

A Space For "Wetworking"



twitter.com/BCFWWetlands



facebook.com/BCWFWEF/



flickr.com/photos/bcwfwep

The Bog Blog

www.bcwfbofblog.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. Wetlandkeepers and Wetlands Institute alumni are also encouraged to share their work.

Get Involved in 2018

Wetlands Institute

Salt Spring Island: September
(Final Date TBA)

Wetlandkeepers

Nanaimo: May 4-6
Vancouver: May 25-27
Mackenzie: July 20-22
Moberly Lake: July 17-18

Map our Marshes

Peachland: May 6
Salmo: Date May 10
Kamloops: April 16

Information on more workshops coming soon.

Consider following our social media to stay up to date!

Dates and locations are subject to change

These projects were undertaken with the financial support of:
Ces projets ont été réalisés avec l'appui financier de:



Canada



TD Friends of the Environment Foundation

Wetlands Update



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

2018 Edition



The "Salix and Sedge" Wetland only months after restoration

Ramping up Restoration in 2017

It was a banner year for the Wetlands Education Program when it came to wetland restoration. In addition to those restored during the Wetlands Institute (see pages 2-3), we were able to restore over a dozen hectares at multiple sites across BC.

One such site was the "Cherry Creek" project (near **Kimberly**), which restored habitat that once supported the red-listed Northern Leopard Frog. **Meadow Creek** continued to be a hotbed of wetland restoration with three sites last year; two on private property and one completed in partnership with The Nature Trust of BC. Another project on private land, just south of **Salmo**, converted unproductive farmland back to wetland habitat while improving the adjacent cropland; a win-win situation!

We were also able to design wetlands for future restoration on **Salt Spring Island, Vancouver Island**, near **Fort St. John**, in the **Lower Mainland, Revelstoke**, and at various locales across the **Kootenays**.

Of course, the Wetlands Education Program does more than restoration! Please continue reading to learn more about our 2017 programming, and what workshops may be coming to your area in 2018.

In This Issue

Wetlands Institute

A 7-day workshop where we restored 4 wetlands!

Wetlandkeepers

Stewardship courses in Courtenay, Cheam Lake, Fort St. John, Campbell River, and Fernie

Map our Marshes

Learning how to map small wetlands with GPS units in North Van, Lillooet, and Oliver

Wetlands Outreach

Hundreds of people learn about wetlands in Squamish, Salmo, Mission, and Surrey

Partnering for Better Workshops
WEP hosts joint events across BC

Workshops in 2018

Mark your calendars!

A Space For "Wetworking"

Keep up to date with our "Bog blog" and more



For more information, or to make a donation, contact:
604-882-9988 ext 232
wetlands@bcwf.bc.ca



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

The Wetlands Institute



Institute participants in the Columbia River Wetlands

Nestled firmly at the headwaters of the Columbia River Wetlands, Canal Flats welcomed the 2017 Wetlands Institute participants with open arms, gracing them with Grizzly Bear encounters by day, natural hot springs in the evenings, and late-night visits by the Aurora Borealis.

Our flagship workshop, the Wetlands Institute accepts applicants from across the province who have wetland projects in their respective communities and provides them with the skills necessary to complete them. A portion of this training was administered by a dozen experts from various fields. A few of the topics covered included:

- *History of Wetland Drainage in North America*
- *Biology and design considerations for Painted Turtle, North American Beaver, Amphibians, and Waterfowl*
- *Wetland Plant Identification*
- *First Nations' Connection with Wetlands*
- *Interpretation and Communications Techniques*
- *Wetland Fire Ecology*

A main attractant for many participants is the workshop's commitment to hands-on training, including multi-step involvement in wetland restoration projects. Participants are able to participate in site assessments, complete detailed restoration designs, work with heavy machinery, and execute erosion and invasive species prevention management. The 2017 Wetlands Institute included the restoration of four unique wetlands at three different sites, which you can read about on the next page.

The 2018 Wetlands Institute will take place on Salt Spring Island and include the restoration of at least three wetlands.

Did you know?

At 150+ square kilometres, The Columbia Wetlands is one of the largest intact wetlands in North America. Due to its economic, cultural, and recreational value it was designated as a Wetland of International Importance.

Unique Partnerships

The Wetlands Education Program loves to partner with groups from all across the province. In 2017 alone we partnered with over 40! Cooperation allows us to provide unique training experiences and reach a larger, more diverse audience. See below for a few of these partnerships.

Bogging with "BOW"

In 2017, the Wetlands Program offered training at another BCWF program called "Becoming an Outdoors-Woman" which provides an opportunity for women to learn outdoor skills. The ladies learned about GPS use and aquatic invertebrates while exploring a lakeside bog in **Maple Ridge**.

Learning from the Best

Jakob Dulisse Consulting and BCWF co-hosted a training course in **Cranbrook** on a well-known Rapid Assessment Wetland Health Form, which attracted highly-educated participants from a wide variety of NGO, government, and consulting backgrounds. One of the form's creators, Dr. Paul Hansen, travelled from the US to teach the course.

Designing Wetlands of the Future

Teaming up with Columbia Shuswap Invasive Species Society, BCWF was able to train over 30 people in **Revelstoke** during a Invasive Species and Wetland Restoration Workshop. A partnership of six groups allowed for a Restoration Design Workshop in **Lillooet**. This hands-on workshop not only trained participants, but also led to the design of restoration projects at Lillooet Secondary School and Spray Creek Ranch.

Supporting Novel Invasives Research

In June, BCWF held a Wetlandkeepers workshop to support a research-driven, experimental method of removing invasive Yellow Flag Iris (see the "Wetlandkeepers Courses" section for details). To lend further support, BCWF hosted a public "Work Party", which was attended by families eager to help. Over 8000ft² of Yellow Flag Iris were treated! Volunteers also managed to plant 750 cattails and bulrushes in previously treated areas so that invasive species would not return.



Top: Neil teaches wetland design in Lillooet, Centre: Participants classifying soils in Revelstoke, Bottom: Participants learning rapid wetland assessment in Cranbrook

Outreach Education

In addition to training adults, the Wetlands Education Program attends events, hosts public talks, and visits schools to teach the public (especially kids!) about the benefits of wetlands. In 2017, we reached over 1400 people at events like **World Wetlands Day**. Continue reading to learn about some other events.

Squamish Field Outreach Days

The 2017 theme for the Squamish River Watershed Society's Outreach Days was "Our Estuary". BCWF collaborated with the group by teaching approximately 500 students about estuary critters at the "Mighty Detritus" station. Kids were able to interact with cool invertebrates like the Giant Water Bug, and maybe even a snake or two.

Learning by Lamplight

BCWF was fortunate to be a part of two Metro Vancouver events this year (**Night Quest** and **Flashlight Mysteries**), both of which took place in parks at night. In booths illuminated by lanterns and flashlights, hundreds of people were able to learn about BC's bat species, as well as ways people can help keep our wetlands safe. Families were delighted to test out our new "Jumbo Jenga" where they could see the negative effect invasive plants and animals have on ecosystem health.



Top: In Squamish, kids discover an estuarine snake, Centre: Learning about invasive species with "Wetland Jenga", Bottom: Gazing at the wetland model at "Starry Night"

WEP Could Visit Your Classroom!

The Wetlands Education Program (WEP) has developed a variety of resources to bring to the wetland to you! Animal masks, watershed models, real skulls and pelts, and maybe even some live invertebrates can be used to teach students of all ages about the importance of wetlands. As WEP travels across the province, we may be coming to a community near you!

Contact wetlands@bcwf.bc.ca for more details



Our new drone provided some great shots of our restoration work in action!

The Restoration Projects

1. **Gypso Logging Basin** was heavily impacted by cattle, which reduced water quality, habitat for wildlife, and the amount of time that water remained on the landscape. To solve this, the soil was loosened and the depression deepened. Cattle access areas were also incorporated to limit future impacts.
2. **Turtle Pond** was at risk of being destroyed by eroding banks. The banks were repaired and a proper spillway was installed.
3. **Hoodoo Wetland** was a wetted system which did not retain water long enough to support wetland species. Two wetlands were created on site: one with an artificial liner, and one with a compacted clay liner. Improvements will ensure the site is more resilient to drought during climatic extremes.

Wetlandkeepers Courses



Left: Laying liner to control invasive Yellow Flag Iris, Right: One of the many amphibian encounters during Wetlandkeepers

These 2.5-day, hands-on workshops educate participants about wetland conservation and provides them with technical skills to steward their own wetlands. 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.

Tackling Invasives at Cheam Lake

This Wetlandkeepers near **Chilliwack** provided assistance to an experimental, multi-agency initiative to remove the highly invasive Yellow Flag Iris from Cheam Lake Wetlands. After cutting the aboveground plant matter, rubber mats were anchored on top to choke the roots. 400ft² were treated.

Wetlandkeepers on the Island

Workshops were held in **Courtenay** and **Campbell River**. Both had strong partnerships that are resulting in local wetland mapping and restoration efforts.

Heading Further North

A new record was set for the most Northern Wetlandkeepers to date. Held in **Fort St. John**, this course featured restoration design training by Tom Biebighauser.

New Trainer in Town

Wetland Institute participant Beth Millions made good use of her new training by hosting her own Wetlandkeepers Workshop in **Fernie**.



Sampling invertebrates in Cheam Lake Wetlands

Map our Marshes



Left: Participants in Lillooet, Right: Trainer Ryan is always happy to classify some wetland soil

Map our Marshes is a 1-day crash course that educates individuals in the value and tools of community mapping. Participants are also taught how to upload important GPS data online. This info 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. Unless wetlands are mapped, they could go unrecognized and be inadvertently destroyed.

Unique Opportunity in North Vancouver

Our first Map our Marshes of the year was packed with participants and featured access to a salt-water marsh in publicly restricted areas in the Maplewood Flats Conservation Area .

Supporting First Nation Initiatives

This special 2-day workshop, held in **Lillooet**, provided training to members of the Xaxli'p and Xwisten First Nations, which are part of the larger St'át'imc Nation. They are using this training to conduct a wetland inventory within their territory.

Amid the Flames in Oliver

In partnership with the Southern Okanagan Sportsmen's Association, we visited a newly protected wetland during this workshop. When wildfires were raging across the Province these sites provided refuge to wildlife. Unfortunately, the Okanagan has lost 85% of wetlands in its valley bottom.



Sampling wetland soil using an auger