

## **SEHAB Roundtable November 2022 – Sunshine Coast**

Angela Kroning, Representative

Dianne Sanford, Alternate

Community Advisor: Jim Wilson

**Key Issues relating to DFO:** The community thanks the SEP Community Involvement Program for hiring a locally-based Community Advisor to support the entire Sunshine Coast. There is ongoing concern about the continued herring roe fishery in the Salish Sea (see Rotary of the Sunshine Coast below).

**Issues related to other Agencies:** Funding is needed for replacement of a fish ladder located in a provincial Park (see Sargeant Bay Society below) which was damaged beyond repair during the Atmospheric River event November 2021.

### **Community News:**

#### **Sunshine Coast Salmonid Enhancement Society**

- 2022 Coho adults, 38 were trapped and we managed to spawn 33 (14 males, 16 females and 3 jacks). 6 egg takes were done, Nov 10<sup>th</sup>, 17<sup>th</sup>, 24<sup>th</sup> and Dec 8<sup>th</sup>, 15<sup>th</sup> 29<sup>th</sup>. For a total of 24,700 in incubation. Ponding of these will be mid/late April with clipping in Oct and release May 2024.
- 2022 Chum adults, 62 were trapped with only 30 (15 of each sex) of these spawned. 5 egg takes were done, Oct 26<sup>th</sup>, 28<sup>th</sup> and Nov 1<sup>st</sup>, 3<sup>rd</sup>, 7<sup>th</sup>. For a total of 28,000 in incubation. Just over half of the Chum returns were poor quality and unusable for brood stock, bad eggs or milt or some were already spawned out at the time of trapping. Ponding of these will commence soon, early to mid-April with release 2 to 4 weeks later.
- 2022 Chinook, Nov 21<sup>st</sup> we received 71,000 eyed eggs form the Chilliwack hatchery, delivered by CA Jim Wilson, Thanks Jim and also a big thanks to the crew at Chilliwack for the spawning and early incubation work! These were ponded to rearing, Feb 8<sup>th</sup>; currently they are 0.65 grams in size and due to be released in late May to early June.
- 2021 Brood Coho, 39,000 adipose clipped juveniles in rearing are scheduled to be released late May.
- The only truly pressing project here this summer is to repair a leaking pipe. It is the main hatchery creek water supply line pipe, currently it is upwelling out of the ground, at the front of the main hatchery building in the parking area, and this will be addressed sometime from early July to Aug 20<sup>th</sup> at the latest. We will have to shut the creek water 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 stop-log configuration or a valve on the intake pond inflow culvert. The 2022 brood Coho will be the only fish on site during this work and will be rearing on well water only throughout this work period.

- We are preparing for the Second Annual Salmon Release Festival here at Chapman, scheduled for Sat May 20/23, last year's event was a hit on the coast as the weather cooperated and we had a huge turnout with between 400 to 500 visitors. Many different community groups participated and we are looking forward to having them all back (and also a few new ones this year) for a second year of fun and fish releases.
- Our ongoing well project to supplement the hatchery water supply is currently slowed to almost a standstill. We are looking at the possibility of drilling a test/production well on the adjacent property next to us, the Sechelt Rod and Gun Club and also the possibility of drilling on a non-developed road allowance for Gun Club Road directly to our southeast. I have nothing formal to report on both of these prospects as of yet.
- Phase 3 of the hatchery buildings painting project will take place at various times over the spring and summer months with the help of our many volunteers and the Rotary Club, this project is ongoing.
- Visitor numbers were down for the winter months and are slowly picking up these days. Hatchery volunteer hours are slightly increasing through this reporting period.
  - Bill Krause, Manager, Chapman Creek Hatchery

#### **Sargeant Bay Society -**

The main project we continue to work on is getting the damaged 30+ year old fish ladder in the Sargeant Bay Provincial Park replaced. We were told by BC Parks last summer that there was funding available for the whole project as BC Parks had applied for Disaster Funding due to the Atmospheric River rains when the fish ladder was severely damaged. Recently however, we have been informed by BC Parks that the funding will only cover repair not replacement. There is not really any way to repair the ladder since it had almost washed away previously and the wood is rotten. So we are this spring, once again, trying to determine where funding may come from. We have some other options but with BC Parks taking the lead on the project it would be nice for them to get the funding through their own channels. DFO engineering has been great and is working on obtaining some quotes for building of the replacement ladder. Hopefully some progress is made. As a non-profit volunteer group we can only push a project so much - we hope both funding and direction to move forward come soon from BC Parks.

During the fall and spring we hosted a brush clean up on the berm of Colvin Lake at the Park. We have been removing any invasive plants along the beach and also extra brush near the salmon access to the Lake that the beaver has piled up. A beach portion of this clean-up has also been added this year. This works as a good community outreach with often 15+ Streamkeepers / Sargeant Bay Society members and other volunteers working for a few hours at the Park.

Not really salmon related...but there was been more reports of people picking oysters in some areas of Sargeant Bay last summer. It seemed to be people visiting / vacationing on the coast that were not aware or did not make the effort to find areas where it is safe and legal to harvest shellfish. We have requested some Shellfish Closure signs for the beach and parking lot. There is currently a crab harvest regulation sign that has been in place for many years but no notice of shellfish closure. Hopefully we can get those signs up for early summer.

- Dave Spicer, Director

#### **The Loon Foundation -**

Salmon Escapement – We completed creek walks in Anderson and Myers Creeks from September to November. The drought resulted in Chum residing in the bay until the last week of October. We did notice dead juvenile Coho in the gravel of the dried out pools at the beginning of October. We counted a total of 5,546 Chum salmon and 15 Coho in Anderson Creek and 3,177 Chum and 73 Coho in Myers over the season.

Forage fish – Forage fish egg sampling have been continuing through the year. Our first detection of Pacific Sand Lance winter spawning was on November 16, 2022 at Vaucroft Beach. Since then sampling has occurred at 29 beaches, with positive spawning beaches being detected at 11 beaches. This data is housed on the Strait of Georgia Data Center.

Invasive species – We identified our first European green crab (EGC) in Pender Harbour May 2021. We caught 2 males in Malcolm Bay and another crab was brought to us by a local that was caught in Francis Point Marine Park. All crabs were males of approximately 3 years of age. We have been working closely with Christine Spice of DFO. All crabs have been euthanized. In 2022 we found 4 EGC with 3 of them being males found in Bargain Narrows and 1 of them a female in the lagoon on Pool Road in Hospital bay.

Juvenile salmon – We had a total of 5,111 juvenile salmon (25 Chinook, 2491 Chum and 49 Coho, 2446 Pink and 100 unidentified salmon) identified at Irvines Landing and 3,644 juvenile salmon ( 28 Chinook, 3345 Chum, 10 Coho and 261 Pink). Monitoring started on March 1 and the first salmon was observed at Irvines Landing on March 11.

Seagrass – One Seagrass Leaf Area Index Survey was completed at Thormanby Island in July. Seagrass bed mapping was completed at Baker Beach and within Bargain Harbour as well as Kent Road Lagoon.

Pinnipeds – The pinniped surveys were greatly reduced due to lack of access to vessels for surveys. Hodgeson Islands (aka Seal Islands) were counted monthly throughout 2022. The data has not been analyzed at this time. One sea lion survey was completed and we observed a sea lion that had been entangled. This was reported to the DFO and the Marine Mammal Rescue program run by the Vancouver Aquarium.

- Jenn Blancard, Field Research Supervisor

### **FRIENDS OF FORAGE FISH - SUNSHINE COAST**

The Friends of Forage Fish Sunshine Coast Group commenced our fall and winter sampling on the lower Sunshine Coast in October of 2022, one site in Sechelt Inlet and the second in Gibsons Harbour, with financial assistance from the Sitka Foundation.

We had a successful recruitment of new volunteers and completed the season with positives for Pacific Sand Lance at Breakwater Beach in Gibsons in the months of December and January, and one positive for Pacific Sand Lance in Sechelt Inlet at Ark Road Beach in January 2023. These were small positives, with only one egg found each time at each beach, but one egg is better than none!

We will be sampling the same beaches with a focus on Surf Smelt eggs starting in June.

We are now affiliated with the BC Forage Fish Monitoring Network, a provincial coast-wide network of groups dedicated to finding and mapping shoreline locations of forage fish spawning sites, and our positives will be posted on their maps.

- Dianne Sanford, Co-ordinator

### **Sunshine Coast Conservation Association**

The Sunshine Coast Conservation Association in partnership with Sk̓wx̓wú7mesh Úxwumixw (Squamish Nation), with support from DFO SEP Community Advisor, Ministry of Transportation & Infrastructure, the Sunshine Coast Streamkeepers Society and the Town of Gibsons is moving forward on the project to replace culverts and improve salmon habitat in the lower reaches of Gibson/Ch'kw'elhp and Malcolm Creeks.

In February, the SCCAA co-authored a letter with the Elphinstone Community Association and the Ocean Beach Neighbourhood Association addressed to the Sunshine Coast Regional District stating support for the inclusion of a proposed \$150,000 budget item. This money would be used to conduct hydrological and geomorphological studies on Chaster and neighbouring creeks to identify for example, storm-water management issues and their impacts on salmonid habitat. This line item was replaced by the SCRD with a \$10,000 proposal to host a forum involving all the government agencies that have authority in the Chaster Cr. watershed. The budget was passed and it is expected that the Ministries of Forests, Transportation & Infrastructure, Water, Lands & Natural Resource Stewardship, DFO, Squamish Nation, local governments and community groups will attend to state their roles and present their respective interests and management plans for the watershed.

- Suzanne Senger, Executive Director

### **Salish Sea Nearshore Habitat Recovery Project 2018-2022 + Extension to 2023 due to COVID**

Over the 5 years of this project, a total of 4,852 eelgrass shoots were transplanted in Sechelt Inlet, and 7.71 metric tonnes of underwater debris removed from the Porpoise Bay area of the Inlet. A total of 37 metric tonnes (37,000kg) of underwater debris was removed from the four regions involved (Sechelt Inlet, Howe Sound, Burrard Inlet, and Gulf Islands).

Our local project culminated with a celebration picnic at Porpoise Bay Provincial Park for all the community, local governments, and volunteers that participated in the project. The Shishalh Nation opened the celebration with a song, and presentation of beautiful blankets to three of our key participants. (Nikki Wright, Project Lead, Dianne Sanford, Sechelt Area Coordinator, and Darlene Bulpit, Shishalh Nation.)

A StoryMap project has been initiated for the Gulf Islands and Sechelt Inlet Areas to capture the history of these portions of the Salish Sea Nearshore Habitat Recovery Project. With assistance from the University of Victoria geography students, this online pictorial history will help ensure that techniques, Indigenous and community collaboration, and lessons learned are passed on for future projects.

Following the final year of the 2022 project, Sea Change Marine Conservation Society has applied for Aquatic Ecosystems Restoration Funding to continue with restoration work in the Southern Vancouver Island and Sechelt Areas. The results of this application will be announced at the end of March 2023.

- Dianne Sanford, Regional Coordinator for Sechelt Inlet

### **Sunshine Coast Streamkeepers Society**

Malcolm Creek Culvert Replacement Project -We have exciting news to relay about a culvert that is a barrier to spawning salmon! The Malcolm Creek culvert located at Metcalfe Rd/Roy Rd in Roberts Creek and the Gibson Creek (Marine Drive) are going to be replaced by fish friendly culverts that will allow wild salmon to reach / wonderful spawning grounds previously not accessible. SCSS is now part of the / Ch'kw'elhp /Gibson Creek Working Group Replacement Project. In solidarity with Squamish Nation, SCCA and MOTI, the two culverts replacement will hopefully happen in 2024.

Climate Change & Salmonid Temperature Loggers Report -We are continuing to download the data from the nine creeks water temperature loggers and air temperature loggers we have installed from Chapman Creek to Dakota Creek. We have put the data into graphs and the information is proving to be interesting and sometimes surprising! We are in the process of adding this data to our website. Please watch for this addition! SCSS is planning to add a creek located in the Sechelt Inlet in the near future.

Invasive Plants Removal and Native Plant Planting Monthly Events: SCSS is continuing the monthly events at Roberts, Malcolm and Chapman Creeks. We remove ivy, blackberry, laurel and holly. We received a grant from the Pacific Salmon Foundation to purchase 87 native plants to replace the invasives we removed. These plants will contribute to the health of the riparian areas of these three creeks by providing shade and helping the banks to remain intact when a flood event occurs.

Spawning Salmon 2022 Report - Please have a look at our website for the full report on the spawning counts for 2022. We want to make special mention that this last fall SCSS volunteers counted the largest amount of Chum & Coho in Roberts Creek with a grand total of 586!! <https://sunshinecoaststreamkeepers.com/spawning-counts-for-creeks-fall-2021/>

Volunteer Appreciation Tea & Welcome to New DFO CA Jim Wilson - SCSS had a special event to welcome our new DFO Community Advisor Jim Wilson on March 15, 2023, at the Chapman Creek Hatchery. We combined this with a Volunteer Appreciation Tea and were happy so many wonderful Streamkeepers volunteers attended.

Mt. Elphinstone South Watershed Hydrology Report released: A report commissioned by BCTS was just released (Mt. Elphinstone South Watershed Assessment: Phases I & II). Available [https://www.for.gov.bc.ca/ftp/TCH/external/!publish/InformationSharing/Mt Elphinstone South Watershed Assessment/](https://www.for.gov.bc.ca/ftp/TCH/external/!publish/InformationSharing/Mt%20Elphinstone%20South%20Watershed%20Assessment/) BCTS will be holding an online public engagement on April 6th to review the report. All of our communities on the lower Sunshine Coast are all downstream of the forests of Mt. Elphinstone. We all know that we are dealing with a new 'normal' with regard to things never happening before on a scale never really anticipated, i.e., long summer droughts to atmospheric rivers (November 15, 2021). The effects of climate change with so many unprecedented weather events must be taken into consideration in any further decisions on all government levels, federal, provincial, and municipal. After reading the report, SCSS concurred with Donna Mahon, Area E SCR D Director, that a comprehensive full Sunshine Coast Watershed Management Strategy with all the various governments and First Nations representing this area must be implemented as soon as possible. SCSS will be pursuing different avenues to achieve this goal.

- Shirley Samples, President

### **Rotary Club of the Sunshine Coast**

Because the Pacific Herring is a main forage fish for salmon, Rotary drops fabric curtains off docks each spring, providing artificial spawning grounds for herring, due to the loss of much of their natural habitat, eelgrass and kelp beds. With diminished sightings of herring spawning along the Sunshine Coast in

recent years, Rotary has worked diligently to help the existing herring population grow in number, despite the continued heavy roe fishery in the Salish Sea. This year we experienced single layer coating of herring roe at 3 locations in Porpoise Bay, and carefully removed predators such as crabs and starfish while the roe grew to maturity within a 2 to 3 week timeframe. This is one small action towards helping to maintain balance and sustainability within the marine food chain, so the Pacific Salmon species may continue to receive the support they need to survive. Working with several teams of dedicated volunteers, Rotary organizes the construction of the curtains, their tending during spawning season, then the cleaning, repair and storage of all the curtains until the following spring.

Following the herring spawn season this year, Rotary will assist in an ocean micro-organism study alongside shíshálh Nation members, working to better understand the changes and challenges to marine life in our local waters. Using ocean samples taken from a series of marked plots, handheld equipment will measure the quality and quantity of microscopic marine species, and this data will be sent to the DFO for analysis and interpretation.

- Margie Garrard, Herring Project, Operations Manager

Compiled by  
Angela Kroning, March 25, 2023