

MONTANA FISH, WILDLIFE & PARKS

FISHERIES DIVISION JOB PROGRESS REPORT

STATE: MONTANA PROJECT TITLE: STATEWIDE FISHERIES INVESTIGATIONS
PROJECT NO.: F-46-R-7 STUDY TITLE: SURVEY AND INVENTORY OF
WARMWATER LAKES
JOB NO.: IV-a JOB TITLE: NORTHWEST MONTANA WARMWATER
LAKES

PROJECT PERIOD: JULY 1, 1993 THROUGH JUNE 30, 1994

ABSTRACT

Warmwater fisheries habitat was maintained through existing statutes and laws. Habitat structure was added to regional lakes by local clubs and Department personnel to benefit differing age classes of largemouth bass. Illegal transplants of fish to new waters continues to be a very serious problem jeopardizing many established fisheries. Reservoir and tributary fisheries work continued on Noxon Rapids and Cabinet Gorge impoundments under agreement with MDFWP, the U.S. Forest Service and Washington Water Power.

OBJECTIVES AND DEGREE OF ATTAINMENT

1. Establish and maintain fishable populations (catch rate = 0.25 fish/hour of smallmouth bass and burbot in Noxon and Cabinet Gorge reservoirs. Objectives partially accomplished and submitted in special segment report: Northwest Montana Coldwater Lakes Investigations, Noxon Rapids and Cabinet Gorge Reservoirs Segment, Project No. F-46-R-7 (Huston, 1994).
2. Identify populations with surplus fish that can be used for transplants. Objectives accomplished using state funding.
3. Attempt to acquire and develop access sites on all lakes and reservoirs with the potential for more than 500 mandays of fishing annually. First priority should be given to Lake Blaine and those lakes with adjoining Champion International or Plum Creek Timberlands property. Objectives were partially accomplished using state funding.
4. Minimize the impacts of land and water use on fisheries. Objectives were accomplished using state funding.

5. Define the impacts of fishermen use on specified fisheries and provide an increased opportunity to catch large bass (>12-14 inches) and northern pike (>28 inches). Objectives were accomplished using state funding.
6. Address the demand for new species introductions. Define the parameters of interspecific competition, participate in a walleye introduction EIS, halt the illegal spread of northern pike. Objectives were partially accomplished. Illegal introductions continue.
7. Enhance fish populations through the placement of artificial habitat. Objectives were accomplished using state funding.
8. Define the mechanisms of predator/prey relationships in area lakes. Reduce competition with game fish and reduce overabundant populations of non-game fish. Objectives were accomplished.
9. Encourage increased public knowledge and participation in resource decisions. Objectives were accomplished.

PROCEDURES

Standard floating and sinking monofilament gill nets 125-feet long by 6-feet deep were used for fish collection. Nets contained 25-foot panels of 3/4, 1, 1 1/2, 1 3/4, and 2-inch bar mesh. One-hundred foot by 6-foot beach seines were used primarily for juvenile fish collection. An 18-foot jon boat with boom mounted electrodes operating on a Coffelt VVP-IIC electrofishing box powered with 110 volt current was also used for sampling. We weighed and measured collected fish and extracted scales and stomach samples for future analysis. A list of waters with available species has been progressively compiled and updated (Appendix A).

Water quality and aquatic habitat were protected or enhanced by participation in the Natural Streambed and Land Preservation Act (NSLPA), the Lakeshore Protection Act (LPA), the Army Corps of Engineers (COE) 404 permit program, and Montana Pollution Discharge Elimination System (MPDES). Proposed projects were reviewed and mitigative measures recommended where appropriate.

Snorkel/SCUBA surveys were utilized for structure evaluations in Echo Lake.

The Miles City Fish Hatchery provided the region with young-of-the-year largemouth bass. These fish originated from a diverse background and were utilized to infuse genetic diversity into some existing populations.

RESULTS AND DISCUSSION

Species Introductions

During the project period no lakes received transplants of bass from surplus populations as in previous years. In the past and likely in the future largemouth bass transplants will be made to supplement populations that suffer prolonged climatic conditions resulting in poor survival.

During the project period Echo Lake was stocked with bass from Miles City Fish Hatchery to improve genetic diversity.

Illegal fish introductions continue to plague fish management within the region. During the report period black crappie (*Pomoxis nigromaculatus*) were found in Blanchard Lake.

Montana Department of Fish, Wildlife and Parks continues to cooperated with Washington Water Power and the USFS on operations and inventory of Noxon Rapids and Cabinet Gorge reservoirs and tributaries (Huston 1994).

Access

No new fishing access sites were acquired during the report period. Negotiations continued on sites on Lake Five and Marl Lake. An easement was secured at a site on Noxon Rapids Reservoir near Trout Creek and funds were contributed for dock and ramp improvements. Access sites improvements were initiated at Smith Lake and Lake Mary Ronan.

Habitat Protection and Enhancement

Lakeshore protection applications, some requiring Department recommendations for mitigation, were processed through regional county agencies. Comments were submitted on COE 404 permits for regional lakes and streams. NSLPA permits were reviewed and recommendations made.

Fish populations were enhanced and habitat loss mitigated by enlisting the aid of Washington Water Power, USFS, Western Montana Bassmasters, Echo Lake Bassmasters, Clark Fork Bass Anglers, Noxon Rod and Gun Club and other local groups to purchase and install bass habitat structures. Waters receiving structure improvements include: Echo Lake, Middle Thompson Lake, Peterson Lake and Murphy Lake. Structures were also placed in Horseshoe Lake to benefit smallmouth bass (*Micropterus dolomieu*) spawning.

RECOMMENDATIONS

There is an increasing demand for baseline population and habitat data on the 114 warmwater lakes within the region. As time allows we need to collect population indices for prioritized

waters. This information would help confirm a need for different management such as regulations changes.

The number of bass fishermen and interest among them is ever increasing. Tournament requests, requests for special regulations, and concern over specific fisheries continue to come in at a greater frequency. Complaints about illegal spear fishing are also more frequent as are complaints about mortality or injury to fish during tournaments. A more conservative policy will need to be evaluated that will reduce potential impacts from the above issues.

Habitat enhancement structures in specific waters will need additional evaluation.

A more extensive genetic sample of regional bass populations would be desirable. This would identify populations needing additional genetic diversity that could be infused through stocking.

Illegal introductions of warmwater fish is causing severe impacts to many fisheries. Statutes and penalties addressing the action need to be reinforced to further discourage illegal transplants.

LITERATURE CITED

Huston, Joe E. 1994. Northwest Montana coldwater lakes investigations, Noxon Rapids and Cabinet Gorge Reservoirs segment, July 1, 1993 through June 30, 1994, Project No. F-46-R-7, Job No. II-a, Montana Dept. of Fish, Wildlife and Parks, Helena, MT.

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