

SEHAB October 2024: Sunshine Coast Roundtable Report

**Rep: Angela Kroning
Alternate: Dianne Sanford
Community Advisor: Jim Wilson**

A notable achievement this past summer has been the replacement of the 2021 damaged fish ladder at Sargeant Bay Provincial Park. A salmon was seen using the new fish ladder the following day! Significant rainfall events that occurred at just the right time throughout this summer which have kept water levels higher than in previous years may be partially responsible for the unusual number of Pink salmon returning in various and sometimes unlikely creeks and streams throughout the Sunshine Coast. Additionally, sightings of the occasional early Coho provide hope that their return may also be increased this season.

Thanks to Pacific Salmon Foundation and to CA Jim Wilson for grant monies from the former and ongoing support from the latter are expressed by many of the groups.

Stewardship should be made aware of the community's concern over proposed logging in the upstream reaches of Roberts Creek, which is one of the creeks that has shown a recent unusual increase in the return of Pink salmon.

Sargeant Bay Society –

The new fish ladder at Sargeant Bay Provincial Park on the lower Sunshine Coast is now finally installed. For anyone following along this project it had a few false starts and was a much bigger project than anyone involved anticipated. Planning started almost 4 years ago with the thirty-year-old wooden fish ladder ageing out and also sustaining significant damage during the atmospheric river rain event in 2021.



Planning involved many on-site and zoom meetings between DFO Engineering Brandon Kirby and Kirby Rietze; DFO Community Advisor Jim Wilson; BC Parks Rangers Elyse Guzek and Rod Dalziel; and Rand Rudland and myself from the Sargeant Bay Society (photo credits).

The new aluminum fish ladder was manufactured off site last winter on Vancouver Island by David Key. DFO engineers designed a longer ladder than the old one with a more gradual slope to allow easier fish passage as well as allowing smaller fish to use the ladder.

Sargeant Bay Provincial Park was closed for August 6th to 9th to allow heavy equipment to work in the Park and have materials delivered easily and safely. The installation went well with long days. Amazingly in the first night that the ladder was installed and water flowed, a Pink salmon was found in the ladder the next day!

Historically the salmon that enter the fish ladder to spawn in Colvin Lake and Colvin Creek have been Coho and Chum. In the past the beavers have blocked the fish ladder during the summer and Pink salmon have never had the ability to use it. The old fish ladder did not really function until there was enough rain in autumn. The new design has an intake pipe and “beaver baffle” which now allows the water to flow from the lake into the ladder year round. It will be interesting to see if perhaps next summer we have a new run of Pink salmon using Colvin Creek. This may be an unexpected bonus of a well-engineered fish ladder.

Many permissions and permits had to be approved and granted. This project was located in a Provincial Park, and on shíshálh Nation traditional territory which made it

unique in many ways. Archaeological assessments during the installation were necessary. We were able to work with local suppliers for deals on some materials and trucking which really helped reduce costs.

The Sargeant Bay Society also obtained funds which allowed volunteers to build a mobility friendly viewing platform over the fish ladder. This was not something that was located on the site before and is a welcome addition.

Since the installation a few Coho have arrived and we look forward to seeing how the ladder functions with the rains this fall and winter. We have seen Coho arrive in this system as late as January a few times over the years. The Sargeant Bay Streamkeeper group will be monitoring the ladder and the creek daily during this fall with optimism.

Thanks to all involved: DFO, BC Parks, shíshálh Nation, SCR D, Pacific Salmon Foundation, Husband Contracting. Also a big thank you to Angela Kroning from SEHAB for relaying some of the Sargeant Bay Society and Sargeant Bay Streamkeepers difficulties in getting this project off the ground during its early stages. It is believed that SEHAB really helped to lend a voice to this project which helped in getting DFO to take the initiative to see this project through to completion.

- Dave Spicer, Sargeant Bay Society, Sargeant Bay Streamkeepers

Sunshine Coast Streamkeepers Society –

Total-To-Date 2024 SCSS Spawning Salmon Surveys: We were not expecting the huge number of pink spawners this year! Here are our numbers SO FAR! We are thrilled!

<u>Date</u>	<u>Live</u>	<u>Dead</u>
Sept 3, 2024,	57 Pink	6 Pink
Sept 8, 2024,	510 Pink	17 Pink
Sept 16, 2024,	741 Pink	16 Pink
Sept 24, 2024,	904 Pink.	148 Pink
<u>Sept 30, 2024,</u>	<u>538 Pink</u>	<u>342 Pink + 2 Chum</u>
TOTAL:	2,750 Pink	531 (529 Pink + 2 Chum)

We are not sure why these Pink salmon returned to Roberts Creek this year, as this isn't typically a pink year or have had these large numbers in five years of counting returning salmon in Roberts Creek. This year's numbers so far have surpassed our highest total that we had in 2023 (1,546) of all three species (Coho, Pink, and Chum).

SCSS Celebrated World Rivers Day Event – September 22, 2024: We were very happy to take part in the worldwide event that happened in over 100 countries! We had a good turnout and were especially happy with the number of families and young people that joined in planting all the native plants we brought! We also filled 4 green waste bags of ivy! Our next planting event will be on November 2, 2024, at our First Annual Salmon Festival at Roberts Creek estuary!

Climate Change and Salmonid Temperature Loggers Project Report: With the amazing support of the Pacific Salmon Foundation Community Grant Program, we were able to update and replace 10 temperature loggers currently in the field in Roberts, Langdale, Malcolm, Wilson and Chaster Creeks.

Module 3 Creek Water Quality Assessments: SCSS volunteers were able to perform monthly Module 3 Water Quality assessments, including recording the lowest water levels during the summer in Roberts, Malcolm, Wilson, Chapman and Gibson Creeks.

Protect Spawning Salmon Signage: We have noticed and members of the community reported numerous incidents of the public harassing spawning salmon. Therefore, we have installed a sign on Roberts Creek to ask the public to respect spawning salmon. We plan to install similar signs in other creek locations and **would appreciate any support DFO could provide in acquiring official signage.**

New SCSS Campaign: "Stop the cut blocks in the Roberts Creek Watershed/Save Roberts Creek Salmon":

We are continuing our campaign to stop the logging by BCTS of 6 proposed cut blocks located in the headwaters of Roberts Creek. We believe the risks of logging in this vulnerable watershed including the three main upper tributaries of Roberts Creek to salmon and their habitat in the lower reaches including the spawning grounds are too great.

We believe it is more important than ever to keep important primary forests intact as we are dealing with a new normal: weather events (floods, wildfires, droughts) that have not happened before on such a scale. The effects of climate change must be taken into consideration in making any further decisions in all government levels, federal, provincial, and municipal when hectares of trees will be logged. If we combine the new climate realities with the removal of the proposed 6 cut blocks in Roberts Creek headwaters, we could lose the spawning salmon run in Roberts Creek. This totally wild, unique and precious salmon run is too important to the future of salmon as a species. The higher water temperature due to removal of tree canopies, silt from road building, removal of large 40-80-year-old trees and the longer summer droughts are keeping the

water flows in the usual spawning creeks too low for fish to enter. Many of the Lower Sunshine Coast totally wild salmon runs have essentially collapsed. This reality makes it more important than ever to protect the wild salmon runs of Coho, Pinks and Chum in the lower reaches of Roberts Creek.

- Shirley Samples, President, Sunshine Coast Streamkeepers Society

The Loon Foundation -

We wish to note that a European Green Crab was caught in Sargeant Bay this past July at a low tide event hosted by the Sargeant Bay Society. None were identified through our trapping efforts in Powell River, on Texada Island or Pender Harbour in 2024. We continue to monitor in our region.

Salmon counts have started in Myers and Anderson Creeks (Pender Harbour area) and the first of the Chum are being recorded

-Jenn Blancard, Field Research Supervisor, The Loon Foundation

Sunshine Coast Salmon Enhancement Society, Chapman Creek Hatchery -

- Preparing for the upcoming egg take season.
- Rearing:
 - Coho, 2023 brood juveniles – currently holding 19,200, these will be adipose fin clipped on Oct 25th and 26th and moved to their final rearing container.
- Spawners: Currently creek water levels are minimal, and we have only just started to run the adult trap, there is little more than bare minimum water flows going through the hatchery plumbing to encourage a few adults in. Creek water temperatures are still warm for this time of year - 10.5 - 13C; mid-September we saw creek temps range from 14.5 - 16.5c.
 - CA Jim Wilson estimates 2,000 Pinks were spawning in the creek. The Pinks first started arriving Aug 4th this year. This is a very unusual high number returning on an even year run; two years ago a total of 9 pinks were recorded in Chapman.
 - 1 Chinook was holding in the creek as of Sept 12th.
 - Many Coho showed up with the last couple of rains, we estimate 250 – 350 in the creek at this point.
- Projects:
 - The backup generator has been commissioned by the distributor and is now fully operational. The replacement and hook-up of one breaker panel that

powers the Incubation building and the domestic drinking water well pump are the last things left to do that will complete this project. This work scheduled soon.

- Replacement of the hatchery's wooden viewing deck with new wheelchair access ramp is nearing completion. The old deck was 40+ years old and quite rotten.
- Replacement of the deck boards on our intake pond maintenance access bridge has occurred, awaiting a gate to be installed to limit access for authorized users only.
- Awaiting the installation of 2 wheelchair ramps to be added to the bridge beside the adult fish trap to improve access for hatchery visitors.
- Sun deck on the main hatchery building was rebuilt.
- Education building upgrades are scheduled in the near future; new siding to replace old rotting siding, cracked window replacement, roof gutter and downspout repairs, new picnic area pavers, some concrete work on the sidewalk and a new set of doors will be added to the north side of building.
- The hatchery buildings painting project resumed this summer with the workshop and oxygen storage buildings being painted.
- Hatchery volunteer hours were once again fairly high and holding steady throughout this reporting period.
- Visitor numbers were up through the summer and are still climbing.
 - Bill Krause, Manager, Chapman Creek Hatchery, Sunshine Coast Salmonid Enhancement Society

Sunshine Coast Conservation Association -

Ch'kw'elhp/Gibson & Malcolm Creeks Salmon Passage, Habitat & Restoration Project –

Following discussions between the SCCA with the preferred archaeological consultants and Skwxu'7mesh Uxwumixw (Squamish Nation), it was decided at a subsequent meeting that the working group would wait for the Ministry of Transportation & Infrastructure to release their final design for the culvert replacements in order to better determine the scope and costs of the required archaeological/cultural and environmental assessments. We had an informative tour by the Pacific Salmon Foundation, the SCCA and CA Jim Wilson of Ch'kw'elhp/Gibson Creek in mid-August.

The results of the monthly SCCA-conducted water quality tests on Ch'kw'elhp/Gibson creek showed good water quality except for mid-August when it slipped into acceptable on the account of dropping oxygen saturation (84%) and dropping pH ((6.15). Approximately 12 trout were seen in the large pool just downstream of the impassable

culvert on that date. Strategic rainfall events these past four months has kept the creek in better shape than in previous years.

Dakota/L' Dakota Fisheries Sensitive Watershed Nominations Update Project – Water quality sampling in mid-July and early September showed Dakota Cr to have good and L'Dakota (1995-96 SEP Project) to have acceptable water qualities. The latter was steady with 60% oxygen saturation and pH 6 and the former 90-95% O2 saturation and pH 6.5. Nonetheless a trout was seen L' Dakota in July and a few more in Dakota Cr. Regrettably, Centre of Restoration Excellence staff were not able, due to a lack of time, to view L' Dakota when they were on the coast to replace the fish ladder at Sargeant's Bay in August. The SCCA believes that this original SEP project designed to provide overwintering habitat to Coho fry can still provide this function if it were to be rehabilitated.

In September, two Pinks were observed holding in the pool below the McNair Forest Service Road in Dakota Creek; although water levels were significantly higher than they had been in the past six years, the flow was not deep enough for the salmon to swim further upstream to spawn. Stuck at this location, make any salmon highly vulnerable to illegal fishing/poaching.

The SCCA continues to partner with the Sunshine Coast Friends of Forage Fish & Moonstone Enterprises to deliver forage fish egg sampling and eelgrass mapping projects.

-Suzanne Senger, ED, Sunshine Coast Conservation Association

Sunshine Coast Friends of Forage Fish -

The Sunshine Coast Friends of Forage Fish volunteer group is carrying on with sampling three beaches on the lower Sunshine Coast this fall and winter. We did a final education session in late June with a class from a local school, it included a pre-field trip education session about forage fish and what to expect, and then going out and doing a hands-on sampling with the class. It was a hit! Financial assistance for more education has been provided by Pacific Salmon Foundation.

Data collection is done using MABRRI data pages, (version: October 2018) with protocols set by Mount Arrowsmith Biosphere Region Research Institute and Vancouver Island University.

-Dianne Sanford, Coordinator, SC Friends of Forage Fish

Eelgrass Mapping -

An application for funding to assist with mapping in Sechelt Inlet, in order to complete two areas that have not been monitored for eelgrass since 2008 - Narrows and Salmon Inlets, has been successful. Thank you, Pacific Salmon Foundation! Mapping took place in September, with volunteer involvement to provide education on eelgrass and its importance, as well as the importance of data collection. Results of the mapping are currently being compiled and will be submitted to the Sunshine Coast Regional District and the Strait of Georgia (SOG) data center.

A report on our findings will be available early in the new year.

-Dianne Sanford, Moonstone Enterprises