

Tuluksak River Salmon Run Timing and Abundance. Study No. 10-307, Annual 2012

Abstract

The Kenai Fish and Wildlife Field Office, assisted by the Tuluksak Native Community, monitored the escapement of the five species of Pacific salmon *Oncorhynchus* spp. returning to the Tuluksak River, a tributary to the lower Kuskokwim River. From June 27 to September 9, 2012, a resistance board weir and an underwater video system were used to collect abundance, run timing, age, sex, and length data from returning adult salmon. These data support in-season and post-season management of the commercial and subsistence fisheries that occur on the Yukon Delta National Wildlife Refuge and the Kuskokwim River. Estimated escapements of 16,981 chum salmon *O. keta*, 555 Chinook salmon *O. tshawytscha*, 189 sockeye salmon *O. nerka*, 140 pink salmon *O. gorbuscha* and 4,407 coho salmon *O. kisutch* passed through the Tuluksak River weir during 2012. Peak weekly passage occurred July 15–21 for Chinook, July 22–28 for chum and sockeye, July 29 to August 4 for pink, and August 19–25 for coho salmon. Age, sex, and length data were collected for chum and coho salmon, and sex data for Chinook and sockeye salmon. Dominant ages were 0.3 (60%) for chum and 2.1 (89%) for coho salmon. Overall percentages for female salmon were chum 51%, Chinook 33%, sockeye 64%, and coho salmon 54%. Mean lengths varied between male and female salmon for each species sampled. The estimated Chinook salmon escapement during 2012 was the fifth lowest on record and below the escapement goal range of 1,000–2,100 for the sixth successive year. Special management actions were taken for Chinook salmon during 2012 directly related to low return concerns in the Kuskokwim River drainage.

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