

## **ANVIK RIVER SONAR CHUM SALMON ESCAPEMENT STUDY, 2010**

The 2010 Anvik River sonar project operated from late June until the end of July to estimate the passage of summer chum salmon *Oncorhynchus keta*. Data from each bank was collected using a high frequency imaging sonar (DIDSON) sampling 30 minutes of each hour, 24 hours per day, 7 days per week. The estimated salmon passage was 901,682 (SE 4,068), of which pink salmon comprised 56% (505,509) and summer chum salmon passage was 396,173. The summer chum salmon passage was 12% above the minimum escapement objective for the Anvik River biological escapement goal of 350,000 to 700,000 chum salmon. Based on 1979–1985 and 1987–2009 mean quartile passage dates, timing of the 2010 chum salmon run was 4 days later. A chum salmon diurnal migration pattern was observed with the highest passage (37%) occurring during the darkest part of the day (2300–0500 hours). Females comprised 54.7% of the catch in beach seines. Age-0.3 fish comprised 57.5% of the chum salmon run in 2009.

Key words: chum salmon, *Oncorhynchus keta*, pink salmon, *O. gorbuscha*, sonar, DIDSON, Anvik River

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