

The newsletter for stewards of salmonids and their habitat • Volume 23 • Number 1 • Spring 2016



Koocanusa mapping project lead Bruce MacDonald pulling a beach seine net to sample for juvenile fish at Gold Bay. Photo: Heather Leschied.

From my viewpoint looking out over Lake Koocanusa, I can't help but imagine this landscape as it was before Highway 3, before Libby Dam, before the flood. Back when this was a wild river called the Kootenay. A river allowed to travel its course, surging from riverbank to riverbank, constantly depositing precious gravel, spawning substrates, and nutrients. A system originating north of Kootenay National Park, crossing the border into Montana and back again to Canada, resting for a time as Kootenay Lake, then finally plunging into the Columbia River at Castlegar.

Completion of the Libby Dam in Montana in 1973 turned part of the river into Lake Koocanusa.

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This transboundary reservoir extends 140 km between Libby, Montana, and Wardner, B.C. The fourth dam constructed under the Columbia River Treaty, it is operated by the U.S. Army Corps of Engineers and provides flood control and hydroelectric power for Montana, Idaho, Washington, Wyoming, California, Utah, Oregon, and Nevada. Since the dam was built, land-use pressures around the reservoir have escalated, including offroad vehicle use, informal camping, shoreline disturbance, and water quality concerns resulting from upstream mining activity.

At times the landscape seems stark, without life, dust swirling in the wind. A number dictates things here: 2,444. That is the elevation of the reservoir (in feet). Too little water, spawning beds go dry. Too much, favourite swimming and fishing holes drown. It's a constant struggle between the need to produce hydroelectric power – hence revenues – and to provide adequate water for ecosystems.

Today, an engaged community hopes to change this. I am with a field team from the East Kootenay Integrated Lake Management Partnership, a multi-stakeholder initiative that has been conducting Sensitive Habitat Inventory Mapping (SHIM) projects for the region's lakes since 2006. With local support from the Lake Koocanusa Community Council, and financial support from the Fish and Wildlife Compensation Program, we are conducting a Foreshore Inventory and Fish and Wildlife Habitat Assessment. Our intent is to develop shoreline management guidelines that will protect the most sensitive habitat values of the lake.

Data collected as part of the SHIM process includes identification of adjacent land use, shore type, existing riparian condition, and anthropogenic alterations along the foreshore. Fish and wildlife habitat assessments include presence and absence observations and fish sampling using beach seine, gee trap, and snorkel survey methods. Additional macroinvertebrate data is collected from identified tributaries. Scientific analysis is used to identify zones of sensitivity and key habitat features, and to rank shoreline segments using the Aquatic Habitat Index.

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# All hands on deck for Kootenay Lake salmon

One of British Columbia's most important sport fisheries occurs on Kootenay Lake. A leviathan strain of rainbow trout known as Gerrards feed on the landlocked kokanee salmon that live in the lake. In 2014, record low spawner numbers of kokanee were observed, corresponding to a decline in the Gerrard trout fishery and leading to increased concern from the local community, scientists, and lake managers. A Kootenay Lake Fisheries Advisory Team was assembled to compile a recovery plan, and regulatory measures have been put in place to protect the kokanee salmon and their predators.

The Kootenay Lake Partnership (KLP) and the Friends of Kootenay Lake are two groups that are working together to protect kokanee habitat. Using the Foreshore Inventory and Mapping protocol devised by Fisheries and Oceans Canada, the KLP - which includes the regulatory agencies and First Nations - is creating an integrated approach to permitting and shoreline protection. The KLP soon will be releasing a shoreline guidance document for Kootenay Lake that brings together known ecological and First Nations cultural values. This work should help direct development in a sustainable way that protects sensitive kokanee habitat, respects Aboriginal values, and recognizes the importance of healthy fish and fish habitat to the local economy.



Some of our volunteer citizen-scientists brandishing a pH meter, dissolved oxygen and temperature meter, and a Van Dorn water sampler used to collect water from a discrete portion of the water column. Photo: Claire de la Salle.

With the help of citizen scientists, Friends of Kootenay Lake has been conducting water quality and zebra and quagga mussel monitoring on Kootenay Lake. The three-year study is designed to provide important baseline data useful for assessing long-term changes in water quality that are significant to fish habitat quality and human uses of the lake (e.g., recreation, drinking water), to assist with early detection of invasive mussels, and to empower community members in understanding and monitoring lake health.

Friends of Kootenay Lake is also raising awareness about kokanee that

spawn along the shoreline and is working with the Province to initiate a "report a spawner program". This program will help to increase our understanding of what areas of shoreline the kokanee are using for spawning, as well as increase knowledge among shoreline homeowners and visitors about what can be done to reduce disturbance to the spawning areas.

For more info, visit us at kootenaylakepartnership.com or friendsofkootenaylake.ca.

Ryan van der Marel, Kootenay Lake Partnership

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The AHI quantifies the ecological value for each shoreline segment and identifies the potential if anthropogenic alterations were to be removed.

So it is that one cool morning we stop to collect samples and detailed habitat information at a low-lying grassy bank. It is typically inundated with water at high pool; at low pool it is inundated with off-road vehicles. We are thrilled to be met by a long-billed curlew, the largest member of the sandpiper family. The curlew is not nearly as thrilled to

see us. Long-billed curlew have had a rough go of it. Urbanization, forest encroachment due to fire suppression, noxious weeds, conversion of native grasslands to agricultural crops, soil erosion and other disturbances from off-road vehicles, all threaten these amazing birds. They are Blue-listed in British Columbia and protected under the provincial *Wildlife Act*; federally, they are listed as a Species of Special Concern and protected under the *Migratory Birds Convention Act*.

We promise not to stay long. We collect our data and record the encounter. Curlew habitat has been documented at a handful of locations around the lake, and designated as Wildlife Habitat Areas. As we depart, the sun shines through the storm clouds to remind us that nature is still at home here despite all the tire tracks in the sand and grass.

Heather Leschied, Living Lakes Canada



# Connecting youth to nature

The Freshwater Fisheries Society of BC was created in 2003 as a private non-profit organization with a mandate to conserve and enhance freshwater fish resources for the benefit of the public. Funded largely through freshwater fishing licence revenues, we stock



eight million trout, char, and kokanee salmon into 800 lakes around B.C. each year in partnership with provincial fisheries managers. We manage hatchery programs for endangered species such as white sturgeon, educate

the public, and work to make angling more accessible for all.

The Society has developed a number of programs to educate youth and families about recreational fishing and conservation. These programs range in target audience age, and include topics such as fisheries resource protection, water conservation, and endangered species. Youth get to connect with nature while participating in activities such as aquatic insect collection and identification, water quality testing, stream mapping, fish releases, and fishing.

Our most popular program, Learn to Fish, is offered at urban lakes and provincial parks across B.C. In 2015, the program was delivered at 90 different lake locations and two hatchery visitor centres, and reached over 25,000 youth and their families. It's designed to break down barriers to freshwater angling, with a strong focus on environmental stewardship. Participants learn about proper fish

handling, ethics, conservation, and regulations. Learn to Fish has also partnered with the Invasive Species Council of British Columbia to deliver their "Clean Drain Dry" message.

The Society regularly evaluates the Learn to Fish program to ensure it is both fun and educational. Results from our 2014 survey showed that 93 per cent of adult participants felt the Learn to Fish program made them more likely to protect the resource in the future. Since the program's inception in 2006, we've taught more than 180,000 youth and their families - all future stewards of the resource - how to fish responsibly. And thanks to ongoing support from the Habitat Conservation Trust Foundation, Columbia Basin Trust, BC Chrysler Dodge Advertising Association, Rapala Corp., Gaming Policy and Enforcement Branch, Teck Highland Valley Copper, Vancity, and BC Parks, Learn to Fish is provided for free or minimal cost to participants.

Tanya Laird, Freshwater Fisheries Society of BC

Photo: Shealo Blackwell

## Learn about the future of fish at the Gulf of Georgia Cannery

Although the Gulf of Georgia Cannery in Steveston is designated as a national historic site, much of what is featured focuses on B.C. fishing issues relevant today. Being the size of three hockey rinks, there is room for its main historical components – a salmon canning line and a herring reduction plant – and contemporary exhibits about current issues.

Over the past century, the fishing industry has been both a witness to and a victim of change: technological innovation helped the industry flourish but also contributed to a decline in fish populations (along with pollution and other environmental factors). There are proactive solutions to ensure fish stocks for future fisheries and the maintenance of healthy marine habitats, however. Through public programming, the Cannery works to share these concerns and solutions with visitors.

Permanent exhibits and school programs teach about the history of the fishing industry, indicate the cause and

effect of changes to the industry over the past century, and deliver insights into how one's choices can have a positive impact on fisheries. Can of Worms is an interactive touch-screen exhibit that presents the industry from multiple perspectives and increases understanding of the complex issues surrounding B.C. fishing. Best Catch is an interactive exhibit highlighting the kinds of fish caught, methods used, and the latter's positive or negative impacts on ocean sustainability.

Two school programs deliver similar messaging. Fishy Business (for grades 2-3) highlights the technological changes that have taken place over the past century and uses hands-on activities to teach the students how current fishing practices have shifted in response to declining fish populations and the sustainability of their habitats. Seafood for Thought (for grades 6-8) addresses the question, "What is ocean friendly seafood?" through the exploration of fishing methods, changes



Delving into the Can of Worms. Photo: Parks Canada.

in resources, and habitat maintenance. Students learn how to make informed consumer choices and how to help preserve marine environments.

Engage in the Gulf of Georgia Cannery's hands-on exhibits and learn about B.C.'s fishing history, explore the industry's current challenges, and find ways to contribute to positive change for the future of fishing in B.C.

Christina Froschauer, Gulf of Georgia Cannery Society





Our environmental community has many layers, varied interests, and a multitude of processes. Our mission statements may vary in wording but the foundational outcomes remain similar. We see needs within our ecosystems and desire to assist our lands, air,

and waterways. Organizations within our region have learned the benefit of coming together to work on our common goals. Sometimes we have a specific purpose with finite timelines and a flurry of meetings, other times we have a longer term for sharing our niche knowledge and seeing how this fits into a larger picture.

The Pacific Streamkeepers Federation has been and is part of various short-and long-term planning and process working groups. We are a part of the Marine Conservation Caucus (www.mccpacific.org) and within this group we are active on the salmon committee. Recently we were invited to meet with new Fisheries Minister Hunter Tootoo and senior DFO staff in the Vancouver office.

Putting a face to a name is good for us as NGOs, but it is also good for politicians and policy people to meet face to face to make introductions and to show our good faith in working together to fulfil some of our common goals. Having the Fisheries Minister's mandate from our Prime Minster in hand allowed us to first find the commonality within our mandates as a foundation, and then add in more specific local knowledge gained over our years of caring for and about our lands.

Leaving out some of the preliminaries, here is the core of a message that I prepared on behalf of



Marine Conservation Caucus members, including representatives from Raincoast Conservation Foundation, David Suzuki Foundation, Pacific Streamkeepers Federation, Watershed Watch Salmon Society, Skeena Wild Conservation Trust, Living Oceans Society, Canadian Parks and Wilderness Society, and the World Wildlife Fund, with MP Joyce Murray, the Hon. Minister Hunter Tootoo, and a glass sponge.

Pacific Streamkeepers as part of our meeting with the Fisheries Minister in December:

We look forward to having a Fisheries Act and enabling legislation that is clear in its ability to protect our fish stocks; and to see the review of past areas where Federal authority has been transferred to others, and the scrutiny of these, to ensure that what was envisioned in these processes is indeed occurring. DFO has the responsibility to protect our oceans, coasts, waterways, and fisheries and for good reason has brought in many partners to assist in this meaningful task. Working with these partners in moving forward while also looking back to ensure that what should be in place actually is, will keep us all on a pathway that has fulfilment, success, set goals, and the ability to know that what we are all doing is not just "busy work" but taking productive steps to protect our environment so it can continue to provide economic benefit to all Canadians.

We are pleased to read of the support for the Cohen recommendations, many of which will also assist in the implementation of strategies within the Wild Salmon Policy. We look forward to witnessing the revival of science and monitoring programs and seeing decisions that are based on sound science that serve the public interest. The public here in Pacific Region are interested! They spend weekends being trained in DFO's streamkeeper

monitoring protocols to undertake environmental assessments, including stock assessment. Citizens assist salmon whose pathways have been blocked by man or Mom Nature, and when they determine there are issues for our environment and wildlife's ability to thrive, they step up and do something about it.

We thank you for this opportunity to meet Minister Tootoo who with us will steward our resource with care. We also look forward to working in a collaborative relationship. Thank you.

> - Zo Ann Morten, Pacific Streamkeepers Federation



#### Removing sea lice with lasers

Norwegian technology companies Mestec and Stingray Marine Solutions have developed what they describe as an ecologically-friendly salmon delousing system that incorporates LED lighting, cameras and a directionally guided laser.

#### Water education posters

The U.S. Geographic Service offers downloadable posters about watersheds, wetlands, water use, and other water issues, for elementary and middle school levels.





## The 11th annual BC Interior Stewardship Workshop

The Fraser Basin Council facilitated the BC Interior Stewardship Workshop on November 4-5, 2015. The small agricultural communities of Enderby and Grindrod – where the North Okanagan and upper Shuswap meet – were the perfect setting for approximately 60 stewards to convene for the two-day workshop.

The purposes of the workshop are two-fold: to provide a venue for networking, peer-to-peer learning,

collaboration, and training; and to recognize and celebrate the work of stewards in B.C.'s interior regions. Representatives of stewardship groups, First Nations, and local, regional, and provincial governments attended, as well as staff from DFO's Community Involvement Program and Resource Restoration Unit.

Over two days, a number of presentations covered a range of stewardship topics: Splatsin First

Nation's responsibility as care-takers of the land and stewardship initiatives they have underway; impacts of the 2015 drought, a case-study on the Coldwater River; an update on the *Water Sustainability Act*; and the Okanagan Nation Alliance's sockeye re-introduction initiative.

The group spent an afternoon on a field tour at two sites. The first was Trinity Valley Dairy, hosted by Ralph and Heather Vandalfsen, where the

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# Stewards of the future for streams and wetlands

The Honourable Judith Guichon, Lieutenant Governor of British Columbia, has launched the 2016 Stewards of the Future program, a province-wide initiative that provides funding, support, and resources to allow youth of high school age to explore stewardship initiatives in their communities. The program stems from Her Honour's long-standing connection to the land as a rancher in the Nicola Valley, and is supported by the Government House Foundation.

Stewards of the Future features a teaching toolkit that includes research on place-based learning and action projects, an outline of the overall program and funding available, a listing of partners to support educational efforts, and activities and tools to help students, teachers, and other groups get engaged. Participants conduct field work and research projects throughout the spring term and create detailed project reports, which include items such as maps of invasive species, videos on salmon habitats and life cycles, and slideshows on local, sustainable agriculture.

A conference will be held in June 2016 at which Stewards of the Future participants will discuss their projects and share their ideas on sustainability. Water is the primary theme for the conference and students will examine the issues and implications of water stewardship through the lens of topics such as transportation, forestry, and agriculture. The location of the 2016 conference is still to be determined.

The first Stewards of the Future conference was held

in June 2015 with 100 high-school students attending and presenting their projects. Her Honour was pleased to see the level of inquiry, analysis, and handson engagement displayed across so many subjects and regions. Conference themes included energy, invasive species, grasslands and ranching, parks and water. The students in the water group had the privilege to be led through their theme by Brian Riddel, CEO of the Pacific Salmon Foundation and internationally recognized fisheries



Students from Timberline Secondary conduct juvenile salmonid sampling and test stream water quality.

scientist. The group also received a visit from the Lieutenant Governor, who shared her insights into holistic land management and the importance of maintaining healthy waterways and ecosystems.

To learn more about Stewards of the Future, visit our website or contact Abby Pollen at 250-356-1050 or Abby. Pollen@gov.bc.ca. We also have a Facebook page.

Abby Pollen, Government House Foundation



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group learned about environmentally safe manure storage, fish-friendly irrigation practices, cropping and fertilization, and dairy herd nutrition. The second was Kingfisher Interpretive Centre, hosted by Neil Brookes and Shona Smith. The group toured this "living, outdoor classroom" adjacent to the beautiful Shuswap River, and planted shrubs on the newly restored banks of Cooke Creek. Participants agreed it was a great afternoon, and the early November weather held out perfectly.

A highlight of the workshop was the presentation of the BC Interior Stewardship Award for Ecosystem Excellence. It went to the Adams River Salmon Society for their pivotal role hosting the quadrennial Salute to the Sockeye event in Roderick Haig-Brown Park. Their dedicated volunteers plan the event that sees up to 150,000 visitors over a three-week period, offer interpretive services, and keep the visitors safe on site.

The Fraser Basin Council is grateful to DFO for support of the annual workshop, and in particular to Bob Harding for his guidance and enthusiasm.

For more information about our programs click <u>here</u> or contact me at 250-314-9660.

Erin Vieira, Fraser Basin Council

#### Tsunami aftermath

The Living Oceans Society, based in Sointula off Vancouver Island's central coast, includes Clear the Coast among its many conservation initiatives. Volunteers collected five tonnes of marine debris from northern Vancouver Island and the Cape Scott Islands last summer. Last year in Cape Scott Provincial Park they picked up 2.67 tonnes of plastic from all over the world. This year's haul, which amounted to about 3.5 tonnes, washed in during just one year. Nearly all of it bore marks or labels from Japan, meaning it was likely washed to sea by the 2011 tsunami.

### **Lake Babine Nation in action**

Lake Babine Nation (LBN) is the third-largest Aboriginal band in British Columbia. The territory encompasses Babine Lake, the longest natural lake in B.C., and the upper Babine watershed supports the largest sockeye salmon population in Canada. Lake Babine Nation Fisheries Program has

been extremely active in the conservation and protection of the valuable aquatic resources around this region. LBN has been co-managing the salmon fishery with DFO since 1991.

LBN Fisheries has many projects, including stream enumeration and restoration efforts on 17 streams around Babine Lake, a sockeye smolt enumeration project, sockeye fry migration predation study, sport fishing

creel survey, sockeye and kokanee DNA sampling, and salmon enumeration and biological sampling at the Babine River counting fence. LBN Fisheries is excited to have recently expanded our fisheries educational program with a mobile information kiosk, the Fort Babine information centre, and the Babine River information kiosk.

Two projects occurred this fall near the Babine counting fence: the Babine Lake sockeye smolt enumeration project and the Skeena sockeye "invisible migration" event.

#### **Counting sockeye smolts**

Babine Lake is the nursery lake for approximately 90 per cent of the Skeena sockeye population. In the spring of 2013, in collaboration with the Skeena Fisheries Commission (SFC), LBN reinstated the Babine Lake sockeye smolt enumeration project. A mark-recapture protocol is used to calculate the number of smolts leaving Babine Lake and therefore provide an

assessment of the productivity of the lake over time.

LBN members and biologists from the SFC estimated that the total sockeye smolt population from Babine Lake was approximately 24,000,000. The estimate was lower than expected based on adult returns in 2013.



migration predation Fort Babine students release sockeye smolts. Photo: Donna Macintyre.

#### **Invisible migration event**

This was the first year that LBN hosted an "invisible migration" event in collaboration with the Skeena Wild Conservation Coalition to celebrate the out-migration of salmon from Babine Lake to the ocean. LBN highlighted the celebration by releasing sockeye smolts captured for the smolt enumeration in a ceremony accompanied by traditional prayer, dance, and drumming. Boat tours to the smolt trap and helicopter tours of the Babine fence and smolt trap were provided to LBN members and guests from schools, forest industry, BC Parks, DFO, conservation groups, and First Nations throughout the Skeena watershed.

For more information on the important work that Lake Babine Nation has been doing to protect and conserve the Babine watershed fisheries, click here.

Donna Macintyre, Lake Babine Nation



## Project Highlight

# A chilling tale

### The technology that brought salmonids to the classroom

My name is Ron Coutts, owner of Aquachill Industries Ltd. in Vernon, B.C.

One day in October 1988 I received a phone call from a teacher at Highland Park Elementary School in Armstrong, B.C. He explained they were hatching salmon eggs in a classroom but they could not get the temperature of their 33-gallon tank below 11 degrees Celsius. They were circulating city water through a grid system in the bottom of the tank and most of the eggs were dying. I immediately drove to the school and met with Community Adviser Dennis Demontier. He said if we could get the water temperature below 10 C, most of the eggs would survive. I told him I could build a chiller that would cool between 6 C and 8 C.

The next problem was that there was no budget money for refrigeration units. I built a chiller out of used parts that I had in my shop and donated it to the school. The chiller worked very well and we soon had units in other schools, though I had to make some improvements.

The immersion coil (evaporator) is a custom-made part and I have had several different designs. My first coil was made of soft copper tubing, formed around a five-inch piece of pipe and set it in the bottom of the tank. It worked okay but needed to be raised a little above the gravel, so I thought of a way to hang the coil over the rear of the tank. My neighbour had woodworking tools so I asked him if he could make a jig on his lathe to form some copper tubing. We sat at his kitchen table and I drew the shape that I wanted on a napkin. That was all he needed. He soon had several spools attached to a piece of plywood that would accept 5/16-inch soft tubing.

After we produced about 100 coils, some of my customers were

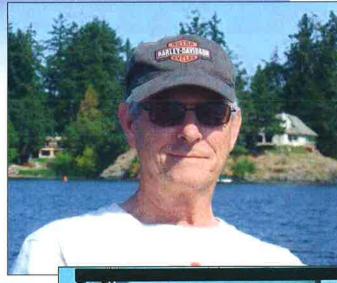
worried that the copper might oxidize and harm the eggs or the fish. I thought about how I could coat the copper so it would not oxidize. My friend owned a motor repair shop so I asked if he could try dipping a coil in the varnish used to coat motor windings. After dipping, it is baked at a high heat in an oven. This worked very well so we made many more. My current

design is made from <sup>1</sup>/<sub>2</sub>-inch stainless steel. I also build a few circulating chillers using titanium, which is suitable for salt water.

Through the years we have upgraded to newer compressors and thermostats and, of course, we are using environment-friendly refrigerant. Also, every chiller that I build gets tested electrically by a CSA

inspector. We now have more than 1,600 aquarium chillers for salmon and trout in British Columbia, Alberta, Yukon, Alaska, Montana, Washington, Oregon, California, and Nevada.

One of our most interesting sales was to Stanford University in California, to whom we had sold in the past. I received a call on a Friday and was asked if I had a circulating chiller that I could send to Honolulu by Monday. They had a research sailing ship due to depart on Wednesday to an atoll in the South Seas. I had just what they needed, so I rushed it to the UPS office. They looked after it from there and it arrived on time. I could then track the ship via internet to its destination, where the chiller was used for a plankton project.





Ron Coutts and his creation. Portrait: Brent Youlden. Chiller: Bev Bowler.

There is always a service and repair part of any business. We will honour the one-year parts and labour warranty or just do a repair with a quick turnaround. Every November we make a trip to Victoria. I spend a few days at the DFO warehouse in Saanich, where I repair a few older chillers. This is all organized by education coordinator Don Lowen and has worked very well for over 20 years. The office people are very accommodating and allow me to use the work benches for my repairs and testing.

Thank you to all our loyal customers and we will continue to supply chillers to a very important project.

Ron Coutts, Aquachill Industries Ltd.



### **Stepping into Nature**

With technology becoming increasingly dominant in the lives of children and youth today, experiences with nature are slowly fading. A growing body of evidence suggests this disconnect with nature is leading to problems, including attention-deficit disorders, sedentary lifestyles, and poor performance in school. Although not a defined diagnosis, the term "nature deficit disorder" was coined by Richard Louv in his book *The Last Child in the Woods* to describe the trend.

To address this concern, in October 2015 the Burns Bog Conservation Society delivered The Stepping into Nature Festival, a program to connect students to their environment through hands-on learning. The four-day event included guest speakers and seven interactive stations spread throughout the Delta Nature Reserve (the portion of Burns Bog open to the public). Students enjoyed a full-day field trip learning about environmental themes aligned with British Columbia's school curriculum, including biodiversity in B.C., peat lands and wetlands, importance of bees, climate change, scientific testing, and the importance of salmon in the environment.

Environmental organizations such as Earthwise, Northwest Wildlife Preservation Society, Pacific Streamkeepers Federation, and Cougar Creek Streamkeepers helped develop quality learning stations. In addition, the Burns Bog Conservation Society partnered with the Strive program at South Delta Secondary School to train students to become leaders for the festival. Over 60 Grade 10 students trained with experienced educators on a particular theme in nature. Students soon became experts on their themes and demonstrated great leadership skills to their younger counterparts.

The high cost of busing often deters schools from field trips. Through funding from the Pacific Salmon Foundation, Hamber Foundation, Chris Spencer Foundation, and Vancity, the field trip was made affordable to schools, including free busing. Invitations were sent to the Delta and Surrey school districts and within a month the event was full with 435 students and a wait-list of over 300 students.

During the festival you couldn't help but notice the smiles and curiosity of the students as they explored local ecosystems, examined animal artifacts, tested nearby streams for water quality, and identified plant and insect species. This rare opportunity to step out of classrooms and learn hands-on helps students understand their natural world and how interconnected people are to the environment. The root of



Wet, dirty, fascinating! Photo: Robin Alam.



To receive StreamTalk by e-mail, please contact Joanne Day at Joanne.Day@dfo-mpo.gc.ca with the subject line "StreamTalk by e-mail."

#### StreamTalk

is published collaboratively by Fisheries and Oceans Canada and stewardship, enhancement, education, and streamkeeper groups in B.C. and the Yukon that care for salmon and their habitat.

> You will find past issues of StreamTalk here.

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Opinions expressed in StreamTalk are those of the authors and do not necessarily represent those of Fisheries and Oceans Canada or of other organizations that contribute to the newsletter.

#### Canada da

conservation is passion and these initial experiences with nature are sometimes the most powerful ways to inspire people to appreciate and protect their surroundings.

Maureen Vo, Burns Bog Conservation Society

