

Abundance and Run Timing of Adult Salmon in the Gisasa River, Koyukuk National Wildlife Refuge, Alaska, 2008

Abstract

A resistance board weir was operated by the U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office to collect information on abundance, run timing, and biology of returning adult Chinook salmon and chum salmon in the Gisasa River. This was the fourteenth year of operating the weir at this location. In 2008, the weir was operated from June 24 through July 30 with counting interrupted for approximately 48 hours due to high water. An estimated 1,738 Chinook salmon *Oncorhynchus tshawytscha* and 36,938 summer chum salmon *O. keta* passed through the weir. The most abundant other species was pink salmon *O. gorbuscha* (N=1,316), followed by longnose sucker *Catostomus catostomus* (N=36), whitefish spp. (Coregoninae; N=15), Arctic grayling *Thymallus arcticus* (N=7), northern pike *Esox lucius* (N = 6), and sockeye salmon *O. nerka* (N = 5). The estimated weekly sex composition for Chinook salmon ranged from 8% to 32% female fish. Three primary age classes were identified, 1.2, 1.3, and 1.4, for Chinook salmon, with a dominant age class of 1.3 (64%). The estimated weekly sex composition for summer chum salmon ranged from 39% to 53% female fish. There were two primary age classes identified, 0.3 and 0.4, with a dominant age class of 0.4 (64%).