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Coastal Cutthroat Trout A Forgotten Treasure

By Heather Wright Research and Education Officer World Fisheries Trust

Coastal Cutthroat Trout are a forgotten treasure found in many backyard streams of Saanich. This native fish is beautifully coloured: sporting spots along its silver body with yellow tinged fins and – usually, but not always – orange or red slashes on the bottom jaw. Some Cutthroat Trout (like those found in the lower Colquitz) are sea-run; hatching in streams, going out to sea to grow and returning to spawn, similar to salmon. Sometimes they return to seawater again in the spring. Cutthroat Trout are more related to salmon than other trout and are in the same genus (Oncorhynchus) as Pacific Salmon.

These fish are a favourite of catch-and-release anglers who fish for Cutthroat Trout in the Victoria Harbour area and other local waters. Cutthroats were once a major angling target in the Colquitz River but fishing has been closed for a number of years because of a dramatic decline in their populations throughout much of their range, including locally. They are now being considered for listing in the Canadian Species at

Risk registry to join the interior subspecies: Westslope Cutthroat Trout.

Thankfully there have been a variety of proposals and projects to enhance and restore local habitat for salmon. The PICI project (pronounced "peachy" and standing for Portage Inlet Cutthroat Initiative) is the newest of these projects and plans to build on past and ongoing initiatives that benefit Cutthroat Trout in the watersheds associated with the Gorge Waterway, including the Colquitz River and Craigflower Creek. The project has been put together and funded by the Freshwater Fisheries Society of BC, World Fisheries Trust, Peninsula Streams Society, Victoria Golden Rods and Reels, Haig-Brown Fly Fishing Association, Esquimalt Anglers' Association, Victoria Fish and Game Protective Association, Hemmera – an Ausenco Company, and the Amalgamated Conservation Society. This project is still in the initial stages, but boots will be in the water later in 2019.

For more information on how to get involved and/or volunteer please contact Heather at World Fisheries Trust: heather@worldfish.org





Garry Oak Meadow Marathon

By Travis Muir Conservation and Engagement Coordinator Nature Conservancy of Canada

After a successful pilot year, the Nature Conservancy of Canada is happy to announce the Garry Oak Meadow Marathon is back and bigger than ever. Throughout February and March, parks and conservation groups across southern Vancouver Island are hosting volunteer events to help restore our Garry Oak meadows. This multi-partner marathon aims to raise awareness and support restoration efforts of the unique and sensitive Garry Oak habitats of southern Vancouver Island.

With more than thirty events ranging from bashing broom and eradicating ivy, to tending native seedlings and learning at specialized workshops, there are many options for both new and experienced participants. Events take place during the week and on weekends in our many public and private conservation lands that feature Garry Oak habitats.

Cross-pollination is encouraged! Volunteers who come to events at three or more different sites will be entered into a draw to win fabulous nature prizes. Groups involved this year include: Saanich Parks, Saanich Native Plants, Haliburton Farm, Swan Lake Christmas Hill Nature Sanctuary, Greater Victoria Green Teams, CRD Regional Parks, Parks Canada, Habitat Acquisition Trust, Friends of Uplands Park, and Salt Spring Island Conservancy.



Broom Removal at Cowichan Garry Oak Preserve Photo Credit NCC



GARRY OAK ECOSYSTEMS RECOVERY TEAM'S

20th Anniversary & 14th Annual GOERT Conference

The purpose of the GOERT Conference is to bring together people who are planning or conducting research and restoration projects relevant to Garry Oak Ecosystems to have them present brief descriptions of their studies and results to prompt discussion and encourage coordination among groups. Registration coming soon!

When: Monday, April 29, 2019
Where: Cedar Hill Golf Course

Cost: \$25 individual / \$10 student

Includes lunch and refreshments

Contact: goertvictoria@gmail.com





VOLUNTEER EVENTS

To find the full listing of Garry Oak Meadow Marathon events visit: www.natureconservancy.ca/meadowmarathon.

Garry Oak Conservation Workshop at the Cowichan Garry Oak Preserve

The Nature Conservancy of Canada is hosting a free Garry Oak conservation workshop on March 10th at the Cowichan Garry Oak Preserve in Duncan. Come learn from leading experts about the ecosystem and the endangered species that rely on them, native plant propagation techniques, proper uses of tools, and restoration management plans.

To register go to https://events.natureconservancy.ca/



Citizen Science Projects

By Thomas Munson Senior Environmental Planner, the District of Saanich

Citizen science is described as the collection and analysis of data relating to the natural world by members of the general public (residents or volunteers), typically as part of a collaborative project with professional scientists. There are a number of examples of ongoing citizen science projects in the District of Saanich, including the Colquitz River salmon counting fence, the Christmas Bird Count (North America's longest-running citizen science project), and the use of smartphone apps such as iNaturalist for local bioblitzes.

Why is citizen science important? Science relies on observation. As more people examine natural phenomena and record and share information, we gain a better understanding of the natural world. Local residents can make good citizen scientists because they know what lives nearby. Citizen science enables participants to make a direct contribution to research, increase their scientific understanding, and immerse themselves in learning about environmental issues. These opportunities can provide personally transformative experiences.

Smartphones, the internet, and accessible research technologies de-institutionalize science and get the inner scientist in all of us outside to contribute to a broader understanding of a variety of topics, from backyard birds to flower-blooming times. Regular observations of such phenomena as bird collisions with house windows, appearance of ladybugs or bumble bee or butterfly pollinators, or recording of bird nesting activity all provide valuable scientific data that can tell researchers about trends in the natural world.



Participate in the "Great Backyard Bird Count," February 15-18th. www.birdscanada.org

For children, citizen science may be the first opportunity to get kids outside and get their hands dirty. Citizen science can contribute to a new awareness of the wonders of the natural world, and can overcome the 'nature-deficit-disorder' becoming more common among children who spend more time in front of screens than time outside. Introducing the natural world to children at a young age, through citizen science, can create a life-long interest in wanting to observe and explore nature.

Some scientists are sceptical about the value of citizen science: as data collection projects are scaled up, there is concern regarding the rigour and usability of data collected by citizens who are not formally trained in research science. There are three potential aspects of data quality in play: data accuracy and precision, sufficient sample size, and standardized sampling procedures (including data from different areas and time periods). By providing lay-volunteers with education and training on standardized and responsible conduct of research, citizen science can be improved and scientists can gain the valuable data that they are interested in.

Have you contributed to a citizen science project in the District of Saanich? If 'yes', congratulations and thank you. If 'no', perhaps there are ways that you as a resident or volunteer can become involved in a local citizen science project. Check out local naturalist organizations or school projects and sign up. Saanich is blessed with natural biodiversity, but the world is changing daily in terms of patterns of species behaviour and activities. Become a citizen scientist...you and the natural world will benefit.

Saanich - In the Heart of the NatureHood

By Jacques Sirois Friends of Victoria Harbour Migratory Bird Sanctuary Partner, Greater Victoria NatureHood

In 2018, again, the Vital Signs report of the Victoria Foundation revealed that residents of Greater Victoria see the natural environment as its biggest asset. With its 170 parks, 100+km of trails, forested hills, Garry Oak ecosystems, lakes, ponds, creeks, and seafront, Saanich, our largest municipality, plays a central role in maintaining, enhancing, restoring, and showcasing this remarkable asset.

Saanich has valuable biodiversity not only in its backyard, but also in its beautiful, marine front yard, the Salish Sea, in Cordova Bay and Cadboro Bay, and in its "veins of life" like the Colquitz River and the Gorge Waterway. Pacific Herring, Coho Salmon, Olympia Oysters, Buffleheads, eelgrass, and clams live or show up on its seafront. So do Orcas, Steller Sea Lions, Northern Elephant Seals, Rhinoceros Auklets, Marbled Murrelets, and Great Blue Herons.

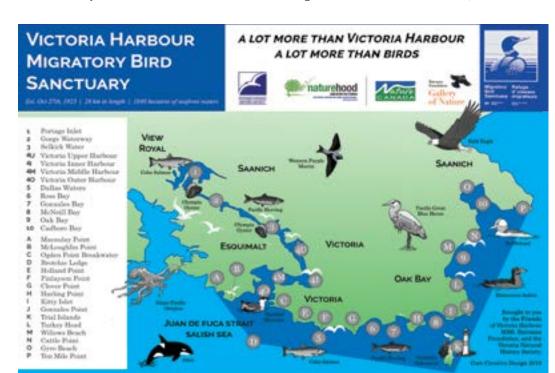
Saanich has a splendid, busy, 40 year-old Nature Centre at Swan Lake, itself almost shaped like a heart. It even has a sacred site, the Spirit Rock of Camossung, in the reversible falls of the Gorge Narrows, with a creation story of a girl, herring, salmon, oysters, and ducks. In a spirit of reconciliation, the time may have come to secure, acknowledge, and



The Greater Victoria NatureHood was officially recognized at Government House with Lieutenant Governor Judith Guichon, right, and Nature Canada President Bob Peart in attendance. For more information on the Nature Canada's NatureHood program, visit: https://naturecanada.ca/enjoy-nature/your-naturehood/

celebrate this unique site with the Songhees and the Esquimalt First Nations.

Saanich's seafront waters lie largely within historic Victoria Harbour Migratory Bird Sanctuary, established in 1923 to control hunting. Today, this bird sanctuary is still home to birds and other valuable wildlife in a busy urban environment. It is also where urban folks can easily connect with nature. Hence its recognition as a NatureHood by Nature Canada in 2015; a designation given to the three historic Migratory Bird Sanctuaries in our region: Victoria Harbour, Shoal Harbour, and Esquimalt Lagoon.



In 2017, this designation was extended to Greater Victoria, Saanich included, in light of our exceptional natural environment; among the best in urban Canada. It encourages us to share a vision, continue to nurture our biggest asset, and confront nature-deficit disorder in our kids.

Saanich is a great NatureHood. Thanks to staff, volunteers, and the residents who care for it.

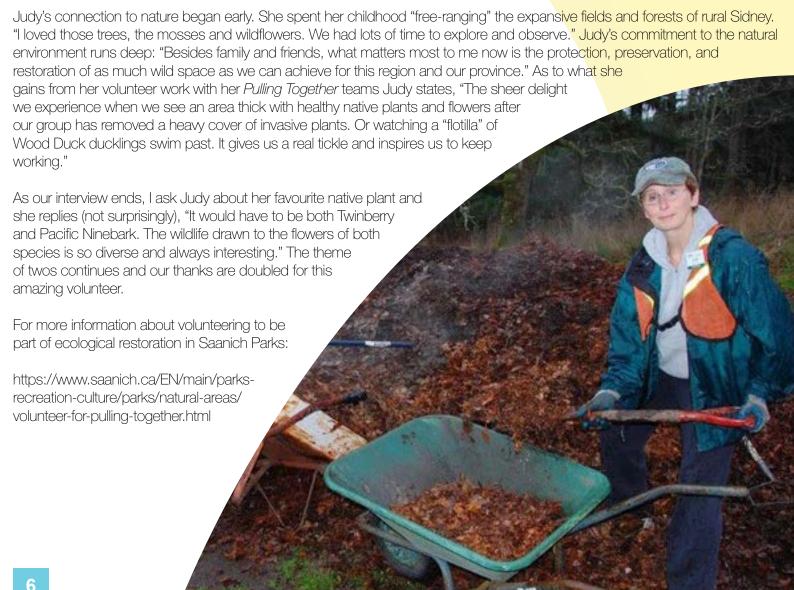


Saanich Pulling Together Volunteer Program Feature Volunteer: Judy Spearing Bow/Brodick Parks and Mount Douglas Park

By Jenny Eastman Volunteer Coordinator, District of Saanich Parks

With her wheelbarrow loaded to capacity, volunteer Lead Steward, Judy Spearing appears with abundant tools, kind words, and plans for her teams of volunteers removing invasive species at weekly work parties. A dedicated volunteer who coordinates volunteer groups at two parks and volunteers at least twice every week, it seems as though Judy has a theme of twos in her volunteer life.

Judy began ecological restoration along with her husband, Derek, volunteering in 2004, with community members working in Haro Woods to remove invasive species. Judy notes, "The whole idea of restoring a Douglas-fir forest appealed to us. We had the good fortune to meet and work with a super bunch of folks. In February 2006, I also joined a small Mount Douglas Park volunteer team." Judy's current teams at Mount Douglas and Bow/Brodick Park are happy to host interested student and community groups keen to try out ecological restoration for the first time. Her volunteer commitment also extends to service on the boards of the Friends of Mount Douglas Park Society and the Garry Oak Meadow Preservation Society.



Spectators Welcome - New Viewing Platform along the Colquitz River Trail

By Jillian Tuson Natural Areas Practitioner, the District of Saanich Parks Division

In October of 2018, Saanich Parks put together a plan to create a new, safe viewing platform for the Department of Fisheries fish fence located along the Colquitz River. The new space was intended to create a landing where spectators of all ages could watch the salmon counts that occur throughout the fall salmon run. The viewing area opened up the trail entrance to give a safe and more inviting feel for everyone to enjoy the view of the Colquitz River.

Layers of road base were compacted within the frame of a newly installed 4X4 treated wood footprint. Next, pathway-blend material was laid on top to create the base of the platform, which can easily accommodate more than two dozen people. The platform was surrounded by a rustic split rail fence for safety, and large boulders were strategically placed throughout so visitors of all heights can view the action on the River. An existing Bigleaf Maple log was incorporated to add yet another fun feature, and a new maple was planted in the centre for future canopy cover.



Located at the Department of Fisheries fish fence, along the Colquitz Trail behind Tillicum mall (en-route to Cuthbert Holmes Park, where volunteers count the fish in spawning season).

The viewing platform is used by school kids of all ages and all varieties of park users. Dorothy Chambers (Salmon in the City Project) and the team of volunteers who participate in the yearly fish count, were very excited to see the construction of the platform. "Wow, that viewing area SURE is appreciated!" exclaims Dorothy in one email after seeing many school groups visit to watch the fish count and learn about the salmon in the creek.

We may not have had record numbers of salmon last fall due to a low rain fall prior to the spawning run, but Saanich residents now have a viewing platform to watch the fish return year after year. Two hundred and eighteen Coho Salmon were observed, and one searun Coastal Cutthroat Trout this year.

Why Am I A *Volunteer Park Ambassador*At Mount Douglas Park?

By John Roche District of Saanich Park Ambassador Volunteer

There are several reasons I enjoy my role as a Volunteer Park Ambassador:

- As a resident of Saanich for more than 50 years and an active retiree, my volunteer role gives me the opportunity to give back to the municipality that has done so much for me over the years.
- The Park Ambassador role is an active volunteer job and contributes to my healthy lifestyle.

 During my two hour shift, I will typically walk 5,000 6,000 steps. I generally park in the lower lot and walk the 240 vertical meters to the lookout at the summit. It is an exhilarating walk on a variety of paths, ranging from rocky, root-bound paths to paved roads.
- get to meet a variety of people from many backgrounds and countries who are all enjoying the different ecological layers of the park; from the beach to the summit. I also get to meet a large variety of dogs being walked through the park.
- 4 Heave feeling I've contributed to the success of the park. I pick up minor amounts of garbage, clear paths of small branches and other debris, and report any significant issues to the Parks Department. Hopefully, the park is a little better when my shift is over!

Park Ambassador duties are fun and contribute to the positive experience of the many parks visitors. Please consider volunteering to the Park Ambassador Program.





Prospect Lake Aquatic Plant Survey & Water Quality Testing

By Carmel Thomson Photos by Lori James Derry www.todcreekwatershed.ca

Aquatic plants are often undervalued and incorrectly identified. For example, to the lay eye Native Coontail is often mistaken for Eurasian Milfoil. While some boaters and swimmers might consider aquatic vegetation a nuisance, lake plants hold significant value for a lake's overall health and water quality.

Healthy native aquatic plants provide much the same functions as terrestrial plants. They produce food for animals (such as waterfowl, frogs, turtles, insects, and other species), help to stabilize lake bottoms, aerate the water, and provide habitat and spawning beds for fish.

In early September 2018, those who live around Prospect Lake may have seen members of the Friends of Tod Creek Watershed (FOTCW) conducting the 3rd Annual Prospect Lake Aquatic Plant Survey.

With assistance and under the watchful tutelage of University of Victoria professor Dr. Rick Nordin, who specializes in BC water quality and limnology, aquatic plants at eight locations on Prospect Lake were surveyed. Sample sites are plotted by latitude and longitude, and at

The 2018 Aquatic Plant Survey Team at the end of a long day on Prospect Lake. L – R: Mary Haig-Brown; Joanne Delage, Ron Delage, Dr. Rick Nordin, Winona Pugh, Carmel Thomson & Lori James Derry.

each location vegetation samples at depths of 2, 4 and 6 metres were taken, identified, and catalogued.

At the more densely populated side of Prospect Lake and in shallow areas, a greater abundance of plants was observed. A common reason for this is inflated nitrogen levels resulting from leaky outdated septic systems and the excessive use of fertilizers in lawn and garden management. Still, the volume of plants found in Prospect Lake appeared not to be detrimental to overall lake activity.

"Unquestionably, maintaining freshwater aquatic plant species and supplying plant data and reliable water quality measurements is important in any lake or wetland ecosystem. Of particular interest is that the invasive Eurasian Milfoil was not detected in Prospect Lake and its water quality levels were consistent with previous surveys." FOTCW Chair Winona Pugh.

Data and samples collected are provided to the Capital Regional District's Aquatic Ecology Lab and the BC Lakekeepers Society. It is used to evaluate water quality, identify invasive plants, and to plot changes over time. The data are also used to diagnose possible emerging problems, determine whether pollution controls are needed, and to guide management decisions.

For more photos and details on the survey see: www. todcreekwatershed.ca





(At left) 1: Chara [Stonewort] or Nitella; Ceratophyllum demersum [Coontail]; Myriophyllum sibericum [Northern Water-milfoil, which is native. One distinguishing feature is that Northern Water-milfoil produces winter buds]. NOTE: Evidence of the invasive Eurasian Water-milfoil was not found.

2: Potamogeton robbinsii [Fern Pondweed]; Elodea canadensis [Canadian Waterweed]; Vallisneria

2: Potamogeton robbinsii [Fern Pondweed]; Elodea canadensis [Canadian Waterweed]; Vallisneri americana [American eelgrass]; Stuckenia pectinata [Sago Pondweed]; Chara [Stonewort].

Make your commitment today and help stop the spread of aquatic invasive species!

- 1. CLEAN off all plant parts, animals, and mud from boat and equipment (e.g. boots, waders, fishing gear). Use a power wash station if available.
- 2. DRAIN onto land all items that can hold water (e.g. buckets, wells, bilge, and ballast).

3. DRY all items completely before launching into another body of water.



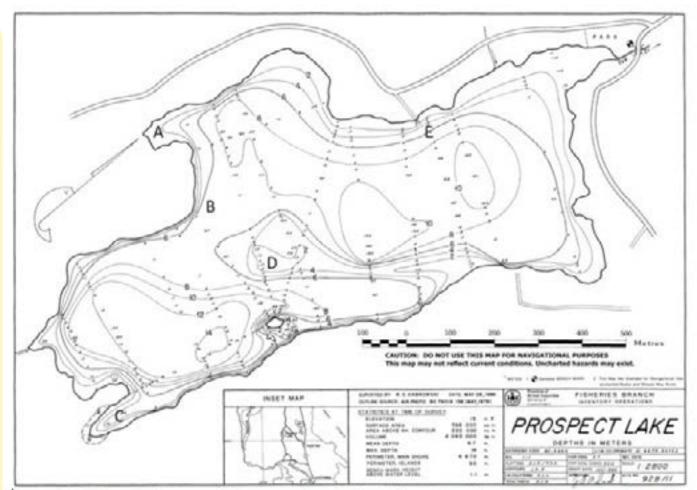


Figure 8: Bathymetric map of Prospect Lake. Point A: location of aquatic plant samples and one species of Spirogyra; Point B: sub-surface light green mats of Spirogyra; Point C: Mougeotia sp., water pump was active; Point D: all sampled aquatic plants were free of filamentous algae; Point E: thick mats of Ceratophyllum demersum.

New GORSE Alert Sheet

By Carolyn Richman
Saanich Environmental Education Officer

For those of us battling invasive species and trying to get the message out about the problem, no message could have been stronger than the one received by Bandon, Oregon. Twice. In 1914 and then again in 1936 the entire town burned down - both fires attributed to the invasive plant Gorse. I would venture to guess that managing invasive plants is probably an easier "sell" to the residents of Bandon!

For those who are not familiar with this species, Gorse is a spiny invasive shrub that forms dense thickets that can quickly become impenetrable. The plant stems and foliage have a high concentration of volatile oils, which contribute to the plants being highly flammable: burning rapidly and with high intensity. When in bloom, this 1-3m tall shrub has fragrant, yellow pea-like flowers which develop into flat black hairy seedpods. Gorse is adapted to regenerate well after fires.

Saanich and other partners have been working on managing the spread of Gorse in our region. Gorse spreading into natural areas impacts our native ecosystems, threatens rare species, alters soil conditions, and increases erosion on slopes due to the bare soils that typically occur around it. In the Westshore region, for example, Gorse has had significant impacts on rare Garry Oak ecosystems and it is costly to try to manage or eliminate it.

The good news in Saanich, so far, is that we have few sites to manage, but unfortunately our few sites include a larger outbreak in one area of rural Saanich. Saanich Environmental Services works with residents to identify and use best methods to remove invasives like Gorse. If you'd like to find out more, check out our new Gorse alert sheet on our Saanich website saanich.ca/invasives (under Invasive Resources).

If you have Gorse on your property, note that the highly flammable wood was used in traditional bread ovens in areas of Western Europe, where it is native. Food for thought as we strongly encourage Saanich residents to remove any Gorse on their property.

https://www.saanich.ca/EN/main/parks-recreation-culture/parks/natural-areas/volunteer-for-pulling-together.html









Upcoming Events

Saanich Recreation Trails & Treks

http://www.saanich.ca/EN/main/parks-recreation-culture/active-living-guide.html 250-475-5408

Sunday Weekend Walks (FREE Drop-In)

Sundays | 1 pm to 3:00 pm

Discover the beauty and nature of Saanich Parks. Please wear sturdy footwear and bring water. Walks go rain or shine. Leashed, well-socialized dogs are welcome unless specified.

Feb 24 | Lesser Known Vistas of Cedar Hill

Meet by the footbridge in Cedar Hill Recreation Centre parking lot

Mar 24 | Swan Lake to Bruce Hutchison Park

Meet at Saanich Municipal Hall parking lot at the end of Darwin Ave. Apr 28 | Floral Glories of Spring - Mt. Tolmie and Finnerty Gardens Meet in University of Victoria, Parking lot 10, off Gordon Head Road.

Gentle Walk & Tale (FREE Drop-In)

Thursdays | 9:30 am to 11 am

Enjoy beautiful scenery, a friendly chat, and gentle exercise as we walk through our parks & trails. Suitable for all walking abilities, but wear suitable footwear. Dogs not permitted.

Mar 7 | Lochside Trail to Beckwith Park

Meet on Lochside Trail in parking lot by Don Mann Excavating

Mar 14 | Layritz to Copley to Quick's Bottom Parks

Meet at Layritz Park parking lot off Glyn Rd, off Wilkinson Rd

Mar 21 | Swan Lake

Meet at end of Nelthrope, off McKenzie

Mar 28 | Beaver Lake

Meet at Beaver Lake parking lot (Nature House) off of Elk Lake Drive

Apr 4 | Lambrick Park to Sierra Park

Meet at Gordon Head Rec Centre, 4100 Lambrick Way

Apr 1 | Blenkinsop Valley

Meet at Lochside Elementary, corner of Royal Oak & Lochside on Trail

Apr 18 | Cedar Hill to Playfair Park

Meet at Cedar Hill Rec Centre main doors

Apr 25 | Cedar Hill Golf Course - Kingsberry Pond

Meet at Cedar Hill Rec Centre main doors

May 2 | Mt. Doug to Glendenning

Meet at washrooms in parking lot off Cordova Bay Rd at Ash Rd.

May 9 | Mt. Tolmie and Finnerty Gardens

Meet at Henderson Rec Centre, main entrance parking lot

Birdwatching for Beginners (Workshop)

Wednesdays, April 3-24 | 9:00 am to 10:30 am

Do you love birds? Our expert birders will introduce you to the basics of birding including identification, sounds, and great birding locations. Each week features a different location. Registration required (4/\$45: #16718) Location: Bow Park - Hopesmore Drive

CRD Parks & Environmental Services

Our naturalists lead guided walks, hikes, canoeing, and drop-in events for all ages. Most are free, all are fun!

www.crd.bc.ca/parks-events 250-478-3344

Horticulture Centre of the Pacific

505 Quayle Rd, Saanich www.hcp.ca 250 479 6162

Meadowscaping for Biodiversity

Sunday, April 7 | 1 pm to 4 pm

Are you interested in creating a native wildflower meadow in place of lawn or field? Join Kristen Miskelly to learn how, including which native species to use, how to prepare and plant your area, and how to keep it thriving for years to come. Must preregister. Members \$45, Non-Members \$60

Swan Lake Nature Sanctuary

www.swanlake.bc.ca 250-479-0211

Guided Bird Walks (Drop-In)

Every Sunday | 9:00 am

Bring your binoculars and meet in the parking lot for this walk around the lake. Donations are appreciated.

Delightful Ducks (Drop-in Event)

Sunday, February 24 | 12 noon to 3 pm

Some dabble on the surface, some dive for their food – explore the amazing adaptations ducks have for living on the lake and discover who's who in the duck world. Admission by donation.

Fossil Fair (Drop-in Event)

Saturday/Sunday, March 23 & 24 | 10 am to 3 pm Dinosaurs, trilobites, ammonites, and enormous clams once lived here in the ancient tropical coral seas and palm tree forests. Paleontologists share their fossil discoveries. Bring your family and your own fossils for identification. Kids can follow a scavenger hunt, or make fossil and dinosaur rubbings.

Annual Native Plant Sale (Drop-in Event)

Saturday & Sunday, April 13/14 | 9 am to 3 pm

Over 4,000 plants and over a hundred species available for purchase at our Annual Native Plant Sale.

Pre-orders over \$50 are available - please see website for details. Parking is limited. Please carpool if possible. http://www.swanlake.bc.ca/plant-sale.php

Wild about Wildflowers (Drop-in Event)

Sunday, April 28 | 12 noon to 3 pm

Spring has sprung and the Swan Lake gardens are in full bloom. Celebrate our wonderful wildflowers with guided tours of our native plant garden, crafts for the kids, and hands-on info about planting native wildflowers. Admission by donation.

Victoria Natural History Society

Visit www.naturevictoria.ca for more programs

Natural History Night (every 2nd Tuesday)

Wildlife Viewing in Guyana | Tues, Mar 12, 7:30 pm UVic Fraser Building, Room 159

Botany Night (every 3rd Tuesday)

Plants of Western Australia | Tues, Feb 19, 7:30 pm TBA | Tues, Mar 19, 7:30 pm Swan Lake Nature Centre

Birder's Night (every 4th Wednesday)

The Hummingbirds of BC | Wed, Feb 27, 7:30 pm TBA | Wed, Mar 27, 7:30 pm UVic Fraser Building, Room 159

Marine Night (last Monday of the month)

Shellfish Archaeology in B.C. | Mon, Feb 25, 7:30 pm TBA | Mar 25, 7:30 pm UVic Fraser Building, Room 159

Saturday Morning Birding (most Saturdays)

Meets every Saturday morning, usually at 8 am. Check the Calendar page (http://www.vicnhs.bc.ca/?page_id=1518) of the VNHS website on the Thu/Fri before to find out the week's location. Novice and experienced birders welcome. Non-members welcome to try us out before joining.

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