

The newsletter for stewards of salmonids and their habitat • Volume 19 • Number 2 • Autumn 2012

# **Taking on the poachers**

### Bowen Island Fish and Wildlife Club finds new ways to protect and enhance

### by Tim Pardee

The Bowen Island Fish & Wildlife Club (BIF&WC) manages the Bowen Island Salmon Hatchery with funding from Fisheries and Oceans Canada (DFO). We carry out streamkeeper and stream rehabilitation funded by the Pacific Salmon Foundation. We look for ways to enhance herring spawns and protect other offshore marine life around Bowen. And we raise public awareness about illegal poaching activity.

The salmon hatchery issues faced here are similar to those of other hatcheries. On the positive side, we have knowledgeable volunteers who are dedicated to ensuring our operations are up to the highest standards. Unfortunately, we have not experienced strong spawning returns for several years. We revived an active streamkeeping program two years ago and have established benchmarks on several key streams, including Terminal Creek, which feeds our salmon hatchery. We've collected a lot of data and are hopeful that a data entry and reporting system will soon be available so that meaningful historical information can be tracked and stream health monitored. Elementary students from the public Bowen Island Community School and from Island Pacific and Island Discovery private schools take part in salmon hatchery and streamkeeping

# In this issue:

Important information about the new Public Involvement Project funding process. See page 3 for details.



Tim Pardee, Bill Newport, Rob Bell-Irving (DFO), Roger Milsted, Gord Janzen and Bill Keller stand on guard for Bowen Island streams and coastline.

educational programs. The general public on Bowen has a high level of awareness of the salmon hatchery and the importance of salmon to the West Coast ecosystem. Our streams are very healthy for fish from the standpoint of organic material, insects, tree and plant cover, and pH balance. However, as with many islands, it is important to assure heavy water usage by residents does not adversely impact fish.

### Poachers beware!

Poaching of clams and oysters from our beaches and throughout Howe Sound has been a regular occurrence for many years. The common scenario is that a van with five or six people arrives on a beach, and live clams and oysters are gathered and placed in water-filled containers or garbage bags. There are also reports of poachers arriving at remote Bowen beaches by boat. Professional poachers act quickly; later the same day the catch is sold to participating Lower Mainland restaurants. This despite the fact that for many years all beaches throughout Howe Sound and Bowen Island have been closed to harvesting because of contamination and the risk to public health. Beaches that have been stripped do not recover for many years, if ever.

Early this year an incident highlighted the need to raise public awareness. A Bowen resident who witnessed a poaching incident posted a note on a local chat line and asked, "This must be illegal but does anyone know for sure? If it is illegal, who should I have called?" Much discussion followed. The BIF&WC met with the DFO enforcement officer in Squamish, the senior RCMP officer in our local detachment, and the Bowen

## Byrne Creek Streamkeepers win award



Jane Burkholder, Dave Burkholder, Paul Cipywnyk, Frank Williams, AFS chapter representative Stephanie Avery-Gomm, John Sneep, Yumi Kosaka, Louise Towell Photo: BCSS.

by Paul Cipywnyk

The Byrne Creek Streamkeepers Society (BCSS) in Burnaby was pleasantly surprised to receive a Volunteer Organization of the Year award from the Washington-British Columbia chapter of the American Fisheries Society (AFS).

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Island municipal by-law officer. Several things became clear: DFO cannot have an enforcement officer on every beach; our three RCMP officers can enforce the Fisheries Act; and our bylaw officer and all residents can report illegal poaching activity by phoning DFO and the RCMP immediately. The BIF&WC agreed to pay for permanent metal beach signs and the municipality agreed to install them on likely beaches. Smaller plasticized notices were placed on all local bulletin boards, the marina, grocery stores, and the post office. Phone numbers were included for DFO, the RCMP, and the by-law officer.

Success was realized within a few weeks when several residents witnessing poachers on a popular beach phoned the local RCMP, who responded promptly and apprehended the poachers. Several large plastic bags and buckets full of oysters and clams were confiscated and returned to the ocean. The RCMP called to determine whether these particular poachers were known to DFO. They were not known, so were not fined but escorted back to the ferry and warned never to poach again. We solicited some good press in our local newspaper. Our strategy is twofold: to empower residents of Bowen Island to take pride in our beaches and protect them from poachers, and to send the message to poachers that they will be apprehended, possibly fined, and stripped of their harvest.

professionals in the world." Its mission

is to improve the conservation and

sustainability of fishery resources

and aquatic ecosystems by advancing

fisheries and aquatic science and

promoting the development of fisheries

professionals.

### Protecting offshore marine life

DFO research indicates that inshore rockfish populations in the Strait of Georgia, Johnstone Strait and other locations are declining. Rockfish are slow growing and may not reproduce until ages 15 to 20. They are sedentary and easy to catch so it is important that harvest reduction measures are strictly followed. Many Rockfish Conservation Areas have been established and there has been a closure to commercial and sport fishing of rockfish and ling cod in all of Howe Sound for several years. However, we feel public awareness

The award is presented to volunteers who have made exemplary contributions to fisheries conservation, education and science in this region.

According to its website, the American

F i s h e r i e s Society is "the oldest, largest, and most influential association of fisheries BCSS President Paul Cipywnyk said the group was honoured to receive such recognition, and said it was achieved through thousands of hours of volunteer work over many years.

"We thank our DFO community advisor Maurice Coulter-Boisvert, and many other mentors including the Pacific Streamkeepers Federation, that has trained many of our members in streamkeeping modules, " he said. "Much of our creek runs through a municipal park, so we also work closely with the City of Burnaby.

"Our group has over a decade of data collected on spawner returns, aquatic invertebrate counts, resident fish trapping, and invasive plant species mapping. It is particularly gratifying to be recognized by a professional association for our efforts as 'citizen scientists'."

is low, and poaching of rockfish is a regular occurrence.

We are developing strategies with DFO to raise rockfish public awareness here. Long-term we hope that the DFO rockfish closure in Howe Sound becomes permanent and/or all of Howe Sound becomes a Rockfish Conservation Area. Perhaps coordination of efforts with other streamkeepers, conservation organizations, First Nations, and communities would send an even stronger message to poachers that their activities will not be tolerated.

The BIF&WC is closely connected to the Squamish Streamkeepers and Dr. Jonn Matsen has educated us on the importance of enhancing the ability of herring to spawn. We're hoping to use Squamish's method of coating creosote pilings with egg-safe material.

Bowen Island is so close to Vancouver, yet it has an unbeatable island spirit. We're working hard to protect the qualities that make it such a wonderful place to call home.



# **IMPORTANT!** *New process for PIP funding is now in place*

The Salmonid Enhancement Program (SEP) has implemented a new process to formally identify community groups wishing to participate in the Public Involvement Program (PIP). The purpose is to establish a list of groups, individuals, businesses or Aboriginal groups that are interested in collaborating with SEP on salmon and salmon habitat enhancement projects.

Your project will only be considered for PIP funding if it is on this list. It will be used for the next three years (2013-2016). If you currently work with SEP on a PIP project or if your group has an idea and anticipates seeking funds over the next three years, you are encouraged to submit an application package. Starting October 19, packages will be available from your local community advisor, the SEP website or through the public sector online tendering system at www.merx.com.

The deadline for submissions is February 1, 2013.

While the process is new, it is largely administrative. It is not intended to increase workload for community groups, nor is it a departure from our current PIP expectations. Community advisors will continue to work with groups to support them through this transition.

If you have any questions or concerns regarding this process, please do not hesitate to contact your local community advisor. Find their contact information at http://www.pac.dfo-mpo.gc.ca/seppmvs/advisors-conseillers-eng.htm

### The more bugs, the better: Katzie Slough's new blind channel

#### by Greta Borick-Cunningham

Alouette River Management Society (ARMS) has received a grant from the Pacific Salmon Foundation to monitor the health of a newly constructed channel in Pitt Meadows for overwintering salmonid species. This compensation project is a Ministry of Transportation and Infrastructure initiative to offset habitat lost from Katzie Slough when Highway 7 was expanded to install a HOV/bus lane.

ARMS coordinated training for Katzie youth to assist in monitoring the channel and began work in May. Mike Pearson from Pearson Ecological led a small crew of volunteers to set and retrieve juvenile fish traps and lay vegetation plots to record the type, number and size of plants occurring in the project area.

In July, Coho Creek in Maple Ridge provided a perfect location for Zo Ann Morten and Dianne Ramage of the Pacific Streamkeepers Federation to teach stream habitat surveying, juvenile fish trapping, and water quality surveying.

Next, ARMS staff and volunteers learned photo-point monitoring

camera skills. This is a technique used to record changes in habitat from season to season.

Our first full day of water testing was conducted at the end of August. The slough's water turned out to be between "poor" and "acceptable", while the channel was "acceptable". We had not expected the channel's water to be better than the slough's, so we were surprised. We laid some traps and found various aquatic life including sticklebacks, pumpkinseed fish fry, and tadpoles.

During the last week of August, Katzie youth, ARMS

volunteer Mark Trousdell, and ARMS Education Coordinator Nicole Driedger went to the blind channel for an invertebrate study. The channel is more like a pond than a creek and does not flow fast enough to collect bugs using the Surber sampler method (using a D-net to capture insects washed from rocks upstream). So we collected bugs by running a D-net up the reeds close to shore, five times in each area for consistency. The



ARMS volunteers Logan Chick and Mark Trousdell check gee traps for aquatic life in the new channel. Photo: Greta Borick-Cunningham.

number of water mites we found was astronomical! In any given square inch there were at least two dozen clinging to the pail walls, plus striders, boatmen, stoneflies, damselfly larvae, and a mayfly. This count indicated that the water was "marginal" to "good". Such stream invertebrate diversity is great news for fish that will overwinter in the slough and – we hope – in the new blind channel.





## The exquisite parts that make up the whole

#### by Zo Ann Morten

It's early morning and I look out towards the forest. All is still dark and the forest looks to be as one. All green,

all one shade, just shapes; a feeling of forest more than knowing for certain. As the sun rises the shapes become more defined and the colours of the leaves begin to show – first just the ones turning red and orange and then the subtleties of greens. The shape of the tree, branches and leaves. The differences between coniferous and deciduous.

The slim elongated leaves of the mountain ash become clear with movement, and slender needles of the cedar in behind showcase the trees in the foreground. Ah, stunning! I note that the mountain ash berries are losing their brilliance and not as many birds are there to feed upon them. The flycatchers have been coming each day to feed off the bugs high in the cedars and low down in the phlox. I have a deep admiration for these little guys.

Still in a bit of a slumber, my mind wanders to the way this vista in front of me is similar to our streamkeeper community. At first we see the stream, riparian area, park pathways, plants, and fish as one image. Nature, environment, recreational space, whatever our word, we see it as a whole.

Then one day we ask, "What was that fish? What kind of a bird was that? Can we fit another townhouse unit on this small piece of land?" The shades of green begin to separate, subtle differences appear, and we begin to pay more attention, since there is now more to see. We see how the plant life beside the stream is different than that which is set back, how the stream water is not just in the channel but in the earth on either side, sharing with the vegetation. We see connection between the trees overhead and the small piece of land under our feet. The sun is out but we are in the shade. It's

cooler here, this feels nice upon our face and we begin to notice that the little fry in the pool below seem to enjoy the shelter from the sun under this same tree. We look across the stream and see a little flurry of activity: there are people in bright yellow vests who seem to be very interested in something. We cross the bridge to join them; they have a container and all are huddled around it, voices excited. What have they found? We peek over their shoulders and find a small coho salmon. What? From this small stream? And it's wild? Adult salmon come here, to our neighbourhood park? Suddenly we can see the shades of green, the differences in shape and function, the care for the stream and creatures from local residents, and we find we have a deep admiration for nature and for those who seek to learn more, preserve more and protect more.



### Whose idea was the riparian riprap? Keeping an eye on work in your community

While you are out and about this fall watching for salmon, you can assist in capturing knowledge about works being done in your community.

Fisheries and Oceans Canada has developed a series of 17 Operational Statements that outline conditions and measures for avoiding harmful alteration, disruption and destruction of fish habitat.

DFO staff want to know if there are activities taking place that should have a Regional Operational Statement in place. For details visit: http:// www.pac.dfo-mpo.gc.ca/habitat/os-eo/index-eng.htm

Also, the Pacific Streamkeepers Federation is capturing information about stream activities at http://www.pskf.ca/publications/ streamactivities/



## Attention, fish cultivators!

### by Brenda Donas

Under the *Pacific Aquaculture Regulation* (PAR) the cultivation of fish requires a licence. Each hatchery is also required to have a Fish Health Management Plan. All DFO Major Operations hatcheries have Fish Health Management Plans with site-specific Standard Operating Procedures.

Due to the diversity of projects in the Community Involvement Program (CIP) and the fact that the majority of the projects are volunteer operated, it is not practical to write Fish Health Management Plans with site-specific Standard Operating Procedures for every project.

The Aquaculture Management Directorate has permitted CIP to write and implement a Best Management Practices (BMP) document. Its purpose is to set fish culture standards that will be used consistently across all CIP enhancement projects. The

### Organizing the information

Input is needed in these categories:

- Adults captured, egg takes, egg disinfection and green egg estimates
- Incubation including eyed egg shocking, picking and enumeration, fungal treatments, and transfers of eyed eggs in or out of the hatchery
- Rearing including ponding, feeding and cleaning, individual and/or bulk weight sampling, disinfection practices, and fish health checks
- Biosecurity and fish health management
- Juvenile marking
- Juvenile transport and release
- Record-keeping templates associated with each of the fish culture activities

standards ensure compliance with PAR licence conditions.

The BMP document starts out with Background Information and then continues with Standards to Follow.

Standards to Follow are based on Salmonid Enhancement Program operational guidelines for hatcheries, fish culture standards and Fish Health Management Plans for SEP Major Operations hatcheries, PAR licence conditions and other policies developed by Fisheries and Oceans Canada.

The draft BMP document was circulated to all CIP PAR licence holders on July 27. CIP partners may now become familiar with the fish culture and record-keeping standards, try them out and provide input through their local community advisor.

## Adult capture and egg take season is upon us

Please take some time to read through the sections of the BMP that apply to adult capture, adult holding, adult transport, egg takes and egg disinfection.

Start out by reviewing the Facility Production Plan (Attachment I of the PAR licence). For each stock and species the Plan will show the approximate number of broodstock to use, the number of eggs to take and the maximum number of juvenile salmon that can be released.



Photo: Harv Sawatzky

Use the Standards to Follow as you work through each fish culture activity and keep notes on any concerns or issues you have while meeting the standards.

Provide your input to your local community advisor. They will organize the information and submit it to Brenda Donas for incorporation in the BMP up to May 2013.

Have a productive and FUN fall season. We look forward to hearing from you.

### **Register now! B.C.'s Green Games**

Share your environmental action stories with the world!

K-12 students are invited to share their projects and experiences by producing a video or Powerpoint for posting on the Green Games website. This partnership between DFO's Stream to Sea Education Program and Science World has already generated over 350 inspiring stories now available for all to see. It's a fun, interactive database that showcases the commitment of B.C. youth and educators to environmental learning and achievements.

### Register by November 30, 2012 to enter a prize draw for a Sony Canada Digital Media Camera!



Details, planning help, and links to funding sources at http://www.bcgreengames.ca

# My friend Joan

### By Peter McCully

Long-time volunteer and good friend Joan Day passed away on April 30.

My introduction to Joan and her husband Dick came after a call from a fisheries officer to say that he'd been contacted by a couple who reported seeing schools of salmon jumping in Price Bay, Esquimalt Harbour. I called the Days and suggested that they visit the Howard English Hatchery on the Goldstream River – origin of the leaping fish – and, as they say, the rest is history.

Joan was so enamoured of the people and the activities that she attended the hatchery twice a week to volunteer. I guess it was her background as a clinical research nurse with the Banting Institute that gave her an interest into digging around in the innards of fish. She was the go-to person when it came to looking for parasites or evidence of bacterial diseases in the salmon. On one occasion she was looking for a bacterial infection that might be present in the kidney. I noticed that her purse was tucked in under the fish cleaning table so she would have ready access to her cigarettes. I saw a large glop of fish guts slide off the table and plop into the purse. Without batting an eye, she reached down, clutched the offending mess and threw it over the side into the water. She looked up at me with a big grin and went back to her business.

During our annual sojourns to Port Alberni to fish for returning salmon she was no slouch, and very competitive, I might add. She did well with coho and sockeye. However, although she regularly took chinook, she never got a large one until 2005 – her last year of fishing. She was in the cabin of the boat when a fish struck and she leapt into action. However, in her haste to get to the rod, her sweater got hooked on a lure that was hanging on a cupboard and it was as if she was on a bungee cord as she struggled to get to the rod. She calmed down just long enough for us to untangle her and when she finally got the fish to the net, it turned out to be a dandy chinook of 26 pounds.

One of the activities that she really enjoyed was demonstrating aspects of our hatchery operations to visitors.

She was a talented teacher and enjoyed passing her knowledge on to young and inquisitive minds.

For the last three years at the hatchery she chose duties that were administrative or supervisory, and she was skilled at delegating. She maintained her sense of humour and enjoyed a good joke even if it was somewhat off-colour!

A very proud and strong-willed individual, she did not want her infirmity to be anyone's concern. Following the passing of her husband,



Joan and her 26-pound triumph. Photo: Peter McCully.

she had a protracted stay in hospital, followed by a move into extended care. When she could no longer get to the hatchery, she maintained contact by phone and e-mail and several of us visited her. The staff at her facility thought the world of her and she wasn't above using chocolate to bribe her caregivers. In spite of her frailty she was very much in charge of her own destiny to the end. This was a brave and uncomplaining woman. I admired her. She was my friend and I shall miss her.

## Workshop 2013 – are you ready?

The next Salmonid Enhancement Program Community Workshop will be held May 17-19, 2013, on Bowen Island.

The workshop is organized by the stream stewardship volunteer community with help from DFO, and is held in a different community every two years. This time our hosts will be the Bowen Island Fish & Wildlife Club.

There are individuals and groups who are new to the field, and others who have volunteered with SEP for 30 years. This workshop is a time for everyone to network, learn new skills and make friends. The three-day event offers workshops, a keynote speaker, an evening social, and tours highlighting local stewardship and fisheries enhancement.

SEP community volunteers run small public involvement hatcheries, perform streamkeeper tasks, run education programs and participate in watershed roundtable groups. They are the eyes and ears of DFO on streams and shorelines throughout B.C. and the Yukon.

You can check out the fun at past workshops at: http://workshop.pskf.ca/ index.html and http://workshop.pskf.ca/2009/index.html

The registration package will be available online in early 2013. For further details, contact Joanne Day in Community Involvement at 604-666-6614 or joanne.day@dfo-mpo.gc.ca.



## Joe Kambeitz retires A magnificent legacy that reaches beyond our borders

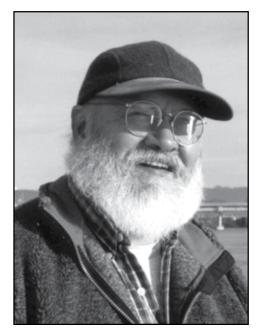
#### By Mark Johnson and Bev Bowler

Long-time Lower Fraser community advisor Joe Kambeitz is retiring in June. His contribution of ideas, activities and gifts to the Community Involvement Program is immeasurable.

His ideas not only endure today but have often been adopted internationally.

In the early 80s, Joe worked with teacher Chris Zimich to set up salmon incubators in school classrooms, introducing students to the salmon life cycle as they fed and cared for the fry until releasing them into a neighbourhood stream. This brought to life DFO's classroom resource, Salmonids in the Classroom. Over two million students have participated throughout B.C. and the Yukon. The environmental sensitivity that develops within students who have adopted salmon is a lasting legacy. Versions have been adopted in Washington, Oregon and California.

Joe was also instrumental in developing the Storm Drain Marking Program. He designed a yellow fish icon to identify storm drains which



empty into nearby creeks (and salmon habitat). Thanks to this program many people are now aware that street drains are for rain water and nothing else – and it, too, is used in cities and countries worldwide.

Joe has always been a strong proponent of salmon stream rehabilitation. He has nurtured strong stewardship groups that rebuild healthy salmon returns, monitor watershed happenings and invite students and visitors to their facilities to learn about salmon and their habitat.

In the early 90s, Joe decided it was time to document the most common activities, beyond hatcheries, that are needed to restore and care for salmon habitat. With contributions from many others, this idea evolved into the Streamkeepers Program, initiated in 1995. Even though Joe would tell you that things didn't evolve exactly as he had imagined, thousands of Pacific region volunteers and their groups have adopted streams and made longterm commitments to protect and restore watersheds.

Among Joe's many skills, which include angling, fly tying and hunting,

he is known as a raconteur. There is something about his delivery that makes every story intriguing. (Ask him about the time he went to Russia as a fly fishing guide and ended up mentoring Jane Fonda and her then-husband Ted Turner and riding in Soviet helicopters!)

Joe has an incredibly creative mind and constantly thinks up new ways to make the job easier and more efficient. Often working with Fraser Valley correctional facilities, he led in the invention of fish transportation trailers, egg take stations, and other aluminum creations. In 2000, Joe discovered the mold for

### **Diamond Jubilee Medal Winners**

This summer the Lieutenant Governor presented Queen's Diamond Jubilee medals to individuals who have made a significant contribution to Canada. Congratulations to recipients Jeff Jung and Joe Kambeitz of DFO!

Jeff's leadership in the Stream to Sea Strategy has inspired generations of B.C. youth, seniors and volunteers to improve the health and sustainability of their communities and local aquatic ecosystems.

Joe Kambeitz started with the department in 1970. Over the past 42 years, he has shared his extensive knowledge and enthusiasm with community volunteers who now share his passion.

the large concrete salmon statue on the Alexandra Bridge near Yale. He offered use of it to SEP volunteer groups who wanted an attractive art piece for their site. In return they were asked to donate \$500 toward bursaries annually awarded to aspiring fisheries biologists, technicians and conservationists by the Pacific Salmon Foundation.

To keep funds flowing in, Joe donates an original carved silver bracelet or pendant for a lottery at the biannual Community Workshop. This beautiful native jewellery of Joe's is highly prized and generates wonderful contributions.

We will miss Joe's candour when commenting on the latest government management decisions, where he begins with, "After 30 years of working within this organization, I think....". Yes, for well over 30 years, Joe has generously shared his talents, as well as his wisdom, with the volunteers he supported and his colleagues at DFO. We are all the richer for it. We extend our warmest regards and wish him well in his retirement. And as Douglas Adams' dolphins say in *Hitchhiker's Guide to the Galaxy*, "So long, and thanks for all the fish."





### http://wetlandslive.pwnet.org/partners.php WetlandsLIVE: A Distance Learning Adventure

This features a series of free live webcasts for students in grades 4-8 that show the functions and ecology of wetlands and their importance to people and wildlife, especially to migrating birds and fish. The next ones are live from Panama, on March 8, 2013, and from Alaska on May 9.

### http://www.youtube.com/watch?v=qV30UZ9aF04 Salmon Life Cycle Song

Check out this clever parody of *I Will Survive* on Youtube, complete with lyrics about alevins, plankton, and estuaries. You'll be singing it all week!

## **Fishtwitter!**

# A call to community advisors, hatchery staff and volunteers

DFO Communications has been running a pilot Twitter account, @DFO\_Pacific. Its following of stewardship groups, industry partners, fisheries activists and other stakeholders, many of whom "re-tweet" our messages to their own circles, is growing well.

This is a great ways to create interest in our enhancement programs, facilities and events. We are looking for:

- Local events where DFO will be present
- Where and when to see salmon at local hatcheries we have the brochure but would love to hear directly when you are having a great week/month for viewing various species
- Facts about stewardship projects
- Hatchery hours and special events
- Information about our education materials
- School events

Tweets must be shorter than 140 characters. We recommend keeping them to 120 and including a link to find out more. If you need help, just send us the information and we can craft a tweet out of it. It must go through approvals and be translated into French, so we have about a 48-hour turn-around unless it is urgent.

Please send your ideas to me and I will get your events, activities and projects promoted across our social network.

Joanne.Day@dfo-mpo.gc.ca

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### 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.

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