

East Fork Andreafsky River Chinook Salmon Carcass Survey

R&M# 05-10

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1. Introduction:

Objectives:

1) Analyze ASL data collected via carcass sampling, analyze ASL data collected via weir sampling, and asses how the two methods compare.

2. Study Area: East Fork Andreafsky River, north east of St. Mary's Alaska, Lower Yukon River drainage (Figure 1).

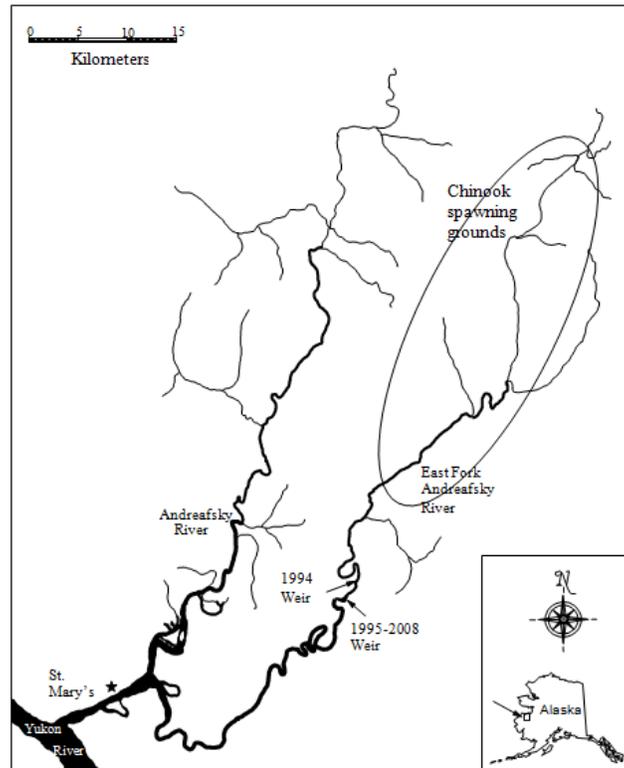


Figure 1. Location of the East Fork Andreafsky River weir and Chinook salmon spawning grounds.

3. Methods:

Age, sex and length were collected from Chinook salmon carcasses on the spawning grounds of the East Fork Andreafsky River August 5-15. A sampling goal of 400 carcasses was set as recommended by ADF&G. Collections were made daily by traveling via boat from the weir camp upstream through the spawning grounds and returning to camp each evening. The majority of the spawning grounds were sampled multiple times throughout the sample period. Sex was determined by dissection and visual identification of the reproductive organs, length was mid-eye to the fork of the caudal fin and rounded to the nearest 5 mm, and scales were sent to ADF&G for age determination.

4. Results:

Twenty five Chinook salmon carcasses were sampled. Of the 25 carcasses sampled, seven were females (28%) and 18 were males (72%). Two females were aged 1.3 with an average length of 792.5 mm, four females were aged 1.4 with an average length of 870 mm, and one female, length 850 mm, could not be aged. Seven males were aged 1.2 with an average length of 542 mm (length not recorded for one individual), ten males were aged 1.3 with an average length of 742 mm, and one male aged 2.2 had a length of 610 mm. The low sample size of the survey was deemed inadequate for making comparisons with the weir data.

Dates of Operation: Chinook salmon carcasses were sampled from August 5-15, 2010.

Problems/Issues: Unfortunately, only 25 Chinook salmon carcasses were sampled. High water at the end of July may have washed carcasses out of the spawning areas, and the timing of the carcass survey may have been too late.

Project Report: The East Fork Andreafsky River carcass survey data was incorporated into the annual East Fork Andreafsky River weir report cited below. No additional reports are expected.