

NEWS FROM THE...

Salmon Coast | Field Station

WINTER 2010/2011

VOLUME ONE, ISSUE ONE of our new semi-annual newsletter, circulated every summer & winter!

2010 PROJECTS . . .

- Mar – June, Sept – Nov** Pilot Plankton Project, collection and identification, with Scott Rogers of SCFSS
- April** Documentary filming re. salmon farms, with Scott Renyard of Pacific Coast Entertainment
- April – June** Sea lice monitoring on juvenile salmon for Coordinated Area Management Plan (government-industry-NGO collaboration), with Martin Krkosek, PhD, of University of Otago
- April – June** Broughton sea lice monitoring project (ongoing since 2001), with Alexandra Morton of Raincoast Research Society
- June** Quantification of economic benefits that people derive from coastal ecosystems, and how benefits change as ecosystem changes, with Sarah Klain, MSc, from University of British Columbia
- August** Stream Clean-Up, Wakhana Creek, clearing of log jams and obstructions, with Mainland Enhancement of Salmonid Species Society (MESSS)
- August** Echo Bay community MRSA project, with Mike Kelly, MD, PhD
- Sept – Nov** Salmon Enumeration Program, stream-walking to count salmon, with MESSS



Thank you!

We are grateful for the amazing volunteers and visitors who passed through the station this summer and fall, and owe a huge thanks to all the folks who donated funds and equipment to support the conservation work we undertake.

Also, we owe many thanks to the community of Echo Bay and its surrounding communities. Billy Proctor and his museum have been very supportive of our initiatives, and have allowed us to place a donation box and poster in the museum, which sees over 3,000 visitors annually. Also, from firewood-log donations to lumber for building supplies, SCFSS has benefitted immensely from being part of the community.



OUR STATION WISH LIST

We are looking for donations, both financial and in-kind! This year we are especially seeking help with printing services, food for volunteers, lumber for building, and a dive compressor. Tools include anything and everything, but we are primarily in need of a wood chipper, planer, table saw, and pex crimper. All garden tools are welcome, especially pruning shears, pitchforks, and shovels. Finally, research tools we are seeking include a stereoscope, a microscope, a dive compressor (e.g. Nuvaair 3.5G has the right specs) and a hydrophone. If you have any leads, please send them our way!



A Note from the Station Manager

Scott Rogers, Salmon Coast Field Station Manager since 2006, will resign in 2011. We will miss her dearly, and are grateful for her contributions over the past few years! She will still, however, be actively involved with SCFSS as a member of the board. Here, she sums up her 2010 moments.

Dear Friends,

This upcoming spring and summer we look forward to the return of some successful projects and welcome some exciting new ones. Two of our newest projects will look at the social perspectives of Echo Bay. We are excited to welcome **Jennifer Schine**, MA candidate from SFU and a former Salmon Coast volunteer, in her first field season as a graduate student. Partnering with Billy Proctor, she will be studying how sound shapes our memories and our relationship with nature. In addition, we are honoured to welcome **Dr. Evelyn Pinkerton**, Associate Professor at SFU, who will be heading a collaborative study entitled, "Overcoming Barriers to the Exercise of Aboriginal Rights to Healthy Clam Fisheries: Learning Through Partnerships." We are thrilled to be hosting a project that brings together First Nations, archeology, and ecology to inform management.

This fall saw some incredible wildlife sightings. Though the Broughton Archipelago is primarily black-bear territory, a **Grizzly bear**, usually a resident of the mainland of BC, visited Echo Bay. (See photo on right, taken by visitor Bruno Munger.) In addition, the MESSS

salmon team had some incredible **wolf** encounters, and the logging camps in Scott Cove have had regular **cougar** sightings, including a mom with two cubs.

We have been fortunate to have some amazing marine mammal sightings, as well. Families of transient **killer whales** have passed by our docks, and we have witnessed mothers teaching their calves to hunt through predation events on dolphins. **Humpbacks** surface just off the station, and there is a young humpback that seems to be spending the winter in our local waters.

These sightings remind us of what we risk to lose if we do not act to reverse the breakdown of our ecosystems. This year saw the lowest **chum salmon** counts in recorded history in the Viner River. The Viner, which relatively recently held as many as 5,000 chum, and historically was the major chum run for the area (up to 50,000), saw under 100 chum this year. Sadly, this is a trend seen in the few remaining salmon streams. This is not enough to support the bear population, especially for the mother black bear and her three cubs we have been observing. This trend is something to be taken very seriously and which requires informed action. This is where we need your support. As much as we can work with volunteers and make every dollar

count, the conservation projects we wish to undertake require funds. With your support we can remain an independent source of conservation efforts in the Broughton. We are developing relationships with local First Nations in the hopes of addressing some of the factors that impede the recovery of wild salmon.



The Viner River, which used to see 50,000 chum salmon, had less than 100 this year.

For further details on our past year, contact us via email at info@salmoncoast.org and we'd be happy to send you our year in review. Thank you for your continued support. We look forward to continue working with you in 2011!

Sincerely,
Scott



EMPLOYMENT OPPORTUNITY

Salmon Coast is looking for a Station Manager (ideally a couple) willing to relocate to our remote station in Echo Bay! Application deadline: January 30. Start date: May 2011. 2-year contract min.

This job includes station maintenance, volunteer and researcher coordination, bookkeeping, fundraising, recruitment, contract development, and community collaboration. It is a full-time contract position, 35 hours/week, with \$30,000 annual salary plus free accommodation and amenities.

Requirements include but are not limited to basic handy-person skills; basic bookkeeping; computer literacy; familiarity and/or interest in alternative energy systems; strong interest in conservation biology of BC Coast; research background and skills; grant-writing experience; comfortable living in remote locations with minimal access to urban service; flexibility and high tolerance for enthusiastic young scientists; strong organizational and interpersonal skills; strong boating and water safety skills & experience.

For more information or to apply (with cover letter and resumé), email info@salmoncoast.org.

2011 GOALS

Conservation, Collaboration, Organizational Stability

2011 will test our stability as a research station with a legacy!

We will try out our new budget, and establish infrastructure that will better enable us to conserve BC's coast through research. We have three main goals for 2011:

1. Ecosystem Conservation

Two of four significant salmon systems left on Gilford Island are being logged –Viner River, historically the largest chum run in the Broughton, and Shoal Harbour. Working in collaboration with our local salmon enhancement society, the Mainland Enhancement of Salmonid Species Society (MESSS), we were able to postpone logging during the critical salmon-fry hatch period. We are now monitoring areas that have been logged, or are slated to be logged. Eventually we hope to establish common conservation goals with local communities and First Nations that allow for resource extraction while leaving important salmon watersheds intact.

In addition to the Watershed Protection Project, we are continuing the Salmon Enumeration Program. We will support MESSS as it monitors the numbers of returning salmon in both indicator watersheds and smaller systems that are no longer a part of government survey efforts. MESSS shares its findings with government and the larger communities, especially local First Nations, in order to keep everyone empowered with information.

We will continue our collaborations with Dr. Alexandra Morton and Dr. Martin Krkosek to independently monitor sea-lice levels on out-migrating Broughton pink and chum fry, and to monitor activities and impacts of Atlantic salmon farms.

We also aim to achieve a second year of monitoring local plankton productivity and

its relationship to out-migrating pink and chum salmon fry abundance and diet.

2. Community Collaborations, Research Development, and Outreach

We are looking towards “citizen science,” developing our network of contacts, support, and understanding by involving visitors to this area in data collection. We are excited to be developing a program whereby interested visitors can contribute to our understanding of this area. Stay tuned for more details, as we will be launching this program in Summer 2011.

In addition, to give back to our communities, SCFSS researchers will continue to share their studies and knowledge through presentations, volunteer efforts, tourist education, and community events.

Finally, we are working to improve our communications and outreach, through brochures, documents, archives, and newsletters. We are even launching a new website, which will better inform the public with up-to-date information. It will be launched in early 2011, so we will keep you posted!

3. Organizational Stability

We are creating a volunteer fundraising committee with experienced individuals who have expressed keen interest in assisting the SCFSS, and in preserving the Broughton's ecology. If you are interested in participating in this, please contact us.

We will also apply for registered charitable status this year, and will continue to learn from other field stations regarding how to better operate our station. As members of the Canadian Field Station Organization and the Organization for Biological Field Stations, we can access tools to be aware of common pitfalls to success and potential solutions.



A Look Back at 2010

Low salmon counts, high cougar sightings, and a new flock of volunteers willing to get dirty: 2010 was a recipe for lots of work and play.

In addition to our new and continuing research projects, many other events have propelled SCFSS's success this past year.

Conferences

- We attended the 24th Northeast Pacific Pink & Chum Salmon Workshop to liaise with researchers in the field.
- SCFSS gave a poster presentation at the Pacific Ecology and Evolution Conference 2010 at the Bamfield Marine Sciences Centre.

Publications

- We supported research published in numerous peer-reviewed papers in academic journals, such as the ICES Journal of Marine Science, the Journal of Applied Ecology, and Ecological Applications.

Station Improvements

- With donations of seeds and starts, as well as a greenhouse structure, two dedicated garden volunteers worked for over a month to make significant headway on the food gardens.

- Our ancient wood stove was replaced with a safer, more efficient one.
- Friends donated wood and labour to replace an unsafe deck on one of our housing facilities.
- Significant removal of brush around our residential buildings increased structure longevity and decreased the odds of dangerous wildlife approaching folks on paths.

PINK SALMON PUZZLE

For the past two years, thousands of pink salmon have been loitering in bays that, according to local elders, have never held salmon. MESSS and SCFSS teamed up to obtain genetic samples and we are waiting to find out if these fish are locals or visitors.

MINIHUMP MYSTERY

Another type of salmon has also caused much debate over decades. Thousands of land-locked salmon, locally named Minihumps, inhabit a small stream on Gilford Island. About 30 cm long, this little salmon (see photo on right) has not keyed out as a sockeye and has long intrigued locals and biologists alike.



Working with MESSS, our stellar fall salmon enhancement team took samples for genetic analysis and we are waiting for the results.

Stay tuned for the results of these salmon riddles!