

Abundance and Run Timing of Adult Salmon in Gisasa River,
Koyukuk National Wildlife Refuge, Alaska, 2005

Abstract: During 2005, a resistance board weir was used to record escapement information for Chinook *Oncorhynchus tshawytscha* and chum salmon *O. keta* in the Gisasa River, a tributary of the Koyukuk River, Alaska. An estimated total of 3,111 Chinook salmon migrated through the weir. Five age groups were identified from 591 Chinook salmon sampled, with age 1.3 (57%) dominating. The sex ratio was 33% female and 67% male. The mean length for females was 760 mm, range 440-965 mm, and the mean length for males was 663 mm, range 420-890 mm. An estimated total of 172,259 chum salmon migrated through the weir. Two age groups were identified from 619 chum salmon sampled, with age 0.3 (98%) dominating. The sex ratio was 45% female and 55% male. The mean length for females was 547 mm, range 470-615 mm, and the mean length for males was 577 mm, range 445-655 mm. Sixty sockeye salmon *O. nerka* were also counted as they passed through the weir. The most abundant non-salmon species was northern pike *Esox lucius* (N=23) followed by Arctic grayling *Thymallus arcticus* (N=13) whitefish (Coregoninae; N=8), and longnose sucker *Catostomus catostomus* (N=8). Chinook and chum salmon escapement counts from this portion of the Koyukuk River drainage assist fisheries managers in making inseason decisions during the Yukon River commercial and subsistence fishing seasons, provide post-season evaluation of various management practices, and assist in developing future run projections.

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