



AYK SUSTAINABLE SALMON INITIATIVE

Project Synopsis

YUKON RIVER WATERSHED



(Paige Drobny)

PROJECT 414

PRINCIPAL INVESTIGATOR

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*Tanana Chiefs
Conference*

CONTRIBUTING ORGANIZATION

*Bering Sea Fishermen's
Association*

RESEARCH PERIOD

May 2004 -
June 2005

BUDGET

\$45,732.00

CAPACITY DEVELOPMENT AND COMMUNITY INVOLVEMENT

COMMUNITY-BASED DATA COLLECTION

Community involvement and capacity development are important components in the collection of biological data from subsistence fisheries. Involving local communities, in this way, can decrease problems and mistrust between local villagers and biologists and increase public support and resource stewardship. During the past five years of low salmon returns, subsistence harvests have been significantly larger than commercial harvests, yet information characterizing the subsistence harvest is sparse.

OUR OBJECTIVES

Develop transferable training guides for individuals and organizations interested in salmon data collection, and train and mentor up to 30 individuals from up to 10 Yukon and Koyukuk river communities.

Provide biological data to management agencies and enhance the subsistence fisheries database.

HOW WE DID IT

We chose 10 communities based on input from various agencies regarding subsistence harvest data that was lacking from their databases. We entered into personal services contracts with each tribal council. We traveled to each community in accordance with the subsistence fishing schedule to train council-selected individuals to collect biological data from Chinook and summer chum salmon. In addition to biological data, the trained technicians

RESEARCH

FRAMEWORK:

SALMON LIFE CYCLE –
PRIORITY #2

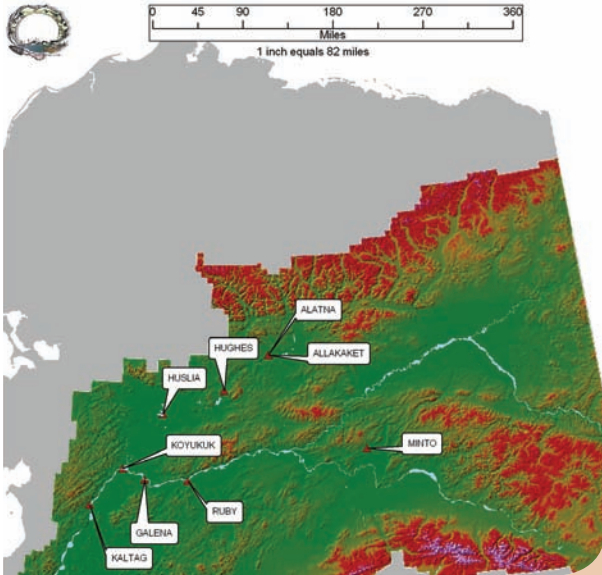
SNAPSHOT

This project engaged communities on the Yukon and Koyukuk rivers in subsistence salmon harvest data collection.

Activities included the development of a manual and training of 21 technicians from seven communities to collect information on gear types, mesh size, and salmon sex, length, and weight. Tissue samples for aging, stock identification, and presence of parasites were also collected.



(Paige Drobny)



Map of the Yukon and Koyuk river villages from which salmon data samples were collected. (Elkin, TCC)

collected salmon scales, otoliths, and vertebrae for age determinations; fin tissue for stock identification; and heart tissue for the detection of *Ichthyophonus*. Usable data was compiled into an Access database.

WHAT WE DISCOVERED

We were able to train 21 technicians in seven communities. Technicians found our manuals useful for data collection. The best dataset collected consisted of gear type, mesh size, species, sex, length, and weight measurements. Scale samples from Holy Cross were the only ones in good enough condition to determine ages. Vertebrae samples contained too much tissue, and many technicians forgot to collect otoliths, resulting in an inadequate sample size. Problems accompanied the collection of fin and heart tissue, although some of these samples were able to be processed and archived for later analysis.

PRODUCTS AND OUTREACH

Our manual is available for future trainings, and our database is available for continued analysis. We provided all usable collected tissues for addition to existing archives. Our results were displayed on a poster at a regional meeting.

WHAT'S NEXT?

Improvements in data collection will require more training for the technicians. We were limited to two days of training prior to the start of the subsistence season. We recommend focusing on two or three communities, allowing for week-long technician trainings. Our data may be useful in future analyses comparing mesh size of nets to Chinook salmon lengths.

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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