

JOB COMPLETION REPORT
DEVELOPMENT PROJECTState of MontanaName Northwestern Montana Fishery StudyProject No. F-24-D-6Title Statewide Lake and Stream Rehabilitation -
Sophie LakePeriod Covered: May 1, 1957 to April 30, 1958

Abstract: Sophie Lake was rehabilitated on October 2, 1957. Squawfish, largemouth bass, coarse-scaled suckers, pumpkinseed sunfish, cutthroat trout, ling and reidside shiner were found.

Objectives: The primary objective was to eliminate the present population of fish and to develop a trout fishery.

Techniques Used: Three boats using an awkward arrangement of spray booms were used to dilute the toxicant and spray it over the surface of the lake. One crew used a fire pump to spray the shallow and weedy areas of the lake. The lake was rehabilitated on October 2, 1957. On November 7, 1957, with the aid of the local game warden, the inlet stream was rehabilitated. Some international problems arose but were taken care of. The inlet stream drains an area just north of the International Boundary and special arrangements had to be made with the fisheries biologist in Cranbrook, British Columbia. The stream flows to the lake only during the run-off in the spring and is dry the remainder of the year. The toxicant was introduced into the stream at the base of about an eighty foot falls. At time of rehabilitation no water was flowing into Montana.

Findings: Many fish were destroyed in this lake. A total of 1,045 gallons of "Pro-Noxfish" and 660 gallons of "Chem-fish-special" was used. This lake is over 50 feet deep and the "Chem-fish-special" was used in the deep areas.

The following fish were found dead in the lake:

Cutthroat trout - Salmo clarkii
Largemouth black bass - Micropterus salmoides
Squawfish - Ptychocheilus oregonensis
Coarse-scaled suckers - Catostomus macrocheilus
Pumpkinseed sunfish - Lepomis gibbosus
Burbot - Lota lota maculosa
Redside shiner - Richardsonius balteatus

It is hoped that a complete kill was obtained.

Recommendations: It is recommended that this lake be sampled periodically to determine if a complete kill was obtained. It is also recommended that this lake be planted until it is determined whether the inlet stream is satisfactory for spawning purposes. It is further recommended that officials of the British Columbia Game Department be contacted about planting in inlet streams.

Prepared by: Frank A. Stefanich
Date April 30, 1958

Approved by: George D. Holton