

FRASER RIVER SALMON UPDATE

By Pete Nicklin, Assistant Stock Management Coordinator – Phone (250) 392-5888 or email: indiseaent@shaw.ca

Intro

There's not much to add about Fraser River sockeye salmon that hasn't already hit the mainstream press in the past week. A press release by CBC (<http://www.cbc.ca/story/canada/national/2004/09/20/salmon040920.html>) characterizes the Fraser sockeye return as "cause for concern" and "extremely low", while the Vancouver Sun (<http://www.canada.com/vancouver/vancouvernews/news/story.html?id=681e5398-8252-4338-afb4-079004375f82>) hit a little harder with a report of sockeye escapement being "disastrously low" and printing Steven Hume's article titled "*Amid feuding and dithering, a salmon run faces extinction*" (September 22, 2004). Yikes. Is the situation really that bad? Yes, unfortunately, it is.

With so much bad press about the sockeye, it's easy to forget that chinook were subjected to the same record high temperatures in the Fraser this summer. How are they doing? Very early indications show an escapement around 10% higher than brood for Interior chinook stocks, across the board. And even better, there doesn't seem to be any evidence of pre-spawn mortality (as opposed to 1998). Yes, this information is very preliminary, but for right now, I'll take all the good news I can get!

Sockeye Escapement Update

DFO posts the most recent escapement updates on their website, twice a week. I'll attempt to summarize the current information, but if you feel inclined you can visit the following link <http://www.pac.dfo-mpo.gc.ca/fraserriver/escapeupdate.htm> to go through the results in their entirety.

Generally, once the sockeye have passed through the various test fisheries, aboriginal/commercial/recreational fisheries, and the Mission echo-sounder, the next piece of the management puzzle is obtaining a final estimation of spawning ground escapement. Getting a final estimation of the spawning ground escapement is, in

itself, at least a four-step process. The four steps are *Salmon escapement estimation field studies*, *Preliminary estimates*, *Near final estimates* and *Final estimates*.

The first step is the field enumeration program on and near the spawning grounds. The initial sets of data posted and released by DFO are actual counts via observation (bridge counts, aerial surveys, stream walks, fence counts, tower and dam counts), which provide general information and can't be interpreted as enumeration estimates, but can be compared to past years observations.

At completion of the field projects Step 2 kicks in. *Preliminary estimates* are released after data from the field projects are entered, but not verified for accuracy or tested for bias. Significant changes to the Preliminary estimates are probable. DFO posted the *Preliminary estimate* for the Early Stuart sockeye on September 21, and I will summarize that information later in this article.

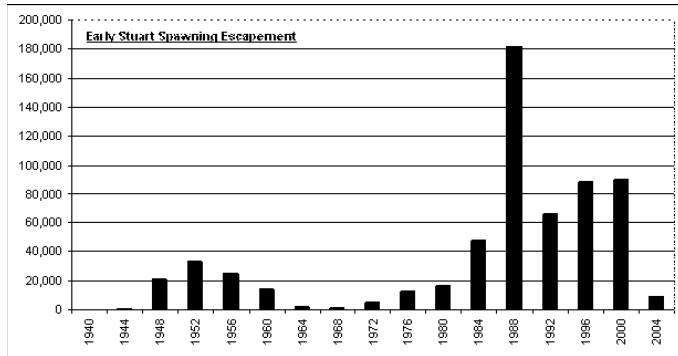
Near final estimates (Step 3 for those keeping count) are released after the data are verified for accuracy and tested for bias. Minor changes to these estimates are still possible. The *Near final estimates* for all runs will be ready in February 2005.

Final estimates are presented after all data have been incorporated and all verification steps are completed. The *Final estimates* won't be ready for all runs until late 2005.

Early Stuart Preliminary Escapement Estimate

Early Stuarts first showed up on the spawning grounds on July 21st, 28 days after being reported at Mission. **The total estimate of sockeye is 9,244 (3,873 males, 5,366 females and 5 jacks).** This cycle year escapement is the lowest in 3 decades, and the 6th lowest since comprehensive surveys began in 1940. The escapement is only 10% of the brood year escapement, 10% of the escapement goal (90,000) and 94% lower than the Pacific Salmon Commission's in-season estimate of potential escapement (150,947).

This is seriously bad news.



The above graph shows how the 2004 escapement compares to the previous escapements on this cycle, back to 1940. The scale on the left goes from 0 to 200,000, with the highest black bar being 1988 at approx 180,000 (record escapement for this cycle). The little bar on the far right is 2004.

Early Summer Sockeye Salmon Escapement Estimation Field Studies

The Early Summer return doesn't look any better than the Early Stuart returns, and may turn out to be a lot worse.

The Early Summer sockeye aggregate is made up of stocks of sockeye that spawn throughout the Fraser Watershed, from as far north as the Nechako River drainage to the Lower Fraser (Pitt and Chilliwack Rivers), in the Thompson River and the middle Fraser (Gates Creek). The Early Summer migration coincided with extremely adverse migration conditions in the Fraser this summer, and this, combined with harvesting pressure (719,000 Early Summers estimated to have been caught as of September 2) has had a tremendous impact on the returns.

Here's what we know so far (some of the following numbers are fairly loose):

- **Nadina River(Nechako drainage):** migration into the river channel complete – 8,320 sockeye
- **Gates Creek (Middle Fraser):** 3,779 sockeye through the Seton fishway, 9,907 sockeye into the creek (migration complete)
- **Scotch Creek (Thompson drainage):** 813 sockeye through the fence

- **Pitt River (Lower Fraser):** 1,590 tags applied, 4,515 carcasses recovered
- **Upper Chilliwack River:** helicopter count of 21,420 live, 56 dead, spawning peak approximately August 23rd
- **Bowron River (Upper Fraser):** approximately 350
- **Upper Adams River:** approximately 7,000 (1/10th of the brood)

The Summer Run and Late Run information is very early, and not worth summarizing for this article, but the previously mentioned web link has some general information about the enumeration programs for these runs. **For more information contact Pete Nicklin at (250) 392-5888 or by email at indiseaent@shaw.ca.**

WEB LINKS

Go to the Pacific Salmon Commission's website at www.psc.org for the most up to date technical information. Download the Excel file titled PSC_ESC.xls for a complete breakdown of the sockeye escapements.

Current Opening/Closing Times and the Harvest Information for Lower and Upper Fraser are posted on the FRAFS website at www.frafs.ca.

UPCOMING MEETINGS

September 30, 2004: Upper Fraser Fisheries Conservation Alliance (UFFCA) Meeting, **10:00 a.m. Sandman Inn, Quesnel.**

October 6, 2004: Fraser Tier One Meeting, hosted by the Musqueam Indian Band. The meeting is at the Musqueam Community Hall located at 51st and Salish Drive. *To confirm your attendance email Denise at info@frafs.ca. For further information regarding this meeting, contact Marcel Shepert at (250) 562-6279.*