

ABSTRACT

This report covers the ninth year of sockeye salmon subsistence harvest and escapement data collection at Klawock Lake. Subsistence harvest assessment was conducted using direct observations of fishing and interviews on the fishing grounds. Sockeye salmon counts at Klawock River weir were provided by the Prince of Wales Hatchery Association (POWHA), and adult sockeye salmon age, sex, and length composition was estimated from samples collected at the weir. Otoliths were examined for hatchery marks in samples collected in the subsistence fishery and on the spawning grounds. The minimum estimated subsistence harvest was approximately 5,900 sockeye salmon. The sockeye salmon escapement count at the weir was 19,699 fish, which is considered a minimum estimate because it is likely fish entered the lake before the weir was installed on 13 July and the weir was overtopped by a flood for 12 h on 22 September. Unlike in prior years, no back-up mark-recapture study was conducted in 2009. The minimum estimated terminal run size (escapement plus subsistence harvest) was 25,599 sockeye salmon. Age-1.3 fish dominated the escapement. Hatchery-reared fish comprised an estimated 7% of the 2009 harvest samples and no thermal marked hatchery fish were found in the escapement samples.

Key words: Sockeye salmon, *Oncorhynchus nerka*, subsistence, Klawock, Klawock Lake, Southeast Alaska, escapement, mark-recapture, age composition, hatchery, otolith.

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