

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

FISHERIES DIVISION

JOB PROGRESS REPORT

State: Montana Project Number: F-46-R-8
Job Number: VI-B (3834)

Project Title: Statewide Fisheries Investigations
Study Title: Statewide Surveys and Inventory
Job Title: Statistical Services
Period Covered: July 1, 1994 through June 30, 1995

JOB OBJECTIVES

To survey and monitor the characteristics and trends of fish populations, angler harvest, and preferences, and to assess habitat conditions in selected waters.

To develop and manage fisheries data systems for the Fisheries Division, and conduct surveys of angler use, angler preference, and economic values of Montana's aquatic resources.

ACCOMPLISHMENTS

All objectives were fulfilled.

The lake and stream name file and cataloging system was maintained. New water names were entered as inventories were completed by field personnel and corrections of existing entries were made as needed. A total of 11,621 waters are now catalogued.

Modifications with the mark-recapture computer system (MR4) were done. The few errors that were discovered were corrected. The program is available for distribution.

The Hatchery Production computer programming was completed. The system contains three major areas: 1) Projections; 2) Production; and 3) Plants. Training was provided and help is continually being offered.

Statistical analysis of various data and methods were made periodically throughout the project period.

Fish planting records were recorded and added to the fish planting database. Data for 63,930 plants have now been entered. The 5 year planting request was updated and the annual plant requests produced. A fish planting query program was developed and is now in the testing stage.

The fisherman log program was continued as planned. Compilation of the data for the period December 1993, through November 1994, is in progress at the time this report is written.

Data analysis for the period December 1992, through November 1993, showed 554 log holders out of 980 log holders returning their books for coding and analysis. These log holders caught 1.5 fish per hour for the summer months (May-November) and 1.9 fish per hour for the winter months. The annual catch rate was 1.6 fish/hour.

The Kalispell region had the highest number of fish caught per hour for both the summer and winter seasons (figure 1).

The Miles City region had the highest average number of fish caught per day for the summer season, while the Great Falls had the highest average number of fish caught per day for the winter season. (figure 2).

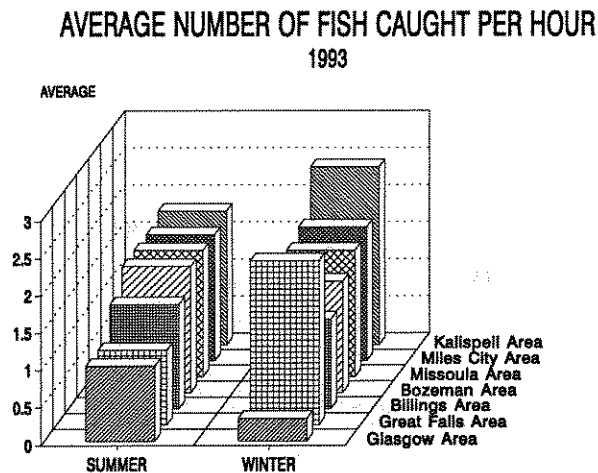


Figure 1. Average number of fish caught per hour by Fish, Wildlife & Parks regions for the summer and winter seasons.

**AVERAGE NUMBER OF FISH CAUGHT PER DAY
1993 Log Year**

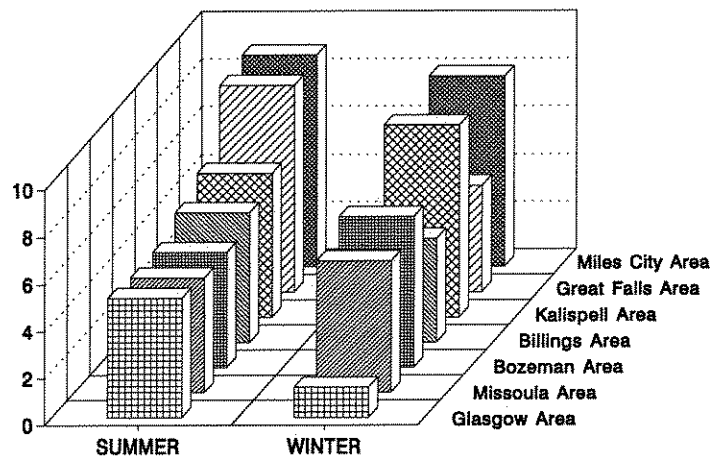


Figure 2. Average number of fish caught per day by Fish, Wildlife & Parks regions for the summer and winter seasons.

In the summer, Rainbow trout comprised the largest percent of the game and sport fish catch at 26.9% of the total. In the winter, Yellow Perch accounted for the majority of the sport and game fish catch at 35.3% (figure 3).

Assistance and trouble shooting of both hardware and software were provided when requested.

**STATEWIDE TOP GAME AND SPORT FISH
DECEMBER 1992 THRU NOVEMBER 1993**

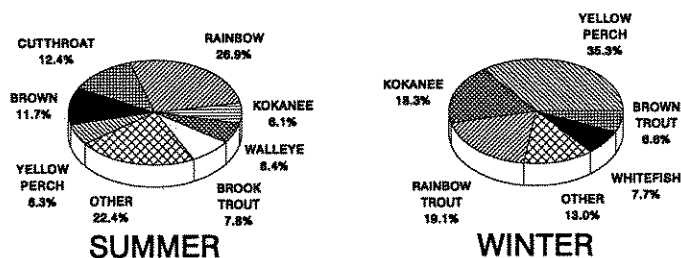


Figure 3. Percent of game and sport fish caught by log holders for the summer and winter seasons for the 1992 log year.

LOCATION OF WORK

All work was preformed out of the Bozeman regional office.

COSTS INCURRED

Total costs incurred for the project year were:

Personal Services	\$106,122.01
Operations	20,406.54
Total	\$126,528.55

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Date: September 8, 1995