



WATERSHED TALK NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

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Early Stuart Run

An update on the Pre-season Forecast

There has been a total accounting of 5,700 Early Stuarts to date.

The pre-season forecast peak timing in Area 20 (Strait of Juan de Fuca) is July 4th. The peak is when half of the run has gone through that area.

With so few fish being seen to date, Early Stuart sockeye could be:

- returning later than forecast;
- returning below the forecast number of about 300,000; or
- a combination of lower and later.

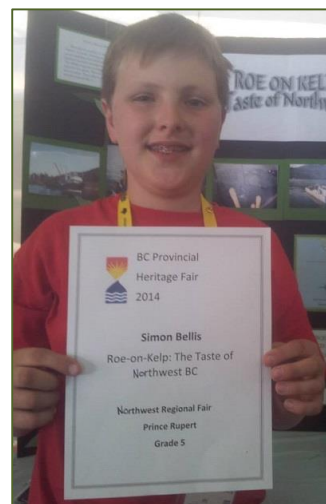
The Fraser Panel meets next Tuesday. We should have new information then.

Fish Tech 101

DFO has forecasted that anywhere from 7.3 million to 72.5 million sockeye will return this summer. For planning purposes they've set a **median p50 number** of 23 million sockeye spawners.

P50 means 50 per cent probability: there's a 50 % chance of the actual returns being higher and a 50 % chance that they'll be lower.

Herring Roe-on-Kelp Fishery



Simon Bellis is a Grade 5 student from Prince Rupert. His grandmother is Mary Ann Bellis (Haida Gwaii) and his “Grandpa” is Aubrey Innes: a fisherman who in the 1970s partnered up with fishers from Haida Gwaii to develop a commercial herring roe-on-kelp fishery.

Earlier this year, Simon and his classmate Kade Jones made a presentation on the history of the local roe-on-kelp fishery. As a result, they were selected to represent the northwest at the BC Provincial Heritage Fair.

In the roe-on-kelp fishery, the harvest is not the fish itself, but the eggs which attach to kelp after the herring have spawned. The open pond method - where lines of kelp are lowered from a frame into an area where herring are naturally spawning - is used by First Nations on the north coast.

Congratulations to Simon and Kade for getting the word out about the roe-on-kelp fishery.

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Fraser Salmon Update

By Pete Nicklin, FRAFS Fraser Fisheries Biologist

Happy July Everyone!

The Fraser sockeye in-season has begun! As a fisheries biologist working with First Nations, I absolutely love this time of year. The anticipation of a healthy return, catch reports, the flow of technical data, in-season calls...the only thing better is the transformation of electronic (or paper) fish into real sockeye (and lots of them!).

The first Fraser River Panel meeting (via teleconference) took place Thursday July 3 at 11am, followed by Mike Staley's FRAFS in-season update teleconference at 1PM. The overall timing of these meetings and the information should be considered early in-season, and mainly focused on the Early Stuart sockeye return. A summary of the sockeye information is provided later in this article.

Fraser River Conditions

The BC River Forecast Centre website (<http://bcrfc.env.gov.bc.ca>) has information and links related to discharge and temperatures at various monitoring stations throughout the Fraser watershed, including snow pillow and melt updates.

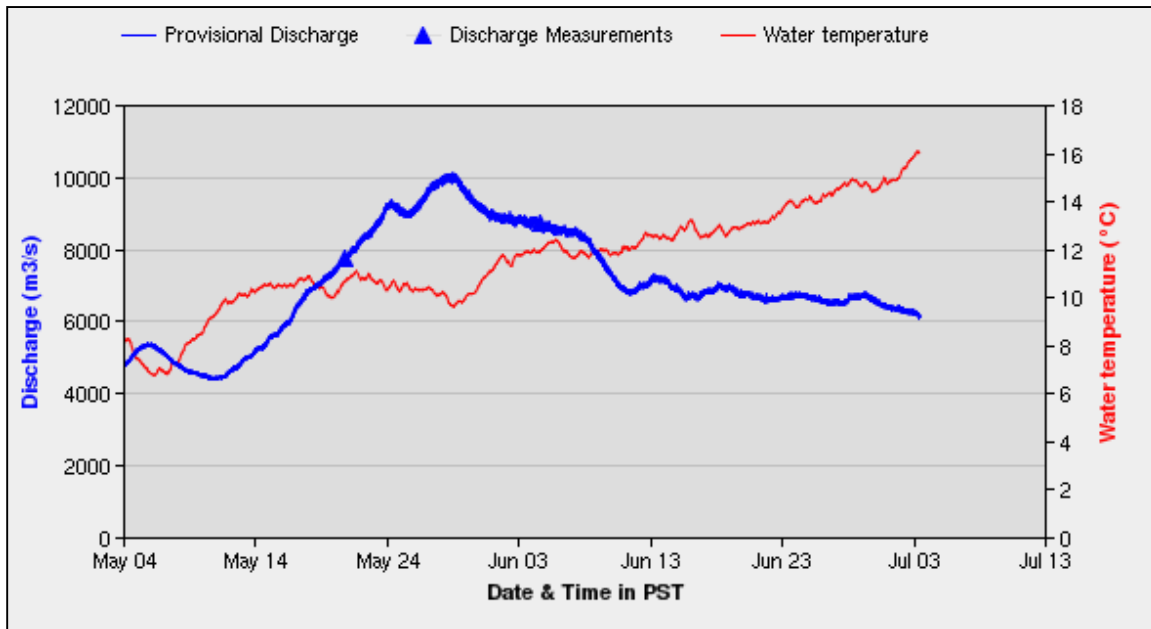
Environment Canada's Water Office webpage provides access to real time hydrometric data at many locations throughout the Fraser watershed (http://www.wateroffice.ec.gc.ca/index_e.html).

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Fraser River Conditions

Discharge and temperature at the Hope water station for the time period May 4th to July 3rd 2014 looks like this:



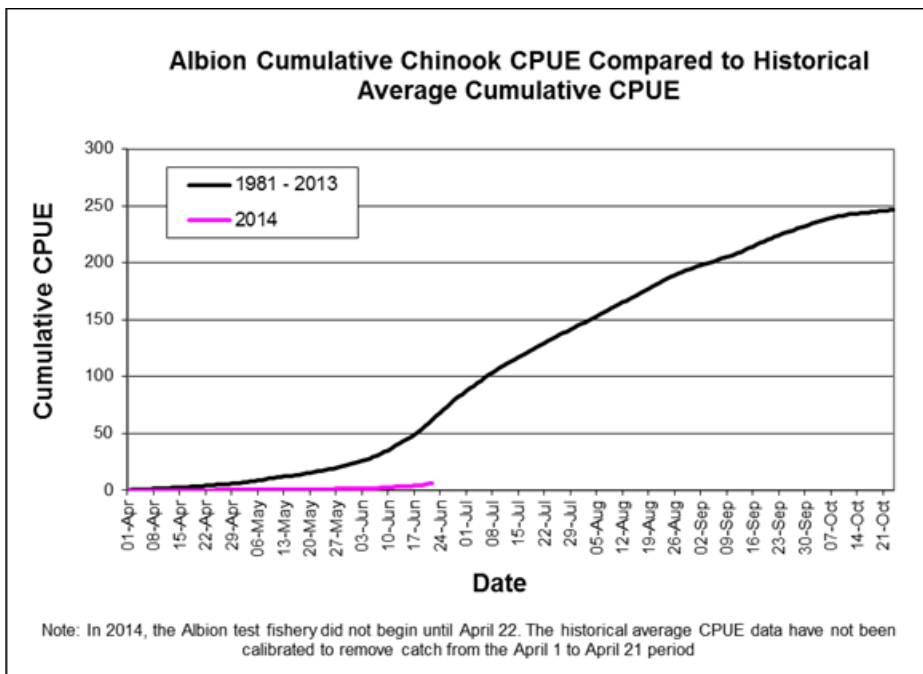
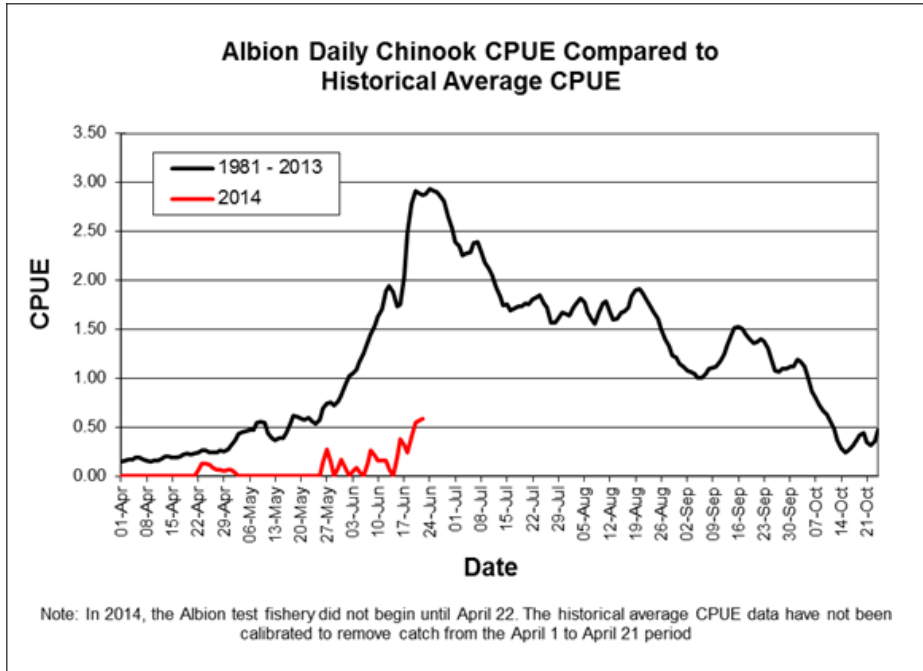
As described in the Watershed Talk salmon update in mid-June, the Fraser River discharge at Hope (thick line – blue if you are looking at this in colour) reached a peak of approximately 10,000 cms (cubic metres per second) May 16th and has continued to decrease to about 6,100 cms by July 3rd. For a reference of what that means in terms of fish passage, in general the Early Stuart sockeye threshold for upstream passage is considered 8,000 cms. Conversely, during the same timeframe, Fraser temperatures (thin line – red in colour) have ranged from about 9.5 to 16 degrees Celsius for the same time period, and are steadily increasing. In general, Fraser temperatures of 18 degrees Celsius and warmer are considered stressful for sockeye salmon, and may affect upstream migration and spawning success.

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Fraser Chinook Albion Test Fishery

(Graphs from DFO website: Albion Chinook Test Fishery): July 3rd, 2014



The Albion Test Fishery information can be found at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/fraser/docs/commercial/albionchinook-quinnat-eng.html>



Fraser First Nations Chinook Catch

Fraser First Nations Fisheries information can be found on the DFO website at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/fraser/index-eng.html>

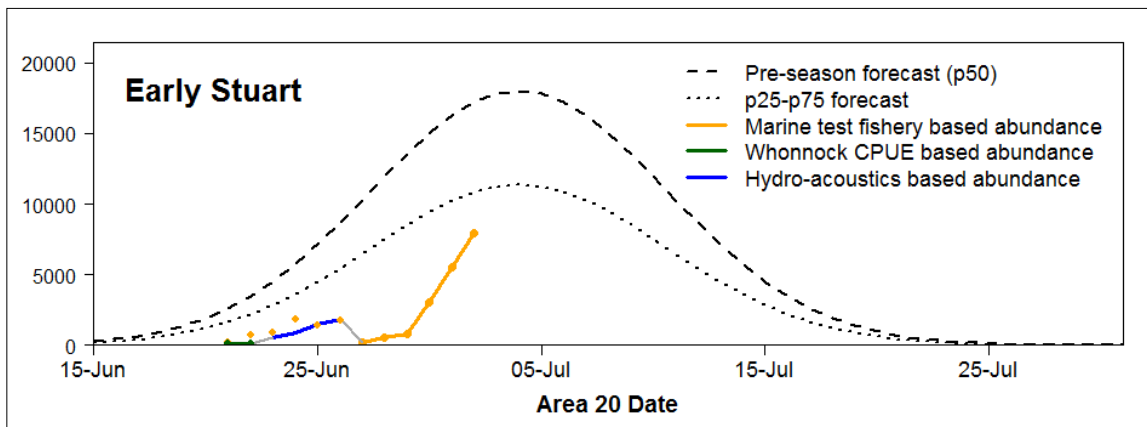
Mid and Upper Fraser First Nations Chinook catch estimates have not been provided by DFO at this time. Current fisheries openings have been updated for this year, but the 2014 harvest report isn't on the website yet. However, I do receive regular updates (and pictures) from one of the local First Nations fisheries organizations, and there have been several Chinook caught in the Williams Lake area in the past week, and these will show up in the harvest report.

The Lower Fraser First Nations Chinook catch estimate to June 29th is 5,105.

Fraser Sockeye

The Pacific Salmon Commission (PSC) distributes the Fraser River Panel agenda and technical information for Panel members and observers to the process. The following information is a summary of key information from that document (July 3rd).

In general, test fishing catches are lower than expected based on expected timing and the pre-season forecast, but it is too early to tell if the Early Stuarts are less than forecast, or later or possibly both.



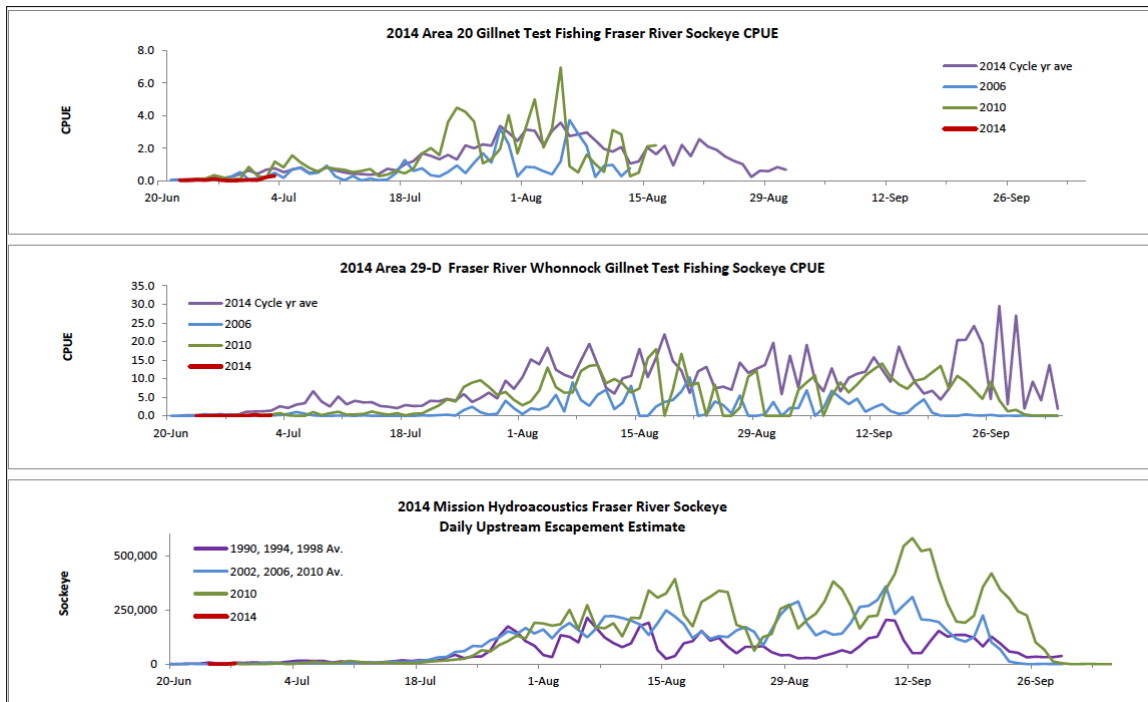
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Fraser Sockeye (continued)

This graph shows the 2014 estimated abundance and timing based on Marine and in-river test fisheries and Mission hydro-acoustics compared to forecast.

Test fishing graphs from the distribution package look like this:



DNA and scale sampling in test fisheries shows a component of Chilliwack (4 & 5%) and Harrison (8,5 & 7%) in the Fraser mix.

The next Fraser River Panel meeting is scheduled for July 8th.

For more information contact Pete Nicklin by email: pnicklin@telus.net