

In This Issue:

Celebrating Biodiversity in the CRD | Salmon at the Sanctuary | Homes in Holmes for our Feathered Friends | Saanich Invasives | Volunteer Profile: Amelita Kucher | A Guide to Exploring Nature in Saanich Parks | What Was Here Naturally? | Three Nature Connection Activities to Deepen Your Relationship With The Living World | 2021 Saanich Environmental Awards



Celebrating Biodiversity in the CRD

Join the CRD's iNaturalist Biodiversity Challenge May 21-24!



The capital region lies in one of Canada's biodiversity hotspots, bursting with an incredible diversity of plants and wildlife. Nestled among our neighbourhoods and workplaces are salmon-bearing streams, Garry oak meadows, vibrant wetlands, and dynamic shorelines. In our backyards and local parks we can find pollinating insects, nesting and migrating birds, native wildflowers, and towering trees. This incredible abundance of life, or biodiversity, supports clean air and water, food security, recreational and cultural opportunities, and is key to the high quality of life we enjoy in the capital region.

Join the CRD in celebrating local species and ecosystems by participating in the 2021 iNaturalist Biodiversity Challenge, in honor of the International Day for Biological Diversity (May 22). Over a four day period, May 21 through 24, photograph and document local biodiversity in the CRD using the free iNaturalist Canada website or app, and help to build a record of the nature that surrounds us.

Visit <u>www.crd.bc.ca/biodiversity</u> for more information on biodiversity in the CRD and the iNaturalist challenge, including details about prizes and iNaturalist resources that will help you get started.

Participating in the CRD's iNaturalist Biodiversity Challenge is simple:

- Find nature in your backyard, neighbourhood, or favourite park or beach. Observations of plants, animals, fungi, insects, tracks, or even scat are all welcome.
- 2. Ideally, photograph your observation from different angles and capture different features. Use a digital camera or smart phone and make sure that gps location is turned on.
- 3. Upload your observation to the iNaturalist app or website.
- 4. Identify your finding to the highest level that you can.
- 5. Interact with iNaturalist community members online to confirm the identification of your observation.

iNaturalist is a free app that is designed for use by nature newcomers as well as more seasoned naturalists. By uploading photos of local biodiversity to iNaturalist between May 21 and 24, you will join a large community of local nature lovers who are helping to inventory and celebrate the capital region's amazing flora and fauna.

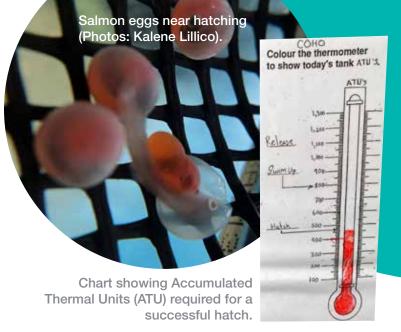
Observing and learning about the natural world that surrounds us can boost mental health and wellbeing, and is a key step in conserving nature for future generations.

Salmon at the Sanctuary

By Swan Lake Christmas Hill Nature Sanctuary Naturalist Kalene Lillico

Following a year of uncertainty, the enthusiasm that greeted plans for a salmon tank at the Nature Sanctuary was a welcome shining light for staff, volunteers and, community members alike. Led by retired environmental educator volunteers, Lenny Ross and Angus Stewart, Coho Salmon eggs reared by the Goldstream Volunteer Salmonid Enhancement Association were welcomed to our Nature House in January 2021. Taking every opportunity to peek into the tank and view the salmon at their various life stages so far has created an impending sense of anticipation. During an early stage of development, the young salmon, known as alevin, proved to be excellent at hiding from inquisitive eyes. It was not uncommon to find visitors deep into a round of eye spy in our salmon hallway!

To better predict the major life stages, the Accumulated Thermal Units (ATU) were tallied daily by adding the current water temperature to the previous day's ATU. The alevin spent a month sustaining their growing bodies with



their attached yolk sac. After that the tank was checked each day to see if the first brave fry had decided to swim topside to search for food.

Our last step in facilitating the journey was the release. The salmon that will have called the Nature House home for four months were released in stages from the comfort of their tank into Colquitz Creek. Water quality monitoring remains a crucial piece of the puzzle that is restoring Swan Lake as a possible home for salmon once again. Along with future stream assessments, consistent data is part of the plan to fully understand the next steps in improving habitat. Hope persists as we strive for a returning salmon population in our very own Swan Lake!



Homes in Holmes - for our Feathered Friends

Mission: To create nesting habitat for various bird species in Cuthbert Holmes Park.



Written by: 10th Garry Oak Venturer Scout Jevin and Scouter Rick

Completed swallow/wren-style nest boxes.

Mission: To create nesting habitat for various bird species in Cuthbert Holmes Park.

Ollie, the Great Horned Owl living in Cuthbert Holmes Park, was looking for a mate this past winter and many volunteers, park users and Saanich staff were hoping for the best. Discussions between Saanich Natural Areas and Dorothy Chambers (Salmon in the City) and Julian Anderson (Pulling Together volunteer and Lead Steward of Cuthbert Homes Park) focused on installing habitat structures for various bird species, including Great Horned Owls. 10th Garry Oak Venturer Scout Jevin was looking for a worthwhile project for his Queen's Venturer Award so a plan quickly developed.

Cuthbert Holmes Park has a history of Great Horned Owl activity but nesting opportunities are limited due



Grand Fir trees. On Dorothy's suggestion, Venturer Scout Jevin decided to build three nesting platforms to help out bachelor Ollie. The goal was to give Ollie several nesting sites to choose from within his established territory. The construction of the three Great Horned Owl nesting platforms began in January just as the breeding season was heating up and Ollie was looking for a mate. A female, now known as Madonna, quickly showed up and the hooting courtship began.

Cheryl, an avid wildlife photographer, has captured some amazing still photos of many bird species, including Great Horned Owls within the park over the years. Local Cuthbert Holmes Park users and wildlife keeners, Steve and Susan also began taking photos and videos of Ollie and Madonna becoming well acquainted and have kept an amazing daily journal of this courtship.

"For an hour at dusk tonight, a symphony of their calls together... he, baritone hoot hoot hoot... she immediately following with hoohoohoo hoo hoo....Then off swooping together, silently, checking out the real estate!"

About a week into the courtship, the nest construction was complete (thanks to Dave Clough for design ideas) and the Saanich Parks Urban Forestry crew stepped up to the rope to climb and install the three platforms. Watching Mike, Riel, and Russ climb the rope and wire in the three nesting platforms was incredible. Dorothy made the final tree selection and she nailed it. Within days Ollie and Madonna were checking out two of the three nesting platforms and



Female Great Horned Owl (Madonna).

Nestbox secretly placed for Bewicks Wren.

after a couple of weeks, they settled into one of them (on occasion though, Ollie still fly's to the other one for some quiet bachelor time). Mating observations were made throughout the month of February and much of March saw Madonna spending most of her time in the nest. No sign yet, but hopefully a few owlets will be popping up any day now.

Up next was the installation of a Wood Duck Box (or potentially Hooded Mergansers) in the new berm side pond that was designed, constructed, and planted by Ministry of Transportation and Infrastructures Sean Wong and crew. Saanich Natural Areas staff placed the post several feet into the water, to deter predators and give the ducklings a wet splashdown when they jump.

Working closely with Darren Copley at Environmental Services, Scouter Rick and Venturer Jevin decided to build nine Swallow/Wren nesting boxes. The cedar construction followed a simple design and went together very quickly. Material cost for each box is

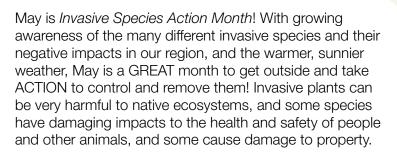
about ten dollars and can be easily cleaned out each winter to prep for the next nesting season. The plan is to make many more and give them to fellow Cubs and Scouts in kit form to build. The Queens Venturer Award teaches valuable life lessons that include engaging with fellow youth, teaching and learning new skills and developing community partnerships that enhance the environment. Darren pitched in and built door extensions for the nest boxes that help prevent invasive House Sparrows from gaining access into the nest boxes. The nine nesting boxes were installed along the low side of the new berm trail; seven higher up for swallows and two lower, and partially hidden, for wrens.

These nesting projects have been an amazing experience for everyone involved. Venturer Scout Jevin and Scouter Rick want to thank everyone for the wonderful feeling of community partnership and relationship building. We hope this is only the beginning of many more habitat enhancement projects within Cuthbert Holmes (and other Parks).



Saanich Invasives

By Ann Klein, Saanich Environmental Technician



Saanich has had some great successes with combatting a number of invasive plants by partnering with community groups and property owners. Giant Hogweed, which is a public health hazard due to the risk of severe skin burns, scarring, and blindness, has been reduced to only a few sites a year. Policeman's Helmet, which is also difficult to control, displaces native plants, and can contribute to flooding and erosion, had been tracked since 2010, but has not returned or been seen locally since 2017.

Knotweed is a priority invasive plant in BC, as it can cause extensive damage to ecosystems and infrastructure, and is very difficult to eradicate. Saanich has a free treatment program for Saanich residents, and has been tracking and treating this invasive since 2010. There have been 271 known private property sites over this time. In 2020, staff visited just over 200 properties and only 110 of these required treatment - this represents a drop of 60%! Twenty-seven new knotweed sites were reported last year, which serves as a reminder how important it is to learn, identify, and report invasives. Although every year brings reports of a few new sites, even more sites are dropping off the annual treatment list as the treatments weaken and kill off the infestations, and the new sites that are being reported tend to be small. Participation in the program is making a real difference in working towards eradicating knotweed in Saanich.

If you are wondering how YOU can start to take action on invasives this month, there are many options available.

First, **BE AWARE** and **DON'T PLANT** any invasives. This might seem obvious and simple, but many invasives are purposely planted, given as gifts or picked up at a plant nursery or sale. Find out what you would like to plant and research if it is invasive. The **PlantWise** program was created for just this purpose, and is a great resource! Find it at: https://bcinvasives.ca/play-your-part/plantwise/

IDENTIFY if you have any invasives. There are many resources for identifying plants. Check out Saanich's website: www.saanich.ca/invasives, the CRD website at https://www.crd.bc.ca/education/concerns/invasive-species or the BC Invasive Species Council https://bcinvasives.ca/take-action/identify/ website, which will show you the priority invasive species. You are also welcome to send a picture to planning@saanich.ca and one of our staff can respond to you with its identification and recommendations for dealing with it.

REPORT if you have or find any priority or 'alert' invasives identified above. Mobile apps make it easier than ever to report! Download either *Report Invasives* or *Report A Weed* onto your mobile device, or you can also report at the https://bcinvasives.ca/take-action/report/ website or to the Saanich Planning department at planning@saanich.ca, to help efforts to track and defeat invasive plants.



Giant Hogweed. Photo courtesy of Dave Polster



Policeman's Helmet.
Photo courtesy of Crystal Wheeler



Lesser Celandine.
Photo courtesy of Mike Goldsworthy

REMOVE invasives following recommended best management practices. Some species can be hand-pulled or cut (like English Ivy), while others require special protective equipment or caution (like Giant Hogweed).

DISPOSE of properly to reduce the spread of invasive plants. Being aware and mindful of **SOILS** is very important, as soil from an area with invasives may likely contain root fragments and may contain seeds. If possible, leave soil in its original location, or dispose of it at Hartland landfill along with your invasive plants, for a small fee.

With the good weather and longer days, it's the perfect time to get out and do your part to protect native plants and ecosystems, by educating yourself and taking action! For additional programs to reduce the spread of invasives, please see the following links:

Clean Drain Go

https://bcinvasives.ca/play-your-part/clean-drain-dry/

Play Clean Go

https://bcinvasives.ca/play-your-part/play-clean-go/

Buy Local Burn Local

https://bcinvasives.ca/play-your-part/buy-local-burn-local/

Poison Hemlock.
Photo courtesy of Nathalie Dechaine



Flowering Knotweed.

Photo courtesy of Jeff Hallworth



Knotweed. Photo courtesy of E. Sellenton



Volunteer Profile: Amelita Kucher

By Katie Turner, Saanich Park Stewardship Coordinator

Climate change! Biodiversity loss! If you are a kid, it is mind boggling to comprehend some of the current challenges. Thankfully, we have uplifting leaders in our community like Amelita Kucher, who raise awareness about the natural environment and empower youth to make a difference.

Amelita is a *Pulling Together* lead steward volunteer at Mount Tolmie Park. She continues the legacy of her dear friend Dave Lock, who was the committed community steward for 20 years on the hill. Amelita has always been amazed by the complexity of nature, which inspired her to be an environmental activist and pursue a degree in Biology and Environmental Studies at the University of Victoria. Working as a CRD Parks naturalist ignited her passion for connecting others with nature, and where she experienced her first "Aha moment" with children.

Now a teacher at Mount Douglas Secondary School, Amelita continues to facilitate nature connections. Amelita began engaging her students in hands-on stewardship at Mount Douglas Park in 2009, and then brought her Eco Club to work with Dave Lock at Mount Tolmie starting in 2014. Next she started a restoration project with her Science 10 classes and continues today with her Science and Environmental Leadership classes.

Fostering stewardship is a proactive undertaking. To inspire ecosystem-level thinking, Amelita encourages observation and action, guided by students' own interests. Her students engage in actions from Scotch Broom removal to the detailed work of a Garry Oak meadow restoration experiment. As they tease apart tiny camas bulbs for transplanting, students restore a degraded meadow choked with invasive grasses, while building a close relationship to this special place.

Raising environmentally engaged individuals does not happen by itself. We are collectively responsible for fostering tomorrow's stewards and activating our entire community is more important than ever. A young person's ability to make informed decisions about their relationship with nature has profound implications for local and global environments and our collective wellbeing.

Thank you to Amelita and other volunteers who share knowledge and foster environmental stewardship in others.

For more information about how to help care for nature in Saanich Parks visit:

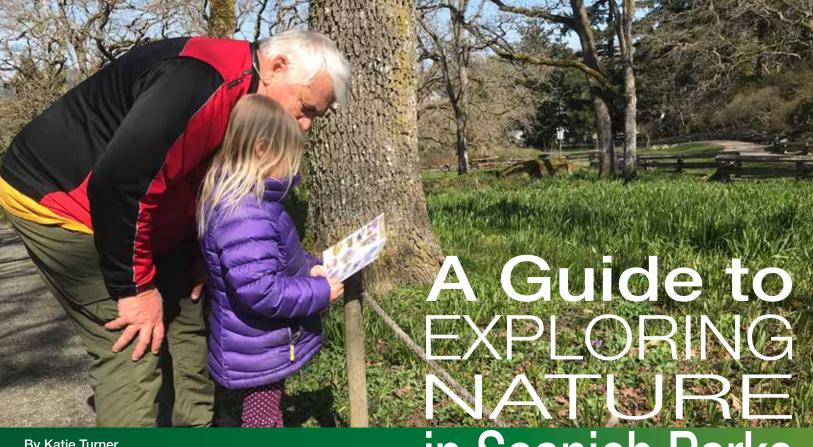
Saanich Parks https://www.saanich.ca/EN/main/parks-recreation-community/parks.html

UN Decade on Ecosystem Restoration https://www.saanich.ca/EN/main/parks-recreation-community/parks/natural-areas/un-decade-on-ecosystem-restoration.html

Natural Intelligence https://www.saanich.ca/EN/main/ parks-recreation-community/natural-intelligence.html



Mount Douglas secondary student transplanting Camas bulbs



By Katie Turner, Saanich Park Stewardship Coordinator

Join us on a journey to learn more about nature. Saanich Parks recently developed a new <u>field guide</u> to recognize and support volunteers in the field. Since its development, we realize that others might enjoy learning about and connecting with plants and animals in our neighborhoods and Saanich Parks. Kristi Bridgeman's artistic impressions in the guide will help you get to know and fall in love with species from White Fawn Lily and Great Camas to Banana Slug and Douglas-fir tree.

The longer term plan includes developing companion pieces to the field guide, and providing educators and parents with resources to gain more hands-on experience with the natural world so they and park visitors can grow their "Natural Intelligence". We hope that this will help residents, including children and youth, care about and be good stewards of Saanich's special places.

in Saanich Parks

"We hope our new guide will enhance the experience of our park visitors and encourage them to be curious about their natural surroundings," said Manager Community Development and Business Systems, Nathalie Dechaine. "The guide is part of our *Natural Intelligence* initiative that aims to improve citizens' knowledge about our natural world and how we connect with it. When we deepen our connection with nature, we tend to be happier, healthier and more motivated to protect it."

Spring is the perfect time to deepen connections with nature. Saanich parks provide vital habitat for plants and animals. Please help us protect these special places by treading carefully, taking only memories, and leaving nothing but footprints.



In an effort to conserve resources, the main channel of distribution for this lovely guide is on Saanich's website: saanich.ca/fieldguide.

What Was Here Naturally?

By Nicole Barrette, Saanich Environmental Services

Before the District of Saanich became a developed urban and suburban area, the natural vegetation communities would have looked quite different. This map was created by examining historical hand-drawn maps for the Saanich area from pre-1900 and estimating the extent of the ecosystems that occurred here at the time.

Garry oak ecosystems included meadows, woodlands, open rocky bluffs and well-drained areas with thinner soil layers. Meadows were maintained by First Nations and managed using fire to prevent them from being overgrown by Douglas-firs. These Garry oak meadows may have included other trees such as Arbutus, and are filled with many native grasses and wildflowers such as Camas, Fawn Lilies, and Sea Blush. Fragments of these beautiful and fragile meadows can still be found throughout Saanich in places like the tops of Christmas Hill and Mount Douglas.

Coniferous forests occupied more low-lying areas with less well-drained and deeper soils. Aside from a

canopy of predominantly Douglas-fir, these vegetation communities typically have a denser understorey that includes species such as Sword Fern, Salal, and Oregon Grape. A visit to Francis-King Regional Park or some of the areas in Elk/Beaver Lake Regional Park demonstrates this type of ecosystem well.

There are also many streams and wetland areas throughout the District of Saanich. Some examples of wetlands can be still be seen at Panama Flats, Rithet's Bog, and surrounding Swan Lake. These areas would be seasonally flooded during the rainy west coast winters, retaining water for most of the year in the poorly drained soils. Plants found in this type of vegetation community included peat mosses, willows, and cattails.

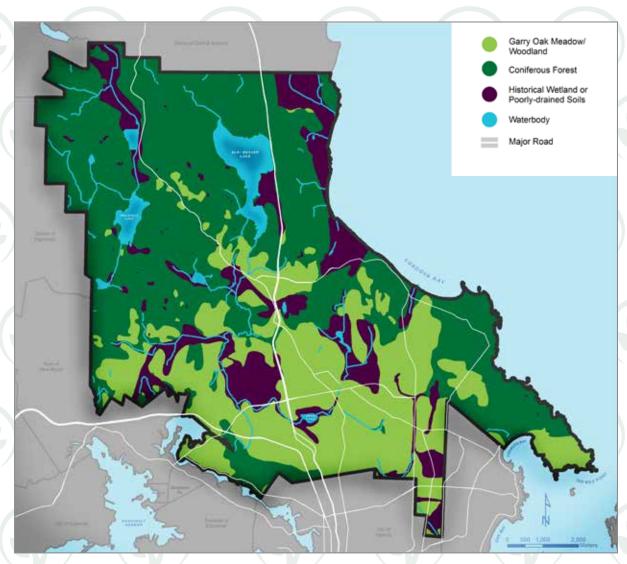
Knowing which vegetation community you are part of helps when planting native plants in your yard. Take a minute to look at this map and see what vegetation community occurred where you live now. Can you still find any of these species in your neighbourhood?



Historical Vegetation Communities of Saanich

Created by District of Saanich Environmental Services, December 2020

All data displayed on this map is estimated from historical maps and data sources. Map is intended for general reference purposes only and land designations may be inaccurate at large scale.



Three Nature Connection Activities To Deepen Your Relationship With The Living World

By Lindsay Coulter, Director of Communications, Culture and Community: of a forest and nature school in Victoria, B.C. Rocky Saanich beach shoreline. Hollydene Beach. **Abundant Miner's Lettuce**

"Mom, what story do you think this rock has to tell?" asked my son.

I was proud. Each day find mystery, magic, beauty, and awe! In nature you realize, there's more in the world than just us. It's one way to stop our disconnection with the living world—a root cause of climate chaos and ecological collapse.

Reconcile your relationship to our non-human kin:

Nature reciprocity. Act as if everything you meet is alive, that it matters, and has its own story — the rock, the moss, a tree. Joanna Macy's Work That Reconnects invites us to be open to communication. Whisper to the trees. Practice witnessing and being seen. Show reciprocity. "Is the tree looking back at you?" "Is it sensing you as you are sensing it?" Send that tree love and thanks, wish it well with how the world is.

Talk to plants and animals. Did you plant a pandemic garden or native plant butterfly garden? Chat with oceanspray, tomatoes, huckleberries, or house plants as if they are a conscious being. Speak out loud. Your words show respect and connection. This practice develops relationships with the more-than-human world, widening our boundaries for compassion.

Forest floor cuddle. Lay your belly on the forest floor. Tune into the sounds, smells and sights. Notice tiny fungi, mosses and look up to the canopy. Sense your smallness and embrace humility. Cup your face with your hands and rest on your elbows. Close your eyes for a few minutes and imagine a landscape, a cherished pet or person. This practice wakes the vagus nerve, considered the physical manifestation of the soul. Tune into your mind-body connection to calm the nervous system.

Other powerful acts to reconnect include: walk barefoot, skip rocks, stargaze, make a mud pie, or smell the rain! We're all a participant in this wondrous universe.

Photos: Lindsay Coulter.

Saanich Environmental Awards Nominate someone today!

Do you know an organization or individual making a positive contribution to the natural environment in Saanich?



BUSINESS • YOUTH • BIODIVERSITY CONSERVATION LONG-TERM ENVIRONMENTAL ACHIEVEMENT • SUSTAINABILITY

Nominations accepted until Tuesday, June 1st at 4 p.m.

saanich.ca/enviroawards

For more information on the awards, please contract Environmental Services at 250-475-5471, planning@saanich.ca or saanich.ca/enviroawards

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