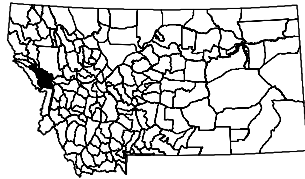


NINEMILE EMU
(Hunting Districts 201 and 203)



Description: This 1,055-square-mile EMU lies west of Missoula and borders the southwest boundary of the Flathead Indian Reservation. The Lolo National Forest (LNF) administers the majority (about 60%) of the EMU, and Plum Creek Timber Company (PCT) owns approximately 15%. The quality and quantity of winter range forage is declining, as shrubfields, created by the wildfires in the early 1900s, become more decadent with age and are invaded by conifer reproduction. Wolves are now established in the Ninemile and Fish Creek areas, where they may have reduced calf recruitment and affected elk distribution.

Public Access: Public access remains good because of the public lands and because PCT allows free public hunting on its lands. Roads constructed for timber harvest and the BPA Powerline pathway provide access to most of the unit. Road construction on public lands has been minor since 1992. Although construction of logging roads has increased on corporate timberlands, PCT has effectively gated most of its roads, reducing vehicular access substantially in many areas since 1992. The Block Management Program has opened blocks of private land to hunting access in the Ninemile and Fourmile areas. Most portions of the EMU offer opportunities for day hunts by vehicle, by horseback, or on foot.

Elk Populations: Numbers of elk observed on post-season aerial trend surveys increased dramatically from 1980 to 1990 (Figure 1). Since then, observed numbers of elk have been relatively stable, and approximately 1,600 elk are observed during fixed-wing aerial surveys of this EMU. Sex/age ratios have not been collected since the early 1990s in this EMU because of budget constraints.

Recreation Provided: During 1999-2001, this EMU provided an annual average of 14,482 days of hunting recreation to 2,193 elk hunters annually, compared to about 26,000 hunter days and 3,900 hunters in the early 1990s. This decline may be the result of implementation of the brow-tined bull regulation (since 1995) and the unusually warm, dry fall seasons since 1998. Winter, spring and summer elk viewing opportunities are available in several areas, including excellent elk viewing in Lolo Creek, Ninemile Creek, and Nemote Creek.

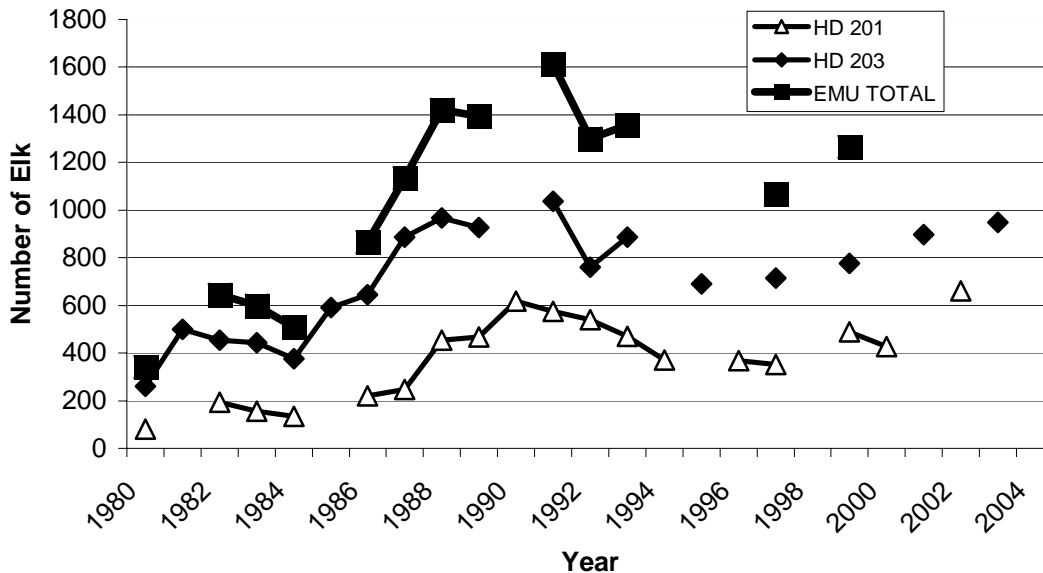


Figure 1. Number of elk observed during post-season aerial trend surveys in HDs 201 and 203, Ninemile EMU, 1980-2004.

Annual Elk Harvest: During 1999-2001, hunters harvested an average 134 elk (83 antlered and 51 antlerless) annually, compared to about 300 elk (200 antlered and 100 antlerless) annually during the early 1990s. Although elk numbers are comparable to previous highs in the late 1980s and early 1990s, fewer hunters, the brow-tined bull regulation (implemented in 1995) and the warm, dry hunting seasons are likely responsible for lower harvests in recent years. Because of the brow-tined-bull regulation, nearly 100% of the bull harvest is comprised of BTBs. About 25% of the harvested bulls have 6 or more antler points on at least one side.

Accomplishments: FWP cooperated with the Lolo National Forest, in facilitating a land exchange that protected approximately 3,500 acres of elk winter range in the O'Brien Creek area from residential development.

FWP and private landowners cooperated in addressing conflicts involving elk on private land in the St. Regis, Tarkio and Ninemile areas. A combination of tools was used to direct hunters and increase harvests in those areas. The Fourmile Creek portion of HD 201 has additional antlerless permits for the general hunting season to control local elk populations. A late season damage hunt was employed in Nemote Creek.

Block Management insured continued hunter access in Fourmile and Ninemile Creeks, where 1,949 acres of private land are enrolled.

FWP cooperated with the Lolo National Forest to control of noxious weeds on winter ranges in Pardee, Eddy and Madison and O'Brien Creeks. FWP also cooperated with LNF in prescribed

burning projects to rejuvenate shrubfield winter ranges in Mill, Pardee, Deep, Burdette, Petty and O'Brien Creeks.

Management Challenges: The future disposition and management of hundreds of thousands of acres in Plum Creek Timber ownership may result in a serious threat to hunting access and elk population management in the Ninemile EMU . PCT lands have historically been open to the public, and hunters tend to take this privilege for granted. However, in recent years PCT has been marketing parcels for sale, and PCT may not be a longtime landowner in this EMU. The loss of hunting access on PCT lands, and possible concurrent loss of elk habitat, would eliminate significant public hunting opportunities for elk in this heavily hunted EMU.

Residential subdivisions continue to be developed on or near elk habitat, particularly near Lolo, Missoula, Frenchtown, and Huson. In some cases, such subdivisions have restricted public access to hunting elk and have contributed to chronic elk damage complaints in those areas. In other cases, winter range productivity has been reduced by housing developments. We expect this trend to continue.

Calf:100 cow ratios in nearby EMUs have declined steadily over the past decade, and recruitment in this EMU probably has declined also. Although deteriorating winter range quality may contribute to this, public concern has centered on the potentially increasing role of predation in the past decade.

The restoration of wolves to western Montana is an emerging factor in elk population management. In the Ninemile EMU, where at least three wolf packs are now established, we anticipate some level of additive elk mortality with more wolf packs, which would necessitate a corresponding reduction in antlerless elk permits.

Use of OHVs, particularly 4-wheelers, for hunting and retrieving elk has increased significantly during the past decade. Increasingly, hunters complain of 4-wheelers illegally accessing areas behind closed gates. This may be not only a social and legal problem, but 4-wheeler use may also contribute to increased bull harvest in some areas, displacement of elk to areas where they are less accessible to hunters, soil erosion, and spread of noxious weeds.

Winter range forage productivity is threatened by conifer invasions of shrubfields and grasslands, aging shrub plants, and weed invasions of grasslands. Continued declines in forage productivity may lead to lower calf recruitment, lower elk populations, and greater elk use of private lands.

Population Monitoring: We conduct biannual elk trend counts during spring greenup with fixed-wing aircraft in HDs 201 and 203. During these surveys, we also record percent bulls in the population. As budgets allow, we sample bull:100 cow and calf:100 cow ratios during late winter by helicopter.

SUMMARY OF PUBLIC COMMENT

In 1992, public comment was supportive of providing a diversity of elk hunting experiences. Some believed elk numbers should be increased, while others thought that elk numbers should be reduced to thwart increasing game damage incidents. The public also expressed a desire for better opportunities to harvest older bulls and supported increased efforts to protect elk security through additional road closures.

Based on recent comments at meetings and in individual conversations, the 1992 summary still accurately reflects the range of public views. However, now there is an increased concern about wolf predation relative to the possible effects on elk populations and hunting opportunities, an increased desire for higher elk numbers, and increased opposition to new road closures, particularly those on PCT lands. Also, concern has been expressed about the effects on elk populations of deteriorating winter range conditions resulting from lack of fire and old clearcuts becoming revegetated with timber.

MANAGEMENT GOAL

On publicly accessible lands, maintain current elk population levels, provide a diversity of elk hunting experiences, and offer opportunities for a maximum sustainable annual elk harvest. In areas of chronic game damage, facilitate increased involvement of local communities in developing elk population objectives, and, where possible, decrease elk population levels with hunting regulations that increase hunter effectiveness in harvesting elk and increase landowner tolerance for hunters on their properties.

HABITAT OBJECTIVES

- 1) Develop cooperative programs that encourage public and private land managers to maintain 662,400 acres of productive elk habitat.
- 2) Maintain at least 80% of existing elk habitat security.

HABITAT MANAGEMENT STRATEGIES

FWP will provide technical assistance and cooperate with the Lolo National Forest and other public and private landowners/managers to:

- Improve vegetation diversity and increase forage carrying capacity of winter ranges by prescribed burning, weed management, and timber harvest. Facilitate conifer encroachment reduction, shrub stimulation, and weed management projects already underway in Eddy Creek, Deep Creek, Petty Creek, Ninemile Creek, O'Brien Creek and Fish Creek.
- Maintain open road densities at current levels.
- Identify and open selected roads where increased hunter access might reduce crop depredation by elk.

- Maintain elk security so that elk harvest is distributed throughout the hunting season, with no more than 40% of harvested bulls taken during the first week of the general season.
- Review subdivision and other development proposals and provide input relative to elk management to local government authorities responsible for development approval.
- Review timber sales, road management, and other projects on public lands that might affect elk populations and elk hunting opportunities.
- Acquire conservation easements from willing landowners on elk range at greatest risk of permanent habitat loss due to future development or other factors.
- Work with private and public entities to protect important elk winter ranges from residential development (e.g. Lolo Creek, Albert Creek, Fish Creek, Petty Creek and Deep Creek).

GAME DAMAGE STRATEGIES

FWP will:

- Attempt to manage game damage through adjustment of numbers of general season antlerless permits.
- Use A-9/B-12 “B” licenses for a second antlerless elk in portions of the district with chronic crop depredation
- Increase antlerless harvest in chronic depredation areas by establishing portions of districts with extra antlerless permits, by adopting special early and late season damage hunts, and by establishing special permits for private lands only.
- Pursue efforts to increase the carrying capacity of winter ranges on USFS lands adjacent to chronic problem areas.

ACCESS STRATEGIES

FWP will:

- Identify important points of access to public lands and provide access recommendations to the appropriate land management authority. Access programs will generally be designed to allow vehicle access to the boundary of USFS lands with non-vehicular traffic allowed beyond that point.
- Identify opportunities for additional Block Management projects and walk-in areas
- Identify opportunities to provide points of access through private lands to public lands through the Access Montana program
- Work with public and private entities to protect lands from land exchanges and/or developments that would exclude lands from public hunting.

POPULATION OBJECTIVES

- 1) Maintain the number of elk observed during post-season aerial trend surveys within 20% of 1,550 elk (600 elk in HD 201, 950 elk in HD 203).

- 2) Maintain at least 10 bulls:100 cows observed during post-season helicopter surveys (if budgets allow these surveys), or at least 7% antlered bulls in the total elk observed.

POPULATION MANAGEMENT STRATEGIES

- Prescribe antlerless harvest equal to estimated calf recruitment rates for elk populations not responsible for chronic crop depredation.
- Focus elk population reductions where game damage problems exist, rather than reducing numbers uniformly across the EMU.
- Utilize the brow-tined bull regulation to maintain a minimum number of breeding bulls.

REGULATION PACKAGES

Six-week brow-tined bull/antlerless elk archery regulation EXCEPT, see Restrictive Regulation for antlered elk.

Antlerless:

Note: Between 1990 and 2002, the number of antlerless permits issued for this EMU varied from 150 to 725 corresponding to the 1,150 to 1,700 elk observed during fixed-wing aerial surveys during the same period.

The Standard Regulation is: limited antlerless permits (100-375 in HD 201 and 100-450 in HD 203 varying with the post-season aerial trend count) during the 5-week general season.

The Standard Regulation will be recommended if: the total number of elk observed during post-season aerial trend surveys are between 480 and 720 in HD 201 and between 760 and 1,140 in HD 203.

The Liberal Regulation is: **1.)** increased numbers of antlerless permits (more than 400 in HD 201 and more than 500 in HD 203) OR; **2.)** brow-tined bull/antlerless regulation during a portion (up to the full 5-weeks) of the general season with limited antlerless permits or A-9/B-12 antlerless licenses (B-tags) valid during the rest of the season (antlerless permits and A-9/B-12 licenses may be valid to 1 January).

Liberal Regulation **1.) (above)** will be recommended if: the total numbers of elk observed during post-season aerial trend surveys are more than 720 elk in HD 201 and more than 1,150 elk in HD 203 .

Liberal Regulation **2.) (above)** will be recommended if: after 2 years of application of Liberal Regulation 1.) (above) the total number of elk observed during post-season aerial trend surveys remains more than 720 elk in HD 201 and more than 1,150 elk in HD 203 .

The Restrictive Regulation is: limited antlerless permits (less than 100 each in HDs 201 and 203) valid for a portion of the district or portion of the season.

The Restrictive Regulation will be recommended if: the total numbers of elk observed during post-season aerial trend surveys are less than 480 elk in HD 201 and less than 760 elk in HD 203 for 2 consecutive survey years.

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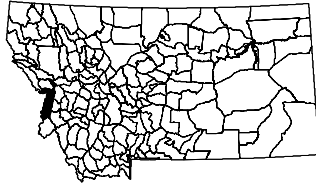
The Standard Regulation is: 5-week general season brow-tined bull regulation.

The Standard Regulation will be recommended if: at least 7% of total elk observed during post-season aerial surveys are bulls or, at least 10 bulls:100 cows are observed during post-season aerial surveys.

The Restrictive Regulation is: unlimited permits for antlered bulls. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED PERMITS.

The Restrictive Regulation will be recommended if: the % bulls observed during post-season aerial trend surveys is less than 7% (or bull:100 cow ratios are less than 10:100) for 2 consecutive years in both HDs OR, calf:100 cow ratios are less than 20 calves:100 cows for 2 consecutive years.

BITTERROOT EMU
(Hunting Districts 240 and 260)



Description: The 927-square-mile Bitterroot EMU is located on the west side of the Bitterroot Valley in western Montana. The Lolo and Bitterroot National Forests administer 77% of the 770-square-miles in HD 240. Most of the backcountry portions of HD 240 are in the Selway-Bitterroot Wilderness while most of the valley floor portion of HD 240 is in private ownership. HD 260 is a long narrow district of 157-square-miles running a few miles on either side of the Bitterroot River and includes the 2,626-acre Lee Metcalf National Wildlife Refuge. Ninety-two percent of HD 260 is private land.

Twenty-one percent (123,420 acres) of the total EMU is elk winter range that lies along the west side of the valley near the National Forest boundary in HD 240. Elk have become year-round residents of the area between Roaring Lion and Blodgett Creeks just west of Hamilton and do not migrate into the Bitterroot Mountains. Elk use the 48% of the winter range that is private land more than they do winter range on public land. On spring 2002 flights, 86% of observed elk were on privately owned winter range.

Elk security is good to excellent because of the ruggedness of wilderness terrain. The capacity of available elk winter range is limited by its general east slope exposure, tree canopy coverage, landowner tolerance, and housing development.

Public Access: There is good public access to every drainage in HD 240 but travel into the backcountry is limited to non-motorized methods. Public access to private lands along the Bitterroot River in HD 260 is limited.

Elk Populations: Because of seasonal movement patterns, elk in HD 260 have been traditionally counted as part of the HD 240 population. Numbers of elk observed during spring fixed-wing aircraft flights in HD 240 averaged 280 from 1965 to 1979. Because of more conservative antlerless harvests, the population began growing about 1980, and reached a high count of 1,016 observed elk in 2004 (Figure 1). Counts were over objective in 2003 and 2004. During 1999-2003, bull:100 cow and calf:100 cow ratios averaged 11:100 (range 7-16:100) and 31:100 (range 19-48:100), respectively.

Recreation Provided: During 1999-2001, this EMU provided an average of 10,755 days of hunting recreation for 1,738 hunters annually. Wildlife viewing and photography are major uses of the elk population during the summer. Opportunities for viewing elk on winter ranges are available at McClain Creek, Brooks Creek and Sweathouse Creek (Victor Hill).

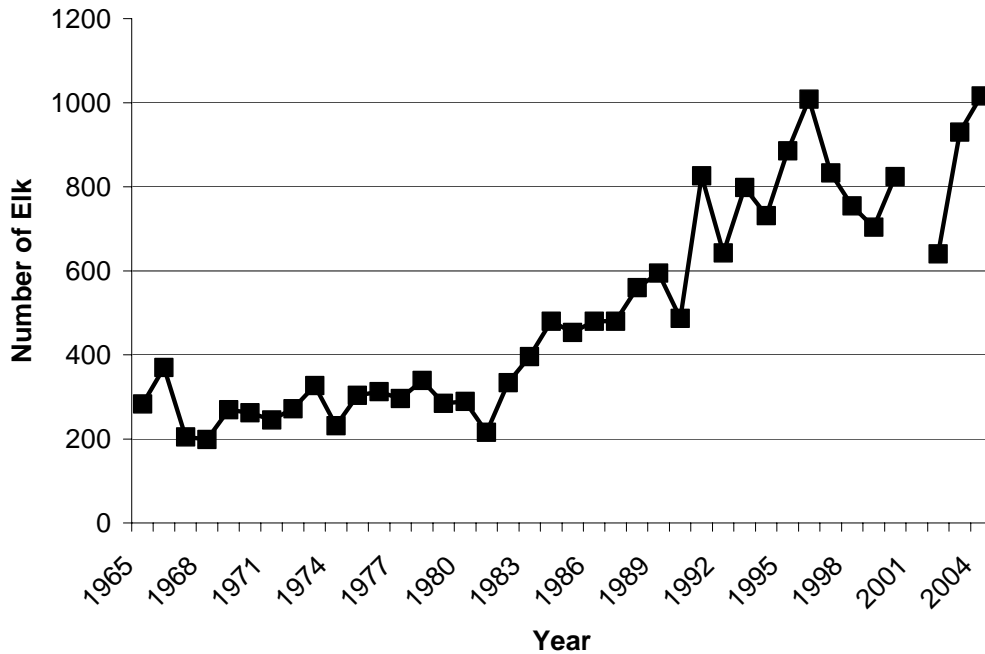


Figure 1. Elk observed during spring fixed-wing flights in HD 240, 1965-2004.

Current Annual Elk Harvest: Average annual harvest during 1999–2001 was 141 elk comprised of 58 bulls (41%) and 83 antlerless elk (59%). An average 27% of harvested bulls had at least one 6-point antler and 33% of bulls were killed during the first week of the general season. Harvest rate for A-7 licenses during this period was 18% of the number issued and ranged from 8-24%.

Accomplishments: FWP has assisted landowners who allow public hunting and have chronic elk damage problems with temporary and permanent hay stackyards, fencing materials, herding, and occasionally, kill permits.

This EMU contains 6 Block Management Areas (BMAs) totaling 3,370 acres and 7,717 acres in lands with conservation easements. Existing and new BMAs enhance public access and have helped in focusing harvest, particularly north of One Horse Creek, where elk depredation has been a chronic problem.

Management Challenges: Land use/habitat changes because of housing developments and limited access for hunters to or through private land are the major elk management

challenges in HD 240. For about the last 15 years Ravalli County has been one of the counties with greatest increase in human population in Montana. Housing development on elk winter range affects elk management in 3 ways:

- 1) Physical loss of winter range including areas outside of home sites but within sight, sound and smell of people and the range of domestic pets, especially dogs.
- 2) Landowners may not allow hunting or access through their property thus limiting the ability to get an adequate harvest.
- 3) The “refuge effect” created by limited access or harvest can concentrate elk and allow them to increase in number. This in turn can increase elk depredation on the immediate and surrounding properties.

Much of the private lands in this EMU, some of it in relatively small acreages (5 – 40 acres), are de facto elk refuges. Such refuges attract and concentrate elk, allow elk populations to grow, limit hunter opportunity, and result in chronic elk depredation problems. An example is the area between Roaring Lion and Blodgett Creeks just west of Hamilton. These elk also range into the Bitterroot River bottom in HD 260.

Wolves restored to Yellowstone National Park and central Idaho in 1995 have since become established in this EMU. Currently there are 2 packs in this EMU: Big Hole and Lake Como. Wolves may have some impact on elk management, but the kind and degree of impact is unknown at this time.

Population Monitoring: Annual trends in numbers of observed elk and sex and age classifications are measured by spring fixed-wing aircraft flights on and near winter ranges.

SUMMARY OF PUBLIC COMMENT

In 1992, public comment indicated support for maintaining the current management goal of providing a diversity of hunting experiences, a desire to improve the opportunity to harvest older bulls, and concern that postseason bull:cow ratios were too low. The public also voiced strong support for establishing cooperative programs between public and private land managers to maintain and improve elk security. Specifically, many comments favored additional road closures.

Based on a proposal made by the Ravalli County Fish and Wildlife Association that recommended an increase in elk numbers above FWP draft population objectives for the Bitterroot hunting districts (HDs 240, 250, 204, 261, 270), a Bitterroot Elk Management Working Group has been established in an attempt to reach consensus on elk population objectives in the Bitterroot. The group consists of representatives from the local business community, the Ravalli Co. Fish and Wildlife Assoc., Montana Bow Hunters Assoc., a local outfitter, landowners, Bitterroot National Forest, Safari Club International, and a timber consultant. Among other things, the group will discuss impacts on elk habitat from the extensive 2000 fires, explore innovative ways to minimize elk damage to agricultural producers, discuss the potential impact of predators (including wolves) on elk

populations, and attempt to reach consensus on long term population management goals for the Bitterroot hunting districts.

Concern was expressed about increasing elk numbers and associated costs for private landowners. This included the winter range and spring grazing by elk of new green growth that affects cattle turnout dates. Increased numbers of the public are concerned about effects of wolf predation on elk and hunting opportunity and desire more elk.

MANAGEMENT GOAL

Maintain the elk population in a healthy condition and cooperate in the management of elk habitat to provide a diversity of hunting experiences and diverse elk harvests.

HABITAT OBJECTIVES

- 1) Participate in cooperative programs with public and private land managers to maintain 496,640 acres of occupied elk habitat.
- 2) Maintain and enhance the current amount of elk winter range.
- 3) Maintain elk security so that elk harvest is distributed throughout the hunting season, with no more than 35% of the bull harvest occurring during the first week of the general season.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to county planning boards and commissions regarding impacts of housing development on important elk winter range. If limiting development is not possible, then provide input to mitigate the effects of development. Work toward conserving existing elk winter range through conservation easements.
- Recommend/support a program to burn 100 acres of winter range annually to reduce tree canopy coverage, stimulate growth of browse species, and increase available winter forage.
- Seek increased consideration of elk security requirements (elk security areas and secure travel corridors) in the planning and design of timber sale cutting units and road systems. This is particularly important in remaining roadless areas adjacent to winter ranges where bulls become vulnerable to hunting pressure with the onset of snow accumulation (such as Brooks Creek, Mill Point and Ward Mountain).
- Recommend changes in road management on winter ranges to improve elk security. Areas in need of changes include wintering areas in McClain Creek, Mormon, Brooks, Sweathouse and Gash Creeks.
- Provide technical assistance to land managers that identifies areas where road closures are necessary to protect elk security.

GAME DAMAGE STRATEGIES

FWP will use A-7 licenses, A-9/B-12 licenses (B-tags), and antlerless permits to attempt to reduce game damage in the Brooks Creek, McClain-Mormon Creek, and Roaring Lion-Blodgett Creek areas to levels that are tolerable to private landowners. FWP may direct antlerless harvest to specific portions of HD 240 or institute late hunts in areas with game damage problems.

FWP will:

- Maintain observed elk numbers within plan objectives while targeting local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning for landowners who allow adequate public hunting access.
- Cooperate with public land managers to change activities/conditions on public lands that contribute to redistribution of wildlife onto private lands.
- Evaluate the number of A-7 licenses or antlerless permits allocated for each hunting district or portions thereof and redistribute as necessary to achieve desired harvest.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider limited access for at least certain groups of hunters (e.g. youth, disabled).
- Encourage dialogue between landowners with differing land management strategies.

ACCESS STRATEGIES

FWP will:

- Identify desirable access points to public lands and provide recommendations to the appropriate land management authority (Access Montana Program).
- Identify additional opportunities for Block Management projects.
- Pursue conservation easements on important elk ranges found on private land.
- Assist landowners with hunter management.
- Explore creative means to encourage landowners who currently do not allow hunting to open their lands to increase public access.

POPULATION OBJECTIVES

Elk population objectives may change if the newly established Bitterroot Elk Management Working Group can reach a consensus.

- 1) Maintain the number of elk observed during post-season aerial trend surveys within a 20% range of 750 (600-900).
- 2) Maintain at least 10 bulls:100 cows observed during post-season aerial trend surveys.
- 3) Maintain an annual bull harvest composed of 100% BTBs, including at least 15% of the bull harvest comprised of bulls with 6 points on at least 1 antler.

POPULATION MANAGEMENT STRATEGIES

REGULATION PACKAGES

Six-week brow-tined bull/antlerless archery regulation EXCEPT, see Restrictive Regulation for antlered elk.

HD 240:

Antlerless:

The Standard Regulation is: limited antlerless permits and A-7 licenses issued in quantities sufficient to achieve an annual harvest of 65 to 100 antlerless elk depending on the number of elk counted on spring surveys. Assuming a harvest rate of 18% of the number of licenses issued this means issuing 360–545 A-7 licenses.

The Standard Regulation will be recommended if: the number of elk counted during post-season aerial surveys is between 600 – 900 AND, calf:100 cow ratios are at least 25 calves:100 cows.

The Liberal Regulation is: **1.)** more than 545 A-7 licenses and/or antlerless permits. A-7 licenses will be specially directed to address problem areas without affecting elk herd units that are not causing problems. A-7 licenses or antlerless permits may be valid beyond the end of the 5-week general season. OR; **2.)** a brow-tined bull/antlerless regulation for a portion or all of the general season, in addition to 1.) (above).

Liberal Regulation **1.) (above)** will be recommended when more than 900 elk are counted on post-season aerial surveys.

Liberal Regulation **2.) (above)** will be recommended if the post-season aerial trend count remains above 900 elk after 2 years of application of Liberal Regulation 1.) (above).

A Liberal Regulation will be maintained until the number of elk counted during post-season aerial surveys is reduced to 750, at which time the Standard Regulation will be recommended.

The Restrictive Regulation is: no antlerless harvest if the most rapid population increase is desired OR, limited A-7 licenses or antlerless permits issued in quantities to result in an annual harvest of less than 65 antlerless elk. This means fewer than 360 A-7 licenses or antlerless permits (assuming a harvest rate of 18% of the number of licenses issued).

The Restrictive Regulation will be recommended if: the number of elk counted during post-season aerial trend surveys is less than 600 for 2 consecutive years OR, trend counts are within the objective range, but post-season calf:100 cow ratios are less than 25 calves:100 cows for 2 successive years.

A Restrictive Regulation will be maintained until the number of elk counted during post-season aerial surveys has increased to 750, at which time a Standard Regulation will be recommended.

Antlered:

The Standard Regulation is: 5-week general season brow-tined bull regulation.

The Standard Regulation will be recommended if: bull:100 cow ratios observed during post-season aerial trend surveys are at least 10 bulls:100 cows AND, at least 15% of harvest bulls have 6 or more points on at least one antler.

The Restrictive Regulation is: 1.) unlimited permits for brow-tined bulls. OR; 2.) limited permits for antlered bulls. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED AND LIMITED PERMITS.

Restrictive Regulation 1.) unlimited permits for brow-tined bulls will be recommended if: bull:100 cow ratios observed during post-season aerial trend surveys are less than 10 bulls:100 cows OR, less than 15% of harvested bulls have 6 or more points on at least one antler for 2 successive years.

Restrictive Regulation 2.) limited permits for antlered bulls will be recommended if bull:100 cow ratios remain below 10 bulls: 100 cows OR, less than 15% of harvest bulls have 6 or more points on at least one antler after 3 years of application of unlimited permits.

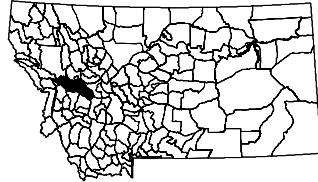
HD 260:

Because of safety and access concerns, there is NO general elk regulation in HD 260.

The Archery Regulation is: brow-tined bull/antlerless archery regulation 1st Saturday in September to 15 January.

Regulations for shotgun, traditional handgun, muzzleloader, or crossbow ONLY: limited antlerless permits, from opening of general season to 1 January.

GARNET EMU
(Hunting Districts 283, 290, 291 and 292)



Description: This 1,349-square-mile EMU is located within the Blackfoot and Clark Fork River drainages, east of Missoula. Key features include the Rattlesnake Wilderness and National Recreation Area, Lubrecht Experimental Forest, Garnet Range, Blackfoot River, Clark Fork River, Little Blackfoot River, and Nevada Valley. Land ownership varies widely among hunting districts in the unit, with large blocks of corporate and private agricultural ownership, as well as substantial public acreage. About 30% of the unit is administered by the USDI – Bureau of Land Management (BLM) and Lolo National Forest (LNF), about 25% is owned by Plum Creek Timber Company (PCT), and 40% by other private landowners. The area is characterized by more intensive timber management than is generally found in surrounding EMUs.

Public Access: Publicly accessible property in mixed LNF, BLM, PCT, and State (DNRC) ownership dominates the west half of the EMU (HDs 283 and west 292). These lands generally have been extensively roaded for timber harvest; however, all but selected cost-share and collector roads were closed to motorized vehicles shortly after Plum Creek Timber Company purchased lands from Champion International Corporation in the mid-1990s. With the exception of the Missoula and Potomac Valleys and Ninemile Prairie, drainage bottoms in this portion of the EMU are narrow and private landholdings are limited. Conversely, private ranches dominate land ownership in the east half of the EMU (HDs 290, 291 and east 292) and access for the general public is more limited. Block Management is of longstanding importance across this EMU, where 12 Block Management Areas covered approximately 100,000 acres in 2002. Regulated public access for hunting is also guaranteed in perpetuity on a 4,600-acre conservation easement that was purchased by FWP in 2001.

Elk Populations: Elk populations are at or near modern day highs. A total of 2,327 elk was observed from fixed-wing aircraft on trend areas across HDs 283, 291 and 292 in spring 2002 (Figure 1). Elk numbers have steadily increased on private lands since 1990 in two portions of this EMU: 1) in the broad valley between Ovando and Drummond, particularly west of Helmville, and 2) in the North Hills of the Missoula Valley. Elk numbers on public lands generally have been stable. Declining calf recruitment during the 1990s has moderated elk population increases and opportunities for antlerless harvest.

Late-winter and early spring calf:100 cow ratios in HD 292 ranged from a high of 47 calves:100 cows in 1990 to a low of 18:100 in 1997, and ranged from 18 to 22:100 during 1996-2001. The percentage of bulls in early spring elk counts averaged 7% across the EMU from 1990-2001. West of Helmville, where hunting access is restricted and difficult, bull:100 cow ratios as high as 38 bulls:100 cows were recorded in a sample of 313 elk.

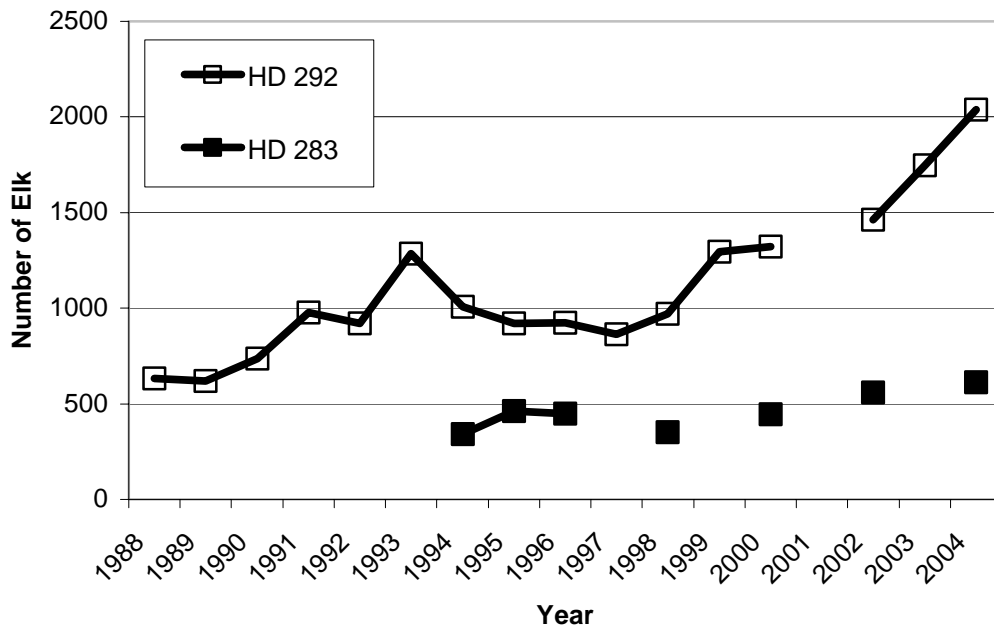


Figure 1. Number of elk counted on post-season aerial trend counts in HDs 292 and 283, 1988-2004. Boundary for HD 283 was different prior to 1994. Counts in HD 291 are not valid trend counts and are not included (629 elk were counted in HD 291 during 2003).

Recreation Provided: This EMU provided an estimated 23,936 hunter-days of elk hunting for 3,951 hunters in 2001. HD 292 ranked third in hunter numbers and fourth in hunter-days in Region 2 due to its proximity to Missoula and availability of highway access around its entire perimeter. Hunter density was about 2.9 per square mile across the EMU. Wildlife viewing and photography are the major uses of the elk population during the summer, particularly in the Rattlesnake Wilderness. Elk may also be observed along roadsides year-round.

Current Annual Elk Harvest: A total of 546 elk (348 antlered, 198 antlerless) were harvested in the EMU in 2001. This suggested a total population size of about 2,700 elk, assuming a stable population and recruitment of 20 calves:100 cows. Actual population size is probably closer to 3,000 because population trend has been gradually increasing, rather than stable.

Accomplishments: FWP and private landowners cooperated in addressing conflicts involving elk on private land in the Ovando-Helmville area, in portions of HDs 290, 291,

and 292. In 1994 the Rocky Mountain Elk Foundation provided funding for FWP and several ranchers to capture and radio-track elk on private land to identify yearlong ranges of resident herd-units that could be subjected to accelerated harvest without impacting elk herd-units on public lands. Resident herds were identified, with the assistance of students from the Ovando and Helmville schools.

Coincident with these findings, FWP and local landowners developed a new hunting season structure to apply maximum harvest pressure on resident private-land herd-units. A new hunting district (HD 298) was superimposed over private-land portions of HDs 290, 291 and 292 in the Ovando-Helmville area. Unlimited numbers of A-7 elk licenses (antlerless) were offered for the areas included in HD 298. This allowed landowners to solicit participation by hunters of their acquaintances as a means of resolving landowner concerns about managing the general hunting public. All first-choice applicants who submitted a properly completed application were selected for the HD 298 license. Upon notification of their successful application, and prior to exchanging A-5 licenses for the A-7s, successful applicants were sent a letter by FWP that encouraged hunters to keep their A-5 and reject the A-7 if they had not already secured access to hunt on private land. This protected the hunting public from mistakenly accepting a restricted-access license without a reasonable opportunity to hunt. The effect of this season structure was to allow landowners to direct as much antlerless hunting pressure to their properties as they desired. Therefore, FWP hunting regulations were no longer a limitation on elk population control in this area.

FWP has provided assistance to landowners with chronic elk damage problems in the form of temporary and permanent hay-stackyards, pasture fencing materials, and herding. Special or regularly scheduled "early" or "late" hunts, such as the one that was conducted for several years in the Potomac valley, have been applied as needed to harvest elk on private land at times of the year when damage is occurring, and damage has been abated. Under severe snow conditions in the winter of 1996-1997, many landowners in this EMU willingly tolerated unusual levels of elk damage to help elk survive.

Factors influencing the vulnerability of bull elk to harvest on publicly accessible lands in the Elk and Chamberlain Creek drainages were investigated with radio-collared elk under the direction of the University of Montana during 1993-1996. Hunting pressure was controlled by regulations of the longstanding Blackfoot BMA (walk-in hunting area). The importance of large blocks of forest cover and unroaded habitat was reinforced by this study. The increasing use by elk of a private land sanctuary near Greenough during hunting season was also documented. BLM was the principal funding institution for this study and the majority public landowner in the study area.

Elk habitat security and walk-in hunting opportunities were maintained in several areas across the EMU where Champion/Plum Creek, BLM, DNRC, LNF, and ranchers cooperated to close roads to motorized vehicles and allow walk-in hunting access. Plum Creek Timber Company further enhanced elk security independent of FWP in the mid-1990s by gating all but selected cost-share and collector roads. Access by foot, horseback and mountain bicycle was still provided. There were few effective elk security

areas in the Garnet EMU in 1992. Principally as a result of PCT actions, elk security is now widespread across the EMU, and areas of low elk security are more localized.

Hunting regulation changes were implemented to address localized security problems. The west half of HD 292 is one area of seriously reduced elk habitat security, due to intensive timber harvest and the Ryan Gulch Fire of 2000. Low observed bull survival coincided with chronic, lowered calf recruitment, decreasing the capacity of this population to rebound from a severe winter or other future environmental event. The FWP Commission approved FWP's recommendation for a brow-tined bull regulation in the west half of HD 292 in 2002 as a means of safeguarding this population without restricting public entry to this hunting area.

Hunting access was enhanced with the addition of 8 Block Management Areas since 1992. Plum Creek Timber Company continued to keep its expansive holdings in the Garnet EMU open to the public for hunting and other activities.

In 2001, a private ranch and FWP agreed to protect important elk habitat, public hunting, and the traditional ranch operation with a conservation easement on a 4,600-acre portion of the ranch in HD 291. FWP purchased 120 acres as part of a 1,600-acre public acquisition of elk winter range on Mount Jumbo, in the Missoula Valley, in 1996. Significant elk habitat also has been protected in this EMU since 1992 with conservation easements granted by private landowners and acquired by the U. S. Fish and Wildlife Service, The Nature Conservancy, Five Valleys Land Trust, Montana Land Reliance, and The Conservation Fund. In a series of land exchanges around 2000, the BLM acquired approximately 9,600 acres and the Forest Service acquired about 950 acres of elk habitat, mostly winter range, from PCT along the Blackfoot River in HD 283.

In 2002 FWP and the University of Montana initiated a multi-year study to document rates and causes of mortality of newborn elk calves in the east half of HD 292. This was in response to declining calf:100 cow ratios observed across much of Region 2. It also represented an opportunity to coordinate with FWP's mountain lion research in the same area, allowing the study of calf mortality coincident with known and manipulated lion densities over time. Landowners' cooperation with these studies has been exceptional.

The control of noxious weeds increased as a priority among ranchers and the BLM in this EMU since 1992. Weed control efforts, particularly those directed toward spotted knapweed, have maintained or improved elk forage on thousands of treated acres in localized portions of this EMU. Perhaps more importantly, weed awareness among land managers is at an all time high, which could prevent the establishment of new exotic species in this EMU.

Management Challenges: Approximately 40-45% of the elk in this EMU are wholly or partly unavailable to hunters due to restricted access to private property during the hunting season.

Despite the availability of unlimited numbers of A-7 licenses to harvest elk on private land, elk numbers and elk-caused damage continues to increase on ranches between Ovando and Drummond. This has resulted from insufficient hunting access and harvest allowed on one or more large landholdings in this area. Elk congregate on certain private lands in hunting season, and disperse onto neighboring ranches after hunting season, causing damage. Elk observed in spring counts in the heart of the problem area (a portion of HD 292) have steadily increased from 313 in 1994 to 548 in 2002. Estimates of elk numbers on the private land refuge during hunting season vary around 700. An annual harvest of at least 85 antlerless elk is needed to stabilize this population but only 30-40 were killed across all affected ownerships in 2001. Concerns in addition to game damage include habitat damage, disease spread within abnormal concentrations of elk, and a potential increase in elk numbers beyond practical means of control in the future (i.e., too many hunters required in too small an area). The solution to this problem is in the hands of the private landowner(s), with assistance as appropriate from FWP. Hunting access and harvest is gradually increasing where needed in response to recent fine-tunings of hunting season length and structure by FWP and the landowner community. Continued landowner cooperation is critical, and is greatly appreciated.

Access to manage elk populations by hunting is seriously threatened elsewhere in the Garnet EMU. In the Missoula Valley, elk winter near and within rural residential subdivisions between O'Keefe Creek and Rattlesnake Creek. Numbers of elk counted here have increased from approximately 100 in 1990 to about 250 in 2002, about 37% of the elk observed in HD 283. Both residential developments and elk numbers are expected to expand in this area, where hunting access is already poor. Developable lands across the EMU are being subdivided, very rapidly in the Missoula Valley. Certain lands under conservation easement and in new ownership are also being converted from commercial ranching to other uses, with hunting access prohibited.

Vehicular access has also been significantly reduced by extensive road closures in the past decade. Road closures that PCT implemented independently in the mid-1990s went far beyond FWP objectives for maintaining and enhancing elk habitat security, bull survival, and walk-in hunting opportunities in this EMU. As a result, hunters have complained about lost vehicular access to favored hunting destinations. Although factors such as weather and variably restrictive hunting regulations are also involved, declining hunter participation as measured at the Bonner Check Station has coincided with the road closures.

Off-Highway-Vehicle, particularly 4-wheeler, use for hunting and retrieving elk has increased significantly during the past decade. Increasingly, hunters complain of 4-wheelers illegally accessing areas behind closed gates. This may be not only a social and legal problem, but 4-wheeler use may contribute to additional bull harvest and displacement of elk to less accessible areas.

A serious threat to hunting and elk population management in the Garnet EMU is the future disposition and management of hundreds of thousands of acres in PCT ownership. PCT lands have historically been open to the public, and hunters tend to take this

privilege for granted. However, in recent years PCT has been marketing parcels for sale. The loss of hunting access on PCT lands, and possible concurrent loss of elk habitat, would eliminate the majority of public hunting opportunities for elk in this heavily-hunted EMU.

Calf:100 cow ratios on winter ranges have declined steadily over the past decade where data have been collected in HD 292, which appears to be part of a more widespread phenomenon in this EMU and elsewhere in western Montana. Observed pregnancy rates in mature cows remain greater than 90%. Decreased recruitment rates: (1) reduce numbers of antlered bulls available for harvest, (2) reduce opportunities to prescribe antlerless hunting on publicly accessible lands, (3) temper increases of elk and game damage on and around private lands closed to hunting, and (4) reduce the capacity of heavily exploited population-units to recover from severe winters or other additive mortality. These mixed results contribute to an increasing complexity of hunting regulations across this EMU to meet area-specific needs, and an overall conservative harvest strategy outside of game damage situations. Public concern has centered on the potentially increasing role of predation in the past decade.

The restoration of wolves to western Montana is an emerging factor in elk population management, the effects of which will be variable and difficult to predict. In the Garnet EMU, we anticipate some level of additive elk mortality upon the establishment of one or more wolf packs, which would necessitate a corresponding reduction in antlerless elk permits. Individual wolves are known to occur in this EMU, but the U. S. Fish and Wildlife Service has not documented the persistence of any wolf packs in this EMU to date.

Population Monitoring: We conduct annual elk trend counts during spring green-up by fixed-wing aircraft across most of the EMU. We will continue to sample late-winter calf:100 cow ratios by use of helicopter or fixed-wing aircraft in HD 292. We sample bull:100 cow ratios in late winter by helicopter in conjunction with mule deer trend flights, and obtain percent bulls from annual trend counts during spring green-up (fixed-wing aircraft).

SUMMARY OF PUBLIC COMMENT

Some landowners are concerned that objective numbers may be too high. There is also recognition that elk distribution in relation to hunting pressure may be more of a problem than numbers of elk. Comments were received about large numbers of elk seeking refuge on large private ranches in the Helmville and Greenough areas. These situations prevent FWP from achieving population objectives and impact neighboring ranches after the hunting season. Some concern was also expressed about impacts of lion predation on elk.

MANAGEMENT GOAL

On publicly accessible lands, maintain current elk population levels and provide opportunities for the maximum sustainable annual elk harvest. In areas of chronic game

damage, facilitate increased involvement of local communities in developing elk population objectives, and, where possible, decrease elk population levels with hunting regulations that increase hunter effectiveness in harvesting elk and landowner tolerance for hunters on their properties.

HABITAT OBJECTIVES

Develop cooperative programs that encourage public and private land managers to:

- 1) maintain current levels of elk habitat;
- 2) maintain at least 80% of existing levels of elk habitat security.

HABITAT MANAGEMENT STRATEGIES

FWP will cooperate with state and federal land management agencies, corporate land managers and private landowners to pursue the following habitat strategies:

- Acquire conservation easements from willing landowners on the highest priority seasonal ranges at greatest risk of permanent habitat loss due to future development or other factors.
- Maintain elk habitat security and associated walk-in hunting opportunities (via enforcement of existing road closures and retention/recruitment of effective cover blocks) in the Rattlesnake Wilderness Area, Arkansas/Ashby Creek, Bonner Mountain, Blackfoot/Chamberlain BMA, Dutton BMA, and Hoodoo Mountain roadless area.
- Maintain the quality of the hunt by minimizing elk and hunter concentrations during hunting season. One index traditionally used to monitor this at the level of the hunting district or EMU is the percentage of the bull elk harvest that occurs in the first week of the general hunting season. Poor elk habitat security may be indicated if, for a 3-year average, more than 40% of the bull harvest occurs during the first week, or perhaps more reliably if this percentage shows an increasing trend over time. Remedies would be applied on a case-by-case basis, with local hunter and landowner participation, and might include prescribed road closures, road openings, adjustments in hunting season opening or closing dates, limited permits for a portion of the hunting district, or other measures.
- Restore winter habitats on state and federal lands in the Elk Creek and Wales-Yourname Creek drainages by cooperating with land managers in planning treatments of advanced forest succession with harvest and prescribed fire.
- Review and provide technical assistance in the planning of timber sales, road management, and grazing allotments on public lands across the entire EMU.
- Cooperate as a landowner-partner in the work of organized Weed Management Groups in Missoula, Powell and Granite Counties, and continue to cooperate with the counties and other land managers in the development of integrated strategies to improve the prevention and control of exotic, invasive plants.
- Participate with Plum Creek Timber Company, community working groups and other agencies in continuing talks to perpetuate elk habitat and traditional public uses on Plum Creek lands in the future.

GAME DAMAGE STRATEGIES

FWP will:

- Help landowners and others in local communities with chronic game damage to work cooperatively on elk management goals and strategies that can be applied to the elk population unit across property boundaries.
- Prescribe antlerless harvest pressure in excess of estimated calf recruitment rates.
- Apply strategies such as the HD 298 season structure that alleviate the legitimate concerns of private landowners with managing the general hunting public.
- Explore all reasonable avenues of assisting in applying effective and efficient harvest pressure to the locations where depredating elk occur in hunting season, while recognizing that access control rests with owners of private-land refugia in the Garnet EMU.
- Replace A-7 licenses with A-9/B-12 licenses (B-tags) as needed to increase hunter participation and harvest effectiveness in game damage situations.

ACCESS STRATEGIES

FWP will:

- Expand public hunting access on private ranches by at least 5%, using the Block Management Program.
- Obtain public hunting access as one benefit of conservation easements acquired by FWP.
- Work with Plum Creek Timber Company and other affected landowners to reopen selected access roads in key locations (outside of designated elk security areas) to motorized access during hunting season.
- Respond with proposals for appropriate road management (closure of spur roads) as needed to address local issues of excess vehicular access and elk displacement from public hunting areas (such as in the Tenmile drainage in HD 292).

POPULATION OBJECTIVES

Maintain 1,900-2,500 elk observed during post-season aerial surveys. This objective incorporates a decrease from 2003 levels in herd units and portions of hunting districts with game damage problems, and allows a corresponding slight increase in portions of the EMU where elk and elk hunting occur mostly on public land. Corresponding objectives for elk numbers observed by hunting district are 400-600 in HD 283, 500-700 in HD 291 and 1,000-1,200 in HD 292. (Trend counts are not regularly accomplished in HD 290.)

- 1) Reduce the elk population in eastern HD 292 from Dunigan Mountain to Sturgeon Mountain to 400 elk counted in post-season surveys.
- 2) Maintain an observed post-season bull:100 cow ratio of at least 10 bulls:100 cows, or at least 7% antlered bulls in the late-winter population.

POPULATION MANAGEMENT STRATEGIES

- Identify causes of elk calf mortality by completing the Garnet Elk Calf Mortality Study during 2003-2006, and address principal causes that are within appropriate management control.
- Prescribe antlerless harvest at slightly above estimated calf recruitment rates in elk population units that are not responsible for chronic game damage, and monitor population parameters to test for a compensatory response. Respond by promptly reducing antlerless harvest if needed to meet population objectives.
- Replace antlerless permits with A-9/B-12 licenses to increase hunter opportunity during periods when elk populations are high.
- If necessary, use restrictive bull harvest strategies to maintain a minimum reservoir of breeding bulls in cases where a combination of chronically low and declining bull:100 cow ratios coincide with low calf survival. Use the brow-tined bull regulation as the first preference when restrictive bull harvest strategies are called for.
- Restrictive bull harvest strategies will not be employed to manage for “trophy” bulls in this EMU.
- Focus elk population reductions where problems exist, such as game damage or inaccessibility for hunting, rather than reducing elk populations uniformly across the EMU.

REGULATION PACKAGES

Six-week either-sex archery regulation; EXCEPT, should the Restrictive antlered regulation be implemented; six-week brow-tined bull/antlerless archery regulation.

Antlerless :

The Standard Regulation is: Sufficient antlerless permits to result in the annual harvest of 180-240 antlerless elk across the EMU, assuming an annual female recruitment rate of 10%. (Higher harvest will be prescribed if recruitment rates increase.) This translates into the issuance of 540–720 antlerless permits annually (assuming an average 33% harvest success rate among antlerless permit holders) AND, specially directed A-7 licenses or A-9/B-12 antlerless licenses (B-tags) to address problem areas without affecting elk herd units that are not causing problems.

The Standard Regulation will be recommended if: post-season aerial trend counts are 400-600 elk in HD 283, 500-700 elk in HD 291, and 1,000-1,200 elk in HD 292. (Trend counts are not regularly accomplished in HD 290.) AND, post-season calf:100 cow ratios are 20-30 calves:100 cows.

The Liberal Regulation is: 1.) Sufficient antlerless permits to result in the annual harvest of more than 240 antlerless elk across the EMU, assuming an annual female recruitment rate of 10%. (Higher harvest will be prescribed if recruitment rates increase.) This translates into the issuance of more than 720 antlerless permits annually (assuming an

average 33% harvest success rate among antlerless permit holders) AND, specially directed A-7 licenses (these may be unlimited) or A-9/B-12 antlerless licenses (B-tags) to address problem areas without affecting elk herd units that are not causing problems. 2.) In addition to 1.) (above), late seasons developed in cooperation with Community Working Groups AND/OR, an either-sex regulation for a portion of the general season.

Liberal Regulation 1.) (above) will be recommended if: post-season aerial trend counts are higher than 600 elk in HD 283, 700 elk in HD 291, and 1,200 elk in HD 292. (Trend counts are not regularly accomplished in HD 290.); OR, trend counts are within objective, but post-season calf:100 cow ratios average greater than 30 calves:100 cows over 2 consecutive years.

Liberal Regulation 2.) (above) will be recommended if: after 2 consecutive years of Liberal regulation 1) (above), post-season aerial trend counts remain above objectives.

The Restrictive Regulation is: no antlerless permits (if the most rapid population increase is desired), or lowered antlerless permits to result in the annual harvest of less than 180 antlerless elk across the EMU, assuming an annual female recruitment rate of 10%. This translates into the issuance of less than 540 antlerless permits annually (assuming an average 33% harvest success rate among antlerless permit holders) AND, specially directed A-7 licenses to address problem areas without affecting elk herd units that are not causing problems.

The Restrictive Regulation will be recommended if: trend counts are below 400 elk in HD 283, 500 elk in HD 291, and 1,000 elk in HD 292 for 2 consecutive survey years that population trend data is gathered. (Trend counts are not regularly accomplished in HD 290.); OR, trend counts are within objective, but post-season calf:100 cow ratios are below 20 calves:100 cows for 2 consecutive years.

Antlered:

The Standard Regulation is: 5-week general season antlered bull regulation.

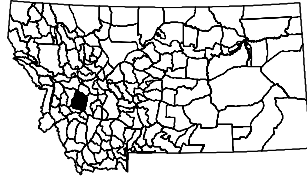
The Standard Regulation will be recommended if: post-season bull:100 cow ratios are at least 10 bulls:100 cows, or at least 7 % percent of the post-season population is bulls AND, post-season calf:100 cow ratios are greater than 20 calves:100 cows.

- For districts or portions of districts to move to the standard regulation package from the restrictive package, post-season bull:100 cow ratios must average at least 25 bulls:100 cows, or percent bulls in the post-season population must average at least 16%. This accounts for the effect of the BTB regulation, plus survival of at least 10 additional bulls:100 cows through hunting season and winter. A sustained level of at least 25 bulls:100 cows indicates a change in habitat security, hunting pressure, or calf recruitment, that might allow the return to an antlered bull regulation without immediately driving the bull:100 cow ratio back below the objective under the standard regulation.

The Restrictive Regulation is: 5-week general season brow-tined bull regulation in the districts or portions of districts that are below objectives for bull:100 cow and calf:100 cow ratios.

The Restrictive Regulation will be recommended if: post-season bull:100 cow ratios are less than 10 bulls:100 cows, or less than 7% percent of the post-season population is bulls in that district or herd unit for 2 consecutive years AND, post-season calf:100 cow ratios are below 20 calves:100 cows for 2 consecutive years.

FLINT CREEK EMU
(Hunting Districts 212 and 213)



Description: The 772-square-mile Flint Creek EMU is bounded on the north by Interstate 90 between Garrison and Drummond, on the east by Interstate 90 between Opportunity and Garrison, on the south by Highway 1 between Opportunity and Georgetown Lake, and on the west by Highway 1 between Georgetown Lake and Drummond. The Flint Creek EMU includes HD 212 (353,377 acres), which makes up the northern 72% of this EMU and HD 213 (140,816 acres) in the southern portion of this EMU, just north of Anaconda.

Public Access: The Flint Creek EMU is characterized by extensive roading, associated primarily with past mining activity. USDA-Forest Service (USFS), USDI-Bureau of Land Management (BLM), and Montana Department of Natural Resources and Conservation (DNRC) lands make up approximately 53% of this EMU. Accessibility to public lands is good for hunting and other forms of recreation as well. Motorized travel on public lands is regulated through USFS and BLM travel plans. There are currently 10 ranches in this EMU that are enrolled in FWP's Block Management Program, ensuring public hunting access to more than 43,500 acres, plus access to adjacent public lands. Three of these ranches are in HD 213 (12,800 acres) and 6 are in (or partially in) HD 212 (26,700 acres). Public access to 3,500 acres in HD 213 is provided through FWP's Blue Eyed Nellie, Lost Creek and Warm Springs Wildlife Management Areas (WMAs). Private properties that do not allow public access for hunting continue to be an issue in elk management.

Recreation Provided: Yearlong recreational use of elk in the EMU includes hunting, photography and wildlife viewing. During 1999-2001, the EMU provided an annual average of 17,999 days of hunting recreation to 2,723 hunters. This represents a 59% increase in hunters and a 50% increase in hunter days compared to 1992.

Elk Populations: We believe that about 300 elk were missed during trend flight surveys in HD 213 during 2004. If so, the number of elk observed during post-season aerial surveys remains within 20% of the EMU objective of 1,500 elk (Figure 1). This objective is based on level of landowner tolerance of elk in the EMU balanced with providing adequate hunting opportunity.

Bull:100 cow ratios have remained relatively stable and currently average 15 bulls:100 cows for the EMU (13:100 in HD 213 and 17:100 in HD 212).

Current Annual Elk Harvest: During 1999-2001, the average annual harvest was 216 antlered and 268 antlerless elk in this EMU. In 2001, brow-tined bulls (BTB) averaged 82% of the bull harvest, exceeding the minimum objective of at least 50% BTBs in the harvest. Bulls with 6 points on at least one antler comprised 13% of the bull harvest, exceeding the minimum objective of 10% of the bull harvest. Forty-seven percent of the bull harvest occurred during the first week of the general season, exceeding the 40% maximum objective. If this trend continues, it indicates that adequate security cover for elk during hunting season is a concern.

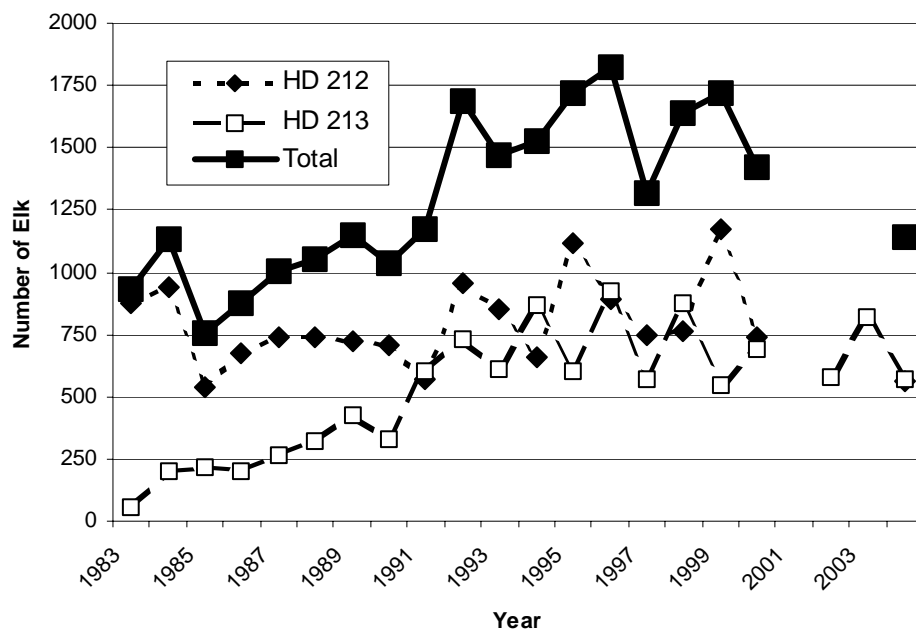


Figure 1. Number of elk observed during post-season aerial surveys in HDs 212 and 213, 1983–2004. About 300 elk may have been missed in HD 213 during 2004 flights.

Accomplishments: FWP has provided assistance to landowners (that allow public hunting access) with chronic elk damage problems in the form of temporary and permanent haystackyards, pasture fencing materials, and herding. Special or regularly scheduled “early” or “late” hunts have been applied as needed to harvest elk on private land at times of the year when damage is occurring. Under severe snow conditions during the winter of 1996-97, many landowners in this EMU willingly tolerated unusual levels of elk damage to help elk survive.

Hunting access was enhanced with the addition of 7 Block Management Areas (BMAs) since 1992, bringing the total to 10 BMAs covering more than 43,500 acres within this EMU. The Blue Eyed Nellie, Lost Creek and Warm Springs WMAs provide public hunting access to over 3,500 acres.

Significant elk habitat is protected in this EMU under multiple conservation easements granted by private landowners and held by various conservation groups.

In November of 1996, the Lost Creek Land Exchange took place when the President signed the Omnibus Parks and Public Lands Management Act of 1996. This land exchange between R-Y Timber Company and the USFS was approved and mandated by Congress. The exchange resulted in the conveyance of some USFS land to R-Y Timber, as well as the offering of timber-only resources from some USFS land (the management of which remains under the USFS). In turn, the USFS acquired 14,500 acres of land in the Lost Creek drainage from R-Y Timber.

In August of 2003, more than 32,000 acres of private lands west of Anaconda came under public ownership, of which more than 2,500 acres are in this EMU. This land deal, known as the Watershed Project, is the largest land acquisition effort by the Rocky Mountain Elk Foundation (RMEF) to date. The RMEF acquired the watershed land from R-Y Timber and then sold the lands to FWP and the USFS. The funds for this purchase primarily came from the Montana Natural Resource Damage Program and federally controlled Land and Water Conservation funds.

Management Challenges: Although hunting opportunities are generally good and restrictions are relatively minimal in the EMU, lack of public access on private land in the south end of the Flint Creek Range has resulted in a large increase in elk numbers occupying these lands during the general hunting season over the past 10 years. This has caused frustration among sportsmen, lack of an adequate elk harvest in this area, and increased game damage to adjacent landowners. Elk congregate on these lands with minimal or no hunting access during the hunting season but, once hunting season ends, move onto those lands that have traditionally been open to hunting. Numbers of elk unavailable to hunters because of lack of access to private lands ranges from 30-70% of the observed elk in this EMU (largely dependent on weather). This may explain why an average of only 24% of the antlerless permit holders in HD 213 were successful, compared to 30% in HD 212.

Elk security on public lands continues to be relatively good throughout most of HD 212, but security in the west half of HD 213 is limited due to past logging operations. Illegal Off Road Vehicle (OHV) and other vehicle use off of established roads/motorized trails have increased elk vulnerability and impacted elk security and habitat values on public lands.

Noxious weeds and other exotic plants are spreading throughout the EMU, creating problems with native plant species management goals.

Enforcement problems continue in HD 212 along the Prison Ranch boundary. The Prison Ranch property is managed as archery hunting only and a “firing line” situation with rifle hunters occurs when the elk are pushed off the Prison Ranch property. Most of the elk that use the Prison Ranch are cows, calves and spike bulls, thus rifle hunters harvest the spikes heavily when they cross the Prison Ranch boundary. One solution to this problem would be to change the

southern portion of HD 212 to a brow-tined bull (BTB) regulation for the general rifle season, eliminating the legal harvest of spikes as they cross the Prison Ranch boundary and thus, likely reduce the number of rifle hunters along the “firing line”.

Some winter and summer elk ranges, particularly in HD 213 north of Georgetown Lake are at risk from housing development.

Individual wolves have been reported in the EMU in the past and there are increased sightings of wolves or their tracks. Wolves may have some impact on elk management in this EMU in the future, but the kind and degree of impact is unknown at this time.

Population Monitoring: We annually conduct post-season fixed-wing aerial trend counts of elk during winter/spring. We record total numbers and sex/age classification of observed elk.

SUMMARY OF PUBLIC COMMENT

1992: *“Limited public comment indicated a desire to reduce elk numbers, increase the number of mature bulls in the herd, and improve elk security levels through the use of road closures”.*

2004: Although some of the same concerns exist today, new issues have been raised. Public comment still indicates concern about possible over-harvest of bulls. A desire to increase bull:100 cow ratios, maintain the elk population level, while keeping game damage under control are currently major concerns. Ranchers and some hunters have expressed concern about the presence of wolves. There is concern regarding off-road motorized travel during the spring, summer and fall. Some people indicate that road closures have gone too far and that some roads should be re-opened to allow additional access to areas. There is increasing concern about closed private land providing sanctuaries for elk.

MANAGEMENT GOAL

Manage the elk population in a healthy condition and cooperate with private and public land managers in management of elk habitats to provide a diversity of elk hunting experiences.

HABITAT OBJECTIVES

- 1) Participate in cooperative programs that encourage public and private land managers to maintain the 476,000 remaining acres of usable elk habitat across the EMU.
- 2) Maintain at least 80% of existing levels of elk security so that the elk harvest is distributed throughout the hunting season, with no more than 40% of the harvested bulls being taken during the first week of the general season.
- 3) Maintain all public land winter ranges in a condition that will support wintering elk.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to the Beaverhead – Deer Lodge National Forest, DNRC, BLM, and corporate timberland managers in programs that will improve overall elk habitat, increase elk security, and improve quality of native forage.
- Acquire conservation easements from willing landowners on the highest priority seasonal ranges at greatest risk of permanent habitat loss due to future development or other factors.
- Cooperate with public and private land managers to maintain walk-in hunting opportunities and associated habitat security (via enforcement of existing road closures and retention/recruitment of effective cover blocks).
- Provide technical assistance to land managers to help re-establish elk winter habitats on state and federal lands in the EMU (e.g. controlled burns, timber thinning, reducing conifer encroachment, noxious weed control).
- Provide information on seasonal elk use patterns and requirements to public land managers related to revisions of grazing allotment management plans.
- Provide technical assistance to land managers relative to elk management issues in the planning of timber sales, road management, and enforcement across the entire EMU.
- Cooperate with federal, state, county and private land managers to address weed management/control within the EMU.
- Provide information to and dialogue with the public about wildlife habitat issues and importance through the media, publications, printed materials and personal contacts.
- Encourage land and travel management practices that maintain or improve elk security.

GAME DAMAGE STRATEGIES

Distribution of the elk in this EMU varies with winter severity. HDs 212 and 213 contain significant acreage of private land where public hunting allowed, thus elk concentrate on these properties during hunting season, increasing game damage complaints on adjacent lands after the season.

FWP will:

- Maintain observed elk numbers within plan objectives while targeting local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning for landowners who allow adequate public hunting access.
- Cooperate with public land managers to identify and change activities/conditions on public lands that contribute to redistribution of wildlife onto private lands.
- Evaluate the number of antlerless permits allocated for each hunting district (and portions of hunting district) and redistribute as necessary to achieve desired harvest.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider limited access for at least certain groups of hunters (e.g. youth, disabled).
- Encourage dialogue between landowners with differing land management strategies.

ACCESS STRATEGIES

Public access in this EMU is very high due to significant amounts of public land and landowner cooperation. However, increased illegal use of OHVs has diminished wildlife security and habitat integrity. Also, some private lands are closed to hunting, resulting in post-season depredations on adjacent lands. Efforts will be made to obtain increased public access to private lands that do not currently allow public hunting.

FWP will:

- Identify desirable access points to public lands and provide recommendations to the appropriate land management authority (Access Montana Program).
- Identify additional opportunities for block management projects.
- Pursue conservation easements on important elk ranges found on private land.
- Assist landowners with hunter management.
- Explore creative means to encourage landowners who currently do not allow hunting to open their lands to increase public access.

POPULATION OBJECTIVES

The following objectives are based on maintaining a low level of game damage while providing adequate hunting and recreational opportunities:

- 1) Maintain the number of elk observed during post-season aerial trend surveys within 20% of 1,500 elk (1200-1800) in the EMU. This EMU objective includes 850 elk (700-1000) observed in HD 212 and 650 elk (500-800) observed in HD 213. Within HD 213, reduce the number of elk observed from Lost Creek to Racetrack Creek to 500 elk.
- 2) Maintain the 2-year- average bull:100 cow ratio observed during post-season aerial trend surveys at a minimum of 10 bulls:100 cows OR, at least 7% bulls among observed elk.
- 3) Maintain an annual bull harvest comprised of at least 50% BTBs, of which no less than 10% have 6 points on at least one antler.

POPULATION MANAGEMENT STRATEGIES

The elk population within the Flint Creek EMU has traditionally been managed with antlerless permits and a variety of bull hunting strategies. Elk numbers observed on aerial surveys indicate that current management strategies are maintaining elk populations within the trend count objectives for this EMU.

To help maintain bull:100 cow ratios within EMU objectives, FWP will continue working with private and public land managers to maintain and improve elk security, particularly near winter ranges where bulls become increasingly susceptible to hunters as snow accumulates. Additional road closures will be considered when appropriate. Efforts will continue to be directed at improving public hunting access to private lands on the southeast end of the Flint Creek Range to

facilitate increased public harvest and decrease the problems associated with large elk numbers on private lands.

REGULATION PACKAGES

Six-week either-sex archery regulation in HD 213 and the south portion of HD 212, EXCEPT, see Restrictive Antlered Regulation. Six-week brow-tined bull/antlerless archery regulation in the north portion of HD 212. The Prison Ranch (west of Deer Lodge- HD 212) is open for archery ONLY from the start of the general rifle season to 1 January.

Antlerless:

The Standard Regulation is: sufficient antlerless permits to result in the annual harvest of 200-300 antlerless elk across the EMU, assuming an annual female recruitment rate of at least 10%. Within the objective range, this has meant the issuance of 600-900 antlerless permits annually (assuming an average 33% harvest success rate among antlerless permit holders) OR, a combination of antlerless permits and limited, specially directed A-7 licenses or other strategies to address problem areas without affecting elk herd units that are not causing problems.

The Standard Regulation will be recommended if: numbers of elk observed during post-season aerial trend surveys are 700-1000 elk in HD 212 and 500-800 elk in HD 213 AND, game damage problems are under control in the districts or portions of districts that would be subject to the standard regulation package AND, post-season calf:100 cow ratios are more than 20 calves:100 cows.

The Liberal Regulation is: **1.)** sufficient antlerless permits to result in the annual harvest of more than 300 antlerless elk across the EMU, assuming an annual female recruitment rate of 10%. Higher harvest will be prescribed if recruitment rates increase. More than 900 antlerless permits would be recommended (assumes an average 33% harvest success rate among antlerless permit holders) AND, unlimited A-7 antlerless licenses for private-land portions of districts with chronic, increasing, game damage problems. **2.)** either-sex (or brow-tined bull/antlerless) regulations for a portion (or all) of the general hunting season and antlerless permits for the remainder of the general season AND, limited A-9/B-12 antlerless licenses (B-tags) in portions of the EMU.

Liberal Regulation **1.) (above)** will be recommended if: number of elk observed during post-season aerial trend surveys are more than 1,000 elk in HD 212 and more than 800 elk in HD 213.

Liberal Regulation **2.) (above)** will be recommended if: after 2 years of Liberal Recommendation **1.) (above)** the number of elk counted in post-season aerial trend surveys remains above 1,000 in HD 212 and above 800 in HD 213.

The Restrictive Regulation is: no antlerless permits (if the most rapid population increase is desired), or fewer than 600 antlerless permits to result in the annual harvest of less than 200

antlerless elk across the EMU (assumes an average 33% harvest success rate among antlerless permit holders) AND, limited and specially directed A-7 licenses for portions of the EMU experiencing game damage.

The Restrictive Regulation will be recommended if: numbers of elk observed during post-season aerial trend surveys are less than 700 elk in HD 212 and 500 elk in HD 213 for 2 consecutive years OR, post-season calf:100 cow ratios are below 20 calves:100 cows for 2 consecutive years.

Antlered:

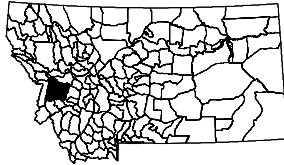
The Standard Regulation is: 5-week general season brow-tined bull regulation in the north portion of HD 212 and antlered bull regulation in the south portion of HD 212 and all of HD 213.

The Standard Regulation will be recommended if: the bull:100 cow ratio observed during post-season aerial trend surveys is at least 10 bulls:100 cows or at least 7% of the observed elk are bulls AND, annual bull harvest for the EMU is at least 50% BTBs, of which at least 10% have 6 or more points on one antler .

The Restrictive Regulation is: 5-week general season brow-tined bull regulation in entire EMU.

The Restrictive Regulation will be recommended if: the bull:100 cow ratios observed during post-season aerial trend surveys are less than 10 bulls:100 cows, or less than 7% of the elk observed are bulls in that district for 2 consecutive survey years OR, calf:100 cow ratios are less than 20 calves:100 cows for 2 consecutive survey years OR, annual bull harvest for the EMU is less than 50% BTBs, of which less than 10% have 6 or more points on one antler.

ROCK CREEK EMU
(Hunting Districts 204, 210, 216, 261)



Description: The 1,490-square-mile Rock Creek EMU is bounded on the north by Interstate 90 between Drummond and Missoula, on the east by Highway 1 between Drummond and Philipsburg, on the south by Highway 38 between Philipsburg and Hamilton, and on the west by Highway 93 from Missoula to Hamilton. Forty-seven percent of this EMU is USDA-Forest Service (USFS) land, and approximately 3% is USDI-Bureau of Land Management (BLM) and Montana Department of Natural Resources and Conservation (DNRC) lands. The remaining 50% is private property, which includes 6.1% of the EMU owned by Plum Creek Timber Company (PCT).

Elk summer range occurs mostly on public lands and fall areas of use are generally also on public lands unless weather induces elk to move to many private land winter ranges early. Approximately 70% of winter range occurs on private lands. Elk security on public lands continues to be relatively good throughout most of the EMU.

Public Access: Public lands (USFS, BLM and DNRC) make up approximately 50% of this EMU. Accessibility to USFS land is good, but there is a lack of access to some BLM and DNRC lands within this EMU. Motorized travel on public lands is regulated through USFS and BLM travel plans. There are currently 8 ranches enrolled in FWP's Block Management Program in this EMU, ensuring public hunting access to 28,590 acres. Five of these ranches are in HD 210 (24,830 acres), two are in (or partially in) HD 261 (2,840 acres), and one is in HD 216 (920 acres). No ranches in HD 204 are currently enrolled in Block Management. Three Mile (HD 204) and Calf Creek (HD 261) Wildlife Management Areas (WMAs), totaling over 8,000 acres, are in this EMU. There are currently 4 conservation easements monitored by FWP providing public hunting access to approximately 8,750 acres in this EMU. Even with the current amount of public access in this EMU, private properties that do not allow public access for hunting continue to be an issue in elk management.

Recreation Provided: Public recreational use of the EMU includes hunting, fishing, backpacking, snowmobiling, photography, and wildlife viewing. During 1999-2001, the EMU

provided an annual average of 27,739 days of hunting recreation to an average of 4,747 hunters. This represented a 23% increase in hunter days and a 26% increase in hunters compared to 1992.

Elk Populations: Elk observed during post-season aerial trend surveys have increased since 1983 (Figure 1), with the greatest percent increase occurring in HD 204. Numbers of elk observed during post-season aerial trend surveys have ranged from 2,149 to 3,165 in the EMU during 1998-2003. The 1992 FWP Elk Management Plan called for maintaining “a late winter observable elk count of about 2,200 elk, offsetting planned reductions in the south half of HD 261 with a population increase in HD 204 north of Ambrose Creek. Elk numbers will be maintained at current levels in HDs 210 and 216”. Although there have been fluctuations in observed elk numbers in this EMU over the years, current hunting regulations generally have worked to maintain elk numbers near the objective until recently. The 1992 objective of 15 bulls:100 cows for this EMU was not met during the 2002 surveys but was met in 2003.

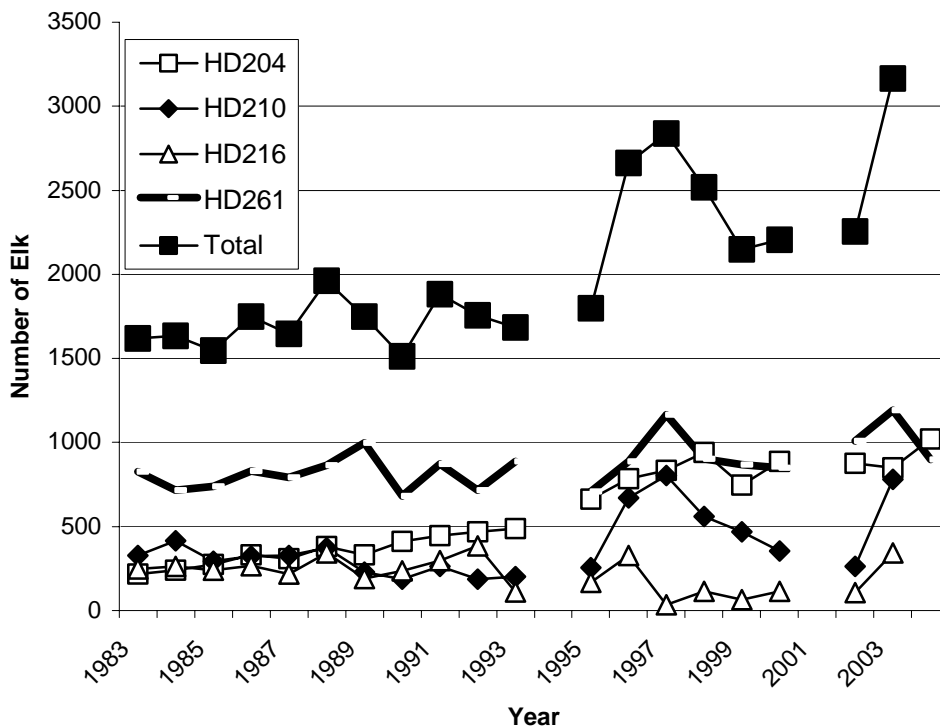


Figure 1. Number of elk observed by HD during post-season aerial surveys in the Rock Creek EMU, 1983-2004.

Current Annual Elk Harvest: From 1999-2001, an average of 314 bulls and 352 antlerless elk were harvested annually in the EMU. Brow-tined bulls (BTB) made up 58% of the average bull harvest, exceeding the minimum objective of at least 40-50% BTBs in the bull harvest. Bulls with 6 points on at least 1 antler averaged 23% of the bull harvest from 1999-2001, exceeding

the objective of at least 10% of the bull harvest comprised of 6-point bulls in the EMU. All HDs averaged more than 10% of the bull harvest comprised of 6-point-bulls. The objective of no more than 40% of the bull harvest occurring during the first week of the general season was met in each of the 4 HDs making up this EMU. The average harvest of 352 antlerless elk during 1999-2001 was not adequate to hold the observed elk numbers at current elk plan objective of 2,000-3,000 elk observed. During this same period, the harvest success of antlerless elk averaged 22% (range = 3–56%) of the A-7 licenses or antlerless permits issued.

Accomplishments: FWP has provided assistance to landowners (that allow public hunting access) with chronic elk damage problems in the form of temporary and permanent hay-stackyards and herding. Special or regularly scheduled “early” or “late” hunts have been applied as needed to harvest elk on private land at times of the year when damage is occurring. Under severe snow conditions in the winter of 1996-97, many landowners in this EMU willingly tolerated unusual levels of elk damage to help elk survive.

Hunting access was enhanced with the addition of 5 Block Management Areas (BMAs) since 1992, bringing the total to 7 BMAs consisting of more than 28,000 acres within this EMU. The Three Mile WMA in HD 204 and the Calf Creek WMA in HD 261 continue to provide public hunting access to over 8,000 acres.

In 1997, a private ranch and FWP agreed to protect important habitat, public hunting, and the traditional ranch operation with a conservation easement on a 1,554-acre portion of a ranch in HD 216. Significant elk habitat is also protected in this EMU under multiple conservation easements granted by private landowners and held by various conservation groups, which protect approximately 4,000 acres in the Rock Creek Drainage.

Management Challenges: Hunting access and opportunities are generally good and restrictions are relatively minimal in this EMU. However, lack of public access to private land in the Rock Creek drainage and in HD 204 has resulted in a large increase in elk numbers occupying private lands during the general season over the past 5-10 years, causing frustration among sportsmen and increased game damage to adjacent landowners. The percentage of elk in this EMU not available to hunters because of the limited access to private land ranges from 20 to 40 % among years, largely dependent on weather. Elk congregate on lands closed to hunting during the hunting season but move onto lands that have traditionally been open to hunting, once hunting seasons end.

Some winter and summer ranges on private land, particularly in the Flint and Rock Creek drainage bottoms and along the west slopes of the Sapphires are at risk because of housing development. If this trend continues, restrictions on the type of weapon(s) allowed may be appropriate for safety reasons, thus limiting the ability to harvest elk in and around these developed areas.

Illegal Off Road Vehicle (OHV) and other vehicle use off of established roads or motorized trails contribute to increased elk vulnerability. OHV users have created new travel routes by driving off of existing roads, impacting elk security and habitat values on public lands.

Individual wolves have been reported in the EMU in the past and there have been increased sightings of wolves or their tracks. Wolves may have some impact on elk management in this EMU in the future, but the kind and degree of impact is unknown at this time.

Noxious weed invasions on private and public lands create difficulties meeting native plant species management goals in this EMU.

Population Monitoring: We annually conduct post-season fixed-wing aerial trend counts of elk during winter/spring. We record total numbers and sex/age classifications of observed elk.

SUMMARY OF PUBLIC COMMENT

1992: *“Public comment indicated general satisfaction with the current management goal of providing a diversity of hunting experiences in the unit. Interest was also expressed in improving bull:cow ratios and for enhancing the opportunity to harvest older bulls. The public voiced support for reducing the antlerless portion of the population, especially in HD 261. Comments also supported improvement of elk security, including additional road closures in some areas. Many comments focused on a need to improve public access to private lands to render hunting as a means to effectively manage game damage”.*

2004: Although some of the same concerns exist today, new issues have been raised. Public comment still indicates concern over possible past over-harvest of bulls, a need to improve bull:cow ratios, and maintenance of elk populations while keeping game damage under control. Ranchers and some hunters express concern about the presence of wolves. Some landowners have expressed their concern about the early-season antlerless rifle hunts and safety issues with archery hunters. Concerns over closed private land providing sanctuaries for elk are growing. Some believe that too many road closures have occurred and that some roads should be re-opened to allow additional access to areas.

Based on a proposal made by the Ravalli County Fish and Wildlife Association that recommended an increase in elk numbers above FWP draft population objectives for the Bitterroot hunting districts (HDs 240, 250, 204, 261, 270), a Bitterroot Elk Management Working Group has been established in an attempt to reach consensus on elk population objectives in the Bitterroot. The group consists of representatives from the local business community, the Ravalli Co. Fish and Wildlife Assoc., Montana Bow Hunters Assoc., a local outfitter, landowners, Bitterroot National Forest, Safari Club International, and a timber consultant. Among other things, the group will discuss impacts on elk habitat from the extensive 2000 fires, explore innovative ways to minimize elk damage to agricultural producers, discuss the potential impact of predators (including wolves) on elk populations, and attempt to reach consensus on long term population management goals for the Bitterroot hunting districts.

Because of recent wildfires, there is interest in allowing elk populations to increase above the draft FWP objective level in HDs 204 and 261. Those commenting believe that FWP should work with landowners experiencing game damage on a site-specific basis. However, concern was also expressed about resource damage from high elk numbers, loss of crops, and impacts of elk on weed distribution in the north portion of HD 204 and portions of HD 261.

MANAGEMENT GOAL

Manage the elk population in a healthy condition within 20% of the objective of 2,500 observed elk and cooperate with private and public land managers in management of elk habitats to provide a diversity of elk hunting experiences.

HABITAT OBJECTIVES

- 1) Participate in cooperative programs that encourage public and private land managers to maintain the 90% (~ 880,000 acres) of this EMU that is usable elk habitat.
- 2) Maintain at least 80% of existing levels of elk security so that the elk harvest is distributed throughout the hunting season.
- 3) Maintain all public land winter ranges in a condition that will support wintering elk at objective numbers.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to the Beaverhead – Deer Lodge, Lolo, and Bitterroot National Forests, DNRC, BLM, and corporate timber-land managers in programs designed to improve overall elk habitat, increase elk security, and improve quality of native forage.
- Acquire conservation easements from willing landowners of elk habitat at the greatest risk of permanent habitat loss due to future development or other factors.
- Cooperate with public and private land managers to maintain walk-in hunting opportunities and associated habitat security via enforcement of existing road closures and retention/recruitment of effective cover blocks.
- Provide technical assistance to land managers to help re-establish elk winter habitats on state and federal lands.
- Provide information on seasonal elk use patterns and requirements to public land managers related to revisions of domestic livestock grazing allotment management plans.
- Provide technical assistance to land managers relative to elk management issues in the planning of timber sales, road management, and enforcement across the entire EMU.
- Cooperate with federal, state, county and private land managers to address weed management/control within the EMU.
- Provide information to and dialogue with the public about wildlife habitat issues and importance through publications, printed materials, personal contacts, and the media.
- Encourage land and travel management practices that maintain or improve elk security.

GAME DAMAGE STRATEGIES

Distribution of the elk population in this EMU varies with winter severity. This EMU currently has significant acreage of private land where owners do not allow public hunting, thus elk concentrate on these properties during the hunting season, heightening game damage complaints on adjacent lands after the season.

FWP will:

- Maintain observed elk numbers within plan objectives.
- Target local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning for landowners who allow adequate public hunting access.
- Cooperate with public land managers to identify and change activities/conditions on public lands that contribute to redistribution of wildlife onto private lands.
- Evaluate the number of antlerless permits allocated for each hunting district (and portions of hunting district) and redistribute as necessary to achieve desired harvest.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider limited access for at least certain groups of hunters (e.g. youth, disabled).
- Encourage dialogue between landowners with differing land management strategies.

ACCESS STRATEGIES

Public access in this EMU is high due to significant amounts of public land and landowner cooperation. However, the increased illegal use of OHVs has diminished wildlife security and habitat integrity. Also, some private lands are closed to hunting, resulting in depredations on adjacent lands.

FWP will:

- Identify desirable access points to public lands and provide recommendations to the appropriate land management authority (Access Montana Program).
- Work with public land agencies to reduce illegal OHV travel on public lands.
- Identify additional opportunities for Block Management projects.
- Pursue conservation easements on important elk ranges found on private land.
- Assist landowners with hunter management.
- Explore creative means to encourage landowners who currently do not allow hunting to open their lands to increase public access.

POPULATION OBJECTIVES

Elk population objectives may change if the newly established Bitterroot Elk Management Working Group can reach a consensus.

The following objectives are based on maintaining a low level of game damage while providing adequate opportunities for hunters:

- 1) Maintain the number of elk counted on post-season aerial trend surveys within 20% of 2,500 elk (2,000-3,000 elk) in the EMU. This EMU objective includes: 625 elk (500-750) observed in HD 204; 725 elk (600-850) observed in HD 210; 325 elk (200-450) observed in HD 216; and 825 elk (700-950) observed in HD 261. Reduce the number of elk observed in HD 204 north of Ambrose to 400 and the number of elk observed in HD 261 south of Willow Creek to 400.
- 2) Maintain a bull:100 cow ratio observed during post-season aerial trend surveys of at least 10 bulls:100 cows OR, at least 7% bulls among the total elk observed.
- 3) Maintain an annual bull harvest comprised of at least 40% BTBs, of which no less than 10% are bulls with 6 points on at least one antler.

POPULATION MANAGEMENT STRATEGIES

In 2003, 3,165 elk were observed in the EMU, above the maximum objective of 3,000. Elk counts in HDs 210 and 216 are within their objectives for observed elk, HDs 204 and 261 are above their objectives for observed elk. Making adjustments to antlerless regulations in HDs 204 and 261 should reduce the observed elk count to below the maximum objective of 3,000. Additionally, we will continue to attempt to improve public hunting access to private lands in the Flint Creek and Rock Creek drainages and the west side of the Sapphire range to increase harvest and decrease the problems associated with large elk numbers on private lands.

To help maintain bull:100 cow ratios within objectives, FWP will continue working with private and public land managers to maintain and improve elk security, particularly near winter ranges where bulls become increasingly susceptible as snow accumulates. Additional road closures will be considered when appropriate.

REGULATION PACKAGES

Six-week either-sex archery regulation in HDs 210 and 216 and six-week brow-tined bull/antlerless archery regulation in HDs 204 and 261. If Restrictive Regulation for antlered elk is implemented, then, 6-week brow-tined bull/antlerless archery regulation for ALL HDs.

Antlerless:

The Standard Regulation is: sufficient antlerless permits and A-7 licenses to result in the annual harvest of 200-350 antlerless elk across the EMU. Assuming an annual female recruitment rate of at least 15%, this translates into the issuance of 1,000-1,500 antlerless permits annually (also assumes a 22% harvest rate for issued A-7 licenses and antlerless permits). Antlerless permits and A-7 licenses may be specially directed to address problem areas without affecting elk herd units that are not causing problems.

The Standard Regulation will be recommended if: total numbers of elk counted during post-season aerial trend surveys are 500-750 elk in HD 204, 600-850 elk in HD 210, 200-450 elk in HD 216, and 700-950 elk in HD 261.

The Liberal Regulation is: **1.)** increased antlerless permits to result in the annual harvest of more than 350 antlerless elk across the EMU. This translates into the issuance of more than 1,500 antlerless permits annually (assumes an annual female recruitment rate of 15% and 22% harvest success rate) AND, unlimited A-7 antlerless licenses for private-land portions of districts with chronic, increasing, game damage problems, and where impacts of high harvest rates on publicly accessible elk herd-units are minimized OR; **2.)** either-sex (HDs 210 and 216) or brow-tined bull/antlerless (HDs 204 and 261) regulations for a portion of (up to the full 5-weeks) the general hunting season AND, unlimited A-9/B-12 antlerless licenses (B-tags) valid ONLY on private land in portions of the EMU.

Liberal Regulation **1.) (above)** will be recommended if: numbers of elk counted during post-season aerial trend surveys are more than 750 elk in HD 204, more than 850 elk in HD 210, more than 450 elk in HD 216, and more than 950 elk in HD 261.

Liberal Regulation **2.) (above)** will be recommended if: after 2 years of Liberal Regulation 1.) (above) numbers of elk counted during post-season aerial trend surveys remain more than 750 elk in HD 204, more than 850 elk in HD 210, more than 450 elk in HD 216, and more than 950 elk in HD 261.

A Liberal Regulation will be maintained until the number of elk counted during post-season aerial surveys is reduced to 625 elk in HD 204, 725 elk in HD 210, 325 elk in HD 216, and 825 elk in HD 261, at which time the Standard Regulation will be recommended.

The Restrictive Regulation is: no antlerless permits (if the most rapid population increase is desired), or lowered antlerless permits and A-7 licenses to result in the annual harvest of less than 200 antlerless elk across the EMU. This translates into the issuance of less than 1,000 antlerless permits annually (assumes an annual female recruitment rate of 15% and 22% harvest success rate). Antlerless permits and A-7 licenses may be specially directed to address problem areas without affecting elk herd units that are not causing problems.

The Restrictive Regulation will be recommended if: numbers of elk counted during post-season aerial trend surveys are less than 500 elk in HD 204, less than 600 elk in HD 210, less than 200 elk in HD 216, and less than 700 elk in HD 261 for 2 consecutive survey years OR, post-season calf:100 cow ratios are less than 20 calves:100 cows for 2 consecutive years.

A Restrictive Regulation will be maintained until the number of elk counted during post-season aerial surveys has increased to 625 elk in HD 204, 725 elk in HD 210, 325 elk in HD 216, and 825 elk in HD 261, at which time the Standard Regulation will be recommended.

Antlered:

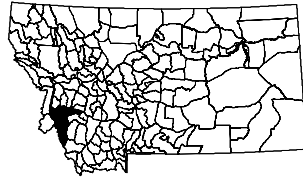
The Standard Regulation is: 5-week general season brow-tined bull regulation in HDs 204 and 261 and antlered bull regulation in HDs 210 and 216.

The Standard Regulation will be recommended if: the bull:100 cow ratio observed during post-season aerial trend surveys in each HD is at least 10 bulls:100 cows or at least 7% of the observed elk are bulls AND, the annual bull harvest is at least 40% BTBs, of which at least 10% are bulls with 6 points or more on at least one antler.

The Restrictive Regulation is: 5-week general season brow-tined bull regulation in all HDs in the EMU.

The Restrictive Regulation will be recommended if: post-season bull:100 cow ratios are less than 10 bulls:100 cows, or less than 7% of the elk observed are bulls in a hunting district for 2 consecutive survey years OR, post-season calf:100 cow ratios are below 20 calves:100 cows for 2 consecutive survey years, OR, the annual bull harvest is less than 40% BTBs, and less than 10% are bulls with 6 points or more on at least one antler.

SAPPHIRE EMU
(Hunting Districts 211, 214, 270, and 321)



Description: The 1,985-square-mile Sapphire EMU includes the Sapphire Mountains between the Bitterroot River and Rock Creek and the north and west parts of the upper Big Hole Valley. It also includes the drainage heads of the Big Hole and Bitterroot Rivers and Rock Creek and a large portion of the Anaconda-Pintler Wilderness. This description of the Sapphire EMU differs from that in the 1992 Elk Plan in that it does not include HD 250, which is now the West Fork EMU. The USDA-Forest Service (USFS)-Bitterroot and Beaverhead-Deerlodge National Forests administer 69% of the land base, the Montana Department of Natural Resources and Conservation (DNRC) about 1% and the USDI-Bureau of Land Management (BLM) less than 1%. At present there are 7 Block Management Areas totaling 1%, 6 conservation easements totaling 2%, and 1 Wildlife Management Area totaling 1% of the EMU.

Public Access: The major portion of this elk management unit is moderately roaded, offering good public access. The northern half of hunting district (HD) 270 is heavily roaded and contains many “loop” roads. This EMU also encompasses some relatively large blocks of roadless security areas, several of which are outside the Anaconda-Pintler Wilderness boundary. Areas of private land that harbor elk and do not allow public access include the lower Rye Creek drainage and north to Tabor Mountain, French Basin in the Schoolmarm Lake vicinity, and the lower portions of the Middle and East Forks of Rock Creek.

Elk Populations: Numbers of elk observed during post-season aerial trend surveys in the Sapphire EMU remained stable from 1983 to 1990 at an average of 1,669 (Figure 1). After 1990, number of elk observed increased by 82% to an average of 3,037 during 1999-2002. Observed elk numbers peaked at 3,556 in 2000, the last year of complete survey coverage. However, counts made in HD 270 during 2001-2003 indicated an increase of 11% over the 2000 count. Elk have likely increased in the other HDs of the EMU as well. The average number of elk observed in each hunting district during 1999-2002 was: HD 211 = 547, HD 214 = 140, and HD 270 = 2,501. Most of the elk in this EMU, and most of the increase in numbers, have been in HD 270 (Figure 1). The lower count in HD 270 in 2004 was because of early spring migration. The elk population likely did not decline to the degree indicated by the 2004 aerial survey results.

Few elk winter in HD 321 due to its high elevation and snow accumulation. Elk that summer north of Highway 43 migrate into the East Fork of the Bitterroot in HD 270 to spend winter. Those that summer south of Highway 43 in HD 321 typically migrate to Idaho during fall and early winter and are usually available to Montana hunters for only part of the hunting season. Post-season survey numbers in this EMU presented here (Figure 1) do not include elk that winter in Idaho. Based on summer flights in HD 321 south of Highway 43, where 909 elk were counted in 1999 and 852 elk in 2002, we estimate that about 1,000 elk migrate to Idaho.

Population classification ratios observed in late winter and spring 2002 were 37 calves:100 cows and 7 bulls:100 cows in HD 211 and 31 calves:100 cows and 11 bulls:100 cows in HD 270.

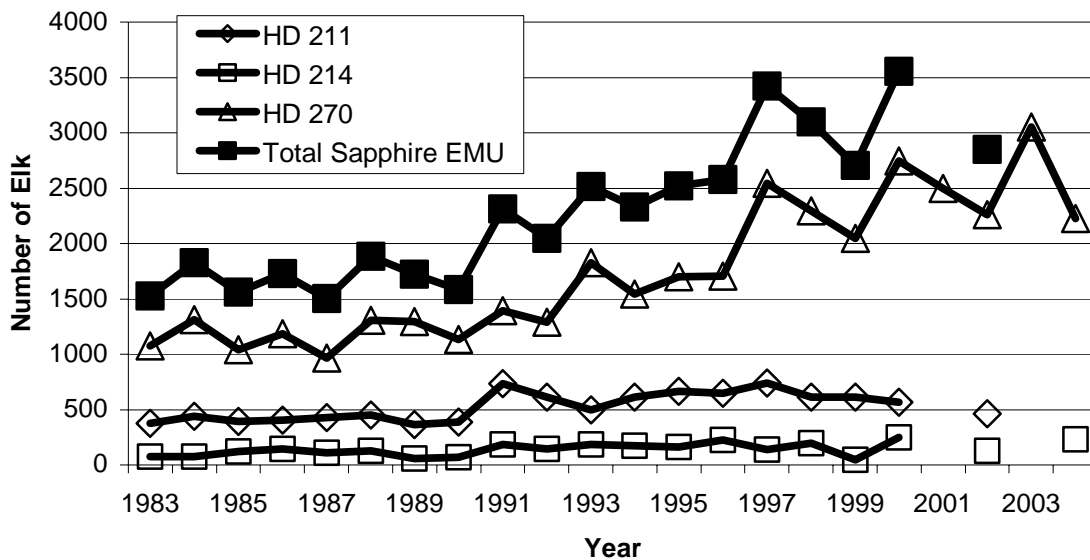


Figure 1. Number of elk observed during post-season fixed-wing flights in HDs 211, 214, and 270 of the Sapphire EMU, 1983-2004.

Recreation Provided: During 1999-2001, this EMU provided an average of 39,701 days of hunting recreation for 6,472 hunters annually with about 77% of hunters and hunter days in HDs 270 and 321. There is no estimate of the proportion of hunters and hunter days in HD 321 that occurs south of Highway 43.

There are opportunities to view elk on winter ranges in the Sula Basin and in Rock Creek during winter and spring. Viewing and photography make up the majority of elk-related recreation during summer.

Current Annual Elk Harvest: Average annual harvest during 1999-2001 was 967 elk made up of 550 bulls (57%) and 417 (43%) antlerless elk. During that period, 25% of harvested bulls had at least one 6-point antler and 27% of bulls were killed during the first week of the general

season. The number of antlerless elk killed using A-7 licenses and permits averaged 23% (range, 8-53%) of the number of licenses issued. Elk harvest in HD 270 greatly increases during years when severe weather causes elk to move out of the Anaconda-Pintler Wilderness during hunting season. When these conditions occur, the harvest from HD 270 can comprise about 50% of the harvest in the entire EMU. There is no estimate of what proportion of the harvest in HD 321 comes from south of Highway 43.

Accomplishments: We have increased the opportunity to harvest antlerless elk (number of permits) by 28% compared to 1992.

FWP has assisted landowners who allow public hunting and have chronic elk damage problems with temporary and permanent hay stackyards, fencing materials, herding and occasionally kill permits. Early or late hunts have been applied as needed to harvest elk on private land at times of the year when damage is occurring.

In November of 1996, the Lost Creek Land Exchange took place when the President signed the Omnibus Parks and Public Lands Management Act of 1996. This exchange between R-Y Timber Company and the USFS resulted in the conveyance of some USFS land to R-Y Timber, as well as the offering of timber-only resources from some USFS land (the management of which remains under the USFS). In turn, the USFS acquired 3,062 acres of land from R-Y Timber in the Storm and Twin Lakes area in HD 214.

In August of 2003, more than 32,000 acres of private lands came under public ownership west of Anaconda, of which more than 29,500 acres are in this EMU. Known as the Watershed Project, this was the largest land acquisition effort by the Rocky Mountain Elk Foundation (RMEF) to date. The RMEF acquired the watershed land from R-Y Timber and then sold the lands to FWP and the USFS. In this EMU, FWP obtained about 9,000 acres (Garrity Mountain WMA), while the USFS obtained more than 20,000 acres in HD 214. The funds for this purchase primarily came from the Montana Natural Resource Damage Program and federally controlled Land and Water Conservation funds.

The Hirshey conservation easements totaling 8,870 acres in HD 321 were completed in 1997.

Management Challenges: Private land elk “refuges” in HD 270 include the lower Rye Creek drainage north to Tabor Mountain and French Basin in the Schoolmarm Lake vicinity. The percent of the elk population harbored on these lands varies with the weather and timing of elk migrations. During spring 2002 aerial survey, 46% of elk observed in HD 270 were on private land. Private land in the lower portions of the Middle and East Forks of Rock Creek is another “refuge” area for elk. This refuge situation is also dependent on weather, but has been less of a problem in recent years. Elk “refuges” created by private land closed to hunting attract and concentrate elk, allow elk populations to grow, and limit hunter opportunity. Thus we have more elk, yet less opportunity for harvest and population management.

In summer, 90% of elk observed on flights in the south half of HD 321 are on private land. This has resulted in game damage complaints during summer.

Wolves restored to Yellowstone National Park and central Idaho in 1995 have since become established in this EMU. Currently there are 4 known packs within the Sapphire EMU. Wolves may have some impact on elk management decisions, but the kind and degree of impact is unknown at this time.

Population Monitoring: Fixed-wing aerial surveys are conducted during winter or the spring-green-up period in HDs 211, 214, and 270. Total numbers and sex and age classifications are recorded during flights. Fixed-wing aerial surveys are conducted during summer in HD 321 and total numbers and sex/age classifications are recorded.

SUMMARY OF PUBLIC COMMENT

In 1992, public comment indicated support for maintaining the current management goal of providing a diversity of hunting experiences and harvest opportunities. There was also interest in managing for more mature bulls in the Bitterroot portion of the unit through additional road closures and more restrictive hunting regulations. Comments opposing additional road closures were also received. The public voiced strong support for establishing cooperative programs with public and private land managers to maintain and improve elk security throughout the unit.

There has been limited, but generally positive response to drafts of the current EMU plan among those contacted. There is support for improving conditions on the new Garrity Mountain WMA to support more elk.

Based on a proposal made by the Ravalli County Fish and Wildlife Association that recommended an increase in elk numbers above FWP draft population objectives for the Bitterroot hunting districts (HDs 240, 250, 204, 261, 270), a Bitterroot Elk Management Working Group has been established in an attempt to reach consensus on elk population objectives in the Bitterroot. The group consists of representatives from the local business community, the Ravalli Co. Fish and Wildlife Assoc., Montana Bow Hunters Assoc., a local outfitter, landowners, Bitterroot National Forest, Safari Club International, and a timber consultant. Among other things, the group will discuss impacts on elk habitat from the extensive 2000 fires, explore innovative ways to minimize elk damage to agricultural producers, discuss the potential impact of predators (including wolves) on elk populations, and attempt to reach consensus on long term population management goals for the Bitterroot hunting districts.

Because of the fires of 2000 and their effects on elk habitat, there is interest in allowing elk populations to increase above the draft FWP objectives in HD 270. Some believe that FWP should reduce harvest of antlerless elk and work with landowners on a site-specific basis if game damage occurs rather than implementing more liberal regulations. There was also concern about the potential impact of wolf predation on elk and hunting opportunity.

MANAGEMENT GOAL

Manage the elk population in a healthy condition and cooperate in the management of elk habitat to provide a diversity of hunting experiences.

HABITAT OBJECTIVES

- 1) Participate in cooperative programs that encourage public and private land managers to maintain 1.2 million acres of occupied elk habitat.
- 2) Maintain elk security so that elk harvest is distributed throughout the hunting season with no more than 40% of the bull harvest occurring during the first week of the general season. This objective may be exceeded in HD 321 because many elk migrate to Idaho during the hunting season, concentrating harvest during the early portion of the season.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to the Bitterroot and Beaverhead-Deerlodge National Forests that helps in the planning and design of timber sale cutting units and road management systems to maintain elk security areas and secure travel corridors. This is particularly important in remaining roadless areas, and on and adjacent to winter ranges.
- Cooperate with DNRC in managing the French Basin walk-in area to enhance elk security on winter range.
- Work with private landowners, particularly in the Rye Creek and French Basin areas, to maintain and increase hunter access that will facilitate population management.

GAME DAMAGE STRATEGIES

Distribution of the elk population in this EMU varies with winter severity. This EMU currently has significant acreage of private land where owners do not allow public hunting, thus elk concentrate on these properties during the hunting season, increasing game damage complaints on adjacent lands after the season.

In the past, elk damage problems have occurred southwest of Anaconda, in the Sula Basin, and west of Jackson. If problems recur, harvest pressure will be directed to these subpopulations to reduce numbers.

FWP will:

- Maintain observed elk numbers within plan objectives while targeting local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning for landowners who allow adequate public hunting access.
- Cooperate with public land managers to change activities/conditions on public lands that contribute to redistribution of wildlife onto private lands.

- Evaluate the number of antlerless permits allocated for each hunting district (and portions of hunting district) and redistribute as necessary to achieve desired harvest.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider limited access for at least certain groups of hunters (e.g. youth, disabled).
- Encourage dialogue between landowners with differing land management strategies.

ACCESS STRATEGIES

Public access in this EMU is high due to significant amounts of public land and landowner cooperation. However, the increased illegal use of OHVs has diminished wildlife security and habitat integrity. Also, some private lands are closed to hunting, resulting in depredations on adjacent lands.

FWP will:

- Assist landowners with hunter management through establishment of walk-in areas or, where appropriate, block management agreements.
- Identify desirable access points to public lands and provide recommendations to the appropriate land management authority (Access Montana Program).
- Work with public land agencies to reduce illegal OHV travel on public lands.
- Pursue conservation easements on important elk ranges found on private land.
- Explore creative means to encourage landowners who currently do not allow hunting to open their lands to increase public access.

POPULATION OBJECTIVES

Elk population objectives may change if the newly established Bitterroot Elk Management Working Group can reach a consensus.

- 1) Maintain the number of elk observed during post-season aerial trend surveys within 20% of 3,400 elk (2,720 – 4,080) distributed as 2,600 elk (2,080-3,120) in HD 270, 600 elk (480-720) in HD 211, and 200 elk (160-240) in HD 214. Establishment of the objective of 3,400 observed elk in this EMU was determined by level of landowner tolerance.
- 2) Maintain bull:100 cow ratios observed during post-season aerial trend surveys of at least 15:100 in HD 270 and at least 10:100 in HDs 211 and 214 OR, bulls are at least 10% of all observed elk in HD 270 and bulls are at least 7% of all observed elk in HDs 211 and 214.
- 3) Maintain at least 15% of harvested bulls 4.5-years-old or older and at least 15% of harvested bulls with 6-points on at least one antler as monitored at the Darby Check Station.

POPULATION MANAGEMENT STRATEGIES

REGULATION PACKAGES

Six-week brow-tined bull/antlerless archery regulation in HD 270 and six-week either-sex archery regulation in HDs 211, 214, and 321, EXCEPT, see Restrictive Regulation for Antlered elk.

HDs 211, 214, and 270:

Antlerless:

The Standard Regulation is: limited antlerless permits and A-7 licenses sufficient to achieve an annual harvest of 325 to 485 antlerless elk (depending on the number of elk observed during post-season surveys). Assuming an average success rate of 23% for the number of licenses issued this means issuing a combination of 1,410 to 2,110 A-7 licenses and antlerless permits.

The Standard Regulation will be recommended if: the number of elk observed during post-season aerial trend surveys is between 2,700-4,080 and calf:cow ratios are at least 25 calves:100 cows.

The Liberal Regulation is: **1.)** increased antlerless permits and A-7 licenses in combination to more than 2,110. **2.)** brow-tined bull/antlerless (HD 270) or either-sex (HDs 211 and 214) regulation for a portion (up to the full 5-weeks) of the general season AND, singly or in combination, A-7 licenses, antlerless permits, and A-9/B-12 antlerless licenses (B-tags).

Liberal Regulation **1.) (above)** will be recommended if: the number of elk observed during post-season aerial trend surveys is more than 4,080 (more than 720 in HD 211, more than 240 in HD 214, and more than 3,120 in HD 270).

Liberal Regulation **2.) (above)** will be recommended if: after 2 years of application of Liberal Regulation 1.) (above), the number of elk observed on post-season aerial trend surveys remains more than 4,080 (more than 720 in HD 211, more than 240 in HD 214, and more than 3,120 in HD 270).

A Liberal Regulation will be maintained until the number of elk counted during post-season aerial surveys is reduced to 3,400, at which time the Standard Regulation will be recommended.

The Restrictive Regulation is: no antlerless harvest if the most rapid population increase is desired, or limited antlerless permits and A-7 licenses to result in an annual harvest of less than 325 antlerless elk. This means fewer than 1,410 A-7 licenses or antlerless permits combined (assuming a harvest of 23% of the number issued).

The Restrictive Regulation will be recommended if: the number of elk observed during post-season aerial trend surveys is less than 2,700 (less than 480 in HD 211, less than 160 in HD 214, and less than 2,080 in HD 270) for 2 consecutive years OR, the number of elk observed is less than 3,400 (objective) (less than 600 in HD211, less than 200 in HD 214, and less than 2,600 in HD 270) AND, calf:100 cow ratios are less than 25 calves:100 cows for 2 successive years.

A Restrictive Regulation will be maintained until the number of elk counted during post-season aerial surveys has increased to 3,400, at which time the Standard Regulation will be recommended.

Antlered:

The Standard Regulation is: 5-week general season any bull regulation in HDs 211 and 214 and 5-week general season brow-tined bull regulation in HD 270.

The Standard Regulation will be recommended if: bull:cow ratios observed during post-season aerial surveys are at least 10:100 or bulls are at least 7% of all observed elk in HDs 211 and 214 and the bull:100 cow ratio is at least 15:100 or bulls are at least 10% of all observed elk in HD 270, AND, at least 15% of harvested bulls are 4.5-years-old or older AND at least 15% of harvested bulls have 6 points or more on at least one antler as recorded at the Darby Check Station.

The Restrictive Regulation is: HDs 211 and 214 – **1.)** 5-week general season brow-tined bull regulation OR, ALL HDs **2.)** unlimited brow-tined bull permits **3.)** limited antlered bull permits. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED AND LIMITED PERMITS.

1.) A brow-tined bull regulation will be recommended in HDs 211 and 214 if: bull:100 cow ratios observed during post-season aerial trend surveys are less than 10 bulls:100 cows (or 7% bulls in the population) for 2 consecutive years OR, less than 15% of harvested bulls are 4.5-years-old or older and less than 10% of harvested bulls have 6 points or more on at least one antler as recorded at the Darby Check Station for 2 consecutive years.

2.) unlimited brow-tined bull permits will be recommended if: in HDs 211 and 214, bull:100 cow ratios observed during post-season aerial trend surveys remain less than 10 bulls:100 cows (or 7% bulls in the population) after 2 consecutive years of a brow-tined bull regulations OR, in HD 270, less than 15 bulls:100 cows (or 10% bulls in the population) are observed for 2 successive years.

3.) limited antlered bull permits will be recommended if: after 2 consecutive years of unlimited brow-tined bull permit regulations, bull:100 cow ratios observed during post-season aerial trend surveys remain less than 10 bulls:100 cows (or 7% bulls in the population) in HDs 211 and 214 or less than 15 bulls:100 cows (or 10% bulls in the population) in HD 270.

HD 321:

Elk generally do not spend winter in HD 321. Of elk in HD 321 during summer and fall, about half winter in HD 270 and half in Idaho. Regulation Package changes for antlerless elk in HD 321 will occur when changes among Standard, Liberal, and Restrictive Packages are implemented in HD 270.

Six-week either-sex archery regulation EXCEPT, see Liberal Antlerless and Restrictive Antlered Regulations.

Antlerless:

The Standard Regulation is: 1.) limited either-sex permits AND, limited numbers of A-9/B-12 antlerless licenses (B-tags) may also be recommended OR 2.) 1-2 weeks general season either-sex regulations AND, limited numbers of A-9/B-12 antlerless licenses (B-tags) may also be recommended.

The Standard regulation will be recommended if: HD 270 is in a Standard Regulation Package.

The Liberal Regulation is: 1.) 4-5 weeks general season either-sex regulations AND, limited A-9/B-12 antlerless licenses (B-tags) may also be recommended OR, 2.) 5-weeks antlerless ONLY general season AND, limited A-9/B-12 licenses (B-tags) may also be recommended. Archery hunting would also be antlerless ONLY.

Either of the Liberal Regulation options may be recommended if: HD 270 is in a Liberal Regulation Package.

The Restrictive Regulation is: limited either-sex permits.

The Restrictive regulation will be recommended if: HD 270 is in a Restrictive Regulation Package.

Antlered:

The Standard Regulation is: 5-week general season antlered bull regulations.

The Standard Regulation will be recommended if: HD 270 is in a Standard Regulation Package for antlered elk.

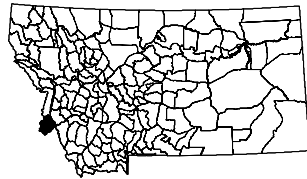
The Restrictive Regulation is: 1.) 5-week brow-tined bull regulation OR; 2.) unlimited brow-tined bull permits; OR 3.) limited antlered bull permits. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED AND LIMITED PERMITS.

A 5-week brow-tined bull regulation will be recommended if: HDs 211, 214, and 270 all have brow-tined bull regulations.

Unlimited brow-tined bull permits will be recommended if: HD 270 is in a Restrictive Regulation Package for antlered elk.

Limited antlered bull permits will be recommended if: after 2 years of unlimited brow-tined bull permits, objectives for bulls remain unmet.

WEST FORK EMU
(Hunting District 250)



Description: The West Fork EMU is a new EMU, separated from the area designated as the Sapphire EMU in 1992. This 707-square-mile EMU encompasses the West Fork of the Bitterroot River drainage. The Idaho state line bounds the west and south sides, Tin Cup Creek the north side, and U.S. Highway 93 is the east boundary. The USDA-Forest Service-Bitterroot National Forest (USFS-BNF) administers 94% of this EMU and the northwest portion is in the Selway-Bitterroot Wilderness Area. Just 5% of this EMU is private land. About half of the private land is near U.S. Highway 93 in the northeast part of the EMU and the remainder is in parcels along the West Fork of the Bitterroot and Nez Perce Creek.

Thirty-five percent or 250 square miles of the West Fork EMU is elk winter range with 14% of winter range private, and 86% public land. However, elk use private land winter range proportionately more than they do public land winter range. Thirty nine percent of elk observed on the spring 2002 survey were on the 14% of winter range that is privately owned.

Elk security is good to excellent because of the ruggedness of terrain, road closures, and roadless and wilderness areas.

Public Access: About half of this EMU is moderately roaded, offering good public access. Most roads are within 5 linear miles of the West Fork of the Bitterroot River. Beyond 5 miles of the river and to the Idaho border there are some relatively large blocks of roadless security areas

Elk Populations: Number of elk observed during spring fixed-wing aircraft flights in HD 250 averaged 497 from 1965 to 1983 (Figure 1). The elk population began increasing after about 1983, coinciding with more conservative antlerless harvests, and reached a high count of 1,703 in 2003. During 1999-2003, calf:100 cow and bull:100 cow ratios averaged 24:100 and 12:100, respectively.

The 1992 Elk Plan called for a 20-30% increase in observed elk in this EMU. Using the 1987-1991 average of 868 observed elk as a starting point, this objective would have

been met at 1,042-1,128 observed elk. The 1992 objective for numbers of elk observed was exceeded in 8 of 9 post-season surveys since 1994. Numbers of elk observed during post-season aerial trend surveys in 2003 were 51% over the objective of 1992.

Recreation Provided: This EMU provided an average of 10,574 days of hunting recreation for 1,519 hunters annually during 1999-2001. Viewing and photography make up the majority of elk-related recreation during summer.

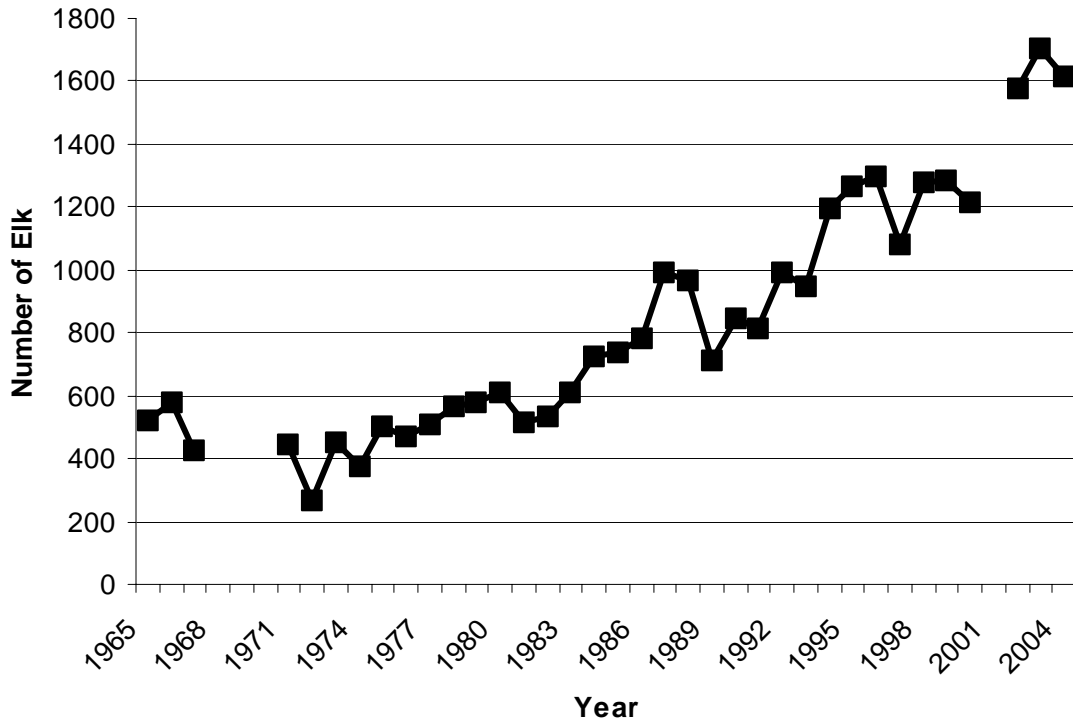


Figure 1. Numbers of elk observed during post-season fixed-wing aerial trend surveys in HD 250, 1965-2004.

Current Annual Elk Harvest: Average annual harvest during 1999-2001 was 130 elk, comprised of 84 (65%) bulls and 46 (35%) antlerless elk. Thirty five percent of bulls had at least one 6-point antler and 29% were harvested the first week of the general season. The harvest of antlerless elk during the same period averaged 50% (range 35-61%) of the number of A-7 licenses issued.

Accomplishments: FWP has assisted landowners who allow public hunting and have chronic elk damage problems with temporary and permanent hay stackyards, fencing materials, herding, and occasionally, kill permits.

The area around Bare Cone Ridge, previously closed to antlerless harvest, was opened for the 2003 season.

Management Challenges: Housing development on elk winter range is a management challenge in this EMU. For about the last 15 years Ravalli County has been one of the counties with greatest rate of increase in human population in Montana. Housing development on elk winter range affects elk management in 3 ways: 1) Physical loss of winter range including areas outside of home sites but within sight, sound and smell of people and the range of domestic pets, especially dogs; 2) Landowners may not allow hunting or access through their property thus limiting the ability to get an adequate harvest and; 3) The “refuge effect” created by limited access or harvest can concentrate elk and allow them to increase in number. This in turn can increase elk depredation on the immediate and surrounding properties.

Wolves restored to Yellowstone National Park and central Idaho in 1995 have since become established in this EMU. Currently, the Painted Rocks pack is the only pack known in this EMU. Wolves may have some impact on elk management in this EMU, but the kind and degree of impact is unknown at this time.

Population Monitoring: Annual fixed-wing aerial trend counts are conducted during early spring. Elk observed are recorded as bulls, cows, and calves to determine sex and age ratios.

SUMMARY OF PUBLIC COMMENT

In 1992, public comment indicated support for maintaining the current management goal of providing a diversity of hunting experiences and harvest opportunities. There was also interest in managing for more mature bulls in the Bitterroot portion of the unit, through additional road closures and more restrictive hunting regulations. Comments opposing additional road closures were also received. The public voiced strong support for establishing cooperative programs with public and private land managers to maintain and improve elk security throughout the unit.

Based on a proposal made by the Ravalli County Fish and Wildlife Association that recommended an increase in elk numbers above FWP draft population objectives for the Bitterroot hunting districts (HDs 240, 250, 204, 261, 270), a Bitterroot Elk Management Working Group has been established in an attempt to reach consensus on elk population objectives in the Bitterroot. The group consists of representatives from the local business community, the Ravalli Co. Fish and Wildlife Assoc., Montana Bow Hunters Assoc., a local outfitter, landowners, Bitterroot National Forest, Safari Club International, and a timber consultant. Among other things, the group will discuss impacts on elk habitat from the extensive 2000 fires, explore innovative ways to minimize elk damage to agricultural producers, discuss the potential impact of predators (including wolves) on elk populations, and attempt to reach consensus on long term population management goals for the Bitterroot hunting districts.

Because of the fires of 2000 and their effects on elk habitat, there is interest in allowing elk populations to increase above the draft FWP objectives in HD 270. Some believe that FWP should reduce harvest of antlerless elk and work with landowners on a site-specific

basis if game damage occurs rather than implementing more liberal regulations. There was also concern about the potential impact of wolf predation on elk and hunting opportunity.

MANAGEMENT GOAL

Manage the elk population in a healthy condition at 1,400 elk observed during spring aerial surveys and cooperate with public and private landowners in the management of elk habitat with emphasis on maintaining a diverse bull age structure.

HABITAT OBJECTIVES

- 1) Participate in cooperative programs with public and private land managers that will maintain 452,506 acres of occupied elk habitat.
- 2) Maintain elk security so that elk harvest is distributed throughout the hunting season with no more than 30% of the bull harvest occurring during the first week of the general season.
- 3) Maintain and enhance the current amount of elk winter range.

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to county planning boards and commissions regarding impacts of housing development on important elk winter range. If limiting development is not possible, then provide input to mitigate the effects of development.
- Work toward conserving existing elk winter range through conservation easements.
- Provide technical assistance to the Bitterroot National Forest in the planning and design of timber sales and road management to maintain elk security areas and secure travel corridors. This is particularly important in remaining roadless areas and on and near winter ranges.

GAME DAMAGE STRATEGIES

FWP will:

- Maintain observed elk numbers within plan objectives while targeting local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning for landowners who allow adequate public hunting access.
- Cooperate with public land managers to change activities/conditions on public lands that contribute to redistribution of wildlife onto private lands.
- Evaluate the number of A-7 licenses or antlerless permits allocated for the hunting district or portions thereof and redistribute as necessary to achieve desired harvest.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider limited access for at least certain groups of hunters (e.g. youth, disabled).

- Encourage dialogue between landowners with differing land management strategies.

ACCESS STRATEGIES

FWP will:

- Assist landowners with hunter management through establishment of walk-in areas or, where appropriate, actively pursue block management agreements.
- Identify desirable access points to public lands and provide recommendations to the appropriate land management authority (Access Montana Program).
- Pursue conservation easements on important elk ranges found on private land.
- Explore creative means to encourage landowners who currently do not allow hunting to open their lands to increase public access.

POPULATION OBJECTIVES

Elk population objectives may change if the newly established Bitterroot Elk Management Working Group can reach a consensus.

- 1) Maintain numbers of elk observed during post-season aerial trend surveys within 20% of 1,400 elk (1,120-1,680 elk).
- 2) Maintain at least 10 bulls:100 cows observed during post-season aerial trend surveys.
- 3) Maintain an annual bull harvest composed of 100% BTBs, including at least 15% with 6 points or more on at least 1 antler.

POPULATION MANAGEMENT STRATEGIES

REGULATION PACKAGES

Six-week brow-tined bull/antlerless archery regulation EXCEPT, see Restrictive Regulation for antlered elk.

Antlerless:

The Standard Regulation is: sufficient antlerless permits and A-7 licenses to achieve an annual harvest of 100 to 175 antlerless elk as number of elk observed vary within the objective range. Based on past harvest success of 50% of the number of licenses issued, this means issuing 200 to 350 A-7 licenses.

The Standard Regulation will be recommended if: the number of elk counted during post-season aerial trend surveys is 1,120 – 1,680 AND, calf:100 cow ratios are at least 25 calves:100 cows.

The Liberal Regulation is: **1.)** more than 350 A-7 licenses or antlerless permits or a combination of permits and specially directed A-7 licenses OR, **2.)** brow-tined bull/antlerless

regulation for a portion (up to the full 5-weeks) of the general season AND, singly or in combination, A-7 licenses, antlerless permits, and A-9/B-12 antlerless licenses (B-tags).

Liberal Regulation **1.) (above)** will be recommended if: the number of elk observed on post-season aerial trend surveys is more than 1,680 OR, the number of elk observed is 1,120-1,680 AND, calf:100 cow ratios are more than 30 calves:100 cows for 2 consecutive years.

Liberal Regulation **2.) (above)** will be recommended if: after 2 years of application of Liberal Regulation 1.) (above), the number of elk observed on post-season aerial trend surveys remains more than 1,680.

A Liberal Regulation will be maintained until the number of elk counted during post-season aerial surveys is reduced to 1,400, at which time the Standard Regulation will be recommended.

The Restrictive Regulation is: no antlerless harvest if the most rapid population increase is desired OR, limited A-7 licenses or antlerless permits to result in an annual harvest of less than 100 antlerless elk (fewer than 200 licenses or permits).

The Restrictive Regulation will be recommended if: the number of elk observed during post-season aerial trend surveys is less than 1,120 for 2 consecutive years OR, the number of elk observed is less than 1,400 AND, calf:100 cow ratios are less than 25 calves:100 cows for 2 successive years.

A Restrictive Regulation will be maintained until the number of elk counted during post-season aerial surveys has increased to 1,400, at which time the Standard Regulation will be recommended.

Antlered:

The Standard Regulation is: 5-week general season brow-tined bull regulation.

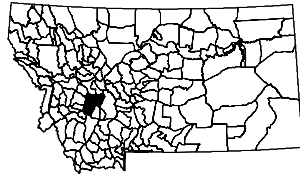
The Standard Regulation will be recommended if: the bull:100 cow ratio observed during post-season aerial trend surveys is at least 10 bulls:100 cows AND, at least 15% of harvested bulls have 6 points or more on at least one antler.

The Restrictive Regulation is: **1.)** unlimited brow-tined bull permits. **2.)** limited antlered bull permits. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED AND LIMITED PERMITS.

1.) Unlimited brow-tined bull permits will be recommended if: the bull:100 cow ratio observed during post-season aerial trend surveys is less than 10 bulls:100 cows for 2 consecutive years OR, less than 15% of harvested bulls have 6 points or more on at least one antler for 2 consecutive years.

2.) Limited antlered bull permits will be recommended if the bull:100 cow ratio remains below 10 bulls :100 cows OR, less than 15% of harvested bulls have 6 points or more on at least one antler after 2 years of application of unlimited permits.

DEER LODGE EMU
(Hunting Districts 215, 318, and 335)



Description: This 1,086-square-mile EMU is bounded by Interstate 15 and U.S. Highway 12. The communities of Helena, Boulder, Butte and Deer Lodge occur along the periphery of the EMU. The USDA-Forest Service (USFS) - Beaverhead-Deerlodge (BDNF) and Helena National Forests (HNF) administer about 45% of the unit's land base. The remaining lands are managed by the USDI – Bureau of Land Management (BLM) or Montana Department of Natural Resources and Conservation (DNRC), or are in private ownership. Approximately 92% of the EMU is elk habitat.

Summer range for elk occurs almost entirely on public lands. Fall use areas also are generally on public lands unless weather induces elk to move to private land winter ranges at lower elevations. As much as 70% of the winter range currently used occurs on private lands.

Public Access: Public access to public land is adequate. Four large landowners currently do not allow public access in HD 215, but there are no significant agricultural acreages that are closed to hunting in HDs 318 or 335. Motorized travel on public lands is regulated through National Forest and BLM travel plans. Past off-road motorized travel has resulted in pioneering of travel routes and thus reduced habitat security and habitat effectiveness. Travel plans for the HNF, BDNF, and the BLM are in various stages of revision, and will likely restrict motorized travel to designated routes. On public land, approximately 96% of elk habitat occurs within one mile of lands that are open to motorized travel.

Elk Populations: Typically, about 2,000 elk, representing 8 reasonably distinct elk herd units were counted in this EMU. The numbers of elk observed declined approximately 10% from an average of 1,845 elk in the EMU during 1993-1996 to an average of 1,663 during 1997-2000, and increased to 1,879 in 2003 (Figure 1). This is a density of approximately 1.8 observed elk per square mile of elk habitat. Portions of the EMU are experiencing local abundance and game damage complaints, largely the result of private land refugia where hunting is not allowed. The overall bull:100 cow ratio is approximately 8:100, ranging from 5:100 in HD 215 to 11:100 in HD 318 to 13:100 in

HD 335. The recent observed bull:100 cow ratio is a decline from approximately 15 bulls:100 cows for the EMU during 1999-2001.

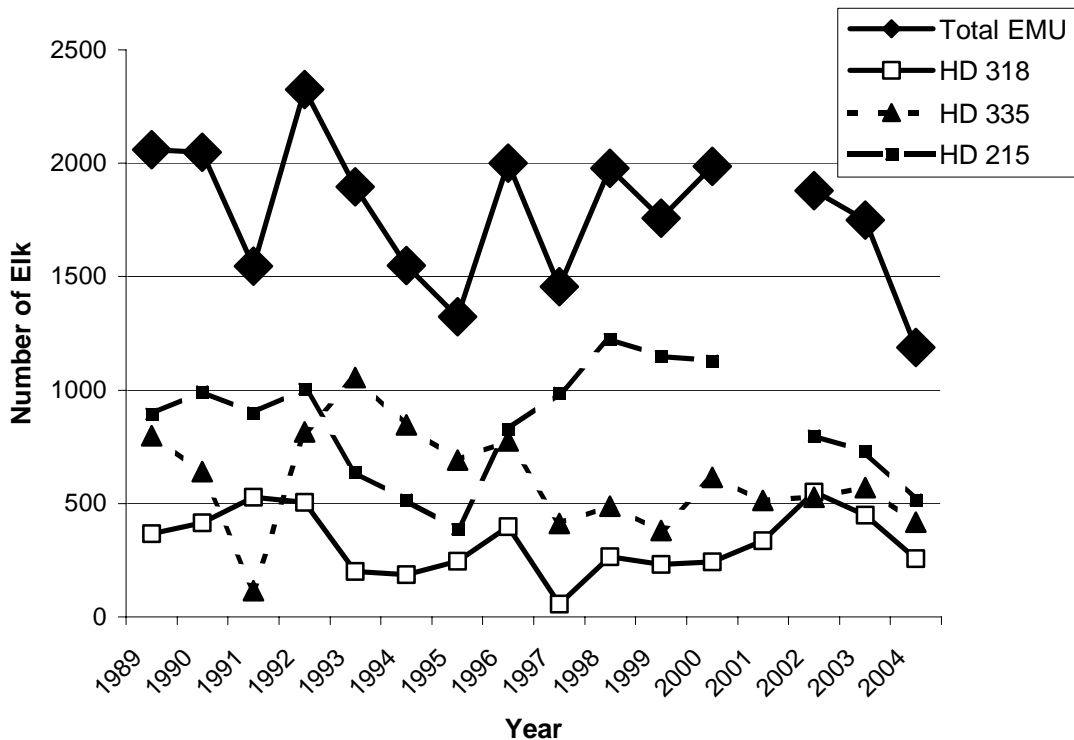


Figure 1. Number of elk observed during post-season aerial trend surveys in HDs 215, 318, and 335, 1989-2004.

Recreation Provided: In 2001 the EMU provided 26,225 days of hunting recreation to 3,655 hunters annually. This represented a decline in hunter participation of approximately 11% since 1996. Hunter days afield have also declined by about 7%. These figures reflect a downward trend compared to a 1992 to 1996 comparison when hunter numbers increased 5%, and recreation days increased 10%. Summer and winter recreational opportunities include photography and wildlife viewing. Wildlife viewing is an important aspect of winter recreational use in this EMU, particularly in HD 335 along U.S. Highway 12, and the Spring Creek Road where wintering elk can be observed, in HD 318 where elk can be observed from the Boulder River Road, and south of U.S. Highway 12 from Elliston to Garrison in HD 215. Antler gathering is becoming increasingly popular, but has potential stress-related consequences to herds if the activity is conducted during late winter or spring.

Current Annual Elk Harvest: Total elk harvest has declined 14% from the mid 1990s (698) to the average for the 3-year period 1999-2001 (603). However, approximately 19% more bull elk were harvested during 1999-2001 (average of 243) than 7 years ago (average bull harvest of 198), despite a decline of 16% in number of elk observed during post-season aerial surveys during that period. Harvest of bull elk by the end of the first

week of the general season is exceeding the 40% maximum objective (average 42.2% -- with highs of 46% in HD 215, 52% in HD 318, and 60% in HD 335).

Accomplishments: Six ranches in HD 215 totaling more than 25,500 acres are enrolled in the Block Management Program. Also enrolled in the Program are 3 ranches in HD 318 (9,000 acres) and 2 ranches in HD 335 (5,200 acres), for a total of approximately 39,700 acres in the Block Management Program for the EMU.

Management Challenges: Winter ranges within this EMU may be at risk because of housing developments and mining activity. Extensive subdivision developments in HD 335 and to a lesser degree in HD 318 and HD 215, may create accessory impacts from adjacent recreation uses, uncontrolled pets, and removal of wildlife that is causing “damage” to property owners, as well as make hunting access and population management more difficult. The proposed expansion of the Apollo Gold (Montana Tunnels) Mine in HD 335 will require an evaluation of possible impact to public and private land winter ranges. Recreational use of snowmobiles throughout HD 318 on the BDNF (and to some degree in HD 335 on the HNF) may be contributing to redistribution of wintering elk from public to private lands, that results in game damage complaints and lower landowner tolerance for elk.

Although hunting opportunities are good and restrictions are relatively minimal in HD 318 and HD 335, four large parcels of private land are closed to hunting in HD 215. These closures create local concentrations of elk that can and do affect adjacent ranches, including those that allow hunting. Hunting is not restricted on any significant parcels of agricultural land in HDs 318 and 335.

Extensive motorized use (full sized vehicles, OHVs, motorcycles) of public lands via USFS and BLM system roads and illegal off-road use may be encouraging a redistribution of elk from public lands onto private properties.

Individual wolves have been reported in the EMU since the late 1980s, and pack activity has been documented in this EMU since 1994. The establishment of a wolf pack or packs in this EMU may influence future elk populations, their distribution and management.

Population Monitoring: Elk trend surveys are generally conducted between January and March, and all elk winter range habitat (adjustments are made to accommodate mild weather years) is surveyed from the air in each hunting district. Total numbers, sex and age class, and location data are recorded. Data are recorded in database files and a report is written for each hunting district surveyed.

SUMMARY OF PUBLIC COMMENT

Public comment encouraged continued management of elk at reasonably stable levels with emphasis on cooperation between FWP and public and private land managers in the management of elk habitats. Some landowners felt that elk numbers were too high in HD

215 and portions of HDs 318 and 335, while hunters expressed general concern about low elk numbers throughout the EMU. Ranchers and some hunters have expressed concern about the presence of wolves. Hunters have expressed concerns about limited bull numbers; some have requested implementation of spike seasons with permits for older bulls. Shorter elk seasons are not favored. Reduced vehicle access is generally supported to promote fair-chase hunting. Some people have expressed concern over deteriorating elk habitat on public lands, particularly in light of concurrently diminishing habitat on private lands as they undergo changes due to development.

MANAGEMENT GOAL

Manage all components of the elk population in a healthy condition, at levels that meet plan objectives, and cooperate in the management of elk habitat to provide healthy habitats, and fair chase hunting experiences.

HABITAT OBJECTIVES

- 1) Develop cooperative programs that encourage public and private land managers to maintain 639,360 acres of productive and secure elk habitat.
- 2) Maintain elk security so that the elk harvest is distributed throughout the hunting season, with no more than 40% of the harvested bulls taken during the first week of the general season (a reflection of bull elk vulnerability).

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to Helena and Beaverhead-Deerlodge National Forest and the BLM land managers in programs designed to improve overall habitat effectiveness, decrease elk vulnerability, and improve quality of native forage.
- Identify winter range and cooperate with public land managers to protect, and where possible, enhance winter ranges with travel planning, noxious weed control, grazing management plans, and timber management.
- Provide input on oil, gas, and mineral development plans, and land trades.
- Provide input to public land managers regarding revisions of allotment management plans.
- Encourage retention of all designated and defacto roadless areas to contribute to effective summer ranges and secure fall habitat, thereby helping to minimize displacement of elk onto private property. The Electric Peak, Lazyman, and Jericho Roadless Areas comprise less than 4% of the Deer Lodge EMU. Few such areas exist in this EMU and road construction into these areas should be discouraged.
- Pursue new conservation easements and monitor existing conservation easements on private lands where critical seasonal elk habitats occur.
- Provide technical assistance to land management agencies and county planning boards regarding land use plans and travel management with respect to elk habitat.

- Provide information to and communicate with the public about wildlife habitat through the media, publications, printed materials and personal contacts.
- Provide technical assistance to the HNF, BDNF, and BLM with planning and design of timber sale cutting units and road management systems with emphasis on maintaining elk security areas and secure travel corridors throughout the Little Blackfoot, Tenmile, Prickly Pear, and Boulder River drainages.

GAME DAMAGE STRATEGIES

Elk numbers in the northern portion of HD 215 have increased to levels observed in the early 1990's, resulting in current landowner complaints. Apparent redistribution of elk within the EMU has resulted in more elk being observed in Fred Burr, Jake and O'Neill Creeks, and Helena Gulch, while fewer have been reported in the Hurd Creek, Spotted Dog and Trout Creek drainages. This apparent redistribution could have been related to wolf presence, however this wolf pack is no longer present.

Game damage depends on local conditions, but all hunting districts seasonally experience local game damage. Distribution of the elk population throughout the EMU shifts with varying severity of winters and human activities. For example, elk appear to have shifted their winter use from traditional winter range areas in HD 318 (Berkin Flats) to HD 215 where they are not disturbed by snowmobile use but where they also are not welcome on private lands.

FWP will:

- Maintain observed elk numbers within plan objectives while targeting local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning.
- Work with public land managers to alter human activities that occur on public lands that contribute to redistribution of wildlife onto private lands, and thus contribute to private land depredation.
- Evaluate the number of antlerless permits allocated for each hunting district (and portions of hunting district) and redistribute as necessary to achieve desired harvest in targeted areas.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider access for at least certain groups of hunters (youth, disabled, seniors, graduates of advanced hunter education).
- Encourage dialogue between landowners with differing land management strategies where elk distribution is resulting in depredation to one or more landowners.
- Pursue efforts to increase the carrying capacity for elk of winter ranges on public lands.
- Participate in range improvement projects on public land winter ranges.
- Acquire critical winter ranges through fee title purchases or conservation easements using the Habitat Montana program.

ACCESS STRATEGIES

Access in this EMU is very high due to significant amounts of public land and landowner cooperation (with certain exceptions in HD 215). At the same time, motorized use of public lands has diminished wildlife security and habitat integrity.

FWP will:

- Identify points where access is needed to public lands and provide recommendations to the appropriate land management authority.
- Recommend Designated Route access on public lands.
- Identify additional opportunities for block management projects.
- Pursue conservation easement implementation on important elk ranges.

POPULATION OBJECTIVES

The following objectives reflect approximate current conditions. These objectives have been acceptable to the hunting public as well as landowners within the EMU, with exceptions for local game damage situations where additional pressure is applied to local groups of elk.

- 1) Maintain the number of elk counted during post-season aerial trend surveys within 20% of 2,100 elk. Objectives by hunting district are: HD 215 – 1,000 elk; HD 318 – 500 elk and; HD 335 – 600 elk.
- 2) Maintain bull:100 cow ratios observed during post-season aerial surveys above a minimum of 10 bulls:100 cows.

POPULATION MANAGEMENT STRATEGIES

Elk numbers within the Deer Lodge EMU have been managed through antlerless permits and brow-tined bull regulations. Elk numbers have not exceeded objective and were below objective in 2002.

REGULATION PACKAGES

Six-week brow-tined bull/antlerless archery regulation EXCEPT, see Restrictive Regulation for antlered elk.

Antlerless:

The Standard Regulation is: limited antlerless permits and/or A7 licenses. [The population is at the lower limit of the objective range with 150 antlerless permits in HD 318, 100 antlerless permits and 75 A7 licenses in HD 335, and 525 antlerless permits valid during portions of the season in HD 215.] (limited A-9/B-12 antlerless licenses (B-tags) may also be recommended).

The Standard Regulation will be recommended if: the number of elk observed during post-season aerial surveys is between 20% above and 20% below objective (1,680 – 2,520 elk).

The Liberal Regulation is: brow-tined bull/antlerless regulation for up to 5 weeks of the general hunting season. (Limited A-7 and/or A-9/B-12 antlerless licenses (B-tags) may also be recommended).

The Liberal Regulation will be recommended if: the number of elk observed during post-season aerial surveys is more than 20% above objective (more than 2,520 elk).

The Restrictive Regulation is: limited antlerless permits and/or A-7 licenses.

The Restrictive Regulation will be recommended if: the number of elk observed during post-season aerial surveys is 20% or more below the EMU objective for 2 consecutive years.

Antlered:

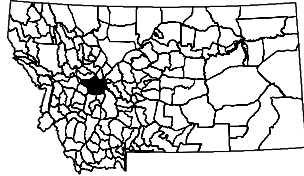
The Standard Regulation is: 5-week general season brow-tined bull regulation.

The Standard Regulation will be recommended if: bull:100 cow ratios observed during post-season aerial trend counts are at least 10 bulls:100 cows.

The Restrictive Regulation is: unlimited brow-tined bull/antlerless permits for a specific hunting district. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED PERMITS.

The Restrictive Regulation will be recommended if: bull:100 cow ratios observed during post-season aerial trend counts are less than 10:100 for 2 consecutive years. If a Restrictive regulation is implemented, and the post-season aerial classification reaches 15 bulls:100 cows or greater for 2 consecutive years, a standard season would again be recommended.

GRANITE BUTTE EMU
(Hunting Districts 284, 293, 339, and 343)



Description: The 1,113-square-mile Granite Butte EMU extends west from the Missouri River to Mineral Hill at the junction of State Route 200 and State Route 141, from Avon to East Helena along U.S. Highway 12 and north on Interstate 15 to the Causeway Road (Route 453) to the Missouri River and north to Holter Dam. About 50% of the unit is USDA – Forest Service (USFS) managed land and 10% is administered by USDI – Bureau of Land Management (BLM). The Continental Divide bisects the unit and includes MacDonald, Priest, Stemple, Flesher, and Rogers passes. The Granite Butte EMU includes Hunting District (HD) 284 (6,080 acres south of State Route 200), a small archery only hunting district along the Blackfoot River and adjacent to the town of Lincoln; HD 293 (304,966 acres) that is west of the Continental Divide extending from Rogers Pass south to MacDonald Pass, south of State Route 200, east of State Route 141 and north of U.S. Highway 12; HD 343 (189,613 acres) that is east of the Continental Divide extending from Flesher Pass to MacDonald Pass, south and west of State Route 279 and north of U.S. Highway 12 and; HD 339 (211,926 acres) that is west of HD 343 extending from near Rogers Pass south to the Lincoln Highway (State Route 279) and east to the Missouri River.

Approximately 79% of the EMU (563,112 acres) is available to elk. Summer range occurs almost entirely on public lands. Areas used during fall are generally also on public lands unless weather induces elk to move to the many private land winter ranges at lower elevations. Seventy to eighty percent of winter range occurs on private lands. In the Granite Butte EMU, the Sleeping Giant Wilderness Areas occurs on BLM lands. Roadless Areas on the Helena National Forest (HNF) include Specimen Creek, Anaconda Hill, Crater Mountain, Ogden Mountain, and Nevada Mountain. Collectively these areas comprise less than 3% of the EMU. Although most of these areas provide quality elk habitat, in many cases the majority or all of the acreage in these roadless areas are within 1 mile of an existing road.

Public Access: The EMU is largely comprised of public lands (60%) and the majority of private lands (with some exceptions in HD 343 and HD 293) are also available to hunters with few or only limited restrictions. Accessibility to public lands is good. Public access is plentiful for other forms of recreation as well. Motorized travel on public lands is regulated through USFS and BLM travel plans. Past off-road motorized travel has resulted in pioneering of travel routes

and thus reduced habitat security and habitat effectiveness. On public land, approximately 97% of elk habitat occurs within one mile of lands that are currently open to motorized travel.

Elk Populations: Numbers of elk counted have declined slightly from recent highs and in 2003, 2,036 elk were distributed among 15 herd units (Figure 1). This is a density of about 2.3 counted elk per square mile of elk habitat. Current trend survey numbers (2,036) are at EMU objective (2,100). Portions of the EMU are experiencing local population abundance and game damage complaints, largely the result of private land refugia where hunting is not allowed. Composition of the population has shifted somewhat with decreases in the bull:100 cow and calf:100 cow ratios in HD 293 and increases in HDs 339 and 343. The average bull:100 cow ratio of 19:100 in 2002-2003 is an increase from 11:100, which was the average of the 3 HDs from 1999-2002.

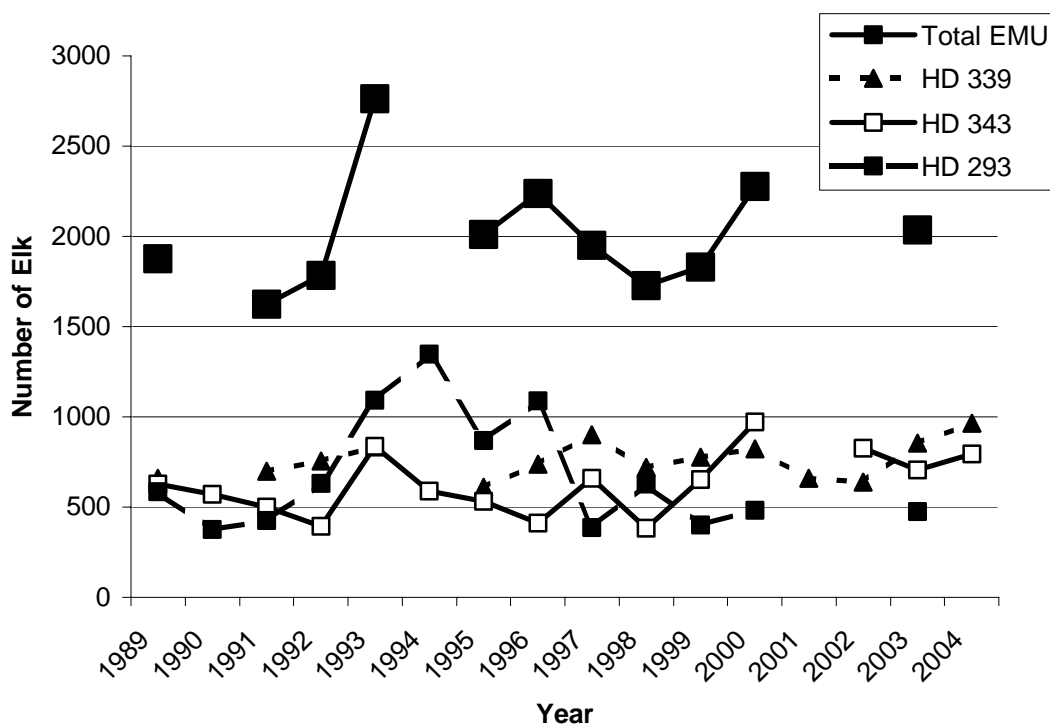


Figure 1. Number of elk observed during post-season aerial trend surveys in HDs 293, 339, and 343 during 1989-2004.

Recreation Provided: Yearlong recreational use of the EMU includes hunting, photography, and wildlife viewing. In 2001, the EMU provided 23,282 days of hunting recreation to 3,731 hunters. This represented a decline in hunter participation of 13% and a decline in hunter days afield of 17% since 1999. Limited backcountry-hunting opportunities occur in the Granite Butte EMU. Wildlife viewing is featured by a popular boat tour along the Missouri River. Elk may be observed from a variety of locations throughout the EMU including Highway 12 near Avon, Highway 141 near Nevada Lake, Highway 200 from Lincoln to Mineral Hill, and Highway 279 in the vicinity of Canyon Creek. Antler gathering is becoming increasingly popular, but has

potential stress-related consequences to herds if the activity is conducted during late winter or spring.

Current Annual Elk Harvest: During 1999-2001, an annual average of 220 bulls and 275 antlerless elk were harvested in the EMU. The percent of annual bull harvest occurring during the first week of the general season was 36%, meeting the objective of less than 40% of the bull harvest occurring during the first week of the general season.

Accomplishments: Eight ranches in HD 293 totaling more than 50,900 acres are enrolled in the Block Management Program. Six properties in HD 339 totaling 78,748 acres and 4 properties totaling 19,718 acres in HD 343 also are enrolled in the Block Management Program.

FWP has 5 conservation easements with elk habitat totaling 34,961 acres in this EMU including the Mannix Brothers (HD 293), Sieben Ranch (2 easements in HD 339), Grady Ranch (HD 343), and O'Connell Ranch (HD 339). All easements are designed to maintain and improve elk habitat, provide public hunting opportunity, and permanently protect elk habitat from development.

Management Challenges: Housing development is spreading across some winter ranges, particularly in HDs 343 and 339. This development may threaten elk habitat, including accessory impacts from adjacent recreation uses, uncontrolled pets, and removal of wildlife that is causing "damage" to property owners, as well as make hunting access and population management more difficult. The entire south face of the North Hills elk herd unit is experiencing proliferation of housing development.

Elk security on public and private lands has become limited in areas where timber harvest has temporarily reduced cover and roads and motorized trails have increased elk vulnerability. Recreationists have driven off of existing roads, creating pioneered travel routes that impact elk security and habitat effectiveness on public lands.

Classified noxious weeds and other exotic plants are spreading throughout the EMU, reducing forage for elk.

Although individual wolves have been reported in the EMU since the 1980's, pack activity was not documented in this EMU until 2002. The potential impacts of established wolf pack(s) may influence future elk populations, their distribution and management.

Although hunting opportunities are generally good and restrictions are relatively minimal in HD 339 and HD 293, various parcels of private land closed to hunting are creating impacts to adjacent landowners. During the hunting season, elk congregate on properties closed to hunting, but once hunting seasons end, elk move onto and forage on adjacent properties that have traditionally been open to hunting.

Extensive motorized use (full sized vehicles, OHVs, motorcycles) of public lands via USFS and BLM system roads and illegal off-road use may be encouraging a redistribution of elk from

public lands and onto private properties. This has occurred even in otherwise secure habitats within HD 293 and HD 343.

Population Monitoring: Elk trend surveys are generally conducted between January and March, and all winter range elk habitat (adjustments are made to accommodate mild weather years) are surveyed from the air in each hunting district. Total numbers, sex and age class, and location data are recorded. Data are recorded in database files and a report is written for each hunting district surveyed.

SUMMARY OF PUBLIC COMMENT

Public comment indicated concern about possible over-harvest of bulls, a need to improve bull:100 cow ratios in some portions of the EMU, and maintenance of elk populations. Ranchers and some hunters have expressed concern about the presence of wolves. Concern also was expressed regarding off-road motorized travel during the hunting season, over-grazing of public lands by domestic livestock, and disturbance of elk on winter ranges by antler hunters. Landowners who have complained of too many elk in the past, are now concerned about the presence of wolves. Shortening the general elk season is not favored and concerns over private land refugia are growing.

MANAGEMENT GOAL

Manage all components of the elk population in a healthy condition, at levels that meet plan objectives, and cooperate with private and public land managers in management of elk habitats to provide diverse elk harvests and fair chase hunting experiences.

HABITAT OBJECTIVES

- 1) Develop cooperative programs that encourage public and private land managers to maintain 563,112 remaining acres of productive and secure elk habitats across the EMU.
- 2) Maintain elk security so that the elk harvest is distributed throughout the hunting season, with no more than 40% of the harvested bulls taken during the first week of the general season (a reflection of bull elk vulnerability).

HABITAT MANAGEMENT STRATEGIES

FWP will:

- Provide technical assistance to Helena National Forest and BLM land managers in programs designed to improve overall habitat effectiveness, decrease elk vulnerability, and improve quality of native forage.
- Identify winter range and cooperate with public land managers to protect, and where possible, enhance winter ranges with travel planning, noxious weed control, grazing management plans and timber management.
- Provide input on oil, gas, and mineral development plans, and land trades.

- Provide input to public land managers regarding revisions of allotment management plans.
- Encourage retention of all designated and defacto roadless areas to contribute to effective summer ranges and secure fall habitat, thereby helping to minimize displacement of elk onto private property.
- Pursue new conservation easements and monitor existing conservation easements on private lands where critical seasonal elk habitats occur.
- Provide technical assistance to land management agencies and county planning boards regarding land use plans and travel management with respect to elk habitat.
- Provide information to and communicate with the public about wildlife habitat through the media, publications, printed materials and personal contacts.
- Provide technical assistance to the HNF and BLM with planning and design of timber sale cutting units and road management systems.

GAME DAMAGE STRATEGIES

Game damage depends on local conditions, but all hunting districts seasonally experience local game damage. Distribution of the elk population throughout the EMU shifts with varying severity of winters. Elk will winter in HD 293 during mild to moderate winters, but a significant portion will move into HDs 339 and 343 during more severe winters to take advantage of east slope Chinook winds. Currently, several landowners in HD 343 do not allow public hunting, thus elk concentrate on these properties, exacerbating game damage complaints.

FWP will:

- Maintain elk numbers within EMU plan objectives while targeting local wildlife depredation sites with game damage hunts, stack yard materials, and aversive conditioning.
- Work with public land managers to alter human activities that occur on public lands that contribute to redistribution of wildlife onto private lands, and thus contribute to private land depredation.
- Evaluate the number of antlerless permits allocated for each hunting district (and portions of hunting district) and redistribute as necessary to achieve desired harvest in targeted areas.
- Explore creative means to encourage landowners who currently do not allow hunting, to consider access for at least certain groups of hunters (youth, disabled, seniors, graduates of advanced hunter education).
- Encourage dialogue between landowners with differing land management strategies where elk distribution is resulting in depredation to one or more landowners.
- Pursue efforts to increase the carrying capacity for elk of winter ranges on public lands.
- Acquire critical winter ranges through fee title purchases or conservation easements using the Habitat Montana program.

ACCESS STRATEGIES

Public access in this EMU is very high due to significant amounts of public land and landowner cooperation (with notable exceptions in HD 343). At the same time, motorized use of public

lands has diminished wildlife security and habitat integrity. As of 2003, two large landowners in HD 293 do not allow public hunting, and in HD 339 and HD 343, hunting is not allowed on at least 5 properties, thus complicating elk management.

FWP will:

- Identify points where access is needed to public lands and provide recommendations to the appropriate land management authority.
- Recommend Designated Route access on public lands.
- Identify additional opportunities for block management projects.
- Pursue implementation of conservation easement on important elk ranges.

POPULATION OBJECTIVES

The following objectives reflect current conditions. The current status has been acceptable to the hunting public as well as landowners within the EMU, with exceptions for local game damage situations where additional pressure is applied to local groups of elk.

- 1) Maintain the number of elk observed during post-season aerial trend surveys within 20% of 2,150 elk (1,720-2,580). Objectives by hunting district are: HD 293 – 750 elk; HD 339 – 700 elk and; HD 343 – 700 elk.
- 2) Maintain a minimum of 10 bulls:100 cows in HDs 293 and 343 and 15 bulls:100 cows in HD 339 observed during post-season aerial trend surveys.
- 3) Maintain the average age of bulls harvested on either-sex permits in HD 339 at 5.5 years of age or greater.

POPULATION MANAGEMENT STRATEGIES

REGULATION PACKAGES

Six-week either-sex archery regulation in HD 284, 6-week brow-tined bull/ antlerless elk archery regulation in HD 293 and HD 343, and 6-week spike bull/ antlerless elk archery regulation in HD 339 EXCEPT, see Restrictive regulations for Antlered elk.

Antlerless:

The Standard Regulation is: limited antlerless permits and/or A7 licenses (limited A-9/B-12 antlerless licenses (B-tags) may also be recommended). [The population currently is being held at objective with 300-400 antlerless permits in HD 339, 350 A7 licenses in HD 343, 325 antlerless permits and unlimited A7 licenses in HD 293 valid on private land only, and an either-sex archery season in HD 284.]

The Standard Regulation will be recommended if: the total number of elk observed during post-season aerial trend surveys is between 20% above and 20% below objective (1,720 and 2,580 elk).

The Liberal Regulation is: brow-tined bull/antlerless (HDs 293 and 343) or spike/antlerless (HD 339) regulation for up to 5 weeks of the general hunting season (Limited A-7 and/or A-9/B-12 antlerless licenses (B-tags) may also be recommended).

The Liberal Regulation will be recommended if: numbers of elk observed during post-season aerial trend surveys are more than 20% above objective (more than 2,580 elk).

The Restrictive Regulation is: limited antlerless permits and/or A-7 licenses.

The Restrictive Regulation will be recommended if: numbers of elk observed during post-season aerial trend surveys are 20% or more below objective (less than 1,720 elk) for 2 consecutive years.

Antlered: HD 293 and HD 343 (Brow-tined Bull Regulations)

The Standard Regulation is: 5-week general season brow-tined bull regulation.

The Standard Regulation will be recommended if: bull:100 cow ratios observed during post-season aerial trend surveys are at least 10 bulls:100 cows.

The Restrictive Regulation is: unlimited brow-tined bull permits for a specific hunting district. ARCHERS WILL ALSO BE REQUIRED TO APPLY FOR UNLIMITED PERMITS.

The Restrictive Regulation will be recommended if: bull:100 cow ratios observed during post-season aerial trend surveys are less than 10:100 for 2 consecutive years. If a Restrictive regulation is implemented, and the post-season aerial classification reaches 15 bulls:100 cows or greater for 2 consecutive years, a standard season would again be recommended.

Antlered: HD 284 (Unlimited Archery-Only Either-Sex Elk)

The general hunting season for HD 284 will remain an archery-only hunting district, open for hunting of either-sex elk during the archery and general season to provide diversity in hunting opportunity. This is a small hunting district surrounding the town of Lincoln, and for safety reasons, is best suited for archery hunting.

Antlered: HD 339 (Spike Bull General Season with Limited Either-Sex Permits)

The general hunting regulation for HD 339 will remain a Spike Bull regulation (with limited permits for either-sex elk) to provide diversity in the bull age structure as well as diversity of hunting opportunity in Montana. This hunting district is one of only 2 spike/either-sex permit hunting districts among the 159 hunting districts in the state. Spike Bulls are: “any elk having antlers which do not branch, or if branched, the branch is less than four inches long measured from the main antler.”

The Standard Regulation is: 5-week general season Spike Bull regulation with 15-30 either-sex permits valid during the 5-week general season.

The Standard Regulation will be recommended if: numbers of elk observed during post-season aerial trend surveys are at least 600 elk AND, post-season calf:100 cow ratios are at least 25:100 AND, post-season bull:100 cow ratios are at least 10:100 AND, age of BTBs taken with the either-sex permits average 5.5 years or greater.

The Liberal Regulation is: 5-week general season Spike Bull regulation with 30-50 either- sex permits valid during the 5-week general season.

The Liberal Regulation will be recommended if: total numbers of elk observed during post-season aerial surveys are at least 700 elk AND, calf:100 cow ratios are at least 40 calves:100 cows AND, the bull:100 cow ratio is at least 15 bulls:100 cows for 2 consecutive years AND, the average age of harvested bulls on either-sex permits is more than 5.5 years old.

The Restrictive Regulation is: 3-week Spike bull general regulation with less than 15 either-sex permits valid for the 5-week general season.

The Restrictive Regulation will be recommended if: numbers of elk observed during post-season aerial trend surveys are below 600 for 2 consecutive years AND, post-season calf:100 cow ratios are below 25:100 for 2 consecutive years OR, post-season bull:100 cow ratios are less than 10:100 for 2 consecutive years OR, average age of BTBs taken with the either-sex permits is less than 5.5 years for 2 consecutive years.