

MONTANA DEPARTMENT OF FISH AND GAME

FISHERIES DIVISION

JOB PERFORMANCE REPORT

STATE: Montana TITLE: Flathead Lake Fisheries
Investigation
PROJECT NO.: F-33-R-9
JOB NO.: I-a TITLE: The Seasonal, Area and Depth
Distribution of Kokanee in
Flathead Lake.
PERIOD COVERED: July 1, 1974 through June 30, 1975

OBJECTIVES

The primary objective of this job is to identify diel and seasonal movements of kokanee as they are associated with habitat preference or spawning migration. The present segment of this job was to monitor the age structure of the kokanee population found within one area of the lake from spring to fall. Associated with the fish sampling, measurements of the basic chemical; physical and biological characteristics of the area were to be made.

ACCOMPLISHMENTS

All of the objectives described under the present segment of this job were accomplished. Twenty-seven purse seine hauls sampled the kokanee population in Lakeside Bay during the period June 13 through September 13, 1974. Seining was conducted during the daylight hours in waters that had water clarity ranging from 0.5 to 3/4 feet (seechi disc). A total of 1,260 kokanee (84.3 percent of total) were taken in seine and represented ages one through four. Other species taken were pygmy whitefish, mountain whitefish, lake whitefish, cutthroat trout, Dolly Varden and peamouth.

Replicate sampling with the seine did result in comparable catches. Both habitat and species preferences were noted for both juvenile and the mature aged fish. Although 965 kokanee were marked with fluorescent pigment and released in the sampling area (2x3 miles), no recaptures were taken. The age composition of the kokanee catch did change through the period thus indicating some seasonal and area preferences as they moved in and out of the sampling area.

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Date: September 30, 1975