods, timing and sampling effort necessary to accurately assess blue crab abundance at the refuge complex. 8 years of data on blue crab abundance have demonstrated an inverse relationship between crab abundance and Whooping Crane mortality rates. Results convinced Texas to implement a moratorium on commercial crabbing in the waters surrounding the refuge. Results are being used in litigation aimed at protecting fresh water inflows that promote blue crab spawning and development in the surrounding estuary. **[Northern Rocky Mountain Science Center]**

UTAH

Utah Cooperative Fish and Wildlife Research Unit. An assessment of the use and effectiveness of wildlife crossings, funded by the National Cooperative Highway Research Program of the Transportation Research Board, part of the National Academies of Science and Engineering. This is a nationwide effort to provide State Departments of Transportation and Wildlife Agencies with a web-based Decision Guide to select the appropriate type, configuration, and spacing of wildlife crossings, along with recommendations for maintenance and evaluation of effectiveness. The final report and Web based guide will be submitted in March 2007 and finalized by 1 June 2007.

Reestablishment of Utah Prairie Dog populations: Although methods for translocating Utah prairie dogs have been refined over the past 25 years, post-release loss rates remain high at many sites, and persistence of populations is low. Biologists are testing methods including visual barrier fences and electric fencing to temporarily restrict the post-release movements of prairie dogs, and artificial burrow structures and mowing to increase the attractiveness of sites. **[Fort Collins Science Center]**

Satellite tracking of Marbled Godwits: As a species of conservation concern, the Marbled Godwit is the focus for a recently initiated international shorebird conservation effort, the Tri-National Marbled Godwit Initiative. This initiative aims to take a large-scale view in developing a hemispheric conservation plan for this medium-sized shorebird. Little is known about Marbled Godwits during migration, especially key stopover sites used during both spring and fall migration. At the Bear River Migratory Bird

Refuge, USFWS and FORT (CO) researchers attached lightweight solar-powered satellite transmitters to 2 birds, providing information on their routes, length of stay at stopover sites, and where they settled to breed. The satellite transmitters are expected to send data for up to 2 years. Managers can use this information to identify and prioritize areas used by these birds that are critical to their survival. <http://www.fort.usgs.gov/Resources/GoGodwits/> [Fort Collins Science Center]

WASHINGTON

Sediment toxicity assessment studies for the Puget Sound assessment and monitoring program (PSAMP): We used two different test protocols, one older and one newly developed, for the fertilization assay with the sea urchin *Strongylocentrotus purpuratus* using pore water collected from 12 different sites in Puget Sound along a contaminant gradient. The results of this study showed that when the reference toxicant tests are similar, that the results from the two protocols are similar for the field collected pore water tests. This result will allow future studies to employ the new protocol while still allowing data collected using the older protocol to be compared directly with the new protocol data. Sediment samples from an additional 30 sites in Puget Sound have been received and the pore water has been extracted and stored. Samples will be tested using the new protocol when gravid *S. purpuratus* become available in the fall. [Columbia Environmental Research Center, Columbia, MO]

The Yakima Basin in Washington historically sustained diverse and abundant salmon and steelhead runs. Since 1900, anadromous fish runs have declined or been extirpated. Although numerous out-of-basin mechanisms may be involved in the decline, in-basin changes in the characteristics and dynamics of the riverine habitat have been identified as primary causal agents. Land managers have been assigned the task of improving flow and habitat for the Basin's remaining anadromous fisheries. USGS is developing an integrated water management/habitat response tool to allow managers to quantify feasibility, effectiveness, and risks associated with management alternatives. [Fort Collins Science Center]

Enhancing Wetlands for Wildlife Yields Benefits for Fish. During periods of high water, rivers may overflow their banks, rejuvenating freshwater wetlands and providing access to riverine fish. Periodic flooding of shallow wetlands, accompanied by decomposition of organic matter and release of nutrients, accelerates the production of fish prey. A recent trend of enhancing freshwater wetlands by installing water-control structures benefits waterfowl and other wildlife, but has raised concerns about effects on juvenile salmon. USGS and colleagues compared juvenile coho salmon use of enhanced and unenhanced wetlands in the lower Chehalis River, Washington floodplain. As oxygen levels declined and wetlands dried out throughout spring, fish survival was greater in enhanced wetlands that allowed escape back to the main river channel. Results suggest that enhancing freshwater wetlands with water-control structures can benefit juvenile salmon by providing conditions of greater growth, survival, and emigration. Henning, J.A., Gresswell, R.E., Fleming, I.A., 2006, Juvenile salmonid use of seasonal freshwater emergent wetlands in the floodplain and its implications for conservation management: North American Journal of Fisheries Management, v. 26, p. 367-376. **Contact:** Robert Gresswell, 406, 994-7085, bgresswell@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Fish Passage Restoration: Setting Priorities. Identifying and removing barriers to fish passage is vital to restoring native fish populations. In the Pacific Northwest, restoration could potentially involve hundreds of stream miles and millions of dollars. A USGS scientist was recently funded by the Washington Department of Fish and Wildlife to synthesize current information and identify data gaps. Project outcomes will help decision makers to identify key restoration projects that benefit fish populations.

Contact: Jason Dunham, 541-750-7397, jdunham@usgs.gov [Forest and Rangeland Ecosystem Science Center]

WYOMING

Coal Bed Methane (CBM) Development Effects on the Establishment on Non-native Plants. Working closely with BLM, we evaluated vegetation and soil characteristics of well pads, water release areas, and “undisturbed/control” sites in the Powder River Basin. We found increased invasion on CBM-developed areas, reduced native plant diversity on pads, and extensive invasion in water release areas. This pilot study suggests the need for extensive regional evaluation of cumulative effects of CBM development and associated infrastructure relative to background, because Wyoming continues to be invaded by non-native plants in other areas and for other reasons. Broad-scale invasive species mapping is needed to set priorities for control and restoration. [Fort Collins Science Center]

Mapping Sagebrush Habitats in Human-Influenced Landscapes. BLM manages 50% of remaining sagebrush habitats and needs methodologies to accurately assess and monitor habitats at landscape scales to meet management objectives. Scientists are developing statistically rigorous methods to map distribution, cover, and height of sagebrush as well as identify the distribution of roads, trails, and oil and gas infrastructure. This work involves testing the effectiveness of different remote sensing technologies in identifying and mapping various sagebrush species at larger scales. During summer, 2006, we compiled existing remotely sensed and digital data and acquired additional remotely sensed imagery at selected study sites in the Jack Morrow Hills, SE Wyoming. We began mapping anthropogenic features at the 3 study sites, using existing and newly acquired digital data. Field staff conducted vegetation assessments as a first step in developing a stratified sampling plan. [Fort Collins Science Center]

Assessing Grazing Treatments on Vegetation and Wildlife Communities across Managed Burns and Habitat Controls. BLM manages grazing and burning of shrub-steppe ecosystems. Information is limited on timing and levels of grazing for suitable recovery and establishment of vegetation communities, particularly after natural or prescribed burns. In 2004, FORT and BLM Rawlins Field Office began a cooperative effort to re-establish the Stratton Sagebrush Ecological Study Site as a research location, with the goal of making it a long-term research site for sagebrush ecology. Stratton is the only high-elevation sagebrush research site of its kind with 30+ years of baseline data. Within each grazing and burn treatment and controls, scientists are quantifying Greater Sage-Grouse, songbird, and small mammal abundance and habitat use/association; evaluating changes in wildlife species presence and abundance over 30 yrs to determine how grazing and burning are affecting wildlife populations; and continuing long-term research assessments to evaluate changes in vegetation community and wildlife associations as they relate to BLM adaptive-management activities. In FY06 scientists developed a habitat-based stratified sampling design, set up sampling across grazing treatments, controls, and burned sites. Field staff conducted vegetation measurement, BBS surveys, Sage-Grouse transect surveys, and small mammal trapping. [Fort Collins Science Center]

Science to Support Management of Wildlife Diseases in the Rocky Mountains. Much of the interest in disease ecology and wildlife health has been prompted by the emergence, or resurgence, of parasites that move between livestock, wildlife, and/or humans. Hantaviruses, WNV, immunodeficiency viruses,

Ebola, plague, tuberculosis, brucellosis, AI, SARS are examples of disease issues that have arisen over the last decade. 75% of emerging human infectious diseases are zoonotic, and many spilled from natural wildlife reservoirs into humans either directly or via domestic or periodomestic animals. Human population abundance and distribution combined with anthropogenic environmental change has resulted in dramatic increases in human-animal contact, thus increasing the intimate linkages between animal and human health. USGS and Wyoming Game and Fish Department are working on brucellosis in elk around GYE to determine effects of artificial feeding on disease dynamics. Initial research on brucellosis in elk around the WY feedgrounds suggests that artificial feeding of elk for longer time periods is associated with higher brucellosis seroprevalence. The artificial feeding season is associated with snowpack--managers feed elk longer during harsh winters; climate is likely to play a role in brucellosis dynamics through its effects on management. The Center coordinates chronic wasting disease research in mule deer in SE Montana, enhancing surveillance and providing baseline data prior to the arrival of CWD in Montana; surveillance for chronic wasting disease has not detected any CWD although it is in nearby deer populations in Wyoming and South Dakota. **[Northern Rocky Mountain Science Center]**

Understanding effects of flow regulation on the Snake River Ecosystem below Jackson Lake: Using Science in an Adaptive Management Framework. Jackson Lake Dam was built in 1908 and became part of NPS when GTNP was expanded to include most of Jackson Hole. BOR manages the dam and sets discharge schedules, primarily to meet agricultural needs, and to a lesser extent recreational river use. Management of instream flows can affect the riparian plant community, wildlife and fisheries and is a major concern for federal and state managers. Actions of the federal government are scrutinized by private business interests and groups such as the Greater Yellowstone Coalition and Jackson Hole Conservation Alliance. This study seeks to understand channel and floodplain geomorphology and the relationship among channel form, dam releases and unregulated inflow of water and sediment from tributaries; understand structure and function of terrestrial plant community and wildlife assemblages to changes in geomorphology as a result of river regulation; understand impact of geomorphology on cutthroat trout spawning, survival and distribution; and create models to allow managers to understand implications of modifying (or not) flow regimes. **[Northern Rocky Mountain Science Center]**

Wyoming Cooperative Fish and Wildlife Research Unit. The Wyoming CRU's most important research projects involve four areas of research of substantial value, particularly in the light of natural gas development and wolf and grizzly bear management issues:

- Several projects were completed and one is underway that address the habitat needs of greater sage-grouse and effects of natural gas development on the species. Mechanisms by which natural gas developments affect the species have begun to be elucidated. Research projects were initiated by Stanley Anderson prior to his death and have continued under my supervision.
- The first phase of a large project to define factors affecting population dynamics of Shira's moose in NW Wyoming is being completed. Research will identify the relative importance of habitat, disease, and predation by gray wolves and grizzly bears on population dynamics of Shira's moose. Research suggests that both gray wolves and grizzly bears are contributing to the mortality of calves. Gray wolf and grizzly bear management are "hot issues" in Wyoming and objective information is needed by state and federal agencies on which to base management decisions. The project was initiated by Stanley Anderson and continues under the direction of Matthew Kauffman, the new assistant unit leader, and myself.
- Three projects have been completed on life history requirements of sauger in the Wind River drainage of Wyoming. This is one of the few remaining genetically pure sauger populations. Projects have identified habitat requirements for life stages, locations of required habitats, and movement corridors needed to carry out the life cycle of fish in the riverine population. Potential impacts of water and natural gas development were suggested by the research.

- Two projects have been completed and another ongoing focusing on ecology of bluehead suckers, flannelmouth suckers, and roundtail chubs in the Muddy Creek drainage of southern Wyoming. These species are in decline throughout the Colorado River basin. Muddy Creek is one of few locations where sympatric populations of the three species persist. Research has identified issues associated with population fragmentation created by anthropogenic barriers to movement and introductions of invasive fishes, particularly hybridization of the two native sucker species with introduced white suckers. Natural gas development is taking place in the watershed and the information is used by BLM to develop mitigation strategies.

Energy and Land-Use Studies in Sagebrush Ecosystems. As exploration and development of domestic oil and gas resources has become a national priority, understanding effects of energy development on surrounding ecosystems is limited; this poses a challenge for wildlife managers and decision-makers who must strike a balance between maintaining healthy rangelands and wildlife habitat while providing for resource development and multiple public uses. In collaboration with Federal, State, and local partners, USGS is conducting interdisciplinary research focusing on issues at a regional landscape level. FORT, BLM and others are conducting investigations in south-central Wyoming to assess sagebrush habitat conditions; identify and evaluate ecological impacts of fire, grazing, and off-highway vehicle use; quantify effects of road use on ungulates; and refine scientific understanding of sage-grouse population dynamics and genetics. http://www.fort.usgs.gov/Research/research_tasks.asp?TaskID=9354BO9.431.0. **[Fort Collins Science Center]**

Southern Greater Yellowstone Institutional Analysis. In 2001, FORT social scientists used the Legal-Institutional Analysis Model (LIAM) to conduct analyses of stakeholders in the elk and bison EIS process for National Elk Refuge in Jackson Hole. Analyses using a content analysis procedure indicated a higher potential for conflict than analyses of self-ratings. Since that time, a draft EIS has been released and public comments have been received. During FY06 we conducted a second analysis, based on stakeholder group comments on the draft EIS, to assign LIAM roles to each group. We compared these roles to those from the two earlier assessments. These analyses are helping managers understand the nature and extent of conflict surrounding proposed management plans. **[Fort Collins Science Center]**

Social Research on Wolves. Following the re-introduction of wolves, the growth of the wolf population has presented land managers with the challenge of balancing public concerns with biological needs of the species. Wolves of the Southern Greater Yellowstone Area are considered an "experimental" population under the Endangered Species Act; management actions taken to remedy human-wolf conflict situations are flexible and allow for lethal removal of problem animals. In collaboration with Grand Teton, FORT conducted a survey to help managers understand how people form judgments of responsibility following a variety of conflict situations, in this case negative encounters with wolves. This knowledge assists agency managers in choosing and implementing actions. **[Fort Collins Science Center]**

Reproductive Ecology of Tailed Frog. Tailed frogs live in cold, fast-flowing streams from western Montana to the Pacific coastal mountains. Initially considered one group, they were recently split into two species, inland and coastal, using molecular techniques. Both species are listed as federal species of concern and developing a better understanding of their natural history may identify critical habitats or other elements important for conservation. USGS scientists participated in a recently completed range-wide summary of existing and new information comparing the reproductive ecology of the two species. The ecological differences reported support the division of the two species and suggest that different management strategies may be necessary for each species.

Karraker, N.E., Pilliod, D.S., Adams, M.J., Bull, E.L., Corn, P.S., Diller, L.V., Dupuis, L.A., Hayes, J.P., Hossack, B.R., Hodgson, G.R., Hyde, E.J., Lohman, K., Norman, B.R., Ollivier, L.M., Pearl, C.A.,

Peterson, C.R., 2006, Taxonomic variation in the oviposition of tailed frogs (*Ascaphus* spp.): *Northwestern Naturalist*, 87(2): 87-97.
Contact: Michael Adams, 541-758-8857, mjadams@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Reducing Classification Ambiguity. The U.S. Endangered Species Act allows listing of subspecies and other groupings below the rank of species. This provides USGWS and the National Marine Fisheries Service with a means to target the most critical unit in need of conservation. A new publication by USGS scientists and collaborators reviewed classification information and found no standardized criteria for determining subspecies. Minimum biological criteria are proposed that would provide a clear distinction between species and subspecies, thus reducing classification ambiguity.

Haig, S.M., Beever, E.A., Chambers, S.M., Draheim, H.M., Dugger, B.D., Dunham, S., Elliott-Smith, E., Fontaine, J., Kesler, D.C., Knaus, B., Lopes, I.F., Loschl, P., Mullins, T.D., Sheffield, L.M., 2006, Taxonomic considerations in listing subspecies under the U.S. Endangered Species Act: *Conservation Biology*, 20(6):1584-1594.

Contact: Susan Haig, 541-750-7482, susan_haig@usgs.gov [Forest and Rangeland Ecosystem Science Center]

MULTI-STATE ACTIVITIES

Invasive Weed Management Using Fire. USGS and collaborators evaluated the current state of knowledge on prescribed burning as a tool for invasive weed management. The resultant article provides a general overview of how fire can be used to manage invasive plant species. Several examples of approaches involving specific annual and perennial invasive species and integrated strategies and post-burn monitoring are discussed.

DiTomaso, J. M., M. L. Brooks, E. B. Allen, R. Minnich, P. M. Rice, and G. B. Kyser. 2006. Control of invasive weeds with prescribed burning. *Weed Technology* 20:535–548. **Publication Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/brookspbaug2006.html>.

Contact: Matt Brooks, 702-564-4615, matt_brooks@usgs.gov [Western Ecological Research Center]

The Conservation Reserve Program is the largest environmental program administered by USDA, with enrollment exceeding 34M acres across 50 states. Improvement in program performance is a goal of CRP administrators. For the past 9 years and ongoing, FORT scientists have been working with FSA evaluate program performance socially (how it is working for CRP contractees) and ecologically (how is wildlife habitat improved). In June 2004, FORT and FSA sponsored a national meeting to address and present research on these issues as well as future CRP directions. *The Conservation Reserve Program: Planting for the Future*, was published in 2006. [Fort Collins Science Center]
http://www.fort.usgs.gov/Products/Publications/pub_abstract.asp?PubID=21490.

Genetic survey of Greater Sage-Grouse. Greater Sage-Grouse currently inhabit 56% of their historic range, leaving some populations isolated from each other. Questions remain about genetic viability of and distinctions between different populations of this bird. FORT scientists are completing DNA analysis of Greater Sage-Grouse sampled across their entire range of 11 states and two Canadian provinces. These data will help understand gene flow, genetic diversity, and evolutionary history between populations of grouse and enable comparisons between all surveyed populations. With this information, managers can develop species-wide management strategies that take into account the "genetic landscape" of this species. [Fort Collins Science Center]

Preventing Plague. The federally endangered black-footed ferret, on the rebound from near extinction, http://www.fort.usgs.gov/resources/research_briefs/BFF.asp, still faces serious recovery obstacles. One of them—sylvatic plague—is found in the prairie dog colonies upon which the ferrets depend. Eliminating plague from colonies http://www.fort.usgs.gov/Research/research_tasks.asp?TaskID=83279NA.12.0 is essential for ferret recovery; researchers at FORT are testing two approaches. One involves developing vaccines against plague for both animals. Oral vaccine for prairie dogs has shown promise in experimental studies, and a successfully tested injectable vaccine is undergoing field trials on ferrets released in the wild. A second approach involves eliminating or reducing the incidence of plague from test areas by reducing the population of fleas. Scientists are assessing the efficacy and cost of a flea control dust within burrows (including a colony in South Dakota previously free of plague) and measuring responses of prairie dog, ferret, and associated mammals. **[Fort Collins Science Center]**

Not Just a Fly-By. Studies of migration stopover ecology of western land bird populations to identify to identify geographic patterns of distribution and habitat use during migration in southwestern North America. This project synthesizes existing data from many studies and is an initial step in identifying regions important to “en route” western birds. The information can help managers to prioritize habitat management activities in the region to benefit these visitors. **[Fort Collins Science Center]**
http://www.fort.usgs.gov/Research/research_tasks.asp?TaskID=8327999.16.0

Tracking Bird Migration with Radar: Through a cooperative agreement, scientists from the USGS Fort Collins Science Center and the University of Southern Mississippi <http://www.usm.edu/mbrg> are initiating a collaborative study using Doppler weather radar to understand bird migration patterns http://www.fort.usgs.gov/products/publications/pub_abstract.asp?PubID=21468 in the borderlands of the arid Southwest (Brownsville, Texas, to San Diego, California). The project will look at migrant densities during flight, migrant-habitat associations, migrant flight elevation and direction of travel, and the effects of topographic obstruction (e.g., mountains) on radar capabilities. This information will be valuable to resource managers and others for habitat protection and management, as well as for addressing issues related to the siting and permitting of communication towers and wind power turbines that pose hazards to birds in flight. **[Fort Collins Science Center]**

Get your biology here. Scientists at FORT are developing the Southwest Information Node (SWIN) of NBII to provide access to hundreds of biological databases and a suite of information tools tailored to address the complex environmental issues of the Southwest. SWIN allows users to browse, model, map, simulate, forecast, interpret, and visualize biological and environmental conditions and processes. Current tools include a searchable database of scientific research and collection activities on federal lands in southwestern states; an interactive GIS map viewer; a GIS-based decision support system addressing critical habitat for threatened and endangered species; and, in partnership with New Mexico State University, an index of water, drought, and fire-related datasets from state and federal agencies. **[Fort Collins Science Center]**

Factors Influencing Cowbird Parasitism of Least Bell's Vireos. Brood parasitism by brown-headed cowbirds reduces the reproductive success and productivity of least Bell's vireos, a federally endangered subspecies of Bell's vireo. USGS scientists examined the relationship of vegetation structure surrounding nests and of vireo behavior near nests to the incidence of parasitism. Dense cover near nests likely reduces the ability of cowbirds to locate vireo nests and may shield parental activity from the view of searching cowbirds. Their findings provide data with which to design recovery strategies to minimize parasitism of least Bell's vireo.

Sharp, B. L. and B. E. Kus. 2006. Factors influencing the incidence of cowbird parasitism of least Bell's vireos. *Journal of Wildlife Management* 70:682-690. **Publication Brief for Resource Managers:**
<http://www.werc.usgs.gov/pubbriefs/kuspbaug2006.html>.

Contact: Barbara Kus, 619-225-6421, barbara_kus@usgs.gov [Western Ecological Research Center]

Ducks' Risk-taking Behavior Linked to Differences in Life History Characteristics. Life history may be an important component influencing the susceptibility of waterfowl to harvest. USGS researchers and collaborators investigated the risk-taking behavior and life-history characteristics of seven species of dabbling ducks by measuring their approach behavior during waterfowl hunting season. Researchers found that approach behavior of ducks was strongly correlated with life-history characteristics. Species characterized by a "slow" life-history strategy (e.g., northern pintails and mallards, which are less fecund but longer-lived) were more risk-averse than species with a "fast" life-history strategy (e.g., cinnamon teal and green-winged teal, which are more fecund but shorter-lived). Results indicate that life history influences the risk-taking behavior of dabbling ducks and provides an explanation for the differential vulnerability of waterfowl to harvest.

Ackerman, J. T., J. M. Eadie, and T. G. Moore. 2006. Does life history predict risk-taking behavior of wintering dabbling ducks? *Condor* 108:530–546. **Publication Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/ackermanpbaug2006.html>.

Contact: Josh Ackerman, 530-752-0485, jackerman@usgs.gov [Western Ecological Research Center]

Restoration of Fish Passage Involves Tradeoffs. In many regions, suitable coldwater habitats for native fish are found mainly in protected natural areas, relegating the fish to more isolated pieces of their former native ranges. Managers sometimes install barriers to upstream movement to protect remaining native populations, but such actions may have unintended negative effects. USGS collaborated with U.S. Forest Service to release a report about strategies for considering potential tradeoffs. While restoration of fish passage through stream barriers may benefit native fish populations by increasing connectivity to other populations and habitats, isolated native fish may be exposed to displacement or hybridization with non-native species. The report focuses on the case of native trout, providing a comprehensive overview of considerations and a framework for making decisions.

Fausch, K.D., Rieman, B., Young, M., Dunham, J.B., 2006, Strategies for conserving native salmonid populations at risk from nonnative fish invasions- Tradeoffs in using barriers to upstream movement: USDA Forest Service, Rocky Mountain Research Station RMRS-GTR-174, p. 44.

Contact: Jason Dunham, 541-750-7397, jdunham@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Mechanical Duck Decoys. Although mechanical spinning-wing decoys are known to be strong attractants to ducks and increase harvest rates over traditional decoying methods, few scientific data have been available to guide management decisions regarding the use of this new technology. USGS and collaborators found that effectiveness of spinning-wing decoys differs among dabbling duck species and changes with latitude. Consideration of these effects may be warranted in setting duck harvest regulations and methods of take.

Ackerman, J. T., J. M. Eadie, M. L. Szymanski, J. H. Caswell, M. P. Vrtiska, A. H. Raedeke, J. M. Checkett, A. D. Afton, T. G. Moore, F. D. Caswell, R. A. Walters, D. D. Humburg, J. L. Yee. 2006. Effectiveness of spinning-wing decoys varies among dabbling duck species and locations. *Jour. Wildlife Mgmt.* 70:799–804. **Brief for Resource Managers:** <http://www.werc.usgs.gov/pubbriefs/ackermanpbjul2006.html>.

Contact: Josh Ackerman, 530-752-0485, jackerman@usgs.gov [Western Ecological Research Center]

Parasites, the Thread of Food Webs? Food webs trace the flow of energy through an ecosystem and extend the concept of food chains to biological communities. Parasites are rarely included in traditional food webs, because of the difficulty in quantifying them by standard ecological methods. Recent research indicates that parasites strongly affect food web structure. Parasite links are necessary for measuring ecosystem stability. Studying four relatively comprehensive food webs that contain parasites, USGS

scientists and partners examined how parasites affected the food webs. They found that parasites dominated the food web links between species and concluded that parasites may be holding the structure of ecological communities together. Once the food web structure and the role of parasites is better documented, scientists will have a much better understanding of how the loss of biodiversity will affect the quality of life for the surviving species.

Lafferty, K. D., A. P. Dobson, and A. M. Kuris. 2006. *Proc. Natl Academy of Sciences* 103:11211-11216.
Contact: Kevin Lafferty, 805-893-87 [Western Ecological Research Center]

Disease Investigations Training Program. An important component of the early detection of HPAI H5N1 effort was training staff involved in collecting samples. As a result of the call for training by state, federal and tribal partners, staff from the NWHC prepared presentations and developed teaching materials. The NWHC began presenting workshops on collecting samples for avian influenza in January 2006. Emphasis was placed on Alaska first, because sampling activity would begin there sooner than in the lower states. There were 40 “face-to-face” workshops and two interactive satellite broadcasts between mid-January and the end of November 2006. Workshops were presented in 14 states and several Pacific islands to hundreds of biologists. Interactive broadcasts went out separately to National Park Service and USFWS staff. [National Wildlife Health Center]

Avian Influenza and Migratory Birds. Avian influenza is a common disease of birds that rarely infects humans. Most human cases have occurred in people who have close contact with infected poultry. The highly pathogenic H5N1 strain of avian influenza has spread to large geographic areas in Asia, Europe, and Africa, where it has primarily affected domestic poultry. Migratory birds are considered natural carriers of low pathogenic avian influenza, which is not regarded as a public health threat. The USGS is modeling migratory bird data in order to predict where migrants from one source end up, in terms of their migratory pathways. If the highly pathogenic avian H5N1 influenza were to be detected in North America, these models will help predict the range of destinations that migrants from one source may go, thereby aiding surveillance efforts. Additional USGS research applying genetic techniques to assess connectivity in some populations of migratory birds complements the modeling approach.

Contact: Mark Fuller, 208-426-4115, mark_fuller@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Scientists Track Whooper Swans via Satellite Transmitters. Using computers and lightweight solar-powered GPS satellite transmitters, USGS and partners are tracking wild whooper swans from Mongolia across Eurasia to their wintering grounds. They hope to learn how wild birds may be involved in the spread of avian influenza. Whooper swans drew attention after large numbers perished in Mongolia and western China in 2005-2006 in areas where few poultry are present. Subsequent sampling of dead swans verified some swans were infected with highly pathogenic avian influenza (HPAI). The HPAI strain known as H5N1 is highly lethal for a variety of species, especially poultry and some waterfowl species. Leaders around the world are concerned about a potential pandemic threat should the virus become transmissible among humans. The satellite data from this research will provide a better understanding of the linkage between wild birds and the spread of avian influenza; it will enhance conservation efforts through determining the non-breeding ranges of birds and the mechanisms involved in long-distance migration. Whooper swan locations are being updated twice weekly at www.werc.usgs.gov/sattrack/, which provides access to the data in Google Earth format. U.N. Food and Agricultural Organization, Wildlife Conservation Society, and Mongolian Academy of Sciences are partners.

John Takekawa, 707-562-2000, john_takekawa@usgs.gov [Western Ecological Research Center]

Hunter-Harvest Surveillance [CA, ID, OR, NV, UT, WA]. During 2006, as part of the National Surveillance Plan, surveillance for HPAI H5N1 was conducted by sampling birds killed by subsistence

and sport hunters from Alaska and the Pacific Flyway. Sampling protocols followed the U.S. Interagency Strategic Plan as well as plans developed individually by participating states. In Alaska, 5,210 individual birds were sampled and tested, representing 114 species. While 158 (3.0%) birds were Matrix PCR-positive for avian influenza, no birds were positive for HPAI H5N1. In the Pacific Flyway, through Dec 8, 2006, 1,538 individual birds had been sampled and tested, representing 7 species. Of these, 176 (11.4%) birds tested Matrix PCR positive for avian influenza, but none were positive for H5N1 HPAI. Pacific Flyway states submitting samples include California, Oregon, Washington, Idaho, Nevada, and Utah. Sampling of birds in the Pacific Flyway is on-going and will be concluded at the end of the 2006 hunting season. Samples from 129 species of North American wild birds were tested, the majority from the targeted "high-priority" species. Of the 26 species that were high priority, avian influenza, as detected by the matrix RT-PCR test of the cloacal swab specimens was found in fifteen of these species. Since the high priority species were chosen primarily because of their migratory patterns and not because they have been extensively studied for avian influenza, several of these species will represent new species records of avian influenza infection. Analyses of the viruses of these species will be of particular interest and lead to new information on the ecology and evolution of influenza viruses. **[National Wildlife Health Center]**

NWHC's Diagnostic Virology Laboratory. New staff have been hired and trained on laboratory procedures for avian influenza virus (AIV) testing. These include both NWHC-specific procedures on the inoculation and isolation of AIV in embryonated eggs as well as on the molecular RT-PCR procedures in accordance with the National Animal Health Laboratory Network (NAHLN) techniques. Modification of test procedures have increased molecular testing throughput 10-fold from the previous low test volume, one sample at a time method, to high throughput formats including the use of laboratory automation systems. **[National Wildlife Health Center]**

Forecasting Invasions: Scientists from NASA, Colorado State University, and USGS have combined expertise to develop the Invasive Species Forecasting System (ISFS), a web-based tool for combating <http://www.fort.usgs.gov/resources/spotlight/EcoForecasting/default.asp>, invasive plant species across the U.S. ISFS links data on occurrence, field information on species abundance and spread, and NASA satellite data to analyze past and present distributions of non-native plants and predict future distribution and abundance, based on ecological factors. Land and resource managers can use ISFS to generate color-coded maps that will help them limit the spread of existing invaders and prevent new invasions. The model has successfully been tested on tamarisk. **[Fort Collins Science Center]**

Sage grouse and West Nile Virus (WNV) [CO, ID, MT, NV, ND, OR, SD, WY] Since July 2006, greater sage-grouse deaths from West Nile virus WNV have been reported in Oregon, Colorado, Idaho, Nevada, Montana, South Dakota, North Dakota, and Wyoming. USGS NWHC sent out a Wildlife Health Bulletin in early November that summarized interim reports from effected states and from USGS investigators. Overall, WNV has been detected in sage-grouse in California, Colorado, Idaho, Montana, Nevada, Oregon, North Dakota, South Dakota, Utah and Wyoming, as well as Alberta, Canada. Experimental studies at the USDA National Wildlife Research Center have shown that WNV is usually fatal to sage-grouse, resulting in death within 6 days of infection. Wildlife Agency contact information for each state was listed in the Wildlife Health Bulletin. **[National Wildlife Health Center]**

Wildlife Mortality Events -- Last Half of 2006 (Die-Offs). Since June, 2006, NWHC has investigated 19 large-scale (greater than 500 birds dying) wild bird mortality events in the United States, 12 of which have occurred in Western states. The NWHC investigated each one of these die-offs in detail. Descriptions of state-by-state locations, as well as species involved and diagnoses are available at: http://www.nwhc.usgs.gov/disease_information/mortality_events/ **[National Wildlife Health Center]**

Vegetation mapping in NPS units. The Northern Great Plains Network of NPS Inventory and Monitoring program is developing its monitoring plan for 13 units in Nebraska, North Dakota, South

Dakota, and Wyoming. A major part involves monitoring vegetation, particularly plant community composition and diversity. Specific protocols must be tailored to goals of the monitoring program, conditions in each park, and available funding. USGS and NPS completed analysis from a field study comparing two methods for measuring plant cover for the community monitoring. Methods were similar in repeatability but differed in efficiency in number of species captured and the amount of time to sample a site. [Northern Prairie Wildlife Research Center]

Book Examines Fire Landscapes in U.S. USGS scientists contributed to a new book that examines fire landscapes across the United States and offers suggestions to more effectively manage and to more safely live with fire. The book reviews fire management from ecological, economic, and social/political perspectives. Articles authored or co-authored by USGS scientists: "*Fire Ecology of the Sierra Nevada: Forests Born to Burn*," "*Wildfire Management on a Human-dominated Landscape: California Chaparral Wildfires*," "*Applied Historical Ecology: Using the Past to Manage for the Future*," and "*Ecological Restoration of Southwestern Ponderosa Pine Ecosystems: A Broad Perspective*." Wuerthner, G. (ed.) 2006. *Wildfire — A Century of Failed Forest Policy*. Island Press, Covelo, CA. 322 p.

Contacts: Jan van Wagtendonk, 209-379-1306, jan_van_wagtendonk@usgs.gov; Jon Keeley, 559-565-3170, jon_keeley@usgs.gov; Craig Allen, 505-672-3861 x541, craig_allen@usgs.gov; Julio Betancourt, 520-670-6821 x107, jlbetanc@usgs.gov. [Western Ecological Research Center]

Linking Biological Diversity and Scale is Important for Conservation. Recognizing that ecological phenomena vary by scale, from the single-organism level to the entire region, researchers have increased the number of projects that implicitly include scale. Simultaneously, the concept of biological diversity has changed. It now not only encompasses species richness, but also includes function and structure across many levels of ecological organization, from genes to ecoregions. In spite of these new approaches, few researchers have investigated both concepts jointly. The results of a recent report by the USGS and collaborators highlight the importance of linking the two concepts and provide an overview of emerging tools that may prove useful for integrating them. The authors suggest that such integration will be especially critical in certain areas of research, such as restoration.

Beever, E.A., Swihart, R.K., Bestelmeyer, B.T., 2006, Linking the concept of scale to studies of biological diversity- Evolving approaches and tools: *Diversity and Distributions*, 12:229-235.

Contact: Sue Powell, 541-750-1048, spowell@usgs.gov [Forest and Rangeland Ecosystem Science Center]

New Book Synthesizes Habitat Connectivity Research. Natural and human-caused disturbances, such as urbanization and development, can fragment or destroy natural habitats, threatening the survival of many plants and animal species. Although challenging, maintaining or restoring connections between fragmented habitats is important for the conservation of species. A new book about conserving habitat connectivity synthesizes the current status of research and implementation, identifies application challenges, and highlights critical research areas. A USGS scientist co-authored a chapter about understanding how migratory birds interact with their environment through all life stages, and the latest techniques available to measure migratory connectivity are reviewed. Another USGS scientist co-authored a chapter about using genetic techniques to assess connectivity in salmonid fish.

Crooks, K.R., Sanjayan, M., eds., *Connectivity Conservation*, Series- Conservation Biology (No. 14): Cambridge, UK, Cambridge University Press, p. 157-183.

Contact: Susan Haig, 541-750-7482, susan_haig@usgs.gov [Forest and Rangeland Ecosystem Science Center]

Viral Hemorrhagic Septicemia Virus. Viral Hemorrhagic Septicemia Virus (VHSV) is considered to be the most important viral pathogen of finfish worldwide. Many nations and international organizations list it as a reportable pathogen. Before 1988, VHSV was not known to occur in North America; it was

thought to be limited to Europe. Subsequently, it has been shown that the North American strain (known as Genotype IV) is endemic among marine fish on the west coast of North America, where it can have a devastating effect on marine pelagic fishes, especially herring. In 2005-2006, reports from the Great Lakes region indicated that wild fish had experienced disease or, in some cases, very large die-offs from a strain now identified as IVb. The type IVb isolate found in the Great Lakes area is the only strain outside of Europe that has been definitely linked to freshwater mortalities. As of October 2006, it has been found in Lake Ontario, Lake Erie, Lake St. Clair, and one of lakes in the "finger lakes" area of New York State. Significant mortality has been reported in Muskellunge, freshwater drum, goby, burbot, yellow perch, gizzard shad, and smallmouth bass. Detections have occurred in several additional species in the area, but the magnitude of mortality has not been reported. Fisheries managers in the Western U.S. are concerned about the introduction and establishment of this highly virulent virus, which has a very broad host range, into populations of freshwater fish.

Elsayed, E., M. Faisal, M. Thomas, G. Whelan, W. Batts and J. Winton. 2006. Isolation of viral hemorrhagic septicemia virus from muskellunge, *Esox masquinongy* (Mitchill), in Lake St. Clair, Michigan, USA reveals a new sub-lineage of the North American genotype. *Journal of Fish Diseases* 29:611-619.

Contact: Jim Winton, 206-526-6282, james_winton@usgs.gov [Western Fisheries Research Center]

NEW SCIENCE DIRECTIONS

Restoration Ecology - Restoration Ecology is a capability being developed at CERC with several projects. CERC has worked successfully through the FY2006-07 budget process to gain support from DOI Natural Resource Damage Assessment and Restoration (NRDAR) Program for development of a program that focuses specifically on restoration of contaminated lands where DOI trust resources are affected. NRDAR program is directing funding to CERC to address this issue. Scientists will be developing a classification matrix of potential contaminants and habitats encountered by NRDAR practitioners and identifying tools to monitor restoration of contaminated lands. Efforts will focus on NRDAR sites contaminated by mining and/or industrial pollutants, consistent with the strategic goal of Resource Protection identified in the Department's Strategic Plan. CERC is hiring a Restoration Ecologist to oversee development of a Restoration Program by designing and implementing studies addressing ecological recovery and ecological value at sites relevant to the NRDAR program. Studies will provide critical data to evaluate the success of different ecological restoration alternatives and will ultimately provide information to DOI land management agencies for better defining the environmental benefits of restoration efforts. [Columbia Environmental Research Center, Columbia, MO]

Nanotechnology - In the spring of 2006, CERC convened a Nanotechnology workgroup that included scientists from multiple branches with interest in nanoparticles and nanomaterials. Members of the CERC workgroup participated in developing the outline for nanotechnology research in the USGS through the Science Strategy Team's Report "*Facing Tomorrow's Challenges: USGS Science in the Coming Decade*" and are involved with developing a document that describes how CERC could contribute to the emerging science of nanotechnology. CERC workgroup organized a nanotechnology discussion session at the Ozark Prairie Regional SETAC meeting where scientists from government, academia, and industry discussed toxicological implications to increasing nanomaterials and nanoparticles in the environment. CERC Toxicology Branch has been conducting aquatic toxicity tests on invertebrates with carbon-based nanomaterials. This work was conducted in collaboration with the University of Missouri and resulted in funding of additional nanomaterial research through the USEPA Science to Achieve Results (STAR) Program. [Columbia Environmental Research Center, Columbia, MO]

Molecular Biology – CERC was able to upgrade a laboratory for research in Molecular Biology. One project involved development of biomarkers for atrazine exposure in fathead minnow and medaka. This involved primer development and qPCR analysis of endocrine-related genes in the hypothalamus-pituitary-gonad axis of fathead minnow and some for the medaka and gene expression profiles in fathead minnows (*Pimephales promelas*) caused by exposure to atrazine over a 6 week period. A number of genes that were differentially regulated in fathead minnows exposed to atrazine were also identified. For example, in the liver we saw differential regulation of genes that encode proteins that are part of fatty acid metabolism, cellular signaling, as well as other pathways. This study demonstrates the power of these fathead minnow microarrays in the identification and development of chemical and tissue-specific biomarkers. Characterization and validation of these biomarkers for use in environmental assessments will also be enhanced with these tools. [Columbia Environmental Research Center, Columbia, MO]

Radar ornithology [National Wetlands Research Center]

- Expansion of an existing alliance with the Gulf Coast Joint Venture (GCJV). GCJV provided funds to explore various applications of weather radar to bird conservation planning in the gulf region. Historically, most biological applications of NEXRAD data have focused on passerines. We will be advancing radar biology by demonstrating that NEXRAD data can be used to monitor wintering waterfowl movements.
- Partnered with NRCS to establish an assessment of WRP practices using NOAA national network of weather radars. The first assessment will take place in the Central Valley of California. The Farm Bill is scheduled for reauthorization in 2007; as part of this process, NRCS needs to demonstrate effectiveness of the Wetland Reserve Program (WRP). We will use NEXRAD data to assess migratory bird use of WRP sites before and after restoration.
- Partnership with University of Southern Mississippi to advance ability to use weather radar data by providing methodology to filter insect echoes. The new filtering process is being used to determine response of birds to Hurricane Katrina. Weather radar detects many types of targets in the air space, and it is not uncommon for insects to be mixed with other biological targets. If monitoring bird movements is the primary goal, insects are a source of data contamination. This insect filtering program is an advancement for radar biology because it is an improvement over previous filtering methods.
- Co-established a radar collaborative between USFWS and USGS at a national level. All regions of USFWS are involved as are NWRC, FORT, NRMSC, UMESC, and PWRC. Two NWRC employees participated on the steering committee for a national level workshop involving multiple DOI agencies, USDA, DOE, DOT, DOC, DOD, EPA, State agencies, NGOs, and several universities. Two open file reports and two fact sheets (both won national awards by NAGC) were produced on radar applications.

Energy and Land Use. Exploration and development of domestic oil and gas resources has become a national priority, while understanding of the direct and indirect effects of energy development on surrounding ecosystems remains limited. This situation poses a challenge for decision-makers balancing priorities that include maintaining healthy rangelands and wildlife habitat while providing for resource development and multiple public uses. FORT and other USGS science centers, along with Federal, State, and local partners, are jointly conducting an interdisciplinary research program focusing on these issues at a regional landscape level. Projects for 2007 will investigate diverse, multi-disciplinary energy and land-use issues, including efforts to assess sagebrush habitat conditions; identify and evaluate the ecological impacts of fire, grazing, and off-highway vehicle use on sagebrush ecosystems; quantify the effects of road use on ungulates; augment scientific understanding of sage-grouse population dynamics and genetics; and evaluate and centralize sagebrush ecosystem Internet resources. This interdisciplinary work will contribute directly to the *Wyoming Landscape Conservation Initiative* (WLCI), a long-term,

landscape-scale, science-based collaboration to ensure full consideration and adaptive management of Wyoming wildlife and habitats in the face of increasing land-use pressures, including energy development. BLM, USFWS, Wyoming Game and Fish Department, USDA Forest Service, and USGS are developing a proposal to implement WLCI, which has been recognized for partial funding under DOI FY 2008 American Landscape Initiative for Healthy Lands, Communities, and Economies. Because Southwest Wyoming has major energy resources as well as significant blocks of public land, the region serves an excellent laboratory for developing new approaches to landscape conservation. WLCI will initially focus on Southwest Wyoming. If successful, this concept would port easily to other ecosystems anywhere in the country. [Fort Collins Science Center]

Missouri River.—The Missouri River is a managed river with many conflicting needs by federal, state, and private users. Conflicts between transportation and flood control and species survival and habitat is leading the U.S. Army Corps of Engineers to fund a variety of studies on threatened and endangered fish and avian species. [Northern Prairie Wildlife Research Center, Columbia Environmental Research Center]

Northern Rocky Mountain region—

- New research thrusts in grizzly bear habitat and food modeling
- New work on wildlife disease modeling
- New research on habitat requirements of fluvial grayling in the Bighole river
- New research on bighorn sheep demographics in Dinosaur National monument
- New research on the winter use of sagebrush habitat by sage grouse
- New directions in the role of climate change on forest succession



BUREAU OF LAND MANAGEMENT UPDATE

*Prepared for the Western Association of Fish & Wildlife Agencies Meeting,
Tucson, Arizona January, 2007*

SUBJECT: BLM Energy Act Implementation

SUMMARY: The BLM has established an Implementation Team in the Washington Office to organize the Energy Policy Act of 2005 (P.L. 109-58) implementation efforts. Many aspects of the Act require the BLM to prepare regulations and reports to Congress. The BLM is also required to implement a variety of improved business practices and work more closely than it already has with other agencies that also regulate energy development activities on federal land. The Implementation Team provides leadership and support to the agency as these various tasks required by the Act are completed.

BACKGROUND: The Act, signed by the President on August 8, 2005, is the most significant federal legislation addressing energy issues in over a decade. Nothing in the Act changes the fundamental responsibilities or mission of the BLM. However, it does provide for improving the way the Bureau carries out its energy-related responsibilities, including streamlining the permitting process for energy resource development and enhancing management practices to be more responsive to all stakeholders, whether landowners, lessees, local or state governments, or other interest groups or individuals. It also calls on the BLM to modernize regulations for energy development on public lands and develop ways to improve coordination between all the agencies responsible for managing that development.

BLM is making progress with the aspects of the Act that were not immediately effective upon passage, for example, the Memorandum of Understanding (MOU) with the Forest Service to improve oil and gas leasing procedures. The Act assigned additional tasks to BLM to be completed within a strict timeframe. For example, BLM has initiated a programmatic EIS to evaluate oil shale and tar sands development in Colorado, Utah and Wyoming. Public scoping meetings and Governor coordination meetings for the programmatic EIS are complete and advance notice of proposed rule making for oil shale regulations has been prepared and is currently in the final review and surname process. BLM has also signed an interagency MOU to support preparation of the programmatic Right-of-Way Corridor EIS and to improve coordination in the review of energy related rights-of-way on federal lands.

The BLM is expending a great deal of time responding to Section 365 of the Act that identifies seven BLM Field Offices as part of a Pilot Office project to improve oil and gas permitting and administration. An Interagency MOU for the Pilot Office project was signed on October 24, 2005 by the Secretary of the Interior, Secretary of Agriculture, Administrator of EPA, and the Corps of Engineers to implement this section of the Act. The BLM will hire additional staff and provide funding for employees from other federal and state agencies in these offices so that permitting can be streamlined. The Act provides additional funding to the BLM to facilitate implementing the Pilot Office project.

The Implementation Team in the BLM headquarters office will track the progress of the various tasks needed to implement the Energy Policy Act, but much of the work will be performed by people in many places in the BLM. The implementation of the Energy Policy Act of 2005 will require the hard work and attention of people throughout the BLM.

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Phil Allard, BLM Energy Act Implementation Team (202) 557-3374



BUREAU OF LAND MANAGEMENT UPDATE

*Prepared for the Western Association of Fish & Wildlife Agencies Meeting,
Tucson, Arizona January, 2007*

SUBJECT: National Vegetation Management Environmental Impact Statement

SUMMARY: BLM issued a Notice of Availability November 10, 2005 of BLM's Vegetation Treatments Using Herbicides Programmatic Environmental Impact Statement and Programmatic Environmental Report. BLM held ten public hearings between Nov. 28, 2005 and Dec. 13, 2005. The public comment period was extended and closed on Monday January 9, 2006.

BLM initiated a National Vegetation Management Environmental Impact Statement (EIS) through a contract with ENSR International, in response to accelerated vegetation treatment schedules directed by several new Departmental and Bureau initiatives, including weed management, forest and rangeland health restoration, and the National Fire Plan. This EIS:

- evaluates proposed vegetation treatment alternatives on lands BLM administers in the western continental U.S. and Alaska;
- provides a comprehensive analysis of activities involving the treatment, management or restoration of vegetation including hazardous fuels reduction treatments to protect communities and restore desired natural fire regimes;
- provides a comprehensive programmatic NEPA document that BLM field offices can tier to for local land-use and project-level planning;
- serves as a baseline cumulative impact assessment for land-use and activity plans that involve treatment, modification or maintenance of vegetation; and
- Considers human health risks and ecological risks for herbicides

BACKGROUND: The purpose of the EIS is to update and consolidate four BLM vegetation treatment EIS analysis documents dating between 1986 and 1991. The bulk of the analysis for this new EIS covers 3.5 million acres of hazardous fuels reduction work as outlined in the Fire Cohesive Strategy. The EIS evaluates and updates air quality and smoke management and now includes vegetation treatments on public lands in the states of Alaska, Nebraska and Texas.

In developing the new EIS and an associated Environmental Report, BLM reviewed and analyzed vegetation and soil surface treatment alternatives, including use of chemicals on vegetation including noxious weeds and invasive species, as was done in the past. The new EIS includes analysis of treatments to restore watershed function, important habitats, and natural fire regimes on public lands. It analyzes, on a national basis, the cumulative impacts of these treatments and the use and effects of natural wildfire, prescribed fire, under story thinning, forest health treatments and other activities related to restoring fire-adapted ecosystems.

Ecological Risk Assessments and Human Health Risk Assessments have been completed and reviewed by the BLM team. BLM has prepared a Biological Assessment and Essential Fish Habitat Analysis. USFWS has concurred with BLM's determination of Not Likely to Adversely Affect. Formal consultation will be initiated with NMFS in January 2007.

The final EIS will be completed in 2007 after consultation with NMFS is complete.

CONTACTS: Gina Ramos, Vegetation EIS Team Leader, (202) 452-5084



BUREAU OF LAND MANAGEMENT UPDATE

*Prepared for the Western Association of Fish & Wildlife Agencies Meeting,
Tucson, Arizona January, 2007*

SUBJECT: Plant Conservation Program and Native Plant Materials Development

SUMMARY: The BLM Plant Conservation Program is a new name for the program that combines the traditional special status plant program and the native plant materials program that was developed through Congressional direction. The program focus is to increase the diversity and the amount of native plant seed available for stabilization, rehabilitation and restoration efforts on public land, as well as focus conservation actions to maintain and restore native plant communities for special status plants and animals. The increasing use of native plant materials ensures sound rehabilitation and protection of diverse habitats while providing for environmentally responsible recreation and commercial uses of public land. In addition, native plant species can be used to combat invasive plant establishment, to restore habitat important for wildlife and special status species such as sage-grouse and lesser prairie chicken, to enhance forage for livestock, and to produce native plants for interim reclamation and restoration of energy development areas.

BLM is continuing to direct about \$5 million to native plant materials development through Fire Rehabilitation, T&E and Wildlife programs. Funds are used for wildland seed collection, evaluation of native plant materials, defining native seed transfer zones, development of germination and cultivation protocols, seed increases with local commercial growers, and on-the-ground restoration. The Bureau is working through the Plant Conservation Alliance in developing an interagency native plant materials program that will benefit all federal lands, as well as state and private lands, in ensuring the development and availability of locally appropriate native plant materials for restoration purposes.

BACKGROUND: The *Conference Report for the FY 2001 Department of the Interior (DOI) and Related Agencies Appropriations* directed federal agencies to develop a long-term program to manage and supply native plant materials for use in federal land management rehabilitation and restoration efforts and recommended that the Plant Conservation Alliance lead the effort.

Seeds of Success is an essential part of the BLM plan to increase both the amount and diversity of native plants available for restoration use. *Seeds of Success* is part of an international project in cooperation with Royal Botanic Gardens, Kew from the UK. The *Seeds of Success* project has expanded to eight other partners, supporting 35 teams collecting native seed from across the United States. In 2006, BLM signed a second five-year agreement with Kew and will collect seed from over 2000 native plant species for use in native plant materials development. Other US partners in the *Seeds of Success* project include: Chicago Botanic Garden, Lady Bird Johnson Wildflower Center, University of North Carolina Botanical Garden, New England Wild Flower Society, the Virginia Native Plant Society, New York Department of Parks and Recreation with the Brooklyn Botanic Garden and Zoological Society of San Diego. A portion of the material for 1000 native seed collections has been returned to the United States and is in storage at the USDA Agricultural Research Service facilities in Ft. Collins, CO and Pullman, WA. Seed from those species will be available for researchers and growers once BLM native seed priorities have been established and the seed has been documented in the ARS germplasm information data base. In addition, Royal Botanic Gardens, Kew sent seed quality information and germination protocols for over 1000 native US plant species to the BLM for incorporation into the Plant Conservation Alliance website: www.nps.gov/plants/sos.

The Plant Conservation Program promotes rehabilitation, restoration and conservation

activities, through partnerships with other federal agencies, state governments, tribes, and the private sector. BLM is working closely with federal partners (Forest Service, Fish and Wildlife Service, National Park Service, Agricultural Research Service and Natural Resources Conservation Service) that share responsibilities for developing native plant materials for restoration of federal lands.

BLM and the USFS are working together to develop seed transfer zones for native grasses and forbs. In California we are continuing to investigate seed zones for native grasses in the Sierra Nevada, including establishing fifteen common garden plots representing east-west and north-south environmental gradients. In Oregon there is a similar program for eight native plant species of the Pacific Northwest.

Plant selection and increase are under way for a total of 48 new forbs in the Great Basin. Pollination studies, genetic variability tests, and common garden studies are also part of this major effort to stabilize soils, fight invasive species establishment and restore sage-grouse habitat in the Great Basin.

The Medford, OR native plant program continues to expand in 2006 in an attempt to meet all the native grass seed and native plant material needed for District rehabilitation and restoration projects. In 2005, 14 native grass species produced a record 27,000 pounds of seed, with an additional 12 hardwood shrubs and forbs grown out. Also over 1100 acres were treated with 21,000 pounds of native grass seed.

BLM taught the sixth session of Seed Collecting for Restoration and Conservation, a course developed through the National Training Center that teaches participants how to collect species for future restoration efforts on public land.

In 2007, BLM Offices requested more than \$7 million for projects in the native plant materials program. BLM expects to receive \$4.6 from fire rehabilitation and will work internally with other programs that benefit from development of native plant materials, such as energy development, weeds, wildlife, recreation and range. As new native plant materials become available, additional funding will be needed to expedite commercial field production of these materials.

In 2007, the native plant materials program will continue to focus on the Great Basin, the Colorado Plateau and the Mojave Desert and focus on increased cooperation with private industry for seed increase.

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Mary Byrne, Seeds of Success, National Collections Data Manager, (202) 452-7767

APHIS Wildlife Services Report to WAFWA
Jeff Green, January 6, 2007

ALASKA – WS worked with USFWS and Alaska Department of Fish and Game to study and reduce impacts of predators on Stellar's Eider on Alaska's north slope. WS provides full-time assistance at three airports/military bases and on an "as needed" basis at many others and works with Alaska DOT, US DOD, FAA, USFWS, and ADFG to reduce wildlife hazards at airports. WS provides wildlife deterrence training statewide to government and industry for oil spill and hazardous chemical response. WS continues cooperative work with the USFWS to protect the Aleutian Canada goose and numerous species of nesting seabirds from predation by non-native, introduced populations of arctic fox in the Aleutian Islands.

ARIZONA – Arizona WS continues a strong cooperative relationship with the Arizona Game and Fish Department. WS is on an on-call status for urban lion issues and has removed several lions. WS continues to assist the black-footed ferret recovery by providing personnel for monitoring and surveillance of ferrets and collecting animals for disease sampling. WS is a full partner in the Mexican wolf reintroduction and has worked well with AGFD and others in collecting samples for avian influenza surveillance.

CALIFORNIA - California WS supervisors recently met with the Deputy Director of California Department of Fish and Game's Law Enforcement Branch to discuss agency coordination and get clarification on a few DFG statutes and regulations. WS is negotiating with the DFG on an update to an existing MOU between the two agencies and an agreement that would provide funding to WS to assist the Department with mountain lion depredation investigations and the removal of offending lions. The cooperative AI surveillance effort between the Department and WS went very well in California.

COLORADO - The Colorado WS Program has increased its cooperation with the Colorado Division of Wildlife in the past year by expanding its cooperative agreement to address mountain lion and black bear problems in the Southeast Region. Previously, WS was assisting the Northwest and Southwest Regions with livestock depredations. WS is also assisting the DOW with a mountain lion research project on the west slope and a WS Wildlife Specialist is utilizing his hounds to capture lions to be radio collared.

HAWAII – WS has developed a much improved cooperative partnership with the State of Hawaii's Department of Forestry and Wildlife to include cooperative work to sample birds for Avian Influenza and West Nile Virus. In addition, during 2006, WS received funding to support the State's trapping efforts for mongoose on Kauai Island. Fiscal years 06 and 07 mark the first time that the USFWS, Hawaii Ecological Services Department, have provided funding to WS to support Avian Influenza surveillance work on Guam and throughout the Hawaiian Islands. In addition, WS has secured funding to hire a full-time wildlife biologist to initiate off-shore island rat eradication work in 2007.

IDAHO - The Idaho WS program worked with the Idaho Department of Fish and Game in 2006 to develop a standard protocol for responding to incidents of wolf predation on livestock and other domestic animals, and that protocol has worked reasonably well during the first year after the USFWS turned over day-to-day wolf management responsibilities to the State. The Idaho program also expects to be working with the IDFG & USFWS in 2007 on a NEPA document to facilitate wolf removal for the protection of ungulates under certain circumstances. WS also continues to cooperate with IDFG in removing coyotes for protection of mule deer in the southeastern part of the State.

KANSAS – During the past year Kansas WS received funding from the Kansas Livestock Commissioner to conduct feral hog control. With feral hogs identified in 23 counties in the state, the Kansas Livestock Association recently passed a resolution supporting additional state and federal funding to deal with the growing feral hog problem.

MONTANA - The Montana Fish, Wildlife and Parks Department provides cooperative funding to the Montana WS Program to manage coyote predation on mule deer and antelope fawns. Each year MFWP conducts surveys to determine the doe:fawn ratio. In areas where the ratios do not meet MFWP's goals, WS conducts late winter aerial hunting to remove coyotes to improve fawn survivorship the following spring. WS is a full partner with MFWP in managing wolf depredation on livestock.

NEBRASKA – We are in the final stage of selecting a new State Director for the Nebraska WS program. He will likely be reporting for duty in Lincoln by early March, 2007.

NEVADA - Nevada WS continues to work cooperatively with the Nevada Department of Wildlife. In August of 2006, the Nevada Wildlife Commission continued their support for five projects to protect mule deer and bighorn sheep from excessive predation from coyotes and mountain lions. Most of these projects are five year projects with two slated to end in 2008 and two in 2009. The bighorn sheep project is ongoing. One new project was approved for 2007. For State FY 2007, funding was approved for WS to continue conducting predation damage management in six project areas to protect natural resources.

NEW MEXICO – WS cooperates with the New Mexico Department of Game and Fish on collecting wild birds for avian influenza monitoring and surveillance, and the Department contracts with WS to do work with protected species such as bear, mountain lion and beaver. WS participates on the State prairie dog working group and plays a key role in helping manage Mexican wolf depredation on livestock.

NORTH DAKOTA – WS assisted the ND Game & Fish Department with their annual chronic wasting disease surveillance of hunter-harvested deer, with investigations of mountain lion sightings and reports of mountain lion depredations and with their river otter surveys.

OKLAHOMA – A decade ago, feral hog populations were limited to the southern portions of the State but they are now found Statewide. WS assists by working directly with landowners and resource managers, providing technical assistance on hog trapping and other methods that could reduce hog damage. WS also, provides direct control within the limits of the program. WS regularly monitors for diseases in feral hogs including pseudorabies, swine brucellosis, classical swine fever, plague and tularemia. Pseudorabies, a highly contagious herpes virus among swine, is a concern for swine producers statewide. Swine brucellosis is a concern not only for livestock producers but is important to hunters, as *Brucella suis* can be transmitted to an unprotected hunter cleaning an infected carcass.

OREGON - Historically, predators have been responsible for more than 60% of all mortality of the eggs and young of the federally threatened western snowy plover despite extensive efforts by federal and state agencies to halt predation with non-lethal methods. Since WS has provided assistance by selectively removing avian and mammalian predators, fledgling success has dramatically improved. During the 2006 nesting season the nesting success of plovers on Oregon beaches was the highest on record since monitoring of the bird began in 1990. This year, 110 young birds survived long enough to learn to fly and become independent of their parents. This number is more than double the average of 45 produced annually since 1990. WS is currently working on an EA to analyze the impacts of our potential involvement with the Oregon Department of Fish and Wildlife Cougar Management Plan which uses administrative removal of cougars in target areas to reduce cougar conflicts with human health & safety, livestock production, pets and big game management.

SOUTH DAKOTA - WS conducted plague surveillance in prairie dog towns within the range of black-footed ferrets.

TEXAS – WS is cooperating with Texas Parks and Wildlife Department on collection of wild birds for avian influenza monitoring and surveillance and with the Texas Department of Health on wildlife disease issues such as rabies in coyotes and gray fox and pseudorabies, swine brucellosis and other diseases in feral hogs.

UTAH – WS has a strong cooperative relationship with the Utah Division of Wildlife and works closely with them on various issues such as predator management to benefit game populations, disease surveillance and predator control for black-footed ferret recovery and working on conservation plans for sage grouse and other sensitive species.

WASHINGTON – WS works cooperatively with USFWS, the US Army COE, and Chelan, Douglas and Grant County Public Utility Districts to protect downstream migrant salmon and steelhead (several T&E listed) from predation by predatory birds and northern pike minnow in the immediate vicinity of the dams and spillways; with the USFWS to protect T&E listed Columbian white-tailed deer fawns from predation by coyotes; with Washington Department of Fish and Wildlife and livestock producers to reduce predation by coyotes primarily during calving and lambing through the use of

aerial hunting; with WDFW, The Nature Conservancy, 3 counties and 2 irrigation districts to reduce damage caused by nutria and beaver; with WDFW and USFWS to develop emergency response procedures and a State management plan for wolves; with numerous agencies and public and private entities to reduce damage to agriculture, property, and human health and safety caused by both migratory birds and non-native species such as feral pigeons and starlings; and full-time with three airports and on an "as needed" basis with numerous airports to reduce wildlife hazards to aviation.

WYOMING - Wyoming WS generally provides predator management services to the County Predator Management Districts (PMDs). The 2006 State legislature passed a bill providing state funding to the PMDs to help pay for predator management to protect livestock and wildlife. With these new dollars the PMDs are looking to WS for increased services. WS continues to protect bighorn sheep at Whiskey Mtn. (Dubois) and Devils Canyon (Powell), is assisting the USFWS to radio collar wolves to support a WG&FD elk predation study and provides assistance to WY Game and Fish Department in responding to trophy game animal (i.e., cougar, black bear and grizzly bear) damage.

Wildlife Service

Aviation Training and Operations Center

FY 2006 –

1st Quarter through 4th Quarter Training

Summary

<u>Course Title</u>	<u>Course Description</u>	<u># Trained</u>	<u># Hours Training</u>
Crewmember	Trains crew members how to handle firearms in and round aircraft, firearm cleaning and maintenance, and shooting proficiency from aircraft.	64	Classroom 609.5 Flight 40.1 <u>Simulator 180.0</u> Total 829.6
SLAM	Senior Level Aviation Management teaches managers and the aviation team how to manage aerial operations programs. The training is focused on understanding each aviation team member's roles and responsibilities, effective communication, coordination, safety, and developing management objectives.	66	<u>Classroom 1042</u> Total 1042
Pilot Training (Agency, Interagency & Contract)	Primary Flight Training, Fundamentals, Advanced, Field Operations, Airworthiness Check Airmen, Instructor Pilot	32	Classroom 895.7 Flight 274.3 <u>Simulator 128.9</u> Total 1298.9
TOTAL 1st, 2nd, 3rd, and 4th Quarters FY06		162	3170.5

WAFWA SECRETARY'S REPORT

July – December, 2006

The past six months have been busy for the WAFWA Secretary, though the post-annual conference time period is typically not as frenzied at the months leading up to the annual conference. Nonetheless, a wide range of tasks and activities were accomplished and other routine services were provided to member agencies and partners. Highlights for the latter half of the year, in no particular order of importance, include the following:

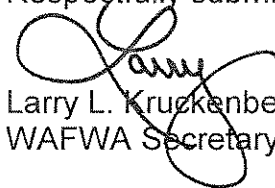
- Completed and distributed the annual business meeting minutes.
- Completed most of the business meeting-related action items emanating from the annual meeting.
- Coordinated the submission of progress reports to meet the terms of three Multi-state Conservation Grants involving Western Native Trout Initiative, Sage Grouse Coordinator, and Human Dimensions Expertise.
- Completed printing and distribution of the proceedings from the plenary sessions held at the July, 2005, annual conference in Kananaskis, Alberta.
- Coordinated with Committee Chairs and President to finalize the agendas for the 2007 mid-winter meeting in Tucson, Arizona, as well as worked with the conference planning staff from Arizona on matters relating to the mid-winter meeting.
- Launched the WAFWA website and worked extensively with the webmaster to address document needs, corrections and server capacity issues.
- Completed update of Director, Commission/Board Member, Fish Chiefs and Wildlife Chiefs' Rosters and e-mail groups.
- Participated in one teleconference and one meeting between the regional association coordinators and AFWA's leadership, including the new Executive Director, to discuss priorities, communications, and the changing role of regional associations.
- Issued two news releases during the period – one announcing the selection of Robin Knox as the new Western Native Trout Initiative Coordinator and the other announcing the availability of the Association's *Greater Sage Grouse Comprehensive Conservation Strategy* and requesting public comment.
- Had numerous communications with MAFWA officials, as well as the 2008 conference planning staff from South Dakota, regarding a possible joint MAFWA/WAFWA meeting in 2008. That proposal by MAFWA was later abandoned for a variety of reasons.
- Assisted personnel from South Dakota in getting an Invitation for Bid prepared for facilities in Rapid City for hosting the 2008 annual conference.

In addition, since the annual conference, as part of the day-to-day conduct of business, the Secretary received over 700 Association-related e-mails (over 2,000 for calendar year 2006), and initiated or responded to over 500 e-mails (over 1,400 for calendar year 2006) that involved information dissemination about the Association. Likewise, he initiated or received over 100 phone calls (over 250 for calendar year 2006) involving Association business since the annual conference. During this same period, the Secretary also drafted or assisted with the drafting of 21 individual letters (55 for calendar year 2006) that required the signature of the President or Secretary, and handled all distribution.

The Secretary wishes to thank all the directors, committee and working group chairs, commission/board members, and other volunteers for all their hard work and attention to getting Action Items completed. During this period, 95 actions were approved by the directors, of which at least 66 (70%) have already been accomplished.

HAPPY NEW YEAR!!!

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Larry", with a large, stylized flourish extending from the end of the signature.

Larry L. Kruckenberg
WAFWA Secretary

WESTERN ASSOCIATION OF FISH AND WILDLIFE AGENCIES

Status of Action Items 2006 - 2007

- ✓1). That the 2006-2007 budget for the Association reflect \$31,250 in income and \$30,650 (later amended to \$35,650) in expenses. **COMPLETED JULY 26, 2006.**
- ✓2). That the Commissioners' Committee focus on invasive species, mountain lion protocol in urban settings, and energy development effects on wildlife at their January, 2007, meeting. Colorado, Arizona and New Mexico to lead the presentations, respectively. **COMPLETED JULY 26, 2006 AND JANUARY 5, 2007.**
- ✓3). That the Association supports the AFWA Bird Conservation Committee's efforts to continue developing important initiatives like conserving state priority migratory birds on their wintering areas. **COMPLETED JULY 26, 2006.**
- ✓4). That member agencies Oklahoma, Montana, British Columbia and Texas be encouraged to appoint a representative to the Mule Deer Working Group. **COMPLETED JULY 26, 2006.**
- ✓5). That the Association send a letter to the leadership of the appropriate federal agencies inviting them to sign the North American Mule Deer Conservation Plan MOU, and become partners in its implementation. **COMPLETED AUGUST 2, 2006.**
- ✓6). That comments on the two draft habitat guidelines currently in circulation be submitted to the lead authors (Bruce Watkins and Mary Sommer) by September 30, 2006. **COMPLETED SEPTEMBER 30, 2006.**
- ✓7). That the Mule Deer Working Group's three proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓8). That the directors be encouraged to send their respective representative to the next Mule Deer Working Group meeting in Salt Lake City, January 17-18, 2007. **COMPLETED JULY 26, 2006.**
- ✓9). That the Western Bird Conservation Committee's six proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓10). That the Association re-affirm its commitment to deliver its final Greater Sage Grouse Comprehensive Conservation Strategy to the U. S. Fish and Wildlife Service by December 31, 2006. **COMPLETED JULY 26, 2006.**
- ✓11). That Association member agencies be encouraged to review and provide comments on the draft Conservation Strategy during the period August 7-September 22, 2006. **COMPLETED JULY 26, 2006.**
- ✓12). That the Association convene a brief meeting in September, 2006, in conjunction with the AFWA annual conference, among interested directors and Conservation Strategy co-authors. **COMPLETED SEPTEMBER 18, 2006.**
- ✓13). That the Association embrace the concept that the respective Joint Ventures becoming the agents for funding and administration of the Sage Grouse Conservation Project. **COMPLETED JULY 26, 2006.**
- ✓14). That the Association embrace the concept of jointly writing and developing the Draft North American Sagebrush Ecosystem Conservation Act in concert with the Western Governors' Association-Sagebrush Conservation Committee. **COMPLETED JULY 26, 2006.**
- ✓15). That the Association announce – via news release – the hiring of Robin Knox as the new WNTI Coordinator. **COMPLETED AUGUST 28, 2006.**

- ✓16). That the Association send a letter to interested WNTI parties encouraging them to be responsive and identify their state or regional WNTI contacts, their support for staffing and participation on the Assessment Team or with support of the Team's objectives. **COMPLETED AUGUST 28, 2006.**
- ✓17). That Mike Stone replace Virgil Moore as co-chair of the WNTI Management Committee. **COMPLETED JULY 26, 2006.**
- ✓18). That the President appoint a new Director Sponsor for the WNTI. **COMPLETED JANUARY 7, 2007.**
- 19). That the Association name a representative for the National Fish Habitat Initiative Board, when appropriate, and pending a recommendation from the Inland and Marine Fisheries Committee.
- ✓20). That member agencies be encouraged to review and support the proposed revisions to CFR and the Forest Service Manual regarding piscicide applications on National Forest System Lands. **COMPLETED JULY 26, 2006.**
- ✓21). That the Association send a letter to the National Marine Fisheries Service in support of revisions to the Marine Mammal Protections Act to enable selected lethal removal of problem marine mammals taking migrating salmon and sturgeon. **COMPLETED AUGUST 7, 2006.**
- ✓22). That the directors support inclusion of the Inland and Marine Fisheries Committee as a partner committee with the Nongame and Endangered Species Committee regarding coordination of State Action Plans. **COMPLETED JULY 26, 2006.**
- ✓23). That as regards State Action Plans, that whenever possible and appropriate the generic term wildlife be replaced with fish and wildlife. That the Inland and Marine Fisheries Committee's seven proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓24). That the Inland and Marine Fisheries Committee's seven proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓25). That the Association send a letter to the National Park Service requesting that the agency reconsider comments submitted by AFWA on February 18, 2006, to have its policies more accurately reflect the role of the states. **COMPLETED AUGUST 7, 2006.**
- ✓26). That the Association support proposed revisions to the Magnuson-Stevens Fisheries Conservation and Management Act that would exempt states that have statistically valid programs in place to assess marine recreational fisheries from mandatory participation in the Marine Recreational Fisheries Statistics Survey, and further, that this be carried to the AFWA Fisheries and Water Resources Committee in September, 2006. **COMPLETED AUGUST 7, 2006.**
- ✓27). That the Association support studying the effects of energy corridors on sage grouse, with the details of that study and its estimated costs being under the authority of the Western Bird Conservation Committee and the National Sage Grouse Conservation Framework Team. **COMPLETED JULY 26, 2006.**
- ✓28). That the Habitat Committee provide a formal recommendation to the directors at the 2007 mid-winter business meeting on the establishment of a WAFWA initiative to restore aspen in the West. **COMPLETED JANUARY 7, 2007.**
- ✓29). That Keith Sexson become the new chair of the Habitat Committee pending formal appointment by the new President. **COMPLETED AUGUST 23, 2006.**
- ✓30). That should the Association's Multi-state Conservation Grant application involving public lands access be approved, the Private Lands Access and Conservation Committee will assist the President in getting the Joint State/Federal Task Force established and appointed. **GRANT APPLICATION NOT APPROVED.**

- ✓31). That the winter meeting of the Private Lands Access and Conservation Committee be held the third week in January, 2007, in Arizona. **COMPLETED JULY 26, 2006.**
- ✓32). That the Association encourage the directors to ensure their agency is represented on the respective NRCS State Technical Committee, and each director strive to develop a working relationship with the NRCS State Conservation and FSA Director. **COMPLETED JULY 26, 2006.**
- 33). That the Association provide time for more in depth discussion, analysis and action regarding private and public lands access at a future plenary session, Directors' Forum or Joint Directors/Commissioners meeting.
- ✓34). That pending appointment of a new Chair for the Habitat Committee, a new Chair be named for the Private Lands Access and Conservation Committee and said appointment come from among those individuals who expressed a desired interest to serve in that capacity. **COMPLETED AUGUST 23, 2006.**
- ✓35). That commencing in 2007, the Association will initiate the President's Award, to be given to an individual or entity, including those not affiliated with a WAFWA member agency, that best exemplifies the highest ideals of innovation, leadership, stewardship and/or dedication involving fish and wildlife resources in the West. The Association President will select the recipient of this award. **COMPLETED JULY 26, 2006.**
- ✓36). That the directors reaffirm their ongoing concerns about inappropriate and excessive federal regulation of public activities on state waterways by the National Park Service and the U. S. Fish and Wildlife Service, and agree with the content of the draft letters, as presented. **COMPLETED JULY 26, 2006.**
- 37). That the results of the Human/Wildlife Conflicts Survey be posted on the WAFWA website when it is operational.
- ✓38). That the Association encourages agency participation at the Large Carnivore Human Conflicts Workshop in Cody, Wyoming, May 14-17, 2007. **COMPLETED JULY 26, 2006.**
- ✓39). That the Association encourage agency participation at the Animal Damage Management Conference, scheduled for April 9-11, 2007, in Corpus Christi, Texas. **COMPLETED JULY 26, 2006.**
- ✓40). That the Human/Wildlife Conflicts Committee's two proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓41). That the Law Enforcement Committee's five proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- 42). That Nancy Foley, California, compile State/Province reports for 2007 and these reports continue to be a regular Law Enforcement Committee agenda item.
- 43). That in an effort to adequately cover all agenda topics and have meaningful discussion, less time be allotted for presenting oral state/province reports in the Law Enforcement Committee meeting.
- 44). That Rob Buonomici, Nevada, determine through e-mail which items to add to the Recruitment and Retention Survey and that the survey be routinely updated for inclusion in the Law Enforcement Committee meeting.
- ✓45). That the Association affirm officer access to private land is a state, not federal issue. **COMPLETED JULY 26, 2006.**
- 46). That the Law Enforcement Committee provide a statute compilation on officer access to the Legal Committee by August 31, 2006.
- 47). That the 2007 venue for law enforcement remain a one-day workshop, a one-day Chiefs' meeting and a half-day committee meeting.

- ✓48). That Uniform Day at the WAFWA conference/plenary session be permanently established on the first official day of the conference when the colors are posted. **COMPLETED JULY 26, 2006.**
- 49). That the Legal Committee review and determine the eligibility of specific law enforcement activities within existing P-R and D-J language.
- 50). That John Heggen, Idaho, update the 1996 Game Transportation Laws Summary for future posting on the website.
- ✓51). That the Association's Officer Exchange Program be a permanent program, unless or until amended by the directors. **COMPLETED JULY 26, 2006.**
- ✓52). That the Association encourage all its members to develop an MOU with the Council on Environmental Education on the use of Project WILD materials to protect copyrights and prevent groups with other wildlife agendas from re-labeling "our" products with "their" messages. Steven Huffaker to assist, if necessary. **COMPLETED JULY 26, 2006.**
- 53). That the Resource Information and Education Committee develop recommendations on how to integrate the Wildlife Values in the West survey results through agency information, education and outreach programs.
- 54). That Wyoming and Arizona discuss this matter with CSU and draft a document for Resource Information and Education Committee review. Each state to name a point of contact.
- ✓55). That the Association adopt as its lone FY2008 NCN one entitled "Programs that enable fish and wildlife agencies to better understand and manage the human dimensions of conflict with wildlife that is accompanying expanded development in the United States". **COMPLETED JULY 26, 2006.**
- 56). That the Secretary submit said NCN to AFWA after the mid-winter meeting.
- 57). That prior to the 2007 annual conference, the Secretary advise all committee and working group chairs that NCNs are eligible to be advanced at the annual business meeting.
- ✓58). That should multiple NCNs be brought forward at the annual business meeting, the directors will need to decide then whether to act on them at that time or postpone final action until the subsequent mid-winter meeting. **COMPLETED JULY 26, 2006.**
- ✓59). That the Association encourage all 12 states in black-footed ferret historical range to fully engage in revising the current recovery plan by participating in the Recovery Implementation Team. **COMPLETED JULY 26, 2006.**
- ✓60). That William E. VanPelt (AZ) represent WAFWA on the U. S. Fish and Wildlife Service black-footed ferret 5-year review team and coordinate with all 12 ferret states to ensure that their comments are considered in completing the review. **COMPLETED JULY 26, 2006.**
- 61). That Terry Johnson coordinate with the states to ensure that within-state meetings or workshops regarding project prioritization have been conducted.
- 62). That Terry Johnson and Larry Kruckenberg finish documenting and reporting "partnership" mandatory expenditures for the regional conservation grant..
- 63). That Terry Johnson complete the final obligations to NFWF on submitting the new WAFWA Doris Duke/NFWF grant proposal that has been tentatively approved(i.e. Colorado River Native Fish Database)
- ✓64). That the Association not alter its position or funding commitment to the Colorado River Native Fish Database proposal, in an effort to allow NFWF to fully fund Hawaii's grant proposal for a Pacific Shorebirds multi-state project. **COMPLETED JULY 26, 2006.**

- 65). That Terry Johnson further synthesize the "Top 10" list of multi-state projects from the regional priorities workshop to determine which ones are already in play through ongoing WAFWA actions, and further, that he prepare a set of recommendations for the director's consideration at the January, 2007, business meeting, regarding suggested measures to implement the results/next steps of the regional priorities workshop.
- ✓66). That the Nongame and Endangered Species Committee's seven proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007 business meeting. **COMPLETED JULY 26, 2006.**
- ✓67). That WAFWA express non-financial support at the September, 2006, AFWA annual conference (TESP Committee meeting) for an international workshop in Mexico, before the 2007 Trilateral meeting to review/evaluate progress under the North American Bat Conservation Partnership's Bat Conservation Plan and to set priorities for and identify conservation activities writing the Plan for implementation over the next five years. **COMPLETED SEPTEMBER 21, 2006.**
- ✓68). That the Association encourage all member states to fully engage in NABCP's Western Working Group. **COMPLETED JULY 26, 2006.**
- 69). That the Legal Committee undertake a review of the practice of sharing nonresident hunter information to help prevent CWD transmission – proposed to be covered by a West-wide MOU – and determine if the legal obstacles are so difficult (or not), that a formalized approach would not be effectively accomplished.
- 70). That Dr. Collin Gillen and Keith Aune inventory and contrast existing policies in western states and provinces and evaluate the current state of knowledge relative to disease risks from translocated wildlife.
- ✓71). That the Wildlife Health Committee's two proposed FY2008 federal budget priorities be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- 72). That the Law Enforcement Committee (LE Chiefs) identify the differences in regulations throughout the western states involving transportation and importation of CWD species, and further, the Association develop related educational materials concerning the movement of potentially infected big game animals harvested by hunters.
- ✓73). That the Association contribute \$10,000 to the North American Game Warden Museum, with \$5,000 to come from the Association's operating balance and \$5,000 to come from the Law Enforcement Committee's sub-account. **COMPLETED JULY 26, 2006.**
- ✓74). That copies of the resolutions be included in the business meeting minutes and also be presented to the appropriate entity by the Secretary. Furthermore, that a copy of the North Dakota gratitude resolution be forwarded to the North Dakota Game and Fish Department for distribution to all agency personnel. **COMPLETED AUGUST 2, 2006.**
- ✓75). That the Legal Committee's one proposed FY2008 federal budget priority be advanced to the directors for their consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓76). That the Association's rotation schedule for hosting the annual conference be modified to reflect the following times and places: 2007 – Arizona; 2008 – South Dakota; 2009 – California; and 2010 – Alaska. **COMPLETED JULY 26, 2006.**
- 77). That the Association thank John Kennedy and his counterparts in the Forest Service and BLM, and AFWA staff, for their work on revising the Policies and Guidelines for Fish and Wildlife Management in National Forest and BLM Wilderness.
- 78). That the Association assist BLM and the Forest Service in drafting a cover letter to accompany distribution of the Policies and Guidelines.

- 79). That the Association offer its assistance to AFWA, the Forest Service, BLM and the Carhardt Institute to develop a training module for the Policies and Guidelines.
- 80). That the Association establish an ad hoc team to have follow-up with the National Park Service regarding excessive and inappropriate federal regulation governing public use of state waterways, and further, that the State/Federal/Tribal Communications Committee have a representative on that Team.
- ✓81). That the State/Federal/Tribal Communication Committee's two proposed FY2008 federal budget priorities be advanced to the directors for consideration at the January, 2007, business meeting. **COMPLETED JULY 26, 2006.**
- ✓82). That the State/Federal/Tribal Communication Committee members forward any additional proposed federal budget priorities to the Secretary by October 15, 2006, for consideration by the directors at the January, 2007, business meeting. **NONE RECEIVED.**
- ✓83). That the Association send an op ed to the Wildlife Society Bulletin that explains the Cougar Management Guidelines aren't the final word, they are not sanctioned by WAFWA, and although they may contain good science, the application of this science is not, in some cases, appropriate. **COMPLETED JULY 26, 2006.**
- ✓84). That the Association establish an Ad Hoc Mountain Lion Working Group. The Wildlife Chiefs to provide the suggested Statement of Purpose and member roster for the group to the directors at the January, 2007, business meeting. **COMPLETED JANUARY 7, 2007.**
- ✓85). That a WAFWA position document be prepared and distributed to the directors in December, 2006, that points out the issues of concern with the Cougar Management Guidelines and respective remedies, with corresponding action to be taken at the January, 2007, business meeting. **COMPLETED JANUARY 7, 2007.**
- 86). That the Association produce and publish a document that is related to the Cougar Management Guidelines, but addresses application and management. Said document to be prepared by the Mountain Lion Working Group and be completed by January 1, 2009, with progress reports to be given at interim business meetings.
- 87). That letters be sent out to all sanctioned workshop hosts reminding them of their reporting requirements to the directors. The same letter to include a request for explanation of what the excess funds from workshops have been used for in the past, and a requirement that in the future, because of Patriot Act requirements, that workshops establish a sub-account within the Association treasury and adhere to the Association's accounting protocol.
- ✓88). That the full-functioning Association website be launched no later than September, 2006. **COMPLETED OCTOBER 3, 2006.**
- ✓89). That the directors and commissioners be queried as to their expectations involving the Joint Directors/Commissioners Meeting held twice each year, and this meeting's construct and format be a topic of discussion at the 2007 mid-winter meeting, with appropriate changes or modifications put in place for the July, 2007 annual conference. **COMPLETED JANUARY 6, 2007.**
- ✓90). That the registrant fee assessed on behalf of the Association remain at \$20 for the 2007 annual conference. **COMPLETED JULY 26, 2006.**
- ✓91). That the Awards and Recognition Committee change its process to include an earlier nomination deadline, notification of the involved director to ensure the recipient's attendance at the Awards Banquet, and direct formal notification to the individual or entity that he or she or it is the recipient of an annual Association award. **COMPLETED JULY 26, 2006.**
- 92). That the Association file Articles of Incorporation with the State of Wyoming to become a Domestic, Non-Profit Corporation.

- 93). That the Association file the necessary paperwork to secure federal trademark protection for its new logo.
- ✓94). That the Association's officers for 2006-2007 include the following individuals: President - Duane Shroufe (AZ), First Vice President - John Cooper (SD), Second Vice President - Loris "Ryan" Broddrick (CA), Third Vice President - McKie Campbell (AK), Secretary - Larry Kruckenberg (WY), Treasurer - Stephen Barton (ID). **COMPLETED JULY 26, 2006.**
- ✓95). That John Cooper send a letter and convene a meeting of the principals involved in the Gunnison's and white-tailed prairie dog conservation strategies to resolve matters involving PECE policy compliance and monitoring, and further, that the involved directors weigh-in on bringing closure to these undertakings. **COMPLETED JULY 26, 2006.**

Page # 1

Western Association of Fish and Wildlife Agencies
Balance Sheet
As of 01/07

	<u>Total</u>
<u>Assets</u>	
<u>Current Assets</u>	
US Bank Checking	(5,883.43)
US Bank Conf Checking 5208	100.00
US Bank Conf Checking 5224	500.00
US Bank Conf Checking #7714	500.00
Short Term Investments	176,284.61
Long-Term Investments	25,339.57
Assessments Receivable	24,211.53
Grants Receivable	12,785.92
Proceedings Receivable	980.00
Publications Receivable	7,649.12
PROCEEDINGS INVENTORY	3,100.00
Total Current Assets	<u>245,567.32</u>
 Total Assets	 <u><u>245,567.32</u></u>
 <u>Liabilities & Fund Balance</u>	
<u>Current Liabilities</u>	
Prepaid WAFWA Proceedings	40.00
Total Current Liabilities	<u>40.00</u>
<u>Fund Balance</u>	
Fund Balance	245,527.32
Total Fund Balance	<u>245,527.32</u>
 Total Liabilities & Fund Balance	 <u><u>245,567.32</u></u>



ASSOCIATION *of*
FISH & WILDLIFE
AGENCIES

STAFF REPORT

**Western Association of Fish & Wildlife Agencies
Mid-Winter Meeting
Tucson, Arizona
January 2-7, 2007**

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INTRODUCTION -- MATT HOGAN, EXECUTIVE DIRECTOR

John Baughman's last day with the Association was September 22nd (the last day of the Association's annual meeting). Since then, I have spent most of the last three months learning the workings of the Association, meeting with staff and assessing our overall operations. A major focus of my time has been working on our policies and procedures in an effort to make the Association more efficient and effective so that we can provide better service to our membership.

I have also spent some time analyzing the results of two surveys that our President asked State Directors to complete. These surveys address the relative priorities of the various initiatives underway by the Association, as well as the Association's strategic plan. The results of these two surveys were discussed by the Executive Committee in December and will continue to be used as they discuss the future of the Association. I appreciate the time you have given to complete these two surveys.

Since joining the Association, I have been elected to the board of two groups: the National Conservation Leadership Institute (NCLI) and the Theodore Roosevelt Conservation Partnership (TRCP). John Baughman served the Association well on both of these boards. I have attended board meetings for both of these organizations in October. I would like to particularly note that the first class of the NCLI had their residency at the National Conservation Training Center (NCTC) the week of November 6th. You can find additional information about the NCLI in the MAT team's report in this update.

In November I attended the Northeast Directors meeting in Dover, DE as well as the Southeastern Association of Fish and Wildlife Agencies meeting in Norfolk, VA. My intent is to make all the regional association meetings in 2007 as well. In addition, In November, Eric Schwaab, Amber Pairis and I met with the new director of the U.S. Geological Survey, Mark Myers, to talk about our continued collaboration with his agency. In December, I attended a two day meeting hosted by the Doris Duke Charitable Foundation to talk about their efforts to support the State Wildlife Actions Plans. I also attended the 3rd annual meeting of the National Assembly of Sportsmen's Caucuses (NASC) hosted by the Congressional Sportsmen's Foundation. The NASC is the national umbrella organization for the individual state sportsmen's caucuses. At that meeting,

Ken Haddad and I made a presentation on the State Wildlife Action Plans as well as our continuing efforts at securing dedicated, long-term funding for state fish and wildlife agencies.

On December 18 and 19, most of the members of the Association's Executive Committee along with Trust Funds Committee Chairman Glen Salmon (IN) met with leaders of the archery, sportfishing, firearms, and boating industries in an Industry Summit. The purpose of the two day meeting was to strengthen the long and important partnership between industry and state fish and wildlife agencies through the Sportfish and Wildlife Restoration programs.

The Executive Committee met in Washington, DC on December 19 and 20. During the meeting, the Executive Committee met with Ron DeHaven, Administrator of the Animal and Plant Health Inspection Service (APHIS). He addressed to the Directors the status and process for consideration of further comments on the final CWD rule, the implementation of which was delayed at AFWA's (and others) request. He understands the state's perspectives and obligations to protect the vitality of their free-ranging cervids and doesn't want a rule to compromise that. Among the options on the table is one that would nullify this rule and start over.

DeHaven reaffirmed what he told the Directors at Snowmass that they are not going to codify the APHIS-VS internal wildlife policy, but will continue to promulgate rules that govern a states disease free-status. With respect to diseases that affect both livestock and wildlife, such as bovine TB and brucellosis, he reaffirmed his commitment to meaningfully engage the state wildlife agencies in the drafting of a disease mitigation plan for managing the disease in wildlife that would allow APHIS to grant disease-free status to livestock in the state even though the disease remained endemic in wildlife. Deference on specifics would be given to the state wildlife agency, and elimination of the disease is not required. A draft rule for brucellosis is in process. The proposed TB rule is either near publication or has been published. He also updated Directors on the status of HPAI surveillance and affirmed that all LPAI public notification is now done through posting on the APHIS web-site only, (i.e. no press conferences, news releases or other special attention).

Finally, please note one change to the format of this document. We have bolded those areas that are new developments since our annual meeting in September. I hope you find this helpful in quickly updating yourself on any developments since the last staff update from the annual meeting in September. As always, if you have any questions or comments about this report, don't hesitate to contact me or any member of the staff.

AGENCY INFORMATION DATABASE

Annually, the Association receives requests for information on our member agencies' "vital" statistics (i.e. Annual Budgets, Revenues, Land Area Managed, Harvest Level of Game Species, etc.) and in many cases we cannot fulfill these requests very accurately, or to do so involves contacting agencies and collecting the information on demand. Lacking this information, we are unable to proactively promote the breadth and depth of responsibilities and activities undertaken by our members.

To position us to aggressively promote the accomplishments of our members and to update our business practices and to improve the quality and accuracy of services to our members, we are creating an interactive, web-based database that will make readily available the vital statistics of our member agencies on our web server – the Association's Agency Information Database (afwaAID). Once complete, the data will be accessible from the Association's web site and available for use.

A database structure is currently in place and is undergoing initial testing through agency data input. Missouri has volunteered to serve as the pilot state for data input. This process is being coordinated by Automated Wildlife Data Systems program coordinator, Jeff Johnston, under the direction of the Technologies and Data Utilization Committee.

AUTOMATED WILDLIFE DATA SYSTEMS (AWDS)

With the hiring of Jeff Johnston in January, the AWDS effort is getting back on track. Jeff Johnston brings a rare combination of technical expertise in wildlife management, computer systems and wildlife-related information management. Jeff is working with the Technologies and Data Utilization Committee on a number of exciting projects.

The Automated Wildlife Data Systems (AWDS) program has as its mission: To be the technology and data use center for the Association and its members. AWDS still emphasizes the value of obtaining **Total Licensing Systems** within the states. Total licensing systems give license buyers purchasing flexibility and agencies greater control in enforcing business rules, collection of data, and greater capabilities for resources management. AWDS works with agencies to enhance their total licensing systems by added additional functionality such as electronic harvest reporting, biological data collection in the field, and ability to easily share data between any subset of agencies and the central databases at the Association.

In addition to the expansion of the AWDS program, its governing body has also grown. In September 2004, the AWDS Task Force was dissolved and a new full, standing committee was formed to take its place -- the Technologies and Data Utilization Committee. This Committee is enhancing AWDS' role as the center for agency technology initiatives and data-sharing efforts. As its primary focus, the Association's TDU Committee will also work to assist agencies to utilize cutting-edge technologies to streamline agency processes and enhance interactions with their constituents and realize the full benefits possible from enhanced databases. The Technologies and Data Utilization Committee is led by Paul Peditto, Maryland Department of Natural Resources (Chair) and Stephen Barton, Idaho Fish and Game (Vice-Chair).

AWDS' Annual Subscription Fees

As of January 1, 2005, AWDS is funded entirely by subscription fees paid by fish and wildlife agencies and other interested parties. A subscription to AWDS allows an organization to receive all the services they received from AWDS before 2005 for free, and they will be able to shape the direction of special projects of this expanded program. An organization may also contribute more than the subscription fee and ear-mark the extra funds for a special project or area of AWDS. Access to the main resources of the AWDS web site will only be made available to subscribers.

- Agency Subscription (State, Provincial, Federal): \$1,500
- Non-Governmental Organization \$1,500
- Corporate/Industry Subscriptions:
 - Gold Level: \$5,000 +
 - Silver Level: \$2,500 - \$4,999
 - Bronze Level: \$1,500 - \$2,499

Currently, AWDS subscribers include 35 US and Australian state, Canadian provincial fish and wildlife agencies, 2 non-governmental agencies, and more than 10 corporations.

After a delay due to the position vacancy, subscriptions for 2006 are now being processed.

AWDS Products for 2005

- Release of the report on the enhancement of the Wildlife Violator Compact. *(July/August)*
- Release of the report on the feasibility and technological considerations of a web-based, multi-agency Hunter Education and Safety Course Graduate database. *(July/August)*
- Unveil an online database containing the historic sales and economic impacts of hunting and fishing licenses. *(July)*
- Report preliminary results from pilot states participating in the fishing license holder data-mining and demographics study being conducted with the American Sportfishing Association. *(September)*
- Work with the National Shooting Sports Foundation to develop a quarterly hunting license index, similar to the fishing index.

Subscription notices for 2007 were mailed to states and other partners in early December 2006. In order to continue to accomplish all of these and more projects, AWDS needs your support. A subscription gives you access to AWDS and all of its data and technology projects, plus consulting services from its very experienced and insightful coordinator. Subscribe to AWDS today at www.AFWA-awds.com/subscribe.htm. To learn more about the AWDS program's services offered to fish and wildlife agencies, visit its web site at www.AFWA-awds.com.

FARM BILL

The Farm Security and Rural Investment Act of 2002 (Farm Bill) provides an 80 percent increase in funding for conservation programs, which means that approximately \$3 billion annually will be going to the nation's farmers, ranchers and forest land owners under a variety of programs, all of which can benefit fish and wildlife resources on private lands. To help make the promise of the 2002 Farm Bill a reality, the Association, its State fish and wildlife agency members and partner conservation organizations are now focused on the development of program rules and policy that will ensure fish and wildlife resources have co-equal status with soil and water resources in program implementation. **The following is a summary of the current status of 2002 Farm Bill implementation issues followed by a 2007 Farm Bill Update.**

After reviewing the new Agriculture Conservation Committee membership list, there are noticeable absences from states and regions in participation. Additionally, the Agriculture Conservation Committee added 2 new working groups in September. The new Forestry Working Group will address forestry-wildlife issues on private forest lands, and the Landowner Incentives Program (LIP) Working Group will work on LIP issues. Please nominate your state agency personnel to serve on the Agriculture Conservation Committee. Their regional expertise is greatly needed on the Committee and associated working groups (WHIP, LIP, Forestry, WRP, EQIP, CRP, Biofuels, etc.). Their participation will also facilitate collaboration on current Farm Bill issues and reauthorization efforts. Committee member nominations should be sent as soon as possible to Angela Nelson at arnelson@fishwildlife.org. For participation on the Committee's working groups, please contact Jen Mock at jenmock@fishwildlife.org. Thanks.

Arlen Lancaster Named New Chief of NRCS – On August 23, 2006, Secretary Johanns appointed Arlen Lancaster as the new Chief of NRCS. Lancaster succeeds Bruce Knight at NRCS, who was recently confirmed by the U.S. Senate as under secretary of agriculture for marketing and regulatory programs. Lancaster has served as deputy assistant secretary of Congressional Relations at USDA since April 2005. Prior to his service at USDA, Lancaster served in various senior staff positions in Congress, having worked since 1999 for Senator Mike Crapo, as a senior policy advisor and as the staff director for the Senate Subcommittee on Forestry, Conservation, and Rural Revitalization since 2001, he played a key role in crafting the conservation title of the 2002 Farm Bill. He also worked for Senator Robert Bennett from 1998 to 1999. Lancaster is a graduate of the University of Utah with a Bachelor of Science and an avid fly fisherman and outdoor recreationist.

2002 Farm Bill Update

New Contribution Agreements for Delivery of Conservation Program Technical Assistance at Risk – Because Congress passed a Continuing Resolution (CR) and did not pass FY2007 appropriations in 2006, many federal agencies are tightening their budget belts. According to NRCS headquarters, some state NRCS offices are filing deficit reduction plans, 30 state NRCS offices cannot balance their budgets under the CR, and furloughing for some NRCS employees is being discussed. Consequently, NRCS indicated it will not sign any new contribution agreements for Technical Assistance with states or NGOs until the FY2007 Agriculture appropriations budget is passed by Congress in 2007.

Conservation Reserve Program (CRP) –

FSA Announces New Conservation Practice to Restore Longleaf Pine Forests in 9 Southeastern States – On October 18, 2006 FSA Administrator Teresa Lasseter announced a new Conservation Reserve Program (CRP) Longleaf Pine Initiative to increase longleaf pine forests by 250,000 acres

throughout nine southern states. Producers in states within the natural range of longleaf pine forests that may participate in the CRP Longleaf Pine Initiative include AL, FL, GA, LA, MS, NC, SC, TX and VA. To be eligible for the CRP Longleaf Pine Initiative, land must be located in the National Longleaf Pine Conservation Priority Area (historic range of longleaf pine forests) and must be capable of being restored to a viable ecosystem. Landowners sign-up for the CRP Longleaf Pine Initiative began Dec. 1, 2006, and enrollment runs continuously until the 250,000-acre goal is met, or Dec. 31, 2007, whichever comes first.

Farm Service Agency (FSA) Issues Notice on Managed Haying and Grazing -- Based on FSA's settlement agreement with the National Wildlife Federation on managed haying and grazing, FSA issued notice CRP-537 which modifies those provisions of CRP (please refer to notice CRP-537).

Effective immediately, FSA county offices shall not approve any that include managed haying and grazing provisions as part of the conservation plan. Further, managed haying and grazing shall not be approved (for the first time) for any existing approved contracts. The settlement agreement for the NWF lawsuit specifies that, until an environmental impact statement (or environmental assessment) is completed, new CRP contracts may only be managed hayed once every ten years, and managed grazed once every five years (see specifics in the notice). It is my understanding that current contracts and REX-extended contracts that have managed hayed or grazed previous to this announcement will be allowed to continue to do so.

Johanns Announces \$1.8 Billion in CRP Rental Payments -- On October 2, 2006, Agriculture Secretary Mike Johanns announced that USDA is issuing \$1.8 billion in Conservation Reserve Program (CRP) rental payments to participating producers for FY2007. The payments allow producers to earn an average of \$4,143 per farm enrolled in the program. Producers holding about 739,000 contracts on 425,000 farms will receive an average of \$48.88 per acre. The number of contracts is higher than the number of farms because producers may have multiple contracts on a single farm. The latest data table about enrollments by state, number of contracts, number of farms, acres enrolled and CRP projected rental payments for FY2007 is available at <http://www.fsa.usda.govhttp://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=cpr-st>.

FSA Announces New Wetlands Initiative in the Prairie Pothole Region -- On August 23, 2006, USDA's Farm Service Agency unveiled a new CRP Duck Nesting Habitat Initiative to increase duck populations by an estimated 60,000 birds annually and to restore 100,000 wetland acres. Enrollment is limited to land in the Prairie Pothole Region encompassing parts of Iowa, Minnesota, Montana, North Dakota and South Dakota. The acreage is allocated in the amounts of 40,000 acres to North Dakota, 40,000 acres to South Dakota, 8,000 acres to Minnesota, 8,000 acres to Montana and 4,000 acres to Iowa. Land must be located outside the 100-year floodplain. Land eligible for the program must be capable of being restored to CRP wetland standards. Wetlands must include a buffer that will protect water quality and provide quality nesting habitat. More information on the Duck Nesting Habitat Initiative is available at local FSA offices and in the initiative fact sheet located online at: <http://www.fsa.usda.gov/pas/publications/facts/html/crpduck06.htm>.

Results from CRP General Sign-up 33 -- CRP general sign-up 33 ran from March 27 to April 28, 2006, during which USDA selected 1 million acres of the 1.4 million acres offered. The average rental rate per acre is \$53.44, and will provide annual rental payments of \$54 million to participants for the 1 million acres enrolled. This additional acreage raises the total CRP acreage to 36.68 million acres.

Re-enrollment and Extension (REX) of Expiring CRP Contracts -- Of the 15.5 million acres of CRP due to expire in 2007, CRP participants expressed interest and intent to re-enroll or extend CRP contracts covering 13 million acres, or almost 84 percent. Conservation compliance checks are still ongoing but **final results for 2007 expirations and acceptance should be available by the end of 2006**. Additionally, FSA has extended offers to CRP participants for re-enrollment or extension of contracts and acres due to expire in 2008-2010. **Through informal discussions with FSA, preliminary results indicate that between 84-90% of CRP participants with contracts expiring in 2008-2010 have expressed an interest and intent to re-enroll in CRP.** An official press release on REX should be available soon.

Environmental Quality Incentives Program (EQIP) –

GAO Releases Report on EQIP: State Allocation not Clearly Linked to Program's Purpose or Optimizing Environmental Benefits -- GAO released a report on the Environmental Quality Incentives Program (EQIP) on September 27, 2006, and reported that financial and technical assistance to farmers "lacks a clear link" to the program's purpose of optimizing environmental benefits, and consequently, "NRCS may not be directing funds to states with the most significant environmental concerns arising from agricultural production." GAO found the 31-factor formula used by NRCS to allocate EQIP funds to states to be problematic -- some factors lacked documented rationale for inclusion in the formula and some data used to make financial decisions were deemed questionable or outdated. The 62-page report may be downloaded from GAO's website at <http://www.gao.gov/new.items/d06969.pdf>.

Wetland Reserve Program (WRP) –

The USDA Office of Inspector General (OIG) published an audit report in August 2005 on the Wetland Reserve Program (WRP) which criticized the program and cited flawed valuation methodology because it lacked "before and after appraisals" that incorporated residual land values into the processes of offering payments for easements. The report also suggested that \$159 million had been misused during the preceding five years as a result of this shortcoming. In response to a USDA OIG audit on WRP, NRCS is now using the "Yellow Book" appraisal process which requires "before and after" appraisals and uses the "highest and best use" value for the land. This is a change from the past when NRCS used the current fair market agricultural land value for determining easement offers to landowners.

This has been devastating to the program for the following reasons:

- Across the US, few appraisers are qualified to conduct Yellow Book appraisals, slowing the new WRP appraisal processes, and only a small percentage of appraisals receive have been certified by NRCS. The NRCS admitted that in several instances, first appraisals were rejected by the NRCS National Appraiser after technical review because the proper process was not used or the data was not properly analyzed by the appraisers. Such appraisals were returned to the state for revision, which also slowed the process.
- The Yellow Book appraisal process requires using the "highest and best use" value of the land for appraisal determinations instead of agricultural value, which has resulted in dramatic reductions in the prices offered to purchase WRP easements. The OIG concluded that because the restored land has resale value for recreation (i.e., hunting), the payment should be reduced by this recreational value or "residual value." The NRCS has implemented this approach, and the result is that land value paid for easements is being reduced so much that farmers can not afford to accept WRP easement offers and enroll marginal farm land in the program. Consequently, farmers may have no other choice but to continue farming these marginal acres and to continue receiving the associated crop assistance payments.
- The Association is working with the conservation community to fix problems associated with the appraisal process through legislative opportunities next year. Draft language could include a version of the following: Easement values should be based on appraisals that assess the current fair market agriculture value of the acres offered to remove these marginal, disaster-prone croplands from production. Furthermore, the Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (42 U.S.C. 4601 et seq.) should not apply to the voluntary conservation easement activities of the Wetland Reserve Program administered by USDA.
- Some states are returning large sums of their state's allocation because of the aforementioned problems. All information on this subject is greatly appreciated. Please send information to Jen Mock at jenmock@fishwildlife.org. Thanks.

Conservation Security Program (CSP) –

USDA Announces 51 Watersheds Eligible for FY2007 CSP Sign-Up -- These watersheds represent more than 64,500 of the nation's potentially eligible farms and ranches, covering nearly 24 million

acres of cropland and grazing land. For more information on the FY2007 watersheds, please go to http://www.nrcs.usda.gov/programs/csp/2007_CSP_WS.html.

GAO report on CSP: Despite cost controls, improved USDA management is needed to ensure proper payments and reduce duplication with other programs.

- CSP has raised concerns among some stakeholders because CSP cost estimates generally have increased since the 2002 Farm Bill's enactment. The CBO's estimate increased from \$2 billion in 2002 to \$8.9 billion in 2004.
- USDA control of program spending may be enhanced by addressing (1) weaknesses in internal controls used to ensure the accuracy of program payments and (2) inconsistencies in the wildlife resource criteria used by NRCS state offices to determine producer eligibility for Tier III.
- GAO recommends, in part, that NRCS review its state offices' wildlife habitat assessment criteria and develop a process to preclude and identify duplicate payments. NRCS generally agreed with GAO's findings and recommendations.
- In response to the GAO report, several NRCS state biologists met October 24-26, 2006, to explore the creation and utility of using an index to facilitate consistent wildlife assessments for CSP. On behalf of the Association and the States, Farm Bill Coordinators from IA and MO participated in the meeting to improve program benefits for fish and wildlife.

Farmland Protection Program (FPP)--

HR 5313 Passed the House which Sets Aside 15% of Farmland Protection Program Funds for Competitive Grants Program -- On September 26, 2006, the House passed a bill to fund challenge grants through the Farmland Protection Program (FPP) to encourage the purchase of conservation easements and other interests in land to be held by a State agency, county, or other eligible entity, and for other purposes. Specifically, the following was added to FPP:

SEC. 2. ADDITIONAL TITLE-HOLDING OPTION UNDER FARMLAND PROTECTION PROGRAM.

(a) Additional Title-Holding Option; Reservation of Funds- Section 1238I of the Farm Security Act of 1985 (16 U.S.C. 3838i) is amended by adding at the end the following new subsection:

“(d) Option for Title to Be Held by Eligible Entity-

“(1) RESERVATION OF FUNDS; PURPOSE- Of the funds made available under section 1241(a)(4) for a fiscal year to carry out this section, the Secretary shall reserve not less than 15 percent to make grants to support cooperative efforts by an eligible State agency, a county, and one or more other eligible entities to purchase conservation easements and other interests in eligible land under subsection (a), the title to which will be held by an eligible entity rather than the United States.

“(2) COST SHARING- Notwithstanding subsection (c)(1), the share of the cost of purchasing a conservation easement or other interest in eligible land borne by the United States under this subsection shall not exceed 25 percent. The State agency involved in the purchase shall contribute 25 percent of the purchase price, the county involved in the purchase shall contribute 25 percent of the purchase price, and the other eligible entities involved in the purchase shall contribute 25 percent of the purchase price.

“(3) PROHIBITION ON USE OF GRANT FUNDS- Federal funds made available under this subsection may not be used by grant recipients for administrative purposes.”.

(b) Effective Date- The amendment made by subsection (a) shall take effect on October 1, 2006.

FY2006 Farm Bill Conservation Program Initial Allocations to States – The amounts include technical and financial assistance for conservation programs administered by the NRCS including the Conservation Security Program, Grassland Reserve Program, Farm and Ranch Lands Protection Program, Environmental Quality Incentives Program (including Ground and Surface Water Conservation and Klamath Basin), Wetlands Reserve Program, and Wildlife Habitat Incentives Program.

FY2006 State Allocations

Alabama	\$19,012,021	Maine	\$12,209,934	Oregon	\$48,074,604
Alaska	\$10,799,554	Maryland	\$15,530,887	Pennsylvania	\$18,289,897
Arizona	\$29,384,032	Massachusetts	\$11,454,349	Rhode Island	\$11,496,210
Arkansas	\$50,181,701	Michigan	\$35,678,528	South Carolina	\$18,386,044
California	\$83,599,663	Minnesota	\$52,242,730	South Dakota	\$25,766,201
Colorado	\$48,300,822	Mississippi	\$35,755,535	Tennessee	\$15,761,676
Connecticut	\$11,367,678	Missouri	\$48,097,579	Texas	\$100,399,798
Delaware	\$11,850,948	Montana	\$42,900,017	Utah	\$28,408,210
Florida	\$39,385,784	Nebraska	\$49,299,456	Vermont	\$11,112,361
Georgia	\$24,354,653	Nevada	\$11,532,732	Virginia	\$17,967,459
Hawaii	\$11,696,990	New Hampshire	\$11,423,949	Washington	\$33,084,405
Idaho	\$25,851,113	New Jersey	\$11,479,247	West Virginia	\$10,760,719
Illinois	\$36,075,985	New Mexico	\$27,635,473	Wisconsin	\$33,899,405
Indiana	\$29,590,408	New York	\$23,769,047	Wyoming	\$20,773,906
Iowa	\$51,959,713	North Carolina	\$27,085,467	Pacific Basin	\$1,628,369
Kansas	\$41,197,839	North Dakota	\$30,728,295	Puerto Rico	\$7,454,592
Kentucky	\$19,474,479	Ohio	\$29,229,995	TOTAL	\$1,493,727,753
Louisiana	\$34,065,286	Oklahoma	\$36,262,010		

Biomass and Energy Initiatives under USDA & DOE

The field of renewable energy is rapidly growing and changing with the help of research authorized in the 2002 Farm Bill and the comprehensive approach of the Energy Policy Act of 2005. Industry, agriculture producers, and the federal government are moving as quickly as possible to encourage research, development, and innovative technologies to create and use renewable fuels while reducing use of fossil fuels. Through genomics research, biochemical engineering, and industry initiative (i.e., DuPont, Chevron, ADM, John Deere, Monsanto), use of switchgrass planted as an energy crop and agricultural by-products such as corn stover and wheat straw could be used to produce cellulosic ethanol within the next 5 years. Although industry currently believes there are greater challenges associated with the conversion of pines to ethanol or other renewable energy sources, use of hardwoods for renewable fuels is closer to reality, including the use of willows on a 5-6 year rotation on productive hardwood soils for ethanol production. Many of these energy initiatives are targeted toward marginal lands to reduce conflicts with food, fiber and feed supply concerns.

Noticeably absent from USDA and DOE research and perspective are the potential effects these renewable energy sources could have on fish, wildlife, and their habitats and our nation's water resources. The conservation community has been talking with members of industry, Congress, and federal agencies to raise awareness of concerns and potential threats to fish and wildlife populations and their habitats as well as the need to include conservation practices as integral parts of all renewable energy efforts. The Agriculture Conservation Committee has a Biofuels Working Group that is helping to develop Guiding Principles and recommendations for the 2007 Farm Bill and provides the latest biofuels information to members of the Agriculture Conservation Committee and the Energy and Wildlife Policy Committee. The Working Group hosted a Biofuels Roundtable Discussion during the Association's Annual Meeting, and minutes from that session will soon be available. Members of your staff are invited to join the Working Group and should contact Jen Mock at jenmock@fishwildlife.org to participate.

USDA-DOE Make Available \$4 Million for Biomass Genomics Research – On October 12, 2006 in St. Louis, MO, the DOE and USDA announced \$4 million for bio-based fuels research that will accelerate the development of alternative fuels. The departments issued a solicitation for research proposals for new plant feedstock genomics research projects. The federal agencies are seeking to accelerate research breakthroughs that contribute towards making biofuels a cost-effective alternative to fossil fuels, with a goal of replacing 30 percent of transportation fuels with biofuels by 2030.

The new funding continues a commitment, begun in 2006, to conduct a fundamental research program in biomass genomics, to provide the scientific foundation to facilitate the use of woody plant tissue, specifically lignocellulosic materials, for bioenergy and biofuels. Developing lignocellulosic crops for energy fuels could use less intensive production techniques and poorer quality land, thereby avoiding competition with food production on better quality land. The program will take advantage of significant advances in breeding, molecular genetics and genomic

Mandatory Farm Bill Conservation Program
FY 2007 Appropriations (in Millions)

Program	FY 2006 Authorized	FY 2006 Enacted	FY 2007 Authorized	FY 2007 President's Budget	FY 2007 House	FY 2007 Senate
CRP	39.2 m ac	2,021 (39.2 m ac)	2,021 (39.2 m ac)	\$2,095	\$2,175	\$2,175
EQIP	\$1,200	Cut \$183m to \$1,017m	\$1,300	\$1,000	\$1127	\$1031
GSWC	\$60	Cut \$9m to \$51m	\$60	\$51	\$51	\$
WRP	250,000 acres	Cap at 150,000 acres	250,000 acres	250,000 acres	144,776 acres	No Cap
WHIP	\$85	Cut \$42m to \$43m	\$85	\$55	\$55	\$63
FRPP	\$100	Cut \$26.5m to \$73.5m	\$97	\$50	\$50	\$58
GRP (1)	\$254 total for FY 02-11	0	0	0	0	0
CSP	\$331	Cut \$74.6 m to \$256.4 m	343.2	\$343.2	\$280.173	No Cap
HFR (2)	Uncapped	\$2.5	Uncapped	\$2.5	\$0 (no funding)	\$5

(1) GRP reached its authorized level in FY2005.

(2) HFR – Healthy Forest Reserve Program

2007 FARM BILL UPDATE

The Association's 2007 Farm Bill Policy Position and recommended modifications was unanimously adopted by the membership at the Association's Annual Meeting, and the White Papers should be finalized by December 22, 2006. Additional White Papers will be developed as needed on issues such as a possible disaster title, carbon sequestration, renewable fuels and energy initiatives that could be significant issues during the 2007 Farm Bill debate.

IMPORTANT: When voicing opinions on legislative bills and Farm Bill positions, there are several things you should consider. Farm Bill reauthorization discussions are heating up. Many interest groups and organizations have released their positions and perspectives on what they want in the next Farm Bill, and a couple of members of Congress have already introduced Farm Bill legislation. Many of you will be asked your opinion or whether you support a specific bill or position. As you know, the State Directors of fish and wildlife agencies unanimously adopted their own 2007 Farm Bill Policy during the Association of Fish and Wildlife Agencies' 2006 Annual Meeting. **State fish and wildlife agencies now have their own Farm Bill policy position that they support and are working with the conservation community to develop a common platform for reauthorization – a unified voice for conservation in the Farm Bill.**

Many of you will be asked whether or not you support a particular bill or another organization's position. You may even be asked to support another organization's position on the Farm Bill. In these instances, relying on and affirming your **support for the collective State fish and wildlife agencies' Farm Bill position is critical if we are to build a strong conservation coalition.** When asked about support for a particular Farm Bill position or piece of legislation, it is important to differentiate whether your response is from your state perspective or whether it is the Association's perspective. It may not seem important now, but it is very important and will continue to increase in importance as interest groups actively and aggressively try to recruit states, other organizations, and groups to support what they want in the next Farm Bill.

For your information, the Association currently does not have an official position on the Kind or Pombo bills and since neither will likely receive any attention until the next Congress, we will use the recess to assess the bills and work with the sponsors to try to ensure the bills are consistent with our policy positions. We do not have a position on other organizations' Farm Bill policies. Therefore, if asked about your support for any policy position other than the Association's and you choose to respond, it would be most appropriate to clarify that your response is your state's or personal perspective. If the Association takes a position on a particular Farm Bill policy, we will let you know, however, we generally don't comment on other organizations' policy but rather seek the positions held in common in order to build a coalition around those.

If you have any questions or concerns about responses to other organizations or support for policy position other than the Association's 2007 Farm Bill Policy position, please do not hesitate to contact me at 202-624-3688 or at jenmock@fishwildlife.org.

Association's 2007 Farm Bill Working Group

Over the past year, the Association's 2007 Farm Bill Working Group (Working Group) of the Agriculture Conservation Committee (Committee) has worked to develop the Association's draft 2007 Farm Bill Policy position for your consideration and adoption during the 2006 Annual Meeting. State Directors, committee members, and State Farm Bill Coordinators were sent the draft policy position and are asked to provide comments. The information in the policy position can be found in various technical analyses which were formulated into draft White Papers and are available for comment through the Association's "Members Only" section of the Agriculture Conservation Committee's web page. Please do not distribute current drafts beyond state agency staff and Association committee members.

Because Congressional priorities and program support during the Farm Bill debate will in significant part depend on outcomes of this year's mid-term elections and subsequent Congressional committee assignments, the Association's policy position is carefully crafted to be a platform that provides a clear direction and position on Farm Bill issues (regardless of election outcomes) but still allows for negotiations and fine-tuning as the debate intensifies.

Development of the Position -- The Working Group surveyed state fish and wildlife agencies and Agriculture Conservation Committee members for their 2007 Farm Bill policy priorities. Responses were reviewed, integrated into technical analyses, and policy considerations and recommendations were identified in draft White Papers for each Farm Bill conservation program and significant issue. All recommendations considered and incorporated regional differences and needs commensurate with Regional representation of the Working Group.

History of the Working Group -- The Association's Agriculture Conservation Committee formed the Working Group which first met during the 2005 Annual Meeting to begin drafting the Association's framework for the 2007 Farm Bill policy by developing Guiding Principles. The Working Group consists of 2 representatives from each Regional Association who were chosen for their technical and/or advocacy expertise on Farm Bill programs. The Working Group is chaired by Jeff Vonk (IA), Chair of the Association's Agriculture Conservation Committee. Regional Fisheries Advisors selected by the Fisheries and Water Resources Policy Committee are providing valuable contributions to the Working Group and policy development processes as we collectively work to integrate both fish and wildlife conservation needs into conservation programs of the 2007 Farm Bill. Additionally, three non-governmental organizations (NGO) who are members of the Association's Agriculture Conservation Committee have been asked to participate in the Working Group, and they are Pheasants Forever, American Sportfishing Association, and Ducks Unlimited. Collectively, the regional and NGO representatives work with Jen Mock, the Association's Farm Bill Coordinator, and the Chair to accomplish the tasks described in the Working Group's charge. Through this Work Group, we look forward to better integrating State fish and wildlife agencies' conservation needs into the next Farm Bill. If you have any questions, please contact Jeff Vonk at jeff.vonk@dnr.state.ia.us or 515-281-5385 or Jen Mock at 202-624-3688 or jenmock@fishwildlife.org.

Progress to date:

- Surveyed state fish and wildlife agencies and Agriculture Conservation Committee members for their 2007 Farm Bill policy priorities. Reviewed and integrated responses into technical analyses and policy considerations/recommendations identified in white papers.
- Finalized and prioritized the Association's 2007 Farm Bill Guiding Principles.
- Distributed a draft Executive Summary with programmatic white papers after the 2006 North American Conference and requested comments from Agriculture Conservation Committee members and State fish and wildlife agencies (Farm Bill Coordinators).
- Drafted 2007 Farm Bill Policy Priorities on behalf of the Association of Fish and Wildlife Agencies. This document is being distributed for review and comment; presentation for adoption by the Agriculture Conservation Committee and the State Directors is slated for the Association's Annual Meeting in September 2006 in Snowmass, CO.

- The 2007 Farm Bill Working Group will continue to fine tune the white papers, policy options and alternatives, and final recommendations during the Annual Meeting in September 2006 and subsequent meetings as required. Regional representatives' continued involvement is paramount to the success of this process.
- Held preliminary congressional briefings on September 7 and 8, 2006, to discuss the draft policy and receive feedback on its contents;
- Summarized comments received on the draft White Papers, draft policy position, and issues for discussion at the Annual Meeting; and
- Discussed drafts during the Agriculture Conservation Committee meeting. The draft policy position was adopted by the committee, and the Association membership adopted the policy at the Business Meeting.
- **Because of changes in Congress and subsequent new priorities for the 2007 Farm Bill, the Working Group continues to refine the policy position and White Papers, which should be finalized by the end of the 2006.**

Next Steps in Reauthorization of the 2007 Farm Bill:

- Refine draft White Papers on a possible disaster title, carbon sequestration, fuel conservation, renewable fuels, and other energy initiatives that will be significant issues during the 2007 Farm Bill debate;
- Develop a campaign and communications plan, create a Congressional Briefing document, and continue to develop a political strategy for reauthorizing the 2007 Farm Bill conservation programs;
- Develop state-by-state conservation benefits fact sheets for use at the state and national levels during the Farm Bill debate to educate Congress, Hill staff, and support the States' policy position;
- Work to build a consensus position within the conservation community and collaborate with other interest groups on 2007 Farm Bill issues;
- Work with USDA and provide our policy perspectives during the development of the Administration's 2007 conservation title;
- Draft legislative language for the Association's policy priorities and positions as well as provide language for the Manager's Report, a document which provides direction and guidance to the administering federal agencies.
- Support grassroots efforts underway by some state fish and wildlife agencies for Farm Bill reauthorization; and
- Coordinate a "fly-in" day for fish and wildlife conservation efforts and the 2007 Farm Bill.

Reauthorization of the Farm Bill: Will it happen in 2007, will 2002 be extended, or both?

- Words from the Senate side: could provide a short-term extension of the 2002 bill, but a 2007 Farm Bill will be written. Hearings should start this fall or early next year with negotiations heating up next spring. The Senate Ag Committee is taking informal comments on the 2007 Farm Bill online at <http://agriculture.senate.gov/ag/feedback.cfm> and for the record within 5 days of a field hearing at <http://agriculture.senate.gov/ag/fbfieldrec.htm>.
- Words from the House side: the 2002 Farm Bill probably couldn't pass the floor as written due to budget concerns, but a 2007 Farm Bill will be written; maybe it could be extended if the majority changes in the upcoming mid-term elections. The House Ag Committee is now taking Farm Bill comments online at <http://agriculture.house.gov/>.
- Farm Bill priorities and potential program changes will significantly depend on what happens in the mid-term elections this November, and subsequent committee assignments.
- USDA has summarized comments from the Farm Bill Forums held last year which can be found at <http://www.usda.gov/wps/portal/usdahome?contentidonly=true&contentid=2006/03/0106.xml>.
- USDA has released some of its planned Theme Papers including "Rural Development," "Risk Management," "Conservation and the Environment," and "Energy and Agriculture." The theme papers may be found at http://www.usda.gov/wps/portal/lut/p/s.7.0.A/7.0.1UH?navid=FARM_BILL_ANALYSIS.

- The Senate Agriculture Committee has hosted 8 Farm Bill field hearings across the country. The 8th field hearing was September 8, 2006 in Lubbock, TX. On behalf of the Association, Texas Parks and Wildlife Department testified at the Lubbock field hearing on important conservation issues for consideration during the 2007 Farm Bill debate.
- **Democrats will take control of the 110th Congress with Senator Harkin (IA) chairing the Senate Agriculture Committee and Congressman Peterson (MN) chairing the House Agriculture Committee. Both have stated they plan to write a Farm Bill in 2007, and legislation will look similar to the 2002 Farm Bill with some tweaks and improvements. Both Chairmen have expressed an interest in maintaining and increasing funding in the Conservation Title as well as growing the Energy Title by increasing the focus on advancing cellulosic-based ethanol research and technologies.**
- Harkin has expressed a time line for reauthorization. He would like to have Farm Bills written before the August 2007 recess and conferenced before the end of the September 2006, which is when many Farm Bill programs expire. In a press conference held December 8, 2006, Congressman Peterson indicated that drafting of the 2007 Farm Bill will begin in January 2006.

CONGRESSMAN POMBO INTRODUCED THE "EAT HEALTHY AMERICA ACT OF 2006" (HR 6193) IN THE HOUSE ON SEPTEMBER 26, 2006

H.R.6193 Title: To continue and expand upon previous congressional efforts to ensure an abundant and affordable supply of fruits, vegetables, tree nuts, and other specialty crops for American consumers and international markets, to enhance the competitiveness of United States-grown specialty crops, and for other purposes.

Sponsor: Rep Pombo, Richard W. [CA-11] (introduced 9/26/2006) **Cosponsors** (introduced with 56 co-sponsors, added 17 since introduction) Currently, 12 members of the House Agriculture Committee are co-sponsors of the bill, and 5 members of the House Appropriations Agriculture Subcommittee are co-sponsors of the bill.

Latest Major Action: 9/26/2006 Referred to House committee. **Status:** Referred to the Committee on Agriculture, and in addition to the Committees on Education and the Workforce, Energy and Commerce, Ways and Means, and Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned. Because Congressman Pombo was not re-elected in November 2006, some are speculating that Congressman Cardoza, bill co-sponsor and Agriculture Committee member, will pursue this legislation in the 110th Congress.

CONGRESSMAN KIND INTRODUCED THE "HEALTHY FARMS, FOODS, AND FUELS ACT OF 2006" (H.R.6064) IN THE HOUSE ON SEPTEMBER 13, 2006

H.R.6064 Title: To reauthorize Department of Agriculture conservation and energy programs and certain other programs of the Department, to modify the operation and administration of these programs, and for other purposes.

Sponsor: Rep Kind, Ron [WI-3] (intro 9/13/2006) **Cosponsors** (41 when introduced, now 39) Currently, 3 members of the House Agriculture Committee are co-sponsors of the bill, and 2 members of the House Appropriations Agriculture Subcommittee are co-sponsors of the bill.

Latest Major Action: 9/13/2006 Referred to House committee. **Status:** Referred to the Committee on Agriculture, and in addition to the Committee on Education and the Workforce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned. **Congressman Kind's staff has reached out to the Association and asked for comments and suggestions on the legislation before the end of 2006 in preparation for reintroduction of Congressman Kind's bill next year.**

FEDERAL AID EXCISE TAX INITIATIVES -- STATUS

Under the Leadership of the Association's Fish and Wildlife Trust Funds Committee, the Association continues to pursue several key strategies necessary to maintaining support among anglers, hunters and other outdoor enthusiasts for excise taxes that fund the Sport Fish Restoration and Wildlife Restoration Programs. Building and maintaining support for these programs among all partners, particularly the sportfishing, archery, hunting and shooting sports industries that collect the taxes, is essential to long-term protection of these critical fund sources to the states.

The Federal Aid Excise Tax Working Group includes key representatives from the Internal Revenue Service (IRS), Tax and Trade Bureau (TTB), and U.S. Customs responsible for collecting, processing and transferring approximately \$700 million annually in excise taxes and import duties to Federal Aid and State Sport Fish and Wildlife Restoration Programs. Working with the Fish and Wildlife Service and the Association's Fish and Wildlife Trust Funds Committee, the Working Group has sought to maintain fair, effective and efficient collection, management and disbursement of Federal Aid funds. The IRS is implementing a Corrective Action Plan (CAP) to address non-compliance and ensure a level playing field for all industry taxpayers through policy clarification, improved excise tax agent training and industry education and outreach. A training course was conducted for a select group of IRS agents to improve awareness and understanding of compliance issues, and new staff has been assigned by IRS to address outstanding tax compliance concerns voiced by industry, FWS and the states. Recent activities include the release in July 2006 by the IRS of new guidance to the sportfishing industry designed to ensure fair treatment across the industry.

In light of the substantial progress that has occurred related to its initial mission, at the Fish and Wildlife Trust Funds Committee meeting in Snowmass, Committee Chair asked staff to work with industry leaders to evaluate the status of the Excise Tax Working Group and recommend an appropriate course of action for the Working Group.

Concurrent to the compliance efforts is a renewed effort by the states, industry leaders and the US Fish and Wildlife Service to highlight the role of hunters, anglers, outdoor enthusiasts, the outdoor sporting industry and various federal collection agencies in creating and maintaining the cycle of conservation and recreation successes that support much of the important work of state fish and wildlife agencies. Key to this effort is a summit meeting scheduled for December 18 and 19, 2006 that will bring together leaders from the sportfishing, archery and hunting and shooting sports industries with the Association's Executive Committee for strategic discussions aimed at solidifying relationships, assessing current status of the programs and seeking new opportunities to work together on mutual priorities.

Finally, following the significant gains realized through reauthorization of the Wallop-Breaux Act in 2005, including the recapture of an estimated \$110 million in diverted motorboat fuel taxes, the Association is working with other sportfishing and boating partners to ensure the best possible use of the newly named Sportfish Restoration and Boating Trust Fund. **At the Association's 2006 Annual Meeting, President Cooper and Mr. Charlie Sledd, President of the National Association of State Boating Law Administrators, signed a letter of intent to work together to establish a task group to evaluate the current allocation approach and, based on a needs assessment, recommend any appropriate future changes to allocation of Trust Fund dollars. The results would be provided to the American League of Anglers and Boaters for its use in future work on Wallop Breaux legislation.**

For more information on these or other excise tax issues, contact staff lead Eric Schwaab at eschwaab@fishwildlife.org, or at 202-624-7890.

FEDERAL-STATE AQUACULTURE DRUG APPROVAL PROJECT

After over 12 years of work, this project is moving rapidly toward conclusion. The Federal-State Aquaculture Drug Approval Partnership Project (known as the Association Project) and the continuing efforts on the part of its participants have made great progress and are close to having limited approvals from the Center for Veterinary Medicine (CVM) for seven of the nine Association Project drugs. With the

extensive base of existing data, it is anticipated that some additional effectiveness data will be required to develop the broad "all freshwater-reared fish" approvals envisioned in the original Association Project proposal. These broad approvals will allow the widespread, legal use of these drugs for fish management and aquaculture.

To date the project has helped gain expansions and extensions of the New Animal Drug Applications (NADAs) for two label claims for formalin and one supplemental label claim for immersion marking with oxytetracycline. Two pharmaceutical sponsors for formalin and three for oxytetracycline have stepped forward to add the new label claims to the labeling of their products.

It is anticipated that NADAs will be submitted in 2006 for three broad label claims for hydrogen peroxide. In addition, final data packages are projected to be submitted in late 2006 or 2007 to CVM for the following drugs with the number of label claims in parenthesis: chloramine-T (2), copper sulfate (1), florfenicol (4), formalin (1), hydrogen peroxide (1), oral oxytetracycline (2), and immersion oxytetracycline (1). From 2008 to 2009, final data packages are projected to be submitted for AQUI-S® (2, contingent upon planned funding), copper sulfate (1), and potassium permanganate (1).

The submission of these NADAs should lead to approvals for nine drugs and 20 label claims. All of this progress will have been made as a result of the efforts that were funded in large part by 38 state natural resources agencies, three federal agencies, and 10 company sponsors over a 15-year period. The total public sector contribution as of 2005 is more than \$25 million; drug sponsors have also contributed a significant, but for confidentiality reasons, unknown amount. To put this effort in perspective, pharmaceutical companies usually expect to spend \$12 million over a ten-year period on one drug, one label claim and one species.

To help realize these potential outcomes and to finish the Association's commitment to this project a new National Conservation Need was selected for the 2006 MSCG cycle to solicit proposals specific to approval requirement for AQUI-S, a zero withdrawal anesthetic drug. In cooperation with the national coordinator and other project partners, the Association's Fisheries and Water Resources Policy Committee submitted a successful proposal under that NCN to conduct critical studies and related activities necessary to complete national coordination of this project and obtain approval for AQUI-S use. It is expected that the direct Association role in this effort will conclude by the end of 2008 and will have yielded significant new approvals for commonly used aquaculture drugs.

FURBEARER RESOURCES AND BMP OUTREACH PROJECTS

Furbearer Research Program – While all 50 states support the development of Best Management Practices for Trapping in the United States (BMPs), to date, 35 states have participated in and assisted with trap testing projects to evaluate traps and trapping methods. All regions of the US have directly participated including states in the Southeast, Northeast, Midwest, West, and Alaska. More than 70 different restraining and body-gripping trap types have been evaluated. Data have been collected on 15 of the 23 species of furbearers prioritized for testing.

Thirteen states (WI, SD, PA, NC, MO, AR, GA, KS, CA, NH, MD, MN, IA) participated in field projects this year to evaluate the performance of 21 trapping devices including coil-spring traps, long-spring traps, body-gripping traps, cage traps, and non-powered cable devices. Trapping devices were evaluated on the basis of animal welfare, efficiency, selectivity, safety, and practicality. Trap testing projects focused on several species including mink, muskrat, fisher, river otter, beaver, gray fox, red fox, coyote, and bobcat. All trapping efforts are conducted during regulated trapping seasons. Research projects were conducted in four regions of the United States including the Midwest, West, Northeast, and Southeast. Results of these efforts will provide information to include in Best Management Practices for Trapping in the United States (BMPs).

BMP Development – Best Management Practices for Trapping eastern coyote, western coyote, raccoon and red fox, gray fox, bobcat and opossum, along with a general Introduction were released in March of 2006. A press release on these new BMPs, which included information on how to access them through the www.fishwildlife.org/furbearer_resources.html website was distributed to state agency members. CDs containing these newest BMPs have been distributed to state agency directors, I&E chiefs, state

furbearer biologists, federal fish and wildlife agencies, and trapper associations. Other BMPs currently being written include those for beaver, muskrat, fisher, river otter, nutria, and marten. Completion of these BMPs is anticipated in 2007.

The purpose of the Best Management Practices (BMP) process is to scientifically evaluate the traps and trapping systems used for capturing furbearers in the United States. Trapping BMPs are based on scientific research and professional experience regarding currently available traps and trapping technology. Trapping BMPs identify both techniques and traps that address the welfare of trapped animals and allow for the efficient, selective, safe, and practical capture of furbearers. These guides are intended to be a practical tool for trappers, wildlife biologists, wildlife agencies, and anyone interested in improved traps and trapping systems. BMPs include technical recommendations from expert trappers and biologists, and a list of specifications of traps that meet or exceed BMP criteria. The results of this research serve as a reference guide to wildlife management agencies, conservation organizations, tribal nations, researchers, trapper organizations, individual trappers, and others interested in the continued improvement of traps and trapping systems. Trapping is an element of many wildlife management programs. State fish and wildlife agencies must continue to take a lead role by establishing a practical and effective plan for the improvement of trapping systems in order to maintain trapping as a valuable wildlife management practice.

National Trapper Education Curriculum -- In 1979, the International Association of Fish and Wildlife Agencies passed a resolution recommending and supporting the development of trapper education course materials. These materials were recently distributed to state agencies following an 18-month development period that included extensive evaluation. Designed for trappers of all experience levels, developed using trapping best management practices and using the standardized approach that has made hunter education so successful, the program is very flexible and can be adapted to the needs of each state. The curriculum provides content standards, learning objectives, student manuals, student workbooks, a student exam, and an instructors guide and evaluation forms. Educators, furbearer biologists, expert trappers, and representatives from the International Hunter Education Association were consulted in the development of this program. Because each state implements hunter/trapper education differently, we have sent this CD to the following state agency personnel: Director, Public Affairs/I&E chief, Hunter/trapper coordinator, Furbearer program contact, and Law enforcement chief. Additionally, the CD was shared with the Canadian provinces/territories and the state offices for USDA-Wildlife Services. The education curriculum is also available at www.fishwildlife.org/furbearer_resources.html.

These materials are especially timely, as many state agencies have recently begun the process of revising trapper education materials. It is our hope that by adopting and customizing these materials, states will be able to save valuable time and expense. The curriculum will not only inform trappers about Best Management Practices, but it will also provide consistent information to trappers in every state. As a result, the program will provide for the potential for licensing reciprocity through content standards. *If states choose to customize the materials, please note that the content standards should be maintained to promote consistency among the states. At the March 2005 Association of Fish and Wildlife Agencies business meeting, a recommendation was passed by the agency Directors that state agencies voluntarily adopt the content standards developed for this program.*

New!! Train the Trainers Workshops

Based on requests by state agency personnel, the Association has received a grant to present "Train the Trainers" workshops to support state agency hunter/trapper education coordinators and instructors in the use of these newly developed trapper education materials. The workshop has three main components -- use and customization of the student manual and workbook; presenting a skills/field program; and use of the authentic assessment method for student performance evaluation. The Association will cover expenses for workshop materials and trainer fees to deliver this workshop in your state. **If you are interested in hosting one of these workshops, please contact Susan Langlois at TE.Workshops@state.ma.us.** Please include your name, contact information, and a list of three potential dates for hosting this workshop. *We require a minimum of 30 participants per workshop (not to exceed 60 per session).* Priority will be given to those states that hold combined workshops with other states and those that request this workshop during the 2006 calendar year. The grant may be extended into 2007 if a significant number of states are interested in hosting the workshop but are unable to schedule it during 2006. Grant extension is subject to approval by the Association's National Grants Committee and the USFWS and cannot be guaranteed at this time.

National Furbearer Harvest Database -- This new database will be administered by the U.S. Trap Testing Technical Work Group and supported by Association staff. It will provide an outlet for all states to collect furbearer harvest information in one concise location. Information such as the number of licenses sold, amount of revenue collected from license sales, average pelt value, harvest estimates, and harvest status of species will be collected. This database is presently available for pilot testing by selected agencies and expected to be on-line for state use this fall.

Ownership and Use of Traps by Trappers in the United States Survey -- A survey of trappers in the United States was conducted in 2004 to provide a better understanding of trappers, their equipment and techniques used for capturing furbearers, and to provide information to those in furbearer management which will allow them to make informed decisions on trapping matters. More than 4000 trappers from 46 states were surveyed. Release of the first report on this survey is expected this fall and will be provided to all state fish and wildlife agencies in electronic format. The report will also be available at www.fishwildlife.org/furbearer_resources.html.

Professional Training Workshops and Video Development -- The "Trapping Matters" workshops were offered to state fish and wildlife agencies on a limited basis until recently. The last planned workshop was held in Kansas City, Missouri in March 2006, and was hosted by the Missouri Department of Conservation. This workshop was attended by about 100 fish and wildlife professionals in the Kansas City Region.

INTERNATIONAL AFFAIRS PROJECT

The work of this project is split between domestic and international projects. International activities have been pretty much focused on CITES while domestic activities have been focused on Trap Testing work where significant gains have been made (see Trap Testing report) and the Association's Recruitment and Retention programming efforts.

Also during the last few months, a sizeable percentage of project time has continued to be focused on CITES work -- in this case preparing for the upcoming Conference of the Parties in June of 2007 and the recently concluded Standing Committee Meeting. We attended the recent meeting of the US Delegation in Europe working on the CoP and attended the Standing Committee meeting in Geneva as a member of the US Delegation. The entire CITES Team -- Dale Towell (ID F&G), Carolyn Caldwell (Ohio DNR), Cal DuBrock (PA GC) and Buddy Baker (SC DNR) -- will be taking part in the CoP in June next summer. When the Regional Association representatives recently met in Aspen, CO with the Federal CITES leaders, consensus was reached that this would be our final push at getting the Bobcat de-listed from CITES. We all agreed that this had gone on for several years and it was fish or cut bait time. Team Leader Carolyn Caldwell has set a time-table for the group's work to carry this agenda forward. To this end, Cal DuBrock (PGC) is meeting with Federal officials to coordinate work, and Buddy Baker (SC DNR) is working with the collateral bobcat researcher efforts in Mexico to pull all our work in North America together. Gordon Batcheller (NY DEC) assisted by lining up a PhD candidate from Cornell to do a peer review of the Mexican research. That researcher, funded by the Association, has recently completed his inspections in Mexico. The so called Cornell report is available on request. Recall that this whole effort at decoupling bobcat management from CITES was to free up state agency resources being wasted on unnecessary tracking, tagging and reporting on an abundant resource with robust populations.

The Regional's CITES Team continues to work on the currently underway review of the CITES implementation regulations (50 CFR part 23) -- regulations infamously out of date and in need of updating.

The discussions/negotiations with the European Union continue and the outcome of our fur trade with Europe continues as an issue and is something we follow closely.

This is a very active file right now and the outcomes are largely unpredictable at this time. Our contacts believe that the EU will honor the understanding with respect to maintaining trade as long as we maintain

an active testing program and carry out our own commitments. The next meeting to be held in Brussels may be delayed until early 2007 and may be associated with a technical workshop for European Parliamentarians and member state representatives.

The project has prepared a history of the Association's trap testing research and BMP development for use by Congressional and Appropriations staffers as we continue the struggle to get our research funded.

Ramsar Convention on Wetlands of International Significance -- especially for Birds -- the Association continued to be a part of the U.S. work on the Ramsar Convention. The Association has contributed significantly to supporting this effort. Don MacLauchlan of the Washington office staff represented the States on the US National Committee which has recently met at Blackwater National Wildlife Refuge on Maryland's Eastern Shore.

Wildlife without Borders -- The Project has continued to promote this important project on behalf of its southwestern States -- all four Mexican Border States are members of WAFWA. The purpose of this project is to make joint US/Mexican projects work more efficiently and effectively and act wherever possible as a facilitator for projects. This Association has again applied for funds to allow members of border agencies to participate in the 2007 Trilateral in Quebec. This meeting has impacts far broader than the four border states for many states share hundreds of species with Mexico -- the implications here are far broader than four states.

JOINT TASK FORCE ON FEDERAL AID

The Joint Federal/State Task Force on Federal Assistance Policy (JTF) was established in September 2002 to review issues identified by State and Service personnel in the administration and policies of the Wildlife Restoration and Sport Fish Restoration Programs. The Office of the Director of the U.S. Fish and Wildlife Service and a state fish and wildlife agency director, as designated by the Association, serve as the co-chairs of the JTF. The Service names six additional federal employees as members and the Association names six additional state fish and wildlife agency employees as members. Current members are:

State Representatives: Glen Salmon (IN), Co-Chair; Gerry Barnhart (NY); Lisa Evans (AK); John Frampton (SC); Kelly Hepler (AK); Tom Niebauer (WI); Keith Sexson (KS)

FWS Representatives: Rowan Gould, Co-Chair; Tom Barnes; Jim Greer; Mitch King; Chris McKay; John Organ

JTF staff: Carol Bamberg (Association Counsel); Larry Mellinger (DOI Attorney); Kelly Miller Reed (Association); Kim Galvin (FWS)

If determined to be necessary, the JTF recommends policy clarifications to the Director of the U.S. Fish and Wildlife Service (USFWS). Starting in late 2005, the USFWS began issuing policy clarifications as new Service Manual Chapters rather than issuing Director's Orders (DOs), which are only in effect for one year and must be renewed. To date, 16 clarifications have been issued, including five Manual Chapters, six DOs (which are being converted to Manual Chapters), three Director's memorandums, and two memorandums from the JTF Co-Chairs. These policy clarifications are used by USFWS's regional staff in administering grant programs.

The JTF is exploring the applicability of policy clarifications to not just the two Federal Aid programs, Wildlife Restoration and Sport Fish Restoration, but also 10 other programs whose funds come from the Wildlife Restoration Fund (WR) and/or Sport Fish Restoration Account (SFR). The 10 include (1) Clean Vessel Act Pumpout Grant Program; (2) Boating Infrastructure Grants; (3) Section 10 Firearm and Bow Hunter Education and Safety Grants; (4) Multistate Conservation Grant Program; (5) Landowner Incentive Program; (6) State Wildlife Grants; (7) National Coastal Wetlands Conservation Grants; (8) North American Wetlands Conservation Fund; (9) Boating Safety Financial Assistance (DHS and US Coast Guard), and (10) Priority Louisiana Coastal Wetland Restoration Projects.

The JTF last met on November 14-16, 2006. Minutes of the last meeting are available at <http://federalaid.fws.gov/jtf/jtfindex.html>.

All Director Orders, now Manual Chapters, are available at <http://federalaid.fws.gov/jtf/jtfindex.html>.

Here are some JTF activity highlights:

- **Performance Measures/ PART and GPRA discussion**

At the March meeting, the FWS reported that the 1994 SEIS would be updated since two areas of SFR and WR received a "results/performance measures not demonstrated" during OMB's 2005 PART review. FWS is now pursuing the development of a strategic plan for FWS' Federal Assistance, with the recognition that states determine how funds are spent. As a result of this finding, the Association and several state agency directors worked with the FWS to hold a meeting with top officials at the Office of Management and Budget. At that meeting, it was agreed that states would work with the FWS to develop appropriate measures and a performance accounting system to report state progress under federal funding programs. The FWS and states have identified the Joint Task Force as the best group to oversee this planning effort. A work team has been appointed and the initial meeting was held in Shepherdstown in Early December. One anticipated outcome of the process is determining whether the FWS or the states should set and report on grant performance measures, which will be entered into FAIMS (<http://faims.fws.gov/>). A work group of state and federal members was appointed by the Co-Chairs at the November task force meeting.

- **Next Audit Cycle – audit type for non-tribal SWG**

To date, SWG has not been audited nor has Congress requested an audit. However, the states and the FWS would like to be prepared. Prior to an official audit, the states would like to review the program. The plan is to form a Working Group to conduct mock audits and prepare guidelines for the states' use in conducting internal reviews of their program and preparing for an audit. This matter was discussed at the November 2006 meeting of the Joint Federal/State Task Force on Federal Aid Policy (JTF).

- **New FWS Manual Working Group**

There is a need to review and update the FWS' Manual Chapters pertaining to Federal Assistance (see 6th item at <http://training.fws.gov/fedaaid/toolkit/toolkit.pdf>). In the meantime, all new policies originating from the Joint Federal/State Task Force on Federal Aid (JTF) have been added to the Manual as new chapters.

- **Third Party Agreements and FWS Approval**

Third party agreements are handled differently in every state. It was decided that rather than make this a JTF issue, the Chair of the Trust Funds Committee will appoint a group to develop best practices. The Committee will contact others to help with this effort.

LEGAL REPORT

Wolves

FWS has informed Michigan that it is revoking Michigan's wolf depredation permit authority. Michigan Department of Natural Resources challenged that action by filing a request for reconsideration with the FWS's regional director. Michigan has received a response from the Regional Office acknowledging that MDNR "fully and properly executed all conditions of the permit while performing gray wolf recovery actions within the State." The letter also acknowledges that Michigan's depredation control program was fulfilling its intended purpose of further the recovery of grey wolf in Michigan. Michigan is considering further action.

FWS revoked Michigan's permit after a federal district court in D.C. recently ruled enhancement of survival permits could not be used to authorize the lethal take of an endangered species. It is not

known whether FWS will appeal the D.C. ruling. The case was brought by the Humane Society of the U.S. and others. Michigan and Wisconsin are hopeful that in the Spring of 2007, gray wolf populations will be delisted in the Western Great Lake States. Montana and Idaho have permit authorities similar to what Michigan and Wisconsin had. Oregon was in the process.

Minnesota Trapping Lawsuits

A recent lawsuit filed in the District Court in Minnesota challenges trapping in Canada lynx habitat. Plaintiffs, Animal Protection Institute, argue that the Minnesota trapping program "takes" (hunts or kills) the Canada Lynx in traps or snares set for other animals. Plaintiffs ask the court to end or alter the trapping program in areas where the lynx reside. Safari Club International and the Minnesota Outdoor Heritage Alliance were granted amicus status in the case this month.

There is also a related case in the same court challenging the trapping program as allowing "take" of Canada lynx, bald eagle, and gray wolf, all listed under the Federal Endangered Species Act. The complaint alleges that 10% of all trapping in the U.S. takes place in Minnesota; that the DNR sells 6,000 trapping licenses each year; that DNR regulations allow trappers to leave their traps unchecked and unattended for up to 72 hours; and that leghold, snare and Conibear traps have caused injury to all three species in Minnesota.

Muzzleloader Lawsuit

The North American Muzzleloader Hunting Association has filed an ADA complaint against 15 states, (Alaska, California, Colorado, Georgia, Idaho, Kansas, Minnesota, Nebraska, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, and Wisconsin), because the states do not allow scopes on muzzleloading rifles. The complaint alleges that this may discriminate against older people because some may need vision enhancements to facilitate shooting. The states are in the process of responding to the complaints.

Hunting in National Refuges

Fund for Animals v. U.S. Fish and Wildlife Service and U.S. Sportsmen's Alliance Foundation, SCI, et al. On August 31, 2006, Judge Ricardo Urbina ruled in *Fund for Animals v Hall* that the U.S. Fish and Wildlife Service violated the National Environmental Policy Act by issuing six rules that collectively opened or expanded hunting opportunities on 36 refuges within the wildlife refuge system without first analyzing the cumulative impacts of those rules. Refuges involved in the litigation are: 10,000 Islands (FL), Balcones Canyonlands (TX), Key Cave (AL), Trustom Pond (RI), Canaan Valley (WV), Bond Swamp (GA), Currituck (NC), Julia Butler Hansen (WA), Plum Tree Island (VA), Cameron Prairie (LA), Mandalay (LA), Lower Rio Grande (TX), Lake Umbagog (NH), San Andres (NM), McNary (WA), Mackay Island (VA), Arid Lands (WA), Grand Bay (AL), Big Oaks (IL), Clarks River (KY), Petit Manan (ME), Deep Fork (OK), Bayou Teche (LA), Black Bayou Lake (LA), Cat Island (LA), Catahoula (LA), Occoquan Bay (VA), Okefenokee (GA), Marais des Cygnes (KS), Lost Trail (MT), Washita (OK), Trinity River (TX), and Whittlesey Creek (WI).

The court has asked for further briefings on the appropriate remedy which has now been completed. FWS has asked the court not to close any of the hunting programs while it reassesses its NEPA compliance. The Service has voluntarily offered to delay additional hunting openings and/or expansions until May 2007 when the FWS projects it will be able to meet its NEPA obligations.

The Association believes that hunting on refuges should not be made vulnerable to NEPA challenges and will continue to explore all options.

Constitutional Right to Hunt and Fish

This issue has been (again) gaining national recognition, particularly in the southeastern states. Apparently, NRA has been pushing this agenda as a way to help curtail local zoning aimed at shutting down shooting ranges. NRA and others who support constitutional amendments protecting the right to hunt and fish argue:

- The people should have a constitutional right to hunt and fish.

- This right should be subject to rules and regulations that manage game populations from a scientific, not a political, perspective. Unregulated hunting in the United States has proven to be a failure with regard to protecting healthy game populations.
- Traditional means, methods and species should be protected in the constitution to guard against actions by activist courts. Language should allow for the incorporation of future means, methods and species.
- Hunting should be the preferred means of managing overpopulated and invasive species.
- The right should provide aggrieved sportsmen a private cause of action.
- The right should be truly meaningful. For various reasons, some organizations advocate for language that provides sportsmen with little or no practical benefit or protection against politically motivated actions. As a rule, public policy makers favor this approach because they prefer the path of least resistance when crafting policy.
- The fact that many states have adopted constitutional amendments that are little more than "window dressing" is not an argument against changing course and adopting meaningful, substantive amendments in the future.

This issue was discussed at length during the Southeastern Association of Fish and Wildlife Agencies legal committee meeting last month.

Massachusetts v Environmental Protection Agency

The U.S. Supreme Court heard oral arguments on November 29th on their first-ever global warming case, a bid by states and environmentalists to force the EPA to regulate tailpipe emissions. Michigan, along with eleven other states, filed a brief in support of the federal agency position that EPA had not been given authority by Congress to regulate tailpipe emissions. Several justices, led by Antonin Scalia and John Roberts, questioned whether 12 states have the legal right to challenge an Environmental Protection Agency decision not to regulate those emissions. Roberts, the chief justice, said the states were "spinning out conjecture on conjecture" to support the argument that they would benefit from EPA rules. The court's ruling on legal standing would create a precedent for other global warming lawsuits involving power plants and other emissions sources. It might also have a broader impact on legal challenges regarding government implementation of environmental requirements.

During the arguments, other justices suggested the agency had relied on impermissible factors in making its decision. Justice John Paul Stevens questioned the EPA's reliance on three National Academy of Sciences reports for the notion that scientists are unsure whether so-called greenhouse gases are increasing the earth's temperature. Justice Stevens commented during the argument that the "They [the reports] left out the parts that indicated there was far less uncertainty than the agency purported to find."

The divide may leave Justice Anthony Kennedy as the deciding vote, as he was in the Michigan Rapanos/Carabell wetland case in the court's last term. Kennedy didn't tip his hand, directing a handful of questions to both sides in the hour-long argument.

The case raises the prospect of new regulations on automakers including General Motors Corp. and Ford Motor Co. Depending on how broadly the court rules, the case might also affect utilities, which have fought efforts to cut emissions of carbon dioxide and other so-called greenhouse gases from power plants.

USDA-APHIS CWD Final Regulation

On July 21, 2006, USDA published a final rule entitled, "Chronic Wasting Disease Herd Certification Program and Interstate Movement of Farmed or Captive Deer, Elk, and Moose", effective October 19, 2006. The rule establishes a herd certification program that participating deer, elk and moose herd owners will have to follow to move herds. Herd owners may enroll in a state program that APHIS has determined equivalent to the federal program, or may enroll directly in the federal program if no state program exists. However, the final rule states, "This rule will preempt state requirements for movement of

cervids into states to the extent that the state requirements are in conflict with this rule." APHIS has apparently taken the position that under the Commerce Clause, their authority regarding interstate transport and movement supersedes any state law that is in conflict with the rule. The problem is some states have significantly more restrictive rules than is provided in USDA's final rule. Some states totally prohibit importation of captive cervids. Association of Fish & Wildlife Service filed a petition to stay effective date of the final rule to give the state fish and wildlife officials the opportunity to comment on the rule consistent with the notice requirements of certain executive orders. **APHIS has announced that it will delay the effective date until further notice, to give the agency time to consider the several petitions received asking that the rule not take effect as scheduled.** APHIS said the delay was needed to allow the agency to consider the issues raised in the petitions and to decide what action to take in response to them. Comments are now due on January 3, 2007. The Association will file comments and share those comments with state fish and agency counsel through the Association's Legal Committee.

USDA-APHIS Final Fish Order

On Tuesday, October 24, 2006, USDA-APHIS issued a federal order, under the broad authority of the Animal Health Protection Act and effective immediately, banning the movement from the 8 Great Lake states of 37 fish species susceptible to Viral Hemorrhagic Septicemia (VHS). While the states recognize and support an aggressive and proactive fish health protection program, and there is arguably merit for more than a state-by-state approach, the APHIS action was taken unilaterally without meaningful collaboration with or perhaps thorough appreciation for the fish health programs of not just the individual states but also the Great Lakes Fishery Commission. This action, and potential consequences to fish restoration efforts in the Great Lakes, are both unacceptable.

Becky Humphries (MI), Chair of the Association's Fish and Wildlife Health Committee, and Gerry Barnhart (NY), US Vice-Chair, Great Lakes Fishery Commission, shared those concerns on Tuesday (24th) afternoon with Dr. Ron DeHaven, Administrator, APHIS, and Dr. John Clifford, Assistant Administrator, APHIS-Veterinary Services. Dr. DeHaven and Dr. Clifford committed to working with the state fish and wildlife agencies and GLFC on an interim rule that would allow movement of the species listed under the order conditioned upon a certificate of health for the stock to be moved. Subject interim rule (to be in place NLT March 2007) would be effective immediately while public comments were considered. A subsequent Association letter of October 27, 2006 to Dr. DeHaven from Ed Parker (CT), President, and Gerry Barnhart (NY), GLFC, institutionalized the concern and remedy for the record.

APHIS thereafter conducted a workshop on October 31 and November 1 for state fish and wildlife agencies, the baitfish industry, and NGOs to solicit and discuss recommendations for the substance of the proposed interim rule. As a result of this meeting, USDA-APHIS has amended the federal order. The amended order allows qualified movement of certain susceptible live fish conditioned upon their disposition if there is an approved certificate of health from the state of origin and acceptance by the state of destination. We understand an interim rule which would be effective upon issuance, promulgating the amended order and seeking further comments will be forthcoming.

LEGISLATION

Just before they adjourned for August recess, Congress took conclusive action on two of the Association's legislative priorities: conservation tax incentives; and the electronic federal duck stamp. Both were signed into law by the President.

And, just before they adjourned for the election, Congress passed (and the President signed) a bill reauthorizing NAWCA; a bill reauthorizing and improving the Great Lakes Fish and Wildlife Restoration Act; a bill reauthorizing the Neotropical Migratory Bird Conservation Act; and a bill providing statutory authorization for the USFWS Partners for Fish and Wildlife Program.

The mid-term Congressional elections turned the control of both the House and the Senate over to the Democrats when the 110th Congress convenes in January 2007. Before they adjourned sine

die, the 109th Congress passed a Continuing Resolution funding the federal government until February 15, 2007 at the lowest of either the FY2006 enacted appropriations law, or the FY2007 mark in the House passed bill, or the FY2007 mark in the Senate passed bill. Only the FY2007 Appropriations for the Department of Defense and the Department of Homeland Security were signed into law. All other agencies will operate under the Continuing Resolution until the 110th Congress takes conclusive action on the remaining appropriations bills.

Congressional action was taken on the Association's other priorities as detailed below.

Farm Bill: Congress held several hearings both in DC and in the field leading up to anticipated reauthorization of the Farm Bill in 2007. The Association adopted its principles for Farm Bill reauthorization at its Annual Meeting in September and will use those to assess the merits of bills in the next Congress. See the extensive treatment on the Farm Bill elsewhere in this report.

Magnuson-Stevens Fisheries Conservation and Management Act: In the early morning of last legislative day before they adjourned sine die, Congress passed a lengthy reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act governing the management of fisheries in coastal and marine waters, which the President is expected to sign. The bill is closer to the Senate version than the House version. The official bill text that passed is not yet available and it is 240 pages long so we have not had time to fully analyze it. However, Eric quickly reviewed what we believe was close to the bill that passed and provides his perspectives on it.

Angler Registration and Recreational Data: Regarding registration of recreational anglers, the bill establishes a requirement for creation by NOAA of a regionally based system for registration of recreational anglers. This system is required for anglers in federal waters under the jurisdiction of the eight Councils, and it retains original Senate language that applies to anglers targeting anadromous species (with no jurisdictional delineations), thus it appears to apply a federal registration requirement for anglers in state waters targeting anadromous species. The bill provides an exemption for anglers registered or licensed under a state system providing the Secretary of Commerce determines that the information generated is adequate to satisfy data needs for recreational catch and effort.

The angler registration requirement is incorporated into a larger effort to improve recreational catch and effort data. The bill imposes upon NOAA standards for that review and a requirement that they work to improve the Marine Recreational Statistics Survey system based on the recent National Academy of Sciences review and in partnership with states, academic experts, industry and anglers.

Dedicated Access Privileges: The bill includes extensive treatment of standards and procedures for the development and use of dedicated access privilege systems for federal fisheries management (ITQ's, etc.).

Science in the Management Process: The bill establishes new standards and procedures for the creation and use of Science and Statistical Committees in the Council process. New standards require certain advice for the Committees for establishing total allowable catch and constrain Councils to operate within the confines of that advice.

Council Member Training and Appointment: The bill does provide an avenue for the Secretary of Commerce to deem gubernatorial nominees insufficient and independently solicit public nominees for consideration in Council appointments. We had not previously seen this concept in earlier versions of the bill. The bill does contain requirements for a new Council member training program.

Assured Wildlife Funding: Just prior to August recess the Senate, by a vote of 71-25 passed S3711, a bill which would authorize gas and oil exploration and drilling in the so-called Lease 181 and Lease 181 south areas of the Gulf of Mexico. Significantly, it direct 37.5% of the revenues therefrom and without further appropriation to the coastal producing states (TX, LA, MS, AL) for coastal impact assistance and restoration (including fish, wildlife and habitat conservation); 12.5% to the state-side Land and Water Conservation Fund; and the remaining 50% to the federal Treasury. The Administration supported S3711 because the revenue sharing was from new receipts from new leases only; they have not supported

broad (existing receipts) OCS revenue sharing with the states as witnessed by their initial opposition to the broader House-passed bill (HR4761). The Administration dropped their objections to the House bill when the House leadership changed the bill from direct spending to subject to annual appropriations, rendering it only an authorization for spending instead of compelling spending. The House bill also authorized the creation of a "Natural Resources Enhancement Fund" to which would be dedicated a certain percentage of the on-shore (public lands) and off-shore (OCS) receipts from producing states. These funds would be available to state fish and wildlife agencies in producing states to mitigate/ameliorate impacts to fish, wildlife and their habitats from the exploration, siting, and development of gas and oil fields. From a national policy perspective, HR4761 also gives the Governor, with the assent of the General Assembly, the authority to petition Congress to lift the federal moratorium on OCS drilling off their respective coast.

While we were unable to insinuate wildlife funding (WCRP) into S3711 even though we understand Chairman Domenici (Senate Energy and Natural Resources Committee) is favorably inclined, we have been able to maintain the high visibility of that need. The barriers to getting wildlife funding into S3711 were the Senate Leadership's insistence that the bill be kept very narrowly focused on the Lease 181 Area, and, the inability to capture further any of the 50% going to the federal Treasury without losing support of the Administration for the bill.

As part of a bigger tax extender and international trade package (HR6111), Congress included and passed the provisions of the Senate passed bill (S.3711) which opens up the so-called Lease 181 and 181 south area of the Gulf of Mexico to gas and oil development, which the President is expected to sign. This is the bill that the Senate passed in the summer but until this week, the House sought to open more than just the Lease 181 area to additional drilling. The House this week concluded that the Senate bill was the best it was going to get, and accepted it.

Under the bill that passed, 37.5% of the lease revenues and royalties goes to the 4 producing states of TX, LA, MS and AL on a formula basis to remediate the environmental and infrastructure impacts of gas and oil development, including fish and wildlife surveys and management; 12.5% goes to all states for the state-side LWCF; and 50% goes to the Federal Treasury. As you know, although we endeavored to do so, we were unable to capture any more of the federal income for assured state wildlife funding. However, with this precedent established of cost-sharing of OCS federal revenue to some states, we will use that to continue to pursue our needs.

Endangered Species Act (ESA): Once again, ESA reauthorization has eluded this Congress, but it is helpful to summarize the state of play.

In a move that surprised many of us, the House last year passed Chairman Pombo's bill (HR3824) in late September only 10 days after it was introduced. The bill text and process was tightly managed by the Committee and the Association testified, assessing the bill's merits against our Association reauthorization principles. An alternative bill (which narrowly failed) offered by moderate Republicans and Democrats was similar in many respects with the exception of the requirement in HR3824 to compensate landowners for foregone use of their property if the Secretary determines that such use would constitute a take under the ESA. The similarities in the other respects between HR3824 and the alternative suggest bipartisan support for ESA improvement.

The Senate Environment and Public Works Committee held several oversight hearings last year but work on a draft Committee bill stalled. An effort they asked the Keystone Center to conduct on critical habitat and other provisions of ESA relating to habitat failed to reach consensus on recommendations for improvement.

Just before Congress recessed last year, Senator Crapo (ID) introduced an Endangered Species Act reauthorization bill, S2110, with which the Association finds much favor. It contains some provisions for enhancing state role in ESA implementation through Section 6 amendments. It also directs the US Fish and Wildlife Service to prioritize listing decisions and provides guidance for doing that. It further details standards and process for recovery programs and directs the Fish and Wildlife Service to prioritize species recovery programs. Finally, it incentivizes private landowner species and habitat conservation through a market incentive by creating a conservation banking system under guidelines established by the Secretary; and further, gives landowners a tax deduction for entering into conservation agreements

equal to the cost of carrying those out and fair market value of activities they forego in order to meet conservation objectives. Because it is heavily weighted to tax credits and incentives, the bill was referred to the Senate Finance Committee on which sits Senator Crapo and two cosponsors of S2110 – Senator Lincoln (AR) and Senator Thomas (WY). No hearings have been scheduled. Senator Crapo and Senator Lincoln continue to be interested in working with other Senate members on a consensus ESA bill that reflects the Senate's reauthorization interests and not just theirs.

Just before Congress adjourned, Senator Crapo (ID) introduced as a marker for the next Congress, a bipartisan (cosponsored by Senator Lincoln-AR, Senator Baucus-MT, and Senator Grassley-IA) bill that would provide tax incentives to qualified private landowners who enter their property into a conservation easement, or a habitat protection agreement, to enhance the conservation of listed species and/or their habitats. The bill, which we support, amends the tax code, not the ESA. The bill would also give the same tax-exempt status to several FWS administered programs granting money to private landowners (LIP, Partners, SWG, Partnerships) as has the USDA cost-share conservation programs, a provision we specifically requested. As you know we worked closely with Senator Crapo and Senator Lincoln throughout this Congress on an ESA bill that could pass, but to no successful conclusion. There is a good chance that a bill as this, narrowly focused on tax incentives to landowners, could pass the next Congress. We will continue to work with staff on a strategy for bill consideration next year.

MANAGEMENT ASSISTANCE TEAM

The Management Assistance Team (MAT) provides state fish and wildlife agencies expertise in the form of consulting, employee training, agency and program evaluations, and other related services in the area of organization and human resources development, management systems, change management and agency effectiveness.

State Leadership Development Program

Per directions from the Association's Executive Committee and Leadership and Professional Development Committee, MAT has focused its efforts primarily on research and design of a leadership development program for state fish and wildlife agencies. **Using input from a survey with participation from all state fish and wildlife agencies, MAT completed the *States' Toolbox for Leadership Development*. The *Toolbox* is a comprehensive approach to integrating a leadership development within any state fish and wildlife agency and includes strategies necessary for implementing the program as well as a comprehensive set of resources to develop leadership at all levels in an agency: online and face-to-face workshops, evaluation methods, and facilitator resources.**

MAT has begun work with several states to consult on creating leadership development and workforce planning needs. With completion of the *Toolbox*, MAT is prepared to work with any state needing assistance in these areas.

In 2006 MAT developed an online campus for leadership development courses available to all state fish and wildlife agencies. Visit www.conservationlearning.org. MAT has contracted with eCollege to provide the platform to offer select MAT workshops in an instructor-led, asynchronous learning environment. ECollege uses research supported (www.sloan-c.org) best practices to economically deliver learning to geographically dispersed professionals in a way that can *improve* learning in many cases.

This year MAT has developed 6 online classes and 5 face-to-face classes. MAT is also working on developing a National Faculty to assist with course delivery.

Course Development:

Online Courses:

- Creative and Critical Thinking online class
- The Adaptive Leader online class
- Visionary Leadership online class
- Power
- Organizations as Ecosystems

- Going from Good to Great

Face-to-Face Courses:

- Emotional Intelligence
- Mastering Agency Change (Major revision)
- Leader as Supervisor
- Ethics
- Publics, Problems, and Politics
- National Faculty Certification for Online Courses

National Conservation Leadership Institute

MAT has worked with the Association, USFWS, The Conservation Fund, National Fish and Wildlife Foundation, WMI, Boone and Crockett, Izaak Walton League, and others to design a national conservation leadership institute and is working with these same partners on implementation. The initial National Conservation Leadership Institute (NCLI) is on schedule to commence in Fall 2006. MAT created the NCLI website and is responsible for curriculum coordination and program management for the NCLI. Fellows for the inaugural class have already been accepted, and recruitment will begin for the cohort scheduled to start in Fall. Visit www.conservationleadership.org for more information.

MAT Website

MAT has launched a website at the request of the Leadership and Professional Development Committee that will serve as an information hub for MAT services and for registration for online courses. Visit www.matteam.org.

Consulting and Training

MAT continued its consulting and training work in other areas with state fish and wildlife agencies and during 2006 provided consulting and training as follows:

Training

- The Adaptive Leader online
- **Creative and Critical Thinking online (2X)**
- Going from Good to Great online course
- **Power online (2X)**
- **Organizations as Ecosystems online (2X)**
- Visionary Leadership online
- SC: Four Roles of Leadership
- PA Game Commission: Four Roles of Leadership.
- **NM: Leadership Ethics**

Scheduled Training through CY '06

- Delivered: Power online course
- Delivered: Organizations as Ecosystems online course
- Delivered: Creative and Critical Thinking online course
- NM: Ethics for Commissioners

Consulting

- NH Game and Fish: Consulted with director on creating an agency survey.
- CO Division of Wildlife: Consulted with management team on creation of a leadership development program and beta testing MAT's first three online courses.
- PA Fish and Boat Commission: Conducted leadership assessment of the Director.
- Texas Parks and Wildlife Department: Consulted on Leadership Development Program assessment and completed statistical analysis of a survey of 120 participants and graduates of TPWD Natural Leaders program.
- NM: Consulted on ethics training for commissioners and senior staff
- Consulted with SD and their contractor, Merrill Ronning, regarding the SD Game Fish and Parks leadership development program.

- Consulted with Maryland DNR staff about MAT assistance with implementing a MD leadership program.
- Consulted with Director, MN Division of Fish and Wildlife, on strategic workforce development and recruitment of staff.
- WY Game and Fish: Consulted with management team on creation of leadership development program.
- PA Fish and Boat Commission: Facilitated meeting of all mid-level manager and higher personnel on future leadership needs in the agency.
- Delaware Div. of Fish and Wildlife: Consulted on leadership 360° assessment.
- Maine Inland Fisheries and Wildlife: Consulted on the launch of leadership development program.
- Association's Education Outreach and Diversity Committee: Consulted on a process for developing Conservation Education Summit core concepts.
- WAFWA – Presentation on leadership development and workforce succession.
- Delaware – Consultation on large meeting facilitation.
- UT Division of Wildlife Resources – Consultation on leadership development.
- NCTC – Facilitated Last Child in the Woods conference.

National Conservation Leadership Institute

MAT worked with the Association, USFWS, The Conservation Fund, National Fish and Wildlife Foundation, WMI, Boone and Crockett, Izaak Walton League, and others to design a national conservation leadership institute and is working with these same partners on implementation. **The initial National Conservation Leadership Institute (NCLI) residential component was held at the National Conservation Training Center in November 2006.** MAT created the NCLI website and is responsible for curriculum coordination and program management for the NCLI. Fellows for the inaugural class have already been accepted, and **recruitment will begin for the cohort scheduled to start in Fall 2007.** Visit www.conservationleadership.org for more information.

For more information on MAT and their services offered to state fish and wildlife agencies, please visit www.matteam.org or contact Dr. Sally Guynn at 304-876-7395, Dr. Dwight Guynn at 304-876-7387 or Jake Faibisch at 304-876-7915, sallyg@matteam.org, dwightg@matteam.org or jacobf@matteam.org.

MIGRATORY BIRD CONSERVATION

North American Bird Conservation Initiative (NABCI) – The U.S. NABCI Committee met on August 28-29, 2006 to discuss progress and make decisions about its work plan components including coordinated monitoring, private lands, conservation design, international cooperation, and communications. NABCI also welcomed its newest member—Department of Defense—to the table.

The Communications Subcommittee developed a presentation on integrated bird conservation and NABCI that Bruce McCloskey presented to the State Agency Directors in the four Regional Associations from May to July 2006. The intent of the presentation was to inform State Agency Directors about what NABCI is working on and what each state can do to engage in and implement integrated bird conservation. The Communications Subcommittee continues to publish the All Bird Bulletin and promote integrated bird conservation.

The Conservation Design Subcommittee developed the first half of the plenary session at the Association of Fish and Wildlife Agencies' 2006 Annual Meeting. Every day state wildlife agencies face the challenge of balancing and integrating multiple conservation needs and multiple conservation demands from numerous stakeholders. Browse any State Wildlife Action Plan and you will see hundreds of species of greatest conservation need, driven to this status by a host of problems, most commonly habitat loss in its varied forms. How can agency administrators and biologists decide where to spend time and money to most effectively address these problems and conserve these species before they reach the brink of endangerment? The morning part of the plenary session was dedicated to addressing this question—wildlife conservation design. Bruce McCloskey, Director of the Colorado Division of Wildlife, made the opening and closing remarks. Plenary speakers Seth Mott, US Fish and Wildlife Service; Russ George, Colorado Division of Wildlife; and Doyle Shook, Arkansas Game and Fish Commission gave stimulating presentations

on what conservation design is and how States are using it to develop a roadmap for conservation. Due to the success of the plenary and the many requests for copies of the handouts and presentations, they have been posted on the NABCI website at <http://www.nabci-us.org/consdesign.htm>.

The Trinational NABCI Committee is advancing international conservation efforts on various fronts with a focus on promoting regional alliances (joint venture-like partnerships) in Mexico and securing new and innovative funding sources for bird conservation by promoting and soliciting funding for trinational projects. The trinational projects are being developed from five priority sites in Mexico (Janos, Yucatan, Marismas Nacionales, Laguna Madre, and El Triunfo) and linked to sites and Joint Ventures in the US and Canada through common priority species. **Initial U.S. proposals have been received from the Pacific Coast, Intermountain West, Central Hardwoods, and Atlantic Coast Joint Ventures. The next step is to have workshops that allow US, Canadian, and Mexican participants to work together to complete the proposals.** It is anticipated that the proposals will be completed in Spring 2007.

The newly formed Private Lands Subcommittee is looking at how NABCI can improve the conservation of birds on private lands across the country. One of the first tasks before that Subcommittee will be to develop a half-day bird symposium for the NRCS biologists from around the country and also determine how to engage the NRCS State Conservationists in a similar discussion. The Subcommittee will also tackle an updated guide to the Farm Bill for conservationists after reauthorization is complete. The guide will be based on the one developed by the Wildlife Management Institute (WMI) in the early 1990s. The Subcommittee will also engage in the Conservation Effects Assessment Project (CEAP) and work to assist in determining how to improve bird conservation on private lands through recommendations in the State Wildlife Action Plans. **The Subcommittee had a conference call on October 30, 2006 to develop a first draft of the half-day bird symposium and discuss potential speakers. The Subcommittee is currently identifying speakers and talks that will provide NRCS biologists with information on objectives setting, habitat management, and bird conservation resources.**

See below for information on NABCI Monitoring Subcommittee.

Farm Bill – As the Association's Farm Bill Coordinator addresses the reauthorization of the 2007 Farm Bill, the Migratory Bird Coordinator will assist where necessary on bird related issues in the Farm Bill. Both Coordinators will work as a liaison between the Bird Conservation Committee and the Agricultural Conservation Committee.

Bird Monitoring – The Coordinator continues to help facilitate the development of products on coordinated monitoring through the US NABCI Monitoring Subcommittee. The Subcommittee held its latest meetings in March and May 2006. The meetings focused on the completion of the draft report that is due out for NABCI Committee review in August 2006. A draft list of issues from the report was distributed at the North American Conference in March 2006. The objective of the framework is to provide information that will be useful in the implementation of the State Wildlife Action Plans and the plans of other management agencies. The Subcommittee presented a draft interim report to the US NABCI Committee on August 28. NABCI will be soliciting comments by November 16, 2006. **The Coordinator is working with the USFWS to compile and analyze the comments. The comments and a strategy to move forward will be addressed through a Subcommittee meeting in early January 2007.**

The Migratory Bird Coordinator and the Association's Science and Research Liaison are working with the USGS and the NPS on the Natural Resource Monitoring Partnership (NRMP) to develop a Monitoring Protocol Library and a Monitoring "Locator." They will include an Internet accessible, searchable database that provides information on monitoring protocols and ongoing and past monitoring programs. The most recent workshop of the NRMP helped finalize the databases. **The library and locator (<http://www.pwrc.usgs.gov/brd/MonitoringPartnership.htm>) was released on November 6, 2006. The next step is to work with State agencies to get their metadata and protocols entered into the databases. We will begin this process in Spring 2007 and will put on an open house at the North American in March 2007 to officially announce the NRMP.**

Bald Eagle Grant Advisory Team – The Migratory Bird Coordinator is a member of the Bald Eagle Grant Advisory Team developed under the provisions of the proposed *American Bald Eagle Recovery and*

National Emblem Commemorative Coin Act (H.R. 4116). The Team has started preparing drafts of proposed application forms, guidelines, project rating forms, etc. The Team has also drafted a list of major points or topics to be included in the guidelines.

Nongame Migratory Bird Consultation between the States and the USFWS – Implementation of an Expanded Flyway System has begun with the nomination of state fish and wildlife agency personnel to the nongame migratory bird technical sections of each flyway. The sections have also developed bylaws. The Central, Pacific, and Atlantic Flyway nongame technical sections have met twice, most recently in July. The Mississippi Flyway nongame technical section met in July. Each Flyway Council has updated their bylaws and MOUs to reflect the changes. The Central, Pacific and Atlantic Flyway nongame technical sections provided comments to their respective councils on Bald Eagle management and delisting in May 2006. All the nongame technical sections discussed the Falconry EA that was released in June, a Peregrine Falcon take EA on the harvest of migrants that will be released in fall 2006, the sustainable harvest of songbirds in Mexico, and other pending issues at the July meetings. The Migratory Bird Coordinator is working with all the Flyways to facilitate continuing implementation. Two conference calls were conducted in August to discuss overall concerns and issues that need to be addressed, to receive background information on the falconry EA from Bruce Taubert, and to develop a plan of action to address the songbird harvest issues in Mexico. **In conjunction with the USFWS, SEMARNAT and the Flyways, we are in the process of setting a date for a workshop to discuss the harvest of migratory songbirds and what effect that harvest is having on population levels. The workshop will most likely be held the third week in February.**

State Wildlife Action Plans – As the States completed the development of the State Wildlife Action Plans, the Coordinator has shifted her support from development to implementation. Currently the Coordinator is working on support for the implementation of monitoring and on the implementation of regional projects developed as a result of the Duke Foundation grant. Extracting the regional and national priorities from the Strategies will be critical for identifying the priority issues. A first stage of this is the development of a workshop for the states within the Atlantic Flyway to identify priorities and develop a means of pulling bird conservation information out of the plans and putting it in a useful format. This project is being done in conjunction with the USFWS and is funded by NBII. **The first workshop was held December 4-5, 2006 at Patuxent Wildlife Research Center in Maryland. Seventeen participants attended the workshop including representatives from six States and Puerto Rico. The workshop results included compilation of the bird conservation information and priorities and priority management issues from the State Wildlife Action Plans; a description of what an application would allow partners to do; the information management needs in order to implement priority conservation actions and address priority management issues. The next step is to work with application developers to define exactly what the application will look like.**

NBII – Bird Conservation Node – The Bird Conservation Node's Strategic Plan is complete but the Coordinator continues to work with the Node to make sure state interests are represented on the Node Guidance Team that is being created.

Shorebird Conservation Planning – The Association's Migratory Bird Coordinator continues to be an active member of the WSHRN-US committee and the Shorebird Initiative. The Coordinator is keeping up to date on State issues surrounding the Red Knots and horseshoe crabs in the Mid-Atlantic.

Bird Conservation Committee – The Committee's most recent meeting in Snowmass, Colorado included discussions on avian influenza, NABCI's Trinational projects, the North American Monitoring Partnership, the Southern Wings Program, the Clean Water Act and other topics. Hot issues in the Committee that are being addressed include the ramifications to wetland-related and wetland-dependent species with regard to the Clean Water Act, the start of the Southern Wings Program, and issues related to avian influenza.

The Southern Wings Program is being developed to provide a mechanism for States to easily engage in projects that help conserve their priority species on the wintering grounds in Latin America and the Caribbean. The State Fish and Wildlife Agencies spend millions of dollars conserving migratory birds each year. The economic significance of migratory birds is well known. To protect millions of dollars worth of States' investment in migratory birds and to maintain and increase the millions of dollars in revenue that flow into the States from bird

watching, States should consider engaging in partnerships that conserve migratory bird species on their wintering grounds. A presentation was given to the Directors of each State Regional Association in the summer of 2006 to begin the discussion of how to develop a flexible, transparent mechanism that would make it easy for States to engage in conservation of migratory birds throughout Latin America and the Caribbean and also to leverage State money with other partners' resources and potentially the Neotropical Migratory Bird Conservation Act. The Directors expressed support for moving forward with the development of a mechanism to make this a reality. To facilitate the initial stage of this process, The Nature Conservancy, Ducks Unlimited, American Bird Conservancy, and the National Audubon Society have prepared a number of proposals that address the conservation of State priority migrant bird species. The proposals are available on the Association's website at http://www.fishwildlife.org/allbird_LAC_projects.html. In addition, we are developing a regional proposal for the SEAFWA in response to a request from the SEAFWA Directors. States have been asked to identify a point person to determine where their State fits into the program now and into the future.

Wind Power Development – Along with the Association's Science and Research Liaison, Steve Ugoretz (Wisconsin DNR), and Russ Mason (NV DOW), we developed a symposium on wind energy at the 2006 North American Conference. The goal of the symposium was to spark discussions among state fish and wildlife agencies, state utility commissions and siting authorities, and the wind energy development industry on the impacts of wind energy development on wildlife populations and their management. Follow up information can be found on the Association's website.

The Coordinator is also engaging with the wind subcommittee through the Association's newly created Energy and Wildlife Policy Committee. Currently the Subcommittee has decided to address a number of topics including updating the USFWS Draft Guidelines through the FACA process (the Association is in the process of identifying a State representative to sit on the FACA), developing a relationship with the public utility commissions, developing regional guidance for states including partnering with the Clean Energy States Alliance in regional state-level discussions, and increasing communication with federal agencies in the US, Canada and Mexico on wind energy guidance development. The Subcommittee through the Coordinator, Amber Pairs, Science and Research Liaison and Steve Ugoretz, Wisconsin DNR is also engaged with the National Wind Coordinating Committee (NWCC).

Wind power development is just beginning to reach Mexico and developers are focused on southern Mexico, a critical migration route for many neotropical migratory birds traveling from the US. In an effort to share experiences and mitigation techniques with colleagues in Mexico, the Migratory Bird Coordinator helped develop and facilitated a wind power symposium in Mexico on October 3, 2006. The Symposium was successful with participants from Mexico, Central America, Canada, Germany, Sweden, the U.S. and other countries. The Coordinator is helping to develop wind power development recommendations that will be sent to the Mexican government per the request of Mexican participants.

Two recent developments include discussions with NARUC to determine how to get wildlife issues higher on their priority list and discussions on the development of regional state discussions to increase standardization of wind energy siting guidelines and share protocols and information.

Avian Influenza – The USDA and USGS were recently given mandates to develop a management plan for avian influenza that includes a continental survey. The Migratory Bird Coordinator in coordination with other Association staff participated in the development of the plan to make sure States' needs and concerns were addressed. Numerous discussions were held at the Association's annual meeting in September 2005 and at the March 2006 North American meeting. The next step is the completion of Flyway-level implementation plans, from which states can tier off their individual action plans. The Flyway Councils with the help from Association staff will have the lead on this issue for the states.

MULTISTATE CONSERVATION GRANT PROGRAM

To date, the Multistate Conservation Grant Program (MSCGP) has directed over \$37 million to 115 national and regional priority projects of the state fish and wildlife agencies. *(See the list below for grants currently managed by the Association. Another 27 active grants are managed by other non-governmental organizations and state agencies. Seventy-seven projects have been completed.)*

The Association wrapped up its seventh grant cycle at the September Annual Meeting. The 2007 grant cycle began back in November 2005 with the annual solicitation of proposed National Conservation Needs (NCNs) – each Association committee and Regional Association was allowed to propose one NCN by the February 17th deadline. An informational meeting was held in early January 2006 with non-governmental organizations who were encouraged to actively participate in the MSCGP process including submitting NCNs to committees for consideration. We received 17 proposed NCNs for the 2007 MSCGP. The National Grants Committee reviewed and recommended four NCNs that were approved during the Business Meeting at the North American Wildlife and Natural Resources Conference.

Beginning in April, proposals were solicited to address the four NCNs. Twenty-two proposals were received and assigned to eight subject matter committees for evaluation and ranking. All committee members were asked to review proposals, and participation increased to around 50% of members. **At the Annual Meeting, the National Grants Committee used the committees' input as a starting place for selecting a recommended list of projects. The state directors subsequently approved the "priority list" of eleven projects, and it was submitted to the U.S. Fish and Wildlife Service by the mandated October 1 deadline. The USFWS can only fund projects on our list; we expect grant awards to be issued in December and funds will be available starting January 1, 2007.**

The 2008 cycle commenced in mid-November with a request for NCNs.

The Association's current Multistate projects include:

- Representation of the Western, Southeastern, Northeast and Midwest Associations of Fish and Wildlife Agencies in International Conventions & Protocols
- Coordination of the National Fish Habitat Initiative
- Management Assistance Team
- Multistate Conservation Grant Program Coordination
- Complete the Approval Requirements for AQUI-S®, Zero Withdrawal Anesthetic
- Data-Driven Strategies to Recruit and Retain Anglers
- Development and Coordination, Association of Fish and Wildlife Agencies North American Conservation Education Strategy
- Clarifying Population Objectives for Waterfowl Habitat and Harvest Management
- Training Opportunities for New Trapper Education Program Materials
- Review of Conservation Practices Used on Conservation Reserve Program Land
- Evaluating the Integration of Fish and Wildlife Conservation as a Primary Resource Concern in the Conservation Security Program.

National Survey Working Group: The Association is about to undertake an effort to evaluate cost-reducing options beginning with the next cycle of the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. While the Association is awaiting final approval from the USFWS for this new 2007 grant, efforts are underway to finalize Working Group members and review the grant's objectives, goals, and timeline. We anticipate issuing a RFP for contract work in January, and contacting state agencies, NGOs, USFWS, and other interested parties to inform them of the proposed Working Group process. Though the Working Group will be comprised of state agency and Association personnel only, the Working Group will communicate with NGOs, the FWS, and others throughout the two-year process.

For details on projects being conducted by the Association using Multistate Conservation Grant funds, please refer to other sections in this report, such as National Fish Habitat Initiative, Furbearer Resources and BMP Outreach Activities, Public Affairs, and Management Assistance Team. For information on other current and past Multistate Projects, please visit <http://faims.fws.gov>.

Please visit http://www.fishwildlife.org/multistate_grants.htm for more information about the MSCGP. If you have any questions, please contact Ms. Kelly Miller Reed at kreed@fishwildlife.org, or at 202-624-7890.

NATIONAL CONSERVATION LEADERSHIP INSTITUTE

The National Conservation Leadership Institute (NCLI) is a world class leadership development program focused specifically on the conservation organizations. The Association joined with a number of like-minded conservation organizations to develop the National Conservation Leadership Institute (NCLI) to prepare future leaders in fish and wildlife conservation. This initiative has been integrated into the Association's leadership initiative under the guidance of the Management Assistance Team and the Leadership and Professional Development Committee. Beginning in 2006 the NCLI will provide an annual opportunity for state, federal and private fish and wildlife professionals to attend a top-rate leadership development program. Developed to help conservation organizations meet the challenge of continued leadership as current leaders retire from the workforce, the Institute will combine leadership and management development training with exposure to the history and current challenges of fish and wildlife conservation in North America.

The initial class will convene in the fall of 2006. Over 60 applications were received for the inaugural class, of which **35 were selected to attend**, including 21 state agency personnel.

A board of directors for the Institute, under the leadership of John Baughman, has worked to coordinate necessary work to move from concept to reality, including development and execution of a fundraising strategy. The Association's Management Assistance Team is coordinating most operational aspects of the Institute. While significant funds have been raised to initiate the program in 2006, fundraising efforts for 2006 and for future years continue. At its most recent meeting in August 2006, the Board added new Executive Vice President Matt Hogan to its ranks and elected Wildlife Management Institute President Steve Williams as the new Chair to replace John Baughman.

The NCLI will commence in November 2006 at the National Conservation Training Center in Shepherdstown, WV. The faculty is led by Marty Linsky and Hugh O'Doherty from Cambridge Leadership Associates and Harvard's Kennedy School of Government. The NCLI Fellows will learn from nationally recognized leadership experts and authors and 14 top-ranking conservation leaders including state agency directors, Federal leaders, Congressional staff, and NGO executives.

Additional information is available via the NCLI website (www.conservationleadership.org).

NATIONAL FISH HABITAT INITIATIVE

The inaugural National Fish Habitat Board (NFHB), formally named in mid-July, held its initial meeting in conjunction with the Association's Annual Meeting in Snowmass on September 22, 2006. The 20-member Board includes state agency leaders John Cooper, Gary Myers, Ed Parker, McKie Campbell and Doug Hansen. The full membership and additional information can be viewed at www.fishhabitat.org. During the meeting, the Board was given an overview of the National Fish Habitat Initiative, briefed on the work of the Science and Data Team, and reviewed documents prepared by various subcommittees including a draft charter, staffing plan suggestions, staffing duties, partnership guidelines, and communications strategies and recommendations. The Board also accomplished edits of the charter and elected John Cooper as Chair and Doug Hansen as Vice Chair. The next NFHB meeting is scheduled for November 16, 2006 to be held at the Association of Fish and Wildlife Agencies headquarters in Washington, DC.

Two half-day workshops were held at the American Fisheries Society Annual Meeting in Lake Placid, NY. The focus was to allow participants to share views and ideas regarding criteria to consider in developing Fish Habitat Partnerships. The overwhelming positive interest of over 120 attendees triggered the restructuring of the initial workshop plans. Outcomes of the partnership workshop are currently being reviewed and will be provided to the NFHB for consideration at their next meeting on November 16th.

The Science and Data Teams have collectively prepared a draft of the Science and Data Report outlining the strategy for its assessment that will be underway over the next several months. The Association-USGS NFHI Liaison has completed edits to enhance the Aquatic Habitat Restoration and Protection Information Survey and Database. The database was redistributed to collect project information from additional states, **and a recent deadline of 20 October 2006 for project submissions was set in order to summarize data results for the upcoming National Fisheries Database Summit.** Ongoing edits to the draft summary report will continue until the final report is presented in March.

A Multistate Conservation Grant has been awarded to the American Fisheries Society Computer Users Section to hold a National Freshwater Fisheries Database Summit II. The Association-USGS Liaison has been serving on the Planning Steering Committee for the Summit. Information regarding the development of the Aquatic Habitat Restoration and Protection Survey and Database will be shared **during an Interactive Demonstration Session** with the fisheries and data manager professionals attending the Summit in Salt Lake City, Utah from October 31 through November 2, 2006.

National Fish Habitat Action Plan implementation continues to operate at the Association under a Multistate Conservation Grant through 2007, with a National Fish and Wildlife Foundation grant for coordination services and through the ongoing notable support of the Alaska Department of Fish and Game. In addition, the Bush Administration requested \$3 million for the National Fish Habitat Action Plan in the President's proposed Fiscal Year 2007 budget, compared to \$1 million that was made available for FY2006. The funding, which appears in the U.S. Fish and Wildlife Service's (FWS) Fisheries Program budget, supports fish habitat projects identified by partnerships established under the action plan.

In FY06 the \$1 million provided by Congress to the US Fish and Wildlife Service for plan implementation leveraged with \$1.2 million from public and private funding is being directed to five regional pilot projects developed under the National Fish Habitat Action Plan. The funding has invested in five partnerships including the Eastern Brook Trout Joint Venture, Matanuska-Susitna Salmon Conservation Partnership, Midwest Driftless Area Restoration Effort, Southeastern Aquatic Resources Partnership and the Western Native Trout Initiative.

For more information, contact Eric Schwaab at eschwaab@fishwildlife.org or Andrea Ostroff at aostroff@fishwildlife.org, or call (202) 624-7890.

NORTH AMERICAN WATERFOWL MANAGEMENT PLAN (NAWMP) COORDINATOR'S REPORT

It is a pleasure to report to you on my activities as the Association's NAWMP Coordinator. I would like to thank all of you for your assistance and support. I would also like to thank the Canadian provinces, Canadian Wildlife Service and the NAWMP partners in Canada for continuing to **financially** support the coordinator position at the Association. A number of NAWMP and NAWCA (North American Wetlands Conservation Act) activities have taken place in Canada, the United States and Mexico since my last report. This report will cover some of the major items.

North American Wetlands Conservation Act (NAWCA)

NAWCA provides funding for cooperative public-private wetland conservation projects throughout North America which support the goals of the North American Waterfowl Management Plan. NAWCA allocates to Canada and Mexico between 30-60% of available funds and currently Canada receives 45%.

All states have benefited from NAWCA standard and small grants programs. Thousands of projects have been put on the ground in North America, including a total of more than 23 million acres of wetlands and associated uplands in the U.S. and Canada. Partners in more than 1,300 projects have received more than \$720 million in grants. There has been at least one NAWCA funded project in every state, including Alaska and Hawaii.

In July, the Canadian Intermountain Joint Venture (CIJV) hosted the US North American Wetlands Conservation Council (NAWCC) in Cranbrook, BC, as well as the first meeting of the Neotropical Migratory Bird Conservation Act Advisory Group. The Advisory Group consists of the North American Wetlands Conservation Council and five additional migratory bird conservation professionals from Canada, the United States, Mexico, Argentina, Ecuador, and Trinidad and Tobago. Both the US and Canadian wetlands councils met in July. As one of the most recent Joint Ventures in Canada, the CIJV has published a prospectus entitled "Something Ventured Something Gained." For more information please go to www.cijv.ca.

Appropriations – The Association went beyond the President's FY 2007 budget request of \$41.6 million for NAWCA and recommended funding at \$50 million. The Act is authorized to \$75 million for FY 2007.

Congress has reauthorized NAWCA, and President Bush signed it into law for five more years with an authorized funding level at \$75 million annually.

Congress also reauthorized the Neotropical Migratory Bird Conservation Improvement Act for five years and increased the level of authorization. The NMBCIA now also provides for projects in Canada.

Canadian NAWMP/NAWCA Initiatives

The NABCI/NAWCC Canada Secretariat has been integrated into the Canadian Wildlife Service and now is located at the Environment Canada headquarters. Cynthia Wright, Associate Assistant Deputy Minister, Environment Canada is now the Chair of the NABCI/NAWCC Canada. Richard Pratt is the Executive Secretary. Michele Brenning is the new Director General of the Canadian Wildlife Service.

The Canadian program is so successful that it has expanded to include waterbird, shorebird and landbird interests through the Canadian NABCI Council. Canada has achieved over 63% of its NAWMP goals since 1986. During that period, Canada has spent over \$427 million on NAWMP and wetland and wetland-associated habitats.

The Western Boreal Forest Initiative covers over 2 million square kilometers containing a mosaic of wetland complexes, flood plains and river deltas from the Yukon Territory to Manitoba. The region supports a significant component of the continental population for some waterfowl species of concern such as scaup and scoters. Furthermore, waterfowl produced in this region use all four Flyways. As work continues, the full importance of the Boreal Forest to other bird species is just beginning to be understood. The overall objective of this program is to conserve wetland and upland habitat based on priority areas to sustain western boreal water bird populations. Agreements have been signed with Aboriginal people, industry and Ducks Unlimited. Progress continues on expanding the program into eastern Canada while aligning it within existing joint ventures.

While the Boreal Forest is the second most significant breeding ground in Canada, it should be noted that the focus of NAWMP activity will remain on the Prairie Provinces. The priorities of the PHJV are integrated landscape management, biological foundation, policy leadership, governance of the PHJV, marketing, communications and education, and developing a viable resource base/PHJV capacity.

The PHJV has recently produced a set of five "fact sheets" on policy, conservation partnerships, science, achievements and the PHJV as a strategic investment. Contact the PHJV at phjv@ec.gc.ca for copies of the fact sheets or for more information. The PHJV has also published its Strategic Plan 2006-2011.

An action plan for the recovery of pintail has been completed and distributed. The Northern Pintail Action Group has established as its highest priority the reduction of cultivated land and spring tillage in key pintail breeding areas. The Alberta NAWMP partners are using both direct habitat securement and policy initiatives to meet this priority.

The Eastern Habitat Joint Venture continues to move ahead with finalizing an implementation agreement as well as a corporate program.

The Canadian NAWMP Committee membership now includes M. Anderson and I. Barnett (DUC), R. Milton (NS), A. Tremblay, Wm. Gummer and S. Wendt (CWS). David Brackett, former Director General of the CWS is now the President of Wildlife Habitat Canada.

You may wish to explore the website of the NAWMP in Canada for more information, including the annual Canadian NAWMP report entitled "Habitat Matters" at www.nawmp.ca.

Association President's Task Force

I would like to thank all of the states and organizations who generously provide NAWCA "match" money to support Canadian NAWMP projects. We need to continue our work on the prairies and elsewhere in Canada to provide good quality habitat for waterfowl populations. While most duck species have recovered to well above their normal levels, some species (for example, sea ducks, pintails, and scaup) either continue to decline or they are recovering very slowly.

Since there has been a substantial increase in NAWCA funding over the past few years, we will need additional support in raising the non-federal U.S. "match" money for Canadian NAWCA grants. Without your assistance we will not be able to achieve the goals set by the NAWMP. We must not lose sight of the fact that the goals of the NAWMP have not all been accomplished. There is a significant amount of work that needs to be done in Canada to ensure the fulfillment of the NAWMP.

An Association Task Force was formed under the Bird Conservation Committee to develop strategies to increase state contributions to Canada as non-federal U.S. match for NAWCA/NAWMP projects.

The Task Force was chaired by Scott Yaich, who is also chair of the Waterfowl Working Group. Membership included representatives from each of the four Regional Associations, the four Flyways, WMI, DUI and the Association. The Report of the Association Task Force on State Contributions to Canada is available on the Association web site www.fishwildlife.org. The Report contains six recommendations related to maintaining the \$10 million Association funding goal: apportionment among the States; use of State/NAWCA relationship as consideration in evaluating state contributions; establishing a minimum partnership level; developing five year plans; and a review process for the draft recommendations. We have met with each of the Regional Associations; all endorsed the Report and its recommendations. A resolution was passed in support of the Report and its recommendations at the Association's Business meeting in September 2005. We will be contacting you in the near future to offer assistance in developing your five-year plan.

NAWMP 20th Anniversary

There were a number of activities in Canada and the United States to celebrate the 20th Anniversary of the NAWMP. Congratulations to all who have been a part of the greatest conservation success story in North America.

Canada Night

The Canadian NAWMP/NAWCA partners hosted a reception at the Association of Fish and Wildlife Agencies Annual Meeting in September. The purpose of the reception was to recognize and thank all of the states and other partners who have sent money to Canada for NAWMP/NAWCA projects. Over 700 people attended.

Continental Assessment

The first comprehensive continental assessment of progress in achieving the biological goals of NAWMP is now completed and a draft assessment report is under review. The assessment identified desired biological outcomes and habitat needs, how to strengthen the scientific foundation of NAWMP, re-evaluation of the resources needed to attain the full vision of NAWMP and ways to improve the effectiveness of institutional structures and relationships. A draft of the NAWMP Continental Assessment Report has been completed and reviewed by the Plan Committee. The draft report examines progress to date in achieving the biological goals of the Plan; adaptive processes (monitoring and evaluation); the status of North American waterfowl populations; and future needs and actions, among other matters. It is

anticipated that draft recommendations will be addressed during the North American Wildlife and Natural Resources Conference in March 2007.

North American Bird Conservation Initiative

The North American Bird Conservation Initiative (NABCI) continues to move forward in Canada, the United States and Mexico. All three countries have signed a Memorandum of Understanding. Next steps are to develop an action plan to meet the 12 objectives in the MOU.

Canada is also involved in the Arctic to Argentina Initiative, a science and conservation strategy for species and habitat in the Western Hemisphere. It focuses on action for science, habitat partnership and leadership.

Other Matters

- a. Canada has passed legislation to more effectively protect migratory birds and the marine environment from the negative effects caused by the discharge of harmful substances, such as oil, into marine waters. The Birds Oiled at Sea Bill directs any fines to Environment Canada.
- b. The MBCA has been changed in Canada to provide for a regulatory framework that could address the incidental take of migratory birds.
- c. NAWCA technical assessment questions for the U.S. Standard Grants Program continue to be revised in order to improve the quality of geographic/species priority information and to establish equity among all bird groups in the NAWCA application and proposal review process. Proposals are evaluated based upon 1) overall quality; 2) the extent of overlap among the four bird plans, and 3) the quality of the scientific basis, among other criteria.
- d. A "Coordinated Bird Monitoring Technical Working Group" was established under the Association's Science and Research Committee. Canada is renovating its migratory bird program and also developing a coordinated bird monitoring program which will be complementary to the U.S. program.
- e. Canada has developed a number of environmental stewardship programs such as Environmental Farm Planning and the National Farm Stewardship Program under its Agriculture Policy Framework which is modeled after the Farm Bill in the United States.
- f. The Association is administering an NCN entitled "Clarifying Population Objectives for Waterfowl Habitat and Harvest Management."

The proposal objectives are:

- i. Clarifying the biological meaning of North American Waterfowl Management Plan population objectives and the implication for monitoring and assessment.
- ii. Develop options for incorporating those objectives in Adaptive Harvest Management and describe the implications of those options for both harvest and habitat management.
- iii. Engage all relevant stakeholders in consultations to identify a preferred option for adoption and implementation.

A Joint Task Group has held meetings to review comments from stakeholders and it is anticipated that a draft report will be prepared in the near future.

I look forward to working with you over the coming year.

PUBLIC AFFAIRS

Annual Report—Rachel Brittin, Public Affairs Director for the Association, has just wrapped up a rough draft and design of the 2006 Annual Report. This document is a first for the Association and is a great example of the work the Association pursues on behalf of its member agencies. Brittin will present this report to the Executive Committee on December 20. In addition, a draft of and plans for a matching PowerPoint presentation about the Association will also be available to the committee.

Legislation, Litigation and Funding

Public policy provides a framework for federal, provincial, and state conservation programs to drive conservation for an array of fish, wildlife, and shell habitats. For decades, the Association of Fish and Wildlife Agencies has worked on behalf of its members on such issues as wildlife law enforcement, habitat conservation, and funding. This partnership, displaying the skills and resources of all participants, will help to secure wildlife, especially in the face of, and enhance a quality of life for North America.

Energy Development

The Association's new Energy and Wildlife Policy Committee got off to a quick start in late 2006 by organizing two separate subcommittees to develop a thorough review of energy development activities and begin to develop recommendations for member agency coordination. The solution of the committee is to provide information sharing facilities to coordinate and cooperate with federal agencies, energy industry, and NGOs and, develop policy recommendations for the same coordination.

Other energy development issues that involve a priority for the Association is wind power, especially as activities show that wind power facilities have direct impacts on some species, especially birds. Fragmentation of habitat is also of great concern. Today, only a few thousand wind turbines are in the United States, but the potential for growth is enormous. Wind turbines are located in areas of high bird density and habitat fragmentation. Since the responsibility of state and local governments, the Association established a working group this year to help with wildlife conservation, identify priorities and strategies, share information and look for opportunities for collaboration with new partners.

Energy development, both renewable and traditional, will continue to be a growing priority for the Association. Especially as the President's plan for a mandate to reduce and dependence on foreign sources of energy. As a result, for the first time, hydro, coal, oil, natural gas, and renewable energy were added to 2007 Farm Bill.

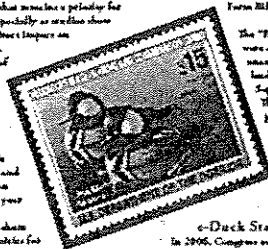


Recreation. The fish, wildlife, and shell habitat conservation issues associated with energy require daily, and one of the nation's challenges is to advance renewable energy without compromising important fish and wildlife habitat.

Farm Bill

In the last year, the nation's four regional fish and wildlife associations, state and non-governmental members of the Association have collaborated to develop a national platform of policy and legislative priorities for the program recommendations for the Association in preparation for the introduction of the Farm Bill in 2007.

The Association's 2007 Farm Bill Working Group, and its subcommittees, have been busy bringing millions of dollars in the fish and wildlife agencies to the table. Composed of three non-governmental conservation organizations and two representatives from each regional association of Fish and Wildlife Agencies, the group spent 2006 conducting technical analysis on each Farm Bill program and articulating policy issues and priorities that the fish and wildlife agencies want addressed in the 2007 Farm Bill.



e-Duck Stamp

In 2006, Congress introduced a major priority of the Association when they passed the US Fish and Wildlife Service (USFWS) to conduct a pilot program in up to 15 states that allow states to electronically provide federal migratory bird hunting permits ("Duck Stamp") to hunters. On Sept. 1, 2007, the e-Duck Stamp will allow hunters to buy the Federal Duck Stamp electronically over the phone or Internet. A conventional paper stamp will

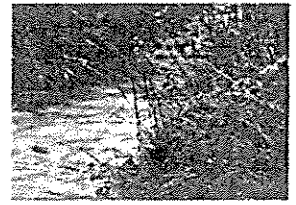
also remain available at retail outlets.

Wildlife hunters have contributed well over \$600 million to habitat conservation during the past 75 years with their purchases of Federal Duck Stamps. The ability to buy an electronic Duck Stamp should make it easier for hunters to acquire their annual Duck Stamp, and that will be a positive step for wildlife conservation.

The Association's Technology and Data Collection Committee is working closely with the USFWS to design and implement this forward-thinking program in 2007.

Laws of Land and Water

The Association, and 34 signed state, territorial, and tribal entities, submitted to the US Supreme Court. The Association was joined in both instances by 34 state fish and wildlife agencies. In the first case, *Rapanos v. United States* and *Carabell v. Army Corp of Engineers*, the U.S. Supreme Court ruled on judgments against Carabell and Rapanos who wanted to fill wetlands they owned in Michigan. The Court found five separate opinions, none of which constituted a majority of seven members. The plurality, written by Justice Scalia for four Justices, would have reversed on the grounds that only those wetlands with a continuous surface connection to bodies of water are "waters of the United States" as provided by the Clean Water Act. Justice Kennedy, who wrote a separate opinion, said that a quality of water itself need not be continuously flowing, but that there must be a "significant nexus" as a necessary condition to be navigable. A majority of wetlands are navigable waters, but it is not sufficient. There have been several cases where courts have decided whether the Army Corp of Engineers had authority to issue permits to regulate wetlands under the Clean Water Act since the Supreme Court failed to opinion. The lower courts have not been consistent in their application of the *Rapanos/Carabell* program in the 2007 Farm Bill.



The second case was *S.D. Warren Co. v. Maine Board of Environmental Protection*. Warren asked the Federal Energy Regulatory Commission to remove the Federal Bureau of Investigation from the hydroelectric dam in operation on a river in Maine to protect its power for its paper mills. With dam impounded water, which there has been through centuries and returned to the stream, putting around a section of the river. Warren proposed the necessity of obtaining water quality certification from the Maine state agency while section 401 of the Clean Water Act claiming that the dam did not result in any "discharge" but that the dam's impounding application of section 401. Section 401 requires some approval of "any activity" which may result in any discharge from the Nation's navigable waters. The Supreme Court held, "The issue is not one of whether discharging a dam to produce hydroelectricity may result in any discharge from the navigable waters of the United States. If so, a Federal Review under Section 401 of the Clean Water Act requires some certification that water pollution laws will not be violated. We hold that where there is a potential for a discharge, and some approval is needed."

In both of these cases, the Association advocated for strong rulings.

- This year, Congress passed a bill that provides additional federal tax incentives for working farmers and ranchers if they donate conservation easements on their property to a government agency or qualified conservation organization. The Association will continue to work with the conservation community to have Congress extend this two-year non-renewable provision.
- The Association, through a contribution agreement with NRECA, continues to work with on the Conservation Easement Assessment Project by engaging the regional associations and their member states to identify and assess fish and wildlife conservation benefits from Farm Bill conservation programs authorized in the 2007 Farm Bill.

In 2004, the Association worked with NRECA to identify opportunities and processes for working farmers and ranchers to achieve sustainable fish and wildlife conservation benefits from the Conservation Easement Program.

The Association worked with FWSA to increase fish and wildlife benefits of conservation practices for the Conservation Reserve Program, especially the Northern Subsidies Program, and the National Wetlands Reserve Program, and the Longleaf Pine Initiative.

Annual Meeting, the Source Book—the 2006 Annual Meeting in Snowmass, Colorado was a great success! The Association welcomed more than 740 attendees, which was a record for the Association. Plans are now underway for the 2007 Annual Meeting in Louisville, Kentucky at the Galt House. A site visit to Louisville takes place on December 18-19, and Rachel Brittin will provide an update at the next Executive Committee meeting about plans for 2008, 2009 and 2010. Brittin has also just finalized the Association's new Annual Meeting "Source Book" which will serve as a comprehensive guidebook for use by all parties involved in Annual Meeting planning, particularly the host state.

Working on Behalf of the State Agencies—The Association's Public Affairs Director, Rachel Brittin continues to oversee Association publications, field media calls, and coordinate fish and wildlife community outreach and background collateral. Since September, National Public Radio, The New York Times, and the Associated Press covered stories fielded through the Association on a variety of national topics including deer populations, hunting restrictions, and canned hunts. Brittin will continue to work with agency leaders and information and education contacts to build a plan for responding effectively and rapidly to national conservation issues. Currently, she is working on putting together a national communications plan to focus on providing media with national information on a variety of conservation priorities. Conversations continue about the state wildlife action plans with several top market media outlets as a result of attending the Society of Environmental Journalists Conference.

Website Changes—Since the name and brand change back in May, the transition has been relatively smooth. In the last two months since the launch, there have been more phone calls from the media than we had in 2005 alone. The website continues to experience upgrades and updates, although many more are in need. Currently, the Association is working on finding new ways to edit the website in a more practical and timely manner (i.e., Contractor, or paid intern, etc.). It will be a work in progress throughout the next several months. Rachel Brittin, the Association's Public Affairs Director, will continue to stay focused on viral marketing ideas and list-serve communications.

Next month, Brittin expects to have a solution to the many List Serves that need to be upgraded to respond to the ratio of people to the number of lists needed. Following the goal of the Association becoming the "go-to" information source for all the agencies, as well as for media and the general public, the Association continues to update the website as regularly as possible. The "Members Only" section is still experiencing some changes, but this is due to a need for updating some of the website content. A small team of staff at the Association are currently reviewing ways to more effectively update the website in coming months.

Electronic Newsletter—as part of the re-branding effort, the Association has launched a revamped newsletter look in coordination with the new website. As the Association's name has changed, "Inside IAFWA" no longer works for the name. The next newsletter is now under a new name, "Fish & Wildlife in Focus." To read the latest Fish & Wildlife in Focus, [click here](#). This newsletter will no longer be monthly, but a more in-depth bi-monthly newsletter.

SCIENCE PARTNERSHIP WITH USGS AND USFWS

Dr. Amber Pairis serves as the Science and Research Liaison for the Association of Fish and Wildlife Agencies. This position works to coordinate the science and research needs of state fish and wildlife agencies with key federal resource agencies. Dr. Pairis is working closely with USGS Biological Resources Discipline (USGS-BRD), USFWS, NPS, and other federal agencies including USDA-APHIS Wildlife Services. She regularly makes a variety of site visits to science centers and federal facilities around the country. Dr. Pairis continues to place emphasis on the following priorities.

Research and Monitoring Priorities -- Dr. Pairis organized a forum for discussion during the Science and Research Committee meeting at the Association's annual meeting in Colorado that focused on identifying State research and monitoring needs. The goal of this forum was to identify priority research and monitoring needs based on input and presentations from State representatives, and identify ways in which the committee can take action to support the efforts of the State agencies and other Association committees. To meet this goal, Dr. Pairis surveyed the Association's committees and the state fish and wildlife chiefs on priority research and monitoring needs and then produced a document that was distributed and discussed during the Science and Research Committee meeting. This report was also distributed to appropriate state representatives who were unable to attend the meeting. In addition, a representative from each of the regional associations was present to participate in the committee meeting and represent regional needs. Based on the discussion and member feedback, Dr. Pairis is compiling the priorities for further consideration. The committee will then choose which theme it will focus on as the basis of its efforts on behalf of the Association.

Coordination with TWW – In conjunction with Teaming with Wildlife, Dr. Pairis is working to cooperatively fund a short-term position to evaluate State Wildlife Action Plans and synthesize research and monitoring needs with the goal of identifying opportunities for cooperation and collaboration between State and Federal Agencies.

Wildlife Resource Policy Committee – Dr. Pairis is working with the Human Wildlife Conflict Group of the Wildlife Resource Policy Committee on the issue of emerging technology from USDA-APHIS Wildlife Services on a deer immunocontraceptive vaccine. A forum was recently held at the Association's annual meeting in Snowmass to discuss this technology. The forum was well attended with opening remarks from John Cooper, presentations from USDA-APHIS Wildlife Services, representatives from State agencies in Colorado and Connecticut, and a survey from the Northeast Deer Technical Committee. Scientists with the U.S. Department of Agriculture's National Wildlife Research Center (NWRC) were present to discuss the new single-shot, multiyear contraceptive for white-tailed deer known as Gonadotropin-releasing hormone (GnRH) or GonaCon™.

USDA-APHIS was very clear that they did not see this technology as a replacement for hunting in managing cervid (deer and elk) populations but a tool that could potentially be used after a population has been reduced through traditional methods. While no final decision has been made

regarding the registration or use of this product, NWRC scientists anticipate that GonaCon™ will be registered as a "Restricted Use" product for use by state or federal wildlife or natural resource management personnel or persons working under their authority. GonaCon™ users will also need to follow state authorization processes.

In preparation for the forum, the Northeast Deer Technical Committee conducted a nationwide survey to determine how prepared states were from a legislative perspective to regulate the use of immunocontraceptives in a management context. A total of 31 states responded to this survey. At the request of the Wildlife Resource Policy Committee chair, Dr. Pairis will be following up with the States that had not responded to the survey in order that they have the opportunity to evaluate their current statutes in preparation for the release of this product and to provide input through the survey to help the Association comment on labeling language.

Invasive Species – Dr. Pairis is the Association's point-of-contact for invasive species issues and provides staff support to the Invasive Species Committee. She attends the meetings of several federal interagency working groups including the Invasive Terrestrial Animal and Pathogens (ITAP) committee, the Federal Interagency Committee for the Management of Nuisance and Exotic Weeds (FICMNEW), and The Invasive Species Advisory Committee (ISAC) of the National Invasive Species Council (NISC). She is also working with representatives from USGS, NBII, and DOD on early detection rapid response issues for invasive species that could be beneficial to State Agencies' management efforts. Dr. Pairis is also involved on a project with the USFS on the creation of informational videos/DVDs on controlling invasive species spread and supports the involvement of State representatives (WI DNR) on this project. This project is being created for the hunting and angling community and focused on activities that might halt the spread of invasive species.

Aquatic Nuisance Species Communications Workshop -- In 2003, the Association of Fish and Wildlife Agencies received a Multistate Conservation Grant to support a comprehensive, three-year project. The project addressed a national conservation need to increase effectiveness of state agency efforts to manage aquatic nuisance species (ANS). The Association partnered with all four regional associations, four state agencies, the U.S. Fish and Wildlife Service, and numerous private partners to pilot test communication strategies. Dr. Pairis is part of a steering committee that is planning a day-long workshop to share the results of this project with other State Agencies and partners at the 72nd annual North American Conference in March 2007 in Portland, OR. The primary focus of the workshop is the communication aspects of the project and to the extent possible some presentations/case studies on communications around emerging technologies (methods) in aquatic species control.

Energy and Wildlife Policy Committee – Dr. Pairis serves as the staff support on the global climate change and wind power and wildlife subcommittees.

Climate Change Panel Discussion -- Dr. Pairis had submitted a proposal for a panel discussion titled "State Agency Responses to the Challenges of Climate Change Impacts on Fish and Wildlife Resources" to be held at the George Wright Society Meeting in April 2007. Confirmed panelists are State agency representatives from AZ, NC, ND, TN, and the State representative for Partners for Amphibian and Reptile Conservation (PARC).

Wind Power Issues -- Materials from the Wind Power and Wildlife Symposium held in conjunction with the 2006 North American Wildlife and Natural Resources Conference is now available online at http://fishwildlife.org/agency_science.html. Resources include a letter from the current Association President John Cooper, a summary of the symposium, list of presenters, PowerPoint presentations available for download, and links to other wind power related resources.

In conjunction with the Association's Migratory Bird Coordinator Deb Hahn, Dr. Pairis is working on a variety of wind-related issues. These include working with USFWS and other partners in support of a collaborative (FACA) led effort to create wind power facility siting guidelines and the gathering of necessary information to determine where States are in their guideline development for siting wind facilities. The Association is also supporting State involvement in a meeting focused on State Agency Dialogue on wind/wildlife issues that is being proposed by the Clean Energy States Alliance (CESA), a non-profit coalition of state clean energy programs. Efforts are made on a

continuous basis to maintain communications between state, federal, industry, and NGO partners, and retaining state representation at various meetings.

Natural Resources Monitoring Partnership -- Dr. Pairis is working with USGS-BRD Status and Trends Program and NBII on the Natural Resource Monitoring Partnership (NRMP) protocol and locator library. The Natural Resources Monitoring Partnership is currently developing two Internet-based tools that will provide information on current monitoring activities at a variety of spatial scales and serve as a reference and clearinghouse for monitoring protocols and resource assessment methodologies. Dr. Pairis serves on the NRMP steering committee along with other representatives from the States, USGS, USFS, NPS, and other partners. She is also the leader of the Outreach Committee. **The project is currently being finalized and will be ready for release November 6, 2006. For more information please visit http://biology.usgs.gov/status_trends/nrmp/MonitoringPartnership.htm.**

National Biological Information Infrastructure (NBII) -- Current NBII coordination is managed on a project-by-project basis. Areas of interest include collaboration with the USGS Status and Trends program, NBII, and key individuals in a host of other agencies to develop a searchable, geospatially explicit reference library of monitoring efforts and protocols under the Natural Resource Monitoring Partnership. Additionally, Andrea Ostroff and Eric Schwaab are engaged in several activities of the Fisheries and Aquatic Resources Node (FAR), including development and support for the Eastern Brook Trout Joint Venture and the National Fish Habitat Initiative. Other FAR projects include efforts to expand technical support for the Multistate Aquatic Resources Information System (MARIS), a state cooperative project to make fish population data available on-line. MARIS recently received a multi-state conservation grant to expand participation by other states and is working with FAR to improve the capabilities of the site and to provide information technology support to states to improve participation and cooperation.

Partners in Amphibian and Reptile Conservation (PARC) -- Dr. Pairis is a member of the PARC Steering committee and recently participated in a strategic planning meeting in August. She is also a member of the PARC committee that is planning an "Agricultural Effects Workshop" in 2007. Her efforts are focused on encouraging State participation and identifying resources useful to State management activities.

Fish and Wildlife Health Committee -- Dr. Pairis stays up to date on wildlife disease issues. In regards to Avian Influenza, she is focused on making sure that State Agencies are informed of current and future activities and decisions made by Federal Agencies and trying to maintain communications efforts.

Dr. Pairis is also a member of the U.S. Fish and Wildlife Service Directorate Science Advisory Committee and attended recent meetings in Minnesota.

TEAMING WITH WILDLIFE

State Wildlife Grants Advocacy:

No final action was taken by the 109th Congress on the Department of Interior spending bill. Here is the status and summary for this past year. The U.S. Senate Interior Appropriations Subcommittee voted to provide level funding at \$67.5 million for the State Wildlife Grants Program in FY07. This is an increase from the \$50 million suggested by the U.S. House of Representatives, but falls short of the \$74.7 million in the President's budget and the \$85 million supported by 226 members of Congress. Strong support for \$85 million came through in the Dear Colleague Letter, which gained more signatures than ever before and was strongly backed by the Congressional Sportsmen's Caucus. **In September we orchestrated a sign-on letter from nearly 150 conservation groups in favor of the Senate's higher number. This letter was delivered as part of a national day of action which generated phone calls to House offices through email alerts reaching nearly 100,000 individual wildlife supporters.** The conference process to determine the final appropriation has been delayed until the next Congress convenes and is now expected in January or February 2007.

The Teaming with Wildlife Fly-In Day on March 1st was an enormous success again this year. Attended by 150 people from 42 states, an estimated 300 meetings with Congressional staff took place to discuss the importance of the State Wildlife Grants program and the new state wildlife action plans. The Teaming with Wildlife Steering Committee also hosted two key events. One was a packed Congressional Sportsmen's Caucus breakfast, where co-chairs Congressmen Putnam (R-FL) and Boswell (D-IA)

opened the briefing with a statement of strong support for State Wildlife Grants. Four Representatives -- Congressman Thompson (D-CA), Saxton (R-NJ), Kind (D-WI) and Hayes (R-NC) -- were awarded for being champions for wildlife for spearheading the "dear colleague" letters for \$85 million. At an evening reception in the Senate, awards were also given to Senators Crapo (R-ID) and Nelson (D-NE). Senator Warner was presented with an award from the Virginia Teaming with Wildlife Coalition at his office, where he reaffirmed his strong support for this program and commitment to help achieve even greater funding. All spoke very eloquently of the need to prevent wildlife from becoming endangered.

Long-term funding

Senators Johnson (D-SD), Talent (R-MO) and Lincoln (D-AR) introduced an amendment to dedicate a portion of oil and gas revenues from a new gulf coast lease sale to the Wildlife Conservation and Restoration Program (a subaccount of Pittman-Robertson and complements the Wildlife and Sportfish Restoration programs by allocating on a permanent basis funding for wildlife conservation and associated recreation and education with the intention to fill the funding gap for wildlife diversity). All amendments for this bill were withdrawn, but it was an important symbolic step to showing the need for this kind of funding. The Association is also working with other Members to see a stand-alone bill introduced for dedicated funding to the Wildlife Conservation and Restoration Program early in the next Congressional session.

The Association has worked in partnership with the National Wildlife Federation to secure dedicated funding for the Wildlife Conservation and Restoration Program in climate change bills. As the profile of this issue rises, we hope it will become increasingly likely that a bill will pass which caps emissions of greenhouse gases and generates revenue through the sale of emissions credits. Due in part to our testimony, meetings and a sign-on letter from 375 organizations, several such bills and draft proposals already dedicate some revenues to wildlife and there's optimism others will soon.

State-Level Wildlife Funding Initiatives

In cooperation with The Nature Conservancy, The Trust for Public Land, the National Wildlife Federation and presenters from six states, the Association's Teaming with Wildlife program hosted a "How to Fund Your Wildlife Action Plan" workshop at the annual meeting in Snowmass, Colorado. This intensive workshop introduced the steps states can take to launch a successful legislative or ballot initiative for dedicated wildlife agency funding on the state level. New materials developed for this program, including examples of legislation, have been posted at www.teaming.com.

Teaming with Wildlife Public Outreach Initiative

The Association continues its public outreach initiative with The Nature Conservancy funded by the Doris Duke Charitable Foundation. Two polls have been completed, one of the general public and one of wildlife advocates, to gauge awareness of and opinions on wildlife conservation, funding, and the state wildlife action plans. **This polling was used to develop effective messages for motivating key audiences to support increased funding for wildlife conservation.** Polling results and message training have been provided through in-person and interactive Webex trainings to approximately 600 state agency staff from every state as well as conservation partners. Over 1,000 *State Wildlife Action Plan Message Kits* containing tools and resources to help inform, inspire, and motivate the public to support increased funding for implementation of their state's wildlife action plan have been distributed. A half-day workshop at the Association for Conservation Information conference in July 2006 also provided hands-on training to state agency I&E staff on the Teaming with Wildlife outreach initiative.

The communications campaign has thus far been highly successful in that coverage of the state wildlife action plans has been positive and on message. A November 2005 press event with then-Secretary of the Interior Gale Norton resulted in good media coverage on the submission of all 56 state and territorial wildlife action plans. The Secretary also called the State Wildlife Grants Program "our nation's primary program for keeping species healthy and off the list of threatened and endangered species." At least 16 states issued press releases and gained media coverage upon approval of their wildlife action plan.

The Association hosted **well-attended press events and field trips** at the June 2006 Outdoor Writers Association of America conference and the **October 2006 Society of Environmental Journalists conference**. By providing an overview of the state wildlife action plans and the need for new and greater

funding, these events provide reporters with background to generate some features in the short term and, perhaps more importantly, to present the plans as a frame with which to evaluate conservation stories they'll encounter in the years ahead. To continue this outreach to reporters, the Association will co-host with Nebraska Game and Parks a national media tour on March, 16 2007 timed to coincide with the annual sandhill crane migration in Kearney, Nebraska. In addition to these efforts aimed at the mainstream media, there will be a focused effort in the coming year to secure coverage in the newsletters and magazines that reach the four key constituencies described in the coalition section below (land trusts, sportsmen, tourism and resource users). More information about these outreach efforts including the media tour is available at www.teaming.com/newsroom.

The Teaming with Wildlife program of the Association released two major publications this year. The *State Wildlife Grants Five-Year Accomplishment Report* was published in May and hand delivered to every member of Congress during the appropriations deliberations. The report was also distributed to every state wildlife agency and national partners. A summary report on the wildlife action plans was released in August with similar distribution. Multiple copies were sent to each state fish and wildlife agency. In addition, the Association, working with each state, produced a four-page summary of every state's wildlife action plan. These are all available at www.teaming.com.

Teaming with Wildlife Coalition

The Association has been working with Teaming with Wildlife coalition leaders in the states to energize the **4,500+** member organizations to **support increased funding for the state wildlife action plans from federal, state and private sources**. A coalition workshop to kick-off the new initiative was held in November 2005 and served as a starting point for many new state coalition leaders. A "Coalition Toolkit" CD was released in January **and has been continuously updated with new** tools to help coalition leaders build and strengthen Teaming with Wildlife efforts in their state. A second coalition workshop took place in conjunction with a communication training prior to the Fly-In on February 27th and 28th. Weekly emails and occasional conference calls continue to keep coalition leaders up to speed on the latest tactics and resources for strengthening their coalitions. **A new "Coalition Work Group" of the Teaming with Wildlife Steering Committee meets monthly to develop strategies for building the coalition and re-engaging the 115+ national organizations of the coalition.**

Teaming with Wildlife has received nearly 2,000 new endorsements, bringing the national coalition to over 4,500 organizations! Twenty states have already achieved the goal of over 100 organizations per state! To further strengthen the coalition and spread this success across all states, Teaming with Wildlife will pursue three key strategies over the next year:

Reaching for 100 Groups Per State and 5,000 Nationwide by the 2007 Fly-In Day: The impressive milestone of 5,000 organizations nationwide is now well within reach and will be an effective demonstration of public support as the final plans are approved and the coalition gathers to demand increased funding in Washington (Feb 27-March 1, 2007). By re-dedicating ourselves to the goal of 100 groups in every state, we can ensure that every state wildlife action plan has a substantial, engaged coalition to secure the funding it needs.

Targeting Four Key Constituencies: By casting a wide net over the past year, we've fostered a broad-based resurgence of the Teaming with Wildlife Coalition. Over the next year, we plan to pay special attention to four key constituencies to ensure their awareness of the wildlife action plans and to secure their support for plan implementation and Teaming with Wildlife Coalition efforts including communications and funding advocacy. Sub-groups of the Teaming with Wildlife Steering Committee will develop comprehensive outreach strategies aimed at reaching four key constituencies: 1) Resource Users (agriculture, forestry, energy, etc.), 2) Sportsmen, 3) Tourism (visitor's bureaus, birding trail sponsors, outdoor equipment retailers, lodging, etc.) and 4) Land trusts. These outreach efforts will include meetings with national groups, presentations at conferences, newsletter articles and recruitment for the Fly-In Day.

Wildlife Summits in Every State: Gathering partners together to celebrate a newly approved action plan and decide on next steps is a great way to galvanize support for plan implementation and coalition efforts to secure funding. A Wildlife Summit (or congress) can mean many things from a large gathering of stakeholders to set priorities to a much broader event introducing a wildlife

action plan to the public. Great work went into development of the plans, and it will take as much and more effort to now turn them into action. Those states that have already hosted a wildlife summit have found them to be very effective and valuable. We hope all states over the next year will host similar events and bring everyone together to help them prevent wildlife from becoming endangered across the nation!

State Wildlife Action Plan Implementation

Even as the wildlife action plans continue to move through the final stages of the approval process, the Association is moving ahead with support for states in implementation.

The Association is providing support directly to agencies in building strong programs by sharing information and effective practices across agencies. The Association and the Fish and Wildlife Service jointly hosted the "One-Year Later" Meeting from July 30-August 2, 2006 at the National Conservation Training Center in West Virginia which was attended by over 40 states as well as many federal agencies, NGO's and private businesses. This conference provided an opportunity to learn how other states are approaching implementation and help to forge new partnerships to move our wildlife action plans forward.

In addition, the Association is continuing to work with federal agency partners, other state agencies, and non-governmental organizations to boost awareness of the wildlife action plans and secure commitments of support for their implementation. **The Association met with Department of the Interior Deputy Secretary Lynn Scarlett to organize a summit of leadership from across the federal land and resource management agencies.** The Association also is meeting one-on-one with many of the key federal agencies including USFWS, USGS, USFS, NRCS, and DOD. Many others are planned.

A review and synthesis of the plans by the Association will identify crosscutting issues and high leverage opportunities to help other agencies and conservation organizations incorporate the action plans into their own activities. **The Association is in the process of finalizing a contract with an outside contractor to complete this project. A working group of state agency personnel and partners is helping with this process and will stay involved to steer the synthesis project as it moves forward. This is being funded by the National Fish and Wildlife Foundation, US Fish and Wildlife Service and US Geological Survey. We hope to recruit additional funding partners.**

For more information on the state wildlife action plans see the "State Wildlife Action Plans" section of the Teaming with Wildlife web page at <http://www.teaming.com>. This site also links to each of the states that have websites on their own wildlife action plan related efforts. Early next year **the Association plans to launch a new web site: <http://www.wildlifeactionplans.org> aimed at providing implementation partners streamlined access to state-by-state information on the wildlife action plans.**

For more information on the Teaming with Wildlife initiative, contact Naomi Edelson at (202) 624-7890 or nedelson@fishwildlife.org.

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WAFWA Agency Report

Alberta Fish and Wildlife Division

October, 2006

Chronic Wasting Disease

Alberta continues an aggressive approach to surveillance and control of chronic wasting disease in the eastern border regions. The provincial total now stands at 13 documented cases in wild mule deer, all of which are focused in a small area along the Alberta/Saskatchewan border in southeastern Alberta. Maps and program information can be found at <http://www.srd.gov.ab.ca/fw/diseases/>. A combined program of herd reduction and enhanced surveillance is the primary tool being used in designated risk areas.

Fall hunting seasons are well underway and we have provided additional hunting opportunities, including three chronic wasting disease control areas that encompass the known cases, extended season length, reduced licence fees, increased draw opportunities, a version of 'earn a buck' (turn in two antlerless heads, receive a third tag for either sex), and increased opportunities for landholder harvest. In addition, submission of hunter-killed heads from five wildlife management units where chronic wasting disease risk has been identified is mandatory. Voluntary submission of hunter-killed heads in adjacent wildlife management units is encouraged. The overall goal is to reduce deer populations significantly in the disease control areas and eventually reach <1 deer per km² in critical habitats, buffered by areas of reduced deer density. Enhanced surveillance in adjacent areas will help determine whether or not chronic wasting disease spreads.

The cooperative research program between the Fish and Wildlife Division and the University of Alberta, in conjunction with a similar program by Saskatchewan Environment and the University of Saskatchewan, continues. The shared goals are to assess deer movement and genetics as a basis for predicting potential spread of chronic wasting disease and to enhance current field response programs in both provinces. The Division also entered into a contract agreement with the University of Alberta to evaluate the economic costs associated with chronic wasting disease under various scenarios of potential chronic wasting disease occurrence within the province.

West Nile Virus

Virus activity in Alberta in 2006 increased slightly over that in the previous two years. However, a pattern of seasonal presence in the grasslands habitats of southeastern Alberta held true, as in previous years. Local spring and summer weather conditions that affect abundance of *Culex tarsalis* appear to largely drive local viral populations. All cases in birds, mosquitoes, horses and humans occur in late summer and there is no evidence of overwintering west nile virus in Alberta. Mitigations in critical sage-grouse range appeared to reduce the number of local *Culex* and whether related or not, no mortality associated with West Nile virus was detected in our endangered sage-grouse population. This program is carried out as part of a graduate student program at the University of Alberta.

Avian Influenza

As guided by the provincial steering committee directing influenza planning and response in Alberta, the Fish and Wildlife Division conducted dead bird surveillance on species of greatest risk of mortality from high path Eurasian H5N1. As anticipated, there was little evidence suggesting a pathogenic form of AI was present in wild birds in Alberta. A few limited waterfowl die-offs associated with blue-green algal poisoning were the only reported incidents. Approximately two dozen sick or found dead waterfowl were received. As expected, low path AI strains were identified in a few individuals but were not associated with the mortality. The theoretical risk that migrating waterfowl passing through Alberta from Arctic breeding areas may potentially carry high path Eurasian H5N1 is considered negligible in Alberta. Federal agencies conducted a national live bird surveillance program similar to last year. Results are available at: <http://wildlife1.usask.ca/en/aiv/index.php>.

Escape of Farmed Cervids

Alberta's chronic wasting disease program includes monitoring and responding to reports of escaped farmed cervids. In recent years, there have been a significant number of escapes/releases of farmed cervids. During the period April 1, 2004 to March 31, 2005 the Fish and Wildlife Division became aware of 21 incidents, the majority of which involved elk. The number of animals involved ranged from one to 87. The Division's response to a specific incident, which can range from simply monitoring the situation to actively collecting the animals, is based on an assessment of each incident made in consultation with Agriculture, Food and Rural Development (the provincial government department that regulates and administers game farming in the province). The Division also works with Agriculture, Food and Rural Development and the industry to minimize the number of escapes. For the period April 1, 2005 to March 31, 2006 there were a total of 28 reports of elk escapes from game farms. The numbers of animals involved ranged from one to 75 animals. Between April 1, 2006

and the time of writing (October 31, 2006) there have been an additional thirteen documented incidents of elk escapes from game farms. The number of animals involved in these cases ranged from one to 40 animals.

Commercial Fisheries Rationalization

Alberta's fisheries resources are limited with increasing demand from domestic, recreational and commercial users. A rationalization program was implemented in 2003 with goals of reducing the number of commercial fishermen, the potential for conflicts between recreational and commercial users, and improving the economics of the industry. Licence fees were increased in 2003 and compensation payments have been made for the past three years. These have had the desired effect of reducing participation in the industry. The number of commercial gill net fishermen is now below the goal of 200 (190), down considerably from the 800 at the start of the program. The other goal of reduced yardage from 37,000 to about 18,000 nets, is within reach, with 22,000 nets remaining after the 2006 compensation program. Up to three years of funding will be required to complete payments for the remaining fishermen who have volunteered to relinquish the licences for compensation.

New Fisheries Harvest Opportunities

Anglers in Alberta want to be able to harvest fish, particularly walleye. The challenge to fisheries managers has been to balance this demand with the need to protect recovering fish populations. A variety of strategies have been utilized to try and meet the demand without reversing the trend in improving stocks. Strategies that have been implemented to either target or restrict the harvest include area closures, large minimum size limits, short harvest periods, and expanded small fish harvest opportunities. Monitoring of these new opportunities is critical to their evaluation and future success. Angling pressure has been shown to have a significant impact on walleye in particular, even with a limited harvest window. Alberta has walleye and northern pike management plans that are based on Alberta data, leading-edge science and extensive public consultation. The use of limited entry fish harvest tags was implemented on a trial basis in three lakes in 2006. The program will be evaluated and continued in 2007 to target and limit the harvest to a controllable level.

Bow Habitat Station at the Sam Livingston Fish Hatchery

Construction of a world-class visitor and education centre, the Bow Habitat Station in Calgary, is well underway as part of a broader departmental public education and outreach initiative. The centre, which includes a 14.6 hectare interpretive and treatment wetland, will highlight the diversity, sustainability and stewardship of Alberta's aquatic resources. Construction of the interpretive wetland, a large-scale re-naturalization project to restore valuable riparian habitat, naturally treat hatchery wastewater, and

showcase a variety of Alberta's aquatic ecosystems was completed and officially opened in September 2004. The wetland, known as the Pearce Estate Park Interpretive Wetland, was completed through a unique partnership involving different levels of government, industry, non-profit organizations and hundreds of community businesses.

Work is also underway to develop the new visitor centre that will include more than 15,000 square feet of state-of-the-art exhibits, aquariums, a multimedia theatre, discovery room, "Aqua" school, gift shop and other visitor amenities. Construction of the new visitor centre is made possible through the Alberta Centennial Legacy Initiative and donations from project partners such as Ducks Unlimited Canada, BP Canada Energy Company, HSBC Bank Canada, and the Sam Livingston Fish Hatchery Volunteer Society.

Alberta's Species at Risk Program

Alberta supports a fully integrated species at risk program to identify, legally designate and plan for the recovery of Threatened and Endangered species within the province. Central to this process is the Alberta Endangered Species Conservation Committee. This unique ministerial advisory committee is chaired by a member of the Alberta Legislative Assembly and is comprised of a balance of members representing resource industries, landowners/land managers, conservation groups and university scientists. The Scientific Subcommittee of the Endangered Species Conservation Committee assesses the biological status of candidate species within Alberta, and recommends appropriate designations for those that meet established international criteria for Threatened or Endangered status and those that are of special management concern. The Alberta Endangered Species Conservation Committee considers these independent scientific assessments and makes practical recommendations relating to legal designation, recovery planning and immediate conservation priorities for these species to the Minister of Sustainable Resource Development. Once received by the Minister, the recommendations of the Alberta Endangered Species Conservation Committee and its Scientific Subcommittee become public.

A fundamental underpinning of the Species at Risk Program is the General Status of Wild Species Report. Like all other provinces and territories in Canada, Alberta will assess and report on the general status, or well-being, of a large number of species. This is done every five years and is accomplished by evaluating population and distribution trend information, as well as threats to habitat and populations, for all species. This year, we will report full general status designations for the following groups: amphibians, reptiles, fish, birds, mammals, odonates, lepidopterans, vascular plants and unionid mussels. This information is 'rolled-up' to produce national general status ranks for all species. In view of the large number of species, no hard copy report is planned this year for Alberta; this will be replaced with a separate web page with a searchable database to appear on the Sustainable Resource Development website. Complete information on the Alberta species at risk program can be obtained from our web site at <http://www3.gov.ab.ca/srd/fw/speciesatrisk/index.html>.

Woodland Caribou

Woodland caribou is a Threatened species in Alberta and Canada. A national recovery strategy is in preparation. This strategy is expected to provide an umbrella document under which the more detailed provincial plans will reside. In May 2004, the Alberta Woodland Caribou Recovery Team formally submitted a draft provincial recovery plan to the department of Sustainable Resource Development for review. This plan, with the exception of one recommendation, was endorsed by the Minister of Sustainable Resource Development in June 2005. The provincial plan is a strategic plan that provides provincial goals, objectives, a strategy and an action plan to address caribou conservation issues. The action plan is based on the provision of adequate effective habitat to meet the needs of the individual herds. This requires the creation of a habitat effectiveness target. This target has been developed. Operational plans will be developed by industry-government planning teams. These plans will occur on landscapes that will contain caribou ranges of similar biological and industrial characteristics.

An Alberta Caribou Committee has been established to coordinate and direct caribou conservation initiatives in the province. This Committee has established a Landscape Planning Team for the west central caribou ranges. This team will develop an action plan which will address the needs of caribou on these west central ranges. It is the first of five landscape teams.

Provincial Recovery Planning

Alberta's recovery planning program has grown steadily since its inception over five years ago. Recovery plans have now been approved, and are being implemented for 12 Threatened or Endangered species, including the greater sage-grouse, Ord's kangaroo rat, piping plover, northern leopard frog, western spiderwort, burrowing owl, soapweed/yucca moth, western blue flag, peregrine falcon, woodland caribou and trumpeter swan. Plans are currently being reviewed for two species (grizzly bear and shortjaw cisco), and recovery planning is in progress for the swift fox, tiny cryptanthus, wood bison, ferruginous hawk, lake sturgeon, small-flowered sand-verbena, St. Mary's sculpin, stonecat and western silvery minnow. All completed and developing recovery plans are prepared by multi-stakeholder teams to ensure that affected and interested agencies and individuals are involved in the planning process, and that the proposed management is effective. Additional information on provincial recovery teams and the progress of management can be obtained at: <http://www.srd.gov.ab.ca/fw/speciesatrisk/index.html>.

Grizzly Bear

The Endangered Species Conservation Committee made recommendations to Sustainable Resource Development on the conservation of grizzly bears in Alberta. Sustainable Resource Development is acting on many of those recommendations. A provincial grizzly bear recovery team has been convened with representatives from industry, land managers and conservation groups. A draft recovery plan has been submitted and is now undergoing government review. A technical committee was also assembled to assess the status of our grizzly bear information. A moratorium on grizzly bear hunting was announced in spring 2006. This closure will remain in effect for three years, until the DNA-based survey to establish provincial population size has been completed.

Grizzly Bear Study

The Alberta Fish and Wildlife Division, Foothills Model Forest and many companies and non-government organizations have completed a major five-year study of grizzly bears in the Yellowhead ecosystem. This study examined grizzly survey methods, habitat assessment techniques, population modelling methods, bear productivity, bear movements and industrial and human impacts on the population. A DNA survey based on hair snagging samples is currently being conducted between Highways 1 and 3. The area between Highways 16 and 1 has been completed. A new study has been initiated which studies the effects of land use activities on the health of individual bears. For more information, please go to <http://www.fmf.ab.ca/programs.html> and click on "Grizzly Bear Program".

The Alberta BearSmart Program

The Alberta BearSmart Program is a multi-stakeholder initiative to reduce bear-human conflicts and increase public stewardship of black and grizzly bears in Alberta by providing strategies, information, and educational materials to the public, stakeholders and government agency staff dealing with bears. Sustainable Resource Development managers, biologists and Fish and Wildlife officers are currently working with a number of communities (the towns of Canmore, Rainbow Lake, Bragg Creek and the municipality of Crowsnest Pass) on "Community BearSmart" initiatives. These communities are situated in wildlife corridors and have a history of bear/human conflict. The program will be delivered by officer and biologist staff throughout the province to the industrial, recreational and agricultural audiences.

Wolf Management

Alberta has a thriving wolf population. This results in some management challenges when wolves prey on domestic stock, compete with hunters for wild ungulates and

generate a strong following of people interested in wolf conservation. We have established a stakeholder group to work on a collaborative approach to understand and mitigate depredation of cattle in southwest Alberta. We now have several radio-collared packs which are being monitored and managed by removal of some wolves from packs if the pack is depredating livestock. In collaboration with the University of Alberta, a research program has been established to examine wolf/prey interactions, wolf population dynamics with some wolf harvest by trappers and development of wolf population survey methodology in west central Alberta. To reduce predation on caribou, we actively removed wolves during the winter of 2006 in one of the caribou ranges where the caribou population has been in decline.

Biodiversity

Alberta is a signatory to *Canada's Biodiversity: A Commitment to its Conservation and Sustainable Use* committing the province to use the Canadian Biodiversity Strategy as a guide to its actions. Development of an Alberta Biodiversity Strategy was included in the 2005-2008 Government of Alberta Business Plan. The Fish and Wildlife Division, in partnership with Sustainable Resource Development's Corporate Business Support, continues to take a leadership role in moving the strategy forward under the guidance of an interdepartmental steering committee and working group; eight government departments are represented on these committees. A broad strategy framework and public consultation plan have been developed and efforts are now underway to integrate development of the biodiversity strategy with development of a proposed provincial land use framework. Initial integration will include developing options for consulting Albertans on biodiversity as part of development of the provincial land use framework. This will set the stage for future consultations on a draft biodiversity strategy.

The Fish and Wildlife Division also continues to provide technical support to development of the Alberta Biodiversity Monitoring Program, a partnership that includes industry, research institutions, academia, and governments. The program is intended to be a provincial-level monitoring program that will be able to measure the status of a comprehensive suite of aquatic and terrestrial biodiversity indicators across Alberta over time. Testing of aquatic and terrestrial monitoring is underway and is expected to be completed by 2007. The goal is to have the Alberta Biodiversity Monitoring Program operational in 2007.

Water Strategy

In November 2003, *Water for Life: Alberta's Strategy for Sustainability* was released. The strategy outlines a series of short, medium and long-term actions aimed at ensuring Albertans have: safe, secure drinking water; healthy aquatic ecosystems; and reliable, quality water supplies for a sustainable economy. The Division continues to work cooperatively with Alberta Environment to carry out activities that support the Healthy Aquatic Ecosystem outcome of the strategy. Some of these activities include:

- development and adoption of a provincial Instream Flow Needs guideline;
- completion of detailed Instream Flow Needs studies in a number of river basins in Alberta;
- development of a winter IFN tool, in cooperation with the University of Lethbridge, to assess effects of winter water withdrawals on fish and fish habitat (winter IFN tool);
- continued development and investigation of tools required to assess the health of Alberta's aquatic ecosystems, such as an Index of Biotic Integrity for fish and an overall assessment of health of fish populations;
- ongoing support to watershed stewardship groups through the Cows and Fish program (<http://www.cowsandfish.org>);
- participation and input to watershed management planning processes throughout the province; and
- continued participation in development of an Alberta Wetlands Policy.

Integrated Resource Management

The level of resource development activity within Alberta is very high and continues to accelerate putting greater pressure on public lands and fish and wildlife populations. In addition to ongoing development of conventional oil and gas reserves, mineable oil sands and forest resources and expanded human settlement, the province is facing tremendous expansion in coal bed methane extraction and conventional coal mining. The Fish and Wildlife Division continues to be involved in the review of project applications and environmental impact assessments. As well, the Division is one of several government agencies that participate in regional forest management planning processes, provincial integrated resource planning initiatives such as the Southern Alberta Sustainability Strategy, and a variety of regional access management strategies such as the Bighorn Access Management Plan, the Ghost-Waiparous Access Management Plan and the Richardson Backcountry Access Management Plan. In addition, the Fish and Wildlife Division is participating in the Integrated Land Management Project, being coordinated by the Lands Division of Sustainable Resource Development. The ILM Project will establish the foundation for addressing land use challenges, including managing and reducing the footprint, reclaiming the land, and providing the appropriate level of access.

**Arizona Game and Fish Department
WAFWA State-of-the-State Report
July – November 2006**

87 percent of Game and Fish employees get significant pay raises

A concerted three-year effort resulted in 87 percent of Arizona Game and Fish Department employees getting significant annual pay increases totaling \$7.2 million annually. This amount includes employment related expenditures.

It was a gargantuan multi-year effort by the department's human resources staff to accomplish classification maintenance reviews, reclassification reviews and equity adjustments for both wildlife series and non-wildlife series employees.

This extraordinary effort resulted in 487 out of 563 permanent and limited/permanent employees (approximately 87 percent) receiving an average pay increase of 13 percent. The average salary for a Game and Fish Department employee went from \$40,488 to \$44,117, which is a \$3,629 increase on average. This makes Arizona Game and Fish employees some of the highest paid in Arizona state government.

Ground is broken for new Game and Fish Department headquarters

The Arizona Game and Fish Department headquarters complex at the Ben Avery Shooting Facility is one step closer to reality; a groundbreaking ceremony was conducted in mid-October.

The new headquarters is to be built on 24 acres of commission-owned property at the Ben Avery Shooting Facility on the northern edge of Phoenix. The new complex will total 117,115 square feet of new construction, including office space for 332 employees, a 205-seat auditorium, conference rooms, climate-controlled warehouse, laboratories, development shop, and vehicle maintenance facility.

The department is pursuing silver certification under the Leadership in Energy and Environmental Design Green Rating System, which is a national standard for high performance, energy efficient, resource-sustainable buildings.

If the construction schedule is met, department employees will move into the new building in late 2007.

Game and Fish takes over Ben Avery Clay Target Center

The Arizona Game and Fish Department assumed operational control of the Ben Avery Clay Target Center in late September.

Management of the public shotgun-shooting facility in north Phoenix transitioned from a private vendor to Game and Fish, and the center reopened under new, expanded hours on Sept. 20.

There is now a six-station executive sporting clays course, a 10-station sporting clays course and six trap and skeet overlay fields. One of the stations on the latter course includes an 8-foot-high shooting platform.

Renovation of the other trap and skeet fields and clubhouse will begin in the near future. At full build out—anticipated to be completed by early 2007—the Clay Target Center will have 18 fully functional trap and skeet fields (14 overlays with four additional trap fields).

Director Shroufe named outstanding conservationist of the year

Arizona Game and Fish Director Duane Shroufe was recognized as the outstanding professional conservationist of the year by the Arizona Wildlife Federation during its annual banquet on July 15.

Director Shroufe was presented with the Thomas E. McCullough Memorial Award, which is the most prestigious annual award given by the Arizona Wildlife Federation. There are two categories for the award: professional and non-professional.

The professional category award is given to those who have contributed above and beyond their normal duties to the promotion of wildlife and natural resources conservation in Arizona.

Arizona's big game super raffle raises \$514,055 for wildlife

Arizona's historic first-ever big game super raffle raised more than a half-million dollars for wildlife conservation in the state.

The nine winners of special, prized hunting tags with yearlong season dates were drawn from a drum on July 8, and almost immediately, the goal for next year's super raffle was set at raising a million dollars for wildlife.

The big game super raffle is a new concept, not just for Arizona, but for the nation.

For many years, two commissioner tags have been set aside for each big game species in Arizona. Those tags were auctioned off or raffled by individual sportsmen's groups to raise money for wildlife.

A third tag per species was created last year by the state Legislature. Several sportsmen's groups then joined together in a unique collaborative effort to market these nine new commissioner tags via a super raffle.

Workshops established to teach newcomers small game basics, aid in hunter recruitment, retention efforts

As part of the Arizona Game and Fish Department's increased hunter recruitment and retention efforts, the agency is offering its first-ever small game hunting camps for new residents.

These small game hunting camps are designed to provide new Arizona residents with the basic skills they need to successfully pursue a variety of Arizona's small game species. Both adults and youths ages 10 and older have been invited to participate.

The workshops include free meals, free instruction and the free use of hunting equipment during the camps. The workshops are aimed at developing responsible and successful hunters who recognize the importance of wildlife and habitat conservation.

New wildlife-feeding law goes into effect

A new wildlife feeding law that went into effect in Maricopa and Pima counties is aimed at helping prevent wildlife-human conflicts.

Many people think feeding wildlife is a helpful thing to do, and they enjoy seeing rabbits or deer spending time around their homes. But feeding encourages these animals to stick around, become aggressive and even dangerous to humans.

What also happens is that those animals attract larger, predatory animals to the neighborhoods. That's when you have coyotes, javelina and other animals that can become a danger to people and harm their pets.

The law does not affect people just feeding birds and tree squirrels or anyone carrying out normal livestock or agricultural operations. It is a public safety measure that will only stop those who are intentionally, knowingly or recklessly feeding wildlife.

Learn about the state's reptiles and amphibians in a new book

The Arizona Game and Fish Department in cooperation with Arizona State University published a new book titled "A Field Guide to Amphibians and Reptiles in Arizona". This is the first comprehensive guide to Arizona's native and introduced reptiles and amphibian species.

The new \$12 guide offers 150 pages full of color photos and tips for finding and identifying different amphibians and reptiles in the wild. The book contains details on all 141 species of Arizona reptiles and amphibians, including all 13 rattlesnakes found in this state.

In addition to being offered for sale to the public, the Arizona Game and Fish Commission authorized the distribution of the books for free to all public schools in the state.

Volunteers log 105,903 hours for the Arizona Game and Fish

A small army of volunteers have amassed 105,903 hours and driven more than 113,000 miles this past fiscal year to assist the Arizona Game and Fish Department to achieve its mission.

It all adds up. These volunteer hours and miles have an estimated value of \$1.5 million that positively impact wildlife resources, aid hunter and angler recruitment efforts, and help educate the public about the department's mission.

Fish Arizona! campaign receives Governor's tourism award

The Arizona Game and Fish Department's Fish Arizona! campaign, which reversed a decade-long decline in fishing license sales, received the Innovative Promotions Award during the Arizona Governor's Conference on Tourism on July 11.

The Innovative Promotions Award is presented to the organization that best demonstrates outstanding quality and creativity in planning and carrying out a promotion campaign.

Game and Fish campaigns receive prestigious PR awards

Two Arizona Game and Fish Department public relations campaigns won top awards from the Public Relations Society of America (PRSA), the most prominent public relations professional society in the country.

The mountain lion awareness campaign and the Fish Arizona! campaign each won the top award from the Phoenix chapter in their respective categories. The award is called the Copper Anvil, and the department was competing against the biggest private public relations firms, plus nonprofit groups and other government agencies from across the Phoenix area.

Arizona youth teams have strong showing at national championships

Arizona teams captured one national title, two second-place finishes and a third place at the Scholastic Clay Target Program (SCTP) skeet and sporting clays national championships July 15-16 at the Rochester Brooks International Trap and Skeet Club in Rochester, N.Y.

A record 18 states were represented at the event, producing the highest attendance in its six-year history. Nearly 220 youths competed in skeet and 170 in sporting clays.

The Arizona program is expected to grow to 1,000 participants this year.

Law prohibits intentionally interfering with a legal hunt

A new law making it illegal to intentionally interfere with a lawful hunt went into effect in September.

The law does not apply to incidental interference arising from lawful activity by public land users, including recreationists, ranchers or miners; nor does it apply to landowners engaged in agricultural or livestock operations.

The law, A.R.S. 17-316, protects the rights of licensed hunters by prohibiting people from intentionally disrupting hunts through such actions as vandalizing a hunter's equipment or property, obstructing or making physical contact with a hunter, or intentionally placing themselves between wildlife and someone attempting to legally hunt that wildlife.

Poaching penalties increased

A new law increasing the penalties for poaching wildlife in Arizona is now in effect.

The law gives the Arizona Game and Fish Commission the authority to permanently revoke or suspend a person's hunting privileges for various offenses, including unlawfully taking trophy or endangered species, taking three times the legally established limit, or committing repeat violations.

The legislation also creates a system of civil assessments and license revocations based on the number of convictions an individual has for unlawfully taking or wounding wildlife.

Governor, advisory council fight real problems from invasive species

Invasive species, non-native plants and animals that come to Arizona and cause real harm, and the problems they create are being addressed by the governor's Arizona Invasive Species Advisory Council.

The Arizona Game and Fish Department was instrumental in working with the governor to create the council and helping to lead the council in creating an Arizona Invasive Species Plan.

Arizona is currently dealing with several invasive species problems, including the emergence of roof rats in our urban areas, the competition of non-native crayfish with our native and sport fish species, and the discovery of golden algae.

Game and Fish educational efforts earn national awards

The department's communications efforts were recognized this year with five national awards from the Association for Conservation Information (ACI).

Arizona Game and Fish received awards for: its "Focus WILD Arizona" environmental education program; the department's mountain lion awareness campaign; the "Arizona Breeding Bird Atlas;" the Arizona Game and Fish Department Heritage Fund brochure; and the "Bats of Arizona" poster.

First-ever elk, antelope winter draw scheduled

There is a big change to the timing of the draw for two of the most popular hunting seasons in Arizona; this will be the first year that the Arizona Game and Fish Department will conduct a winter draw for elk and antelope tags.

The idea of the switch is to let hunters know early enough whether they have been drawn for elk and antelope prior to their applying for fall deer, turkey, javelina, bear and buffalo hunts in the spring. The application deadline for elk and antelope is Feb. 13.

Exceptional year for Arizona's eagles

With the breeding season now over, Arizona can celebrate what's turning out to be an incredible year for the state's bald eagles.

Arizona Game and Fish Department biologists confirm a record number of eagle breeding areas in the state, as well as a tie with the year 2004 for a record number of eaglets that lived to fledge, or begin flying, in Arizona.

"We are really excited at how this breeding season turned out," says James Driscoll, head of the Arizona Game and Fish Department Bald Eagle Management Program. "Forty-two eagle nestlings fledged this year, tying our previous record in this state."

Biologists also found three new bald eagle breeding areas, for a record total of 50. Every year, many eagle breeding areas that are located near popular recreation areas are closed for the breeding season, so the birds' breeding attempts won't be interrupted by human activity.

"Arizona Wildlife Views TV" receives five national awards

"Arizona Wildlife Views," the Arizona Game and Fish Department's popular PBS wildlife television program, was recognized with five Excellence in Craft Awards from the Outdoor Writers Association of America (OWAA).

The national awards recognize the highest ethical and communications standards, conservation of natural resources and mentors for the next generation of professional outdoor communicators.

New online tool streamlines environmental review process in Arizona

A new online tool that shows if a proposed development project in Arizona could affect threatened or endangered animals and plants is now available from the Arizona Game and Fish Department.

The free, Web-based Arizona Online Environmental Review generates a list of special-status species potentially affected within a project area, a process that used to take weeks, but now takes only minutes.

Game and Fish gathers input on strategic plan

The Arizona Game and Fish Department developed and has been gathering comment on the draft "Wildlife 2012" plan, a strategic plan that will guide how the agency manages wildlife, outdoor recreational opportunities and its own operations for the next six years. The department develops a new strategic plan every six years. "Wildlife 2012" is one third of a three-tier planning effort that includes operational and implementation plans.

Threatened frogs released into new, safer homes

Hundreds of Chiricahua leopard frogs -- a species listed by the federal government as threatened -- were released to new homes in Arizona in September, thanks to biologists from the Arizona Game and Fish Department, U.S. Fish and Wildlife Service, USDA Forest Service and the Phoenix Zoo.

Arizona's current drought, disease, habitat loss and other problems have added to the decline of this frog species in our state. This release is part of a larger plan to help with the frog's recovery. The frogs were released in a part of the Tonto National Forest called the Gentry Creek area, near Payson. They started out as eggs collected in places where the resulting frogs would have had a tough time surviving because of poor habitat conditions. Biologists at the Phoenix Zoo reared the eggs into adult frogs.

Beleaguered native fish receive biological boost

One of Arizona's beleaguered native fish received a biological boost.

Arizona Game and Fish Department biologists in October were able to stock 150 longfin dace into Upper Mineral Creek, which is located near the ASARCO Mine between Superior and Kearny.

Longfin dace are small native fish ranging up to 2.5 inches in length. Biologists point out that of Arizona's 35 native fish, one is extinct, and almost 75 percent are either federally listed under the Endangered Species Act, are candidates for listing or are listed as a wildlife species of special concern.

State of the State Report
California Department of Fish and Game
L. Ryan Broddrick, Director

California Fish and Game Commission
John Carlson, Jr., Executive Director

January, 2007

Organization

In November, 2006, the voters of California re-elected Governor Schwarzenegger and put into office the most significant infusion of new members into our state's Legislature that we have experienced. It is anticipated that the Governor's continuing commitment to the environment will highlight again this year the Department of Fish and Game's (Department) efforts to preserve and protect the state's fish, wildlife and plant resources, and the exceptional public and private partnerships that have been formed in support of these efforts. Ocean and public health, infrastructure, alternative energy, water supply and water quality are major issues facing our perpetually expanding and progressing state. The Department's authority and responsibilities in these areas will continue to play a significant role in these critical issues.

Marine Life Protection Act

The Marine Life Protection Act mandates the design and management by the Department of a network of marine protected areas (MPAs) to protect marine life and habitats, marine ecosystems and marine natural heritage, and to improve recreational, educational and research opportunities provided by marine ecosystems along California's 1,100-mile coastline. In August, the Fish and Game Commission (Commission) approved the designation of more than two dozen MPAs covering more than 200 square miles of state waters in California's central coast region. This decision follows an intensive effort by the Department, the Commission and the Administration to involve the public in the decision-making process through public meetings and marathon public hearings. The specific boundaries of the MPAs are expected to be defined later this spring.

The next phase of the MLPA effort has already begun with the determination that the waters off California's northern coast will be the next area of focus.

SS Palo Alto

A joint oil removal project from a grounded World War I oil tanker was successfully completed, ahead of schedule and within budget. The project brought together experts from the Department's Office of Spill Prevention and Response (OSPR), Department of Parks and Recreation, U.S. Coast Guard, and a maritime contractor to remove 505 gallons of oil, 125 cubic yards of oily sand and residue, 173 deceased birds and two deceased harbor seals from an 87-year-old ship, the SS Palo Alto. The mothballed

vessel was privately purchased in 1929 and used as an amusement park in a small tourist town near Monterey. The vessel, which had become a popular pier for fishing and an artificial reef for numerous fish, mammal and invertebrate species, became the property of the state and has been managed as a state park. Years of exposure to the surf and weather deteriorated the deck and caused the hull to shift, exposing the tank, which had been believed to be empty. An investigation was initiated by the Department following the discovery of oiled and dead birds, and oil fingerprinting done at the Department's Petroleum Chemistry Lab pointed to the SS Palo Alto.

Although the vessel remains partially submerged at the ocean's edge, its now empty tank has been opened to prevent future wildlife entrapment.

Levee Repair

California voters also approved millions of dollars in bond monies to help repair and improve California's massive and deteriorated levee system. Experts have predicted that the condition of the state's levee system puts California at risk for a catastrophic event far worse than that experienced in New Orleans from Hurricane Katrina. Governor Schwarzenegger has aggressively worked to secure resources for this effort, and the Department will have a major role in levee projects, which will include work on our own wildlife areas and ecological reserves.

Wildlife

The management of California's diverse and vast wildlife resources is a challenging and rewarding endeavor in a state of 37 million people. Habitat preservation, threatened and endangered species protection, and human consumption of and conflict with wildlife continue to be major emphases of the Department.

The Department is heavily involved in the efforts to develop alternative wind energy strategies due to the impact most of the operations have on wildlife, including birds that get caught in high-tech windmills (see attached). We are also increasing education and outreach efforts on wildlife interactions

Centennial License

This year marks the 100th anniversary of the California Hunting License and the Department has designed a special license to recognize this milestone in our state's hunting heritage. The design for the 2007/2008 Hunting License is reminiscent of the first paper hunting licenses issued in the early 1900's, and features the artwork of wildlife artist Kevin Pack. It is hoped that the interest generated by this license will increase license sales by encouraging hunters who have gotten away from the sport to return to it and expose new audiences to hunting and wildlife conservation. The license will also be used as part of the outreach campaign for the Department's Automated License Data System, which is scheduled to be piloted this summer and fully implemented by the end of the year.

Although it is expected that the centennial license will generate interest from collectors, as the state's official license for the 2007/2008 hunting season, it will only be available

to individuals who can obtain a hunting license in accordance with the Fish and Game Code.

Fisheries

The Pacific salmon fishery continues to be a major focus for both the Department and the Commission. Regulatory efforts to conserve the chinook salmon that return to spawn in the Klamath River and sturgeon that populate waterways of the San Francisco Bay Delta are continuing. Enhanced scientific and enforcement efforts are being employed to address the decline in these as well as several other species. Multi-agency teams have joined with stakeholder groups to identify the causative factors in the decline of and management solutions for these species.

California Fishing Passport

The Department has created a unique program to promote angling opportunities throughout the state and to encourage sportspersons to experience the many different fishing opportunities available to anglers of all ages. This program, the "California Fishing Passport" (Passport), is designed to provide a venue for anglers to challenge themselves, to compete with others, to experience new angling opportunities, and to be recognized for their achievements. The goals of the program include providing a positive and varied fishing experience that will have a broad appeal for everyone from the young child fishing for the first time to the seasoned angler; providing educational information about the Department's fishery management efforts and the broader concept of resource conservation; promoting ethical fishing practices; increasing economic benefits to the state by encouraging license sales, equipment purchases and travel; and creating more fishing opportunities for children to develop future generations of anglers.

The Passport program models the birder's "Life List" in that it identifies selected fish species, both freshwater and saltwater, to be caught and a range of locations where they may reside. Over 100 sport fish species have been identified by department staff and are represented in the Passport book. With the support of exceptional partners, this program will be free to licensed anglers and youth under the age of 16 (who are not required to have a sport fish license.) While other states also support grand slam-type and short-term angling competitions, the Passport program is the first of its kind in the nation and the first such effort that the Department has undertaken.

Enforcement

The Law Enforcement Division has continued to dispatch its insufficient staffing resources to maximize their impact. Several major busts, including two busts in one month that resulted in the confiscation of nearly 200 pounds of high-grade marijuana with an estimated street value of \$700,000. These busts resulted from regular Game Warden patrol efforts and add to the strategic details involving Wardens as members of the California Department of Justice's Campaign Against Marijuana Planting (CAMP) team.

Poaching and illegal commercialization of striped bass operations also felt the sting of enforcement efforts when a months-long undercover operation culminated in the arrest of 14 suspects who were operating out of homes, the backs of trucks in public parking lots and a supermarket. Two of the arrests were prompted by the discovery of a substantial illegal drug trafficking operation at one of the homes. Operations comprised of individuals and businesses involved in the black-market sale of bear parts and sturgeon roe were also shut down following high-powered undercover and investigative actions.

Species Management

The petition presented to the Commission by the Department for the delisting of the Siskiyou Mountains salamander is moving through the public comment and administrative processes. Consideration for the delisting of the California brown pelican is also continuing.

Invasive species also continue to be a high priority for the Department. Potential plans to eradicate the destructive northern pike from Lake Davis are nearing completion following tremendous public education, outreach and involvement, and multiple eradication projects for aquatic invasive species are ongoing (see attachment).

Avian Influenza

Detection efforts for the HPAI H5N1 strain of avian influenza are progressing, utilizing hunter-harvested samples. This follows the sampling of thousands of migratory ducks over a three month period as part of the Department's usual testing and banding efforts. Environmental sampling will make up the next phase of our detection efforts. Public education and outreach efforts are ongoing and include a dedicated webpage on the Department's website, the publication of informational materials, and media events.

Litigation

The issue of the use of lead ammunition continues to be a hot item for California. Under the direction of the Commission, the Department continues its review of this issue while environmental groups pursue the matter through the California court system. Neither the Department nor the Commission have taken the position that action on the use of lead ammunition is not warranted; we believe the best avenue for determining this issue is through the public Commission process and not litigation.

COLORADO DIVISION OF WILDLIFE REPORT
WESTERN ASSOCIATION OF FISH AND WILDLIFE AGENCIES
DECEMBER 2006

“KEEPING COLORADO WILD” MEDIA CAMPAIGN

Colorado’s wildlife is the subject of a new statewide public education campaign that was launched in November. The legislatively-mandated campaign supports the mission of the Colorado Division of Wildlife (CDOW). The monies for the campaign were financed through a 75-cent surcharge on hunting and fishing licenses (see the License Fee Increase section). Built around the theme “Keeping Colorado Wild,” the campaign aims to educate outdoor enthusiasts, wildlife watchers and the general public about the importance and scope of the CDOW’s professional activities in serving the interests of wildlife, wildlife watchers, sportsmen and women and the citizens of Colorado. The campaign also works to educate Coloradans on the role of the CDOW in supporting the wildlife management practices for the resource.

The public education campaign will run statewide on both local and cable television stations. The radio announcements will run on Colorado Public Radio and the outdoor portion of the public education campaign will debut in January. The first phase of this multi-year campaign will run through May 2007.

MARKETING SUMMARY

A full-time Marketing Director was hired and started working with the CDOW in January 2006. As well as conducting a marketing review of the agency this year to establish a baseline, three targeted efforts were accomplished:

1. A targeted fishing campaign where the CDOW spent \$23,000 in the Denver Metro area on 3 billboards, 30 Denver Airport train signs, 20 public bus signs, and a week-long movie theater commercial. For the same period the previous year, fishing licenses sales increased by 10,304 and website traffic to the advertised page increased 560%. New signage for CDOW provided fishing opportunities now reminds the public that the 18 CDOW hatcheries produce approximately 75 million fish each year for Colorado.
2. After many meetings with the Colorado tourism board regarding the economic benefit of wildlife in the state, specific pages for both fishing and hunting opportunities were included to their website, www.colorado.com. The national brown binocular viewing site symbol was added to the Colorado site map, which the tourism board produces. Wildlife Viewing and Festival opportunity pages are also being negotiated to coincide with the launch of the Colorado Birding Trail in February 2007. Providing photos with unlimited usage rights has been key for this effort.
3. Since the CDOW receives funding from the Colorado Lottery, efforts to co-market with them have been useful and inexpensive. Their new commercials now mention that wildlife benefits from Lottery proceeds, their new crossword game now features wildlife instead of farm animals and our website now randomly advertises the benefits wildlife receives by playing the Lottery.

COLORADO HABITAT STAMP

In 2005, Colorado’s legislature and Governor Owens approved the creation of the Colorado Habitat Stamp Program. In an effort to raise additional revenue to acquire habitat, a \$5 fee is attached to the first two hunting or fishing licenses. Non-hunters or anglers can buy a \$10.25 Habitat Stamp. The Stamp

provides three benefits: the monies go to a fund to conserve habitat for big game corridors and at-risk species, the stamp grants the purchaser access to over 1 million acres of State Wildlife Areas and State Trust Lands; and the stamp includes a search and rescue fee to defray expenses related to rescuing someone lost in Colorado's backcountry. In 2006, the stamp has raised over \$3 million and is now part of a \$22 million effort to conserve habitat throughout the state.

DVD'S

The Division of Wildlife recently released two new hunting DVD's for sale. The first DVD, Down to the Bone, provides a 25-minute, first of its kind, description of how to debone an elk in the field, particularly when you've harvested the animal a far distance from your car. Over 2,500 copies have been sold. The second DVD, Elk Hunting- Colorado, provides a comprehensive review of elk hunting opportunities in Colorado. Over 500 have been sold since September.

SPECIES OF CONCERN

3-Species Fish Conservation Efforts

In 2004, the CDOW signed the *Range-Wide Conservation Agreement for Roundtail Chub, Bluehead Sucker, and Flannelmouth Sucker*, joining an effort by wildlife agencies from five Colorado River basin states in implementing rangewide conservation measures aimed at protecting these 3 native fish species from threats to listing as threatened or endangered species. The CDOW summarized the known occurrence of the 3 species mentioned above into a geographical database in 2005 as a first step in completing a multi-species assessment. In 2006, the CDOW began a long-term native fish monitoring study to determine the cause of the observed decline of native suckers in the lower Dolores River. The CDOW hopes to expand its native fish inventory and management efforts in the future under the umbrella of the 3 Species Conservation Agreement by implementing a GIS database that tracks changes in population status.

Colorado River Cutthroat Trout (CRCT)

CRCT Conservation Agreement and Strategy

A new Conservation Agreement was written in early 2006 to expedite implementation of conservation measures for CRCT in Colorado, Utah, and Wyoming. This collaborative effort among state and federal resource agencies is designed to provide a framework for the long-term conservation of Colorado River cutthroat trout, and to reduce or eliminate threats that warrant its status as a species of special concern or potential listing under the Endangered Species Act of 1973. Cooperating resource agencies for this revised agreement now include the CDOW, Utah Department of Natural Resources, Wyoming Game and Fish Department, Region 2 and 4 of the U.S. Forest Service, Colorado, Utah, and Wyoming offices of the BLM, the U.S. Fish and Wildlife Service, the National Park Service, and the Ute Indian Tribe. In addition to the Agreement, a companion Strategy was also produced that outlines specific tasks that will be used to achieve long-term conservation of Colorado River cutthroat trout outlined in the Agreement. This Strategy can be found at <http://wildlife.state.co.us/Research/Aquatic/CutthroatTrout/>.

CRCT Rangewide Assessment

Among other activities, the original Conservation Agreement directed the Conservation Team to produce an assessment of the status of CRCT after a five-year period. This Assessment was completed in 2006, and compiled input from 48 fishery professionals using a consistent methodology to assess the extent of

CRCT historical range, their current distribution including genetic status, and evaluated the foreseeable risks to 285 populations designated as “conservation populations” by management agencies. The assessment shows CRCT are currently well distributed across their historical range with confirmed genetically unaltered CRCT occupying at least 26% and possibly up to 41% of currently occupied habitats (no record of stocking or hybridizing species present). A copy of the Assessment can be found at <http://wildlife.state.co.us/Research/Aquatic/CutthroatTrout/>.

CRCT Purity Determination

Using the new Amplified Fragment Length Polymorphism (AFLP) genetic assessment technique, we are currently developing new molecular markers to characterize the purity of various cutthroat trout populations, while addressing some of the inconsistencies associated with more traditional methods for evaluating introgression. The goal of this research is to develop a unified approach for evaluating the purity of native cutthroat trout populations in Colorado.

Rio Grande Cutthroat Trout

The CDOW, New Mexico Department of Game and Fish, U.S. Forest Service, Bureau of Land Management, and Jicarilla Apache Nation began a systematic, rangewide assessment of Rio Grande cutthroat trout in June 2006 using the Inland Cutthroat Protocol developed by the U.S. Forest Service for other subspecies of cutthroat trout. The rangewide assessment employs an ArcGIS mapping tool to geographically reference stream segments containing Rio Grande cutthroat populations. A geographically linked database was developed that summarizes existing distribution, population status, genetic purity, and habitat information for Rio Grande cutthroat populations. It is anticipated this effort will be revised, with the final status assessment report due by June of 2008.

Greenback Cutthroat Trout

A similar geographic information system will be developed in January 2007 for greenback cutthroat trout with collaboration from the U.S. Fish and Wildlife Service, CDOW, Wyoming Game and Fish, U. S. Forest Service, and National Park Service. This spatially referenced database will form the foundation of an assessment for this subspecies that will play a key role in the movement to delist the greenback cutthroat trout.

Swift Fox to South Dakota

In a cooperative effort, personnel from the CDOW and Turner Endangered Species Fund (TESF) captured 35 swift fox to help re-establish swift fox in South Dakota. DOW personnel worked with five representatives from the TEF southeast of Limon, Colorado from August 28th through 30th to capture a total of 37 swift fox. Each animal was held in a pet carrier until results from blood analysis were received. South Dakota is a plague-free state so each animal had to be tested for plague exposure. TEF was permitted to transport 35 swift fox to the TEF property in South Dakota for release, so two of the captured foxes had to be released at the site of capture. The trapping and subsequent release of swift fox is part of a multi-state effort to re-establish viable swift fox populations in their historic range.

Grizzly Bear Sighting Report

A sighting of a grizzly bear sow and two cubs by two hunters southwest of Leadville was reported to the CDOW in late September. Field personnel spent time on the ground with the reporting parties and in a helicopter attempting to verify the sighting without success. Efforts will continue this coming spring. An information poster with distinguishing characteristics for both grizzly and black bears was developed and

posted at local trail heads and campgrounds to alert hunters in the area during the big game seasons. The poster will be modified and posted again this spring at trailheads, campgrounds, and in the surrounding communities to alert hikers, campers, and other outdoor recreationists to the possibility of grizzlies in the area.

MOUNTAIN GOATS TO SOUTH DAKOTA

The CDOW, with assistance from South Dakota Game Fish and Parks, trapped and relocated 14 mountain goats to the Black Hills of South Dakota in November. The goats came from an area west of Leadville that they have pioneered into over the past 10 years. There is concern about the potential effects the goats might have on bighorn sheep in the area.

A helicopter was used to capture goats with either net guns or drugs. Due to the high elevation, steep terrain, and windy conditions this was a difficult capture situation. The CDOW had never used net guns or darting for mountain goats and the project was monitored closely to ensure both the safety of the people doing the capture and the animals. South Dakota generously paid for all capture related costs. The capture operation took place over a two-day period with goats transported to South Dakota at the end of each day's efforts.

BIGHORN SHEEP STUDY

DOW personnel will be undertaking a 3 – 5 year study of bighorn sheep on Pikes Peak and in the Queens Canyon area west of Colorado Springs. Using a combination of darting, drop nets, and clover traps a total of 60 sheep from Pikes Peak and 24 sheep from Queens Canyon area will be trapped and radio collared over the next year. Money raised through the sale of sheep and goat auction and raffle licenses is providing the necessary support for this two-part study. Sheep from the Pikes Peak herd will be part of a mark/ resight effort undertaken to improve the Division's sheep population data and better understand migratory movement patterns. The Queens Canyon portion of the study is designed to study the affects of lungworm treatment of adult sheep on lamb production and recruitment.

STATE WILDLIFE ACTION PLANS

CDOW staff participated in WAFWA's multi-state workshop in Salt Lake City on April 11-13, 2006 to spur multi-site coordination of State Wildlife Action Plans. Ten priority projects were identified, including energy development impacts, conservation of grassland communities, conservation of riparian communities, coordinated sagebrush conservation across its range, Colorado River Basic Aquatic endangered fish, facilitating increased understanding of the CWCS for other stakeholders, coordination of prairie dog monitoring and assessment, tracking of priority invasive species, development of U.S.- or continent-wide monitoring databases for species and habits, and promoting rangeland grazing methods that ensure long-term plant and animal sustainability.

FISH PRODUCTION REPORT

The Hatchery System experienced increased production over the 2005 stocking season because of the increased water flows at many of our facilities. Production levels were up allowing us to rear and distribute 3.45 million catchable trout, 14.55 million cold water sub-catchables (8 species) and 73.47 million warm water sub-catchables (14 species). Over 1.77 million pounds of fish were reared and distributed into state waters with over 550,000 miles of travel to accomplish our schedules.

Working with researchers and biologists, the Hatchery System is incorporating the Hofer and Hofer crosses into our production scheme. The Hofers are a strain of rainbow trout that has shown a resistance to the effects of Whirling Disease and should have positive impacts on our ability to re-establish wild spawning populations of rainbow trout in systems that have been impacted by the disease. Presently we have two hatcheries developing brood stocks of the Hofers and three hatcheries that are going to produce over 300,000 of either the pure Hofers or the crosses to be stocked into river systems in 2007.

Wild spawning operations were very successful this year. Walleye and saugeye egg takes amounted to over 102 million eggs this spring. Fall spawning operations of brown trout and kokanee salmon produced 1.05 million and 14 million eggs respectively.

Work continues with our three species of native cutthroats (greenbacks, Colorado River and Rio Grande) at seven of our facilities.

Our Native Aquatic Species Restoration Facility in Alamosa continues to provide refugia and develop brood stocks for T & E species, both Federal and State, along with the species of special concern. The species presently at the facility are Colorado pike minnow, bonytail chub, roundtail chub, Rio Grande sucker, Rio Grande chub, suckermouth minnow, northern redbelly dace, southern redbelly dace, common shiner, Arkansas darter and plains minnow. A number of different populations of boreal toads are also being held at the facility.

Report to Western Association of Fish and Wildlife Agencies Winter 2006

Idaho Fish and Game Director Announces Retirement

Steven Huffaker announced November 9 that he will retire as director of the Idaho Department of Fish and Game effective January 1.

“It has been a great opportunity to serve as the director for the past five years and to have a wonderful career in fish and game for the past 37 years,” Huffaker said. “I move on feeling very good that I have accomplished the goals in the department I set when I became the director. Morale in the department is good and we have great relationships with the commission, Legislature, governor’s office and the sportsmen.”

Huffaker was appointed director on February 13, 2002.

He earned a bachelor’s degree in fish and wildlife biology from Iowa State University in 1968 and served in the U.S. Army from 1968 through 1970. After the army, he went to work for the Indiana Department of Natural Resources as a fishery biologist, hatcheries supervisor and regional supervisor until 1984.

After he joined Idaho Fish and Game in 1984, he worked his way up to chief of the fisheries bureau in 1989. In 1997 he was appointed wildlife chief and assistant director until 2002.

During his tenure he oversaw the development of the *Access Yes!* program, the Mule Deer Initiative and the Pheasant Initiative. He served as chairman of the Interagency Grizzly Bear Committee, president of the Western Association of Fish and Wildlife Agencies and has been active on numerous committees for the Association of Fish and Wildlife Agencies.

But his most important accomplishment as director, Huffaker said, was the “building of a great staff and hiring quality people with the right skills and abilities to make cooperative conservation work.”

The Fish and Game director is appointed by the commissioners and serves as secretary to the commission and leader of the department. The department has 525 classified employees and a budget of \$74 million funded by license and tag sales, federal and private grants, and contracts.

Fish, Wildlife and Habitat

Fisheries

Fisheries Management Plan 2007-2012

Idaho Fish and Game revised its Fisheries Management Plan in 2006. This six-year policy document will guide fisheries management in Idaho during the period 2007 to 2012. Public scoping included a statewide angler opinion survey. An opinion survey was mailed to about 10,000 randomly-selected anglers including residents and nonresidents. Angler survey returns help Fish and Game to maintain ongoing, or develop new, fishery management programs.

The Idaho Department of Commerce estimates that the recreation and tourism industry is the third largest in the state. Sport fishing comprises a substantial part of this business. Fishing in Idaho generates 450 to 500 million dollars annually in statewide retail sales. The Fisheries Management Plan is an integral component of Fish and Game’s efforts to fulfill its statutory mandate to preserve, protect, perpetuate, and manage Idaho’s fisheries resources.

Big Lost River Mountain Whitefish

Mountain whitefish populations located in the Big Lost River basin of eastern Idaho have shown declines recently in distribution and abundance.

Mountain whitefish populations are adversely affected by factors that impact trout populations including water management, channel degradation, water pollution, and non-native species interactions. Because they are geographically and physically isolated from

other Snake River populations of mountain whitefish, mountain whitefish in the Big Lost River basin are genetically distinct. Sampling completed in 2002-2004 by Fish and Game indicate that mountain whitefish currently occupy about 44 miles of stream, or about 21 percent of historical levels. Adult whitefish abundance in 2004 was estimated to be 2,501 fish or about 1 percent of historic levels.

A petition for an emergency listing of Big Lost River mountain whitefish under the Endangered Species Act was filed by non-governmental organizations in mid-2006. The Department is working with state and federal resource agencies, non-governmental organizations, and irrigators to protect and conserve this unique population of mountain whitefish. It is Idaho Fish and Game's contention that despite the current depressed status of the population, a federal listing is not warranted. In the near future, Fish and Game will complete a management and conservation plan for the Big Lost River mountain whitefish.

Lake Pend Oreille

The long-term fate of native trout in Lake Pend Oreille and the fisheries they provide, along with the highly desired kokanee fishery, is imperiled by burgeoning populations of non-native predatory species. Lake Pend Oreille is the largest natural lake in Idaho covering almost 90,000 acres. Idaho Fish and Game has expended significant staff effort over the past few years in a concerted attempt to suppress predator fish numbers in order to protect valued game fish.

Westslope cutthroat trout, bull trout, pygmy whitefish, and mountain whitefish are the only native salmonids in the Pend Oreille drainage in Idaho. Prior to the 1940s, cutthroat trout were the most frequently caught fish in the Pend Oreille system. Large adfluvial bull trout were often targeted for harvest in tributary streams. Spawning runs of mountain whitefish historically supported a significant commercial fishery on Lake Pend Oreille.

Kokanee were established in Lake Pend Oreille in the 1930s via Flathead Lake, Montana and, historically, they supported a sport and commercial fishery averaging one million fish through about 1965. Kokanee also provided forage for native and introduced fish predators that produced a world-class trophy fishery for introduced rainbow trout.

The kokanee population of Lake Pend Oreille has declined from historic levels primarily as a result of habitat-related impacts but, since 2000, the greatest threat to the kokanee population has been too many fish predators. Native bull trout, trophy rainbow trout, and a rapidly expanding lake trout population threaten the total collapse of the kokanee population. Fish and Game closed the kokanee fishery in 2000 and harvest regulations on rainbow and lake trout have become increasingly liberal. By 2006, the adult kokanee population had reached new lows and survival rates between all age classes were also at record lows.

Lake trout were introduced into Lake Pend Oreille in 1925 but provided little in the way of a sport fishery until the early 1990s. Lake trout have increased in abundance in Lake Pend Oreille during the past 15 years. Harvest regulations on lake trout were liberalized in 1992 in an attempt to prevent lake trout from dominating the fishery. In 2000, a year-round season and no bag limit were implemented. A rod-and-reel commercial fishery was opened in 2003. Trap and gill nets have been used to remove lake trout since 2006. In addition, an aggressive angler incentive program was initiated in 2006 to pay anglers to harvest lake trout. The lake trout population continued to expand in 2006 despite these initial efforts.

Kamloops rainbow trout were introduced into Lake Pend Oreille in the early 1940s, producing a world record 37-pound rainbow trout in 1947. Concern over a collapsing kokanee population prompted liberalization of the rainbow trout regulations in the lake and tributary streams in 2006.

If the kokanee population collapses, the likelihood of re-establishing a kokanee fishery with a predator population in place is low. The trophy rainbow trout fishery would collapse with the loss of kokanee. Without high, sustained exploitation, lake trout will dominate the Lake Pend Oreille fishery as they do in Priest Lake in Idaho and Flathead Lake in Montana. Angler exploitation without a funded incentive program is not high enough to suppress lake trout. If kokanee collapse, fundamental changes in the management direction for Lake Pend Oreille must occur.

Blackfoot Reservoir

Fish-eating birds are hampering Idaho Fish and Game's ability to manage trout fisheries in southeastern Idaho. Expansion of American white pelican and double crested cormorants nesting on Gull Island in Blackfoot Reservoir located in southeastern Idaho has elevated concerns over avian impacts to hatchery rainbow trout stocked to provide recreational fishing, and native Yellowstone cutthroat trout. Diet studies conducted on Gull Island in 2001 and 2002 indicated pelicans were foraging largely on suckers, carp, and chubs. However, immediately after stocking hatchery rainbow trout, pelicans foraged heavily on trout. Consumption of rainbow trout within a few weeks almost equaled the 6.9 tons of trout stocked. Hatchery fish are expensive to rear and stock and their loss to avian predators has economic impacts to Fish and Game.

In 2005-2006, the estimated run of adfluvial Yellowstone cutthroat trout from Blackfoot Reservoir was less than 30 fish. The 2006 spawner run size represents a 99 percent decline from the 4,700 fish observed in 2001. For pelicans alone, there has been an 88 percent increase in nests observed since annual surveys started in 2002. In 2006, more than 1,400 breeding pairs nested on Gull Island. In 2004, hundreds of pelicans concentrated at the mouth of the Blackfoot River to feed on upriver migrants and about 70 percent of the fish observed at a fish trap were scarred by birds. In an attempt to reduce predation losses, Fish and Game used a variety of hazing techniques. These hazing techniques failed to effectively reduce the number of pelicans feeding on migrating fish. In 2005, Fish and Game was authorized by the U.S. Fish and Wildlife Service to include lethal techniques in its hazing efforts. Because other hazing techniques had failed in prior attempts, Fish and Game shot 13 pelicans in 2006. Lethal methods also failed to significantly reduce the number of pelicans feeding at the confluence of the Blackfoot River and the reservoir.

Similar foraging behavior by pelicans at the confluences of Bear Lake tributaries has been noted where native Bonneville cutthroat trout migrate upstream to spawn.

Given these issues, fishery managers in Idaho Fish and Game are working with their wildlife counterparts in finding the appropriate balance between pelican numbers at

the Blackfoot Reservoir nesting colony and maintaining a recreational fishery supported by hatchery trout and native Yellowstone cutthroat trout.

Lemhi River

The Idaho Department of Fish and Game is working collaboratively with many other parties to restore native fish habitat in the Salmon River drainage. The Lemhi River is a tributary to the Salmon River and drains about 1,290 square miles. It flows through a broad valley of fertile agricultural land between the Bitterroot and Lemhi mountain ranges. The valley includes more than 25,000 acres of land irrigated for hay production and grazing. The principal form of irrigation is flooding from an extensive system of ditches. All major mainstem ditches are screened and have bypass systems to prevent fish entrainment losses. The river can be seasonally dewatered in the lower reach during low flow years which, without intervention, impedes adult and juvenile salmon and steelhead migration.

The drainage supports runs of both spring Chinook salmon and summer steelhead. The amount of potential spawning habitat has been reduced by stream alterations, but there is still adequate habitat available, particularly in the upper reaches of the river and in the Hayden Creek watershed. Native resident trout include inland redband trout, westslope cutthroat trout, and bull trout.

Idaho Fish and Game participates in and supports habitat restoration efforts accomplished through the Upper Salmon Basin Watershed Project and others to transfer or purchase water rights to provide adequate flows in the mainstem Salmon River. Fish and Game continues to investigate methods such as improved irrigation delivery systems, ditch consolidations, permanent head gates, and stream channel improvements, to provide safe passage throughout the river. Fish and Game also works cooperatively with willing landowners through the Upper Salmon Basin Watershed Project to maintain and enhance critical spawning and rearing areas for resident and anadromous fishes. Some of the methods used include the reconnecting tributaries through improved irrigation delivery systems, dry-year lease options, and/or permanent leases.

In 2006, Idaho Fish and Game participated in some key habitat restoration projects. A fencing project was completed on Little Springs Creek on the Ammonson

property. A habitat restoration project on Bohannon Creek is ongoing. Another restoration project on the Lemhi River flowing through the Ammonson property is going through review.

This past spring, Kenny Creek was reconnected to the Lemhi River by screening a diversion and installing a head gate. We are currently pursuing a reconnect of Big Timber Creek to the Lemhi River. This will be a significant project as Big Timber Creek encompasses 18 percent of the Lemhi River drainage. It is currently not connected but maintains healthy populations of westslope cutthroat trout and bull trout. We are coordinating with the Upper Salmon Basin Watershed Project to complete the L-63 irrigation diversion siphon under Big Timber Creek. This is critical to the season-long reconnection of Big Timber Creek to the Lemhi River.

Lake Cascade Fishery Restoration

Lake Cascade's yellow perch population is gaining the advantage it needs to reestablish a fishery. Fish and Game has continued to remove the two main roadblocks preventing the recovery of the Lake Cascade yellow perch fishery which at one time was Idaho's most popular fishery. A series of events in the early 90s cut yellow perch to extremely low numbers, and a large population of northern pikeminnow prevented the yellow perch population from recovering. The crash dramatically changed angling use on the reservoir and resulted in the loss of millions of dollars annually to the local economy.

To revitalize the fishery, Fish and Game decided on a two-pronged approach to reshape fish populations in the reservoir. Over the past three years, the Department has trapped and hauled 850,000 adult yellow perch from lakes and reservoirs in Oregon, Montana and Idaho to re-establish a spawning population in Lake Cascade. Additionally, the Department has aggressively reduced the number of adult pikeminnow in the reservoir during this period. A combination of trap-netting and applications of rotenone in tributaries where pikeminnow spawn has reduced the adult pikeminnow population by more than 75 percent.

The efforts are having the desired effect. Fall gill net sampling documented the significant decrease in adult pikeminnow. In addition, fall trawl net samples are showing increases in yellow perch numbers, especially young-of-the-year and age-one fish.

Numbers per trawl in these two groups increased on average 148 percent from 2005 to 2006 (312 to 461\net respectively). It appears that the combination of decrease of adult pikeminnow and larger numbers of spawning perch may be allowing yellow perch to survive past their first year in the reservoir, resulting in the first successful large year class of perch since the mid 1990s.

In 2007, the Department will continue to monitor both yellow perch and northern pikeminnow numbers in Lake Cascade but will not be stocking additional adult yellow perch or be controlling northern pikeminnow in tributaries. However, a long term monitoring program will be implemented to keep track of adult pikeminnow numbers. When numbers begin to climb to levels that are excessive for forage levels, control methods will be reinstated.

Use of Sterile Fish in Salmonid Sport Fisheries

Idaho Department of Fish and Game is continuing to develop and monitor its sterile triploid trout program with the primary goal of protecting the genetic integrity of native stocks while continuing to supply hatchery-reared trout for harvest-oriented anglers. Research and management staff (J.R. Kozfkay, J.C. Dillon, and D.J. Schill) recently summarized Idaho's and other state's use of sterile fish in their hatchery trout programs in a "Perspectives" article in *Fisheries* (August 2006). Recent field evaluations of sterile rainbow trout demonstrate that they provide recreational fisheries of equal or superior quality to normal diploid hatchery rainbow in streams and productive lentic systems. But preliminary evaluations suggest that use in high mountain lakes may require stocking adjustments or be problematic because of lower survival rates of triploid trout. During the next few years, Idaho will continue to evaluate success of triploid trout in higher elevation waters to determine if they can successfully provide fisheries for anglers.

Conservation Law Enforcement

Innovations in Conservation Law Enforcement

Shikar-Safari Club International's Foundation awarded Idaho Fish and Game a \$75,000 grant to upgrade and replace an outdated DNA sequencer used by our forensic biologist. Each year dozens of poaching cases are solved using "CSI"-like techniques, including DNA matching of evidence to specific individual big game animals.

Other Special Law Enforcement Issues:

Idaho's Citizens Against Poaching Board (CAP), a private nonprofit organization which partners with Fish and Game to provide Idaho with an anti-poaching and call-in tips program is celebrating their 25th year. This fall's "Make the Call" campaign encourages sportsman to report fish and wildlife violations to the CAP toll-free phone line or to their local Conservation Officer.

Wildlife

Wolf Management

In January, former Idaho Governor Dirk Kempthorne and U.S. Interior Secretary Gale Norton signed a memorandum of agreement that gave Idaho the lead role in most wolf management in the state south of Interstate 90 under the authority of section 10(j) of the Endangered Species Act. Fish and Game now manages wolves under the provisions of the Idaho Wolf Conservation and Management Plan of 2002 approved by the U.S. Fish and Wildlife Service, but Fish and Wildlife retains all law enforcement authority until the wolf is removed from the endangered species list.

In 1995 and 1996, the Fish and Wildlife Service reintroduced 35 wolves into central Idaho under the 10(j) rule. Since then, their numbers have increased steadily at about 20 percent per year, and by the end of 2006 they had grown to more than 600 wolves, with 41 verified breeding pairs and 70 documented packs well distributed throughout Idaho. But as long as wolves remain on the endangered species list, hunting will remain prohibited. Once removed from the list, Fish and Game would manage wolf numbers as black bears and mountain lions are.

Since taking over management of wolf control, Fish and Game authorized the lethal control of 35 wolves that were involved in conflicts with livestock.

Escaped Elk

Between 75 and 160 domestic elk escaped from a shooter-bull operation in eastern Idaho near Yellowstone Park in early August.

The Idaho Department of Agriculture regulates domestic elk operations in Idaho.

On September 7, about a month after the escape, Idaho Governor Jim Risch issued an executive order authorizing the state departments of Agriculture and Fish and Game to try to kill the escaped domestic elk. Veterinarians from both agencies sampled the killed animals for disease and genetics.

Samples are being processed at laboratories in Idaho, Washington, Iowa and Saskatchewan, Canada. So far, test results from the first 12 escaped domestic elk killed by state officials show no serious diseases. Testing continues.

The elk were marked with small metal ear tags about three-eighths of an inch wide and 1 1/2 inches long, not easily visible from 150 feet, as required by state law.

Wildlife officials in Idaho, Wyoming and Yellowstone National Park were concerned about the potential spread of diseases and genetic interchange.

As of early December, officials from Fish and Game and the state Department of Agriculture, and landowners and hunters had shot a total of 43 escaped domestic elk. In addition, 61 have been rounded up and are being held in a pen under quarantine by the Department of Agriculture. Officials are unsure how many domestic elk may still be on the loose.

This incident, combined with two proposals to lease state endowment lands for domestic elk hunting, has generated significant attention and rallied sportsmen to become more engaged politically. It is anticipated several bills, ranging from imposing stricter regulations to complete bans on domestic elk farming, will be introduced in the next session of the legislature.

Mule Deer Initiative

Achieving the goals of Idaho's Mule Deer Initiative (MDI) wouldn't be possible for Fish and Game without the help of some very important partners—teenagers. For the past few years, students from area high schools in the southern, southeastern, and Upper Snake regions of Idaho have been donating numerous hours to improve habitat for mule deer.

This past March, high school students from the Magic Valley area began working with Fish and Game biologists to plant bitterbrush and other native shrubs in wintering areas crucial to mule deer. The initial effort actually started last fall when students from eleven Magic Valley high schools along with students from College of Southern Idaho (CSI) potted thousands of small bitterbrush plants in greenhouses. Through the winter months, a total of 8,000 bitter brush plants were raised by high school and CSI green-thumbs until they achieved one-gallon size and were ready to go in the ground.

This past spring, those hand-reared plants, along with 32,000 other bitter brush, 2,000 mountain mahogany, 2,000 four-winged salt bush, and 2,500 silver sage, were placed in the ground in the Magic Valley area by Fish and Game staff, students, various youth groups, volunteers, Fish and Game reservists, and sportsmen's groups like Deer Hunters of Idaho and Mule Deer Foundation.

Mule Deer Hunter Survey

In 1986, the Department contracted with the University of Idaho to survey the views of deer hunters before developing a new State Deer Management Plan. Results indicated deer hunters hunted for a variety of reasons and they had differing opinions relative to the types of deer (e.g. antlerless, small-antlered, or large antlered) and hunting opportunity they desired. Current mule deer management goals and allocation of hunting opportunity are largely based on results of the 1987 survey.

This year the Department initiated an effort to reassess mule deer hunters' attitudes and preferences. Working with the Commission and key stakeholders, the Department developed a list of information needs and contracted with the University of Idaho to conduct the survey. The survey will be implemented this winter. Results of the survey will be used to develop new management goals and reallocate mule deer hunting

opportunity. A major focus of the current survey effort will help identify what restrictions hunters are willing to accept in exchange for different management goals.

Deer and Elk Population Monitoring

A team of wildlife biologists was formed to critically review the current deer and elk population monitoring protocols. Increasing costs of helicopter rentals and stable revenues provided partial impetus for the effort. Additionally, the WAFWA-sponsored workshop on data collection, analysis, and dissemination also contributed to the need for a review.

The team is developing statewide aerial survey schedules, allocating survey dollars, developing sampling strategies, developing training materials, and identifying observer standards. Ultimately, the goal is to implement procedures resulting in better population information at a reduced cost.

Fighting Brucellosis in Elk

Since 1998, Fish and Game has been trapping, testing and culling elk that test positive for brucellosis. The disease became an issue when Idaho lost its brucellosis-free status for livestock earlier this year.

Brucellosis can be transmitted between domestic livestock, elk and bison and is a concern in eastern Idaho, western Wyoming and southwestern Montana. The disease in domestic cattle, elk and bison causes abortions and other problems. In humans it causes undulant fever with chronic recurrent flu-like symptoms – one of the reasons milk is pasteurized.

The disease was confirmed in a second Idaho livestock herd near Arco late last year. State officials found brucellosis in a herd in Swan Valley in October. The disease has been all but wiped out in most of the rest of the country except in the Greater Yellowstone Ecosystem and in western Wyoming elk herds that are fed in the winter.

Idaho Fish and Game worked with the Idaho Cattle Association, Idaho Farm Bureau, US Department of Agriculture and the state Department of Agriculture to develop a wildlife brucellosis plan acceptable to all to help Idaho regain its brucellosis-free status. This plan will use a number of management tools, but one tool will be

increased hunter opportunity to manage brucellosis risk in eastern Idaho elk. State officials are increasing efforts to fence haystacks and feedlots to keep any potentially infected elk away from the hay and separate from livestock; also, habitat improvements to encourage elk to disperse.

Brucellosis is more prevalent in fed animals because feeding areas concentrate elk, spreading the infectious disease. Idaho will work to eliminate any feeding of elk in eastern Idaho except in winter emergencies. But as long as Wyoming's widespread elk-feeding program continues, infected elk are likely to wander into Idaho. The key to preventing the spread of brucellosis from elk to livestock is to keep them apart.

Furbearers/Trapping

Idaho Fish and Game has nearly completed the development of a public trapper education program based upon the Association of Fish and Wildlife Agencies trapper education model. A pilot class will be conducted in 2007.

The first furbearer trapping workshop for Department employees was conducted in October 2006. The goal of the workshop was to broaden Department employee's knowledge and understanding of trapping and enhance employee's ability to communicate to the public and trappers about trapping. The classroom and in-the-field workshop included; regulations, trapping techniques and equipment, trapper associations, dispatching and skinning. Future workshops will be conducted in 2007. Wildlife Services employees and local trappers were instructors for the workshop.

Landowner Incentive Program

Idaho was successful in competing for the Landowner Incentive Program (LIP) Tier 2 awards in fiscal year 2007.

Fish and Game has used Tier 1 infrastructure money for four years to support statewide personnel in providing technical assistance to private landowners. Costs are shared with Soil and Water Conservation Districts, the NRCS for Farm Bill Coordinators, and Regional Land Trusts.

These biologists interact with landowners and help them with conservation and restoration project design to benefit LIP species of concern, with identifying financial

partners, and to point landowners to other agencies that will be of assistance. This is close to “one stop shopping” for private landowners.

For the 2007 Tier 2 funds, Idaho has identified three focus areas: the Bear River drainage, the Upper Henrys Fork and the Palouse. These areas have previously been identified as priority areas by USFWS Partners for Wildlife and West Joint Ventures. Focusing these conservation dollars in areas identified as priorities by other conservation groups is valuable in identifying projects and willing landowners. A portion of the 2008 LIP Tier 1 funds will be identified for small and important projects which may not fall within 2007 focus areas.

Farm Bill Coordination, Habitat Program

Three Department employees work in Natural Resource Conservation Service offices as Technical Service Providers (TSPs) implementing Farm Bill conservation programs. 8,000 acres were improved as wildlife and fish habitat in 2006. TSPs are also assisting landowners applying to the Idaho Landowner Incentives Program (LIP).

TSPs are assisting private landowners enrolling in Idaho’s CREP. The CREP will retire up to 100,000 acres of irrigated cropland. CREP lands are being planted to conservation cover of native grasses, forbs and shrubs benefiting many wildlife species including sage grouse. The Department received a \$100,000 grant from Idaho Office of Species Conservation to provide private landowner incentives to include sagebrush in conservation cover plantings on retired agricultural lands near sage grouse habitat.

The Pheasant and Quail Initiative provides technical and financial assistance to private landowners in north-central and southwest Idaho interested in improving upland game bird habitat. Approximately 5,000 acres were improved in 2006.

Assistance was provided to the AFWA Farm Bill 2007 reauthorization committee commenting and reviewing white papers. Deputy Director Mansfield testified on Farm Bill programs at a Senate Forestry, Conservation and Rural Revitalization subcommittee hearing conducted in Idaho. Testimony included comments and recommendations for the TSP program, CRP, Fish Habitat, and Open Fields.

Sage-Grouse

The Conservation Plan for the Greater Sage-Grouse in Idaho was signed by the governor, agencies, and cooperators in July 2006. It was produced in cooperation with state and federal agencies, American Indian tribes, private individuals, industry and conservation groups, and representatives from Sage-Grouse Local Working Groups.

The new state plan is specifically designed to support local working groups in development of their plans and to promote the successful conservation of sage-grouse and their habitats across Idaho. For the past decade, Fish and Game has worked to improve sage-grouse management, coordinating with agencies, landowners, hunters, non-governmental groups, and others to develop local solutions conserving sage-grouse populations and habitats in Idaho.

The plan includes:

- Guidance for local working groups.
- Background information and resources regarding sage-grouse and sagebrush ecology.
- A summary of the status of sage-grouse populations and habitat in Idaho.
- Identification, discussion, and a statewide prioritization of 19 threats to sage-grouse and their habitats.
- A toolbox of conservation measures to address each of those threats.
- Research, monitoring and evaluation guidelines and recommendations.
- All completed Local Working Group Plans.

In August 2006, West Nile virus began affecting sage-grouse in southwestern Idaho. Overall, about 15 sage-grouse were documented to have died from the disease and there were other suspected mortalities. As a precaution, the 2006 sage-grouse hunting season was closed in this part of the state. Lek monitoring and other work in 2007 should help determine the overall impact of this disease outbreak and the need for continued hunting restrictions.

Idaho Bird Inventory and Survey (IBIS)

The Idaho Bird Inventory and Survey (IBIS) is a program designed to monitor all birds (waterbirds, shorebirds, waterfowl, and landbirds) throughout Idaho in a coordinated, standardized manner. IBIS is organized such that monitoring efforts can be effectively “rolled-up” to broader regional scales as neighboring states develop similar programs. Version 2.0 of the IBIS written plan is near completion, and includes a discussion of ongoing monitoring efforts, identification of nine high priority management issues on which to focus monitoring activities, and detailed survey protocols.

Phase I of the IBIS program emphasizes monitoring of aquatic species and habitats. To begin monitoring these species, we initiated aquatic bird monitoring at 30 wetlands throughout Idaho with a pilot effort in 2004, and expanded programs in 2005 and 2006. Monitoring efforts included general aquatic bird counts, marsh bird playback surveys, and colonial waterbird counts.

The 2006 IBIS surveys provided information for 57 species by latilong distribution updates throughout the southern half of the state. In addition, 24 of the 25 aquatic birds identified as priority species (i.e., Species of Greatest Conservation Need) in Idaho’s Comprehensive Wildlife Conservation Strategy (CWCS) were detected during IBIS surveys. Initial results therefore suggest that IBIS provides an immediate and effective tool with which to implement the bird monitoring components of the CWCS.

Idaho Important Bird Areas (IBAs)

Idaho’s Important Bird Areas (IBA) Program continued to grow in 2006. Several nominations were received, reviewed by the IBA technical committee, and officially accepted into the IBA program.

Examples include Sterling WMA, South Hills, and Upper Lochsa River. The IBA Program is now focusing on implementing the next phase of the IBA program – bird monitoring. As a result, monitoring has been initiated at 28 wetland IBAs, with more sites likely to be added in the near future. To promote stewardship and involvement of local communities in bird monitoring and conservation, an *Adopt-an-IBA* program was launched in 2006. Publicity for Idaho’s IBA program also received a boost in 2006.

All IBAs are now available for online viewing on the National Audubon Society website (<http://www.audubon.org/bird/iba/>) and further information on the Idaho IBA program is available on the IDFG website (<http://fishandgame.idaho.gov/cms/wildlife/nongame/birds/iba.cfm>). Also available on the IDFG website is a new newsletter, *Idaho IBA News*, created to serve as a forum for biologists and the concerned public to communicate about Idaho's IBAs.

Pygmy Rabbits

Over the past four years, Fish and Game has entered into several BLM Challenge Cost Share projects and funded University of Idaho faculty and graduate students with State Wildlife Grants to better determine the occurrence, distribution, ecology, and conservation status of pygmy rabbits in Idaho.

An initial habitat model was developed to prioritize habitats in which to conduct pygmy rabbit surveys. Results (detection vs. no detection of pygmy rabbits and various habitat variables) from ground-based surveys continually refined the model. Prioritizing habitat for surveys of an uncommon mammal: a modeling approach applied to pygmy rabbits. This model identified a large contiguous area of habitat in central Idaho (BLM Challis Field Office) as a focus area for additional surveys. Surveys by Fish and Game nongame staff in the summer of 2006 documented 269 positive pygmy rabbit detections, a four-fold increase in known point locations for this species in the Challis Field Office area. Negative detections were documented at 72 survey sites identified as predicted habitat.

A winter aerial survey technique for detecting pygmy rabbit presence has also been developed to provide a tool for biologists to more completely define distribution of this species, especially in northern areas of the species' range that are remote or difficult to access on the ground.

Administration

PCards Cut Labor

The Administration Bureau implemented PCard department-wide this year. Annual transactions by PCard are estimated at 15,000 for about \$2 million. This has reduced the

number of invoices processed by Accounts Payable by about 30 percent and the result is a staff reduction of two part-time positions.

Fleet Reduced

Administration continued progress on Fleet Operations and prepared a management report on results to date. Department vehicle count was reduced by an additional 31 units and the replacement cycle for off-road vehicles was extended as a result of using data provided by Fleet System. Operating costs for standard Department trucks are less than the state personal mileage reimbursement rate.

New License Sales System

Administration is gearing up for the installation of a new automated license system and will train all vendors in its operation. The process of enhancing and refining the system will begin after initial roll-out in the spring.

Natural Resources Policy

The Governor of Idaho, James Risch, submitted a petition to the Secretary of Agriculture outlining management of Idaho's 9.3 million acres of roadless areas on National Forest lands.

The petition was presented to the Roadless Area Conservation National Advisory Committee on November 29. The committee gave the petition a unanimous do pass recommendation to the Secretary to instruct the U.S. Forest Service to begin the process of rule making for roadless area management in Idaho. The petition was the product of a nearly two year effort involving a broad spectrum of Idaho citizens, interest groups and stakeholders. Fish and Game participated in the process by providing information on fish and wildlife resources and associated recreation on the 275 inventoried roadless areas in Idaho. The department also assisted by preparing the wildlife section of the petition. The management scenario described in the petition will provide for long-term conservation of fish, wildlife and associated recreation on the largest acreage of roadless national forest land in the lower 48 states

Public Outreach-Communications

“Fast Food”

A new two-credit Project WILD workshop titled “Fast Food in a Wild World” was filled to capacity with 30 Idaho teachers this summer. The workshop deals with predator-prey relationships in a manner that teachers can convey biology to students in an attention-grabbing way. Among other materials, the Communications Bureau video “Fast Food” is available to support the teaching effort.

“Place”

Communications developed two DVDs dealing with lands issues. “A Sense of Place” was created to support Fish and Game’s Lands Legacy effort, a long-term program aimed at securing the future of wildlife habitat in Idaho. The DVD is appropriate for general audiences and for opening organized discussions of changing western land uses. Copies have been made available to regional offices for showings throughout Idaho.

In cooperation with Idaho’s Rangeland Resources Commission (an industry-supported quasi-public commission), the Communications Bureau created a DVD titled “Care and Share”. The DVD explains the desire to rangeland operators to continue to share the use of lands with recreational users while demonstrating in detail the responsibilities those users bear when they enjoy rangelands.

Family Fishing Waters Brochures

Idaho Department of Fish and Game has 92 designated Family Fishing Waters scattered around the state in its eight management areas. Fishing rules in these waters are standardized and simplified to attract the occasional family anglers. To make it easier for these anglers to locate the waters, the Department has created eight regional brochures during 2006. These brochures include area maps with number dots for individual waters. These numbers correspond to detailed driving directions to individual waters.

The brochures all have similar covers using the pictures from the “take me fishing” campaign. Along with information on finding the waters, the brochures provide information regarding available facilities at each site such as fishing docks, toilets and camping. Standard icons are used to identify fish species likely to be caught. All

brochures have some simple fishing tips on gear to use, fishing techniques and how to handle fish for release or how to keep fish fresh when harvested.

The fishing rules for waters designated as Family Fishing Waters are: Year-round seasons, a general fish limit of six trout and six bass and no limits on other species, no length restrictions and any standard sport fishing gear may be used.

Fires and Hunters

The Communications Bureau was in for a hot time when Idaho's massive 2006 forest fires continued into early big game hunting seasons with the attendant area and road closures. The bureau worked closely with U.S. Forest Service information officers and Critical Incident Commanders to keep the hunting public in touch with fast-changing fire conditions. This working relationship paid off in comparison with previous fire situations by reducing calls to an already maxed-out Forest Service information crew and tamping down hunter anxiety. Daily updates of fire maps allowed Fish and Game customer service reps to provide accurate, detailed information to individual hunters while maps and information were refreshed constantly on the department web site. Major fires affected three national forests in the state during late summer and early fall. The bureau and Forest Service information personnel have agreed to collaborate on a long-term effort to explain impacts of big fires on lands and wildlife in Idaho.

Domestic Elk

The bureau fielded scores of calls through late summer and fall from media representatives interested in the escape of domestic elk from an eastern Idaho elk ranch. The incident led to articles in newspapers from the Los Angeles Times to the Chicago Tribune and New York Times. Many regional papers as well as television and radio stations pursued the story. The public offered dozens of comments and questions that required responses through the department web site email system.

**Western Association of Fish and Wildlife Agencies
Kansas Report, December 2006**

Legislation Prohibits Sport Hunting of Feral Hogs

Legislation passed during the 2006 Kansas session was aimed at preventing persons from releasing feral swine in Kansas for sporthunting purposes. In recent years, populations of feral swine have been identified in several Kansas counties. Attempts to exterminate the populations have been only moderately successful. The new Department of Animal Health statute states that "no person shall engage in, sponsor, instigate, assist, or profit from the release, killing, wounding or attempted killing or wounding of feral swine for the purpose of sport, pleasure, amusement, or production of a trophy"; and "owners or legal occupants of land, the employees of such owners or legal occupants or persons designated by such owners or legal occupants may kill any feral swine when found on their premises or when destroying property. Such designees shall have a permit issued by the livestock commissioner in their possession at the time of the killing of the feral swine."

Kansas State Park Cabins Added

The Kansas Department of Wildlife and Parks continues to add new cabins to its state park system. The cabins feature all the comforts of home while providing immediate access to the variety of outdoor recreation available at parks and lakes across the state.

These cabins feature amenities such as full bathroom with a shower; kitchen with microwave, refrigerator, and a cook-top stove; beds for as many as nine people; screened-in porch; fire ring; and barbecue grill. Heating and air conditioning, table and chairs, basic pots and pans, and table service for four are also offered at many cabins. Some are handicapped accessible.

State parks that currently offer cabin rental include Cedar Bluff, Cheney, Cross Timbers, El Dorado, Eisenhower, Lovewell, Milford, Perry, Prairie Dog, Tuttle Creek, Webster, and Wilson. Cabins are in high demand, so renters are encouraged to call well in advance of a planned trip to make sure a cabin is available.

Stream Surveys Continue

The Kansas Department of Wildlife and Parks' Environmental Services Section (ESS) continues to survey Kansas streams each summer with stream survey crews. The stream survey program was created in the mid-1990s to monitor aquatic life in streams throughout the state. In the past 11 years, more than one million fish have been surveyed or collected. The crews have also created an extensive database on the quality of habitat and density of insects, fish, mussels, and basic water chemistry in Kansas streams.

This past summer, two stream survey crews worked the rivers and streams in Kansas. A statewide crew surveyed various locations throughout the state. Another crew surveyed streams in the eastern quarter of the state, primarily the Marais des Cygnes and Missouri river basins. Each team is comprised of a leader and four temporary fisheries technicians -- college students working toward degrees in biology or environmental sciences.

Information gleaned from stream monitoring is available to anyone. Private consulting firms, other state agencies, landowners, and federal agencies such as the U.S. Fish and Wildlife Service use this information. The information is also an invaluable student research tool.

Bird Flu Testing Complete

In cooperation with other state and federal agencies, universities, and non-governmental organizations Kansas biologists tested wild birds for H5N1 this past summer and fall. Seven hundred and fifty samples were collected from shorebirds, ducks, geese, and sandhill cranes.

Ruling Favors Residents

U.S. Senior District Judge Wesley E. Brown, Wichita, has issued a summary judgment order in favor of defendant Mike Hayden, in his official capacity as secretary of the Kansas Department of Wildlife and Parks. Summary judgment is a legal term which means that a court -- in this case the judge applying facts presented by both plaintiff and defendant -- has made a legal determination without a full trial.

The order stemmed from a lawsuit filed by George Taulman, a New Mexico resident who owns two ranches in western Kansas. As a nonresident landowner, Taulman is not allowed to obtain a special transferable Hunt-Own-Land deer permit. In addition, because his land is in turkey management Unit 4 and he is a nonresident, he is ineligible for the limited number of turkey permits reserved for the resident-only drawing in that unit.

Taulman argued that as a nonresident landowner, he should have equal access to wildlife on his land as resident landowners do on their land. This would allow him -- and all other nonresident landowners -- to apply for turkey permits in Unit 4, as well as obtain a special transferable Hunt-Own-Land deer permit -- which allows the taking of mule deer or white-tailed deer in any season with equipment legal for that season -- and then transfer that deer permit to a lineal or collateral relative.

Taulman argued that Kansas laws and regulations regarding nonresident landowners and hunting violated the "Privileges and Immunities Clause" of the U.S. Constitution, which states that "Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States."

After analyzing all the facts and legal citations presented by both parties, however, the court found that previous rulings on this clause have determined that "not every state law which discriminates against nonresidents runs afoul of the Privileges and Immunities Clause." Specifically, such discrimination would have to threaten the "basic . . . maintenance or well-being of the Union." One example cited was a case in which a state law threatened a nonresident's commercial livelihood. Kansas law in this case in no way threatens the livelihood of Taulman, the court ruled.

"This case is important for Kansas hunters because it reaffirms the longstanding notion that it is the prerogative of the Kansas Legislature and the Department of Wildlife and Parks [KDWP] to enact laws and regulations that benefit or give preference to resident hunters over nonresident hunters," said KDWP chief legal counsel Chris Tymeson.

Website Adds Map Function

As the Kansas Department of Wildlife and Parks' (KDWP) website continues to grow and evolve, new ways of providing information are being added. Perhaps one of the most fascinating portals is the "Map" icon. By clicking this, the reader is taken to a conventional map of the state park or wildlife area. Icons on the map show the location of primitive and modern campsites, the park office, playgrounds, shelters, cabins, parking areas and other features of the site.

Best of all, the map may be viewed in three formats: conventional ("map"), satellite, and hybrid. The conventional map is like one would see in a brochure of the area, with highways, service icons, the lake, and county roads. The satellite image is a photographic view of the area from high altitude. The hybrid image is the same as the satellite image except that major highways are superimposed on the photograph.

All formats retain the service icons, and viewers may zoom in or out to gain a desired view of the area. In addition, viewers may "grab" the image by holding down on their computer mouse and move the image in the view box, offering a glimpse the area for several miles around the park.

Ground Broken For Wetlands Education Center

On October 27, Kansas Governor Kathleen Sebelius participated in the ground-breaking ceremony for the Kansas Wetlands Education Center near Great Bend. The education center is being established to showcase the acclaimed Cheyenne Bottoms Wildlife Area, as well as other wetlands in Kansas. The center, which will be operated by the Kansas Department of Wildlife and Parks and Fort Hays State University, is the result of a partnership that includes a variety of local organizations and volunteers.

Kansas Buffalo Stricken

The Kansas Department of Wildlife and Parks cancelled its 2006 buffalo auction at the Maxwell Wildlife Refuge, due to a *Mycoplasma bovis*-induced pneumonia and arthritis in some buffalo. *Mycoplasma bovis* is a major but often overlooked pathogen that causes respiratory disease, arthritis, and mastitis in cattle. When it was first isolated in the U.S. in the 1960s, it seemed to occur infrequently, but now the infection has become more widespread in cattle herds.

The 2,250-acre Maxwell Refuge is located 6 miles north of Canton in McPherson County. KDWP maintains a fenced-in display herd of about 200 buffalo at the refuge, and surplus animals are sold at auction annually. KDWP began an intensive vaccination program in order to eliminate the disease in the herd, however by the end of November, nearly one third of the animals in the Maxwell herd had died.

KDWP maintains a separate herd of buffalo at the Sand Sage Bison Range near Garden City, and no animals in that herd have been affected. Surplus animals from the department's herd at the Sand Sage Bison Range are usually sold at the annual auction at the Maxwell Refuge, but this year they will be sold on December 2 at the Kansas Buffalo Association's auction in Salina.

Blue Catfish Stocked

In recent years, the Kansas Department of Wildlife and Parks (KDWP) has embarked on a project to stock blue catfish in many of the state's lakes. Blue catfish grow very large (the state record is 94 pounds), provide excellent table fare, and have the added benefit of browsing on zebra mussels, an aquatic nuisance species that is present in El Dorado Reservoir.

In 2003 and 2004, KDWP received blue catfish fry from the Arkansas Game and Fish Commission (AGFC) and stocked those fish directly into ponds at the Farlington Fish Hatchery. Unfortunately, only about 10 percent of those blue cats grew from fry to fingerling.

In hopes of improving those returns, Farlington staff changed their approach. They decided to hold the blue cat fry in the fish house for a week, hoping that they would have the chance to grow bigger and stronger, increasing their chances of survival.

In 2006, the hatchery received 157,330 blue cat fry from AGFC and 62,082 fry from Osage Catfisheries, a private hatchery in Missouri. The fish from Arkansas came in two groups about one week apart. Each of the three groups of fry was held in Farlington's fish house for one week. While in the fish house, the fish grew from approximately 11,000-14,000 fish per pound to 4,000-6,000 fish per pound. After a week, each group was stocked in a separate pond, where they would be grown to fingerling size or larger. Fish were stocked in ponds in early- to mid-June and harvested in mid-October. From the total of 219,412 fry stocked into ponds, 154,406 fish were harvested weighing a total of 11,717 pounds.

Watermilfoil Discovered

The recent discovery of Eurasian watermilfoil in eastern Kansas has biologists concerned. The aquatic plant has been found in Yates Center City Lake, in central Woodson County, and Lebo City Lake, in northwestern Coffey County. The plant forms dense mats on the surface of water, reproduces by fragments that can be transported by boaters, and forms a dense canopy that hinders recreational boating and fishing. In addition, the plant can grow 30 feet deep, shading out native vegetation and reducing oxygen levels during decomposition.

Eurasian watermilfoil joins other aquatic nuisance species, including zebra mussels, white perch and several species of Asian carp in Kansas. Zebra mussels were found in El Dorado Reservoir in 2004, and department has conducted an aggressive education and awareness campaign about the dangers of these nuisance species.

Caging Standards Established

The Kansas Wildlife and Parks Commission has approved minimum standards for caging of certain captive animals, as well as training requirements for handlers of those animals.

At its Oct. 26 public hearing in Chanute, the Commission approved a regulation establishing caging requirements and minimum standards for persons who possess lions, tigers, mountain lions, jaguars, cheetahs, leopards, bears, and non-native venomous snakes. The regulation requires containment facilities that do not allow physical contact with the animal by any person other than the owner, designated handler, or veterinarian providing treatment to the animal. The regulation also prescribes cage dimensions,

fencing and containment facility standards, animal medical records maintenance and accessibility, and other requirements for possession of the animals.

Commissioners approved a related regulation, which defines minimum requirements and training standards for designated animal handlers. The regulation requires that handlers be a minimum of 18 years old, with 200 hours of experience in the care of dangerous regulated animals.

The regulations are the result of a law (Senate Bill 578) passed by the 2006 Kansas Legislature.

Legislature Helps Kansas State Parks

The cost of visiting Kansas state parks is going down in 2007. In a public hearing in Chanute Oct. 26, the Kansas Wildlife and Parks Commission approved changes in state park vehicle entrance fees, effective Jan. 1, 2007. The fee changes were made possible by the 2006 Kansas Legislature's decision to provide enhanced funding support for state parks in 2007. Historically, Kansas state parks have been funded by a combination of user fees and state income tax funds. However, in recent years Kansas state park fees had been increased to accommodate declining appropriations from the State General Fund. The 2006 legislature's action reversed that trend, at least for calendar year 2007. As a result, state park visitors in 2007 will enjoy vehicle entrance fees that are roughly half the cost of fees in 2006.

The Parks Division of the Kansas Department of Wildlife and Parks operates a system of 24 parks and the Prairie Spirit Rail-Trail. Most state parks provide utility and primitive camping, and are located adjacent to lakes or reservoirs. In addition to camping facilities, parks offer boat ramps, courtesy docks, shelterhouses, swimming beaches, trails, and a variety of other amenities. Parks also host numerous special events, such as concerts and festivals, throughout the year.

Kansas Wildlife and Parks Commission Permits Sold

Last January more than 50 state chapters of non-profit conservation/hunting/fishing/wildlife organizations vied for seven Commissioner Big Game Permits. One elk permit, one pronghorn permit and five deer permits were available through a lottery draw.

The Wichita Chapter of the Rocky Mountain Elk Foundation was drawn first and they selected the one elk permit available. The other six winners chose deer permits. The groups can sell or raffle the permit, and are required to return 85 percent of the proceeds to department-sponsored programs. The other 15 percent stays with the organization.

The RMEF's elk permit was auctioned for \$23,000. Another RMEF chapter drew a deer permit, which sold for \$7,000. Three chapters of the Friends of the NRA drew deer permits, which sold for \$3,500 each. A Ducks Unlimited chapter sold its deer permit for \$2,500. A Quail Forever chapter drew the final deer permit, but it had not sold as of this writing.

The Wildlife and Parks Commission will draw seven more lucky winners at its January 2007 meeting. Organizations are not eligible to receive more than one permit in a three-year period.

Nebraska Game and Parks Commission 2006 Semi Annual Report to the WAFWA

Funding Issues

Perhaps the most important issue facing the Nebraska Game and Parks Commission is the uncertainty of our long term funding. Recent internal cost saving measures have provided temporary solutions but a larger effort is developing around the need for a more sustainable budget situation. Many agency programs are judged to be at minimum operating efficiency which brings up the issue of prioritization of the NGPC 2005 Strategic Plan in order to assist decisions regarding the future of individual programs. Commission employment numbers have changed little over the past 40 years thus the need to reprioritize and thus provide funds for only high priority programs and projects.

Over the past eight years the NGPC has experienced a loss of over 57,000 anglers and 25,000 hunters, (roughly 20%) which has resulted in not only the decrease in revenue from permit sales but the larger loss attributed to the reduction in reimbursement from Sport Fish and Wildlife Restoration funds from the federal government. Many factors are thought to be influencing this situation which is somewhat similar to national trends only more severe. Our Parks Division is also faced with a backlog of maintenance and repair projects which continue to worsen over time.

Numerous additional funding sources have been exploited and many agency programs are utilizing grant funds and partnership approaches to accomplishing their work. The NGPC has developed a marketing plan to help with recruitment and retention. New permit scenarios have been developed in an effort to make participation in hunting and fishing more attractive and more convenient while being revenue positive. More needs to be done to sustain outdoor recreation in our state. State tax dollars are not seen as a viable solution consequently new sources of income are being explored, such as a dedicated percentage of sales or income tax. Our survey work indicates such a concept as a new tax to support recreational and environmental interests has favorable public support but faces considerable political opposition.

2007 Outdoor Expo

The Nebraska Game and Parks Commission is planning its first annual outdoor exposition, called Nebraska outdoors: Expo 2007, in partnership with Cabela's, Inc., May 11-12 at the Kearney, Neb., FirstTier Kearney Event Center.

The Expo will include 45 activities conducted by Commission staff, representing nearly every aspect of the agency's operations, plus exhibits and demonstrations by various outdoor interest groups and companies. It will include a half-day devoted exclusively to Nebraska school children and the remainder to the general public. Admission is free.

Natural-Resource Amenities and Nebraska's Economy

Once it became apparent that the drought was going to persist for several years, many Nebraskans began wondering if the state was making wise use of its water. A number of state agencies, non-governmental organizations and representatives of political leaders thought it was important to develop a better understanding of how water and other natural resources contribute to Nebraska's economy. On October 21, 2005, *ECONorthwest*, an economic consulting firm based in Eugene, Oregon began a study, coordinated by the Nebraska Game and Parks Commission, to assess the connections between natural-resource amenities and Nebraska's economy, explain the challenges we face, and describe our possibilities.

Study findings were released on September 20, 2006 and are contained in a 119-page document that is available online from www.outdoornebraska.com. The study concluded that Nebraska does have natural resources potentially capable of generating amenity-driven growth, creating

jobs, incomes, and community stability (but with few exceptions, we don't take advantage of them).

Natural resources amenities could spur economic growth in Nebraska by: 1) expanding recreational use of natural resources; 2) providing jobs for farm and ranch families; 3) protecting environmental values and taking action to reduce ecological risks that can lead to costly repairs; and 4) improving the quality of life to keep and attract individuals with entrepreneurial capabilities who can create jobs for others. Using natural resources to produce amenities could thus help us deal with the problems of rural flight, brain drain, insecure farm earnings, stagnant resource-related industries and deficit agricultural production.

To realize its potential for amenity-driven growth, Nebraska will first have to overcome three challenges: 1) a prevailing attitude that land and water are economically important only when they are used as inputs to the production of commodities—crops, livestock, and electricity, or when they absorb pollutants; 2) perceptions that natural resources in Nebraska are degraded; and 3) 97% of Nebraska is privately owned and typically managed for purposes other than providing the public with amenities. Conquering these challenges is now the primary focus of the study's sponsors; progress is slowly being made in all three areas.

2007 Legislation

Removing barriers to participation in hunting and fishing is the center piece of the legislative effort for 2007. A coalition of supporters has been organized and several bills have been drafted for introduction. Also, new hunting and fishing permit scenarios have been included in this legislation in an effort to continue marketing user friendly licenses, some at discounted fees, created to recruit and retain hunters and anglers.

Cougar Management

Several sightings of Mountain Lions were confirmed in Nebraska during 2006. One cougar entered the City limits of Scottsbluff, NE and was terminated by Conservation Officers. Most occurrences of Mountain Lions in Nebraska are rural sightings which are confirmed using protocol detailed in our Mountain Lion Management Plan. The Mountain Lion is a Game animal in Nebraska but no hunting season currently exists for this species. NGPC continues to monitor population levels and staff discussion occasionally mentions the possible future need for a season.

Chronic Wasting Disease moves East

Three new cases of CWD were detected in Cherry County Nebraska which represent new instances of occurrence in this large remote County of North Central Nebraska. CWD has been described as a slow moving epidemic which is proving to be the case for Nebraska despite efforts to contain the disease in the current known areas of occurrence, those being the Northwest and Western Panhandle of the state. No additional deer or elk herd control efforts were undertaken this year except for the continuing increased use of annual hunting pressure through the availability of permits.

Instream Flow water rights sought

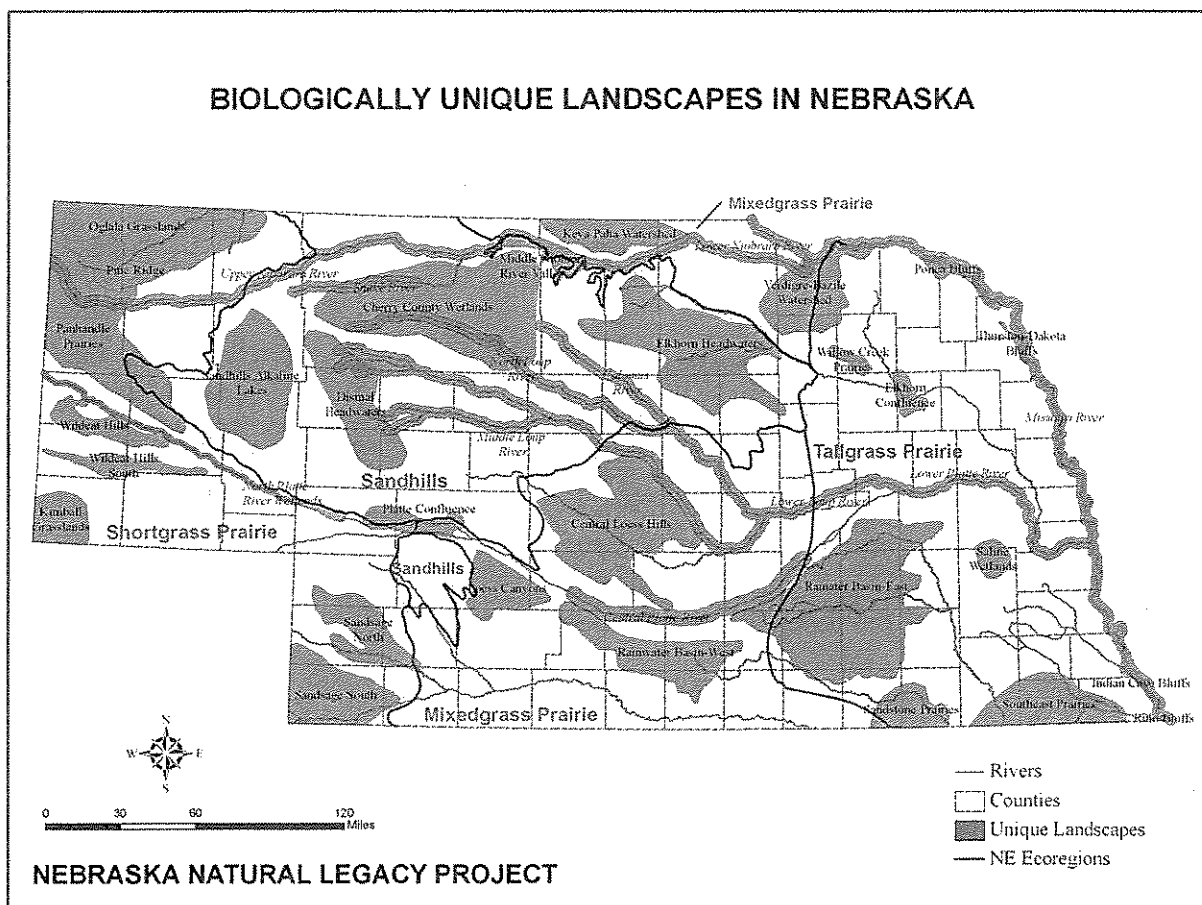
NGPC currently has in effect two Instream Flow water rights. One on Long Pine Creek and the other on the Platte River. A new effort to secure an Instream Flow water right on the Niobrara River has been approved by our Board of Commissioners. The process to acquire a water right on the Niobrara River is expected to take two to three years and cost at least half a million dollars. Base line data gathering followed by the application and the formal hearing process will eventually end with a successful undertaking to protect river flows on this river which is nationally designated as a Wild and Scenic River by the National Park Service.

New Missouri River organization

The Missouri River Basin Association(MRBA) has reformed into the Missouri River Association of States and Tribes(MoRAST). This newly reformed group includes the original seven state Water Resource Agency heads(except Missouri) along with the addition of the state Fish and Game Directors and the Missouri River basin Native American tribes. The Missouri River is a tremendous recreational resource for the state of Nebraska thus the addition of the Fish and Game Directors to this Association is a great opportunity for enhancing the river's outdoor recreation potential. Two thirds of Nebraska's population lives within 50 miles of the river consequently numerous benefits for hunting, fishing and water based recreation can be gained with proper management of the river. It has been a long standing goal of the NGPC to maximize the potential of the Missouri River for outdoor recreation and this new Association will enhance our chances of success.

Nebraska Natural Legacy Project—Wildlife Action Plan

Nebraska continues to move into the operational phase of the Nebraska Natural Legacy Project now that it has been approved by the Fish and Wildlife Service. NNLP identified 40 biologically unique landscapes (BULs) that either exhibit a high degree of biodiversity or a high degree of threat to various species. The BULs each have a list of needed management priorities associated with them. As a part of moving from a strategic process into one of changing the landscape, the Nebraska Game and Parks Commission is working with its many partners to establish focus areas across the state. Currently staff have been hired through partnerships in several of these areas and several more are either up-and-running under pre-existing partnerships or are slated for start-up in the near future. These efforts are being funded through a combination of sources that include (but are not limited to) State Wildlife Grants, Landowner Incentive Program funds, Nebraska Environmental Trust Funds and Non-game funds. A considerable amount of local match (both hard and soft) is also being used.



Farm Bill

Nebraska continues to be very involved in the development of the 2007 Farm Bill. We have a full time coordinator and several other staff who spend a significant amount of time on this most important issue.

NGPC led the effort to establish a broad coalition of agricultural, conservation and environmental groups on issues related to the Farm Bill. The *Nebraska Farm Bill Working Group* developed a set of common recommendations for the development of the bill. This group was broad in ideological scope and the recommendations show great cohesiveness on many issues in the state.

Nebraska also has a staff member who was appointed to represent MAFWA on AFWA's Farm Bill Working Group. This group is hard at developing a common position on the Farm Bill for the States and other members of AFWA.

Nebraska is fortunate to have one Senator and one House member on the respective Congressional Agriculture Committees. Senator Ben Nelson (D) and Congressman Jeff Fortenberry will both help to craft the new bill. It is possible that our newest member, Congressman Adrian Smith, will also be appointed to the House Ag Committee.

New Mexico State Game Commission

WAFWA Significant Events Report

July – December 2006

State Game Commission News

- **Commission Ethics Workshop**

On September 28, 2006, State Game Commission members and upper-level Department managers participated in a half-day Ethics Training Workshop presented by the U.S. Fish and Wildlife Service's Management Assistance Team at the request of Commission Chairman Leo Sims. The workshop topics included comparisons of moral, legal, and ethical distinctions, considerations of personal ethics and board governance, and ethical dilemmas and problem solving. Activities concluded with an exercise on improving personal ethics and a group discussion on sustaining an ethical board.

Wildlife Management

- **Commission Establishes Trophy Wildlife Civil Penalties**

A bill passed by the 2006 state legislature and signed by Governor Richardson authorizes the State Game Commission to confer trophy status and appropriate monetary values upon certain game birds, mammals, and fish. The bill is intended to empower the Commission to establish civil penalties of sufficient amount to compensate public interests for the value of trophy animals removed illegally and to deter illegal taking for the purpose of selling trophies. On September 28, 2006 the State Game Commission adopted a regulation designating trophy wildlife and establishing civil penalties based upon physical measurements. Dependent upon specified Safari Club International scores, illegally taken deer, elk, bighorn sheep, oryx, and ibex may be valued from \$2,000 to \$10,000. Civil penalties for pronghorns and barbary sheep may reach \$8,000 and \$6,000, respectively. Wild turkeys with a 10-inch beard or 1-inch spurs are valued at \$500, and a 20 inch or longer trout carries a penalty of \$150. The regulations include a value for animals from which the head has been removed to acknowledge the implicit trophy value.

- **Governor Richardson Breaks Ground for New Hatchery**

On July 19, 2006 Governor Bill Richardson joined community leaders, hundreds of children, and Department officials in groundbreaking ceremonies for New Mexico's first warm water fish hatchery, an \$8 million project capable of producing 2 million fish per year. Built alongside the existing Rock Lake Hatchery at Santa Rosa, the new facility will be used to rear bass, walleye, catfish, tiger muskies, and perhaps some at-risk species for release in

waters statewide. The hatchery will include a Watershed Education and Training Center with exhibits, educational materials, and learning spaces to inform students, tourists, and other visitors about New Mexico's watersheds and aquatic resources. The first phase of construction is scheduled for completion in December 2006. Funding sources include \$2.5 million from the state Game Protection Fund, derived from hunting and fishing license revenues, \$900,000 in federal grants, and \$300,000 from the State's General Fund.

- **Cougar Management Strategy Evolves**

The Department's development of a Cougar Population Assessment and Harvest Management Matrix this year led to the establishment of a Total Sustainable Mortality estimate for each cougar zone in the state beginning in 2007. A portion of Total Sustainable Mortality is allocated to sport harvest limits and zones are closed to further hunting 72 hours after the sport harvest limit is attained. Hunters are now required to contact the Department 24 hours in advance to determine if the harvest limit has been reached for the zone in which they plan to hunt and to present their cougar pelt to a Department officer for tagging within 5 days of harvest. Hunters are also asked to present the cougar skull for collection of a premolar tooth for determining the age of the harvested animal. This strategy now examines all cougar harvest on public and private lands with respect to specific management objectives and demographic parameters for periodic regulations adjustment and need for population monitoring. Harvest regulations for elk and furbearers were established on similar resource foundations for the 2007 – 2008 seasons.

- **Bighorn Sheep Transplanted**

In just 2 days in August, Department biologists captured 25 Rocky Mountain bighorn sheep from the Wheeler Peak herd in northern New Mexico. Three ewes were taken by use of a dart gun and the remainder were caught by use of a drop net baited with salt. All 25 were successfully relocated to the Turkey Creek area near the Gila Wilderness in the southwestern portion of the state. In late October, Department staff captured 38 desert bighorn sheep at our Red Rocks propagation facility and released them in New Mexico's Big Hatchet Mountains.

- **Transportation Planning on National Forest System Lands**

On December 9, 2005 the U.S. Forest Service (USFS) issued a revised Rule for Designated Routes and Areas for Motor Vehicle Use for National Forest System lands. Referred to as the Travel Management Rule, its implementation will result in the designation of roads, trails and areas on National Forests and National Grasslands that will be open to motor vehicle use. Planning for implementation is currently being accomplished at the Forest and Ranger District levels and is heavily reliant upon local collaboration and decision making. The Department has previously provided input regarding off highway vehicle use to the Southwest Regional Office of the USFS, with emphasis on consistency in resource compatible use of such vehicles among hunters and other users of Forest System lands.

Department staff will continue to provide input to the USFS at regional, forest, and local levels.

- **Off-highway Vehicle Law Implemented**

Department conservation officers have been busy implementing new requirements to ensure the safe, responsible, and sensitive use of off-highway vehicles (OHVs) when operated on public lands. Implemented in January 2006, a new state law requires users of all-terrain vehicles, dirt bikes, and snowmobiles to register or acquire a permit for their OHV if it is used on public land. Fees are deposited into the Trail Safety Fund to be spent on law enforcement, promotion of safety, and providing OHV riding opportunities through a statewide system of dedicated trails. Provisions include noise and speed limits, use of U.S. Forest Service approved spark arrestors, and special safety equipment and supervision requirements for youngsters. The law also establishes an Off-Highway Vehicle Safety Board, comprised of agency and industry representatives, to establish and certify safety training, specify age appropriate OHV sizes and protective equipment, and review public input on trail locations. OHVs used exclusively for agricultural purposes or on private, closed courses are exempted. During this first year of implementation, conservation officers have been emphasizing information and education to familiarize OHV users with the new requirements. In support of their efforts, our Public Information and Outreach Division staff have developed and distributed flyers and provided information on the Department's website regarding the non-resident permitting and resident registration processes.

- **Illegal Outfitters Learn Wildlife Crime Doesn't Pay**

Operators of 2 outfitting companies have received what may be among the harshest sentences ever handed down in New Mexico for wildlife-related crimes. A partner in one unlicensed outfitting company has been convicted of racketeering and fraud and sentenced to 18 years in prison, with 9 years suspended, followed by 5 years probation. The complaint alleged the partners forged licenses and sold hunts for deer, elk, bear, mountain lions, bobcats and turkeys to numerous out-of-state hunters on eBay, over the telephone, and by mail and then failed to provide the hunts and services advertised. The lengthy investigation began in 2004 when 2 Minnesota hunters reported irregularities in their hunting licenses to a conservation officer. The other partner remains to be tried. In the other case, a husband-and-wife outfitting team pleaded guilty to 10 felony charges including racketeering, forgery, tax evasion, and embezzlement in selling counterfeit licenses for trophy elk hunts to out-of-state hunters. One partner received 5 years probation and agreed never again to act as a hunting guide or outfitter and to give up all hunting, fishing, and trapping privileges for 15 years in New Mexico and the 23 other states that are members of the Interstate Wildlife Violator Compact. The other partner remains to be sentenced but faces more than 20 years in jail and \$40,000 in fines. He will also be required to reimburse the state for back taxes on \$244,000 and pay thousands of dollars in restitution to the victims of his fraud. This successful investigation and prosecution marks the first-of-its-kind partnership between the Department of Game and Fish and the New Mexico Taxation and Revenue Department which assigned a special agent and a forensic tax auditor to the case.

Species Conservation and Recovery

- **Comprehensive Wildlife Conservation Strategy for New Mexico**

The Department is in the process of initiating a 2-year outreach project to inform key personnel of federal, tribal, and state agencies, governmental subdivisions, and non-governmental organizations within New Mexico regarding the conservation guidance values of the Comprehensive Wildlife Conservation Strategy for New Mexico (CWCS/NM) and to concurrently promote action development and identify issues for future review and revision processes. The CWCS/NM was granted full acceptance by the U.S. Fish and Wildlife Service in February 2006.

- **Biennial Review of Threatened and Endangered Species**

On August 24, 2006, subsequent to a required 90 day public comment period, the State Game Commission approved the Department's 3rd draft of the 2006 Biennial Review and Recommendations. The process is required by the New Mexico Wildlife Conservation Act under which a review of the status of all state-listed species is conducted to determine if each species should retain its status, be down-listed from endangered to threatened, or be up-listed from threatened to endangered. The 2006 Biennial Review and Recommendations addressed the proposed listing status for 125 species or subspecies currently state-listed as threatened, endangered, or restricted. Staff recommendations included retaining the status of 113 species listed as state threatened or endangered and 7 species listed as restricted, a status that allows the Department to assist in controlling traffic in federally protected species within New Mexico. Five species were recommended and authorized for a change in status. As a result, the piping plover and the shortneck snaggletooth snail were downlisted to state threatened and the Arizona grasshopper sparrow, the spikedace, and the Pecos bluntnose shiner were uplisted to state endangered.

- **Aplomado Falcon Recovery**

Aplomado falcons were placed on the federal and New Mexico endangered species lists in 1986 and 1990, respectively, following a decline that began in the early 1900s due to pesticide use, over-grazing, and lack of fire to restore grasslands. In 2005 the U.S. Fish and Wildlife Service (USFWS) distributed a proposal for public comment regarding prospective aplomado falcon restoration through a 10(j) non-essential experimental population designation and subsequent release of captive propagated falcons. The Game Commission and Department of Game and Fish support the concept but supplied comments on a specific approach that differed somewhat from the USFWS proposal. In July 2006, the USFWS announced its final decision to downlist the northern aplomado falcon to nonessential experimental status and, in cooperation with the Peregrine Fund, reintroduce up to 150 birds per year into southern New Mexico. The New Mexico Audubon Council, Sierra Club, Public Employees for Environmental Responsibility, and Forest Guardians have vowed to fight the new rule in federal court to preserve the genetic integrity of recently observed wild falcons and restore habitat protections. In August 2006, USFWS placed 11 captive-bred falcons in

hacking structures on Ted Turner's Armendaris Ranch near Truth or Consequences, New Mexico. Monitoring by federal and private personnel continues to determine success of these falcons to free-flying, independent status.

- **Mexican Wolf Recovery**

In late July 2006, the U.S. Fish and Wildlife Service (USFWS), subsequent to a 5-year review of the program by the interagency Adaptive Management Oversight Committee, announced it will modify and continue efforts to reintroduce the endangered Mexican gray wolf into the Blue Range Wolf Recovery Area (BRWRA) encompassing 6,000 square miles of eastern Arizona and Western New Mexico. The announcement was preceded and followed by a number of depredation incidents, some of which necessitated the removal of previously released wolves. Such incidents and their resolution present a continual challenge to the success of the project and leave opponents and proponents of wolf reintroduction dissatisfied. The Department, however, continues to work with the USFWS to prepare federal rule changes that will promote more effective recovery areas and diminish the likelihood of problem wolves in New Mexico.

- **River Otter Restoration**

On August 24, 2006, subsequent to consideration of a feasibility study initiated in 2004, the State Game Commission directed the Department to reintroduce river otters to portions of the upper Rio Grande and the upper Gila River. The study was informed by a diverse group of government agencies, the New Mexico River Otter Working Group, and interested members of the public. There have been no confirmed sightings of river otters in New Mexico since one was taken in a beaver trap on the Gila River in 1953, though recent reports indicate that some otters may have migrated to Navajo Lake from Colorado, where they were reintroduced in the 1980s. Numerous conservation organizations have pledged monetary and in-kind support to restoration efforts expected to begin in 2007.

- **Gila Trout Downlisted**

Effective August 17, 2006, the U.S. Fish and Wildlife Service has downlisted the Gila trout's status from endangered to threatened, thereby allowing limited recreational fishing for the species for the first time since 1966. The Department will work with the Service to develop Gila trout fishing opportunities and associated regulations in areas that will not compromise its continued recovery. The decision, however, is not without controversy. The New Mexico Council of Trout Unlimited, contending that only 3 of 4 genetic lineages have been re-established in accordance with the federal recovery plan, is considering litigating against the change in status.

- **Grazing Lease Competition**

Santa Fe based Forest Guardians has entered the bidding process for 2 grazing leases totaling 2000 acres on New Mexico state trust lands. The environmental organization, which opposes

livestock grazing on public lands, currently holds the leases for 3 former grazing allotments totaling more than 3000 acres. In the current competitive bid, Forest Guardians has offered twice what the ranchers are now paying. Revenues from the leases accrue to the State Land Office to benefit public schools, colleges, and other state institutions. One of the tracts open for bid contains potential habitat for the endangered Southwestern willow flycatcher. The second tract provides an essential water source for the state endangered White Sands Pupfish. If the group wins the leases it will fence out cattle, remove non-native vegetation, and work to restore streams and wetlands, all of conservation benefit and of interest to the Commission and Department for other implications.

- **Piscicide Use Approved for Trout Recovery as Needed**

On August 8, 2006, in response to the Department's petition, the New Mexico Water Quality Control Commission approved use of the piscicides antimycin and Rotenone, as needed, to support Rio Grande cutthroat trout management in more than 150 miles of northern New Mexico streams and rivers, 2 dozen lakes, and a reservoir. The initiative, known as the Rio Costilla Project, is intended to reduce the number of non-native brown trout and rainbow trout that compete and interbreed with the cutthroats in the Rio Costilla Watershed. The overall objective is to keep the Rio Grande cutthroat trout, which now survives in less than 7% of its original range, off the federal endangered species list. The Project must go through a federally required environmental assessment and, as of this writing, has been released for public review and comment. Use of piscicides by the Department of Game and Fish must follow strict protocols approved by the Game Commission.

- **Gunnison's Sage Grouse Restoration**

The Department has responded positively to an invitation from the Jicarilla Apache Tribe to join the Tribe and the Colorado Division of Wildlife in an examination of the future prospects for restoring Gunnison's sage grouse to Jicarilla lands in northern New Mexico. While the initiative would represent the potential for restoration of an extirpated species to New Mexico, habitat suitability and the possibility of sage grouse movement outside Jicarilla boundaries present considerations warranting the early involvement of conservation and agricultural interests.

- **Federal Decision on Jaguar Habitat**

On July 13, 2006, the U.S. Fish and Wildlife Service announced that it will not designate critical habitat for the endangered jaguar in the southwest. This decision is the result of a reconsideration prompted by complaints from Defenders of Wildlife and the Center for Biological Diversity regarding the Service's original determination, in 1997 when it first listed the species, that designating critical habitat was not prudent. The decision is based upon the Service's conclusion that the presence of jaguars in the United States, which is at the northern extreme of the species' range, depends upon the existence of a core population in northern Mexico and that habitat is not limiting jaguar presence in the United States. The conclusion is supported by the Arizona-New Mexico Jaguar Conservation Team's scientific

advisory group. The Center for Biological Diversity in Tucson, however, disagrees and intends to file suit over the decision. Defenders of Wildlife also disagrees, contending that historical jaguar habitat extended as far north as the Grand Canyon in Arizona and the town of Springer in New Mexico. Department biologists have concluded that the focus of jaguar conservation in New Mexico should be limited to Hidalgo County in the southwestern extremity of the State. Though jaguars are only occasionally sighted in southwestern New Mexico, interest in opportunities to participate in jaguar conservation decisions is high among New Mexico's 47 Soil Conservation Districts, whose involvement is also supported by New Mexico Cattle Growers, New Mexico Wool Growers, and the New Mexico Federal Lands Council.

- **Assuring Water for the Rio Grande Silvery Minnow**

An unusually dry winter and spring prompted the U.S. Bureau of Reclamation to pursue the purchase of over 60,000 acre-feet of extra water from counties, municipalities, and tribes during the summer of 2006 to supplement natural flows needed to meet the spawning, larvae dispersal, and migration requirements of the endangered Rio Grande silvery minnow. As a result of litigation brought by environmental interests in 1999 and a subsequent biological opinion issued in 2004 by the U.S. Fish and Wildlife Service, the Bureau is required to meet specified habitat and river-flow protection standards on a 157-mile stretch of the Rio Grande. The river must be kept flowing from Cochiti to Elephant Butte from early spring to June 16, though a four-mile stretch may be allowed to go dry through managed recession. Interagency teams that convene each summer to relocate minnows from dry river reaches to wetter stretches were already at work until early July 2006 when steady rains began to increase river flows. Other initiatives implemented to support the minnow include: construction of a minnow refugium in the Albuquerque Biological Park; collaborative efforts to restore habitat by more than 20 municipal, state, and federal agencies and pueblos; a signed agreement by the City of Albuquerque and environmental groups to lease 30,000 acre-feet of space in Abiquiu Reservoir to eventually store water for releases to benefit minnows.

- **State Lists Headwater Chub**

In November 2006, subsequent to a required Listing Investigation Report and a public comment period, the State Game Commission listed the headwater chub as endangered under New Mexico's Wildlife Conservation Act (WCA). The action followed taxonomic revisions that recognize the chub as a distinct species, negating its former protection as a subspecies of the roundtail chub. Listing the headwater chub restores its protection under the WCA and facilitates completion of a single recovery plan for Colorado River Basin chubs in New Mexico.

- **Recovery Plans Adopted**

During its November 2006 meeting, the State Game Commission approved the Department's proposed recovery plans for the Boreal toad and the chubs of the Colorado River Basin in New Mexico. Both plans evolved through the extensive public involvement required for the

development of recovery plans under New Mexico's Wildlife Conservation Act. The goal of the Boreal Toad Recovery Plan is to ensure the long-term persistence of natural densities of the species within its natural range in New Mexico and to maintain the biological diversity to which it contributes. The desired outcome of the Colorado River Basin Chubs Recovery Plan is that roundtail, Gila, and headwater chubs are secure and self-sustaining across their historical ranges in New Mexico.

Disease and Health Considerations

- **Chronic Wasting Disease**

To date, 17 wild mule deer and 2 wild elk have tested positive for chronic wasting disease (CWD) since 2002 when it was first discovered in New Mexico near the main post at White Sands Missile Range (WSMR) east of Las Cruces. A recent positive test, a deer found dead in June 2006 at the north end of WSMR, is the first from the San Andres-Organ Mountain corridor north of Highway 70. The location of this occurrence is 100 miles from the southern CWD cluster and 95 miles from the cluster at Timberon. To incorporate the area in the Sacramento Mountains from which the 2 elk tested positive in 2005, the Department has expanded the 250 square-mile CWD Control Area, and its associated restrictions on the removal of deer and elk body parts harvested therein, to encompass 400 square miles during the 2006 – 2007 hunting season. About 5000 deer and elk hunters are expected to participate in public and private land hunts within the 2000 square mile big game unit 34 in which the CWD Control Area is located.

- **Avian Influenza Preparedness**

During the past year, the Department collected and tested approximately 50 hunter-killed sandhill cranes and developed an avian flu surveillance plan for fall 2006 targeting 200 sandhill cranes, 200 snow geese and 100 pintails for testing. Dowitchers, sandpipers, plovers, yellow-legs, and gulls also will be tested as encountered. Most samples will be collected at hunter check stations but plans include other measures to capture target species for sampling. In addition to continuation of last year's mandatory hunter check stations on national wildlife refuges, hunters this year will be asked to voluntarily provide samples of birds taken on state-owned properties.

- **Blame it on the Weather**

As of early October, New Mexico had recorded 7 cases of bubonic plague, 7 cases of hantavirus, and 1 case of West Nile virus in humans. A horse also contracted West Nile virus and numerous wild ducks were found to have died of botulism at a golf course pond. Earlier in the summer, the Department closed a 100-acre reservoir to all access because of fish kills related to inadequate oxygen levels and lake health. Authorities are blaming the incidence of these wildlife-related diseases on the unusually and successively hot, dry, and wet summer weather of 2006, crediting these conditions with fostering the lush growth of

vegetation, fluctuation of water levels, and resultant abundance of rodent, insect, and bacterial vectors that functioned as causal factors.

Legislative Initiatives

- **Valle Vidal Protection Probable**

The 102,000-acre Valle Vidal was donated to the Carson National Forest by Penzoil Corporation in 1982 but has not been designated as a wilderness, a wilderness study area, or a roadless area. Nor was it included in the Carson National Forest's management plan. The property is highly valued by hunters, fishermen, and other conservationists as home to the state's largest elk herd and the native Rio Grande cutthroat trout. In 2002, El Paso Exploration asked the Carson National Forest to open 40% of the Valle Vidal for coal-bed-methane production but consideration has been deferred pending completion of the current effort to amend the forest plan to include management of the tract. Protection of the Valle Vidal soon became a rallying cry for a coalition of hunters, fisherman, and environmentalists. In 2005, the state Environment Department, Department of Game and Fish, and the Department of Energy, Minerals, and Natural Resources successfully petitioned the state Water Quality Control Commission to designate Valle Vidal streams and ponds as Outstanding National Resource Waters and Governor Bill Richardson included the tract within his 2006 petition to restore roadless area designation to 1.6 million acres of national forest in New Mexico. Over 54,000 responses were submitted during the scoping process for the forest plan and nearly all favored banning oil and gas drilling. As of September 2006, 17 city, town, and county governments in New Mexico had passed resolutions to ban drilling on the tract. On July 24, 2006, the Valle Vidal Protection Act of 2005 (H.R. 3817), a bill to preclude energy development on the tract, was passed by the U.S. House of Representatives and was subsequently referred to the Senate Energy and Natural Resources Committee. The Act received unanimous consent on the Senate floor on November 16, 2006 and, as of this writing, requires only President Bush's signature to become law.

- **Department Initiatives for the 2007 State Legislative Session**

The Department has prepared 7 initiatives for consideration during the 2007 Legislature. Under consideration is a statutory amendment to acquire authority for non-regulatory activities applicable to all New Mexico wildlife species, especially those actions pertaining to habitat management and information and outreach regarding species that are not hunted, fished, trapped, or currently subject to special classification. Consideration is also being given to creating special licenses for high interest game species to be declared available by the Governor and the Commission for use in discretionary fund raising events with proceeds going to fish and wildlife conservation purposes and sportsmen services. Efforts will also be directed at creating a Grand Slam license for 5 big game species in New Mexico, reconciling some license fee inconsistencies, enhancing controls on nongame fish harvest to protect game fish, and simplifying processes for certain wildlife citations to be reconciled by violators. A separate but high priority assisted by the Department is passage of the Land,

Wildlife, and Clean Energy Act, a Governor's initiative primarily coordinated by the Energy, Minerals, and Natural Resources Department.

Special Funding

- **Bighorn Skulls and Horns Auctioned**

The Department's Game Protection Fund was enriched by \$11,500 through the auction of Rocky Mountain and desert bighorn sheep skulls and horns during the state's annual sale of surplus property in July 2006. Normal field operations had resulted in the Department's accumulation of a number of skulls and horns from sheep killed by lions, vehicle collisions, or winter weather that were retrieved by biologists who simply came upon them in the course of their routine field activities or who were purposefully searching for the carcasses of radio-collared sheep presumed to be deceased. The auctioneer sold 14 skulls and 2 bundles of horns. The skulls sold for a median price of \$600, with winning bids ranging from \$350 to \$3500.

- **\$5 Million General Fund Appropriation**

The 2005 legislature appropriated \$5 million from the state's General Fund for a variety of wildlife and land conservation projects as a part of Governor Richardson's program to improve access to hunting, fishing, and other wildlife-associated recreation statewide and to help private landowners and communities to conserve habitat. The legislation specifies that \$4 million be allocated to projects such as land purchases, easements, and improvements to protect wildlife and habitats. The remaining \$1 million will be used to acquire land and conservation easements to benefit species listed or proposed for listing under the federal Endangered Species Act. In moving forward with the initiative the State Game Commission and the Department are working with state and federal agencies, communities, citizens groups, and others to identify voluntary projects and maximize matching fund opportunities. Key partners include the New Mexico Energy, Minerals, and Natural Resources Department, Department of Finance and Administration, and the New Mexico Department of Agriculture. On September 28, 2006 the State Game Commission allocated \$800,000 from this fund for the purchase of the 192-acre Rio Abajo property along the Rio Grande bosque in Valencia County. In support of the Commission's action, Governor Bill Richardson noted that he is "very pleased to see that we are moving forward to protect important lands in New Mexico for wildlife and the public's enjoyment." The Governor further stated that "During the Year of Water I will put a special emphasis on protecting bosque areas to help defend our water resources, wildlife communities, and rural economies." Following the purchase, the Department, in cooperation with the Valencia Soil and Water Conservation District, will implement habitat improvements to benefit native wildlife and enhance opportunities for youth educational activities and wildlife-associated recreation.

- **P.L.E.A.S.E. Staffed, Renamed, and Underway**

Since April 2006, all New Mexico hunters, trappers, and anglers, except those under 18 years of age, 70 years and older, or those who are resident 100% disabled veterans, have been required to purchase an annual \$4 Habitat Management and Access Validation with their hunting or fishing licenses. Authorized by the 2005 New Mexico Legislature, the enabling law specifies that proceeds from the sale of the validations be used to establish recurring funding for habitat improvements statewide, including maintenance of State Game Commission properties. One dollar of each validation is allocated to fund the Private Land Entry and Sportsman Enjoyment (P.L.E.A.S.E.) Program for the lease of private lands for public hunting and fishing and to acquire rights-of-way through private holdings to access otherwise isolated public lands. Governor Richardson recently announced his intention to rename P.L.E.A.S.E. the Open Gate – Hunting and Fishing Access Program. The Department recently hired a coordinator to manage the program and projects are currently underway to lease private lands for quail, dove, and waterfowl hunting and to acquire easements through private holdings to access public lands. The coordinator will also be working with federal and state land management agencies to locate and access additional areas.

Public Outreach

- **Public Strongly Involved in Rulemaking**

This year, the Department successfully completed one of our most successful efforts to provide interested publics the opportunity to participate in and influence State Game Commission decision making regarding the establishment of big game hunting and furbearer regulations. The process included months of public meetings and the assessment of thousands of public comments and recommendations. Commission Chairman Leo Sims observed that “This was one of our most intensive efforts to involve the public in our rulemaking process. More than 2300 people called or e-mailed their comments, and hundreds more had their say at more than 11 public meetings around the state.” Governor Bill Richardson, an avid hunter, noted that “Recreational hunting and fishing contribute more than a billion dollars a year to our state’s economy” and expressed his confidence that the resulting “sensible hunting rules, based on the most current research and input from thousands of citizens, will help promote recreation and protect wildlife for years to come.” The Commission meeting on September 29, during which all big game, cougar, and furbearer regulations were set for 2007 – 2008, was the smoothest on record with all work completed in 4.5 hours and essentially all positive public comment.

- **Game and Fish Goes to the Fair**

Conservation officers, biologists, and education specialists staffed the Department’s booth at the 2006 New Mexico State Fair, held September 8 through 24 in Albuquerque, to provide visitors with information they need to enjoy and conserve wildlife. Among the special exhibits and activities were:

- A law enforcement day on which a trailer staffed by conservation officers exhibited confiscated mounts of illegally taken wildlife
- An aquatic education day during which junior high school students shared their research about the Rio Grande bosque and visitors could learn to tie flies, make fish art prints, and view aquatic insects through microscopes.
- A wildlife adventure day featuring information about the department's Gaining Access Into Nature Program.
- A National Hunting and Fishing Day laser shooting range exhibit celebrating how sport hunting and fishing contribute to the nation's economy and wildlife conservation.

- **Trout in Schools**

The Department provided rainbow trout eggs, an aquarium, and the time and expertise of 2 biologists this summer to give elementary school students in Raton, New Mexico, the experience of raising rainbow trout and learning about water quality. Students took daily measurements of water temperature, pH, and dissolved oxygen as the eggs developed and hatched. A field trip was planned for the students to stock the fish in nearby lakes and Department staff are preparing to repeat the popular project in other schools.

Year-round Excellent Services

- **Hunting Opportunity Increased**

During its September 2006 meeting to establish hunting seasons for 2007 – 2008 and 2008 – 2009, the State Game Commission added 8 new youth-only deer hunts and 6 new deer hunts for mobility-impaired hunters. The Commission also created a new youth hunt for pronghorns and 3 new youth hunts for wild turkey. In all, creation of these hunts added nearly 300 hunting opportunities. These actions were in partial implementation of the Commission's December 2005 directive to the Department to pursue new opportunities to improve hunting, fishing, and wildlife watching opportunities.

- **Credit Card Accommodations**

Following the electronic drawing of successful on-line applicants for 2006 – 2007 big game hunts, the Department began the process of charging the hunt fees to their credit card accounts. Most transactions were successful, but payment requests for a number of applicants were returned as declined by the state's bank and credit card processor. Recognizing that credit cards are declined for various procedural and electronic reasons, and not wanting to penalize on-line applicants for a problem possibly not of their making, our Special Hunts staff contacted and provided those applicants whose cards were declined with an extended deadline and a much appreciated opportunity to pay by another means. While this caused a bit of confusion, it was consistent with our efforts to provide year-round

excellent services as we processed over 156,000 applications for 63,000 permit and license documents issued through the drawing.

Litigation

- **Judge Rules on Otero Mesa Drilling Plan**

Since 2004, Governor Bill Richardson has directed state agencies to resist a Bureau of Land Management (BLM) plan to allow expansion of oil and gas drilling on a portion of the desert grasslands of southern New Mexico known as Otero Mesa. The state subsequently submitted a more restrictive alternative proposal to BLM's oil and gas exploration and development plan for more than 2 million acres that includes protective measures for plants, wildlife, groundwater, and cultural sites and a recommendation that Congress establish a 640,000-acre National Conservation Area. The Energy, Minerals, and Natural Resource Department and the Department of Game and Fish are lead agencies in pursuing Governor Richardson's directives. On Earth Day, April 21, 2005, New Mexico State Attorney General Patricia Madrid and Governor Richardson announced their filing of suit in U.S. District Court challenging the BLM's decision under the Federal Land Policy Management Act which gives the governor special status to object and propose an alternative plan. A coalition of conservation and environmental groups filed a separate lawsuit, alleging the BLM failed to evaluate whether building roads, pipelines, well pads and other structures will destroy, degrade or fragment grasslands and contaminate the aquifer. In September 2006, Forest Guardians, The Wilderness Society, and the Southwest Environmental Center published a report (Hollow Promises from the Land of Enchantment, available at www.oteromesa.org/documents/HollowPromises1.pdf) asserting that the BLM can't protect Otero Mesa grasslands and wildlife under its current plan. On September 27, 2006, U.S. District Judge Bruce D. Black ruled in favor of BLM's plan, noting that the agency had adhered to federal statutes and administrative practices in its development. Judge Black's ruling does, however, require site specific environmental analyses before any leases are issued. Governor Bill Richardson has vowed to continue the fight to protect Otero Mesa and plans to confer with Attorney General Madrid to develop strategies.

- **Roadless Area Protection Debate Continues**

Just prior to leaving office in January 2001, President Clinton issued a rule banning development and road building on almost 1/3 of the nation's 192 million acres of national forest land. A federal judge in Wyoming threw out the Clinton-era rule in 2003 and, declining to challenge the ruling, the Bush administration replaced it in May 2005 with a new rule giving governors 18 months to petition the federal government to protect some or all of the national forest roadless areas within their states. New Mexico joined California, Oregon, Washington and 20 environmental groups in suing the U.S. Forest Service over the changes. Governor Bill Richardson was also the first western governor to petition the Bush administration for roadless-area protection under the new rule, requesting the protection of all 1.6 million acres of roadless national forest in New Mexico as well as an additional

100,000 acres known as the Valle Vidal which the Forest Service acquired after the original roadless-area inventory. The petition is supported by a Department of Game and Fish report titled "Wildlife, Habitat, and Hunting: New Mexico's Roadless Areas" available at www.wildlife.state.nm.us. The national advisory group that reviews petitions provided a favorable review of the New Mexico petition in late August and forwarded it to the Secretary of Agriculture. On September 20, 2006, U.S. District Judge Elizabeth LaPorte reinstated the Clinton-era rule on the grounds that the Bush administration had failed to conduct the necessary environmental studies before making changes that allowed states to decide how to manage individual forests. Governor Richardson declared victory for "everyone who enjoys our wild forests." The decision, however, leaves the 100,000-acre Valle Vidal unprotected by the roadless rule. On September 23, 2006, The Associated Press announced that an Oregon timber company filed the first appeal of the ruling and that the state of Wyoming has asked a federal court to reinstate the 2003 ruling that struck down the 2001 Clinton roadless rule. Meanwhile, Agriculture Secretary Rey said the Bush administration is considering filing its own appeal and conservation groups have filed a motion asking Judge LaPorte to clarify her injunction after the Forest Service said it would go ahead with projects in roadless areas that were approved before the ruling.

- **Recent Refuge Hunts Disallowed**

In August 2006, a U.S. district judge ruled that the U.S Fish and Wildlife Service violated federal law by allowing new sport hunting programs on 3 dozen national wildlife refuges in the last 6 years. One of those refuges is the San Andres National Wildlife Refuge in southern New Mexico, which opened to oryx hunting in 2000. Judge Ricardo M. Urbina ruled that the agency violated the National Environmental Policy Act by authorizing the sport hunting programs without adequately analyzing impacts on refuge visitors, migratory birds, and endangered species. The suit was filed in 2003 by the Humane Society of the United States and The Fund for Animals who claimed the Service was "opening refuges at an alarming pace without studying the accumulative impacts" and "running roughshod over sensitive resources and endangered species in its haste to open more and more protected refuge lands to sport hunting." Ultimate implications of the judge's ruling are still unknown.

Nevada State of the State Report

State of Wildlife

After a prolonged dry period, good precipitation in 2005 and 2006 significantly improved habitat conditions in the Mojave and Great Basin ecosystem. Wetlands were improved, benefiting continental duck populations and tundra swans. Another amazingly good upland game year resulted from the additional precipitation. On a more dismal note, summer wildfires destroyed about 1.46 million acres of Nevada rangelands, with more than 850,000 acres destroyed in the northeastern section of the state that is home to some of the state's largest mule deer herds. Between the impacts of the 2005 and 2006 fires, it is estimated that Nevada lost 62 greater sage-grouse leks and habitat that was supporting close to 4,000 sage grouse; winter range that supported 400-500 wintering deer and more than 70% of crucial migration habitat that supported an estimated 3,000 to 4,000 deer; and habitat that supported 20 to 30 bighorn sheep. A petition submitted by the Stanford Law School Environmental Law Clinic to the U.S. Fish and Wildlife Service to list Mono Basin area sage-grouse under the Endangered Species Act, was denied as not warranted with the petition finding published in the Federal Register Dec. 19, 2006.

Governor

Governor Kenny Guinn authorized two emergency hunts, one for antelope and one for mule deer, in response to the wildfire impacts to wildlife habitat in Management Area 6. A total of 200 emergency tags for antelope, and 1,119 emergency tags for antlerless deer were issued. Governor Guinn's last day will be Dec. 31, and Governor Jim Gibbons will take the helm on Jan. 1, 2007.

Commission

Chris MacKenzie currently serves as commission chair. Clint Bentley is vice chair of the commission. With the retirement of Director Terry Crawford in July 2006, Deputy Director Doug Hunt assumed the helm as Acting Director. The Board of Wildlife Commissioners commenced a recruitment process for a new director in June 2006. A Commission subcommittee of David McNinch, Ron Lurie, and Clint Bentley was charged with handling the director recruitment. On Dec. 7-8, the full commission met to interview six nominees for the position and submitted a slate of three nominees to governor-elect Jim Gibbons for final selection. To date, a wildlife director has not yet been chosen, and Rob Buonamici is currently serving as the Acting Director.

The three final nominees for director are Kenneth E. Mayer, of Sacramento, Calif., a Branch Chief for the California Department of Fish and Game, San Stiver, a former Staff Biologist with NDOW from Prescott Arizona, and Bruce Crawford, of Olympia Wash., a former assistant director at Washington Fish and Wildlife.

Regulations

New rules adopted or amended included:

Amendments to permit the use of fully or partially rifled barrels on shotguns for hunting deer and mountain lion; increased nonresident fee for electronic applications from \$2.50 to \$3.50; amended any legal weapons group to include crossbows; revised method of allocating Hunt 1107 youth tags statewide; amended a series of regulations regarding convictions for violations, demerit points and denial of licenses, taking of bobcats, and trapping regulations; cancelled trout stamp art contest due to lack of entries and interest; established seasons and limits for migratory game birds, big game, and fishing seasons and limits; amended bag limit for striped bass at Lake Mead; established 2007-08 noncommercial collection of reptiles and amphibian season and limits; amended biennial big game release plan to accommodate animals removed in response to wildfire emergency.

Petitions

Public requests for regulation change included amending legal weapons groups to include crossbows (accepted), a petition to allow nonresidents to hunt sage grouse, (continued), a petition to amend Commission Policy 24 "Hunting Opportunities Among Weapon and Hunter Groups" (accepted), a petition to allow special seasons for disabled and over 70 years of age (denied), a petition to restrict one deer muzzleloader season to flintlock rifles (denied), a petition to allow nonresidents to hunt bobcat and gray fox (denied).

Policy

The Board of Wildlife Commissioners completed reviews of all commission Administrative Procedures, updating administrative code regarding processes for hearings and petitions. In addition, policies that have been reviewed include Commission Policy 50: Duck Stamp and Trout Stamp Art Contest; Commission Policy 24: Hunting Opportunities Among Weapons and User Groups; and Standardized Hunting Season Openings.

Committees

The commission enacted a new committee, the Tag Application and Allocation Committee, which will be reviewing processes and issues associated with the allocation of big game tags in the state. In addition, the Commission continues to make efficient use of committees, with individual members assigned by the chairman to the following active committees: heritage committee, legislative committee, regulations and procedures committee, wildlife damage management committee, Overton Wildlife Management Area Committee, and the Outfitters, Guides, Regulations and Procedures Committee.

Fiscal

The Commission acted in accordance within limited statutory responsibility to approve project expenditures for predator management, duck stamp funds, trout stamp funds, and the upland game stamp funds. The Commission also reviewed and supported the 2008-09 Biennial Budget for the agency.

Appeals

The Commission heard three appeals, one from a guide appealing loss of license privileges, another from a license agent who had been revoked, and a third on a landowner elk tag purchased in 2004. The Commission upheld the agency action on all three appeals.

Legislation

The Commission continued discussions regarding potential proposals for the 2007 session of the Nevada State Legislature. Bill drafts to gain general fund support for reimbursement for low-cost licenses and discounted youth licenses, and to require automatic state match from the general fund to support the State Wildlife Grant program approved for submittal to the governor's office.

Miscellaneous

The commission also addressed a number of other matters including: Jon C. Sjoberg named Employee of the Year; numerous other employee commendations; litigation; outdoor educational facilities; updates on the new licensing system; fire emergency tag draw results; wild fires; marketing of wildlife; habitat impacts from wild horses and burros; use of Southern Nevada Public Lands Act Fund for wildfire rehabilitation work; report on mercury levels in Nevada waters; support for greater sage grouse conservation planning. A mule deer management plan was also finalized.

Respectfully submitted,

Chris MacKenzie, Chairman
Dec. 28, 2006

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION

Department Secures River Front Property With First Legacy Permit Purchase

A one-of-a-kind, 320 acre tract of Lower Illinois river front property is now available to Oklahoma sportsmen forever.

To purchase the property the Wildlife Department used several different funding sources. Notably, the purchase marks the first use of the funds from the Hunting and Fishing Legacy Permit. Most hunters and anglers must carry the permit, which was passed in 2004 by the Oklahoma State Legislature.

Located in eastcentral Oklahoma, the 320-acre area will continue to provide access to trout anglers and will also offer hunting opportunities. In the coming months fisheries and wildlife biologists will begin work on stream habitat and wildlife habitat improvements, access improvements for anglers and hunters and new public fishing and hunting regulations for the area.

Second annual Wildlife Expo draws nearly 35,000 people

Nearly 35,000 people participated in the Oklahoma Wildlife Expo just north of Oklahoma City last August.

The Oklahoma Department of Wildlife Conservation hosted the huge event which featured more than 200 hands-on activities. A wide range of other state agencies, private individuals and outdoor-related companies also participated in the event which was designed to promote the appreciation of Oklahoma's wildlife and natural resources and provide hands-on learning opportunities for all types of outdoor recreation. In addition, many Expo sponsors donated their time, manpower and financial resources to make the event an outstanding success.

According to initial survey results, about 90 percent of Expo participants were satisfied or very satisfied with the Expo and said they attended the event with friends or family.

Trout fishing opportunities expanded in SE Oklahoma

With bulldozers, backhoes and a good deal of imagination, streams biologists created a brand new ¼-mile trout stream, dubbed Lost Creek in southeast Oklahoma. Water was diverted into an ancient stream channel through dense woods and boulders creating a unique area for anglers to try to fool wary trout.

A separate ½-mile stretch of the Lower Mountain Fork River, known as the Evening Hole, once had a poor reputation among trout anglers. The warm, slow-moving, muddy water in the area was not favored by the rainbow and brown trout stocked by the Wildlife Department.

However, streams biologists saw the potential in the area and felt if they could narrow the channel and provide more habitat, the trout, followed by trout anglers, would quickly begin using the area. Biologists used 600 dump truck loads of gravel to narrow the river channel, causing the water to remain cooler and move through the Evening Hole faster. With the addition of large rocks, logs and islands, fisheries personnel transformed once sub-par trout habitat into a first class fishing area.

Deer harvest on record-setting pace

This year is shaping up to be the best year ever for Oklahoma deer hunters. Hunters have already taken 40,055 deer, a 26-percent increase over this same time last year, according to preliminary deer harvest totals.

Archery hunters have already taken nearly 10,000 deer. During the youth season, young hunters took 2,783 deer. Muzzleloader hunters accounted for 27,280 deer, including more than 17,000 bucks.

If hunters continue at the current pace, the deer harvest will exceed 105,000 this year, topping the former record of 102,100 set in 2000. Last year hunters harvested 101,111 deer.

Department moves to conserve wetlands for wildlife and sportsman

The Oklahoma Department of Wildlife Conservation has begun to acquire a unique wetland area in northcentral Oklahoma. Known as Drummond Flats, the area includes about 3,000 acres in the wetland basin, plus up to 2,000 acres in the surrounding

uplands. To date, almost 1,500 acres have been purchased with additional negotiations underway.

Three creeks converge on the low-lying area forming a large, natural wetland. Historically, the area has been an important migration stop for shorebirds and waterfowl. Today, the area is primarily used to grow crops or as pasture for cattle. The Oklahoma Department of Wildlife Conservation is currently looking into opportunities to restore this unique wetland habitat and create more opportunities for sportsmen and other wildlife enthusiasts.

Bat watches prove to be a popular attraction

Nearly 1,000 people participated in 12 bat watches in northwest Oklahoma. The visitors came to watch over a million bats fly out of their cave, over their head, and off into the nighttime sky at the bat watches which are coordinated by the Oklahoma Department of Wildlife Conservation. Since 1996, the Wildlife Department has managed the area because of its importance to the Mexican free-tailed bat. This is one of only five major sites in Oklahoma used by female free-tailed bats to raise their young. The bat flight is the highlight of the Bat Watch, but there's more to the evening than watching. There's also learning and exploring.

The Bat Watch begins at Alabaster Caverns State Park in northwestern Oklahoma. Buses take visitors from the state park to the Selman Wildlife Management Area, which is usually closed to the public. Once there, visitors learn facts about bats and the prairie community.

Wildlife Department works to improve fishing across the state

Fisheries biologists with the Oklahoma Department of Wildlife Conservation are working hard to make sure the fishing remains top notch.

The state is home to thousands of acres of lakes and reservoirs, however, many of them are beginning to show their age. When the lakes were first impounded, trees and brush provided excellent cover for fish. As the decades passed, the flooded vegetation decayed leaving fewer places for fish to hide and fewer places for anglers to catch them.

Fisheries biologists across the state are working on innovative ways to provide man-made habitat in these man-made lakes. For instance, at Lake Carl Blackwell near Stillwater, biologists are performing a simple experiment to determine the best type of habitat to use under a popular fishing dock where local anglers target crappie.

Under one side of the dock personnel placed the traditional oak and cedar brush and under the other side of the dock they sank a string of structures made out of plastic pipe and flower pots – called magnum fish magnets. Through a voluntary survey, biologists are asking fishermen which side of the dock is most productive.

At Lake Eufaula in eastcentral Oklahoma, Wildlife Department personnel recently partnered with several local FFA chapters to make hundreds of concrete and pipe contraptions called “spider blocks,” which they placed at popular fishing areas around the lake.

Zebra mussels continue to spread

Fisheries biologists from the Oklahoma Department of Wildlife Conservation made an all-too-familiar discovery recently. While conducting research on striped bass in the Arkansas River, zebra mussels were found below Zink Dam in Tulsa. With the recent discovery of zebra mussels in Sooner and Skiatook lakes, this makes the third new location for zebra mussels this summer.

New book details Oklahoma’s frogs, snakes and turtles

“A Field Guide to Oklahoma’s Amphibians and Reptiles” by Greg and Lynnette Sievert, includes easy to read text and full color pictures of some of the state’s most fascinating animals. Range maps and species descriptions help the reader identify and learn about the state’s 160 species of amphibians and reptiles. The 205-page book was recently published by the Oklahoma Department of Wildlife Conservation’s Wildlife Diversity Program.

Stocking efforts focused on at Great Salt Plains Lake

Wildlife Department fisheries biologists recently stocked more than 100,000 channel catfish into Great Salt Plains Lake in northcentral Oklahoma. The stocking

comes after high temperatures and prolonged drought led to a major fish kill at the lake last summer.

Several gill net surveys conducted in the Fall revealed the significant toll the fish kill took on sportfish populations. Additionally, biologists are planning on stocking an additional 40,000 channel catfish, each about 5 ½" long. Next summer, if water levels are favorable, Department officials will stock both blue and flathead catfish in the lake.

Oregon Fish and Wildlife Commission
Major Issues Report
Western Association of Fish and Wildlife Agencies
December 2006

FISH DIVISION

The Fish Division manages fish and their habitats in a manner that maintains all species at optimum levels, while providing recreational and ecological benefits. In addition, the division regulates fish populations in a manner compatible with the primary uses of the lands and waters of the state of Oregon. The Fish Division has four main programs: Natural Production, Fish Propagation, Marine Resources and Interjurisdictional Fisheries.

Natural Production

Fish Screening and Passage Program

The Fish Screening and Passage Program continues to provide financial and technical assistance to landowners, irrigation districts, and other water users throughout Oregon, to provide fish screens and fishways to protect native fish. In addition to funding and constructing fish screening and passage provisions at specific sites, the Program also works with the owners and operators of all types of artificial obstructions (e.g., dams, road crossings, and tide gates) across the state toward an approved fish passage solution when they are legally required to address fish passage. The program consists of 45 employees located at four fish screen and fishway fabrication shops in Enterprise, John Day, The Dalles, and Central Point and in our Salem headquarters. For the 2005-2007 biennium, the program will receive funding of approximately \$11.4 million to fund project activities, primarily providing cost-share funds for the construction of fish screens at unscreened diversions and fishways over artificial barriers. Funding for the program comes from state Lottery funds, a \$0.25 surcharge on fishing licenses, and federal funds through National Oceanic & Atmospheric Administration (NOAA) Fisheries and the US Fish and Wildlife Service (USFWS). In the 2005-2007 biennium, the program plans to coordinate the construction of more than 150 new fish protection screens on diversions totaling more than 1,500 cubic feet per second. In addition to those already installed in the 2005-2007 biennium, the program plans to install 20 more fishways, providing fish passage at artificial barriers and improving access to upstream habitat. Since July 1, 2005, 73 fish screening and 6 fish passage projects have been installed.

Two especially note worthy projects were completed during this period. A major water diversion in the lower Columbia River was screened. The Fort James Corporation's paper mill in Wauna, Oregon, now has a self-cleaning cylindrical screening array at the 125 cfs water intake. The Fish Screening and Passage Program provided \$100,000.00 to efficiently leverage the \$888,000.00 total cost. This screen now protects chinook, coho and steelhead.

The second project involves the removal of a large diversion dam on the Little Applegate River in the Rogue River Basin, which resulted in restored fish passage as well as additional in-stream flows. This project is one component of a much larger project to replace multiple dams with pump stations and restore stream flows. The Fish Screening and Passage Program provided \$75,000.00 toward this one component of the larger project, which when finished is expected to have a total cost of \$1,830,000.

Hydroelectric Licensing

The Oregon Department of Fish and Wildlife (ODFW) is a member of the state Hydroelectric Application Review Team and works closely with facilities operators, other agencies, and interest groups in relicensing efforts. Currently ODFW is participating in Idaho Power's Hells Canyon (Snake River) project, PacifiCorp's Klamath (Klamath Basin) project, Eugene's Power and Light Carman-Smith (McKenzie River) project and several proposed hydro retrofits of federal dams (Dorena and Applegate). Additionally, implementation of settlement agreements continues to move forward at Pelton-Round Butte (Deschutes Basin), Willamette Falls (Willamette Basin), Clackamas River and North Umpqua (Umpqua Basin) projects. ODFW has signed a settlement agreement with PacifiCorp to settle several issues on the Prospect (Rouge Basin) project. We are also working cooperatively with tribes and the utilities to implement settlement agreements for removal of Marmot Dam (Sandy River) and the Powerdale Dam (Hood River).

Water Quality/Quantity Activities

Resolving municipal water right extensions issues associated with maintaining fish persistence continues to be challenging. Water right transfers continue to increase as water users look for sources of water in fully appropriated streams which can cause injury to instream water rights in some instances and requires the agency to work with transfer applicants to develop a net benefit for the resource before a transfer can be authorized. Additionally, water developers are beginning to look for additional water supplies and are exploring avenues to utilizing peak flows above standard water availability and ODFW is looking into which peak flows are needed to maintain fish habitat.

Natural Resource Information Management

Natural Resource Information Management Program (NRIMP) is participating in an agency wide effort to develop a strategic plan for integrating Geographic Information Systems throughout the agency. The plan has been completed and the group is initiating development of the corresponding Implementation Plan. NRIMP has implemented and populated an online Data Clearinghouse, making ODFW and other Oregon data available through one central location. NRIMP is continuing to support the agency's efforts in implementing the Statewide Wildlife Conservation Strategy, has completed development of a series of Travel Management Area and Access and Habitat hunt maps, and developed the fishing maps for the 2007 Sport Fishing Regulation booklet.

Conservation Plan Development

The draft Coast Coho conservation plan is undergoing a 45-day public comment period and will conclude with a series of four town hall meetings in Coos Bay, Florence, Newport and Tillamook. The final conservation plan will be presented to the Oregon Fish and Wildlife Commission (OFWC) for their approval in March 2007.

The Rogue River spring Chinook conservation plan is nearly complete and following a public comment period, will be presented to the OFWC in early 2007. Upon adoption of the Rogue spring Chinook plan, ODFW staff will be working with their counterparts from California Department of Fish and Game and NOAA Fisheries to develop a coho conservation/recovery plan for the Southern Oregon Northern California Coho ESU.

In the Columbia basin, the State of Oregon, in cooperation with NOAA Fisheries, has initiated conservation planning for coho, Chinook, chum and steelhead in the Lower and Mid Columbia ESU's. Stakeholder teams have met on a regular basis and progress is steady. A similar process is underway in the Willamette ESU for spring Chinook and winter steelhead. Draft conservation plans are scheduled for completion in 2007. Information on some of the conservation plans and other fish management issues can be found on the web at <http://www.dfw.state.or.us/fish/ONFSR/index.asp>

Oregon Hatchery Research Center (OHRC)

OHRC Senior Scientist, Dr. David Noakes (also a professor at Oregon State University) has been working closely with a 15 member public advisory committee to develop a strategic research plan, a facility operation plan and an outreach and education plan. The initial one-year shakedown of the facility was successfully completed and research is ready to begin in earnest. Interest in the facility has been very high and a news story on the facility was published in November on Oregon Public Broadcasting. Several experiments both on and off site are currently under development for coho and steelhead. Several students have completed internships at the facility. Additional information on the OHRC can be found on the web at <http://www.dfw.state.or.us/OHRC/>

Native Fish Investigations Project

The Native Fish Investigations Project (NFIP) conducts research and monitoring of Oregon's native fish fauna. The NFIP implements these activities throughout the State and has recently focused on studies involving inland trout, unique native nongame fish and lamprey. Project personnel work closely with regional management staff as well as federal agencies in providing research results and assessments to guide conservation and recovery efforts. Examples of current studies conducted by the NFIP include:

- Research on bull trout life history, genetics, status and limiting factors. Current efforts are focusing on populations in Northeast Oregon, Odell Lake, Hood River and the Upper Klamath Basin.
- Monitoring and adaptive management of Oregon chub populations in the Willamette Basin.
- Population monitoring of federally listed native minnows and suckers in Southeast Oregon.
- Migration characteristics and habitat selection of adult pacific lamprey in coastal streams
- Development and implementation of a monitoring program for Great Basin redband trout.
- Distribution and relative abundance of native fishes of the Goose Lake basin.

Additional detail regarding these studies as well as information on other NFIP studies can be found at our website: <http://oregonstate.edu/Dept/ODFW/NativeFish/Index.htm>.

Another important role of the NFIP is to provide technical support to State and federal conservation and recovery efforts for native fishes. In this capacity, NFIP staff provides scientific data and technical documents to managers and serve on technical teams and committees. Past contributions include preparing sections of the 2005 Native Fish Status Review and exhibits summarizing redband trout study findings for use in Klamath Basin hydroelectric relicensing hearings. Project staff serve on recovery teams for federally listed fish species and assist with the development of state conservation plans. Recently, the NFIP has taken a lead role

in Oregon's involvement in the development of the Western Native Trout Initiative, a multi-state effort to secure federal funding for the conservation and restoration of the region's native trout.

Aquatic Inventories Program

The Oregon Plan monitoring projects (Aquatic Inventories Program, Western Oregon Rearing Project, and Oregon Adult Salmonid Inventory and Sampling Program) in cooperation with statisticians at EPA and Oregon State University developed a new survey design and standardized 1:24,000 digitized stream coverage to monitor the status and trends in habitat, juvenile fish, and adult salmon at both the regional and coho salmon population scale in western Oregon streams. The surveys will provide rigorous estimates of habitat capacity and quality, juvenile fish populations, and adult populations at multiple scales to address recovery goals in the Oregon Plan for Salmon and Watersheds and Coastal Coho Salmon Recovery Plan.

The Aquatic Inventories Program is completing a study of Chinook salmon that describes the effects of estuarine dike removal on the life history and survival of Chinook salmon. We were able to document a population level response of fall Chinook salmon to estuarine habitat restoration and show the contribution of diverse life history types to the adult population in Salmon River.

Recreational Fisheries Program Administration.

ODFW's Recreational Fisheries Program continued to provide support and guidance for many of the day-to-day activities of ODFW's District Fishery Managers. Program accomplishments include:

2007 Oregon Sport Fishing Regulations

The 2007 Oregon Sport Fishing Regulations underwent a major revision in 2007. The Department decided to complete the regulations in-house this year and use In-Design publishing software. Minor formatting changes were made to improve the readability of the regulations including redoing all maps using a GIS database, moving advertisements to the back of the book, and redoing fonts and text spacing. Outdoor Group was awarded the contract to sell advertisements for the regulations. We also are developing an "Easy Angling Oregon" information section on our Website to inform anglers on some angling opportunities that offer the next best thing to a "sure thing" and are not encumbered by complex angling regulations. This new section is featured in the 2007 angling regulations.

2006 Oregon Angler Survey

The Recreational Fisheries Program has contracted with Responsive Management, a survey research firm specializing in natural resources, to conduct a telephone survey of 1,500 Oregon anglers. The survey is scheduled to be completed and summarized by the end of 2006. The goal of the survey is to obtain updated information on Oregon angler activities and opinions in order to make sound scientific fishery management decisions, respond to new or emerging public angling needs, and to actively involve the public in decisions on public fishery management. Questions formulated for the survey will estimate angler participation in freshwater fisheries and angler preferences in order to help ODFW fish managers sustain and improve public angling opportunities consistent with the conservation of naturally produced native fish; characterize the nature of freshwater fisheries for resident fish, with attention to trends over time; and determine

angler attitudes and opinions on current trout and warmwater fisheries management, including opportunities and barriers to participation.

Biometrics Program

The Biometrics Program implements numerous angler creel surveys on various fisheries throughout the state and conducts analyses to aid fishery managers. The creel surveys provide critical information for District Managers to use in fishery assessments. A statistical creel survey is underway on a quota-based fishery for wild coho salmon in Siltcoos and Tahkenitch Lakes. Other surveys have been completed for 2006 and the data are being entered and analyzed. This includes surveys on the Nestucca River to evaluate catch rates on different brood stocks of winter steelhead; Diamond Lake to estimate pre-treatment catch rates of trout; Crane Prairie Reservoir to estimate catch rates of two fish stocks and to compare angler use that estimated in surveys in the early 1990's; Lake Billy Chinook to examine angler catch rates of bull trout and kokanee; the Deschutes River from Lake Simtustus to Shearar's Falls to estimate angler use and catch of trout and a separate survey below Shearar's Falls to estimate catch of fall Chinook and summer steelhead; and Laurance Lake to monitor angler use and catch of hatchery stocked rainbow, bull trout, and illegally introduced small-mouth bass. Biometric program staff participated in discussions, based on analyses used to identify flow targets to protect wild winter steelhead in the Willamette Basin, to help identify water allocation strategies that meet both fish needs and municipal water needs. The analyses are also anticipated to be used in developing the Biological Opinion regarding hydropower operations in the basin. Biometric staff also serves as an agency "statistical consultant", responding to questions or requests for review of information of a statistical or mathematical nature.

Stream Nutrient Enrichment Program

The Department in 2005-2006 continued the program of fish carcass placement for stream nutrient enrichment with more than 300 individual placements in the Willamette and Oregon coastal basins. The program operates under a National Pollutant Discharge Elimination System (NPDES) Waste Discharge Permit that requires an annual Memorandum of Agreement (MOA) between the Oregon Department of Environmental Quality (DEQ) and ODFW to cover placements from July 1 through June 30. Listed in the MOA are the approved placement locations and a number of conditions including the maximum deposition rate (up to 2,500 lbs/mi), the carcass distribution methods, and monitoring. Projects place salmon and steelhead used for broodstock at ODFW hatchery facilities. Prior to being placed, the fish are sampled by ODFW Fish Health Services to prevent the amplification or spread of fish pathogens to native fish and aquatic life. Additionally, carcass placements cannot adversely impact water quality limitations identified by DEQ. This past year included the fourth year of a research effort led by Mt. Hood National Forest to place higher densities of carcasses in remote areas of the Clackamas and Sandy River Basins to determine whether the deposition rate limit is sufficient to achieve the ecological objectives. The majority of placement projects are labor intensive and rely on volunteers through the Department's Salmon and Trout Enhancement Program (STEP). Fish carcass placement will continue in 2006-2007 under an MOA similar to that of this past year.

Salmon and Trout Enhancement Program (STEP)

STEP celebrated its 25th Anniversary with the 2006 STEP Conference held October 13-14 in Reedsport. The conference hosted by Gardiner-Reedsport-Winchester Bay (GRWB) STEP, a volunteer organization, was highlighted by presentations on a variety of fish management issues and several prominent speakers including Secretary of State Bill Bradbury, a sponsor of the legislation that established the program. STEP's public advisory committee also used the conference to recognize several volunteers and organizations from around the state for their contributions to STEP. In conjunction with the conference, GRWB STEP hosted a salmon fishing derby held in the lower Umpqua River and a youth angling event. Since the program was established in 1981, more than 250,000 adult and youth volunteers have contributed over 2.2 million hours through STEP. These include efforts to inventory, monitor, and research fish populations and their habitats; projects to enhance, restore, and protect stream and other aquatic habitats; fish production programs to supplement natural production or augment fisheries; and activities to inform and educate the public about Oregon's fish resources and the habitats they depend on. The tally of volunteers and their contribution does not include the many additional adult and youth who have participated in presentations, workshops, field tours, or classroom projects conducted through STEP.

Restoration and Enhancement (R&E) Program

In 2006, the Fish Restoration and Enhancement (R&E) Program provided funding to a wide variety of fish restoration and enhancement projects across Oregon that benefit Oregon's sport and commercial fisheries. The R&E Program is supported by funds generated from a surcharge on all sport fishing licenses and commercial salmon permit and poundage fees. Project Sponsors and their partners contribute a significant amount of in-kind or financial match to R&E Funds. On average, R&E Projects have about 75% matching funds or in-kind contributions. In FY 2005-07, the R&E Program has allocated 4 million dollars to a diversity of projects which translate to more than 12 million dollars of match. Some of the high priority projects that were funded in 2006 with R&E funds include: purchasing and application of rotenone for the Diamond Lake Restoration project (\$500,000) to remove introduced Tui chub and restore the fishery at the lake; the Willamette Valley Fisheries Development project (\$37,040) which will increase urban fishery access in the highly populated Willamette Valley; Warrenton High School Hatchery Equipment Upgrade (\$9,967); Foster Creek Acclimation Facility (\$27,195); Crane Prairie Reservoir Broodstock Evaluation Program (\$45,854); Sunnyside Park Angler Access Enhancement (\$15,000); and Management and Monitoring of Nearshore Fisheries (\$34,973).

Fish Propagation

Annual Production

Oregon hatcheries rear 85 different stocks of salmon, and steelhead, and trout. Production numbers have been steady the last several years.

Area	Salmon	Steelhead	Trout	Total
Coastal	7,252,000	1,994,000	1,070,540	10,316,540
Columbia & Inland	31,361,664	2,982,960	5,206,221	39,550,845
Total	38,613,664	4,976,960	6,276,761	49,867,385

Major Recent Projects

- Detection of the IHN virus at various hatcheries occurred this year. The virus severely impacted some hatchery operations and increased the costs of rearing and stocking rainbow trout in particular.
- Examination of fish through the Naturally Reared Fish Health Survey is providing valuable information on pathogens associated with various stocks of fish in the state. This program will continue in order to establish a baseline database for future comparisons.
- Marking and tagging of over 25 million hatchery reared fish.
- Planning the logistics and funding needs for fin marking an additional 13 million Columbia River fall chinook has been done and submitted to the federal funding agencies. This proposed marking program is intended to further protect naturally produced chinook in the Columbia River.
- Purchase one additional automated fish marking and Tagging (MATS) trailer
- Have submitted 77 of 83 Hatchery and Genetic Management Plans to NOAA
- Participated in the Columbia River Hatchery Reform Project
- Completion of the 2005 Fish Propagation annual report, available on the ODFW web site.
- Updating 33 Hatchery Operations Plans, available on the ODFW web site.

Marine Resources Program

During the second half of 2006, several issues framed the Marine Resources Program's (MRP) research and management activities, public review process, and community outreach. The MRP focused its activities in the following areas:

- Participation in regional fisheries management through the Pacific and North Pacific Fisheries Management Councils and International Halibut Commission
- Groundfish research, planning, and fisheries management
- Fishery port sampling and at-sea monitoring activities
- Preparing for implementation of commercial crab pot limits
- Marine mammal hazing tests and population assessments
- Nearshore planning, fisheries management and habitat assessments

Federal Groundfish Management

Mixed stocks, federally-designated overfished species, and complex and unpredictable patterns in the ocean fisheries have created new challenges for the West Coast groundfish management programs. Recent developments point out the importance of representing Oregon's groundfish fishery interests at the Pacific Fishery Management Council (PFMC), which regulates marine fisheries on the West Coast. During 2005, the PFMC completed stock assessments for 22 species – more than twice the number considered in past years. Many of these species were assessed for the first time. MRP staff were involved in preparing and reviewing some of these assessments. Incorporating the outcomes into an already complex set of management measures will present significant challenges in the coming years.

Ocean Fisheries Management in Oregon

The MRP has the primary responsibility of monitoring and regulating marine sport and commercial fisheries in Oregon's coastal waters. Sport anglers this year had a successful Pacific halibut season, taking the entire quota – which was one of the largest in 10 years. Sport fishers

also had the second best tuna season on record with anglers catching more than 11,600 fish. The bag limit of six groundfish and two lingcod seems to have been the right combination to provide year-long access for groundfish sport fishing as the season enters the final months without exceeding important harvest caps. In the two previous years the sport groundfish season did not last the full year because fishers hit the groundfish harvest caps before year's end. Salmon stocks were down and strong northwest winds during the height of the season limited effort, but sport anglers had nearly the same season and quotas as last year for ocean sport salmon. Ocean salmon opportunities were in at risk this year when NOAA predicted disastrous returns of Klamath River salmon. But commercial salmon fishers were not so fortunate. Their seasons were cut to the shortest in decades to prevent interception of Klamath salmon. To allow commercial fishers some access, the MRP established and oversaw several river-mouth "bubble fisheries" that provided late-season opportunity, while avoiding Klamath salmon.

Marine Research

Several research projects led by MRP teams study the nearshore environment and its inhabitants. A preliminary study using different configurations of terminal tackle is showing promise in helping sport anglers to avoid yelloweye rockfish and other limiting species. Two projects looked at survival of rockfish that are released after capture by anglers because they are undersized or are prohibited under current fishing regulations. These fish suffer from expansion of gases in their swim bladders when they are brought up from depth and can die as a result. The research projects examine the effects of being brought up from depth and explore methods to increase survivability of the fish.

MRP researchers are working in the fourth year of a black rockfish mark-and-recapture project that uses PIT (Passive Integrated Transponder) tags to determine the exploitation rate of this species in the recreational fishery. Black rockfish and other rockfish species are also the subject of a continuing acoustic telemetry study investigating rockfish movement patterns. Ongoing nearshore habitat surveys are enhancing our understanding of habitat type distribution and species-habitat relationships. In an effort to reduce bycatch in both commercial and recreational fisheries, the MRP is conducting several commercial gear research projects examining fish behavior in response to specific gear configurations or methods of deployment. The MRP also completed the third year of a razor clam stock assessment on the north Oregon coast.

Pink Shrimp Fishery

The MRP staff continues to work with commercial shrimp fishermen to further refine the spacing of the metal bars used in the trawl net bycatch reduction devices now required in this fishery. As a result of these efforts the Oregon pink shrimp fishery is now being considered for Marine Stewardship Council Certification as an "ecologically sustainable fishery." If successful, it will be the first shrimp trawl fishery in the world to be MSC certified. The fishery was recently declared a "best choice" by the Monterey Bay Aquarium Seafood Watch program.

Sardine Fishery

In December 2005 the Oregon Fish and Wildlife Commission moved the Pacific sardine fishery from a developmental fishery into a state-run, limited-entry fishery system. Twenty-six Oregon permits were established and made available to qualified participants in the fishery. The Oregon fishery will be managed by ODFW staff to track catch landing totals, collect biological information and, observe fishing activity and bycatch at sea. The PFMC establishes an annual

harvest guideline for the three west coast states (Oregon, California and Washington), which was allocated on a seasonal basis beginning in 2006.

Dungeness Crab Fishery

The MRP plays an active role in managing the commercial Dungeness crab fishery on the West Coast through the Tri-State Commercial Crab Committee. In June the Oregon Fish and Wildlife Commission established limits on the number of Dungeness crab pots commercial crab boats may fish in the ocean during the season. The plan has three tiers of limits - 200, 300, and 500 pots per vessel, depending on the vessel's landings during the six qualifying seasons between 1995 and 2001. It meets the Commission's target of reducing the total number of pots in the fishery from approximately 200,000 pots to around 150,200. The Commission is confident that this is a major step in addressing excess gear and effort in this fishery. MRP staff is working with the fishing industry in Oregon to implement the plan. The staff continue to work with partner state agencies, and other states to address several major policies, management issues including state jurisdiction, enforcement, safety, domoic acid, gear limits, and pre-season testing. Staff are also working with the Dungeness Crab Commission to develop and implement a derelict pot removal program and on Marine Stewardship Council certification of the Dungeness crab fishery. The MRP is also completing work on the first season of surveying recreational crabbing in Yaquina and Alsea bays. This is the second year for recreational crabbing surveys in the Columbia River near Astoria.

Nearshore Planning

ODFW received The Nature Conservancy's "Community Partner Conservation Leadership Award" Oct. 25 for *Oregon's Nearshore Marine Resources Management Strategy* and the statewide *Comprehensive Wildlife Conservation Strategy for Oregon*. The Nearshore Strategy identifies priority needs and opportunities for the sustainable management of nearshore marine fish and wildlife. Its 16 recommendations will guide future management decisions affecting Oregon's nearshore marine resources and direct managers' attention and resources to priority areas where they can have the most positive impact on nearshore fish and wildlife. MRP staff also had a successful season doing ROV habitat surveys at Port Orford Reef. Work continues on a revision of the Interim Management Plan for Oregon's Commercial Nearshore Fishery and expanded public outreach including revisions to the ODFW/MRP website (<http://www.dfw.state.or.us/MRP/>).

Marine Mammals

This summer MRP staff worked with National Marine Fisheries Service and sport fishing groups on a successful test of hazing methods to reduce losses of hooked salmonids to predation by sea lions on the lower Rogue River at Gold Beach. In recent years, questions of how growing seal and sea lion populations affect fishery resources received increased attention. The MRP worked cooperatively with NMFS to assess and monitor pinniped populations and to conduct studies to evaluate their potential impact on recovering threatened and endangered salmonid stocks. One area of concern is the escalating problem of California sea lions in the lower Columbia River and their negative interactions with sport fisheries, and the increasing levels of predation on adult salmonids at fish ladders at Willamette Falls and Bonneville Dam. Staff are working with Washington state to prepare a Marine Mammal Protection Act Section 120 application for potential lethal removal of sea lions adversely impacting threatened and endangered salmonids in

the Columbia River below Bonneville Dam. This application will be submitted to the Secretary of Commerce in mid-November 2006.

Interjurisdictional Fisheries

Revising the 2004 Biological Opinion

Oregon was one of several plaintiffs in suit against the federal government challenging the 2004 Biological Opinion on the proposed operation of the Federal Columbia River Power System (FCRPS). The Court found the Biological Opinion invalid and remanded it back to the federal government to be fixed. Staff has provided the scientific analyses necessary to inform the state's policy and legal positions during the remand and helped to resolve deficiencies in the analysis of jeopardy to the ESA-listed salmon and steelhead.

2006 Annual Water Management Plan

Fish managers worked with the U.S. Army Corps of Engineers, Bonneville Power Administration and U.S. Bureau of Reclamation to implement measures in the 2006 annual water management plan for the FCRPS.

2006 Columbia River Non-Indian Recreational and Commercial Fisheries

Non-Indian fisheries in the winter, spring, summer and fall seasons for Chinook, coho, steelhead and sturgeon were implemented and managed in the lower and middle Columbia River within harvest quotas and incidental-take constraints for fish species listed under the ESA.

2006 Ocean-Salmon Recreational and Commercial Fisheries

Ocean fisheries for coho and Chinook were implemented and managed based on harvest quotas and incidental-take constraints for fish species listed under the ESA. Constraints to ocean fisheries imposed by low escapement levels of Klamath Basin salmon led to development of additional fishing opportunities within state-managed waters.

2005-07 Interim Agreement on Fish Harvest and Hatchery Production under US vs. Oregon

State, federal, and tribal fisheries managers negotiated a three-year interim agreement for managing fish harvest and hatchery production in the main-stem Columbia River. Efforts continue to negotiate a longer-term agreement.

2007-09 Project Selection under the Northwest Power Act

Staff worked with Oregon's members of the Northwest Power and Conservation Council to identify and set priorities for projects implemented as part of the Columbia Basin Fish and Wildlife Program.

WILDLIFE DIVISION

Consistent with ORS 496.012, the objective of the Wildlife Division is to manage wildlife in a manner that maintains all species at optimum levels, while providing recreational and ecological benefits, and regulate wildlife populations in a manner compatible with the primary uses of the lands and waters of the state of Oregon. The Wildlife Division has three sections: Game, Wildlife Diversity, and Habitat. The Habitat section includes two sub-programs: landowner assistance and permits/planning.

Game Program – Big Game

Controlled Hunt Tags Drawn but Not Purchased

Many of Oregon's big game hunting opportunities are administered via a controlled drawing process with a limited number of tags for each hunt. A review of long term (1994-2005) controlled tag sales data suggests that the percentage of controlled tags that are drawn, but not purchased by hunters is increasing about 1-3 percent per year in Oregon. In the last two years, this amounts to approximately 20,000 unsold controlled deer, elk and pronghorn tags that equals approximately \$500,000 in lost revenue per year. Action to address this issue could include:

- Analysis of data to determine factors driving the observed trend.
- Develop a process to sell tags to hunters, potentially increasing hunter recruitment and retention.

Black-tailed Deer Management Plan

Work continues on development of a Black-tailed Deer Management Plan. Because of the difficulty in surveying black-tailed deer Oregon has not established population Management Objectives (MOs) as we have for mule deer in eastern Oregon and statewide for elk. The department is considering development of a "Sex-Age Kill" (SAK) model for black-tailed deer. The SAK model would be used to provide a populations estimate for black-tailed deer in western Oregon. The population estimate from the SAK model would then be used to develop MOs for black-tailed deer in western Oregon.

Corporate Timberland Access Fees:

Major corporate timber owners are increasingly looking to charge access fees for all users on their lands. Pressure to increase revenues while at the same time managing increasingly diversified public use appears to be the major impetus behind these efforts. The department has reached out to landowners in an effort to preserve and protect open access to these lands for hunters. It is too early to know how this will unfold.

Upland Game

Sage Grouse

The implementation of Oregon's greater sage-grouse conservation assessment and strategy is underway. The department has committed seed money to each of the state's five sage-grouse working groups to initiate conservation actions. Oregon has also participated in range-wide efforts and inter-state cooperation for sage-grouse and sagebrush ecosystem management. Department staff recently attended a WAFWA Sage-grouse and Sharp-tailed grouse technical committee meeting in Boise to discuss priorities for the proposed Cooperative Sagebrush Initiative.

The department's sage-grouse coordinator was successful in obtaining a NFWF grant to help fund the National Wildlife Federation's Adopt-A-Lek program in Oregon. Plans are underway to implement the program in spring 2007.

Mountain Quail

Oregon continues its cooperation with adjacent states with their mountain quail translocation and re-introduction efforts. During 2006, over 350 mountain quail were trapped in SW Oregon and translocated to Washington, Idaho and the Steens Mountain area of SE Oregon. For unknown reasons, birds translocated in 2006 suffered higher mortality, primarily from avian predation. Graduate students from three different universities were monitoring the translocations. Mountain quail trapping efforts will begin in late November 2006 to supply additional birds to Washington, Idaho and SE Oregon during spring 2007. The department anticipates that it will have mountain quail available in 2008 to fulfill a recent request from the Nevada Department of Wildlife. The department is keen to assist, where possible, with range-wide efforts to secure the future of mountain quail.

Columbian Sharp-tailed Grouse

In 2006, with the assistance of Utah, Idaho, and Washington, the department augmented a re-introduced population of Columbian sharp-tailed grouse in NE Oregon. Twenty-birds were obtained from Utah and 17 birds from Idaho. The department hopes to obtain additional sharp-tailed grouse in each of the next two years from both Idaho and Utah.

Twenty-one of the sharp-tailed grouse released in 2006 were equipped with radio-transmitters. Birds were monitored following release through the nesting and brood rearing seasons and the department plans to continue monitoring the remaining birds. All but one radio-marked female made a known nesting attempt and nesting success was 50 percent. The annual flush count in August resulted in the highest number of grouse observed since re-introduction efforts began in 1991.

The department and cooperators also continued with habitat improvement projects to provide additional winter shrub habitat for the grouse which is thought to be a limiting factor for the existing population. Projects included fencing existing aspen stands to exclude ungulates and planting a variety of deciduous shrubs. Additional private land projects have been identified for 2007.

Upland Habitat Specialist

In July 2006, Oregon's Upland Game Bird Stamp Program partnered with Oregon's Access and Habitat program to fund a Pheasants Forever upland habitat specialist position in northern Malheur County. The habitat specialist will work with private landowners interested in improving upland habitat. Projects will also improve water quality and habitat for a variety of other wildlife. Northern Malheur County was once a premier location for pheasant hunting and still contributes the largest share to the statewide harvest. Upland stamp funds were also used to initiate upland habitat improvement in western Oregon, near the site of the first successful introduction of pheasants in North America. Pheasants Forever was again a primary partner in this habitat initiative.

Waterfowl

The department and California Fish and Game, in conjunction with the Pacific Flyway, developed new hunt proposals in response to a rapidly expanding Aleutian Canada goose population in coastal areas of southern Oregon and northern California. Delisted federally in 2001, this population now exceeds 100,000 geese. The draft management plan calls for a population objective of 60,000 geese and was developed with consideration for private land depredation issues. Late season (February to early March) hunting frameworks are being implemented for 2007 along the southern Oregon and northern California coast. Landowners in both states are supportive of this proposal. Habitat conditions on public lands in California are being reviewed for potential habitat enhancements projects.

A new late season (similar to the Aleutian hunt) is being implemented in the Klamath Basin portion of Oregon for white-fronted geese to deal with increasing damage complaints from landowners. Monitoring will occur to ensure low harvest of tule white-fronted geese.

Wildlife Diseases

Chronic Wasting Disease

Reducing the risk of Chronic Wasting Disease entering Oregon through carcasses parts from other states is a primary concern of the department. Each year the department is becoming aware of cervids being brought into Oregon from states or provinces where CWD has been found. An informal survey of western states and Canadian provinces indicated that all who could legally cooperate would be interested in exchanging contact information for hunters who have nonresident tags. The department continues to be very interested in developing a process to notify hunters who will be hunting out of state of carcass import concerns and rules.

High Pathogenic Avian Influenza

The department is working under the umbrella of the National Strategic and Pacific Flyway plans for the early detection of high pathogenic avian influenza (AI) in North America. Working cooperatively with several federal and state agencies, more than 800 samples were collected from live birds, none were positive for high pathogenic AI. In addition, hunter killed birds and fecal samples from the field will be tested throughout the fall and winter.

West Nile Virus

West Nile Virus (WNV) was first detected in Oregon in 2004. Since then it has been found in 18 of 36 counties. As of September 25, 2006, there have been 63 documented human cases in Oregon.

Three sage grouse found dead in Malheur County in mid-August were confirmed to be infected with WNV, the first diagnosis of the disease in sage grouse in Oregon. The dead sage grouse were reported by a private landowner. The incident was investigated by the department and U.S. Geological Survey biologists, who found three fresh sage grouse mortalities, more than 60 decomposed sage grouse and one sick northern harrier. The three sage grouse samples and the northern harrier were tested at the U.S. Geological Survey's National Wildlife Health Center in Madison, Wis. and confirmed positive for the disease.

Further monitoring was conducted, additionally, sage grouse and pronghorn hunters were informed and encouraged to report sick or dead sage grouse. The sage grouse mortality appears

to have been localized and occurred during a period of extremely hot weather in an area with flood irrigated alfalfa. Overall, Oregon's sage grouse population remains healthy at about 35,000 birds. Oregon will continue to monitor population numbers, lek activity, and brood production and will use that information to evaluate the need for any changes to future seasons.

Mosquito samples from locations in Union County including ODFW's Ladd Marsh Wildlife Area have tested positive for WNV. The first WNV case in Union County was detected in horses in late August 2006. If WNV in Union County follows the typical pattern there are likely to be more cases in the area next year which will focus more attention on the department's management of Ladd Marsh.

Wildlife Diversity Program

Oregon Conservation Strategy

Oregon's Conservation Strategy (Strategy) was approved in February 2006 and the department is implementing many aspects of the plan.

The department worked collaboratively with Idaho, Washington, Oregon Institute for Natural Resources and Defenders of Wildlife to develop a regional Registry of Conservation Actions to track projects within and across three states.

A statewide Fish and Wildlife Monitoring Team is established and working with the department to prioritize species for monitoring. The department is also partnering with those states on a potential regional monitoring framework which allows us to address shared monitoring needs between Oregon, Washington and Idaho.

Several federal and state agencies are incorporating Strategy goals, actions, and priority habitats and species into their management plans and new projects. The department now has an interactive mapping tool for the Strategy's Conservation Opportunity Areas (COA) for staff and the public to access online information on each COA.

The Strategy has an electronic monthly newsletter which is sent to hundreds of stakeholders, department employees and the media. It highlights implementation actions by the department and our partners, showcases good projects and recognizes landowners doing good work for Strategy species and habitats.

Research and Management

The Wildlife Diversity Program is involved in research and management of a variety of threatened, endangered and sensitive species, including western snowy plover, peregrine falcon, bald eagle, Washington ground squirrel, gray wolf, pygmy rabbit, yellow-legged frog and streaked horned lark. Currently, staff are updating the state sensitive species list and working on delisting American and arctic peregrines from the state T & E list. Public and peer review processes are ongoing for both species.

Wolf Conservation and Management Plan

The Oregon Fish and Wildlife Commission adopted an Oregon Wolf Conservation and Management Plan in February 2005. The plan calls for actively managing wolves that naturally disperse into Oregon from other states. Recent reports and observations indicate wolves may be

moving into the state. In order to fully implement the strategies outlined in the plan, several legislative changes were required to allow more flexibility in managing wolves and addressing livestock depredation. A bill to make those changes was introduced in the 2005 Legislative session but failed to pass out of committee. The department will resubmit a similar bill in the 2007 Legislative session. The plan will still be implemented as much as state law allows while the species remains federally listed.

Invasive species

The department hired an Invasive Species and Wildlife Integrity Coordinator in January. Staff began a project of mapping invasive vertebrates across Oregon to provide more clear insight into current and future invasive species management issues. The department continues to play an active role in the Oregon Invasive Species Council which was established to coordinate a comprehensive effort to keep invasive species out of Oregon and to eliminate, reduce or mitigate the impacts of invasive species already established in Oregon. By the end of 2006, the Council plans to release a feral swine action plan. A feral swine subcommittee was formed and department staff currently leads this group. In addition, the department has stepped up efforts to work with the pet trade industry to reduce or eliminate illegal trafficking of non-native pets. The department is working with Oregon State Police and is coordinating with the USFWS to undertake periodic pet store inspections.

Habitat Program

Wildlife Restoration

The Federal Aid in Wildlife Restoration (PR) program supports operation of sixteen wildlife areas, six regional habitat programs and two research programs. The sixteen major wildlife areas encompass approximately 200,000 acres and are actively managed by the department, providing over two million user-days for hunting, fishing and viewing benefits to the general public. The PR program also funds a statewide habitat program designed to provide technical assistance to public land managers and private landowners to enhance and protect wildlife habitats on public and private lands across the state. Other PR funded programs include the NE and SW Research programs, Hunter Education program, Population Laboratory and the Statewide Technical Guidance program.

Priorities for the upcoming year include maintaining current service levels for Wildlife Areas, Statewide Habitat Development, Wildlife Research and Technical Guidance programs with a small increase in federal PR dollars combined with rapidly rising operating and overhead costs. Meeting federal compliance standards (e.g. ESA – Section 7, Cultural Resources, and NEPA) continues to involve significant staff time.

Wildlife Area Management Plan Review

In the fall of 2005, the department initiated a review and update of 16 ODFW wildlife areas long range management plans. The review of the first three plans has been completed. The goals and objectives of each plan were adopted by the Oregon Fish and Wildlife Commission in October 2006. The review of the next three plans has begun in earnest, with completion scheduled for April 2007. Every six months thereafter three wildlife area plans will be reviewed and updated until the existing plans are completed. Four long range management plans will be written for those wildlife areas currently without plans.

The newly updated wildlife area management plans will offer a comprehensive vision and action plan for the next 10 years. The plans will describe management issues unique to each wildlife area and actions or strategies needed to address these issues. These actions will be implemented during the life of the plan but are subject to funding and personnel availability. Each management plan will be reviewed every five years to gauge implementation progress and will be revised in its entirety 10 years after adoption.

Bonneville Power Administration Wildlife Mitigation

The Bonneville Power Administration (BPA) Willamette Wildlife Mitigation Program ensures involvement in BPA's implementation of the Northwest Power Planning and Electric Conservation Act of 1980. The act mandates that BPA fully mitigate for wildlife losses caused by the development and operation of the Columbia Basin hydropower system. The Willamette Basin contains the largest unresolved debt for wildlife mitigation.

In 2006, the Willamette Wildlife Mitigation Program provided support for restoration and enhancement activities including exotic species removal, wetland development and native plant restoration on ODFW wildlife areas, on acquisitions purchased through the mitigation program, and on municipal green spaces. Specifically, funds were provided in the Willamette Basin to restore 44 acres of emergent wetlands on E.E. Wilson Wildlife Area, to restore 34 acres of wet prairie along the Yamhill River, to plant and maintain 40 acres of bottomland hardwood forests and reconnect 300' of side channels near the confluence of the Middle and Coast Fork of the Willamette River, to develop a management plan for 200 acres of wet prairie and riparian forests near Corvallis, and to begin restoration on 890 acres of bottomland hardwood forests, wet prairie, and upland prairie at the confluence of the McKenzie and Willamette Rivers. Additionally, funding was provided to the Willamette Floodplain Restoration project for hydrological surveys and ecological response modeling on the Coast and Middle Forks of the Willamette River. The program also provided funding to inventory Oregon white oak and ponderosa pine forests in the southern Willamette Valley. In 2007, the Willamette Wildlife Mitigation Program will increase restoration activities on focal habitats identified in the Willamette Subbasin Plan, pursue priority habitats for potential acquisition and conservation easements, complete the inventory of oak woodlands in the lower Willamette Basin, implement new restoration projects along the Middle Fork of the Willamette and the Santiam Rivers, begin implementing results from the Willamette Floodplain Restoration Study and assist in the completion of management plans and reviews for previous acquisition sites.

Western Oregon Stream Restoration

The Western Oregon Stream Restoration Program assists landowners and watershed councils in completing salmon habitat enhancement actions under the "Oregon Plan for Salmon and Watersheds". In 2006, the program completed 81 instream structures with three to seven logs per structure or multiple boulder structures, seven riparian projects affecting 15.5 acres and 23 fish passage projects opening 27.9 miles of habitat. In addition, the program practices adaptive management through a monitoring program that aims to evaluate the effectiveness of these actions to inform restoration specialists and managers about the efficacy of their actions. The program is also working on assessment, design, and grants for projects for 2007 and 2008.

Landowner Incentive Program

In 2006, the department dedicated Landowner Incentive Program (LIP) to implementing the Oregon Conservation Strategy on private lands.

Since its inception in 2002, Oregon's LIP funded or is in the process of funding 31 habitat protection, restoration or enhancement projects on private lands. These projects benefit over 150 of Oregon's at-risk species. LIP grants funded or committed funding for approximately \$3.7 million to private landowners, and helped leverage nearly \$6 million in expenditures from more than 85 partnering entities.

During the last four years, LIP projects in Oregon have resulted or will result in benefits to at-risk species habitats associated with:

- More than 250 stream miles of enhanced aquatic habitat or returned to fish-passable condition
- More than 870 acres of wetlands restored/enhanced
- More than 2,340 acres of riparian acres restored/enhanced
- More than 148 acres of upland prairie restored/enhanced
- More than 512 acres of upland woodland (oak/ponderosa pine and mature Douglas fir forest) restored/enhanced
- More than 250 acres of oak savanna, and
- More than 700 acres of habitat protected by conservation easements

In 2006, Oregon received \$775,000 in LIP funds, the maximum allowable for any state. With this allocation, Oregon continues to lead the nation in LIP funds received from the USFWS. Oregon is also one of the most successful states in obligating project funds and getting the money to landowners.

Access & Habitat Program

The Access and Habitat (A&H) program is an incentive-based program aimed at improving public hunting access and wildlife habitat on Oregon's private lands. Since the program's inception in 1994, the A&H program has implemented over 350 projects. Over three million acres of private land public hunting access has been secured annually on private properties. Over 600,000 acres of private land habitats have been enhanced or restored with A&H funds. The program has expended over \$8 million of A&H funds, and secured over \$18 million of cooperators funds. Over 400 sports organizations, agricultural clubs, school groups and other volunteer groups have been involved in A&H projects.

Current program priorities include: 1) providing large, open access private land hunting opportunities, 2) improving public access to "landlocked" parcels of public land, 3) encouraging more private landowners to enroll in the program and 4) creating new projects and partnerships in locations that have historically not participated in A&H.

Energy Facility Siting

The department is working with the Oregon Department of Energy (ODOE) and the Federal Energy Regulatory Commission (FERC) on a number of energy facility siting projects. The department coordinated with ODOE and project proponents on site certificate applications for six large wind energy projects, an ethanol production facility, and an integrated coal gasification –

combined cycle power plant. The department coordinated with FERC and project proponents on FERC applications and National Environmental Policy Act (NEPA) documents for two liquefied natural gas intake facilities and three large natural gas pipelines.

The department is also working with Oregon Department of Geology and Mineral Industries on (1) coalbed natural gas extraction drilling projects (potential for 300 well sites) in Coos County, Oregon, and (2) expansion of an underground natural gas storage facility in Columbia County, Oregon.

Forest Practices

The department continues to cooperate with other state, federal, tribal, and local agencies, landowners, individuals, and interest groups to develop and implement fish and wildlife habitat protection and restoration activities on private, state, and federal forestlands. The department continues to provide technical expertise and assistance to the Oregon Department of Forestry relating to Forest Practices Act regulation, including development of revisions to state law that emphasize creating riparian conditions that will be beneficial to Oregon's fish and wildlife resources. Specifically, the Oregon Board of Forestry is considering adoption of new administrative rule amendments to Oregon's Forest Practices Act, which would provide riparian protection to many stream reaches upstream from artificial obstructions to fish passage, and address large wood inputs from debris flows and landslides. These revisions will help ensure that many fish populations across Oregon previously separated from segments of their historical habitat will be able to move into and occupy quality habitat as soon as removal of an obstruction occurs. They will also ensure that future debris torrents will have a positive effect on aquatic and riparian resources. The department also continues to provide technical assistance to ODF in developing, implementing, and monitoring strategies and prescriptions to maintain and enhance functional fish and wildlife habitats pursuant to the ODF State Forest Management Plans for northwest and southwest Oregon, Elliott State Forest, and federal Habitat Conservation Plans.

The department continues to cooperate with the Bureau of Land Management (BLM) and U.S. Forest Service (USFS) in determining land management direction on federal forestlands. The BLM and FS initiated planning processes to revise all federal Resource Management Plans and Forest Management Plans in Oregon. As one of several state cooperators in each process, the department provides technical assistance to the BLM and USFS on fish, wildlife, and habitat issues during the development of these federal land management plans.

Incentives Programs

The department continues to work with interested citizens on the Wildlife Habitat Conservation and Management Program (WHCMP) and the Riparian Lands Tax Incentive Program (RLTIP). This past year the department worked with Washington County to add it to the list of counties (now 15 of the 36 counties in Oregon) that allow participation in the WHCMP. The department is also working with several cities interested in allowing the RLTIP within urban areas for the first time.

Land Use Planning

Headquarters is working with staff in several regions on big game winter range issues and destination resorts. Development pressure on lands designated as winter range is becoming

much more intense. Developers are proposing numerous destination resorts, especially in Jackson, Deschutes, Jefferson, and Crook Counties.

Measure 37, Oregon's property rights initiative, continues to have a significant effect on development outside of urban growth boundaries.

Natural Resource Damage Assessments

The Department of Homeland Security awarded the department \$12,000 of Hazardous Waste Operations and Emergency Response (HAZWOPER) training grant funds for federal fiscal year 2006. The department matched these funds with \$4,000. HAZWOPER training provides a certification that allows appropriately trained department staff to access hazardous waste/materials sites to perform natural resource damage assessments. The department hired a training consultant to provide 86 department staff with HAZWOPER training at six different training sessions held in August and September of 2006.

In early 1999, the *M/V New Carissa* ran aground north of the entrance to Coos Bay and broke in two spilling thousands of gallons of tar-like "bunker" fuel into the environment. The department is one of several state and federal NRDA trustees working to recover damages since 1999. In January 2006, the NRDA trustees finalized and published the New Carissa Damage Assessment and Restoration Plan. In February 2006, the NRDA trustees submitted a claim to the National Pollution Funds Center for natural resource damages over and above the \$4 million received through the 2004 settlement with the responsible parties.

In January 2006 and again in late 2006, department staff worked with other state and federal agency representatives and the National Fish and Wildlife Foundation to evaluate and select proposals for fish and wildlife enhancement project funding. The source of this funding, called the Columbia River Estuarine Coastal Fund, resulted from criminal settlement penalty monies related to the illegal discharge of freighter waste oil along the Oregon and Washington coasts. Projects eligible to receive these funds include:

- a) On-the-ground habitat conservation, restoration and management projects in and along the Columbia River below the Bonneville Dam and the adjacent Coasts of Oregon (up to Tillamook Bay) and Washington (up to the entrance to Willapa Bay) that may be affected by estuarine flows to benefit the fish and wildlife resources and the habitats upon which they depend;
- b) Landowner outreach and incentive programs for restoration and management of natural resources in the same geographic area;
- c) Public use and natural/cultural projects that benefit the U.S. Fish and Wildlife Service's National Wildlife Refuge System;
- d) Collaborative projects from local communities seeking environmentally and economically sustainable solutions to natural resource problems; and
- e) Applied research that is directly related to improvement of natural resources management in the same geographic area.

To date, grant-funding disbursements have amounted to \$1.3 million in the first round and \$700,000 in the second round.

ODOT Coordination

The Wildlife Division employs three biologists funded by the Oregon Department of Transportation (ODOT) to assist and coordinate on transportation projects. The ODOT Coordinators continue focusing on bridge replacement issues, major construction and maintenance projects, and education of ODOT and ODFW staff on minimization and avoidance measures during construction and maintenance activities. They provide technical assistance to ODOT on fish and wildlife issues related to ODOT activities that include fish passage criteria and law requirements, federal and state permitting requirements, in-water work window extensions, in-water work area isolation and fish removal, mitigation opportunities, and wildlife passage and habitat needs. They are also working to develop awareness for the need for wildlife crossings and habitat connectivity as they relate to transportation and human safety.

The Coordinators assist ODOT in development of programmatic agreements that streamline permitting processes and facilitate project development and delivery. They continue assisting with the development of a statewide mitigation banking strategy to address wetlands, habitats and specific species conservation and enhancement needs.

Waterway Alterations

The department continues to work with other state agencies to develop and implement a process for streamlining administration of all water-related permitting activities. The proposed process will reduce paperwork, eliminate duplication between agencies, increase certainty and timeliness for applicants, and enhance resource protection. Implementation of this process will occur over the next two years. Oregon's natural resource agencies including the department recently signed an MOA to implement the process.

The U.S. Army Corps of Engineers (USACE) suspended the State Programmatic General Permit (SPGP) for fill and removal activities issued to the state last year. The process proved to be too cumbersome for both the applicants and the agencies. The state and federal agencies are working to modify the SPGP. The state anticipates implementation of the revised SPGP in January 2008.

In-stream gravel removal has been the subject of several USACE permit denials this year. The National Marine Fisheries Service (NMFS) issued jeopardy opinions for several proposed in-water gravel bar scalping operations.

SOUTH DAKOTA DEPARTMENT OF GAME, FISH & PARKS
Wildlife Division
Issues Update – January, 2007

Missouri River Reservoir Conditions

Conditions have not improved much as drought continues to plague the upper Missouri River basin for the seventh consecutive year.

The biggest challenge in South Dakota continues to be low water levels in Lake Oahe. Oahe levels were fairly stable during the spring and as a result most species had successful spawning. Oahe levels hit another record low mark last fall and are likely to decline again this summer. Our previous efforts to extend boat ramps over the past 3 summers should have our ramps usable for the entire boating season.

Anglers coming to the Missouri River to fish did find good fishing and healthy fish. The upper basin needs a significant amount of moisture to bring the big reservoirs back to full pool.

Fisheries Program

Fish Hatchery System Upgrade – South Dakota three fish hatcheries are still in the process of being renovated. The hatcheries are 25 years or older and have major infrastructure needs. The \$11.5 million project has been in the planning for several years and will be completed by early 2008. Funding is budgeted through the Wildlife Division and will use state bonds. Bonds will be repaid using a combination of Sport Fish Restoration and licensing revenue.

Cleghorn Springs State Fish Hatchery, one of two coldwater hatcheries is located in Rapid City was originally constructed in 1928 and destroyed by the Rapid Creek flood in 1972. The hatchery was rebuilt in 1972-73. Since that time much of the infrastructure has worn out and is in need of renovation or replacement. Linear outdoor raceways will be replaced by circular indoor tanks. The water pumping system will be replaced and relocated to provide more efficient use of water, less pumping costs and improved security. In addition, egg and fingerling rearing facilities will be renovated and ADA accessible restrooms added to the main hatchery building. The office will be re-located above the new shop. Cleghorn will be out of production for 2 years.

McNenny State Fish Hatchery, a coldwater hatchery located west of Spearfish, was constructed in the early 1950's and operated by the USFWS until the early 1980's when it was transferred to the state. Renovation involves replacement of a rearing building and tanks that were constructed in 1953. A new domestic sewer system will be constructed to replace an old failing system. Hatchery building renovation involves replacement of asbestos ceiling tile, improvement of the electrical entrance box, lights and wiring; and addition of ADA restrooms and building entrance. McNenny will be operational during renovation.

Blue Dog Lake State Fish Hatchery located near Waubay, the State's only cool and warm water hatchery, was constructed in the early 1980's. Inoperable lake water sand filtering system will be replaced with state of the art filters. In addition rearing pond water control structures will be re-aligned and plumbing upgraded. Half of the rearing ponds will be fitted with above ground pond liners to correct major leakage problems. Blue Dog will be operated throughout the renovation.

The hatchery system renovations are designed to upgrade facilities to serve South Dakota for 20-25 years while maintaining current level of fish production. Current facility capacities will allow adequate fish production to meet management needs for that length of time.

Statewide Water Levels Declining - Continuing drought of the 2000's is impacting fisheries across the state. Stream, river and lake levels and flows are low. Historically, fisheries in South Dakota follow trends in water conditions. Good water conditions produce good fisheries and fishing license sales verify those facts.

Many Black Hills streams are experiencing low flows and do not have adequate water quantity. Subsequently, stocking plans for 2007 have been modified. Small impoundments in the Black Hills are low and will not be stocked during the warm part of the summer. Spring rises and flushing flows have not occurred for many years and stream productivity has been reduced.

Water levels in eastern South Dakota lakes that experienced record high water levels of the 1990's are declining. Lake basins once 20 feet deep are now 5 feet deep. Large traditional lakes are doing well and providing the bulk of fishing opportunity. While rainfall in eastern South Dakota has been near normal, little winter snow and spring runoff has occurred in recent years. Spring runoff and rain will be necessary to improve water levels in eastern South Dakota lakes and allow those lakes to regain the quality of fisheries noted in the 1990's.

Chronic Wasting Disease Status

We have been conducting surveillance for CWD since 1997 after it was discovered in captive elk herds in this state. CWD was first found in free-ranging wildlife in the fall of 2001 when a white-tailed deer was voluntarily submitted for testing and subsequently was found to be positive with the disease.

Our final results for 2005 found 8 CWD positive deer and 5 CWD positive elk. All of our CWD positive animals continue to be found in the Black Hills or adjoining Fall River County. In summary - since 1997, South Dakota has tested over 12,301 wild, free ranging deer and elk and has found 46 cases of CWD (32 deer and 14 elk). We will continue work with other state, federal, and tribal agencies on the CWD issue within South Dakota, and on a national level.

2006 Walk-In Area Program

The 2006 hunting season marked another record year for public access to private lands in South Dakota. Enrollment in the Walk-In Area program continues to increase, with the current program opening 1,080,000 acres to public hunting. The continued success of the program is largely due to the payment system where GFP pays landowners up to \$1 per

acre per year for access, plus a bonus payment of up to \$5 per acre per year for permanent, undisturbed cover in the state's prime pheasant hunting areas. The \$5 per acre bonus payment will only be made if the cover remains undisturbed through the hunting season. For example, Walk-In Areas that have land enrolled in USDA's Conservation Reserve Program (CRP) must remain unmowed or ungrazed to receive the \$5 per acre bonus payment. If for some reason a producer needs to hay or graze the tract, the payment falls back to the basic \$1 per acre. Landowners can also receive an additional one-time bonus payment of up to \$1 per acre for each hunting season remaining on their CRP contract if they enroll their CRP land as a Walk-In Areas for the duration of the CRP contract. Land not containing permanent, undisturbed cover can be enrolled for up to \$1 per acre per year (actual price will depend on the type of hunting opportunity available on the site) anywhere in the state, as long as they have sufficient habitat to offer an opportunity to harvest game.

In 2006, CRP was released for emergency haying and grazing and GFP received several calls regarding payment reductions, however, only a few of these calls were complaints regarding our CRP haying and grazing policy on Walk-In Areas.

The Walk-In Area program continues to be a model hunting access program, with numerous other states using South Dakota's program when they establish their own programs.

While 2006 marked another successful year for the Walk-In Area program, near future contract expirations of 1.55 million acres of land enrolled in the CRP in South Dakota will have a negative impact on the Walk-In Area program by the 2007 hunting season.

CRP Update

Approximately one half of South Dakota's CRP (more than 734,000 acres) was scheduled to expire on October 1, 2007. USDA announced in January 2006 that they would offer 2-5 contract extensions and new 10 & 15 year new contracts to CRP expiring in 2007-10. Over 411,000 acres expiring in 2007 were extended or renewed for 2 or more years. This will bring CRP enrollments in South Dakota down from 1.55 million acres to slightly more than 1.27 million acres. While this resulted in a net decrease of 278,000 acres, we have significantly more CRP than what would have remained in South Dakota had FSA not offered early extensions and new contracts on expiring contracts. At this time, it is unknown how many CRP contracts expiring from 2008-10 will be extended or renewed.

Long-term, CRP enrollment in South Dakota will depend on conservation provisions in the 2007 Farm Bill, structure of the commodity support programs (in the current Farm Bill is more lucrative to grow some program crops) and competition for cropland to grow corn for ethanol production.

Pheasant Population Status

The 2005 South Dakota pheasant season attained a 40 high population level. Some 79,270 resident pheasant hunters and 94,956 nonresidents harvested a total of 1,949,063 pheasants. Our pre-hunt population estimate was just over 9 million birds. The average total season bag was just over 11 birds per hunter and the direct economic impact of pheasant hunting to South Dakota is estimated at \$153,000,000.

The nesting habitat provided by CRP continues to be the primary reason for our high pheasant numbers. As long as we can maintain CRP at the landscape level, we will have good pheasant hunting in South Dakota.

Elk and Deer/Herd Reduction Efforts

Declines in elk hunter success and feedback from hunters and landowners indicate that elk herd reduction efforts have been successful. License allocations declined slightly in 2006 and will likely stabilize in 2007 after 7 successive years (1998 to 2005) of increased allocations.

Liberal license allocations and expanded season dates have resulted in some success in reaching deer management objectives. However, unlike elk, we are not able to issue every license allocated. This is most pronounced in areas of the state where the human population is relatively low. A movement towards more double-tag licenses where the second tag is only valid for an antlerless deer has put more tags in hunter pockets but the additional challenge to motivate hunters to fill those tags.

To encourage antlerless deer harvest, the Department implemented a pilot program in 2006 that offered financial assistance for commercial processing costs of antlerless deer that are donated to needy families under the Sportsmen Against Hunger program. A new mechanism where hunters could make financial donations to the pilot program when applying for hunting licenses resulted in just over \$23,000 in donations. Because 2006-07 deer seasons have not concluded, hunters continue to be able to obtain \$30 certificates that can be given to one of the 49 participating processors as partial payment for donated antlerless deer. Approximately 1,000 certificates have been issued to date. The Department made a 2-year commitment to the pilot program after which a permanent funding source will need to be identified should the merits of the pilot program justify its implementation as operational.

Mountain Lion Hunting

The second SD mountain lion hunting season was held in 2006 with a similar season structure as the inaugural 2005 season. Changes from 2005 included a change in the season opening date from 1 October to 1 November and a prohibition on harvesting any mountain lion that is in the company of any other mountain lion. In 2005, this prohibition applied only to lions that were accompanying spotted mountain lions (cubs). The final change in the season structure was modification of the sub-quota from 5 "breeding age" female lions to a maximum harvest of 8 female lions in the unit that encompassed the Black Hills region. Like last year, the total harvest limit for this unit was 25 lions. Also like 2005, the season was structured with a second unit that encompassed the rest of the state not included in the Black Hills unit. While all residents were eligible to purchase Black Hills unit licenses only landowners were allowed to purchase licenses for the prairie unit. Prairie unit licenses were valid only on landowners' own property.

The 2006 season in the Black Hills unit closed on 19 November when the 8th female mountain lion was harvest. Seven male cougars were also harvested in the Black Hills in 2006. Total harvest over 2 years stands at 15 females and 13 males. After no harvest in 2005, one male cougar was legally harvested by a licensed landowner in the prairie unit. This animal was taken less than one mile from the southern Black Hills unit boundary.

Surveillance Plan for Avian Influenza

The department collected a total of 1,023 samples from live waterfowl and shorebirds and hunter-harvested waterfowl. Live bird samples were collected during summer capture and banding operations. No samples were collected by use of lethal collection. Hunter-harvested samples were collected through a predetermined network of avid waterfowl hunters, most of which were also department employees hunting on personal time. Northeast South Dakota has the highest density of migrating waterfowl and shorebirds and therefore most of the birds sampled came from that area.

Conservation Officer Communications Enhancement Efforts

A series of conflicts over the past several years between some northwestern South Dakota agriculture producers and Game, Fish and Parks drew attention to the communications practices of the Division of Wildlife. In particular, this small group of landowners continues to challenge the department's approach to conducting compliance checks of hunters and anglers on private lands. In essence, the group wishes to limit the ability of conservation officers to enter private lands under the "open fields doctrine".

As a result of some of these ongoing disputes, Governor Rounds has challenged the Division to share its communications successes, explore ways to improve communication with the public in our state and specifically focus on ways to improve communications with agriculture producers. The Division of Wildlife developed a general strategic plan to help guide improvements to agency communications efforts. Division of Wildlife supervisors and administrators then identified additional areas where it would focus specific efforts to enhance conservation officer outreach and communication efforts with landowners, sportsmen and other publics.

The 8 objectives listed below were identified by Wildlife Division Field Operations supervisors as 'high priority' areas. Additional work was accomplished during this past year in several of the objective areas. Field training officers and supervisors received additional training in the new Conservation Law Enforcement Field Training Program. This new field training program utilizes an entirely new and unique approach to the field training of conservation officers by incorporating the use of critical thinking and problem solving skills and promotes the utilization of community resources in conservation law enforcement efforts. Additional improvements in the new field training program were implemented and graduates of the program indicate the training is providing them with the skills and confidence to develop important community relationships and solve problems working with their constituents.

Most recently, the Wildlife Division completed development and printing of a "Landowner Guide to Division of Wildlife Programs". The Guide contains general information on Conservation Law Enforcement, Private Lands Fisheries and Habitat Programs, and Wildlife Damage Programs. The Guide can be 'customized' by individual conservation officers by incorporating existing agency informational pamphlets on a wide variety of subjects of interest to the farm and ranch community and will be used as an "ice-breaker" of sorts by conservation officers who make contacts with farmers and ranchers.

Over the past several months, the Division has also been working with several other conservation agencies across the US to develop an interpersonal skills training program for conservation law enforcement staff. Efforts are currently underway to finalize funding for "The IMPACT Project" which will provide conservation law enforcement supervisors with an interpersonal skills training and evaluation tool.

Finally, the Division revised the policy, procedures and forms related to the Citizen Complaint Process. This revised procedure spells out the process for citizens to file a written complaint on an agency employee and provides guidance to agency supervisors, administrators and the public on the citizen's complaint process will be handled by the department.

Conservation Officer Communications Enhancement and Outreach Objectives:

- Develop and Formalize a Process to Document Landowner and other Citizen Contacts made by Division of Wildlife Conservation Officers and Other Staff
- Review and Revise Conservation Officer Work Responsibilities and Job Classification
- Develop a Communications Planning Process for Conservation Officers
- Review and Revise Conservation Officer Trainee Hiring and Screening Processes
- Review and Revise the Field Training Program for Conservation Officer Trainees
- Assess Conservation Officer Communications Training Needs and Develop a Communications Training Program
- Develop a Mission Statement and Philosophy Regarding Division of Wildlife's Role in Regulating Hunting, Fishing, Boating and other Conservation-Related Outdoor Activities
- Review Procedures Used to Document, Respond and Monitor/Review Citizen Complaints Against Conservation Officers and Other Staff

Prairie Dog Management Status

The South Dakota Departments of Agriculture, Game, Fish and Parks, and other South Dakota land management agencies continue to work cooperatively on black-tailed prairie dog issues at local, state, and national levels. This effort is guided by our South Dakota Prairie Dog Management and Conservation Plan, which was approved by the State Legislature in 2005. The management plan sets out a direction for management of prairie dogs on public and private lands while maintaining prairie dog acres at levels that will prevent the need for future federal listing. This plan is available on our website or upon request.

Since the approval of the management plan, the South Dakota Departments of Agriculture and Game, Fish and Parks have been making efforts to follow through with action items in the approved management plan. Such efforts include obtaining funds for prairie dog incentives in southwestern South Dakota, conducting control efforts on private lands adjacent to public lands, establishing a prairie dog monitoring plan to be conducted every three years, and continuing plague surveillance throughout the state. According to this protocol, we surveyed the majority of the state's prairie dog acreages in 2006. We expect to have the report on the survey results published by spring, 2007.

Final prairie dog control work totals are not available as of yet, but the 2006 season should prove to have more acres treated than in any of the previous 2 years of control efforts.

Many more complaints were submitted than previously received and superficial examination suggested more acres poisoned for many of the repeat complaint areas.

It is not clear the magnitude of the effect the Shannon County plague outbreak had on either the statewide prairie dog survey or on the control program. However, all monitoring surveys indicate little movement of plague over the past 12-15 months and no indication of plague in prairie dogs near the successful black-footed ferret reintroduction site (Conata Basin).

The South Dakota Departments of Agriculture and Game, Fish and Parks are both active participants (via formal cooperative agency status) in the US Forest Service efforts to develop a new prairie dog management plan amendment for the Buffalo Gap National Grasslands. The plan as modified in 1999 has a special management emphasis for black-footed ferrets in the Conata Basin and does not allow for any rodenticide use other than on boundary areas. Due to the prolonged drought and lack of direct control, prairie dogs in this area have increased substantially. The state position is that our original conditions for ferret introductions should be maintained. Thus we are requesting that a range of prairie dogs be maintained at between 8,000 and 12,000 acres in the Conata Basin and that rodenticides be used as management tool to achieve these acreage goals.

We expect this issue to remain highly controversial as certain national environmental groups advocate for more prairie dogs and no toxicant use while local ranchers desire substantially lower prairie dog acreages.

Wildlife Action Plan and Wildlife Diversity Funding

South Dakota's Comprehensive Wildlife Conservation Plan is now known as the South Dakota Wildlife Action Plan. The plan is posted on the SDGFP website, along with an article that explains the plan's background and approach

http://www.sdgfp.info/Wildlife/Diversity/Comp_Plan.htm. Hard copies are available for staff use and public viewing in SDGFP regional offices, and CDs are available upon request. SDGFP has obligated its current State Wildlife Grants (SWG) allocation and anticipates receiving a similar allocation once the federal budget is finalized in early 2007. All SWG projects must now be tied directly to the Wildlife Action Plan. To date, the agency has conducted 37 new projects with SWG funding, with an emphasis on collecting baseline information on species, species groups, and habitats that have not been surveyed in the past. The Wildlife Diversity Program's website contains a summary of these projects: <http://www.sdgfp.info/Wildlife/Diversity/wcrp.pdf>.

SDGFP continues its participation in the Teaming with Wildlife Coalition effort, led by the Association of Fish and Wildlife Agencies. Each state was challenged to have 100 coalition members by the fall of 2006 to help meet a nationwide goal of 5,000 coalition members. As of the end of 2006, South Dakota's coalition numbers 111 members, which can be viewed at the following website: <http://www.sdgfp.info/Wildlife/Diversity/teaming.htm>

Wildlife Damage Management Status Update

During the federal fiscal year 2005 we again received additional funds beyond the grant-in-aid allowing the predator control section of the WDM program to continue operations without cutting services or personnel. This was the fourth year the WDM program received these

additional funds. However, all GFP trappers and pilots continue to work 15% of their hours outside of their ADC duties to maintain the program's financial stability.

A quickly evolving funding issue is rumor of a movement to eliminate earmarked USDA-APHIS-WS funding programs at the national level. The GFP WDM program is unique to all other states in that the program includes a predator and nuisance animal response program (Animal Damage Control section – ADC). The majority of the ADC program's responsibilities are covered by APHIS-WS in all other states. Approximately 40% of the ADC program is funded through USDA; half of that with a Grant-in-Aid and the rest funded by an Agriculture appropriations line-item. If either of these federal funding sources were to be eliminated, the ADC program would not be able to continue to provide the same level of landowner services mandated by law. At this time it is too early to tell if this rumor is true or how much strength it has behind it. Communications between GFP, the Governor's office, and the state's US elected officials has already started on this issue.

The WDM Working Group, made up of GFP staff and private citizens from across the state, met last January to go over the program. Many fine accolades were given about the program, but questions arose about adequate funding that allowed staff to respond to landowner complaints. Assurances were given by staff that any funding problems in the future would be brought before the Working Group for their input.

**Western Association Fish and Wildlife Agencies
Winter 2007, Tucson, Arizona
State of the State Report**

**Texas Parks and Wildlife Department
Period June 17, 2006 – November 28, 2006**

DEPARTMENT NEWS

EXECUTIVE OFFICE

MEDIA COVER PARKS ADVISORY MEETING

Newspapers reporters focused on possible budget cuts connected with the agency's 2008-2009 Legislative Appropriations Request (LAR). Executive Director Robert L. Cook briefed the State Parks Advisory committee on the draft LAR, saying "I'm not doing this to scare anybody, but these are options that we have to consider if we are required to make 10 percent cuts in our state parks." Covering Cook's briefing, the Austin American-Statesman wrote "Texas' financially strapped state parks system could lose as many as 18 state parks and 44 full-time jobs," although the same article called these hypothetical cuts "a starting point for legislative budget writers." The article also mentioned a possibility of more cuts to the Local Park Grants fund the department uses to aid cities and counties, which has already been cut from \$15.5 million to \$5.2 million in recent years. The article said additional cuts there would leave just \$1.8 million per year, which would essentially provide for administrative oversight of grant projects already funded. A funding subcommittee briefing said state parks need a total of about \$100 million per year in additional funding above current levels. This includes new money for state park operations, local park grants, and long-term needs such as major repairs and acquiring and developing new parks as recommended in TPWD's Land and Water Resources Conservation and Recreation Plan. TPWD plans to ask for exceptional items to restore the 10 percent cut and increase park funding, although such requests will have to be weighed by legislators against many other state funding needs. The governor's office spokesperson Robert Black said "The governor believes it is fiscally sound and good public policy to make every state agency in state government look at where they can find efficiencies with taxpayer dollars. With that said, the governor is [also] very interested in making sure that the parks have what they need to have [in order] to have the best parks system in the country. He is certainly going to make recommendations to the next Legislature that will make that happen." The next legislative session begins January.

FEMA FUNDING SOUGHT FOR HURRICANE COSTS

For many months, the department has been seeking reimbursement from the Federal Emergency Management Agency for a total of about \$5.1 million in emergency expenses related to Hurricanes Rita and Katrina. This includes about \$3.1 million in facility repairs to seven state parks hit by Rita. The remainder of the funding is for staff and equipment expenses incurred by game wardens and other employees during emergency

response and search and rescue work. So far, FEMA has not officially approved any of TPWD's funding requests. However, an important meeting took place last week involving department staff and representatives from the governor's office, state emergency response officials, the Legislative Budget Board, Texas Dept. of Insurance and FEMA, and employees are now working to provide the remaining information needed for FEMA to make a determination. An issue regarding the reimbursement process has been a federal requirement that TPWD have flood insurance to be reimbursed (state agencies are "self-insured" and thus do not have conventional insurance). After meetings with state leaders the Commissioner of Insurance issued a waiver letter of insurance for over \$2 million in FEMA reimbursement.

ONE YEAR LATER, TPWD SITES STILL RECOVERING FROM RITA

One year after Hurricane Rita slammed into the Southeast Texas coast, almost all state parks, wildlife management areas and other department sites damaged by Rita are back open to the public, although some continue to operate at reduced levels and many still need repairs. In a one year retrospective news article, the Fort Worth Star-Telegram reported that Sea Rim State Park near Port Arthur is still closed, that "...the park's wastewater treatment plant is inoperable, which makes it impossible to reopen the park to overnight campers." Park Superintendent Joseph Munguia told the paper Sea Rim will open for day use by the end of the year even though the site needs \$483,063 in repairs. "It will be primitive," said Assistant Superintendent Gene Cox. "They'll have to use porta-potties, but we'll get it open somehow." Ten department properties and another recently transferred to the City of Houston (Lake Houston Park) still need repairs, places where Rita smashed park stores, destroyed roofs, blew down power lines and clogged water systems.

EXPO CROWD NUMBERS BACK UP WITH NEAR-PERFECT WEEKEND

After two years in which hurricanes and rain doused visitor attendance, the 2006 Texas Parks and Wildlife Expo crowd count was back up to an estimated 35,644 people, close to the 36,000 guests we had in 2003, the last "regular" year. Fallout from Hurricanes Katrina and Rita dropped the crowd to about 28,000 last year and a rainy Saturday in 2004 sogged numbers down to 22,500. This year, blue skies, cool mornings and warm afternoons, and a great performance from employees and partners made this one of the smoothest-running events ever. The Expo has had five years of 40,000-plus crowds, mostly in the late 1990s, when long lines clogged some popular activities. Some longtime Expo staffers believe the event works well and provides a good visitor experience with 30,000-to-40,000 attendees, where we've been for six years out of 15. Perhaps a better numeric measure of success is 510,421, the total number of lives the Expo has touched in 15 years. But none of these data speak to the quality of the Expo experience, which by all accounts was superb. Staff and volunteer labor allocation remains a topic of discussion and TPWD will continue to work to make sure the right number of workers get to each job and shift. This year's crowd was diverse, including a significant number of Spanish-speaking visitors and other nontraditional customers. Probably at least half the crowds were newbies savoring their first Expo. "The Expo is especially valuable for our field employees to see the breadth and diversity of what our agency offers, and for employees whose jobs don't typically put them face to face with the public," said Robert L. Cook, TPWD executive director. "I can tell you on behalf of myself, our commissioners, all

the division directors and many others, our hats are off to all the employees, volunteers and partners. You make this event special. I cannot tell you how many people came up to me to express similar thoughts and congratulations on a job well done. We should all be very proud."

DRAFT STATE WATER PLAN MADE PUBLIC

The draft 2007 State Water Plan was approved and put out for public comment by the Texas Water Development Board. This is the culmination of the second round of a 5-year planning process involving 16 regional water planning groups. TPWD has participated in this process since its inception in 1997 when Senate Bill 1 was signed into law by then-Gov. Bush. TPWD staff serve as non-voting members on the regional water planning groups, providing input regarding potential impacts to fish and wildlife resources. The draft plan predicts the population of Texas will more than double over the next 50 years, growing from 21 million today to roughly 46 million by 2060. Although water demand is expected to increase by only 27 percent, existing supplies are expected to decrease by 18 percent and shortages are predicted if new water supply projects recommended by the draft plan are not implemented. New projects recommended in the draft plan include 14 major reservoirs. Most notable among these are Lake Fastrill and Marvin Nichols Reservoir, both recommended to meet future City of Dallas water supply needs. Lake Fastrill is planned for the same portion of the Neches River as the recently designated Neches River National Wildlife Refuge and, if built, would impact a portion of the Texas State Railroad. Marvin Nichols Reservoir, planned for the Sulphur River, would inundate or otherwise impact portions of a 94,252-acre tract identified as a Priority 1 Bottomland Hardwood Preservation Site by the US Fish and Wildlife Service. On a positive note, 15 river and stream segments located in Region H near Houston and the Far West Texas Water planning region have been recommended as ecologically unique stream segments. If the legislature approves these designations, it would protect these sites from inundation by state-funded reservoir construction. The draft water plan will be reviewed by TPWD Water Resources Branch staff and comments will be submitted to the water development board. The final 2007 State Water Plan is due to the legislature in January.

WILDLIFE

LANDOWNER TECH GUIDANCE REVIEWED

Wildlife Division employees met this year about technical guidance for private landowners, a key element of department efforts to facilitate habitat conservation on private land. In 2000, TPWD doubled from 10 to 20 the number of wildlife biologists who focus on providing tech guidance. However, in recent years practice has evolved so that 197 field biologists and technicians in the Wildlife Division now provide landowner tech guidance as some part of their jobs. During this meeting staff discussed a range of issues, including tech guidance history, evaluation and training; the Lone Star Land Steward Awards; new technological tools; an update on the newly appointed Private Lands Advisory Board; Farm Bill and Landowner Incentive Program updates; access for rare species surveys; revision of tax valuation guidelines; and prescribed burning assistance policies and issues.

TEXAS GETS EXPERIMENTAL DUCK REGS

The Hunter's Choice option for the Central Flyway gained approval from the U.S. Fish and Wildlife Service, giving Texas waterfowlers more latitude during the entire season in exchange for a reduction to the daily bag limit from six to five birds. Texas and four other states in the Central flyway will recommend an experimental Hunter's Choice bag limit starting with the 2006-07 season. The new bag structure alleviates the need for complex restrictive harvest measures on less abundant duck species like pintails, canvasbacks and mottled ducks.

BIGHORN SHEEP SURVEY SHOWS RECORD HIGH

This past bighorn sheep survey season saw a record in the number of sheep observed. The Wildlife Division flew helicopter surveys and counted 829 desert bighorn sheep in West Texas, a record high since record-keeping began in the late 1980s. Desert bighorns were extirpated from the state's western mountains in the early decades of the last century, due mainly to unregulated market hunting and diseases transmitted by domestic sheep. But a multi-partner effort involving TPWD, the Texas Bighorn Society, private ranchers, federal aid funding and hunter license dollars is restoring the species. This year's record sheep numbers will make possible a record 12 bighorn sheep hunting permits in Texas, well above the previous high of eight permits two seasons ago. Eight of the 12 Texas permits will be for sheep hunts on private land, illustrating how private land stewards are benefiting from the restoration effort.

PRAIRIE CHICKEN MAKES NEWS

A new agreement between the TPWD and the U.S. Fish and Wildlife Service is expected to help private landowners conserve the lesser prairie chicken, a rare bird whose fate is tied to the health of grassland ecosystems that sustain many other wildlife species. By undertaking voluntary conservation measures on their property under the new agreement, landowners will be assured that no further land use restrictions or conditions will be required from them if the lesser prairie chicken is ultimately listed under the federal Endangered Species Act. The bird is currently a candidate for listing. An agreement signing ceremony on Nov. 2 involved TPW leaders and Deputy Interior Secretary Lynn Scarlett.

WILDLIFE CONSERVATIONISTS PARTNER IN THE RESTORATION OF A BALD EAGLE NEST

A bald eagle nest located in the northern Texas Panhandle received a much needed restoration thanks to a statewide partnership of university and state wildlife experts and zoos. The group partnered to build an artificial nest and perch for a pair of bald eagles that has made the area home for the past several years. Biologists feared that if the nest was not restored, the eagle pair, which mates for life, would lose this nesting habitat. The nest was discovered in 2004 by Texas Tech University Research Biologist and Associate Professor Dr. Clint Boal. Since then, the two adult eagles have produced five eaglets. The tree holding the nest slowly deteriorated, and was found collapsed in October. The new artificial nest was constructed in early November at the Fort Worth Zoo, and the poles donated by Xcel Energy were erected to provide support and additional perching. The partnership also includes Texas Parks and Wildlife Department, Abilene Zoo, Texas Tech University and Amarillo Zoo. The project was completed just in time for the eagles to nest this winter.

BIG WATER WEEK BLENDS HOPE WITH CONCERN FOR PEOPLE, WILDLIFE

The Land Stewardship and Water Resources third annual conference in Uvalde on Nov. 14 targeted a private landowner audience, helping ranchers and others understand what they can do to improve water quality. Many landowners there expressed worries about groundwater, whether their wells would still be pumping in years ahead with more and more people moving to the country and sinking straws into aquifers. Coincidentally, that same day the 2007 State Water Plan was approved by the Texas Water Development Board. Five years in the making, the state plan rolls up recommendations from 16 regional water planning groups. The plan concludes that over the next 60 years, the demand for all uses of water in Texas will increase by 27 percent. It also says Texas does not have enough supply today to meet future water demands during times of drought. To meet projected shortages, the plan says the state will need an additional 3.7 million acre-feet of water in 2010, increasing to 8.8 million acre-feet in 2060. Strategies to meet these needs include a combination of water conservation, reuse, desalination, additional groundwater use, and 14 new major and 2 minor reservoirs. Estimated capital costs to implement these water management strategies by 2060 come to approximately \$30.7 billion. There was good news in the plan—for example, cities and regional planners proposed more water conservation than in years past, the least costly and most environmentally friendly approach. Also in November the Charting the Course water policy conference at the capitol extension drew a crowd of state agency staffs, university researchers and NGO partners. Former TPWD leader Andrew Sansom and his staff at the River Systems Institute hosted this conference, which included fascinating presentations on global climate change, how cities and groundwater conservation districts are conserving water and managing growth, Gov. Perry's Trinity River corridor initiative, and many other topics. One key theme was environmental flows--how to keep river, bays and estuaries "ecologically sound" as required by recent state laws.

LAW ENFORCEMENT

GAME WARDENS ASSIST IN SNAPPER CASES

Galveston County Game Wardens Kevin Webb and Rip Fluitt, boat pilot Todd Penick and Pat Brisco, along with National Oceanic Atmospheric Administration special agents, recently attended a sentencing hearing in a federal case involving the seizure of 8,851 pounds of unlawfully caught fish, including 7,718 pounds of red snapper. Defendants with the commercial snapper vessel Thanh Tam received maximum possible sentences. The captain was sentenced to 30 months in a federal prison to be followed by three years of supervised release. The co-defendant received 21 months in prison with three years supervised release. The case was made in March 2005 with the assistance of Galveston area game wardens. The district judge in the case commented, "this kind of poaching activity in the Galveston Division of the Southern District of Texas is absolutely unacceptable" and "it is the court's strongest recommendation that the vessel be seized and sold." In a similar case, the operator of a federally permitted commercial fishing vessel Kaitlyn Mai recently received a \$95,000 civil monetary penalty and 180-day permit sanction from NOAA for multiple federal violations. On Nov. 1, 2005, NOAA agents and TPWD wardens approached the Kaitlyn Mai, which tried to elude them and rammed the patrol vessel to avoid a boarding.

During the pursuit, the crew threw approximately 1,000 pounds of fish overboard. State criminal charges are pending for these violations. When special agents finally boarded the fishing vessel, they found 4,762 pounds of reef fish, including 3,659 pounds of red snapper taken from federal waters prior to the opening of the commercial season.

GAME WARDENS CONFISCATE ILLEGAL NETS, FIND DEAD DOLPHINS

On Nov. 17, a U.S. Coast Guard vessel chased a Mexican commercial fishing boat suspected of illegal fishing about six miles offshore of South Padre Island. The boat made a run for the Mexican border some 15 miles away and eventually escaped in shallow surf where the larger coast guard vessel could not go. The department's Captain Williams Gulf patrol boat operated by the Law Enforcement Division was contacted to inspect the area. Game wardens ended up confiscating 10,110 feet of illegal gill net, the longest piece found in the Gulf of Mexico in many years. The net was loaded with dead sharks, cobia and two bottlenose dolphin. Capt. Ken Baker, who supervises wardens in the Lower Rio Grande Valley, reported that "use of illegal gill nets is an ongoing situation and will continue to be a problem in the future. There is no doubt that the illegal fishing on both sides of the border in the Gulf of Mexico is a serious threat to fish species and mammals in the area. One can only speculate what is going on just south of the Mexican border." Baker says "commercial vessels from Mexico can be seen on any given night in Texas waters" and that they are very difficult to apprehend. For example, he reported that a U.S. Border Patrol 32-foot patrol vessel recently sustained more than \$3,000 in damage after a Mexican vessel rammed it and got away. Baker concluded "the use of very specialized equipment for enforcement officers is needed and is being addressed."

FISHERIES

DRY HEAT CAUSING FISH KILLS

In freshwater and saltwater, drought is taking its toll on fishery resources in some Texas rivers, bays and small impoundments. During this past summer, it's not uncommon to see high heat and low water levels combine to produce low dissolved oxygen conditions that kill fish, although biologists say the scope of such kills is greater in Texas than in previous years. Ironically, heavy rains that cause heavy runoff are often killing as many fish as the drought. The Corpus Christi newspaper reported that low oxygen levels in Corpus Christi Bay killed an estimated 1,000 fish found near Packery Channel, mostly menhaden, mullet and perch. Similar kills are being reported statewide, most of them related to drought. However, the Inland Fisheries staff is watching a kill caused by golden alga in the Brazos River above Possum Kingdom Reservoir.

1944 SHIP TO BECOME GULF ARTIFICIAL REEF

After more than 10 years of working with the U.S. Maritime Administration (MARAD), TPWD has completed contractual negotiations to prepare the Texas Clipper to become the first major addition to the department's Ships-to-Reefs program in more than 30 years. In early spring 2007, the clipper will be sunk 17 nautical miles off the southern coast of Texas to become an artificial reef. The Clipper is a former WWII troop transport ship, cruise liner and training vessel for

the Texas A&M University Maritime Academy. Artificial Reef Program Coordinator Dale Shively said that last week a Notice-to-Proceed was issued to Resolve Marine Services, Inc. of Port Everglades, Florida to begin preparations to tow the ship from the MARAD Reserve Fleet dock in Beaumont to Brownsville for cleaning and final preparations. Towing from Beaumont should begin late this month or in early November, and the transfer of the title from MARAD to the State of Texas is set to occur once towing commences. Hazardous materials remediation (cleaning) and hull modifications will be done by subcontractor ESCO Marine of Brownsville. The process of preparing the ship for reefing could take four to six months. The U.S. Environmental Protection Agency (EPA) has approved the TPWD cleanup plan for the ship, but approval for sinking will be made after a final EPA inspection. The department Ships-to-Reefs program uses the sinking of large obsolete ships to create artificial reefs, adding a unique dimension to the Texas Artificial Reef Program. Ships-to-Reefs efforts began in the mid 1970s through the efforts of the Texas Coastal and Marine Council with the reefing of 12 WWII "Liberty Ships" at six sites along the Texas coast. Recently, MARAD and the EPA have drafted guidelines for coastal states to follow in preparing obsolete ships for artificial reef programs. Texas will continue to look for opportunities to acquire suitable ships for its offshore waters.

WAFWA 2007 WINTER REPORT UTAH DIVISION OF WILDLIFE RESOURCES

Employee Recruitment, Advancement and Retention

During the last year, nearly 40 Utah Division of Wildlife Resources (DWR) employees have retired or resigned, many to accept higher paying positions with other agencies and organizations. The effect on our Leadership Team has been even more dramatic. Since May 1, 2005, three of five Regional Supervisors, four of six Section Chiefs and one of two Assistant Directors have been replaced. The DWR has had an increasingly difficult time attracting a good candidate pool to our entry-level professional positions and convincing current employees to seek and accept promotions. Over the last two years, we have attempted to address this through several efforts:

1. Increasing our ties to the universities in Utah through more of an on-campus presence, including career nights, lectures in classes and a contract faculty member. We are also exploring the option of establishing a research coordinator/recruitment position for the DWR, who would be stationed at Utah State University.
2. Establishing an internship program where we hire top undergraduate wildlife students upon graduation and send them to graduate school on a project funded by us with the promise of a job when they complete their course of study.
3. Guaranteeing summer employment to undergraduate students in an honor's program, beginning with the summer before their freshman year.
4. Recruit existing employees to return to school (graduate and undergraduate) in order to make them competitive for promotions.

We are beginning to see some encouraging results. Our applicant pool has been larger for our most recent biologist openings. We have received positive feedback from faculty and students regarding our increased presence on campus. The Research Coordinator position has been established and will be filled by January 1. Our first intern will complete his M.S. degree this fall. Every student in the Quinney fellowship program at USU was offered a summer position and all who expressed an interest received a position. One employee completed his M.S. degree this year, three will complete degrees (2 M.S. and a Ph.D) in 2007, and 2 employees began graduate programs in August.

The retention issue, other than increased education opportunities, has been more difficult to address. A Certified Management Program was assigned the task of surveying employees to see why field personnel do not seek promotions

and what the DWR could do to encourage them. We are ready to implement a new Leadership Development Program based on AFWA's program developed by the Management Assistance Team. We have proposed a fee increase and earmarked part of the revenue to upgrade pay for our employees. The Executive Director of the Department of Natural Resources has made the pay issue and loss of employees his major focus for the upcoming Legislative Session. We are also considering changes to the career ladder for our field biologists to create an intermediary position without forcing a move, similar to the Sergeant position we have in Law Enforcement. Hopefully by next year we can report on the success of these efforts.

Finally, during the spring of 2006 the DWR assessed its management effectiveness for the third time since the early 1990s. Dr. Steve McMullin, of Virginia Tech University, conducted the analysis once again and then led an intensive workshop to enable a deeper understanding of the information among interested employees, including most Leadership Team (LT) members. Since then, the results have been shared extensively with employees at the Section and Region levels and specific action have been identified that can be taken to enhance our management effectiveness. The LT met in late November to prioritize solutions developed by Sections and Regions teams and adopt actions to be taken agency-wide to enhance the effectiveness and improve morale within the DWR.

The Reber Decision – Wildlife Law Enforcement in Indian Country

The Utah Court of Appeals issued an opinion on November 10, 2005, in *State v. Reber*, 128 P.3d 1211 (Utah App. 2005) concluding the State of Utah lacks criminal jurisdiction over wildlife violations committed by non-Indians on non-Indian owned fee lands classified as Indian Country within the Ute Indian Reservation. The ruling leaves a substantial jurisdictional void in criminal prosecution by precluding state prosecution of non-Indians committing wildlife violations on the reservation while federal law does not recognize federal criminal jurisdiction over non-Indians unless the violation occurred on trust lands. The decision also calls into question the Division's authority to manage wildlife and issue hunting and fishing licenses to non-Indians on over 2,000,000 acres of Forest Service, BLM and State lands within the Reservation's boundaries.

The Court of Appeals decision is currently under review in the Utah Supreme Court where briefing will be completed in mid-December, 2006. The Ute Tribe has also joined with the state in opposing the Court of Appeals' opinion.

Over the past year, however, state, local, federal, and tribal representatives have been cooperatively working together to provide wildlife law enforcement under the auspices federal jurisdiction. The first step involved developing a legal vehicle whereby state wildlife laws could be enforced in federal court. This was accomplished by using Forest Service and BLM regulations that assimilate state wildlife laws and make any violation of state law a violation of federal law. Next, an expanded federal law enforcement presence was needed to enforce the

federal assimilation regulations since only one U.S. Fish and Wildlife officer was assigned to the area. The Fish and Wildlife Service assisted by extending federal deputy game warden commissions to state conservation officers allowing them to investigate and enforce, among other things, the federal assimilation regulations. Lastly, the assistance of the U.S. Attorney's office was needed to prosecute the new caseload of federal wildlife violations. The U.S. Attorney's Office did not have the resources to prosecute a substantially increased volume of criminal cases, but agreed to extend Special Assistant United States Attorney status to a selected group of state government attorneys from the Utah Attorney General's Office and local county attorneys' offices.

These three components put everything in place to effectively enforce, investigate and prosecute violations of state wildlife laws in federal court. Although this conglomeration effort has been cumbersome and very time consuming, it has nonetheless proven effective as a short-term law enforcement and prosecution solution to the Reber problem.

Fish & Wildlife Diseases

Avian Influenza

The DWR has completed an Interagency Implementation and Surveillance Plan for the Early Detection of Asian H5N1 influenza in Utah. This plan outlines efforts and goals designed to sample nearly 1,300 birds by the DWR and an additional 1,850 samples that will be collected by the USDA Wildlife Services agency. Primary species to be sampled in Utah include tundra swan, northern pintail, northern shoveler, green-winged teal, and long-billed dowitchers. Funding and supplies to support these efforts have been received from the U.S. Fish and Wildlife Service. We did receive funding and supplies from USDA Wildlife Services, but a little too late to assist with sampling efforts for long-billed dowitchers. Sampling efforts are almost complete and with 895 samples collected so far. From these samples several low pathogenic avian influenza viruses have been detected, but no HPAI H5N1. The Division has also investigated several mortality events in waterfowl that began in mid-July. Necropsies and testing have verified an outbreak of avian botulism that is estimated to have affected 10 - to 15,000 waterfowl and shorebird species. Avian influenza sampling will continue through December with the greatest efforts focused on hunter harvested birds beginning in October.

Whirling Disease

This pathogen continues to invade Utah fishing waters. Legislation is being proposed for the upcoming session by a state senator representing the commercial fish growing industry to downlist the status of this pathogen to "reportable, NOT prohibited." This legislation, if passed, would allow the stocking of fish from infected hatcheries to any water in the state that tested positive for whirling disease. The DWR will encourage the state legislature to vote against

this draft bill due to its negative effects on recovery of native cutthroat trout.

VHS Disease

The recent ruling by APHIS on prohibiting the movement of fish from seven of the Great Lakes states could impact tiger muskie management in Utah. Utah currently gets its eggs/fry from a private (disease free certified) operator in Minnesota. With this ban, Utah is looking for other sources of tiger muskie in non-VHS reportable states; or pursue other species management options. The tiger muskie in Utah is considered a trophy fish, and the loss of this fish would be disappointing to our anglers.

Mercury Contamination

Waterfowl

Mercury concentrations in two species of migratory ducks (i.e., northern shoveler and common goldeneye) led Utah Department of Health (UDOH) and the DWR to issue warnings to waterfowl hunters in the GSL area during the 2005–2006 waterfowl hunting season to not shoot or eat these two species. We believe this was the first advisory of its kind in North America for waterfowl. Because these preliminary sample sizes were generally small and from a limited range of dates and locations within the GSL area, DWR managers wished to better understand how Hg concentrations in waterfowl may vary temporally and spatially in GSL marshes and if elevated Hg concentrations in other species may be cause for concern during the 2006–2007 waterfowl hunting season.

Over 500 waterfowl samples were collected between October 1, 2005–February, 23 2006 by DWR personnel either by shooting with shotguns or from donations by waterfowl hunters. Mercury concentrations in muscle tissue samples were generally less than those from the previous year for shovelers and goldeneye but still exceeded screening levels used by the UDOH to issue consumption advisories. The advisory was modified, however, to allow some limited consumption of these species. Cinnamon teal Hg levels also were elevated and they were subsequently added to the consumption advisory. Temporal and spatial differences in Hg concentrations generally were not apparent in the second year of this study.

Fish

The DWR is working closely with our sister agency, Utah Division of Water Quality, to assess mercury contamination in state waters. In 2005, Utah had four waters that were identified as having mercury levels exceeding state water quality standards. Accordingly, the Utah Department of Health issued a limited fish consumption advisory for these four waters. In 2006, the DWR expanded its mercury level sampling through our standard fish gill netting work effort this spring and fall. Preliminary data indicates that seven additional waters or drainage sets may have mercury levels that exceed state standards. This data

will be analyzed this winter, in conjunction with Utah DWQ and state Health, to determine a course of action in terms of a public health advisory on these waters. Mercury levels in Utah tend to be high, in part due to its geology and in part due to air-borne discharges from gold processing sites in Nevada.

Marketing of Fishing

Fishing in Utah has never been better and the DWR is luring lapsed anglers back and introducing the sport of fishing to a new generation. As of mid-November 2006, the UWR increased fishing license sales by nearly 34,000* permits from the year before, a 19.5 percent increase! To accomplish this, the DWR: 1) sent postcards to lapsed anglers just before Memorial Day; 2) ran outdoor advertising throughout the summer; 3) developed a dynamic customer-centric fishing information Web page; 5) provided all its license agents with small posters for display; and 6) encouraged every employee to promote fishing in Utah in their e-mail tag line. Of course sound resource management, cooperative environmental conditions and the move 365-day licenses also helped. The DWR is confident that fishing license sales can continue to increase and plan to enhance marketing efforts to see that it happens. Success in this marketing effort will lead to a substantial increase in revenue. This revenue would allow the DWR to reinvest in programs aimed at enhancing the long-term revenue picture. *(There were 173,130 season fishing licenses sold in 2005 versus 207,062 365-day fishing licenses sold in 2006 through November 27).

License Fee Increase Proposal

In response to the continuing struggle with major financial challenges from increased costs for labor, benefits, utilities, motor vehicles etc., the DWR is moving forward with a proposed fee increase. The agency has assessed current and future needs and concluded that the fee increase needs to include revenues for existing expenses and also for enhancement of programs of interest to the public. The approach being proposed would raise about \$4.7 million per year and includes a requirement to purchase a hunting license before applying in any limited entry draw hunts or purchasing other hunting permits. The hunting license would be valid for small game hunting. Other fee increases would raise the hunt application fee from \$5 to \$10. A few other hunting and fishing license fees would be increased as well. Some of the new revenue generated from a fee increase would be for sportsman access, phragmites control, and habitat projects. The Utah Legislature will vote on these fee changes in February 2007.

Formation of a Wildlife Foundation

Director Karpowitz has called for the creation of a Utah wildlife foundation and allocated a full-time position to lead the effort. His goal is to have this foundation established and self-sufficient within two years. He envisions this foundation raising funds for wildlife research, education and protection. While he anticipates

the foundation will gather resources to support all wildlife and its habitat, he will challenge its board to focus on providing opportunities for citizens who value non-game and watchable wildlife to support foundation projects.

NRCS Farm Bill Biologists

Four Farm Bill biologists were hired to assist the Natural Resources Conservation Service (NRCS) in helping private landowners cost-share on projects that will benefit wildlife utilizing existing NRCS Farm Bill programs, as well as state Watershed Restoration Initiative dollars. Partners include the NRCS, the Utah Division of Wildlife Resources, the National Wild Turkey Federation, and Sportsman for Fish and Wildlife. It is expected that these Utah Division of Wildlife Resources biologists will be able to assist the NRCS in enrolling more projects that are wildlife friendly and help them spend the wildlife program dollars that are allocated to the NRCS on an annual basis.

Watershed Restoration Initiative

In its third year, the Watershed Restoration Initiative has really picked up momentum. The Watershed Restoration Initiative has primarily been focused on shrub steppe habitat restoration, but has branched out to include lowland riparian, mountain riparian, and wetland habitat types. Planning is ongoing that will allow the Watershed Initiative to focus on the top ten key habitat types as identified in the Utah Wildlife Action Plan. The acreage being treated this year is approximately 143,447 acres. Funding has approached \$11.5 million and is coming from a very diverse group of partners consisting of federal, state, and private entities. This partnership continues to grow as projects are successfully implemented.



WAFWA Report from

Washington State Department of Fish and Wildlife

December 2006

2006 State of Salmon In Watersheds Report: With the assistance of the Department of Agriculture, WDFW staff created maps delineating agricultural land conversion. Land conversion to residential and commercial uses in the Wenatchee Basin will be showcased in the next iteration of the 2006 State of the Salmon in Watersheds Report. Additional maps showing herring spawning areas, eelgrass distribution, and shoreline armoring in Puget Sound, Grays Harbor, and Willapa Bay were also produced.

Washington Conservation Commission: Staff is working with Don Larsen, WDFW Natural Resource Conservation Service (NRCS) Farm Bill Coordinator, on keeping irrigated lands near streams a high priority for funding within the Farm Bill programs. Programs include CREP (Conservation Reserve Enhancement Program) and EQIP (Environmental Quality Incentives Program). We discussed how the Columbia River Partnership funding could facilitate the objective to save water in eastern Washington agricultural zones. Opportunity for projects needs to be inventoried and shared with NRCS and FSA (Farm Service Agency). NRCS and FSA appear to be outside their expertise when cataloging or developing fish and aquatic restoration projects. They intend to work on a proposal to be discussed with policy staff within Habitat and Wildlife.

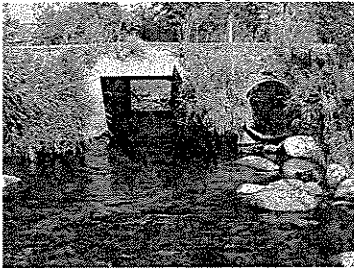
Cleaning up the Sound: Staff issued a Puget Sound-wide general permit for the removal of creosote treated pilings to the Department of Natural Resources. This removal, funded as part of Governor Gregoire's efforts to clean up Puget Sound, will reduce and ultimately eliminate one of the primary sources of polycyclic aromatic hydrocarbons (PAHs) in Puget Sound, which are linked to significant (up to 100%) mortality of herring spawn and similar impacts to other forage fish species.

Outer Continental Shelf Alternative Energy Project Rule Development: Major Projects staff attended an invitation-only meeting with the U.S. Mineral and Mining Service regarding new rules they are developing regarding the permitting/licensing of alternative energy projects on the Washington outer continental shelf. These rules will apply to projects out to 200 miles off the coast. The types of projects currently under consideration are for using wind energy, wave energy, ocean current energy, and hydrogen extraction. Major Projects staff requested that the rules include provisions for addressing protection and mitigation of impacts to fish, marine mammals, birds, and fishing activities. There is currently a disagreement on the jurisdiction of the U.S. Mineral and Mining Service (MMS) with the Federal Energy Regulatory Commission (FERC). The MMS is claiming authority over projects in water outside state waters (beyond 3 miles), and the FERC is claiming jurisdiction over hydropower projects (wave and current energy projects) up to at least 12 miles from the coast.

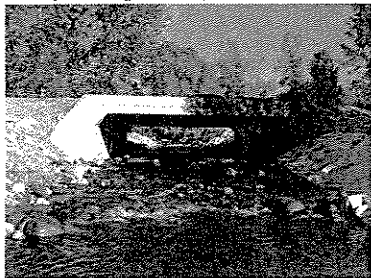
Fish Passage Barrier Correction on State Highways: WDFW conducted compliance inspections on three fish passage barrier correction projects funded by the Washington State Department of Transportation's (WSDOT) Environmental Retrofit Program (I-4) in the WSDOT North Central Region. The barrier culverts were initially identified during the WSDOT Fish Passage Inventory conducted by TAPPS Division staff. The projects were placed onto WSDOT's Six Year Barrier Correction Plan after TAPPS Division biologist and environmental engineer completed the biological and engineering scoping. This month, WSDOT replaced the fish passage barrier culverts with fish passable structures. In Okanogan County, WSDOT replaced culverts on Beaver and Frazer creeks that cross SR 20 at mileposts 205.84 and 206.85 respectively. The two newly replaced culverts on SR 20 are concrete bottomless boxes, providing unimpeded passage to over 100 linear kilometers of habitat for a number of salmon species and resident trout. In Chelan County, a total fish blockage culvert on Mill Creek, crossing U.S. Highway 12 at milepost 70.21, was replaced with an 11.6-meter (38-foot) wide, 100% passable culvert restoring access to over 11 linear kilometers of habitat for Chinook salmon, steelhead, bull trout and resident trout.

Fish Passage Barrier Correction at Washington State Highways

Beaver Creek 48.0307 tributary to
Methow River
State Route 20 Milepost 205.84



Before – partial fish blockage

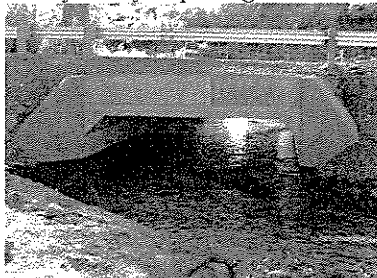


After – fish passage restored

Frazer Creek 48.0309 tributary to
Beaver Creek
State Route 20 Milepost 206.85

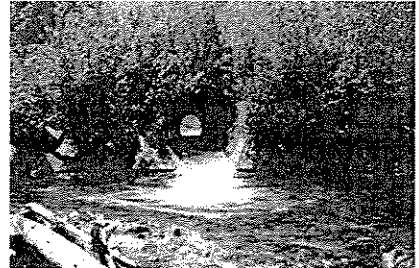


Before – fish passage barrier

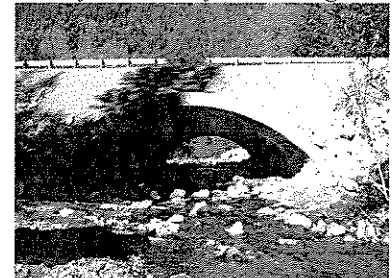


After – fish passage restored

Mill Creek 45.0956 tributary to
Nason Creek
U.S. Highway 2 Milepost 70.21



Before – total fish blockage



After – fish passage restored

Columbia Complex Fire Salvage Logging: Staff has seen a significant increase in Forest Practice Applications for the Blue Mountains. All of them are related to the Columbia Complex Fire and salvage logging on private land-holdings. Salvage logging can be quite intense, but so far the landowners have been very willing to work with staff to reduce the impacts to listed species in affected streams. Staff has spent a significant amount of time in the field providing technical assistance to landowners on this issue. This timely response to requests is allowing landowners to get value off of their damaged timber while still protecting key habitat functions. With over 100,000 acres burned and much of it on private land, this pressure to salvage will continue.

NOAA Releases Upper Columbia Salmon Recovery Plan: The Upper Columbia Salmon Recovery plan is now out for public comment until November 28. The Upper Columbia Salmon Recovery Board (UCSRB) and NOAA Fisheries will host public meetings in both Okanogan and Chelan counties on the evenings of November 8 and 9 respectively. Before the public meetings, NOAAAF will supplement the first federal register notice with additional information on All-H integration. Currently, UCSRB is refining some of the details related to cost of implementation the salmon recovery plan. Initial estimates are \$138 million for the first ten years.

Forest Practices: Staff has been working with local DNR foresters on pre-harvest planning for upcoming timber sales in the SE region. They are planning harvests throughout the Ahtanum and Colockum areas, many of which are planned through the "Forest Improvement" program. These sales are not required to make money for the trusts and are intended for stocking control on dense stands. Many of the timber sales staff has reviewed are constrained by protective HCP requirements for spotted owls, as a minimum 50% canopy closure is required post harvest. Due to the relatively crude techniques used to measure canopy closure and DNR's insistence in harvesting to 51% canopy closure, staff are skeptical that HCP compliance is being met in all cases. DNR foresters seem interested in hearing our input, however, and the any new roads are generally planned to be deactivated or abandoned post harvest. Log mills in Leavenworth, Yakima, and Naches have shut down over the past year leaving no functioning mills remaining in central Washington. This is beginning to affect bids on timber sales in private and state forests because hauling costs to mills 150-200 miles away affect profit margins. Logging less than premium logs is no longer profitable. This may drive additional sales of private forestlands for development.

Otolith Lab Staff Assisted Volunteer Groups in Chum Recovery Efforts In Hood Canal and Prepare to Thermally Mark the Offspring: Personnel from the Otolith Laboratory participated with local volunteer groups and Long Live The Kings to continue an on-going summer chum recovery effort taking place in Hood Canal and the Strait of Juan de Fuca. Staff helped spawn summer chum and collected biological information on each adult fish used as broodstock throughout September and into early October. Every fish produced from this effort is thermally marked to assess survival and distribution patterns. Otolith Lab personnel are currently developing unique otolith codes and beginning the marking programs for the Lilliwaup, Union, Tahuya, Hamma Hamma, and Jimmycomelately summer chum salmon recovery programs.

Education, Environment and Economy: Margaret Tudor and Nicole Ricketts recently attended the "E3: Washington" advisory council meeting with Governor Gregoire, William Ruckelshaus, Commissioner Doug Sutherland, Superintendent of Instruction Terry Burgeson, and other statewide leaders to launch the statewide comprehensive approach to optimizing environmental education. The statewide strategy, called E3 Washington (for education, environment, and economy), is sponsored by the Environmental Education Association of Washington (EEAW) to promote the interdisciplinary, real-world approach to lifelong learning. Partnering with EEAW at the local level are numerous representatives of government, civic groups, non-profit organizations, and businesses. Staff around the state will represent WDFW in the regional planning events, which will contribute to the statewide strategy planning efforts.

Williams Creek Project Update: Working with the Rocky Mountain Elk Foundation (RMEF), Eyes in the Woods, KBH Archers, and department biologists, staff captured and successfully instrumented a total of 20 bull elk (15 branched, 5 spikes) in the Williams Creek Unit (GMU 673) in Pacific County. As a result of this effort, we now monitor the radio signals from 31 bull elk (8 spikes and 23 branch-antlered). This is the second year of this study, which seeks to determine estimates of mortality rates by cause for this unit. We were not entirely satisfied with the distribution of transmitters last year in our initial capture, but were able to remedy this concern in the current effort.

Of the branched sample, five canines were collected from bulls 3 years of age or above. Blood samples were collected from 18 of the 20 elk for later DNA analysis. Ceilings and excellent visibility allowed us to thoroughly search the entire unit and this resulted in a representative sample distribution (spatial and age structure). Induction times of the Carfentanil/Xylazine immobilization mixture were excellent, with only two of the 20 bulls requiring a second dart. All but four groups of elk were along tree lines when first detected, probably the result of the dry weather, moon cycle, rut-related behavior, or a combination of each. We experienced a total of three mortalities and are compiling notes to document causes. The sample going into the modern firearm elk season is 23 branched and 8 spikes. The primary objective was to mark and gain an unbiased estimate of branched bull survival with a secondary objective to estimate spike survival. Spikes were neither detected nor were they in the position to be worked from the helicopter (they simply made it into the trees faster), resulting in a lower targeted capture sample. Our plans are to monitor the sample for at least two more years, and we will submit an RMEF proposal (Williams Creek Bull Mortality Phase Two) for the upcoming Production Advisory Committee meeting.

South Fork Stillaguamish River Fall Chinook Supplementation: Co-Managers for the Stillaguamish River; the Stillaguamish Tribe, Tulalip Tribes and WDFW, recently met to discuss initiating a supplementation program for South Fork Stillaguamish River fall Chinook. The co-managers discussed the risk that a catastrophic event (i.e., flooding, major slide, scouring, etc.) could force the extinction of the South Fork Stillaguamish Chinook stock. The Technical Recovery Team (TRT) has identified the South Fork Stillaguamish stock, along with the South Fork Nooksack and Cedar River stocks, as having the greatest immediate risk of extinction among Puget Sound Chinook stocks. These discussions yielded co-manager agreement to begin a conservation program that could be initiated as early as 2007. The purpose of the program would be to artificially increase the number of natural origin spawners (NORs) above current levels to reduce extinction risk due to catastrophic events and provide enough spawners to challenge any freshwater habitat improvements. Using the AHA model the program size was determined to be 30 NORs (ideally 15 spawning pairs) from across the run and produce 45,000 age-0 smolts for release (not taking more than 50% of the return to the SF Stillaguamish River in any given year).

Strong Return of Chinook to the Dungeness River System: Chinook are returning to the Dungeness River in higher numbers than seen in recent years. The rebuilding program for the Dungeness Chinook has resulted in about 1,400 Chinook returning to the river through week 40 as spawning nears completion. Previous season highs have been in the 1,000 range. Not only are more Chinook showing up but the distribution of spawning shows a marked change from previous years in that the upper Dungeness and Gray Wolf are getting higher numbers and a larger proportion of the spawning. One of the goals of the rebuilding program has been to re-program spawning into portions of the upper watershed that historically supported these fish. The habitat in the upper watershed is considered more capable of supporting natural production because the stream's bed load is more stable than in the diked areas further downstream. Relatively high river flows during the early migration may have contributed to the redistribution of spawning upstream. The proportions of natural and hatchery origin Chinook on the spawning grounds will be estimated from coded wire tag and scale data in the months to come.

Cedar River Chinook Surveys: The 2006 Chinook redd counts in the Cedar River are on pace to exceed the highest total since counts began in 1999. Crews have located more than 350 Chinook redds in the Cedar so far this year, which is ahead of the same time in any other year. The highest season total was 470 redds in 2004. Prior to 1999, only live Chinook observed on weekly surveys were used to compute escapement estimates because many Chinook redds are indistinguishable from sockeye redds, especially in areas with dense sockeye spawning. Through a cooperative effort by King County, Seattle Public Utilities and WDFW, biologists are able to enumerate Chinook redds in the Cedar by surveying more frequently (up to three times per week) to observe female Chinook still attending redds. The co-managers have had discussions to initiate using escapement estimates derived from the redd counts rather than the historical live count Area Under the Curve methodology.

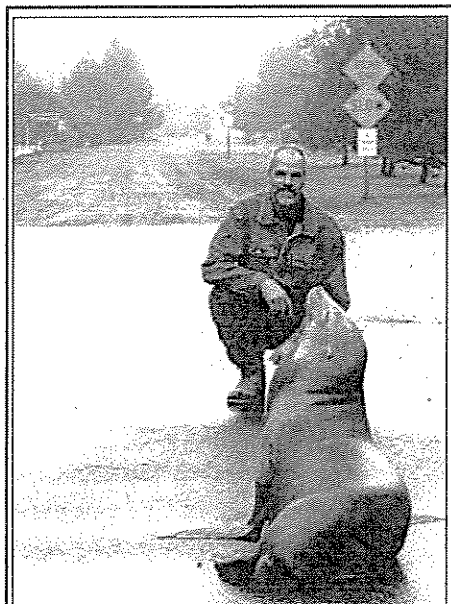
We are also pleased that the increased number of redds are not simply due to a higher than usual number of hatchery strays into the Cedar from the Issaquah Hatchery. To date, 80 percent of the more than 70 female carcasses sampled have been unmarked.

GoHunt Enhancements: Thanks to the extra effort of John Talmadge and Randy Krueziger, over 180 WDFW wildlife area unit maps were created and made available for download by the public from the GoHunt website. These small format maps (8" x 11" PDF) can be selected, viewed, and downloaded from the GoHunt startup page. In addition, high resolution, color aerial photos (orthophotography) provided by DNR (Washington Department of Natural Resources) are available for state and private forestlands in the south half of the state.

Upper Columbia Steelhead: The Mainstem Columbia River opened to steelhead fishing on October 21. This fishery allows anglers to catch hatchery-origin steelhead consistent with the Department's conservation objective to increase the relative proportion of natural-origin steelhead on the spawning grounds. The fishery reflects an ESA success story that demonstrates conservation and recreation are not mutually exclusive. Regional enforcement and fish program staff will monitor fishing effort to ensure that the fishery is consistent with ESA permit 1395.

Sea Lion Aerial Surveys: Steve Jeffries conducted sea lion surveys in WDFW's Cessna 185 on September 5-6, 2006. The survey covered Oregon and Washington coasts including the Columbia River. An estimated 1,200 California and 1,000 Steller sea lions were present on the south jetty of the Columbia River. Another 1,000 California and 800 Steller sea lions were spread out at several sites along the Olympic Peninsula.

Willapa Bay Field Station: Staff responded to a large California sea lion stranded on the Long Beach Peninsula. However, this animal was located inland ½ mile from the beach, right in the middle of a county road. This appeared to be the same California sea lion that was stranded on the beach (off the Oysterville beach approach) a few days earlier. Biologist Bruce Kaufman and Scientific Technician Alan Sarich, along with WDFW Enforcement Officer Spurbeck, used two hoop nets to capture the animal and transport it back to the ocean beach. During the capture process, the rescuers quickly found out that trying to use just one hoop net did not work since the agitated sea lion was able to easily throw it off. In the midst of the netting attempts, the animal made a charge at the group of onlookers gathered. That crowd of locals, who had been observing the fun, quickly scattered. The sea lion then made a run (these things are pretty darn fast!) for the nearby woods, with the WDFW crew in hot pursuit. Using two hoop nets they were able to finally subdue the animal and lift it in the bed of Officer Spurbeck's patrol vehicle.



André loses his way in Klipsan

KLIPSAN BEACH — A wayward sea lion was found at the corner of 220th and M Street in Klipsan Beach early Thursday morning. Doug Remon, seen here with the sea lion, went to Jack's Country Store to purchase some food for the exhausted sea lion that neighbor Melanie Grill named "André." After a couple of hours, officers from the Washington Department of Fish and Wildlife came to André's rescue, netted the 100-pound creature, and safely returned it to the shore of the Pacific Ocean, about a mile away.

Chinook Observer Oct. 25, 2006

On the trip to the beach, the Willapa staff accompanied the sea lion in the back of the truck, doing their best to keep it from jumping out. Once it was finally released the sea lion wasted no time in getting back into the ocean. A picture of the sea lion (nicknamed "André" by the gathered locals) made the front page of the Chinook Observer.

Razor Clam Season: The October razor clam opener was very successful. All beaches were opened for evening low tides on October 6, 7 & 8 with Long Beach and Twin Harbors continuing through October 9. A total of 56,000 digger trips were made with a total of 810,000 clams harvested coast-wide (not including Kalaloch where the data collected by Olympic National Park has not yet been received). The number of digger trips was up considerably over the October 2005 opener (with 32,000 digger trips). The average size of the clams harvested ranged from 4.3 inches at both Long Beach and Twin Harbors and 4.7 inches at Copalis. The excellent weather and surf conditions and the fact Oregon's beaches are closed (due to domoic acid over the action level) were the likely reasons for the increase in effort.

North Pacific Fishery Management Council (NPFMC): The NPFMC met in Dutch Harbor, Alaska from October 2-9, 2006. Agenda issues included preliminary TACs for 2007, Bering Sea Essential Fish Habitat, developing sector allocation splits for Pacific cod between the Bering Sea and the Aleutian Islands, development of the Aleutian Islands Marine Ecosystem Forum and Fishery Ecosystem Plan, and a review of aspects of Bering Sea crab rationalization after the first year of the program.

Pacific Fishery Management Council Allocation Committee: IRM staff attended the Pacific Fishery Management Council's Allocation Committee meeting the week of October 16 in Portland. The purpose of the meeting was to develop a suite of alternatives for long-term intersector allocations for analysis. These alternatives would be analyzed in a draft Environmental Impact Statement and would include an amendment to the Council's Groundfish Fishery Management Plan (FMP). One potential use of the long-term intersector allocation regimes is to further the Council's work in considering a dedicated access program for the groundfish trawl fishery. The Allocation Committee developed a range of alternatives that, at this point, includes one using historical catch data (1995-2005) and a couple of them that focus on recent catches (2003-2005) and projected 2007-2008 allocations. The groundfish species under consideration range from status quo (maintaining current allocations for sablefish, Pacific whiting, and nearshore species) to all species and species complexes in the FMP; there is also an alternative that includes all species except those designated as "overfished." Specific set asides that take into account harvest for tribal fisheries, research, and experimental fisheries have yet to be developed. The Allocation Committee will meet again in mid-December to focus on further development of the trawl dedicated access program alternatives.

Boating Facilities Program Funding: WDFW boating facilities projects scored well in the recent Interagency Committee for Outdoor Recreation grant competition. Six of the seven projects WDFW presented were approved and funded for over \$1,500,000 dollars. Specific project approvals include: Silver Lake Region One Boat Access Redevelopment; Pleasant Harbor Region Six Boat Access Redevelopment; Eloika Lake Region One Boat Access Redevelopment; Jameson Lake Region Two Planning/Permitting Grant; Point No Point Region Six Planning/Permitting Grant; and Sidley Lake Region Two Planning and Acquisition Grant.

Snow Goose Hunt Plan Update: WDFW's Region Four Captain facilitated a Fir Island resident/landowner meeting to discuss the progress of the collaborative effort in developing the comprehensive snow goose hunting plan. Officers followed up the general meeting with an "Eyes in the Woods" class that was well attended by volunteers of the Western Washington Waterfowl Association and the local residents. The residents are impressed with our progress and cautiously optimistic about this hunting season. Those that attended the CORT class have begun developing a working relationship with local hunters willing to volunteer their time to resolve reported problems. The first flight of snow geese (about 10,000 birds) arrived in the Skagit and spent much of their time on the reserve. Residents that have been aggressively critical of hunter behavior in the past were contacted and advised as well as invited to the next agency public meeting. These same critics are very appreciative to have personal visits, are impressed with WDFW's response to their concerns, and mentioned their optimism of having a good hunting season.

Hawk Enters Trap for Doves: A sharp shin hawk entered a live trap set to catch rock doves (pigeons). Gary Chittum, KING 5's environmental reporter, was on the scene as WDFW Officers arrived and caught the entire agency response/rescue on film. The incident involved Sergeant Chandler calling in a ladder truck from the Seattle Fire Department, closing down the road, and our Sergeant ascending the ladder to ultimately remove the hawk from the trap. This incident got some really good coverage and the agency shined but the story and television time continued throughout the week. A day or two later another hawk believed to be injured or sick ended up being captured on a school playground somewhere close by. The hawk was taken inside the school and it escaped inside the janitorial supply room requiring a recapture effort. Gary Chittum was on scene and not only captured this successful rescue effort but also participated personally in the capture (Gary threw roles of toilet paper attempting to scare the bird to Sergeant Chandler who was attempting to catch the bird with a net). This incident also had a very positive spin to it for the agency but the story didn't end here either. Early the next morning the hawk, apparently accustomed to the easy pickings in the pigeon trap, returned and caught itself once again. Sergeant Chandler returned and this rescue effort was also caught on film and ran all day on KING 5.

WDFW Co-recipient of National Conservation Award: Washington Department of Fish and Wildlife (WDFW) and the Asotin Conservation District recently received Conservation Partnership Awards from the U.S. Department of Agriculture, for their work in the restoration and protection of natural resources in the Asotin Watershed in southeast Washington. The awards were presented on October 26 by Under Secretary for Natural Resources and Environment, Mark Rey, and Washington Congresswomen Cathy McMorris, U.S. Fifth Congressional District Representative. WDFW Regional Director John Andrews accepted the award for the agency.

Avian Influenza (AI) Activities: As of October 18, 2006, 605 swab samples have been submitted for AI testing. In addition, a total of 19 carcasses were submitted for testing. Lab results from 495 swab samples and 11 carcasses have been received (one of these carcasses was not tested). A total of 455 swab samples have returned negative results for AI viruses. All 10 carcasses tested were negative for AI. One swab sample from a western sandpiper, 32 swab samples from mallard ducks, and 7 swabs from American green-winged teal have tested positive for an AI virus. Four of the 35 mallards that had positive AI results were positive for an H5 strain of avian influenza virus, but negative for N1.

Impacts of Dredging on Freshwater Mussels: Staff completed the field study aspects of the Similkameen River freshwater mussel study investigating the impacts of dredging on freshwater mussels, and staff removed all study materials from the river. Data analysis and report writing remain to be completed. Passing through a 4" dredge did not cause immediate mortality to two species of freshwater mussels, but some mortality was seen in mussels buried under approximately 12" of gravel regardless of whether they passed through the dredge prior to being buried.

The 2006 Puyallup Fair: The 2006 Puyallup Fair closed on Sunday, September 24th. Fair attendance this year was 1.1 million people, up more than 14,000 from last year. Conservative estimates (based on 10% of daily attendance records for the days WDFW activities were staffed) would have at least 75,000 people enjoying our hugely popular exhibits and activities. Our Marine Touch Trays and Kids' Catch and Release Fishing Pond have become "destination" exhibits for families and kids of all ages. Approximately 4,000 kids (3 to 12 years old) fished in the pond, observed by family and friends and an audience of thousands. The Outreach/Fish Program iced-up some Chinook and a sockeye for public viewing. This year, Enforcement and Wildlife staffed a "Coexisting with Wildlife" exhibit (those psycho-terrorist raccoons again) and a display promoting WDFW license plates. Outreach/Fish Program thanks all who contributed to making this massive annual effort the resounding success it has become!



Pacific Sardine: The Pacific Fishery Management Council's Coastal Pelagic Species Management Team (CPSMT) met in a joint session with the Council's Coastal Pelagic Species Subcommittee on the Scientific and Statistical Committee to review the current stock assessment update for Pacific sardine. The CPSMT supported the conclusions from the assessment and will recommend that the Council implement the resulting harvest guideline (HG) for 2007 associated with the harvest control rule stipulated in the Coastal Pelagic Species Fishery Management Plan. Based on a stock biomass (ages 1+) estimate of 1,319,072 metric tons (mt), the HG for U.S. fisheries would be 152,564 mt. This HG recommendation is roughly 28% greater than the HG adopted by the Council for the 2006 fishing year and is over 50,000 mt greater than the largest recent harvest by U.S. fisheries. It appears a substantial portion of the 2006 HG will remain unharvested, largely as a result of poor markets for the small fish that are currently available to the fishery.

Evaluating the Use of Side-Scanning Sonar as a Means to Estimate Adult Salmon Abundance in Rivers: Unit staff members in conjunction with NOAA-Fisheries personnel are examining the feasibility of using side scanning sonar to estimate adult salmon abundance in Washington rivers. Preliminary work has taken place in the Skykomish River, near Sunset Falls. Video equipment is being used to help validate fish counts. Additional locations in Puget Sound streams and elsewhere will be used to evaluate the usefulness of this tool for estimating the abundance of adult salmon in freshwaters.

WDFW Off-Channel Habitat Data Published in Scientific Journal: Chris Detrick and Dave King worked with NOAA-Fisheries and Tribal staff to compile their 20+ years of off-channel data and project experience into a recently published paper: "Roni, Phil, Sarah Morley, Patsy Garcia, Chris Detrick, Dave King and Eric Beamer. 2006. Coho salmon smolt production from constructed and natural floodplain habitats. *The Transactions of the American Fisheries Society* 135:1398-1408." The paper is best summarized by the abstract:

Abstract – We examined existing smolt trapping data from 30 constructed and natural floodplain habitats to determine whether the number (production), density, and length of coho salmon *Oncorhynchus kisutch* smolts varied by project type and area. At 13 of the 30 sites we conducted detailed physical surveys to examine how morphology (shoreline irregularity), depth, and cover influenced smolt density and length. Mean smolt production for all sites averaged 2,492, density 0.37 smolts/m², and length 98.9 mm. We found no significant difference in smolt production or density between natural and constructed sites or among project types. Smolt length differed by project type and morphology, excavated ponds (gravel pits and mill ponds) producing significantly larger smolts than constructed groundwater or natural channels. Smolt production was positively correlated with wetted area. Smolt length was negatively correlated with density and distance from salt water, suggesting that sites further inland with cooler water temperatures had higher densities and smaller fish. Site perimeter, shoreline irregularity, depth, and percent cover were not significantly different among habitat types at intensively sampled sites, nor were they correlated with smolt production or smolt density. However, multiple regression analysis indicated that shoreline irregularity and percent cover explained 70% of the variation in smolt length.

Puget Sound Chinook Recovery Exploitation Rate Reviews: Fish Program Science Division and IRM staff met internally and with Nisqually tribal and NOAA staff members in an ongoing effort to establish the database to be used for evaluating productivity of Nisqually chinook. These data are to be used to estimate a maximum exploitation rate that is consistent with population rebuilding. The Nisqually chinook recovery exploitation rate (RER) is one of three highest priority management units (population groups) of the listed Puget Sound ESU that are being evaluated by the co-managers with NOAA. Other high priority populations being evaluated are the Skokomish River and the White River spring chinook. Good progress is being made by WDFW and the Muckleshoot and Puyallup tribes evaluating the White River spring population and, while WDFW is making good progress evaluating productivity of Skokomish River chinook, the Skokomish Tribe has failed to meet commitments for this activity defined by the December 2005 Mass Marking agreement.

Governor's Salmon Recovery Office 2006 State of Salmon In Watersheds Report: The Governor's Salmon Recovery Office requested assistance in compiling and analyzing fish barrier and repaired barrier data, and for creating maps for the biennial State of Salmon Report, which is due out this fall. The data will be used for one or more Statewide Indicators in the report, and it will also be used in several maps being created. In addition to the large-scale Salmon Recovery Region maps, six focus watersheds maps will graphically showcase statewide salmon recovery efforts.

Governor's Land Use Agenda: The agency is actively participating in the development of the Governor's land use agenda. A core team of representatives from WDFW and the Departments of Agriculture; Ecology; Community, Trade, and Economic Development; and the Office of Financial Management will meet regularly throughout the legislative session to work on land use issues of concern to the Governor. Topics under consideration of particular interest to WDFW include how the best available science rule is implemented and how pre-existing uses (including existing and ongoing agriculture) are treated under the Growth Management Act. These topics could become proposed legislation during the next session.

Naches Ranger District Grazing Allotments: Staff provided recommendations to the Naches Ranger District's proposed grazing allotments. There are significant concerns with protection for newly discovered Mardon skipper butterflies, protection bull trout spawning areas, and grazing domestic sheep within close proximity to the Tieton River bighorn sheep herd.

A Mardon skipper colony, the first documented on the Okanogan-Wenatchee National Forest, was recently discovered within the Pinegrass Grazing Unit. This population was discovered late in the flight period and the extent of their habitat and critical use areas are not well known. It is likely that other Mardon skipper colonies exist and we have recommended that the USDA Forest Service conduct additional surveys for this butterfly begin in June 2007. We offer our agency's expertise and assistance in Mardon skipper survey design and implementation. Mardon skippers are a state endangered and federal candidate species. RCW 77.15.120 prohibits the take of any state endangered species. Grazing is noted to be detrimental to both Mardon skippers and their habitat. We have recommended a conservative approach for renewing the grazing leases that includes annual leases and surveys, or an adaptive management approach that provides for adjustments as new information becomes available.

In 1998, the USDA Forest Service and WDFW initiated a collaborative project to re-establish California bighorn sheep to their native range within the Tieton River Basin. The project has been a great success with a growing herd of over 100 sheep that now provides abundant wildlife viewing opportunities and sheep hunting. WDFW has opposed the proposed conversion of the Soup Creek grazing allotment from cattle to domestic sheep, as it would jeopardize the existence this newly established bighorn sheep herd. Incidental contact between domestic and bighorn sheep must be avoided as fatal respiratory diseases, usually caused by *Pasteurella* or *Manheimia* spp., can be easily transmitted from domestic to bighorn sheep. Whenever bighorn sheep and domestic sheep have opportunity to co-mingle, bighorns invariably contract a fatal disease and the entire herd is quickly decimated. Diseases can then spread further to other adjacent bighorn sheep herds. Radio telemetry data from Tieton bighorn sheep indicate they frequent the eastern edge of the Hause Creek grazing allotment. As the Tieton bighorn herd grows, we expect that the bighorn sheep use area will expand west. Individual wild sheep are likely already using the area in which the Naches District is proposing to issue sheep grazing allotments. We remain concerned that our concerns may not be addressed in the new allotments.

Management Recommendations for Puget Sound Nearshore: The Habitat Program has restarted a multi-agency effort to develop a set of interim management recommendations for the Puget Sound nearshore. Local planners updating their critical areas ordinances and shoreline master programs will specifically gear the recommendations toward use. Funding for the project has been secured from PSAT and Ecology. Due to the relatively limited amount of funding, the guidance will focus on a small, but highly relevant, set of nearshore topics, including nearshore vegetation, over water structures, shoreline armoring, marine riparian/upland development, and forage fish. The interim guidance will pull together work already done or being done by the agency and other nearshore scientists, including Aquatic Habitat Guidelines white papers, HCP white papers, and additional sources of scientific work on the nearshore. A core advisory team made up of representatives from WDFW, CTED, Ecology, and PSAT is designing the guidance and will work with a consultant to write the document and conduct peer review. The project is anticipated to be complete by June 30, 2007. It is hoped that this interim guidance can be a stepping-stone to more comprehensive shoreline guidance from the agency when additional funding is secured.

Hopkins Ridge Mitigation Agreement: Staff completed negotiations on the Hopkins Ridge Windpower Site with Puget Sound Energy. It is now under AG review. This represents a nearly 4-year effort on the part of the Department. Mitigation was obtained in accordance with our state policy for the lands affected by the construction and the footprint of the project itself. In addition, the location of the site in a very sensitive elk range necessitated the negotiations of some difficult and unique agreements. Hopkins Ridge is stands between the Tucannon Valley and the city of Dayton in Columbia County. This are is very popular with elk hunters and also is the site of significant crop damage claims by local farmers. The Department was very concerned that a) hunting may not be allowed in the area and b) this may become a refuge for calving, both of which would increase crop damage in the area. Staff successfully negotiated for PSE to help provide a herder in the first year of operation and that the entirety of the project be open to hunting. A committee of technical personnel and citizens will also be formed to review operations periodically for excessive mortality and/or other wildlife-related problems. This is an excellent agreement that addresses the needs of wildlife and local citizens, and yet allows a major power project to go forward.

Hydrosystem: The extremely warm weather in the Northwest resulted in the need for several emergency meetings to discuss operation of the Hydrosystem. There was concern in mid-July for a potential power emergency (that did not materialize). Several meetings were held to discuss the operation of Dworshak Reservoir in the Snake River basin. Water temperature at Lower Granite Dam was hovering just below the water quality standard of 68 degrees for several weeks. During the last week of July, the standard was exceeded; however, the availability of additional cool water from Dworshak to help cool down the river is dwindling. The salmon managers (state, tribal, and federal) will be tasked with making some hard decisions on when to use the water and which fish stocks to support the most. This will continue to be a topic of discussion in the upcoming weeks.

Snowy Plover: This season WDFW worked with U.S. Fish and Wildlife Service (USFWS), State Parks, and volunteers to count the number of breeding adult plovers at Leadbetter Point, Midway/Grayland Beach, and Damon Point. We also located and monitored plover nests to determine hatching success, and we monitored chicks post-hatching to determine fledging success. The season is now complete and we are in the process of analyzing and summarizing data. A full research progress report will be available in late October or early November. Some of the season's highlights include: the discovery of a new breeding site in Pacific County; testing new methods for estimating the number of breeding adult plovers; successfully using volunteers to help monitor previously occupied, but currently unoccupied breeding sites in Grays Harbor County; and working with State Parks to resolve potential conflicts between human activities and plover breeding at both Damon Point and Midway/Grayland Beach. In addition, WDFW is assisted USFWS with the release of captive raised plover chicks. These chicks were hatched and hand reared by the Oregon Coast Aquarium from eggs that were covered by drifting sand and abandoned by the adult birds. One bird was released at Leadbetter Point and has been sighted since (it has a unique color band combination on its legs), and two additional birds were released in the week of September 11, 2006.

Healthy Lands Initiative: Edd Bracken met with staff from Natural Resources Conservation Service, the Nature Conservancy, and Okanogan Conservation District regarding the Healthy Lands Initiative (HLI). HLI is a pilot project funded by the Washington Biodiversity Council with the goal of building a collective understanding of biodiversity resources in north-central Washington. HLI is working with groups in the Methow Valley and Moses Coulee areas to try to determine if a grass bank (or perhaps some other model) can be used as an incentive program to benefit riparian and shrub steppe ecosystems. The Methow Valley group has identified WDFW lands as a key part of this strategy largely due to their location between the developed properties at lower elevations and traditional grazing lands (owned by Department of Natural Resources and the U.S. Forest Service) at higher elevations. HLI staff members are working to prepare maps of the area showing various land ownerships and current livestock grazing permits and/or leases.

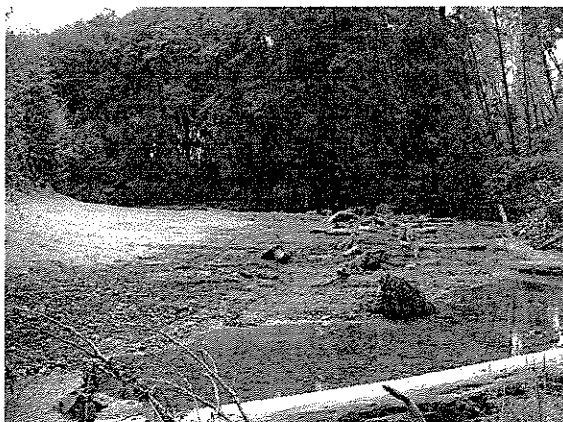
Sage Grouse: Will Moore, Jeff Bernatowicz, Mike Schroeder, and Mike Livingston teamed up with personnel from the U.S. Army and the Yakama Nation to capture 24 sage grouse from Hart Mountain National Antelope Refuge for release on the Yakima Training Center (15 sage-grouse) and Yakama Reservation (9 sage-grouse). We combined our efforts with biologists from the Oregon Department of Fish and Wildlife (ODFW), the USFWS and the U.S. Geological Survey (USGS) Disease Lab in Madison, Wisconsin, who were collecting blood samples from sage grouse for disease testing, including West Nile Virus. All 24 birds were captured, processed, and safely translocated to Washington in less than 20 hours.

Freshwater Jellyfish: Region 2 staff collected what appears to be a freshwater jellyfish from Rock Island Ponds near Wenatchee. We will be sending a sample to a jellyfish expert for positive ID, but it appears that the jellyfish is a non-indigenous species (*Craspedacusta sowerbyi*) that has been documented in several other Washington locations.

Shale Creek – Abandoned In-Stream Fish Collection Facility Removed: A project to remove an abandoned in-stream fish collection facility on Shale Creek, tributary to Clearwater River, was recently completed by members of the Capital Projects & Engineering Division construction crew and TAPPS staff. Our salmon culture construction crew originally built this facility in 1987 in cooperation with the Quinault Tribe to provide a site for collecting coho broodstock to be used as seed for their planned full-scale hatchery. Once the hatchery at Salmon River on the Queets was built, the Shale Creek site was abandoned. Woody debris began to collect on the instream structure and became a fish passage problem. Eventually erosion lowered the streambed level downstream and created a significant fish passage problem. With staff from TAPPS taking the lead, a grant proposal was submitted to and approved by the Salmon Recovery Funding Board to remove this facility and restore the stream to its natural condition. WDFW, the Pacific Coast Salmon Coalition, and the Quinault Tribe provided matching funds. The two-phase removal project began in 2005 and was completed this year. This is a good example of a successful cooperative project, and is another fish passage correction within the Tribal Culvert Court Case area.



Shale Creek – Collection Facility Before



Shale Creek – Collection Facility After

Landowner Incentive Program (LIP): WDFW's Landowner Incentives Program received the maximum funding awarded by U.S. Fish and Wildlife Service in a highly competitive national process for 2006. LIP's Science Review Panel has selected a slate of habitat restoration and preservation projects on private lands totaling \$766,000. Projects are now subject to a federal compliance review and will likely be implemented next summer. LIP also received \$180,000 in administrative funding of \$19 million available nationwide. Congratulations to everyone who helped prepare the grant.

Hood Canal Dissolved Oxygen: The low dissolved oxygen event resulting in the fish kill of early last week has only improved slightly following a weak weather front with northerly winds and rain mid-week. The surviving fish and shellfish in the southern portion of the Canal still remain crowded near shore in shallow water but were noticeable less stressed than the observations following the day of the kill. The post weather front turned sunny again which could spur additional algal blooms but another weak weather front is forecast for the coming weekend. Barring southerly winds, additional relief may result in upper water level improvements.

Removal of Derelict Fishing Gear: The WDFW, in conjunction with NOAA and the Northwest Straits Commission, is engaged in a program to locate and remove derelict fishing gear, primarily lost crab pots and gillnets. For the 12-month period ending on August 31, we had the following results:

Crab Pots – An area at the north end of Camano Island was surveyed with advanced sonar to identify potentially lost fishing gear. A total of 2.3 km² were surveyed and 83 potential lost pots were identified - 36 per square kilometer. Divers later attempted to remove the pots and located 54 of them, plus an additional six pots, which had not been detected by sonar. A total of 60 pots were removed: 22% were still actively fishing. The pots contained 41 Dungeness crab, eight rock crab and one fish. Of the pots recovered, 28% were not equipped with legal rot cord, 53% had legal rot cord and the status could not be determined for 18% of the pots.

Gillnets – A total of 15 derelict gillnets were removed with a total surface area of over 270,000 sq. feet (6.25 acres). Eleven of the nets were still actively catching fish and other animals. A total of 730 animals were observed entangled in the nets during removal operations. The great majority of these animals were dead. Ownership could not be determined for any of the nets.

Salmon and Steelhead for the 21st Century: Salmon and Steelhead for the 21st Century is a four year initiative of the Department designed to conserve wild salmon and support sustainable fisheries by:

- Integrating decisions about hatcheries, harvest, and habitat at multiple scales; and instituting a new framework for science-based, transparent, accountable management.
- A multi-part strategy for success, which includes a long-term plan for institutionalizing a new framework for decision-making.

Several key tasks are underway:

- Identifying and back planning the specific results that WDFW will expect with the completion of the initiative, including near-term results for 2007-2009 and long-term results for salmon and steelhead.
- Establishing near-term annual work plans to meet immediate Department obligations in Puget Sound and the Columbia River.
- Working to make WDFW's external communications with stakeholders and the public as effective as possible.

Assistance with strategic planning, project facilitation, coordination, and communication from private nonprofit Long Live the Kings (LLTK). LLTK's work on the initiative is funded by a federal appropriation, a grant from the National Fish and Wildlife Foundation, and independent contributions.

H Integration: The Department is working with individual co-managers to advance H-Integration in Puget Sound watersheds. H-integration can be defined as a coordinated combination of actions among all the H-sectors - harvest, hatchery, habitat and hydro - that together work to achieve the goal of recovering self-sustaining, harvestable salmon runs.

The Department is focusing on the Puget Sound watersheds with Chinook spawning populations. The goal is to have most of these ten watersheds complete an H-Integration process by May 2007, with the remainder completed by August 2007. (Watersheds without independent Chinook spawning populations (e.g. San Juan, Island) will be included in a focused effort to advance the nearshore salmon recovery 3-yr work schedule.)

Six of the ten-targeted watersheds are already moving forward with co-managers currently developing a draft outline. Draft timetables for completion of an H-Integration process in each of the watersheds will be developed with each watershed and are expected to be in place by November.

Statewide Steelhead Resource Management Plan (RMP): The State Environmental Policy Act (SEPA) process began for WDFW's statewide steelhead RMP with a current focus on Puget Sound with the release of the Determination of Significance and Request for Comments on Scope of EIS on August 22, 2006. A total of six public meetings have taken place throughout the month of September in Mount Vernon, Tukwila, Olympia, Port Angeles and Ellensburg, Washington. In order to accommodate requests from Vancouver residents, a public meeting was held on Monday, October 2 at the WDFW Southwest Region 5 Office. The scoping public meeting deadline for comments was extended to October 3. Public meeting attendance has been on the low side, however those attending have been very vocal in their recommendations for steelhead management and dedicated to the recovery of steelhead in Puget Sound.

A few common themes have emerged from the public meetings including 1) a recommendation to focus on habitat issues for steelhead in Puget Sound; 2) importance of historical steelhead data and relevance to the steelhead science paper and RMP development; 3) the current "one-size-fits-all" management approach for steelhead will not be effective; 4) a need for wild fish management zones; and 5) an understanding of the department's limited budget and desire to support the agency's effort to attain more funding for steelhead recovery. All comments are being compiled and will be taken in consideration as alternatives are being developed within the draft Environmental Impact Statement (EIS). Thank you to all WDFW who assisted with the public meetings.

The statewide steelhead RMP is underway with co-manager meetings scheduled for October to complete the individual watershed templates for Puget Sound. Monthly stakeholder meetings continue this month reflecting recommendations from a diverse group of interests including the Wild Steelhead Coalition, the Hatchery Scientific Review Group, Washington Trout, and members of the WDFW Steelhead and Cutthroat advisory council. WDFW expects to complete the statewide outline and Puget Sound component of the RMP by the end of 2006.

ICC Meeting Report: The 17th session of the U.S./Russia Intergovernmental Consultative Committee on Fisheries was held in Kaliningrad, Russia on September 13-15. In addition to an exchange of information on fisheries, marine mammals, and impending legislation, work continued on drafting a comprehensive agreement for coordination of research and management of marine resources in the northern Bering Sea. Russia had been reviewing the draft from the 2005 meeting and provided comments and introduced several new concepts that the U.S. will consider prior to the next meeting. Work was essentially completed on the cooperative enforcement agreement that will accompany the comprehensive agreement. There was some discussion about scheduling an extra meeting in 2007, prior to the annual meeting, which will be hosted by the U.S. in September 2007. However, no commitments were made to an extra meeting. The primary stumbling block to completion of the agreements is the two countries' differing views on establishing reciprocal fishing privileges in the northern Bering Sea. Russia desires them – the U.S. does not.

Association of Fish and Wildlife Agencies (AFWA) Farm Bill Briefings: In Washington D.C., Don Larsen participated with other state representatives of AFWA's Farm Bill Working Group in Farm Bill informational briefings for both House and Senate Agriculture Committee staff members. We presented AFWA's draft Farm Bill position paper and received feedback. This coincided with a briefing involving a study that examined what would happen to federal spending and commodity prices if the Conservation Reserve Program (CRP) was eliminated. Under current price support programs, eliminating CRP would result in an overall cost increase to taxpayers and a reduction in farm income in many areas. To see the actual report, click the following link: www.eesi.org/briefings/2006/Ag&Energy/9-7-06CRP/briefing%20notice.htm

Tribal Harvest: Tribal harvest of elk from the Colockum elk herd generated a lot of questions and concerns from non-tribal hunters during the archery elk season, which ended

September 21. The overlap of tribal and non-tribal hunters is unfortunate, but the Colockum area is within the ceded area of the Yakama Nation, where tribal members have reserved hunting rights.

Elk seasons in the Colockum area started in August and will continue through the winter, so harvest estimates won't be available until next spring. However, during the 2005-06 seasons, the estimated non-tribal harvest from Colockum Game Management Units was 730 elk. The composition of the harvest from last year was 69 branched bulls, 359 spike bulls and 302 antlerless elk. During the same season, we estimated that tribal hunters harvested 25-30 branched bulls. We don't have information on the tribal harvest of spikes or antlerless elk, but we expect the numbers are much smaller. So, tribal members probably take less than 5 percent of the total Colockum harvest each year, but they may take 25-30 percent of the branched bull harvest.

We will be talking with the tribe about these issues and our concerns about management of age structure and maintaining numbers of mature bulls.

Cowlitz Wildlife Area (CWLA) Patrol: Officers worked an emphasis on the CWLA and Tacoma City Light lands for fires and closed area violations. They issued 26 citations and booked one felony warrant in one evening. Officers contacted a camper on the south shore of the CWLA who was blocking an access gate. The camper did not want to provide identification and was observed tossing his wallet under a vehicle. As it turns out, another of our Officers booked this subject a month before for the same offenses and attempting to flee from his warrants.

Geoduck Enhancement Permitting: Intertidal shellfish enhancement staff met with Pierce County officials to proceed with environmental permitting for a planned geoduck enhancement at Kopachuck State Park in 2007. The park tidelands were last planted with geoduck seed in 1996, resulting in a highly successful and popular multi-year sport fishery. Recreational harvesters have harvested virtually all the geoduck clams from that seeding and the beach is ready for enhancement again. The enhancement site could also serve as a controlled experiment in the environmental effects of geoduck seeding.

Tribal / WDFW Campout: Officers conducted a two-day patrol on Lake Roosevelt. The patrol was originally scheduled as a joint patrol with Colville Tribal officers. Tribal officers cancelled out at the last minute on the joint patrol, but did attend the campout. The campout was a good social event and hopefully will generate more participation by Tribal officers to our overtures for joint patrols.

NPCC Recommends Project Funding for the Largest Fish And Wildlife Mitigation Effort in the World – The Columbia Basin Fish & Wildlife Program: The Northwest Power and Conservation Council (NPCC) approved Draft Fish and Wildlife Project Funding recommendations this week. The project-specific funding proposal is located at: <http://www.nwcouncil.org/fw/budget/2007/province/AllProvinces.xls>. This proposed \$448 million expense budget and \$116 million capital budget, to be funded by the Bonneville Power Administration (BPA), would shape restoration efforts for Columbia Basin anadromous fish, resident fish and wildlife over the next three years.

BPA has stated that \$143 million annually (\$429 million for 2007-2009) will be available for expense projects. The Council and staff targeted \$153 million annual start-of-year budgets on average, over the period, reasoning that actual expenditures will stay within the BPA limits since delays in project implementation are inevitable each year. In addition, BPA allows up to \$36 million annually for capital projects. The Council's Draft recommendations came in at more than \$10 million under budget in the "basin-wide" category because of a dispute over funding the projects that were identified by BPA to replace the Fish Passage Center.

The Council is now accepting public comment on its draft recommendations through October 6. Based on comments received by project sponsors, stakeholders and the general public, the Council will make final funding recommendations during its October 17-18 meeting in Helena, Montana. In addition, BPA will consider input from the Federal Columbia River Hydropower System (FCRPS) Biological Opinion remand process before it makes the final funding decisions. BPA, a federal power marketing agency, funds the Council's Columbia Basin Fish and Wildlife Program as mitigation for impacts stemming from the construction and operation of the basin's federal hydro system.

Cedar River Lawsuit: The state of Washington has been considering their response regarding a lawsuit on the proposed Cedar River sockeye hatchery. A private citizen, Roz Glasser has filed suit against the NOAA regarding their process in approving the proposed hatchery. The suit contends that: 1) NOAA did not comply with the NEPA process in approving this hatchery; and 2) NOAA did not adequately quantify the take of Chinook salmon resulting from hatchery operations.

The City of Seattle has officially intervened in support of NOAA regarding this lawsuit. The State of Washington has been discussing its possible role as an intervener in this lawsuit. On Wednesday September 27, 2006 the state submitted their request to intervene in this lawsuit on NOAA's behalf. The judge is taking this request under advisement but has not yet rendered a decision on this request.

Lake Washington Sockeye Season: This summer's estimated catch of 59,000 Lake Washington sockeye salmon was the largest sport harvest on the lake since 1996. The abundant return of sockeye drew large crowds to the lake and, overall, anglers were pretty successful. Lake Washington sockeye final run size for this year was estimated at 472,000 salmon. That's well above the 350,000 fish needed for spawning escapement, leaving a surplus of 122,000 sockeye available for harvest. The surplus – minus about 2,000 salmon for test fisheries – was split between sport anglers and tribal fishers. Sport anglers made about 63,800 trips on the lake and averaged just below one sockeye (.93) per rod this year. The fishery was open for a total of 18 days – the most days of fishing since 1996, when sport anglers caught about 70,000 sockeye during 23 days of fishing. With the purchase of gear, fuel and other angler essentials, coupled with the ripple effect of those out-of-pocket expenses, WDFW estimates this year's Lake Washington sockeye fishery provided about \$8.6 million in economic benefits to the area. The strong return of sockeye stemmed from a combination of good ocean conditions and salmon produced at a temporary hatchery facility on the Cedar River.

2006 Hunt Unit Maps: Mapping revisions and metadata updates have been completed for the 2006 hunt unit boundaries. A new series of Game Management Unit (GMU) maps (large format), deer area maps, and elk area maps (small format) are now available via the GoHunt Internet mapping application. Hunt unit maps (PDF format) were also sent to each regional office for distribution to the public. The Geodatabase of 2006 hunt unit boundaries has been placed on the anonymous ftp (file transfer protocol) site for download, as well.

WDFW Web Site Usage is Up Again: The WDFW public Internet Website (wdfw.wa.gov) continues to be a major communications tool and information channel for our customers. Statistics for Fiscal Year (FY) 2006 show a significant increase in the overall website usage with total visits for the year exceeding 38 million. Web Site usage has doubled over the past three years, and is ten times greater than in FY00. For the WildWatch Cameras, usage in FY06 of 4.6 million visits was more than double the usage in FY05. In FY05, WDFW initiated an e-mail news subscription service that now has over 16,000 subscriptions. Interactive GIS mapping applications on the Web Site have also been very popular. The number of maps made by customers of SalmonScape and GoHunt increased from 886,000 in FY05 to 1,316,000 in FY06.

U.S. Army Corps of Engineers SWRG Meeting: On August 29-30, the Corps of Engineers (COE) held a meeting of the Study Review Work Group (SRWG). The SRWG was established as part of the COE's Anadromous Fish Evaluation Group for the purpose of reviewing and recommending for funding study proposals aimed at improving understanding of improving anadromous fish passage conditions at COE hydroelectric projects on the Snake and lower Columbia rivers. WDFW, along with the states of Oregon and Idaho, federal agencies, and tribal fish agencies are represented on the SRWG. Approximately 47 Preliminary Proposals were presented during the two days of meetings. SRWG member comments were due to the COE by September 19. These comments will help determine which proposals will be funded and to guide iterative development of Final Proposals. Final Proposals will be reviewed November 29, 2006, with final funding decided prior to January 2007.

Ocean Policy Working Group: Intergovernmental Resource Management (IRM) staff attended meetings of the Ocean Policy Working Group to develop recommendations for a long-term governance structure to continue to solicit input from the public on ocean policy issues, prioritize those issues, and recommend appropriate actions needed to address them. The objectives of this exercise included: 1) ensuring follow-through on the U.S. Commission on Ocean Policy and the Washington Ocean Policy Working Group recommendations; 2) creating a structure comprised of representatives from action agencies; 3) ensuring the tribes and local governments were represented; 4) continuing an outreach component; and 5) minimizing the costs associated with ocean policy implementation.

The Working Group explored different governance structures, such as creating local committees like the Puget Sound Marine Resource committees, using Lead Entities and a watershed-based structure, working with the Association of Coastal Counties, and implementing ocean policy through the Coastal Zone Management Act and/or Growth Management Act. After considerable discussion, the Working Group's preliminary recommendation for a state-level governance body is a continuation of a committee with a composition similar to the current working group; that is, a formalized committee comprised of representatives from key state agencies, such as Fish and Wildlife, Ecology, Natural Resources, Parks and Recreation, and Community, Trade, and Economic Development. Coastal tribes and counties would also have seats on the committee and local constituents would act in an advisory capacity.

With regard to a governance structure to address ocean policy issues on a West Coast level (interacting with Oregon and California), the Governor's Office would continue to take the lead. A full description of the governance structure proposals will be included in the Working Group's second report, a draft of which will be available in early October for review.

Big Game Management Roundtable/ September Meeting: The public was invited to the September meeting of the Big Game Management Roundtable for a discussion of issues related to elk displacement from state-owned winter range to private lands in the Parke Creek/Caribou Creek area of the Kittitas Valley. The meeting began with brief discussions and presentations from WDFW staff and a local rancher about elk behavior and the history of elk depredation in the area. Then the 60 or so attendees representing

ranchers, landowners, local residents, sportsmen, and ATV enthusiasts worked in small groups to identify what they thought was the primary issue responsible for elk moving to private lands, and how they would go about addressing the problem. Some of the suggested causes for the problem included lack of security on the winter range due to too much public activity, and lack of quality forage to hold elk on the winter range. Suggested approaches to addressing the problems included a shorter and/or later hunting season, no public access while elk are on the winter range, more livestock grazing to improve forage quality, construction of an elk fence, and beginning a winter feeding program.

Taneum Creek Coho Reintroduction: Region 3 Director, Jeff Tayer and RFPM, John Easterbrooks participated in a meeting with Yakama Nation (YN) Yakima-Klickitat Fisheries Project (YKFP) staff and two directors from the Taneum Canal Co. (TCC) to discuss the re-introduction of coho salmon into Taneum Creek and other Kittitas Valley tributaries to the Yakima River. TCC has worked cooperatively with the state and federal fish agencies and the YN to significantly reduce winter stock water use, which benefits ESA-listed summer steelhead and resident rainbow trout. YN's YKFP coho biologist and WDFW Science Division staff working in the Ecological Interactions Team (EIT) in Ellensburg want to test the feasibility of expanding coho reintroduction program to smaller tributaries that have not supported coho for many decades... primarily due to irrigation development that blocked passage and dewatered the lower ends of the tributaries. The meeting provided an opportunity to explain the proposed coho tributary program to the irrigators and alleviate their concerns about potential impacts to their summer irrigation water rights. It appears that the Taneum Canal Co. may be willing to sign on as a cooperator on the project.

2006 Northwest Regional Fish Passage and Screening Workshop: This workshop, coordinated and hosted by WDFW Habitat Fish Screening Technical Assistance and Yakima Construction Shop staff, was held in Yakima on September 12-14. The planning and hosting of the workshop rotates between the three northwest states and the U.S. Bureau of Reclamation; this year was Washington's turn. Although we planned for 70, there were 129 attendees, including staff from the fish screen shops in the three northwest states, other state and federal agencies, consultants, and other interested parties. WDFW staff did an excellent job in planning and presenting the workshop. In addition, Regional Director Tayer provided the workshop welcome, and WDFW staff provided eight of the 30 presentations at the workshop. The workshop seemed to go very well, and staff received numerous positive comments from other attendees on the quality of the workshop. BPA has requested that WDFW provide the PowerPoint presentations for posting on the BPA website. The next workshop will be in Idaho in 2008. Special thanks to the planning team of Eric Egbers, Pat Schille and Sonia Ortiz from Habitat and Chuck Lenberg, Ray Gilmore, and Kevin Fulks from the Yakima Construction Shop (YCS), Business Services, and to the other YCS and Habitat staff that assisted during the workshop.

Forest Practices Board: At the August 9 Forest Practices Board meeting, the Board approved motions that instruct the Department of Natural Resources to continue the rule making process for the first studies to come out of the Adaptive Management program that are coupled with the Forest and Fish HCP. These two rules involve perennial initiation points (PIP) for streams and the “desired future conditions” model. The Board also adopted rules to prevent “decertification” of spotted owl habitat. Decertification is a process that certifies that spotted owls are no longer present in particular areas, thus, allowing timber harvests to proceed. Finally, the Board changed a rule that had allowed habitat that was harvested under landowner plans (such as HCPs) to be counted as habitat when determining suitable habitat remaining. Such habitat was termed “virtual habitat” and is no longer allowable.

Roadless Rules: On September 13, federal Judge Elizabeth Laporte, San Francisco, issued a decision in the Roadless Rules case. Washington, in conjunction with California, Oregon, and New Mexico filed suit against the U.S. Forest Service (USFS) for repealing a 2001 Roadless Rule enacted by the Clinton Administration. The 2001 Rule prevented road building and timber harvest on 58 million acres of USFS inventoried roadless areas nationwide, affecting 2 million acres in Washington.

In 2005, the Bush Administration repealed the 2001 Rule and replaced it with a state-specific petitioning process that allowed each state to decide how to manage the roadless areas in their states. The states’ case and another case filed by environmental organizations and heard concurrently alleged that the USFS did not abide by the Endangered Species Act and the National Environmental Policy Act when it enacted the 2005 Rule. The judge agreed and, essentially, reinstated the 2001 Rule.

Environmental Policy staff, in conjunction with the Governor’s Office, has been developing Washington’s petition, which essentially mirrors the 2001 Rule. The deadline for states to file petitions, as outlined in the 2005 Rule, is November 13, 2006. Based on likely appeals, the state may still go ahead and file the petition to ensure an essential timeline is met in the event that the case is overturned on appeal.

Agency’s Hatchery Spring Chinook Supplementation Studies On Tucannon River of SE Washington to be Published by American Fisheries Society: The manuscript, “Supplementation of an ESA-Listed Spring Chinook Population with Management Implications” has been accepted for publication in Fourth World Fisheries Congress. The paper is a follow up to a poster presentation at the World Fisheries Congress in Canada in 2004, and discusses the effects of the hatchery spring Chinook program on the natural population of Tucannon River spring Chinook. Authors were Michael Gallinat, Joe Bumgarner and Mark Schuck of the Snake River Lab, and Glen Mendel, District Fisheries Manager for SE Washington. The American Fisheries Society will publish the proceedings in book form in 2006.

Cowlitz Steelhead Run: The summer steelhead run returning to the Cowlitz River is the largest in recent years. As a result WDFW increased the daily bag limit from two to three steelhead. The summer steelhead fishery on the Cowlitz is one of the most popular fisheries in the state and we are pleased to be available to provide additional opportunity. The reason for the fisheries popularity is the time of year when it occurs: it peaks in July and August and is one of the longest duration fisheries extending from May through October.

Tiger Muskie Update: Efforts continue to maintain our popular tiger musky program. Tiger muskies are a sterile cross between female muskellunge and male northern pike. They were first introduced into Washington in 1988 and are currently in seven waters totaling 11,700 surface acres. Extensive studies have shown that they are not a risk to native species when stocked in appropriate waters and low densities as WDFW has done. However, they do provide a popular trophy fishery for warm water anglers. Our latest freshwater angler survey showed an estimated 16,000 anglers (3% of licensed anglers) make 56,000 trips per year to fish for tiger muskies. This generates approximately \$7.5 million in economic activity annually in the state.

The fishery has been dependant on receiving tiger musky eggs each year from Minnesota's DNR. This is the only disease free and aquatic nuisance free egg source currently available. Initially, Minnesota indicated that they were discontinuing the tiger musky egg program. Thus, we began exploring options for maintaining this important fishery.

After considering the comments on the initial SEPA DNS and further discussions with Minnesota DNR staff, who are now indicating they will continue supplying tiger musky eggs, we are re-evaluating all alternatives. Our goal is to thoroughly evaluate all feasible alternatives that do not pose a risk to other species. Staff will be updating you at the November meeting with the most current information on this issue and the potential actions we will be considering.

Stakeholder Participation in the Development of the Puget Sound Steelhead Resource Management Plan (RMP): WDFW is in the early stages of developing a steelhead hatchery, harvest and monitoring plan for Puget Sound steelhead in response to NOAA Fisheries' proposed Puget Sound steelhead listing. This plan will be a component of a broader statewide steelhead RMP. Stakeholders will have the opportunity to comment on both the statewide and Puget Sound component of the steelhead RMP during monthly meetings throughout the summer and fall. The first stakeholder meeting was an informal ad hoc group of Steelhead and Cutthroat Policy Advisory Committee (SCPAG) members that occurred on July 20. Presentations were given by representatives from the Wild Steelhead Coalition, Puget Sound Anglers, and Washington Trout to name a few. WDFW staff received feedback on current steelhead hatchery practices, harvest management, and research needs that will be incorporated in the development the Puget Sound RMP. SCPAG members were also interested in reaching out to a broader group of local entities including city and county governments working on salmon conservation efforts. Participation from these groups is key to the success of WDFW's steelhead plan and we look forward to their input. The next public meeting will be scheduled in late August 2006.

Cedar River Summer 2006 Trout Population Sampling Completed: Fish Program staff members from the Science Division and Region 4 in collaboration with King County and the U.S. Fish and Wildlife Service (USFWS) completed three weeks of field work (July 24-August 10) to estimate rainbow and cutthroat trout population sizes in the Cedar River between Renton and the Landsburg bridge. A tremendous amount of data was collected during this short period due in large part to the collaborative nature of the project and the number of staff members generously provided by Region 4, numerous units of the Science division, King County and USFWS. Trout were sampled in river reaches using a barge electrofisher unit, floy-tagged, and then re-observed via snorkeling and recaptured with the electrofisher to provide data necessary for estimating population size. Length was recorded and DNA and scales collected from approximately 1,300 trout in order to provide an age-based estimate for both species. Approximately 600 of these trout were sampled for diet content and PIT tagged in order to assess trout movement patterns within the river and Lake Washington. Future detection of these tagged trout at the Ballard Locks PIT antennae array will provide an estimate of the proportion of Cedar River trout that are juvenile steelhead. Data are currently being processed to calculate the age-based population estimate. USFWS and King County staff members will process diet samples this fall in order to estimate consumption.

SaSI Data Collection on the Web Debuts: On August 2, the Biological Data Systems (BDS) Unit of the Fish Program's Science Division launched a new application designed to allow Salmonid Stock Inventory (SaSI) data providers to submit and review annual stock data updates via the Web.

More than 500 SaSI stocks are currently recognized for salmon, steelhead, bull trout, and cutthroat in Washington. A data "provider" has been assigned to each stock, along with one or more data "reviewers" (including both WDFW and co-manager experts). Once the provider has entered a new escapement estimate for a stock, E-mail is automatically generated to the reviewers to notify them about the new or changed estimate. Reviewers contact providers if they have any comments; once satisfied, a simple return E-mail updates the "reviewed" section of the SaSI database for that stock.

The system is also piloting the use of automated E-mail "reminders" as the due date for annual updates for each stock approaches. "Past-due" notices have been implemented as well during this first (pilot) year. This is the first time BDS staff have integrated E-mail, a Web application, and a corporate data repository stored in the NRB, thanks to the skilled efforts of Dong Nguyen with support from Mike Keeling (ITS). It will be a year of learning for us all!

We gratefully acknowledge the efforts of dozens of state and tribal fish biologists to contribute their expertise to creating this SaSI data repository and we appreciate their patience as we work out the bugs in this new system. Hopefully, this will pave the way for implementation of similar Web applications to speed data flow and simplify the task of moving key data from the field to headquarters.

Southern distinct population segment (DPS) of green sturgeon as threatened under the Endangered Species Act: NOAA Fisheries issued a Final Rule listing the Southern distinct population segment (DPS) of green sturgeon as threatened, effective July 6, 2006. The latest genetic analysis identified that the Southern DPS comprised 50%-80% of green sturgeon sampled from Washington's coastal estuaries in 2003-2005. Impacts to listed green sturgeon from Columbia River fisheries require ESA Section 7 consultation. Region 5 staff have drafted a Supplemental Biological Assessment (BA) covering impacts to listed green sturgeon from lower Columbia River fisheries for TAC review and submission to NOAA Fisheries. In discussions with NOAA Fisheries staff, it was indicated that justification for a "no jeopardy" opinion for listed green sturgeon would be more straightforward with implementation of non-retention fisheries. The draft BA states that retention of green sturgeon will be disallowed in commercial fisheries beginning in July 2006 and in recreational fisheries beginning in 2007, allowing the states the opportunity to educate anglers on the difference between green and white sturgeon. In anticipation of further harvest prohibitions, a Sportfishing Rule proposal prohibiting retention of green sturgeon statewide has been prepared for inclusion in the 2007-2008 minor-year rule cycle. NOAA Fisheries will be determining specific ESA Section 9 prohibitions and exemptions over the next several months through the ESA 4(d) process. Impacts from fisheries outside the Columbia River will be addressed through this consultation process.

Use of Single Nucleotide Polymorphism identification of Chinook by-catch in the commercial sockeye fishery: Fin-clip samples were collected by WDFW samplers from live Chinook salmon caught as by-catch in the 2006 Area 7-7A non-treaty purse seine sockeye fishery. The WDFW Molecular Genetics Laboratory analyzed these samples to determine their stock-of-origin using a micro satellite-based mixed-stock genetic analysis. From this analysis we estimated that the 44 samples were composed of the following stocks (with percentage range of stock composition, incorporating estimated error): 1) South Puget Sound, 0-2%; 2) Lower Fraser R., 10-18%; 3) South Thompson R., 76-84%; 4) North Thompson R., 0-4%; and 5) East Vancouver Island, 0-4%. One fish was definitively identified as being from Puget Sound, either from Soos Creek Hatchery or Voights Creek Hatchery. However, because the genetic baseline is currently incomplete for Puget Sound, this fish may have originated from elsewhere in Puget Sound (e.g., Green River natural spawning).

Lummi tribal biologists also collected samples from Chinook by-catch from this fishery. The 292 samples were received in the genetics lab this week and are currently being processed.

Wildlife Area (WLA) Habitat Conservation Plan (HCP) Status Update: Initial (first cut) species inventories for the Sinlahekin, Methow, and Scotch Creek Wildlife Areas are nearly complete. These initial inventories have been compiled from existing data sources. The next steps for the refinement of the inventories include the assessment of data quality, gaps, and future data needs, as well as review by appropriate District Teams and Wildlife Area Managers. By the end of August, we expect to begin the development of a database that will house the inventories and link them spatially with concurrent mapping efforts.

Salmon Recovery Funding Board (SRFB): The Salmon Recovery Funding Board met in Walla Walla to distribute \$17 million for the current (2006) round of grants. The Board approved regional allocation percentages as follows:

- Lower Columbia Region 15%
- Puget Sound Region 45%
- Mid-Columbia Region 10%
- Upper Columbia Region 11%
- Snake Region 9%
- Northeast Region 2%
- Coastal Region 8%

These percentages are only for this funding cycle. SRFB staff, lead entities, and regional staff are developing criteria in which allocations would be divided within each region. This proposal will be presented to the SRFB in September. Lead entities (northeast and coast) not considered within a formal recovery region will request additional funding from the SRFB in September. This funding will help facilitate discussions toward development of a regional recovery plan for the coast and northeast regions. Staff participated in several meetings for the two separate regions with their respective local representatives, lead entities, WDFW, SRFB staff and the Governor's Salmon Recovery Office to discuss the process of regionalization.

Pollution Fines Finance Restoration and Conservation Projects in Puget Sound:

The National Fish and Wildlife Foundation's Puget Sound Marine Conservation Fund has allocated \$1.7 million to fund 14 marine conservation and restoration projects in Puget Sound. The money for these projects came from oil pollution penalties levied against a large shipping company. Natural Resource Damage Assessment/Restoration staff from the WDFW Spill Team participated on the screening committee to evaluate and prioritize project proposals. Many of the selected projects are expected to benefit and support the State's nearshore, estuarine and salmon restoration priorities in Puget Sound.

Search Warrant Activity: Antelope Fawn Held Captive in Tacoma - Officer Maschhoff, Officer Prater, Sergeant Jackson, and a USFWS special gent executed a search warrant in Tacoma. The man that is living at the residence had picked up an antelope in South Dakota last month and was keeping it as a pet. After picking up the antelope the man continued on his road trip to Florida and then returned to Washington toting the antelope all the way. The man showed the officers where he was keeping the antelope and was willing to talk with the officers about the incident but, when it came time to giving a written statement the man said he had already told the officers everything he knew and didn't need to write it down. The man was adamant that he had picked up the antelope in Spokane the week before. In witness statements Officer Maschhoff had already learned that the man had called his girlfriend from South Dakota to ask what to feed a baby antelope because he was going to Wal-Mart to get it food. The officers took the antelope to the Pilchuck Wildlife Center on Camano Island for safekeeping. State charges have already been filed and federal charges will be filed once the antelope's true origin can be determined (via blood samples and cell phone records).

Marine Energy Projects: With the recent six filings for projects by Snohomish Public Utility District, there are now 11 marine energy projects being proposed in Washington State. The design of these projects vary, but the concept for most of them is to take wind turbines and place them underwater to use the energy from tidal currents to generate electricity. The current proposals have rotor blades that range from 9 to 60 feet in diameter. The proposal for the Tacoma Narrows would result in tip speeds over 20 miles per hour. Applications for projects have been submitted to the Federal Energy Regulatory Commission for the following projects:

San Juan Channel	116 turbines (60 foot rotors)
Guemes Channel	166 turbines (30 foot rotors)
Admiralty Inlet	1,010 turbines
Agate Pass	130 turbines (9 foot rotors)
Spienden Channel	168 turbines
Rich Passage	62 turbines (30 foot rotors)
Tacoma Narrows	60 turbines (60 foot rotors)
Deception Pass	4-20 turbines (30-60 foot rotors) (Snohomish County PUD)
	100-300 turbines (Washington Tidal Energy)
Columbia River	50-150 turbines (25-50 foot rotors)
Makah Bay	A wave energy project, using buoys to pump water through a turbine

The impacts of these types of project are unknown because very few of these projects exist anywhere in the world. We will be designing studies to look at the impacts to fish, birds, marine mammals, and their habitats. Potential impacts involve direct mortality on birds, fish and marine mammals from turbine blade strikes, interference with migratory patterns, measures to protect equipment from marine growth, direct habitat loss from equipment and infrastructure placement, impacts on currents, changes in water surface elevations, effects on commercial and recreational fishing areas and equipment, changes in sediment transport, and other issues not yet identified.

Outer Continental Shelf Energy Rules: Staff provided comments on the development of rules for energy projects located on the outer continental shelf off the coast of Washington. The Mineral Management Service, U.S. Department of Interior, is developing the rules. It is uncertain whether the rules for developing these types of projects (wind mills, marine energy, solar, and hydrogen) will be similar to the Federal Energy Regulatory Commission rules for developing hydroelectric projects. We requested that impact to fish and wildlife resources be addressed, and that recommendations from state fish and wildlife agencies be given special consideration.

2006 Methow Wildlife Area Fish Passage Barrier Correction Status Report: As part of the Habitat Program's Technical Applications Division (TAPPS) effort to correct fish passage barriers and noncompliant diversions on WDFW-owned lands, the Capital Programs and Engineering (CP&E) construction crews have also been working on the Methow Wildlife Area in Okanogan County. Four fish passage barrier culverts are scheduled for correction during the 2006 construction season. To date, a 23-foot-wide bottomless arch culvert has been constructed at Beaver Creek to replace a 10-foot-wide culvert installed in 1971, which was a known fish passage barrier.

Alligator Captured in Buckley: Officer Maschhoff responded to a call for service from Buckley Police Department (PD) regarding an alligator in a drainage pond. The PD requested a wildlife officer because they did not know how to deal with the animal. When Officer Maschhoff arrived he actually found a crocodile poking its nose out of a drainpipe that drained the seasonal retention pond. Officer Maschhoff tried to catch the animal with his catchpole but it just backed into the pipe. He then looped his catchpole into the end of the pipe and waited patiently until the croc started to come back out of the pipe. Buckley PD Officers assisted in trying to scare the croc out of the pipe from the other end. When the croc started to come out again Officer Maschhoff waited until its head and front legs were through the loop and then captured the animal. Buckley PD then took possession of the animal and turned it over to Pierce County animal control.

Marine Division and Region Six Officers Seize Over 5,000 Pounds of “Dirty Clams”: Officers Langbehn and Anderson conducted an inspection of a shellfish company in Nordland on Thursday. The company has a long history of shellfish violations and is the source of numerous allegations of trafficking in dirty clams. When the officers arrived at the business, they observed several bags of clams and oysters laying on the beach in wet storage. Contacting the plant manager and some of the employees inside the processing building, the Officers quickly determined several violations of the Washington Department of Health (DOH) rules regarding commercial shellfish, including: shellfish bags did not contain certification tags or they were improperly marked, and shellstock lots in the processing plant were being commingled with other clams of unknown origin. The complexity and magnitude of the violations prompted Officer Anderson to call Sergeant Henry as well as DOH. DOH responded immediately by having one of their investigators, Frank Cox, travel from Olympia to the site. Their extreme interest in the violation was precipitated by an “illness investigation” that Mr. Cox was conducting on that particular shellfish company. Apparently, cases of *Vibrio parahaemolyticus* had been traced back to that buyer, but the specific harvest location couldn’t be determined. A few hours later, the DOH representative arrived and met the WDFW Officers. An assessment of the criminal and civil violations included untagged bags of manila clams; improperly tagged bags; improper fish tickets; commingled stock in the processing plant; dogs roaming throughout the processing plant; birds nesting above the shellstock; and mold growing on the walls and floor. The absence of proper labels on the shellstock (WAC 246-282-080.2) constituted a violation of the NSSP Model Ordinance and RCW 69.30.110.

At the concurrence of DOH staff in Olympia, Sergeant Henry and the Officers initially seized the illegal stock, and began loading it into their patrol trucks. A total of 152 bags of manila clams amounting to 5,125 pounds (approx. \$7,688 value) were documented and seized. DOH reconsidered the removal and destruction of the stock from the property and instead placed a hold order on the product, leaving it at the scene. WDFW Officers are uncomfortable with this result, but ultimately DOH has the last word on the disposition of the shellfish. Despite the disagreement with disposition of the shellfish, the violation of the shellfish buyer still remains. Officers Anderson and Langbehn began the tabulation of the offenses and determination of the charges. Detective Golden of the WDFW Statewide Investigative Unit is assisting with search warrants.

White Sturgeon Hatchery Production at CBH: Region 1 and Region 3 staff collected and spawned two female and two male Lake Roosevelt sturgeon on the evening of June 29, creating four "family groups" consisting of 15,000 eggs per family. This is the first time that WDFW has attempted to capture sturgeon broodstock and spawn the fish ourselves. In previous years, we obtained fertilized eggs from British Columbia. The fertilized eggs were immediately transported to Columbia Basin Hatchery (CBH), Priest Rapids Complex, in Moses Lake where the U.S. component of the Upper Columbia River sturgeon recovery program's hatchery production is conducted. The eggs from female #1 (Family 1 & 2) were not in good condition and fertilization was poor. Most of these eggs died, became fungused and consequently were discarded on July 4, 2006. The remaining families from female #2 (Family 3 & 4) are doing very well and are starting to hatch. These eggs were in better condition and fertilization success was much higher. CBH staff is hopeful that good survival continues so that they will be able to produce the production objective of 4,000 juveniles (2,000 per female family) by next spring when they will range from about 10 - 14 inches in length and be ready to stock back into Lake Roosevelt.

Lake Washington Sockeye Fishery: A recreational fishery for sockeye occurred in Lake Washington on July 29-31, 2006. Since a fishery was unanticipated, Headquarters Fish Program staff scrambled to put together a full fishery-sampling program that required approximately 25 staff for each of the three days of fishing. A mixture of primarily permanent and some temporary staff were utilized to sample the fishery using protocols established in the 2004 fishery.

Anglers had two more days to fish for sockeye salmon in Lake Washington on August 2-3. State and tribal salmon co-managers have updated the size of the Lake Washington sockeye run to about 466,000 salmon. As of July 30, the sockeye count through the Ballard Locks totaled 412,730 fish. The new sockeye projection, which includes expected returns through August, is well above the spawning escapement goal of 350,000 salmon.

Illegal Body Gripping Traps Used: Officer Stevens followed up with information obtained from Sgt. Chandler regarding a local mole trapper trapping moles with scissor traps in violation of trapping regulations. Sean Carrell was contacted in order to determine if this particular individual was a Nuisance Wildlife Control Operator (NWCO) and what the current status on trapping moles was. Sean advised that it didn't matter whether or not this individual was a licensed NWCO. The law prohibits the use of any body gripping trap period. It is common knowledge that most mole trappers use scissor traps, but it seems that most people are simply turning a blind eye to these particular violations. Sgt. Chandler has warned this individual several times in the past about trapping moles. Additional information is being gathered and it looks as though a citation is warranted. Further investigation will be conducted next week.

Publications: Journal Landscape and Urban Planning accepted The Chico Watershed paper. Title: Defining Alternative Futures and Projecting Their Effects on the Spatial Distribution of Wildlife Habitats (George F. Wilhere, Mary J. Linders, and Brian L. Cosentino).

New HRMS Goes Live: WDFW successfully made the transition to the new state Human Resource Management System with the July 10 payroll. HRMS is the new state payroll and personnel system designed to meet the requirements of collective bargaining. A major part of the migration is the new automated, internet-based time sheet system called TotalTime. The agency implemented TotalTime in mid-June, which replaced the use of paper time sheets. TotalTime collects employee hours and account codes, uploads the data to HRMS for payroll, and supports the labor cost distribution process to develop billings for contracts.

Merwin "Special Kids" Fishing Event: Once again the Merwin Hatcheries "Special Kids" Day was a great success. About 100 special needs children participated, along with their families, in the 8th annual event. We had a great group of volunteers attend and they provided help with one on one coaching, fish cleaning, lunch preparation and fishing pole repair. The weather was great and the fish were awesome, many in the five-pound class and a few tipping the scales at nine-pounds! Children participating were able to catch their five fish to take home and also got to keep their fishing pole and tackle box for future fishing. Many thanks to the hatchery staff that participated and all the folks from Olympia that made the trek southward: Bonnie Long, James Chandler, Monique Homan, and Terry Rudnick. And thanks to the folks from GPO (Go Play Outside) and WHEIA (Washington Hunter Education Instructors' Association).

July 2006 License Sales Increase: As of July 31, 2006 License Sales increased approximately 13% in July 06 in comparison to July 05. The largest increase is in temporary fishing license revenue, followed by combination fishing license revenue. Even though we do not have data to quantify it we believe that the Lake Washington Sockeye fishery contributed to this increase.

License Type	05-Jul	06-Jul	% Change
Freshwater	\$799,887.00	\$833,854.00	4.25%
Temp Fishing	\$153,143.00	\$330,019.00	115.50%
Saltwater	\$202,930.00	\$194,639.00	-4.09%
Shellfish	\$243,941.00	\$229,078.00	-6.09%
Totals	\$1,399,901.00	\$1,587,590.00	13.41%

7th International Congress on Fish Biology: The International Congress was held in eastern Canada the week of July 17. Fish Program staff, in conjunction with researchers from Makah and Oregon State University, submitted a paper on the use of stable isotopes to determine the life history and behavior of marine fish. The concept is that by taking a small sample of tissue from the otolith (ear bone) of a fish a great deal can be learned of the environmental history of that fish, such as the salinity and water temperature. Otoliths of many fish species are like trees - they deposit a marking for each year of life. By using these markings, we can infer the type of environment of the fish life at during different periods of its life. Movement between deep and shallow waters should be detectable using this technique.

The organizers of the Congress accepted the paper enthusiastically and asked us to deliver the first talk of the session - to start the session off with a bang.

Exotic Species: The graduate student monitoring a wetland restoration project on the lower East Fork Lewis River has captured five more specimens of an eastern Asian species called the Amur goby (*Rhinogobius brunneus* spp.). This appears to be the first occurrence of this species in North America. This amphidromous species has a high potential to reproduce and compete with or prey upon native fishes. The goby may have spread into the Columbia River system following high water events. Fish Program aquatic nuisance species staff will continue to work with the Fish & Wildlife Service and university staff to identify and monitor its dispersal, habitat use and food habits.

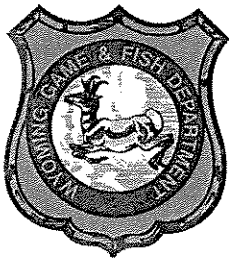
Hood Canal Crab Tagging Study: Twenty-two tagged crab were recovered and reported in the first five days of the Hood Canal recreational crab fishery. These tagged crab are part of a cooperative study by WDFW and the Skokomish Tribe to collect information on what potential affect low dissolved oxygen has on the migration and behavior of Dungeness crab in Hood Canal. In addition, a field-based study is being conducted in southern Hood Canal to assess the feasibility of estimating the recreational crab catch in that sub-area. An ancillary objective is to see if this methodology could be applied on a Puget Sound wide basis. The study involves randomly tagging recreational crab buoys from a marine vessel and determining the proportion of effort and catch those tags represent through creel surveys at three public boat access points in south Hood Canal. The question is whether sufficient tag recoveries and catch information can be obtained at the boat ramps to make a statistically valid estimate of the total catch.

Citizen Science: Chuck Gibilisco and Nicole Ricketts are currently documenting and analyzing the results of Project Swallow, based out of Sunnyside, Washington. Preliminary results of the 5th grade student assessment test scores indicate a significant improvement in several areas, documenting nearly 75% student comprehension based on the objectives.

Project Swallow revolves around the construction, installation, and subsequent species interactions and productivity of 40 bird nest boxes located within the Sunnyside Wildlife Area. The preliminary results also indicate the gathering of credible NatureMapping data to be used by the Sunnyside Wildlife Area and the University of Washington NatureMapping program.

Project Swallow has been a two-year effort by the Chief Kamiakin Elementary School, 5th grade students at Sunnyside, along with the Yakima Basin Environmental Education Program. The results from Project Swallow and other summaries on WDFW citizen science projects will be available as technical reports in the future.

Spotted Owl - Barred Owl Research Project: Joe Buchanan and John Pierce recently received \$15,000 from the U.S. Fish and Wildlife Service to put together an expert team of northern spotted owl ecologists and quantitative scientists (4-6 people). The team will develop an experimental barred owl removal research design framework to investigate the effects of barred owls on northern spotted owl survival, reproduction, and behavior. The final research study design should be completed by the end of this year.



WYOMING GAME AND FISH DEPARTMENT

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Report to Western Association of Fish and Wildlife Agencies January - June 2006

Game and Fish Leadership

Chief Fiscal Officer Ron Arnold retired after 22 years of service to the State of Wyoming. He was replaced by Richard Reynders, who came to the Game and Fish after serving as western district manager of the excise tax division of the Wyoming Department of Revenue. Reynders also has an extensive banking background serving as chief operations officer and president of a number of Wyoming banks.

Leadership Development

Nationwide, state fish and wildlife agencies will be losing large numbers of leaders to retirement in the coming years. In the Wyoming Game and Fish Department, individuals in nearly all Staff-level positions and throughout the Department are currently eligible for retirement, or will be in the next five years. We completed a plan for a leadership development program to prepare and provide incentives for the leaders of the 21st century in the Wyoming Game and Fish Department. Basic training on personal leadership and effectiveness was made available to all employees in 2006.

In 2007, the Department will offer two leadership tracts. Level I is a 12-month interpersonal leadership development program, based on the core competencies of personal integrity, communication skills and supervision. A mentoring/coaching program will be established for each participant. Level II is designed as a program of organizational leadership development to address the core competencies of leadership principles and concepts, team leadership, conflict resolution and strategic decision-making. Students will participate in experiential learning by completing an analysis of a personal leadership problem and will be matched with a senior staff mentor or coach throughout the program.

The program will be administered in the Office of the Director, under the direction of the Leadership Development Program Coordinator.

Wolf Litigation Update

In August 2006, the U.S. Fish and Wildlife Service denied Wyoming's petition to the U.S. Department of Interior to remove the gray wolf from the endangered species. The State of Wyoming proceeded with litigation arguing that the Wyoming wolf management plan constitutes an adequate regulatory mechanism for management of wolves in Wyoming. This is based on wolf population data of at least 309 wolves in 31 packs in Wyoming, which is more than three times the original recovery goal. A decision from U.S. District Court is expected in the next few months.

Grizzly Bears

The Commission approved the Grizzly Bear Habitat Occupancy Plan in July 2005, establishing the final component of grizzly bear management in Wyoming.

In November, the Department of Interior proposed removing the greater Yellowstone population of grizzly bears from the list of threatened and endangered species. As part of the proposal, a distinct population segment of grizzlies in the greater Yellowstone area will be established. More than 600 grizzlies now inhabit the Yellowstone ecosystem. The Wyoming, Idaho and Montana wildlife agencies, federal land management agencies and the National Park Service are committed to managing for a population of at least 500 bears. Following the peer review of the draft delisting document completed in March 2006 the final de-listing rule is scheduled to be published no later than May 2007.

The Game and Fish also began implementation of the Wapiti Bear Wise Community pilot program to reduce the number of human/bear conflicts in the North Fork area near Cody, Wyoming. Under this pilot program, the North Fork Bear Wise community working group was formed to provide local input and assist in decision-making and implementation of the Bear Wise Community Program

Sage Grouse

Wyoming's eight local sage grouse working groups are continuing their efforts to develop local conservation plans. Each working group has 10-15 members, including representatives from agriculture, industry, conservation and government. These eight working groups cover all of the sage grouse habitat in Wyoming. Priorities for each group are determined locally. Projects including on-the-ground habitat improvements, research, water development projects and information and education efforts were approved for 2006. Conservation plans of the eight groups are in various stages of completion. Three groups are scheduled to have plans finalized at the March 2007 Game and Fish Commission meeting, with the other five groups finalizing their plans by early summer 2007.

The Wyoming legislature appropriated \$1.1 million in general funds in 2007-2008 for local sage grouse working group efforts.

Bighorn Sheep

Following two years of transplants to the Devil's Canyon, northeast of Lovell, the herd in that area now numbers 110 animals. It is anticipated limited hunting will take place well before the population objective of 200 is reached.

Another transplant is scheduled for the Laramie Peak area in January 2007 to supplement the existing herd, which is currently less than half the population objective of 500. Montana will provide 45 sheep from habitat similar to that found on Laramie Peak

Strategic Plan

The Game and Fish's strategic plan was completely revised in 2006. All department programs were reviewed, and department employees were involved in developing plans and performance

measures for their programs. The Commission approved the new program-level plan in September 2006.

Chronic Wasting Disease

New regulations designed to ensure the proper disposal of carcasses from CWD hunt areas were implemented in the fall 2005.

Four additional CWD zones were identified in Wyoming in 2006, including deer hunt area 4 in the Black Hills, deer hunt area 11 in Weston and Niobrara county, and Elk hunt areas 16 in the Shirley Basin and hunt area 22 in northwest Carbon county. WGFD personnel expanded testing in 2006 to include most areas in western Wyoming. No CWD was detected in those locations.

Information and education efforts on CWD are ongoing. WGFD mailed more than 30,000 educational brochures to nonresident deer and elk hunters describing CWD zones and testing procedures.

Brucellosis

The WGFD has begun implementing all of the wildlife recommendations of the Governor's Brucellosis Coordination Team. Brucellosis Management Action Plans for all herd units in northwest Wyoming are being completed. All action plans will be completed and in place by July 1, 2007.

Following one of the coordination team's recommendations, Game and Fish personnel trapped elk in January 2006 as part of the Muddy Creek feedground test-and-removal pilot project. In 2006, 58 cow elk testing positive for brucellosis were removed from the herd and processed at a USDA approved facility in Idaho. Preliminary results on the elk that were slaughtered indicate that approximately 30 percent of those elk were culture positive.

The project will be continued in 2007. Meat from the elk will again be distributed to the public. In 2008 and 2009 the project will be expanded to nearby Scab and Fall Creek feedgrounds.

Wyoming regained its Brucellosis Class Free status in September 2006. Ongoing research is part of the effort to eliminate brucellosis in wildlife and maintain Wyoming's brucellosis free status.

Avian Influenza

Game and Fish is working with the Wyoming Livestock Board, Wyoming Department of Health, Wyoming Department of Agriculture, Wyoming State Veterinary Laboratory, USDA-APHIS and US Fish and Wildlife Service to create a comprehensive avian influenza surveillance and public notification system. Game and Fish began monitoring for avian influenza in summer 2006, targeting a total 400 birds, including shorebirds, ducks, geese, swans and cranes. To date 323 birds have been tested.

Game and Fish, along with these partners, has created a frequently asked questions sheet on avian influenza. Press releases along with additional news on radio, television and in Wyoming Wildlife Magazine are being used to keep public abreast of the avian influenza situation.

Legislative Funding

Funding for wildlife conservation in Wyoming has historically been almost totally dependent on hunters and anglers. Currently, almost 90% of the funding for the Wyoming Game and Fish Department comes from sales of licenses, stamps, application fees, and taxes on sporting equipment, etc. The existing funding model based on sportsmen dollars does not meet current demands for wildlife management programs and cannot adequately sustain wildlife management in the future. We have developed proposals for an inflationary increase in license fees and an alternative funding proposal for the 2007 session of the Wyoming State Legislature.

Game and Fish have developed several proposals for the 2007 session of the Wyoming State Legislature relative to department funding needs. A 20-percent increase on most Game and Fish licenses will be proposed to take effect in 2008. This increase would generate approximately \$5.6 million annually. Other proposals would include a legislative appropriation to allocate funds for programs such as wildlife disease and sensitive species to name a few. The Game and Fish has identified 6 programs with a cost of \$7.66 million for which these funds could be earmarked. The department would report annually to the legislature on the use of these funds and the accomplishments of the previous year. A multi-state lottery bill is also on the agenda. The proposal would allocate the first \$5 million to the Game and Fish. In addition, the Department is pursuing legislative authority for the Commission to adjust license fees annually based on inflation. Draft legislation also exists to provide compensation to the Commission in the amount of approximately \$1million annually for licenses issued free of charge or at reduced rates based upon past legislative action.

Energy Development

With Wyoming's energy boom likely to continue, wildlife and wildlife habitat in oil and gas development areas continues to be a focus of Game and Fish. The department will continue to work closely with the Wyoming Governor's Office, Oil and Gas Commission, BLM, U.S. Forest Service, environmental organizations, industry representatives and local communities to identify concerns for wildlife and strategies to identify ways to mitigate impacts to wildlife and habitat across the state.

With the cooperation of many local companies, information on Wyoming wildlife and hunting and fishing laws is being distributed to energy workers moving to the state. A comprehensive information and education plan on energy development's effects on wildlife and habitat is being conducted. A web page containing all related stories and information is available on the Game and Fish website.

Electronic Licensing

In 2006, the Wyoming Legislature passed a bill allowing the Game and Fish to implement an electronic licensing system. In addition to an electronic point-of-sale system at select license selling agents in 2007, the Game and Fish will implement Internet applications in January 2007 for limited-quota big game licenses. Hunters will be able to apply for limited-quota licenses over the Internet. It is anticipated that Internet applications will greatly reduce processing time, increase accuracy of applications and reduce manpower needed to process applications for the drawings.

Wildlife Heritage Summit

The Wildlife Heritage Foundation of Wyoming will host the Wildlife Heritage Summit May 11-12, 2007 in Casper, Wyoming. The summit is designed to improve communications and relationships among conservation groups, hunters, anglers and all entities involved with wildlife. More information on the summit, including a full agenda, will be available on the Game and Fish Web site later this spring.

Wyoming Landscape Conservation Initiative

The Wyoming Landscape Conservation Initiative (WLCI) is a long-term science based collaborative effort to ensure Wyoming's wildlife and their habitats are fully considered and addressed in the face of increasing land use pressures in Wyoming. This is a multi-agency effort involving the Game and Fish, BLM, U.S. Fish and Wildlife Service, U.S. Forest Service and others. The goal of the WLCI is to conserve Wyoming's wildlife resources and facilitate responsible development of critical energy resources.

The WLCI will initially focus on 15 million acres of mostly public lands in southwest Wyoming. This area is estimated to contain approximately 85 trillion cubic feet of recoverable natural gas. The area also has a rich wildlife resource with 100,000 deer, 40,000 elk, 100,000 pronghorn antelope, 8,000 moose, 1,400 bighorn sheep and the highest density of sage grouse within their western range.

Human Dimensions

Wyoming Game and Fish Assistant Services Division Chief Eric Keszler and Information/Publications supervisor Teresa Cole were chosen to participate in the Human Dimensions Training program funded through WAFWA. As part of the program, each participant will complete a human dimension related project for their agency. Keszler will examine the Game and Fish's current public participation and input solicitation methods. Cole will survey Wyoming Game and Fish employees about their wildlife values and preferences and compare those results to the values of residents identified in the WAFWA "Wildlife Values in the West" survey produced by the Human Dimensions in Natural Resources Unit at Colorado State University.

Resident Knowledge Survey

The Wyoming Game and Fish hired responsive Management to conduct a survey regarding Wyoming resident's use of information sources regarding wildlife issues. The study was designed to determine Wyoming residents' knowledge levels on fish and wildlife issues in Wyoming and how knowledge levels regarding wildlife are related to other characteristics, particularly to the media from which Wyoming residents obtain information about wildlife and residents' wildlife values orientations. Survey participants were asked fact-based questions about the agency, wildlife management and key issues facing the agency such as brucellosis, chronic wasting disease and sensitive species. The participants' scores on these questions were then correlated to sources of information to determine which media source (radio, television, newspaper, magazine, etc.) had an effect on knowledge scores. Knowledge and wildlife values orientation were also analyzed to determine correlations.

Game and Fish hopes this survey will provide important baseline information on residents' demographics, wildlife values and knowledge of key issues. The information will also be used by information and education personnel to improve message development and delivery. A full report of the findings from the survey will be made available to the public in spring 2007.

WAFWA – Mule Deer Working Group, Jim Heffelfinger, Chair
Business Meeting Report Mid-Winter 2007 ~ Tucson, AZ

Next Mule Deer Working Group (MDWG) Meeting

We will be meeting in 2 weeks in conjunction with the Mule Deer Foundation/Foundation for North American Wild Sheep/Sportsman for Habitat national Sportsman's Expo in Salt Lake City, UT (January 17-20, 2007). About half of the MDWG members have to be at that meeting so this venue increases member participation and reduces cost to the agencies. MDF is providing a meeting room.

Action requested: Please allow your representative to attend.

Working Group Membership

Calvin Richardson replaced Clay Brewer as the TX representative.

Action requested: We are missing 4 members (NE, OK, MT, B.C.). If you do not have an active member, please appoint one to help with the progress of the working group – especially the habitat guidelines so they are applicable to your jurisdiction. Also, please do what you can to allow that member to attend the meetings.

Action requested: We will need a new Director Sponsor to replace retiring Steven Huffaker.

Publications

All 3 publications recently printed (*Mule Deer Habitat Guidelines for Southwest Deserts*, *North American Mule Deer Conservation Plan*, and *Mule Deer: Changing Landscapes, Changing Perspectives*) have all been distributed to the member agencies and paid for. Thanks to the Mule Deer Foundation for fronting the money to allow us to get that done.

The book "*Mule Deer Conservation: Issues and Management Strategies*" was nominated for a publication award through The Wildlife Society but was not selected.

Action requested: None

MDWG guidance on 2007 Deer/Elk Workshop Planning

The Deer/Elk Workshop will be May 13-16, 2007 at the YMCA camp of the Rockies, Estes Park, CO. The working group will have a meeting in conjunction with this for those who are already attending the workshop. The chair of this (MDWG) committee will provide an overview of the major issues in each mule deer/blacktail ecoregion, by summarizing the work done by the ecoregion guidelines authors.

Action requested: None

muledeernet.org

The muledeernet.org website hosted by USU continues to be our main vehicle for posting MDWG information. This site has the support to keep it fresh with continuing information. MDWG members continue to update this site.

Action requested: None

North American Mule Deer Conservation Plan (NAMDCP) MOU

The cover letter for the NAMDCP MOU was signed at last summer's meeting in Bismarck and was sent to all signatories. Some signatures have been received and others may be obtained at this Mid-winter meeting. The original signatures will be archived and digitally combined for a single signature page to be distributed to the signing agencies.

Action requested: None

NAMDCP Tracking Matrix

This is a document for the MDWG to track state/province progress on the components of the NAMDCP. This could be a valuable tool for leading or directing future needs and gaps in the various programs (regardless of jurisdictional boundaries). At our upcoming meeting we will be discussing input from our federal partners with the help of George Buckner (BLM) and Bill Otani (USFS).

Action requested: None

Web-based version of "Mule Deer: Changing landscapes, Changing Perspectives"

The material in the popular blue book has been converted to a web-based product so it can be posted on-line. This will allow users to "surf" their way through the document as a multi-page website. This means the information can now be accessed quickly by anyone with an internet connection.

This blue book was also converted to a *.PDF file for downloading and/or printing.

Action requested: None

Status of the Habitat Guidelines

We are producing a set of 7 guidelines – 1 for each ecoregion in North America. We have 40 different coauthors working on sections of various guidelines and everyone has a full plate so this is currently consuming nearly all of the working group's efforts. When complete these will have the potential to improve blacktail and mule deer habitat on a landscape scale by allowing federal, state, local, private, and tribal land managers to fold mule deer habitat requirements into land management plans. The SW Deserts Mule Deer Habitat Guidelines are complete and distributed and the other 6 are now being written simultaneously.

Of the 6 being written, we have 2 that were made available for review by the Directors at the Bismarck meeting (Colorado Plateau and California Woodland/Chaparral). These 2 guidelines have also been reviewed by working group members and are now ready for the final review phase - external review and the second round of review by the Directors. These 2 ecoregions will be ready for final approval (and subsequent publishing) at the Summer 2007 meeting in Flagstaff.

The remaining 4 ecoregions are on a different timetable. These are in various stages of development and drafts of 3 ecoregions are available for review at this meeting (Northern Forest, Coastal Rainforest, Intermountain West). At our next meeting we will develop individual timelines for the completion of these documents. The publisher can only take one document into the layout

phase at a time so a staggered completion will work fine as long as rapid progress continues to be made on all ecoregions. A few of these guidelines are still incomplete and none of these have been reviewed by the working group. We are sharing these drafts now to include Directors in the review at the earliest possible opportunity.

Action requested: Please have any comments back to the lead authors by February 1, 2007. With 40 people involved, there is a good chance someone on your staff is contributing, so please provide the support and time necessary to get it done.

Effects of Global Climate Change on Big Game Winter Range

As part of an AFWA grant process, several white papers are being developed on Global Climate Change. Jim deVos will be leading the writing of one on Big Game Winter Range. Jim will tap into the expertise of the MDWG to write this paper collaboratively. The MDWG discussed this at the Bismarck meeting and provided deVos with a lot of good constructive input. DeVos will attend the MDWG meeting this month in Salt Lake City to start this project off.

Action requested: None

FY2008 Federal Budget Priorities

1. Increased Federal Agency budgets to implement the NAMDCP (i.e., Resource Management Plan, Allotment Management Plans, Forest Management Plan revisions and/or amendments to address the plan's components).
2. Increase funding to the NRCS and Farm Services Administration to provide landowner incentives to implement NAMDCP.
3. Provide adequate funding to the USFS to implement and enforce the Designated Motorized Route Rule.

Action requested: include in WAFWA Priorities.

Potential future projects of the MDWG

1. Focus on developing standardized mule deer population (and possibly habitat) monitoring guidelines.
2. Mule Deer Joint Ventures using the Uncompahgre project and avian joint ventures as models. It should be an interstate or international project to dissolve state/provincial boundaries. This would be discrete areas with important mule deer herds where we could implement the conservation plan, habitat guidelines, and mapping effort in a coordinated fashion to illustrate how all the products of the MDWG come together for mule deer conservation on the ground.
3. Proceed with global climate change paper
4. Finish ecoregion habitat guidelines.
5. Discuss mule deer/energy development and mitigation

Action requested: None

Western Native Trout Initiative
Director's Briefing
WAFWA Director's Business Meeting, Tucson, AZ
January 7, 2007

Director Sponsor: Virgil Moore, Oregon

Inland and Marine Fisheries Committee WNTI Management Team: Christopher Estes, AK; Larry Riley, AZ; Rich Haskins, NV; Ed Bowles, OR; Mike Stone, WY; Lisa Heki, FWS; Amy Unthank, FS; Karl Stein, BLM.

THE WESTERN NATIVE TROUT INITIATIVE

A specific regionally based National Fish Habitat partnership:

The western Fish Chiefs, through the Western Association of Fish and Wildlife Agencies (WAFWA) Inland and Marine Fisheries Committee, determined that the combining and coordinating the multiple state efforts for native trout could lead to greater success in improving the status of the species. The intent is to have conservation and management actions focus on common themes that include but are not limited to; water quantity, water quality, fish passage, in-stream and riparian habitat, introduced species, introgression, and brood-stock development. This includes elements of focus in the parallel National Fish Habitat Action Plan (NFHAP).

I. Review of WNTI Project Goal and Objectives

The fundamental goal of WNTI is to speed the implementation of conservation strategies for western native trout. We propose to accomplish that by building and implementing collaborative conservation efforts for native trout (including bull trout) across the western states through interagency efforts and partnerships under this WNTI.

The specific objectives are to:

- Integrate individual species management strategies into a west-wide Strategic Plan
- Implement actions to de-list western native trout and prevent future listings
- Develop and enhance recreational fishing opportunities for western native trout
- Develop and improve local partnerships through a collaborative conservation (joint venture) strategy
- Develop cost share programs for implementation of WNTI priorities.

II. Timeline: 3 years

III. Amount of Funding Received: Year 1 - \$188,365; Year 2 - \$188,365 ; Year 3 - \$188,365

IV. Progress Report

Following approval of the MSG, and a Coordinator search process, Robin Knox was contracted to begin work on July 3, 2006. The office for the Coordinator has been established at the Fish and Wildlife Service Region 6 Fisheries Program office in Denver, Colorado. As a partner in WNTI, the FWS provides the office and related facilities at no cost to the WNTI.

The Inland and Marine Fisheries committee established a Management Team for WNTI oversight and operations management. Rich Haskins, NV, and Mike Stone, WY co-chair the management team and other current members include Larry Riley, AZ; Ed Bowles, OR; Christopher Estes, AK; Lisa Heki, FWS; Amy Unthank, FS; and Karl Stein from the BLM.

The implementation and development of WNTI is proceeding with three phases that will allow WNTI to meet its goal of speeding the implementation of conservation strategies for western native trout, and the objective of helping to focus financial resources on local joint ventures.

Phase 1 is the assessment of western trout species and sub-species, and development of a Status Report that will detail the main obstacles to improving the status of the western native trout and key strategic approaches that could be undertaken the next 5 to 10 years to improve the status of the fish and their habitats. Currently, draft assessments have been prepared for 13 of the 17 species or sub-species, and are being reviewed by the various recovery, conservation or management teams. The timeline is to produce a draft final assessment report by late April, 2007

Phase II will be the development of the WNTI Strategic Plan. This component is intended to communicate the need for resources and what approaches will be applied on the ground to help improve the status of the fish. This process is in the organization stage, with a completion date set for late 2007.

Phase III will be focused on the communication and outreach of WNTI to facilitate on-the-ground partnerships and projects that will further the WNTI objectives.

Relationship to National Fish Habitat Action Plan

The National Fish Habitat Governance Board was approved and selected in September at the 2006 AFWA annual meeting. Their intent is to have "recognized Partnerships" that will qualify for Habitat project funding. WNTI is considered a Pilot Fish Habitat Partnership, and an initial interview with the NFHAP Coordinator indicated that WNTI will meet the national criteria once the Strategic Plan is completed

Benefits to date:

As a result of the WNTI being formed, the FWS has allocated funding in their Fiscal years 2006 and 2007 for habitat projects related to WNTI. In FY 2006, \$197,000 was allocated to four projects – one each - in Arizona, Colorado, Wyoming and Idaho.

WNTI anticipates stimulating an even greater investment, pending approval and adoption of the FWS FY'07. The WNTI Management Team will be reviewing western trout habitat project requests at the WAFWA winter meeting.

Reporting Requirements: The WNTI Coordinator, working through the WAFWA Treasurer and Secretary has completed necessary reports in a timely manner to date, and sufficient to enter the 2nd year of the MSG.

Recommended Director's Action:

The WNTI Management Team requests the Directors continue their respective agency support for WNTI efforts through staff involvement in the Species Status Assessments and the Strategic Plan development, with the continued empowerment of the Chairman of the IMFC, and the WNTI Management Team to continue their guidance of WNTI.

Submitted by, Robin Knox, WNTI Coordinator, on behalf of the WNTI Management Team

WAFWA 2007 Winter Meeting
January 7, 2007

WAFWA'S FY2008 FEDERAL BUDGET PRIORITIES

- Provide adequate funding to the USFS to implement and enforce the Designated Motorized Route Rule.
- Increase funding for Neotropical Migratory Bird Act with emphasis on management in Mexico, Central and South America.
- Support for the National Fish Hatchery System should be maintained at least at FY 06 levels in the USFWS budget. The preference is for funding at FY 02 levels.
- Restore Coastal Salmon Recovery funding for NOAA Fisheries to FY 02 levels.
- Maintain or increase support for the National Fish Habitat Initiative at \$3 million, as originally proposed in the FY 07 budget.
- Financing associated with the National Invasive Species Council:
 - Ensure that the USFWS Budget includes sufficient funding for the Aquatic Nuisance Species Task Force and implementation of Aquatic Nuisance Species Plans by the States.
 - Implementation of the Asian Carp Management Plan will require additional funding within the USFWS Budget for adequate certification of triploidy of asian carp.
 - Implementation of HACCP plans can improve regional and national biosecurity. Sufficient funding should be included in the USFWS budget to implement HACCP planning processes.
- Consistent with the Western Governors' Association June 22, 2006, letter, provide sufficient funding within the Departments of Interior and Agriculture to support on-going conservation efforts in sagebrush country, including beginning implementation in FY 08 of key measures in the WAFWA "Greater Sage-grouse Conservation Strategy".
- Provide \$2 million per year beginning in FY 08 within the U.S. Fish and Wildlife Service budget to fund the Mexican Wolf Blue Range Reintroduction Project adaptive management processes and NEPA compliance (including an Environmental Impact Statement, if needed) associated with revising the existing nonessential experimental population rule for the Mexican wolf.

- Provide base funding (\$710,000 per year) for operation of the U.S. Fish and Wildlife Service's National Black-footed Ferret Conservation Center. Funding is needed to ensure adequate Service support of state and federal agencies, Tribes and other parties undertaking cooperative black-footed ferret recovery efforts across several western states, Canada and Mexico.
- Provide sufficient funding within the Bureau of Land Management budget to fully fund state wildlife agency assessment and mitigation work associated with expediting permitting of oil and gas exploration and extraction.
- Increase funding within the U.S. Fish and Wildlife Service budget to provide grants to states for development and implementation of the National Fish and Wildlife Health Initiative for the United States.
- Increase funding to state and federal agriculture and/or wildlife agencies for research, control, and eventual eradication of feral swine in affected portions of the United States.
- Increase federal funding within the USGS budget to restore and enhance the capacity of the Cooperative Fish and Wildlife Research Units to train natural resource management professionals and conduct high priority fish and wildlife research.
- Increase funding within the Interior Department, NRCS, and US Forest Service budgets for multi-state conservation strategies to benefit at-risk species in the Western Grasslands, Shrub-Steppe, Hawaiian Islands, and Sierra Nevada Foothills.
- Increase funding within the U.S. Fish and Wildlife Service's Migratory Bird Program to enable valuable annual waterfowl populations surveys and related harvest services (i.e. HIP payments to states, etc.) to be accomplished. Additional funding to expand waterfowl surveys in the West, particularly British Columbia, and establishment of designated funds for goose depredations in Oregon and Washington is necessary.
- Redistributing the USGS funding and other resources from USGS NBII to Cooperative Research Units and other USGS BRD programs to enhance the effectiveness, efficiency, and relevance of USGS science delivery to agency managers.
- The drive to develop Federal Lands for oil, gas, and coal is creating the need for better financing of monitoring and mitigation associated with that development. Funding for USBLM to support this demand is critically important:
 - BLM resources are currently being diverted to energy development at the expense of fisheries conservation planning and implementation activities.

- Broad commitments are being made in energy related Environmental Impact Statements to monitor impacts and implement mitigations, however no financing is being made available to the states for monitoring nor is any financing being made available to BLM to implement mitigations required as a result of state monitoring.
- Increase funding to wildlife law enforcement for their continuous role in Homeland Security and disaster response.
- Increase funding to the USFWS Office of Law Enforcement and the states to enforce the Federal Lacey Act and further impact interstate illegal violations.
- Provide sufficient funding in the U.S. Fish and Wildlife Service budget for state wildlife agencies to carry-out post-delisting monitoring and management of the bald eagle for a minimum of the required monitoring period.
- Establish funding within the NOAA National Marine Fisheries Service budget for marine mammals/fisheries interaction monitoring and management actions in Washington, Oregon, and California; increase funding for Alaska.
- Increase Section 6 funding (i.e. state grants) for NOAA Fisheries;
- Increase funding for state grant programs (i.e. State Wildlife Grant, LIP, etc.) that place priority on implementation of Comprehensive Wildlife Conservation Strategies/Wildlife Action Plans, including use of funds for education/outreach
- Increase funding within the U. S. Fish and Wildlife Service budget for traditional Section 6 state grants;
- Increase funding within the U. S Fish and Wildlife Service budget to implement those elements of the Fisheries Strategic Plan that require significant new expenditures to accomplish;
- Increase funding for Interior and Agriculture agencies to implement the National CWD Plan and assist the state
- A \$1 million addition to the base budget of USGS to assist with research and monitoring efforts of grizzly bears in all four northwestern states for the purpose of advancing recovery and delisting of that species;
- Continue opposition to any level of funding the National Park Service's Natural Resource Challenge Program;

- Further reduction of that portion of the U. S. Fish and Wildlife Service's Endangered Species Program budget devoted to listing of species, and increased funding for recovery efforts;
- Increase funding for Interior and Agriculture agencies to implement plans directed at avian influenza surveillance, monitoring, and emergency response with provisions for state assistance;
- Increase funding for the U.S. Fish and Wildlife Service (\$1.3 million) for implementation of the Yellowstone Grizzly Conservation Strategy upon delisting. This amount to be parsed out to the various state and federal agencies that have increased monitoring costs once delisting occurs