

**Chinook Salmon Capture For Radio Telemetry Study  
2003 Performance Report  
US-Canada R & E funded**

**Title:** Chinook salmon capture for radio telemetry study, 2003 Operations

**Study Number:** URE-03-03

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**Study Objectives and Results**

- A.** Capture at least 1,000 healthy chinook salmon, fit them with internal radio tags and secondary marks and then released:

Year 2003 radio tagging of chinook salmon began June 3 and ended July 13. A total of 2,312 chinook salmon were captured and 1,097 of these had radio tags inserted into the stomach.

- B.** Fish tagging rationale:

A 5-week radio tagging schedule was developed using historical run timing from other projects. This 5 week tagging schedule should cover over 95% of the run. Each crew fished up to 8 hours per day, seven days per week, for over five weeks. Drift gillnets were used to capture fish because of their effectiveness in capturing the target species with minimum injuries. Marked fish received a primary spaghetti tag, an internal radio transmitter and other biological data collected (age, length, genetics sample).

- C.** Hire local residents to assist with drift netting to capture and radio tag chinook salmon:

Local fishers from Russian Mission were contracted to provide fishing expertise and fishing boats. The contract fishers were responsible for safe skiff operation, local knowledge of fishing areas, and to provide a crewman to assist in deploying and

retrieving the nets. Two crews near Russian Mission (Dogfish) and one crew at Russian Mission fished to attain weekly tag deployment goals. An additional tagging crew fished at Russian Mission for 11 days during the peak of the run. A total of 10 different fishers (and their accompanying crew) participated in the tagging effort for a total of 128 (8 hour) shifts.

### **Consultations and Capacity Development**

Effort and catch data obtained during drift gillnet sampling was recorded on *rite-in-rain* paper. The data collected was edited and entered daily into a temporary Access database and then each day output sent electronically to Juneau for the database manager to download and incorporate with data from the radio tracking stations. The output from the database in Juneau was sent to ADF&G in Fairbanks and Anchorage for in-season analysis of radio tagged fish. Weekly contact was made with the YRDFA teleconferences.

A report on the 2000-2002 field seasons will be presented in March, 2004. Data collected during the field season is currently being edited and analyzed and will be presented in a report prior to the 2004 field season. Some preliminary results include: 9.5% tagged fish in Lower Basin, 2.3% in Koyukuk River, 1.9% in Mid Basin, 15.3% in Tanana, 7% in Upper Yukon, 34.3% in Canadian Yukon, and 4.5% in the Porcupine. In addition, 20.9% were caught in the US fishery and 4.2% in the Canadian fishery. Sixteen (1.5%) of the tagged fish did not move upriver, were considered lost and were not counted in the distribution.