## MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

## FISHERIES DIVISION JOB PROGRESS REPORT

| STATE: Montana               | TITLE:               | Investigation of more      |
|------------------------------|----------------------|----------------------------|
|                              | anna                 | important waters           |
| PROJECT NO.: F-12-R-28       | TTTT,E •             | Georgetown Lake Management |
| JOB NO.: II-b                | ه استانیبتر عبید باد | Survey                     |
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| PERIOD COVERED: July 1, 1981 | co ourse             | 30, 1304                   |

## **OBJECTIVES**

- 1. To develop a abundance index for adult and juvenile kokanee.
- 2. To measure abundance of kokanee in the spawning run.
- 3. To determine angler effort and harvest and sizes of rainbow trout and kokanee in the creel.
- 4. To determine average lengths of spawning kokanee and brook trout.
- 5. To measure abundance of kokanee in the spawning run.

## **ACCOMPLISHMENTS**

Objectives 2, 3, 4, and 5 were all met. Spawning kokanee were trapped entering Stuart Mill Creek for migration counts and length estimates. Brook trout were electrofished in the North Fork of Flint Creek for length estimates. Partial Creel census was conducted during winter and summer to estimate angler effort and success and to measure sizes of creeled fish.

Objective 1 was not accomplished. Attempts to capture kokanee by gill netting or electrofishing produced no reliable index. Dense growths of rooted macrophytes negated sampling with standard acoustic or trawling techniques. Present population densities are resulting in density-dependent growth and the catch rates and size of kokanee are inversely proportional. Creel data will be analyzed and summarized in a report. Fry counts might be correlated with spawning population estimates to give an index of recruitment but fry sampling has not been initiated due to a lack of equipment.

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Date: June 14, 1983

