# MONTANA STATE DEPARTMENT OF FISH AND GAME FEDERAL AID IN FISH RESTORATION SECTION HELENA, MONTANA

## JOB COMPLETION REPORT INVESTIGATIONS PROJECTS

State of <u>Montana</u>	
Project No <u>. F-7-R-6</u>	Name Northwestern Montana Fishery Study
Job No. VI	Title Survey of Cutthroat Trout Fishery in
Period Covered <u>May 1, 1956 - April 30, 1957</u>	the Flathead River and Tributaries Above Flathead Lake.

### Abstract:

Due to the lack of proper equipment and time, not much was accomplished on this job. Tags of four dolly varden tagged in 1954 were received from anglers. These fish gained in weight from 5 to 8 pounds and were captured some distance from place of tagging - from 15 to 111 miles. Four dolly varden and two cutthroat were tagged during the summer of 1956.

#### Objectives:

The Flathead River and tributary streams above Flathead Lake have provided in the past an extensive fishery on cutthroat trout. This has declined until at present it is almost non-existant. However, it was found that there is a fairly good run of dolly varden trout into some of the smaller tributaries of the North Fork River. During the past years, very little information was obtained on the cutthroat trout due to the extremely high waters during the spawning periods. The objectives of this investigation are to determine the extent of cutthroat trout spawning areas, time and distance of movement, nature and time of recruitment to the lake, and to develop management measures so that a future fishery can be assured in this area. As an incidental objective, the same information will be obtained on dolly varden trout; however, emphasis will be placed on the cutthroat trout.

#### Techniques Used:

It was found in the previous year that the boats available were too small and dangerous to use as a work boat in setting the pirate trap. This winter the pirate trap was returned to the Fish and Wildlife Service so that neither a pirate trap nor means to set it with were available.

Publicity was given the previous years tagging program. All tags received were voluntary returns by anglers.

#### Findings:

A total of 97 cutthroat trout have been tagged since this study started, and only one return has been received. This tagged fish was caught 7 days after tagging. No other returns have been obtained from cutthroat trout.

A total of 44 dolly varden trout were tagged in 1953. One of these was captured by an angler in 1953 and another in 1955.

Of the 158 dolly varden trout tagged in 1954, 22 have been caught by anglers - 8 from time of tagging to April, 1955; 10 for the report period May 1955 to April 1956; and 4 in the report period May 1956 to April 1957.

Three of the trout captured during the past year gained considerable in weight, and one weighed the same when captured. There should not be any question that the dolly varden trout from Flathead Lake move great distances to spawn (Table I).

It was unfortunate that the equipment requisitioned for this job was not approved. However, the project leader is not discouraged. Since the borrowed pirate trap has been returned, two new traps are being made. A work boat that will not jeopardize the workers while setting various traps and nets in Flathead Lake and the main tributaries is on requisition.

It was felt that since no work was done in early spring at the inlet to Flathead Lake that not much could be gained by checking the tributaries. However, some tagging was done on the Middle Fork of the Flathead River. Four dolly varden trout and 2 cutthroat trout were tagged. No information has been received from these fish.

#### Recommendations:

It is recommended that this study be continued so that some idea of the cutthroat populations be obtained. Much information is needed before fishing regulations can be intelligently set and the fisheries of Flathead Lake and tributaries be managed wisely.

#### Data and Reports:

The original data is with the project leader in Kalispell and a duplicate is filed in the Helena office.

Prepared by Frank A. Stefanich	Approved by <u>Senge O Holton</u> George D. Holton
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Date May 6, 1957	000135 2 101001

TABLE I

Recovery of Dolly Varden front Tagged in 1954 from Flathead Lake and Tributaries and Captured by Anglers in 1956 and 1957.

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