FISHERY DATA SERIES NO. 10-61

HETTA LAKE SUBSISTENCE SOCKEYE SALMON PROJECT: ANNUAL REPORT 2009

By
Julie Bednarski
Alaska Department of Fish and Game, Division of Commercial Fisheries, Douglas
and
Steven C. Heinl
Alaska Department of Fish and Game, Division of Commercial Fisheries, Ketchikan

ABSTRACT

The Hydaburg Cooperative Association partnered with the Alaska Department of Fish and Game to continue the Hetta Lake sockeye salmon stock assessment program which started in 2001. A subsistence harvest survey and sockeye salmon escapement count were completed in 2009. Lake temperature, light profiles, and zooplankton populations were also measured, and hydroacoustic and trawl surveys were conducted to estimate small fish populations in the lake. The harvest survey documented a total harvest of 5,105 sockeye salmon from Hetta Cove, most of which were harvested from mid July to late August. A total escapement of 20,522 sockeye salmon was counted at the Hetta Creek weir from June through late September. Age-1.3 sockeye salmon dominated the escapement (85%). The total population estimate of small pelagic fish in Hetta Lake was 686,000. A comparison of past estimates of the sockeye fry population in Hetta Lake to subsequent adult returns showed that trawl surveys to estimate species composition are likely biased due to high abundance of threespine stickleback.