

Wetlands Update



The Newsletter of the BC Wildlife Federation's
Wetlands Education Program **Spring 2015**



Wetland restoration expert Tom Biebighauser explains how to restore a wetland based on a soil sample in Lazo Marsh (Comox Valley).

Vancouver Island Wetlands Institute

Did you know that natural wetlands only comprise a mere 1.7% of East Vancouver Island's landscape? When compared to the provincial coverage of 5.6% it becomes poignantly clear that those wetlands remaining on Vancouver Island need protection.

The 2014 Wetlands Institute focused on three Vancouver Island communities (Courtenay, Nanaimo, and Duncan) and featured one of our most high-calibre groups of participants. Thirty experienced consultants, government agencies, and conservationists took part in the week long, hands-on workshop that focused on protecting, enhancing, and restoring wetlands.

In partnership with Cowichan Valley Land Trust, Cowichan Lake Stewards, and Nature Conservancy of Canada, participants restored two wetlands at the Cowichan Garry Oak Preserve in Duncan. Furthermore, they installed erosion control structures to four existing wetlands. Participants also provided support for a 20ha, Ducks Unlimited enhancement project at Lazo Marsh (Comox Valley) in the form of design, replanting, invasive species removal, GPS work, and amphibian salvaging. A portion of the course also involved providing feasible wetland design prescriptions for Simm's Millennium Park, where a previous wetland project was not performing optimally.



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Wetlandkeepers Courses

These two-and-a-half day, hands-on workshops educate participants about wetland conservation and provides them with technical skills to steward their own wetland! Each course is uniquely tailored to the host community, and topics such as wetland classification and mapping, soil sampling, vegetation surveys, and wetland services are part of the basic structure. In 2014 BCWF hosted five courses around the province.



Participants ID a sedge during Rossland Wetlandkeepers.

Operation Restoration Rossland

The first Wetlandkeepers was held in partnership with the Rossland Society for Environmental Action. A special focus of the workshop was to raise awareness and interest for a proposed wetland restoration project at North Jubilee Park, and develop a preliminary plan. An open house on the second night provided an opportunity for members of the public to learn more about the benefits of restoration and the works proposed. The workshop also explored restoration opportunities for a large wetland complex in Centennial Park

Wetlandkeepers goes North

Eighteen participants took part in the **Prince George Wetlandkeepers**, which was held in partnership with the Spruce City Wildlife Association, BC Parks and the Prince George Naturalist Society. This workshop centred on restoring and improving public access to Hudson's Bay Wetland, a large wetland complex in the heart of city.

The **Terrace** workshop—attended by nineteen participants—coincided with the BC Lake Stewardship Society's Annual General Conference. Partners included BC Lake Stewardship Society, the Lakelse Watershed Stewards Society, and the Terrace Rod & Gun Club.



A young moose spotted during the St Mary Lake Wetlandkeepers.

Wetlandkeepers in the Warmland

Mayo Lake was the field site for the **Duncan Wetlandkeepers**, which was hosted in partnership with the Cowichan Land Trust. There, nineteen participants completed plant surveys, birding, and even spotted a Mississippi Map Turtle (likely a released pet).

All Outdoors at St. Mary Lake

Upon invitation, the BCWF supported a Wetlandkeepers course at **St. Mary Lake** near Kimberly, BC. The course was vetted by members of the Friends of St. Mary Lake that attended a Wetlandkeepers workshop in 2012. Seventeen participants attended the course, which was held almost entirely outdoors. Modules included identification of aquatic invertebrates, GPS activities, and a birding exercise.

Map our Marshes



55 Vernon Community School students decipher a soil sample in the Clarence Fulton Center for Wetland Excellence.

"You can't protect something if you don't know it's there." Unless wetlands are mapped, they could go unrecognized and become inadvertently destroyed. Map our Marshes is a one day crash course that educates individuals in the value and tools of community mapping. Participants are also taught how to upload important GPS data to Google Earth and the BC Wetlands Atlas. This information will help communities identify conservation needs at a wetland or watershed scale. Not only can this data be shared publicly with other stakeholders, but it is the first step to help conserve wetlands. In 2014, the BCWF held three unique Map our Marshes courses in Langley, Vancouver, and Vernon.

WaterWeeks Celebration

BCWF partnered with the Langley Environmental Partners Society as part of their WaterWeeks events and hosted a specialized Map our Marshes course in **Murrayville**. In addition to the course's usual content, 20 participants learned the basics of wetland design. This was immediately put to use in the field as participants conducted design work on a wetland at Murrayville Park. Workers will use these designs when restoring the wetland in 2015.

Mapping and Exploring Wetland Design

The **Vancouver Map our Marshes** course was held in partnership with UBC Farms and held in their brand new yurt. What made this workshop so unique was that it involved an exploratory design exercise. Participants used GPS technology and surveying equipment to map an existing wetland on site and then used this information to design its restoration. Considering the existing infrastructure and adjacent farming practices, this was no easy task!

Hands-On Learning for Vernon Youth

Though Map our Marshes typically isn't held for middle school students, **The Vernon Community School's** philosophy of "encouraging students to pursue their talents and passions with hands-on, project-based, community partnerships" seemed like a perfect fit. Fifty students spent the day learning the basics on wetlands and how they can be mapped using GPS units. Soil samples were deciphered at the school's very own 3-acre marsh: The Wetlands Center for Excellence. Learning was solidified with a race that put all their GPS and wetland knowledge to the test.



BC Wetland Atlas Update

The BC Wetlands Atlas on the Community Mapping Network has undergone changes to allow for more data to be gathered and better coincide with provincial standards. This information will help communities identify conservation needs at a wetland or watershed scale.

To see the BC Wetlands Atlas on the Community Mapping Network, please visit the website: cmnmaps.ca/WETLANDS/

Restoration in Meadow Creek

In June 2014, the BCWF hosted a restoration design workshop in Meadow Creek in partnership with Ducks Unlimited, Central Kootenay Invasive Species Council, Fish and Wildlife Compensation Program, Friends of Lardeau River, and the Nature Trust of BC.

Twenty-six participants travelled from as far as Vancouver Island to learn the ins and outs of wetland design and restoration techniques. Participants designed a number of wetlands on Nature Trust property, as well as the property of Terry and Michele Halleran.

In January 2015, workshop participant Robin Annschild, wetland restoration specialist Tom Biebighauser, and volunteer Tony McLeod braved the cold and restored five wetlands on the Halleran property. In March, more than 80 people attended an on-site open house and helped plant native species surrounding the wetlands.

Returning diversity to the landscape will increase habitat value for Grizzly Bear, Elk, Caribou, Western Toad, and

Olive-sided Flycatcher, which frequent the property. Additionally, the new trees and shrubs will provide visual screen from the highway for Grizzly sows and cubs, allowing them to forage undisturbed. With further assistance from the BCWF, an additional four wetlands are scheduled to be restored before the end of 2015.



Open house participants learning about using willow stakes for wetland restoration work.



Constructing wetlands in January allowed the excavator move across what is otherwise saturated fields.

Planning for the Future



BCWF's Neil Fletcher and wetland restoration expert Tom Beibighauser answer questions from Salt Spring Island residents.

In 2014, the Wetlands Education Program has become further involved in a number of wetland policy initiatives on the municipal, provincial, and federal scale. At a local level, WEP hosts workshops aimed at bringing multiple agencies, stakeholders, and levels of government together to discuss the future of wetlands in their respective areas. Identifying gaps in knowledge and resources is key to advancing strategies to protect and restore wetlands.

Okanagan Wetland Strategy Enters Phase 2

This ambitious, multi-year initiative was launched in late 2013 as a partnership with the Okanagan Basin Water Board, BCWF Region 8, and the Central Okanagan Regional District. The goal: identify priority wetland sites to focus on conservation actions when resources are limited. Phase 1 involved the consolidation of available wetland maps in the Okanagan, stakeholder meetings, and the development of a prioritization framework for conserving wetlands. BCWF will continue to support the initiative through Phase 2, which will involve six restoration projects and a refinement of the mapping products in the Okanagan Basin. Several BCWF 2015 workshops will support this initiative. See the final page for upcoming workshops.

Grand Forks Working Group Workshop

Nineteen participants took part in a 1-day, focused workshop to strategize wetland conservation opportunities for

the Regional District of Kootenay Boundary. Guest speakers from Ecoscape Environmental Consulting, The Slocan Wetland Assessment and Monitoring Project, and West Coast Environmental Law provided context for discussion. Several key priorities were identified among the group as next steps towards conserving wetlands in the district, including a plan to map wetlands in the region and initiate a demonstration restoration project.

BCWF Goes National at Canadian Wetland Leadership Partnership Workshop

BC Wildlife Federation represented the Wetlands Stewardship Partnership of BC at a two-day conference to develop a strategy for conserving wetlands in Canada over the next 10 years. Approximately forty delegates from government, non-profit, and industry attended the event. The workshop was hosted by Wildlife Habitat Canada, Ducks Unlimited, and the Canadian Federation of Agriculture.

Salt Spring Open House

Nearly seventy residents attended an open house which supported the Salt Spring Island Conservancy's multi-wetland restoration project at a decommissioned golf course on Blackburn Lake. The Wetlands Education Program discussed BC wetland restoration as a whole and fielded questions from residents.

Wild Kidz Camps



Dawson Creek children paint bird feeders created with assistance from Ducks Unlimited.

The Wild Kidz Camp is a free, week-long summer day camp that educates children about the practices and importance of wildlife and environmental conservation. Through fun, hands-on outdoors activities, up to 25 children learn about the interrelated dynamics of ecosystems. By providing a real life connection with nature, we ensure children will return home with experiences and memories to last a lifetime.

Both Kidz Camps featured a number of similar activities like good old-fashioned camp games and activities (Dragonfly Dodgeball, Capture the Flag, "Rabies", animal charades, nature walks, etc) as well as educational modules that taught children about BC mammal skulls and furs, native plant species, and food chains. Both camps also took part in exciting activities like fishing, shooting .22s, archery, nature painting, and swimming.

Dawson Creek

After a long journey to the North-East end of our province, the BCWF partnered with the Dawson Creek Sportsman's Club to host a very memorable camp.

In addition to the above activities, 25 Dawson Creek children were fortunate to engage in presentations on outdoor survival skills, trapping and wildlife, and bat research. Other hands-on activities involved catching invertebrates, birding at McQueen's Slough, invasive species removal,



Kids excited to start the Peachland Wild Kidz Camp

compass lessons, building bird houses with Ducks Unlimited, and trap shooting with shotguns.

Peachland

BCWF's second camp was held in partnership with the Peachland Sportsmen's Association. Extra activities included dissecting owl pellets, making custom fishing jigs, and flyfishing lessons. With the use of a special camera, children were even able to watch a live video feed of the local Yuma Bats at the local visitor centre. A visit to the Summerland Trout Hatchery taught campers about fish biology and life cycles.



Outreach Education

Squamish Field Outreach Days

BCWF joined the Squamish River Watershed Society to support their Field Outreach Days at the Mamquam River. Over this week-long event, approximately 400 elementary school students visited BCWF's booth and learned about watershed health and how wetlands can protect rivers like the Mamquam. The presentation focused on aquatic invertebrates and involved a hands-on dipnetting activity. After identifying the invertebrates, students used them to discern the health of the river. This powerful activity demonstrated first-hand the connection between wetlands, the river, and all the life within.

Rossland Students get Barefoot in Wetlands

Forty Grade 8 students from Rossland Summit School participated in several wetland modules including: a photo tour of why wetlands are important, a wildlife module introducing birds, invertebrates and other creatures that are associated with wetland habitat, a hands-on flood control activity, and a bare foot mapping exercise where students creatively piece together their vision of a proposed wetland. The outreach was completed in part to raise awareness and interest for a proposed wetland restoration project at North Jubilee Park, directly adjacent to the school grounds.



Intern Keila Stark and visitors use the interactive watershed model during World Oceans Day in Surrey.

World Oceans Day

Between 100 and 150 visitors participated in activities at the Wetlands Education Program booth during the World Ocean's Day Celebration at Blackie Spit (Surrey). Our interactive, 3D watershed model made a return, demonstrating how an unbalanced landscape could lead to an unhealthy ocean. The booth also contained a wetland scavenger hunt, where participants learned the history and values of wetlands.

World Rivers Day, New Westminster

As part of the Fraser River Discovery Centre's World Rivers Day celebration at the New Westminster Quay, BCWF hosted a booth containing various wetland-related models, skulls, pelts, and live invertebrates. Using natural materials like clay and moss, children were able to construct model wetlands for a chosen animal, such as a moose, or salmon. 360 people visited the booth over the course of the day.



Children show off their homemade wetlands at the World Rivers Day Celebration in New Westminster.

A Space For “Wetworking”



Get involved in 2015

Wetlands Institute

Okanagan Region - Sept. 28-Oct 4

Wetlandkeepers

Kelowna - May 1-3

Windermere - May 22-24

Quesnel - June 5-7

Smithers - June 12-14

Map our Marshes

Fernie - April 26

Creston - May 31

Campbell River - July 4

Wild Kidz Day Camps

Windermere - July 13-17

Prince George - July 20-24

Please Note: Dates are subject to change

For more information, or to make a donation, contact:

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The Bog Blog
www.bcfwfbogblog.com

A multi-layered website set up to share wetland steward experiences and knowledge on how to protect BC's remaining bogs, fens, marshes and swamps. It also features links to resources that might suit people monitoring and conserving wetlands. Furthermore, it has a growing list of featured stewards and educators within the Wetlands Education Program. Wetlandkeeper and Wetland Institute alumni are also encouraged to share their work.

Wetland Education Program Flickr
www.flickr.com/photos/bcwfep

An online photo gallery open to the public through Flickr. Please visit the BC Wetlands Photo Group and consider sharing your treasured pictures. Who knows, they may get selected as our feature photo!

Feeling social?

“Like” our BCWF Wetlands Education Program Facebook page and “Follow” us on Twitter. [@BCWFWetlands](https://twitter.com/BCWFWetlands)

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The BC Wildlife Federation is a province-wide voluntary conservation organisation of hunters, anglers and outdoor recreationalists, representing all British Columbians whose aims are to protect, enhance and promote the wise use of the environment for the benefit of present and future generations

