

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS  
FISHERIES DIVISION

JOB PROGRESS REPORT

State: MONTANA Project Title: STATEWIDE FISHERIES INVESTIGATIONS

Project No: F-46-R-6 Study Title: SURVEY AND INVENTORY OF COOLWATER AND WARMWATER ECOSYSTEMS

Job. No: V-f Job Title: BIGHORN LAKE CREEL CENSUS

Project Period: July 1, 1992 - June 30, 1993

OBJECTIVES AND DEGREE OF ATTAINMENT

- 1) To participate in a coordinated creel and angler preference survey with two other agencies, i.e., the National Park Service and Wyoming Game and Fish.

Coordinated efforts with Wyoming Game and Fish and the National Park Service to conduct creel census and angler preference survey on Bighorn Lake. Establish sampling program using a random sampling schedule that would coordinate efforts among all three agencies. Hired creel clerk to work jointly with the Wyoming creel clerk on the southern end of the lake. Established sampling schedules for three creel clerks, provided technical assistance, and assisted with sampling as needed. Entered all creel data into a computer database and sent to Wyoming for final analyses.

- 2) To determine angler preferences for fish species management.

Conducted survey that allowed anglers to express their opinions on species preference and on potential management recommendations for the lake. Contacted anglers on a pre-established random sampling schedule from January 1, 1991 through December 31, 1991. Over 150 anglers responded to this survey. The majority were satisfied with current stocking program, although a number of other species were suggested for possible stocking.

- 3) To assess public opinion of issues such as reciprocal licensing.

Developed a specific question to determine public opinion towards a reciprocal licensing agreement on Bighorn Lake. Allowed each angler contacted as part of the Bighorn Lake creel survey to respond to this question one time. Eighty-six percent of Montana anglers and 93% of Wyoming anglers who responded to the question were in favor of a reciprocal license.

- 4) To obtain relative fishing pressure estimates to help determine appropriate stocking levels and interstate fishing regulations.

Conducted randomized creel census at three locations on Bighorn Lake in cooperation with Wyoming Game and Fish and the National Park Service from January 1, 1992 through December 31, 1992. Collected data on angling pressure, catch rates and harvest and on angler residency. All data have been entered into a database and are being analyzed.

#### SUMMARY

Progress was achieved on all objectives during FY93.