

## ABSTRACT

The lower Yukon River drift gillnet test fishery program was used to estimate the run timing and to a lesser extent relative abundance of fall chum *Oncorhynchus keta*, and coho salmon *O. kisutch* salmon entering the drainage. The project was operated from 16 July through 28 August, 2006, on the lower Yukon River near the village of Emmonak, Alaska. Catch per unit effort (CPUE), age, sex, and size composition were derived from drift gillnet catches from the Big Eddy test fishery operated on the Kwiluak Pass (South Mouth) and the Middle Mouth test fishery operated on the Kawanak Pass (Middle Mouth). The test fishery recorded a cumulative CPUE (1,150.25) for fall chum salmon with the midpoint occurring on 6 August. Fall chum salmon were predominantly age-0.4 fish, comprising 60.4 % of the unweighted ASL sample. The cumulative CPUE for coho salmon was 188.66 with the corresponding midpoint occurring on 18 August. Age-2.1 coho salmon were the most abundant, making up 79.1% of the unweighted ASL sample. The Pilot Station sonar project recorded the passage of 790,563 fall chum salmon with the midpoint occurring on 1 August and 131,919 coho salmon with the midpoint observed 20 August. The drift gillnet test fishery provided supplemental information that was used to evaluate data provided by other assessment projects in the Lower Yukon. Comparing trends observed from Lower Yukon drift gillnet test fishery to Pilot Station sonar passage estimates provided critical information to fishery management staff regarding run timing.

**KEY WORDS:** Yukon River, Chinook, chum and coho salmon, gillnet test fishery, run assessment, catch per unit effort (CPUE).