

Abundance and run timing of adult salmon in the Kwethluk River, Yukon Delta National Wildlife Refuge, Alaska, 2001

Abstract: From August 12 to September 13, 2001 a resistance board weir was used to collect abundance, run timing, and biological data from the salmon returning to the Kwethluk River, a tributary of the lower Kuskokwim River. This was the second year of a cooperative project with the Organized Village of Kwethluk, initiated under the Federal Subsistence fishery management program to provide reliable data necessary for managing the Yukon Delta National Wildlife Refuge fishery resources that contribute to major subsistence and commercial fisheries. A total of 353 chum *Oncorhynchus keta*, 129 Chinook *O. tshawytscha*, 67 sockeye *O. nerka*, 102 pink *O. gorbuscha*, and 19,196 coho *O. kisutch* salmon were counted through the weir. Due to high water, weir installation and operations were delayed. All species, with the exception of coho, were past the peak of their spawning migration when counts started. Peak weekly passage for coho occurred during the week of August 26 to September 1. Additionally, from August 21-22 and September 7-8, only partial counts were obtained due to high water conditions. Cumulative escapement records from previous weir operations indicate that a large proportion of all other species migrations were missed prior to weir installation. Only coho salmon had sufficient samples collected for sex and age composition estimates. Females made up the majority at 51.4%. Age groups were partitioned: 1.1 12.4%, 2.1 85.6% and 3.1 2.0%. In addition to the salmon, 3 Dolly Varden *Salvelinus malma*, 5 Arctic grayling *Thymallus arcticus*, and 463 whitefish (*Coregonus* spp.) were counted.

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