

Kanalku and Sitkoh Lakes Subsistence Sockeye Salmon Project: 2004 Annual Report.

In 2004, we estimated escapement of sockeye salmon (*Oncorhynchus nerka*) in two systems with important subsistence fisheries for the village of Angoon, continuing a series of annual estimates starting in 2001 for Kanalku Lake and 1996 for Sitkoh Lake. We used mark-recapture methods, visual surveys, and age, sex, and length sampling on the spawning grounds to estimate sockeye escapement and age composition in each lake. Estimated escapement in Kanalku Lake in 2004 was about 1,250 sockeye salmon, a substantial increase from extremely low escapements (200-300 fish) observed in 2003 and 2001, and comparable to the 2002 escapement of about 1,600 fish. Small (mean length 486 mm, mid eye to tail fork) age-1.2 sockeye salmon were the largest age class in the escapement. Despite low water in June through August 2004, sockeye salmon were observed successfully ascending the falls in the Kanalku outlet stream in late July and early August. In Sitkoh Lake the estimated escapement of about 3,700 sockeye salmon was the lowest in nine consecutive years. Age-1.2 fish made up 55% and age-1.3 fish made up 40% of the escapement. Extreme low water in the Sitkoh outlet stream in late July and early August may have created a temporary barrier to sockeye migration. Most Angoon residents continued to observe a voluntary conservation closure and refrained from fishing in Kanalku Bay in 2004. Some Angoon residents shifted their subsistence fishing effort to Sitkoh Bay, but not all were able or willing to do so. Kanalku Bay is still the preferred subsistence fishing area for most Angoon residents. These residents are very concerned about the effect of the closure on traditional subsistence activities, but are willing to participate in the effort to try and rebuild larger sockeye returns to this system.

Citation: Conitz, J. M., and M. A. Cartridge. 2007. Kanalku and Sitkoh Lakes subsistence sockeye salmon project: 2004 annual report. Alaska Department of Fish and Game, Fisheries Data Series No. 07-01. Anchorage.