



# Lheidli Fisheries News

Lheidli T'enneh  
Fisheries Program

Spring, 2006

## Planned Activities and Focus for 2006

The fisheries program is in the planning stages for another busy year. We are currently awaiting information about the status of a Treaty Related Measures proposal submitted through Lheidli's Treaty table that would see Lheidli continuing the development of an in-season run-size estimation platform in the Prince George area. If this proposal is funded, the AFS-funded fisheries program will utilize a portion of its budget to support this work. In either case, the focus of this year's fisheries program will be the following activities:

1. Management of the food, social and ceremonial (FSC) fishery
2. Conducting chinook enumeration in the upper Fraser
3. Participating with DFO towards the development of an improved indicator stock program for upper Fraser Chinook, in combination with an enhanced stewardship component
4. A project attempting to improve our under-

standing of the life history of upper Fraser chinook

5. Maintaining a community fisheries committee meeting process
6. Fisheries Program staff capacity development
7. Assisting with the management of a potential commercial fishery.

We will keep the community informed of the pro-

gram's activities as they unfold through the community fisheries committee process. The first meeting is scheduled for late June.

This update provides a summary of the activities the fisheries program completed in 2005. It also provides a summary of the sockeye runsize forecasts for the Prince George area for the 2006 season.

Inside this issue:

**2006 Sockeye Stock Forecasts for the Prince George Area**

**Summary of 2005 Fisheries Program Activities**

***Copies of this document are available from the Lheidli T'enneh Band Office;  
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Carl Frederick holds two chinook captured during the chinook index project Lheidli T'enneh completed in 2005. More information is provided about this project inside.



## 2006 Sockeye Stock Outlook; Prince George



Special thanks to Pete Nicklin, Stock Coordinator (FRAFS/UFFCA) for assistance with runsize projections!

*“Based on projections approximately 300,000 – 500,000 sockeye would migrate to Prince George, and create substantial difficulty for First Nations trying to meet their food requirements.”*

Each year DFO (PSC) develops forecasts or runsize projections for Fraser sockeye stocks. With changing environmental conditions and other factors, the ability to predict what actually materializes has become increasingly poor over the last decade. For what it’s worth... the following sockeye run-sizes are predicted:

- Early Stuart – 55,000 – 84,000
- Bowron – 22,000 – 34,000
- Nadina – 16,000 – 29,000
- Late Stuart – 104,000 – 288,000
- Stellako – 363,000 – 568,000

Note that these are total runsize predictions (i.e. what is expected to return in the marine area) and reflect predictions at the 50% (larger number) and 75% (smaller number) probability levels. What is predicted to migrate to Prince George is even less appealing, and re-

quires DFO’s planned-projected exploitation in various commercial, First Nation, and sport fisheries, and also the enroute losses that are expected due to migratory stresses based on projections of Fraser River conditions.

- Early Stuart – 30,000 – 50,000
- Bowron – 9,324 – 15,776
- Nadina – 6,781 – 13,456
- Late Stuart – 60,320 – 172,800
- Stellako – 210,540 – 340,800

Based on these projections approximately 300,000 – 500,000 would migrate to Prince George, and create substantial difficulty for First Nations trying to meet their food requirements. DFO has been informed that escape-ment to this area will constrain FSC harvesting. We will work to provide you with the most up-to-date in-season information as it begins to develop.



A rainbow trout parr (juvenile) poses during juvenile salmonid training the Lheidli juvenile coho survey crew completed before beginning their survey work.



Chukar Gagnon and Sean Nome observe juvenile salmonids of different species.



## 2005 Season/Program Review

Reporting is now complete for all activities conducted in 2005. The following provides a summary of the activities undertaken.

### Training and Staff Development

The start of the 2005 season began with a program staffing process. Carl Frederick was identified as the Fisheries Program Manager Trainee and Chukar Gagnon was identified as the Fisheries Technician Trainee. Both have specific performance criteria that are required to be met annually in relation to capacity development and their future managerial roles in the program. Several program and seasonal staff upgraded first aid training, refreshed their swift water rescue certification, and completed the boat operators certification and firearms safety training/licensing. Carl and Chuk have both worked towards upgrading their schooling in the last year in preparation for post-secondary. They performed admirably this past season.

### FSC Fishery

With the late-timing of the sockeye runs in 2005 the food fishery in Lheidli's area was delayed but produced near average catch by the fishery's end. The highest catch per-unit effort (CPUE) wasn't seen until the 2<sup>nd</sup> last week of September. In total, approximately 7000 sockeye and 165 chinook were captured during the fishery. One hundred tissue and scale samples were collected during each week of the fishery and provided to DFO

Several changes were made to improve the management of the fish-

ery, including licensing of non-status Lheidli members that typically participate in the fishery, the distribution of permanent license-marker buoys, and mandatory weekly reporting of catch. All-in-all the fishery occurred without any issues. Additional funding was provided to the Lheidli fisheries program to "enhance" catch monitoring intensity in 2005. The FSC fishery and catch monitoring activities were managed by Carl Frederick, Rocky Quewezance and Chukar Gagnon in 2005.

### Chinook Management

#### **Chinook Run-size Index**

In order to gather additional information about the timing and biology of the various Fraser chinook stocks that spawn upstream of Prince George, the fisheries program has been running 1 or 2 large mesh gillnets for the purposes of intercepting chinook. Scales, DNA and length/weight measurements are collected from these fish. This activity generally starts earlier (early July) than the sockeye food fishery. Once the food fishery is initiated, sufficient samples can be collected from fishers' catches. The Catch Monitoring crew (Carl Frederick, Chukar Gagnon and Joseph Quewezance) managed the chinook index nets 2005.

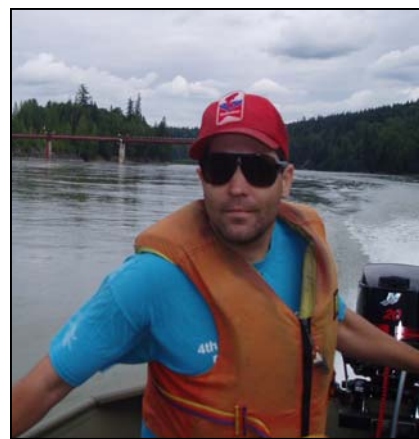
#### **Robson Valley Small-Stream Chinook Enumeration**

DFO enumerates adult returns to the larger upper Fraser tributaries by helicopter overview flights. There are a number of smaller streams that can't be counted in this manner. Lheidli crews have conducted ground-based surveys of 8 chinook spawning streams in the Robson Valley for the last 2 years. These streams are walked

3 times within the spawning period. Gord Haines, Irvine Gagnon and Sean Nome conducted the surveys in 2005. In general, chinook escapement was about ½ of the 2000 brood year.

### Coho Assessment

Coho that occur upstream of the Fraser Canyon near Boston Bar are generally considered to be a single "genetic unit" referred to as the Interior Fraser Coho. They are now known to occur in Naver Creek and the Blackwater and Nechako system, but have yet to be documented in the Fraser system upstream of Prince George. Lheidli conducted a survey of juvenile coho presence in this area in 2005. The Lheidli crew (Chukar Gagnon, Sean Nome, and Merle Seymour) attended the Babine Lake area to capture and observe juveniles of various species, including coho, in large numbers. Between August 31 and September 22 a total of 27 sites on 24 waterbodies were sampled with baited minnow traps. While no juvenile coho were captured, all sites sampled produced other



Gord Haines searches for a route from the Fraser to the Peace. Thanks for your help with the fisheries program over the years Gord!!



## Coho Assessment ...cont'd

species of fish. Lheidli also supported a helicopter flight in the upper Bowron River watershed in the hopes of observing adult coho spawners. No coho were observed, although water conditions were poor for aerial observations. The flight was conducted in early November.

We will continue efforts to better understand coho presence and distribution in Lheidli's territory in the future.

## Nechako Sockeye Sport-Kill Fishery Monitoring

DFO allowed a sport-kill fishery for sockeye in the lower Nechako River for the first time last year. Lheidli was contracted to monitor the fishery throughout the open period. Anglers were allowed to kill two sockeye per day each. Frank Frederick Sr. and John Bozoki monitored the fishery, which occurred from September 10-25. Participation in the fishery was generally low, but increased as anglers became aware of the opportunity. The fishery is estimated to have resulted in 30 sockeye being harvested. Lheidli fisheries staff and DFO negotiated the runsize minimums and river conditions that had to exist before the fishery could be opened, the area where the fishery would take place and timelines, and also a harvest-cap for the fishery. Should DFO approach Lheidli regarding another sport-kill fishery this year, we will work to make any such fishery subject to similar conditions, as well as insist that a creel survey be conducted by Lheidli.

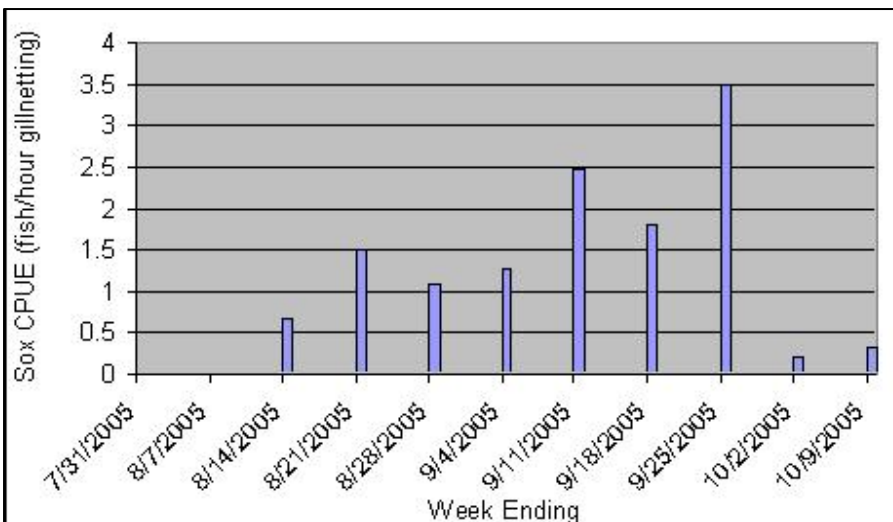
It's difficult to support additional harvesting pressure on the Nechako's struggling sockeye stocks, but if it builds broader-community interest in the stewardship of this resource, and doesn't impact FSC harvesting, it should be considered. This issue will be discussed thoroughly at the community level.

## Community Fisheries Committee

A newly formed community fisheries committee process was initiated in 2005. Initial plans for this committee were completed in the first quarter including the development of a draft terms of reference for discussion and a letter of invitation to the proposed members (proposed membership was determined by Chief and Council). Meetings occurred July 2 & 28, August 25 and September 29.

This process has been an excellent manner in which to provide information to the community and receive their input and direction on specific matters. This group will continue to serve as the primary source of community feedback for the purposes of informing the fisheries program in 2006.

Funds for this meeting process were initially identified within the AFS budget for 2005. The community fisheries forum served as an appropriate manner for Treaty personnel to meet the objectives of an ongoing Treaty Related Measure (TRM). The costs for this meeting process were therefore borne by the Treaty Department.



The CPUE (number of sockeye captured per hour of gillnetting during Lheidli's sockeye FSC fishery in 2005. Note that maximum catch wasn't seen until near the end of September.



Time to think about getting out the fishing gear!!