SEHAB June 2023 Sunshine Coast Roundtable Report Community Advisor: Jim Wilson Rep: Angela Kroning Alternate: Dianne Sanford

The salmon hatchery, stewardship and education groups are pleased to have our new CA Jim Wilson interact with the communities on the whole of the Sunshine Coast

A question has come up on how stewardship groups should deal with invasive fish species found in salmon bearing waters – see Sargeant Bay Society report.

Tla'amin Nation

The Tla'amin hatchery has secured its annual egg targets for 2022 except for Chinook. Due to low water last fall and climate change, the Chinook were unable to enter the stream due to very low water flows in the river. The crew did attempt to channel an area for the fish to enter but were unsuccessful. This left the fish vulnerable to the sea lions waiting for the salmon returns around the estuary. The hatchery reached out to its Community Advisor in search of Chinook eggs and was successful in getting 57,000 eyed eggs from Big Qualicum Hatchery to assist our Nation with continued returns of Chinook for our stream. The juvenile Chinook smolts were released on June 02nd before warm temperatures could possibly affect the release.

We managed to reach our annual Chum egg target of 1.5 million eggs. We keep 600,000 fry that are fed up to 1 gram before release in mid-May. The remainder of fry get released unfed directly into the river. The hatchery staff also managed to secure its target for Coho eggs; 60,000 eggs were taken and are still cared for as of June 8th. They will be adipose clipped before release in July in Tla'amin Lake for overwintering. They will migrate out to the ocean on their own next spring.

The hatchery has also been working on replacing the Tla'amin Lake Dam. The dam was built back in the late 70's to store water for habitat for the river. This stored water would be available for water flows to the waiting fish in the early fall salmon return season. This also allows us to also store water for overwintering habitat for all salmonids that utilize the river system. The Nation applied to the PSSI fund but was denied. The old derelict dam was transferred to the Nation along with the water license that was held by DFO after the signing of the Treaty.

The hatchery also promotes public awareness and education to its many visitors throughout the year. We just completed a cross cultural awareness tour for international students from different corners of the world. We share traditional knowledge with our visitors and the lifecycle of the salmon.

-Lee George, Tla'amin Fisheries Manager

Stream to Sea

The upper Sunshine Coast Stream to Sea Education Program culminated in April with two days of Coho fry release at Tla'amin Creek (also known as q'wətəm tišosəm). Six schools took part with over 150 students naming and releasing fry that they watched grow from eggs in aquariums at their schools. Leonard Harry welcomed them to the hatchery and Melvin spoke about growing up beside q'wətəm tišosəm, the fish people, the flyers and the little people (micro-organisms).

A CA for the entire Sunshine Coast is much appreciated!

-Janet May, DFO Education Coordinator

Sunshine Coast Salmonid Enhancement Society

- 39,013 adipose fin clipped 2021 brood Coho released May 20th & 25th
- 64,134 2022 brood Chinook released May 26th
- 28,332 2022 brood Chum released May 24th and June 2nd
- 24, 386 2022 brood Coho fry are rearing at the hatchery, adipose fin clipping will commence in October 2023 to be released next spring.
- Repairs to our water main feeding creek water to the hatchery will tentatively begin the week of July 17th. Currently creek water is upwelling from the ground close to the front of the main hatchery building, in the parking area. We will be shutting the creek water supply off to the hatchery while this is excavated, repaired then backfilled. Along with this project we are installing a means to turn off the creek water other than sandbags, a frame and stoplog configuration or a valve on the intake pond inflow culvert. The 2022 brood Coho will be rearing on ground water only, supplied through our three wells, until this work is complete. We have recently discovered 2 other plumbing leaks that will be addressed during this creek water shutdown time.
- This year's Second Annual Salmon Release Festival on May 20th at the hatchery was very successful. Starting off with a nice sunny day, between 350-400 visitors of all ages helped out in releasing Coho smolts to the creek and checking out the many displays and events. Many community groups participated in this fun event. We are looking forward to doing it all over again next year.
- Our ongoing well project to supplement the hatchery water supply is currently on hold.
- Phase 3 of the hatchery buildings painting project is taking place at various times over the spring and summer with the help of our many volunteers and the Rotary Club, this project is ongoing.
- Visitor numbers are up so far this spring. Hatchery volunteer hours are ever increasing through this reporting period.
 - –Bill Krause, Manager, Chapman Creek Hatchery

Sargeant Bay Society Streamkeepers

Good news in Sargeant Bay Provincial Park with our stalled fish ladder replacement. After the last SEHAB meeting our concerns with funding by BC Parks seem to have been heard. It has been confirmed by DFO that they will help to fund the majority of this replacement project. This

is great news! The plan now is for DFO restoration to finalize design drawing this spring/early summer. We will plan to have it manufactured offsite in the coming months and installation is scheduled for next July/August. We had already been approved for a grant from PSF last year and have been informed by them that we can roll that over to next year for the project which is great news that we do not have to re-apply. Archaeological assessment as well as quotes on the machine work for installation are next on the agenda but will be arranged by BC Parks. Thank you to everyone that has helped the progress along on this project.

Our group will also continue to monitor summer stream temperatures on Colvin Creek. Colvin Creek is a small, but very shady creek with lots of foliage along its bank and historically has kept healthy low summer water temperatures.

One note of concern that we have heard of lately is invasive Pumpkinseed fish in Colvin Lake (beaver pond) that Colvin Creek drains into. Our first report of this was last year but we have now heard more reports from the public. This is of concern so we will have to do more research as to how best to deal with this invasive species and how other lakes in BC are dealing with these invaders.

-Dave Spicer, Sargeant Bay Society Streamkeepers.

The Rotarian Herring Curtain Project

During the off season we clean and repair the curtains and assemble new ones for next year's spawn season. We also use this down time to connect and promote this project to other Rotary groups in communities around the Salish Sea and in the Lower Mainland. The plight of the herring was featured at the opening of last month's District Rotary conference and it is hoped that the information passed on there will encourage other communities to do what we are doing here to provide temporary habitat for herring during the early spring.

As part of the Sunshine Coast Conservation Association's World Ocean Day festivities, the public was invited to come and help construct a herring curtain in Davis Bay and to learn about the Pacific Herring and what they need to thrive again in the Salish Sea!

- Margie Garrard, Herring Curtain Coordinator

The Loon Foundation

Juvenile salmon monitoring started up on March 1st. The Chum were really late emerging this year which makes sense as the adults as the adults couldn't get into the creeks until almost the end of October of last year.

Forage fish monitoring: one Pacific sand lance egg was found at Baker Beach in March. It was the only egg found this spawning season (October to March).

Seagrass: Surveys will start up again in June with mapping and a Leaf Area Index Survey at Thormanby Island.

European Green Crab: This year there has been a reduction in the effort. We are trapping weekly. No EGC's were found this year as of yet.

-Jenn Blancard, Field Research Supervisor

Sunshine Coast Friends of Forage Fish

After a two-month hiatus, the Sunshine Coast Friends of Forage Fish will be starting up again next week sampling at Gibsons and Sechelt Inlet in hopes of finding summer spawning Surf Smelt eggs.

There were positive finds for Pacific sand lance (single eggs only) at both sites during the winter sampling session in the winter.

- Dianne Sanford, Coordinator

Sunshine Coast Streamkeepers Training

April 26th saw 15 students and staffs from Coast Mountain Academy, the Powell River Salmon Society and a DFO Education Coordinator successfully complete a two-day training workshop in Powell River on Squatter Creek (locally known as Willingdon Creek). The highlights of the sessions were the connections made between the high school students and the education coordinators with talk of hiring some of the students during the summer at the local hatchery.

- Angela Kroning & Dianne Sanford, Trainers

Sunshine Coast Conservation Association

The multi-partnered project Skwxu'7mesh Uxwumixw (Squamish Nation), with support from DFO CA, Ministry of Transportation & Infrastructure, the Sunshine Coast Streamkeepers Society and the Town of Gibsons to replace culverts and improve salmon habitat in the lower reaches of Gibson/Ch'kw'elhp and Malcolm Creeks have begun. The MoTI biologist and geomatics supervisor conducted site visits and their consultants completed topographic surveys on both creeks in the past two months. The SCCA is currently finalizing the contract for the habitat assessments.

This past week, the SCCA embarked on its 7th World Oceans Day Festival with financial support from the Sunshine Coast Regional District, the District of Sechelt and the Sunshine Coast Credit Union. The week- long festival offered for free: two live films screenings, five web-based presentations and two hands community-science activities ranging in topics from the Fraser River estuary, Howe Sound and the Salish Sea and the animals such as cetaceans, salmon, forage fish and Dungeness crabs and flora such as eelgrass and kelp that inhabit these marine waters.

- Suzanne Senger, Executive Director

Salish Sea Resilient Estuaries Program

As climate changes become more impactful to vital nearshore marine nurseries such as estuaries, it is increasingly important to protect those that have a higher capacity to adapt to rising sea levels and increasing storm events. Sea Change Marine Conservation Society is embarking on a four-year plan to identify these estuaries, including small and medium sized ones, and to restore and conserve their unique features to increase opportunities to survive climate effects and processes. Sunshine Coast estuaries will be included.

-Dianne Sanford, Sunshine Coast Advisor

Submitted by A. Kroning, June 12, 2023