Pikmiktalik River Salmon Escapement Enumeration and Sampling Project, 2004

Much of the salmon subsistence harvest for the communities of Stebbins and St. Michael occurs on the Pikmiktalik River. The Pikmiktalik River is part of the Yukon Delta National Wildlife Refuge, and is the site of one of a few Federal subsistence fisheries in the Norton Sound area. Local residents strongly feel that availability of in- and post-season escapement information would improve management of these fishery resources. Kawerak, Inc., in cooperation with the Stebbins and St Michael IRAs, conducted a salmon escapement enumeration and sampling project on the Pikmiktalik River from June 18 to August 31, 2004. The information colleted provided baseline data regarding salmon abundance, run-timing and biological (age, sex, and length) data to the U.S. Fish and Wildlife Service and the Alaska Department of Fish and Game. Total estimated escapements were 225 Chinook *Oncorhynchus tshawytscha*, 8,051 chum *O. keta*, 50,621 pink *O. gorbuscha*, and 11,799 coho *O. kisutch* salmon. Additionally, a total of 616 Dolly Varden (*Salvelinus malma*) and 514 whitefish (*Coregonus* sp.) were recorded. Age, sex and length data collected from chum salmon indicated that the most abundant age class was 5-year-old salmon (produced by the 1999 brood year), which accounted for 47.9% of the total sample, representing 3,883 chum salmon of the estimated escapement. The ratio of male to female chum salmon was roughly 1:1. Males were generally longer than females, and older salmon were generally longer than younger ones for both chum and coho salmon. Of the coho sampled, 72% were male and 28% were female, while 83.6% of coho were age 2.1 and 14.3% were age 1.1. In August a 5-day flood event washed out the partial weir, made the water cloudy with silt and increased water depth too deep to count fish. Due to this high water event some coho salmon probably migrated past the tower and were not counted. Therefore, total coho salmon escapement on the Pikmiktalik River in 2004 is likely higher than that estimated in this escapement project. Continuation of this project in future years would provide valuable escapement data for use in management of these fisheries resources.

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