

ANNUAL STREAMKEEPER REPORT FOR FOCI – November 9, 2020

SALMONIDS IN THE CLASSROOM

The Cortes School participated in the Salmonids in the Classroom Programme sponsored by Department of Fisheries & Oceans. Coho eggs were reared at the Quinsam Hatchery, Campbell River, and delivered in January amidst great excitement. Salmon eggs are slippery, round & wet, so it was no surprise that a few eggs escaped little hands and rolled around on the floor, much to the alarm and consternation of the children. However, salmon eggs are resilient, as nature intended, and they suffered no ill effect.

The kindergarten to grade 4 students monitored development of the salmonids from egg to alevin to swim-up fry in March, and were just beginning to feed the fry when spring break and Covid -19 happened. The fry were cared for by school staff under direction from FOCI Streamkeepers. Many of the students were concerned that the fry would be lonely when school didn't reopen in April. Luckily for the fry, although unfortunate for the students, the fry were released into Hansen Creek as soon as they were ready to fend for themselves.

CORTES CREEK SIGNAGE

Finally, the three major salmon creeks that are crossed by public roads on Cortes are signed. Streamkeepers had long discussed the value to the public of creek signage, and a grant of \$500 from the Cortes General Partnership enabled the project to happen. A Klahoose elder, Rose Hanson, inspired the wording 'fish water' and Julie Hanuse provided the Coast Salish orthography. We are very grateful to Rose and Julie for their facilitation of the signs.

The local highways crew and Mainroad Contracting were helpful in the installation of the bridge signage at Basil, Whaletown, and Hansen Creeks. And now, Cortes residents and visitors can easily identify these salmon creeks by name and as 'fish water'.

(photos to be attached)

JAMES CREEK SPAWNING GRAVEL

James Creek is an important salmon creek on Cortes Island, located within 'the Children's Forest' which is a 600-acre private forest land holding immediately adjacent to proposed Carrington Bay Park. The creek has been monitored by Cortes Streamkeepers since 2008 with chum, coho, and cutthroat trout in the creek. Much of the natural spawning gravel that once existed in James Creek was scoured away during early logging practices. Recommendations were made to enhance the spawning potential for chum and coho, and in the summer of 2020, several suitable locations for spawning gravel deposit were identified by DFO and Streamkeepers.

This project was a partnership between FOCI Streamkeepers, Forest Trust for the Children of Cortes Island Society (FTCCIS) and Mosaic Forest Management, who own the land. Spawning

gravel from the original Basil Creek Restoration Project (2017) had been stockpiled, and was transported to James Creek by the local highways crew.

Twenty-one volunteers worked for 2 very physically demanding days in September; 460 part buckets of spawning gravel were moved by bucket brigade and zipline which translates to approximately 3 cubic yards or 9000 pounds or 4082 kilos of gravel! There remain another 4 surveyed sites and we are hopeful to arrange for more spawning gravel through our local highways crew, and continue this work in the next 2-3 years. *(photos to be attached)*.

SPAWNING SALMON & PUBLIC EDUCATION

The decent chum returns this fall in Basil Creek provided good viewing for the public. Several youth streamkeeper/salmon watch programmes were offered to the public school and home schoolers, in collaboration with the Children's Forest Trust. These youth were tasked to make quantitative observations of the spawning salmon in the lower segment of the creek and in the bay. There are some wildly differing counts from the various groups:

- live fish - numbers between 80 and 286
- dead - numbers between 8 and 28
- predators - numbers between 12 and 40 (They counted every raven & crow!)
- one group rose to the challenge of tallying 110 females & 87 males

One streamkeeper suggested that the students could be paid 10 cents a fish and see what happens to the count numbers.

Most importantly, Cortes youth continue to stay engaged & excited about wild salmon!
(photo to be attached)

SUMMARY OF 2020 SPAWNERS

2016 was a strong year for returning chum to Cortes Creeks, and with their usual 4-year life cycle, streamkeepers anticipated a good year, all the more important because numbers for the previous 2 years were disappointing. As this report is being written, streamkeepers are still monitoring the creeks and expecting the runs should continue through to the middle of November. As usual, our most active salmon spawning creek in 2020 is Basil Creek (Squirrel Cove); regrettably, salmon returns to other creeks are disappointingly low.

The first chum were seen in Basil Creek on October 17, and have continued to steadily arrive and move up the creek, with more recent arrivals seeking new spawning areas higher up the creek. This year's chum are notable for their above average size and display of energy & speed as they push upstream.

The following numbers are incomplete (hopefully) and approximate.

Basil Creek - Oct 17/ **700 chum** / 5 bank walk counts

Hansen Creek - Oct 23 & ongoing/ **10 chum/ 6** bank walk counts

James Creek - Nov 4/ **26 chum/ 5** bank walk counts

Manson's Lagoon Creek – Oct 25/ **2 chum**
Chris' Lagoon – Nov 6/ **5 chum**
Whaletown Creek – **0 chum**
Frabjes Day Creek - **0 chum**

INSTREAM INCUBATION BOXES

As previously reported, an incubation box was installed in Whaletown Creek in December 2018 and stocked with 20,000 chum eggs from the Sliammon hatchery near Powell River. *Note: Sliammon chum have the same genetic makeup as Cortes chum.* These eggs were successfully raised to maturity as alevin and released back into Whaletown Creek at the end of March 2019.

With the help of a grant from the Pacific Salmon Foundation to FOCI, two more instream incubation boxes were constructed and are the property of FOCI Streamkeepers. Unfortunately, the chum returns to the Sliammon hatchery were too low in 2019 to provide additional eggs for the Cortes incubation boxes.

2020 looks more promising, and at this date, the Sliammon hatchery chum numbers look substantial enough for a supply of chum eggs to Cortes for Basil & Whaletown Creeks. Plans are underway for this to happen in early December.

POSSIBLE FUTURE PROJECTS FOR 2021

Winter 2020/2021 salmonids in the classroom and fry release in spring

Work on creek flow into spawning pool at Basil Creek

Consideration of dredging some gravel in Basil Creek culvert

Monitoring of Chris' Lagoon

2nd year of spawning gravel placement in James Creek