

NEWS FROM THE...

# Salmon Coast | Field Station

WINTER 2012/2013

VOLUME THREE | ISSUE TWO



Summer & Fall 2012  
Research Projects



## SCFS BROUGHTON ARCHIPELAGO SALMON HEALTH ASSESSMENT

From August – October, we collected over 50 RNA and DNA samples from salmon caught locally by sports fishermen, contributing to a province-wide grassroots effort to gain knowledge about the health of our salmon. Read the *Note from the Coordinators* on page 2 for more information.

## MESS SALMON ENUMERATION PROJECT

This annual project, which operated between August – November this year, collects data on salmon returns in 12 local streams. SCFS hosted Scott Rogers and Alex Spicer, who acted as this year's stream walkers. Read Scott's article on page 3 to learn more about this year's salmon returns.

## SUMMER OUTREACH

SCFS increased its outreach and citizen science efforts this summer. We had a great response! Many families and individuals toured and learned about our facility, and became involved in our Salmon Health Assessment.

## SOUND & LISTENING WILDERNESS RETREAT

Jennifer Schine, whose master's thesis focuses on work with local elder, Billy Proctor, hosted a retreat in August at SCFS, to allow her fellow sound artists to experience the soundscape that has provided so much inspiration for her. Feedback on the retreat was very positive and participants began planning the second retreat before they had even finished the first!

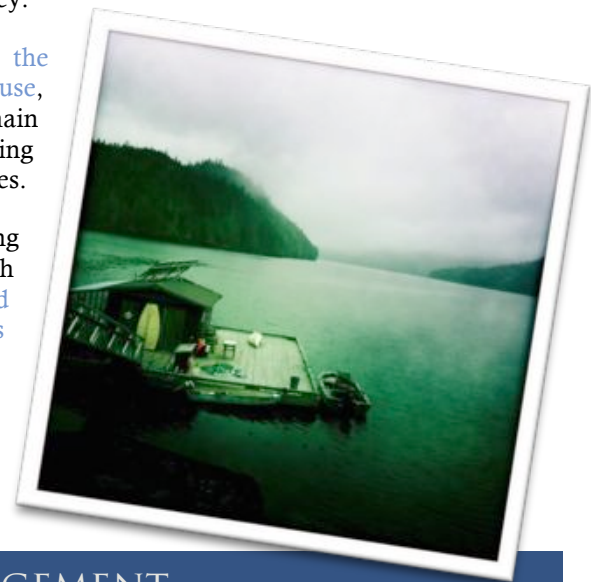
## Thank you!

Due to the recent generosity of the JayMac Foundation and Sarah Haney, we have some exciting 2013 plans:

**We can purchase a boat!** This will greatly increase our capacity and safety for station town trips and ongoing research, and will open doors for new research projects such as a Broughton Archipelago marine mammal survey.

**We can re-roof the leaking Main House,** which contains our main accommodations, dining and laboratory facilities.

We are also working on other projects such as **renovating and building woodsheds** and **renovating the upper house** to make it an independent home.



## SMOOTHING OUT THE MANAGEMENT

### Continuity of Coordinators

Coady and Zephyr will continue working at Salmon Coast until at least July 2014 in order to continue building on the progress that has been made and to provide continuity at a key time in the development of this facility.

### New Assistant Coordinator Position

To help us progress in the development of Salmon Coast and keep it running smoothly, we are hoping to open up an Assistant Coordinator position in the near future. Stay posted for details.

# A Note from the Station Coordinators

**Coady Webb & Zephyr Polk,**  
Salmon Coast Field Station Coordinators,  
reflect on their experiences at the station in  
2012. They've kept their hands full!



Dear Friends and Supporters,

2012 was our first full year as Station Coordinators, encompassing a winter of working and planning for the year ahead, a busy spring season with new volunteers and visitors, weekly Sea Lice Project outings and SLICE resistance experiments, a whirlwind summer of tours for visitors and Salmon Health Assessment sample collections, and an active fall with more volunteers arriving, garden, grounds, and construction projects, firewood collection, and beginning to plan for 2013 projects.

Our daughter Salix has grown quickly over the last year, learning from the rich ecosystem around her as well as from the interesting visitors and researchers who come through the station. She enjoyed summer days playing with her young friends at Blackfish Lodge. She will officially begin kindergarten homeschooling next fall, but she's already coming right along in her training as an amateur biologist!

As we caught, canned and smoked the salmon passing through the Broughtons, and hiked up nearby rivers and streams to watch the local salmon return, these fish once again provided us with both the food and inspiration to continue our work at Salmon Coast. We look forward to another productive year ahead. Here, we'd like to share with you some of our favourite station activities during the past six months and outline some exciting goals for the New Year.

**Broughton Archipelago Salmon Health Assessment** | Since coming to Salmon Coast, we have enjoyed being involved in a number of research projects, but this summer's Broughton Archipelago Salmon Health Assessment was a particular success in several ways. First of all, Salmon Coast secured modest funding for this project and, with the help of our terrific project volunteer, Erica Forssman, and board member, Scott Rogers, we successfully collected tissue samples from over 50 local salmon caught by sports fishermen. These samples are now in world-renowned laboratories in Norway and PEI, being tested for the presence of a number of diseases, some of which show evidence of originating with the salmon aquaculture industry. Our project contributed to a province-wide, grassroots effort to gain an accurate picture of the health of our salmon through sample collection and disease testing. As well as this important disease research, there was the additional element of involving citizens in the scientific process. We made contact with summer visitors to ask if we could sample their salmon, and soon they were asking questions and becoming very interested in the station and its projects. It was our most effective and engaging method of outreach this year.

**Inspiring Conservation** | The positive effect that this beautiful, wild place has on volunteers and visitors who spend time here, sometimes changing the course of their lives and inspiring them to conserve the natural wonders they learned about here, remains one of Salmon Coast's most significant and meaningful achievements. After spending over a

year at Salmon Coast, we have now seen this process in action with each new volunteer and visitor we welcome to the station, and it helps motivate us to keep this special place alive.



Catching, canning and  
smoking salmon  
reminded us of the  
creatures who inspire our  
work.

As always, our heartfelt thanks to the many researchers, donors, volunteers, visitors, station directors, friends and neighbours who continue to inspire us and contribute in so many diverse ways to keep the station going and growing!

*Coady & Zephyr*



## FEATURED VOLUNTEER ERICA FORSSMAN

*Erica spent her summer at the station. Here, I found a home at the Salmon Coast Field Station with the people who live here, the solace of the mossy forest, and in the orange August sunsets down Cramer Pass.*

I had previously spent two summer seasons working at the Whale Interpretive Centre in Telegraph Cove and knew I needed to get back to the area; the field station was above and beyond what I had hoped for. I loved assisting with the Salmon Health Assessment study and learned to see subtle differences between individual salmon that we were looking at, working to gain a better understanding of diseases that threaten our BC's wild salmon population.

The day-to-day tasks of maintaining the station were always a joy; cooking for visitors, berry-picking with four-year-old Salix, and keeping the fish-smoker fueled. I enjoyed the comings and goings of guests, workshop participants, and neighbours, and loved sharing stories and meals with the diverse community of people who contribute to the preservation and celebration of our coastal ecosystems.

Being here has begun to teach me a way of living on the coast and has given me tools to contribute to salmon conservation efforts.

I am so grateful for my time at SCFS and will be returning as soon as I can.

## What the Rain Promises Salmon Returns to the Broughton

*By Scott Rogers, biologist, BSc*

Pink and chum salmon returned to Broughton creeks and rivers with encouraging numbers this fall. As of mid-November, the Mainland Enhancement of Salmon Species Society (MESSS), partnering with Fisheries and Oceans, successfully concluded its fourth season of fall escapement counts for salmon returning to the Broughton. Based out of SCFS, Alex Spicer and I walked 12 streams, many of them every two weeks, between August and November.

Despite late rains, the watersheds came alive with salmon traveling and spawning upriver. The Embley River held over 20,000 pink this year! Eagles, ravens, bears and the occasional wolf filled their bellies and carried nutrients from the ocean deep into the forest. The larger systems we monitored included the Ahta River in Bond Sound, Embley, Gilford Creek, Scott Cove, Shoal Harbour and Viner River. We also walked many smaller systems, which historically had larger numbers of salmon. We kept a steady eye out for the elusive coho, which spawns in the most amazing places! Even the kokanee of the Loose Lake system were showing up in fine form.

We were also fortunate to safely spy on a few grizzlies and wolves enjoying the riches that the salmon run brings. One day the Viner had over 400 eagles in the estuary and river mouth. The relatively high number of returning pinks, chums and coho, as well as the associated wildlife, is a reminder to all of us of the potential richness of this region if properly protected, and our responsibility to do so.

For details and numbers, contact MESSS for their final report. Thank you to the streamwalkers and wildlife that blazed the trails before us, as well as to MESSS, DFO South Stock, SCFS, and those individuals who helped with our stream walks and trail-clearing events.

## New Publication from SCFS Researchers

Using SLICE to control sea lice on farmed salmon is an effective "band-aid"

*Summary by Stephanie Peacock, the paper's lead author* | Although the effect of sea lice on wild salmon populations has been a contentious issue, all sides seem happy to see signs of recovery in the Broughton pink populations. A recent paper by SCFS researchers published in the journal *Ecological Applications* reports that changes to the timing of SLICE anti-lice treatments on salmon farms has resulted in fewer lice on farm salmon during the juvenile salmon migration in the spring. Fewer lice on farm salmon equals fewer lice on juvenile salmon and higher wild salmon survival.

Over the past decade, research at SCFS has played a big role in our understanding of the interactions between farm salmon, sea lice, and wild salmon, and has helped motivate this positive change in farm management. However, the authors caution that the use of SLICE is a band-aid solution that seems to be working for the short term, but should not be relied on in the long term. Although SLICE is doing its job for now, there is a very real possibility that sea lice will develop resistance to the drug, rendering it useless. There are also concerns about SLICE being released into the ecosystem - its effect on non-target species such as the spot-prawn is not well understood. So although there has been a step in the right direction for Broughton salmon populations, we've still got a long way to go!

**Publication:** Peacock, Stephanie Jane, Martin Krkosek, Stan Proboszcz, Craig Orr, and Mark A. Lewis. *In press*. Cessation of a salmon decline with control of parasites. *Ecological Applications*.





## The making of “An Orca Whale Documentary”

By Natalie Lucier

While working as an intern with Canadian filmmaker, Rob Stewart, and his crew in Toronto, I learned how a film can impact people’s worldviews and catalyze change.

I have always felt drawn to whales and the ocean, and dreamed of seeing whales in the wild. I was so driven by this fascination and moved by Alexandra Morton’s book, “Listening to Whales,” that I was inspired to use film to make a difference and draw attention to the endangered killer whales off northern Vancouver Island. [I set out to shoot my first feature-length documentary during the summer of 2012.](#)

Working in cooperation with OrcaLab, I filmed whales during the

summer months in Johnstone Strait, resting in the morning fog, and being chased and surrounded by boats on a daily basis. My intention for this film has evolved to show how we as humans affect the health and wellbeing of the whales and the entire ecosystem.

After filming the whales this summer, I volunteered and filmed at Salmon Coast Field Station in Echo Bay. I interviewed biologist [Scott Rogers](#) about the research that has been ongoing at the station, and I also interviewed the iconic [Billy Proctor](#), who runs the museum in Echo Bay. Billy has a strong passion for the region and it was a treat to hear his stories and be taken to his childhood home near Flower Island.

Throughout my time in Echo Bay, I was struck by the deep respect that the locals have for the marine life and the natural world. It was uplifting to see how passionate the people at the station are about protecting wild salmon and their ecosystem. [Coady and Zephyr](#) work hard and live off the land as much as possible. They made me feel at home during my time at the station, and I enjoyed spending some time with their daughter [Salix](#) as well; she has a smile that can light up the room.

After leaving the station, I was delighted to interview my long-time role model [Alexandra Morton](#) at her home on Malcolm Island. She spoke to me about her passion for the work that she does and why she is taking a

stance against the salmon farming industry in Canada. She wants to protect the ocean and the ecosystem that surrounds her, and I strongly believe in Alex and her work.

I am grateful I had the opportunity to visit Salmon Coast and to all those who have inspired, guided, and supported my journey in creating “[An Orca Whale Documentary](#).” I look forward to weaving together the footage and giving a voice to the stories shared.



The film is set to be released in 2013.

