



AYK SUSTAINABLE SALMON INITIATIVE

Project Synopsis

YUKON RIVER WATERSHED



(Stan Zuray)

PROJECT 808

PRINCIPAL INVESTIGATOR

Stan Zuray
Rapids Research Center

RESEARCH PERIOD

June 2008 -
March 2011

BUDGET

\$33,470.00

WORK-IN-PROGRESS RAPIDS STUDENT DATA COLLECTION

INVOLVING STUDENTS IN SALMON SCIENCE

Presently, there is a lack of consistent information on sex, length, weight, girth, and visible disease for Yukon River Chinook salmon bound for upper river areas and Canada. These types of data are essential for the effective management of the many salmon species that migrate upstream each year. Information on Chinook salmon, in particular, is a high priority because of recent issues of declining size and possible loss of the older age classes. There is a need to have continuing baseline studies in place to monitor changes in this fishery.

OUR OBJECTIVES

Collect full season sex, length, girth, weight, and *Ichthyophonus* disease prevalence data on Chinook salmon, and be able to determine the arrival of the fall chum salmon run.

Collect information using local students trained in data collection techniques.

Provide in-season updates on Yukon River runs.

HOW WE WILL DO IT

Tanana high school students with previous experience will collect random samples of Chinook and chum salmon at several fish camps at the Rampart Rapids. We plan to collect sex, length, girth, and weight data on 1,000

RESEARCH

FRAMEWORK:

SALMON LIFE CYCLE –
PRIORITY #3

SNAPSHOT

This project will use trained, local high school student technicians to collect Yukon River Chinook salmon sex, length, weight, and girth data. Students will also determine the rate of *Ichthyophonus* disease in Chinook salmon, and the date of the start of the fall chum salmon run.



(Stan Zuray)

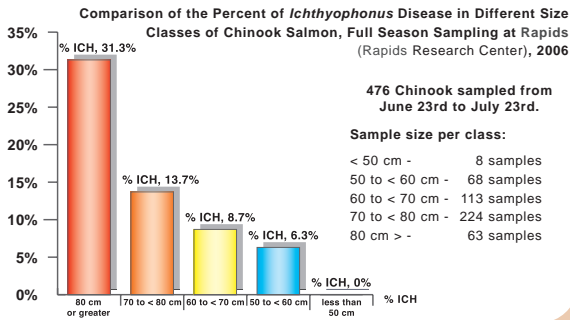


(Stan Zuray)

Chinook salmon, and dissect 500 Chinook salmon to detect *Ichthyophonus* disease rates. Beginning on July 20, well before the fall chum salmon run, we will examine chum salmon for flesh color. The fall run fish have flesh which is darker red with a higher fat content. For the purposes of this study, we will note the date in which 50% of fish collected belong to the fall run as the “official” beginning date of this run.

REPORT COMPLETION

May 2011



While other studies have shown that *Ichthyophonus* infection is spread somewhat evenly among the different size classes of Chinook salmon, Rapids Data Collection Project has shown that the actual disease is clearly more pronounced among the larger size classes. Graph showing similar results to 2006 exist for 2007 to 2009. (Zuray, RCC)

AYK SSI Mission: To collaboratively develop and implement a comprehensive research plan to understand the causes of the declines and recoveries of AYK salmon.

ARCTIC-YUKON-KUSKOKWIM SUSTAINABLE SALMON INITIATIVE

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