

# Memorandum

To : Files: Letts Lake, Colusa County

Date: July 8, 1980

From : Department of Fish and Game

Subject: Stocking of Trinity Lake SMB in Letts Lake

On July 3, 1980 a total of 105 SMB were stocked in Letts Lake. The bass were electrofished from Trinity Lake, Trinity County on July 1 and 2, 1980. Of the 105 fish, 35 were 4 to 5 inches in fork length, 60 were 6 to 8 inches long, and 10 were 9 to 11 inches long. Essentially all of the larger size classes of SMB (70 fish) appeared to be gravid and still contained sex products.

Condition and conformation of the Trinity fish appeared good, but not exceptional. The smaller size class of fish (4 to 5 inches) generally displayed large heads and small bodies compared to equivalently-sized SMB from other waters. The larger size classes of fish showed better conformation and were quite robust. A total of 23 of these larger fish regurgitated gut contents when captured and held in a live carr. Twenty-one of the SMB had been eating young kokanee salmon (4.5 to 6 inches F.L.) while two SMB regurgitated GSF (3 inch F.L.). All of the ingested fish were taken head-first, often with the tail of the ingested fish still protruding from the mouth of the SMB.

The littoral zone of Trinity Lake is essentially an oligotrophic system. Only GSF and SMB were consistently found in the zone, with occasional LMB, WCF and RT also being taken. No KOK were taken in the electrofishing surveys. High water clarity, little cover and low levels of available forage probably account for the low level population of SMB we encountered. Our best estimates of population numbers (based on 5.17 hours of Pulsator time along approximately 12 miles of shoreline during night and day fishing) amounted to only 10.5 SMB per mile for all age classes of fish. This figure is low compared with reservoirs such as Almanor, Oroville, or Merle Collins in Region 2. Only three SMB greater than 12 inches long were taken during the surveys. These fish measured 12.5, 13.2 and 13.4 inches (F.L.) and were released at their respective catch sites.

In summary, the Trinity Lake SMB fishery appears distinctly different than SMB fisheries elsewhere in California. Whether the character of the fishery is a reflection of genetic or environmental parameters has yet to be determined.

*sgnd*  
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Fishery Biologist

Attachment

cc: Beland  
Von Geldern  
John Thomas, Region 1

Ron Pelzman  
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JIH:jb