

Spawning distribution and run timing of Copper River sockeye salmon, 2005, Study No. 05-501

The purpose of this three-year (2005-07) project was to use radiotelemetry techniques to assess the spawning distribution and run timing for adult sockeye salmon *Oncorhynchus nerka* stocks in the Copper River, Alaska. This report summarizes the results from the 2005 field season.

Specific objectives were to: (1) estimate the proportions of sockeye salmon returning to major spawning areas of the Copper River (Lower Copper, Chitina, Tonsina, Klutina, Tazlina, Gulkana and Upper Copper rivers) such that the proportions were within 10% of the true proportions 95% of the time; and (2) describe the stock-specific, migratory timing profile of sockeye salmon in the Copper River at the point of capture in Baird Canyon. The largest proportion of spawners returned to the Klutina River drainage (0.35), followed by the Upper Copper (0.28), Tazlina (0.12), Lower Copper (0.07), Gulkana (0.07), Chitina (0.05), and Tonsina (0.05) rivers.

Run-timing patterns at the capture site varied among stocks. The mean date of passage at Baird Canyon varied from 31 May for the Tazlina stock to 13 July for the Tonsina stock.

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