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Welcome United Nations Decade of Ecosystem Restoration!

Let's Protect Nature for Future Generations



On March 1, 2019, the United Nations (UN) declared the years 2021 to 2030 as the UN Decade on Ecosystem Restoration. In support of this global initiative, Mayor Fred Haynes signed a proclamation that states 2021 to 2030 as the UN Decade of Ecological Restoration in Saanich. The UN Decade is a call to action. Every action, each day counts, and every company, organization, and individual has a role to play in reviving damaged ecosystems.

As someone who has been working in the field of ecosystem restoration for many years, this is music to Rick Hatch's ears. Saanich Parks' Rick Hatch (Natural Areas Assistant Supervisor) works to restore degraded sites in natural areas, in collaboration with many dedicated community volunteers. Ecosystem restoration matters to Rick because he has seen first-hand the incredible return of bird life and biodiversity to

restored areas.

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-recreationcommunity/natural-intelligence.html By Katie Turner, Park Stewardship Coordinator, District of Saanich Parks

He has also experienced the human benefits of this action, and welcomes a decade of increased focus on stewardship in parks.

The District of Saanich's *Pulling Together* volunteers also embody the spirit and practice of ecosystem restoration. Volunteers contribute countless hours of hands-on stewardship in areas that have been impacted by the spread of invasive plants and help restore the ecological function and wildlife habitat. Ecological restoration is much more than pulling weeds and planting trees - there is also an essential human element as it "reinvigorates cultural and emotional connections to the land" says Dr. Nancy Shackelford, Restoration of Natural Systems Director at the University of Victoria. While volunteers and staff at Saanich Parks have worked hard to restore ecosystems, we have barely scratched the surface of what needs to be done.

Ecosystem restoration is a monumental undertaking that includes the journey as well as a destination. Restoration projects are a work in progress, requiring dedication and perseverance over years and, more likely, generations. We at Saanich Parks look forward to the challenge that lies ahead, but it's a team effort, and we need many people on board to make positive changes.

Stay tuned to learn more about how you can play a part in this UN Decade and the restoration of Saanich Parks' special places.

BEES at work!

By Jamie Disbrow and Kiersten Brookes Beaver Elk Environmental Stewards

That is, the Beaver Elk Environmental Stewards (BEES)! The BEES are a newly established Society and part of the larger movement to bring Elk/Beaver Lake Regional Park back to health. This CRD Park is in the traditional territory of the WSÁNEĆ (Saanich) and the Ləkwəŋən (Songhees and Esquimalt) Nations.

The long-standing environmental challenges are many and include:

- too many nutrients and not enough oxygen in the lake, resulting in blue-green algae and toxic cyanobacteria blooms.
- dense aquatic Eurasian watermilfoil choking out native aquatic plants and daunting swimmers and the oars of rowers.
- English Ivy taking over the forest understorey and now climbing the trees, as well as many other invasive plants.

The BEES see all of this and we welcome the chance to tackle these challenges. Here are some 2021 actions we are planning:

Under the leadership of the Peninsula Streams Society, and in partnership with the CRD, we are launching a multi-year plan to rehabilitate the Haliburton Brook that runs into Beaver Lake. We have the chance to do water-quality testing and improve oxygenation and fish habitat with woody debris management and riffles. We will remove invasive plants and replace them with native species, de-compact soils in overly-loved areas, and create new sections of riparian enhancements.

On land, the new sound in the forest is the energy (and laughter) of BEES removing ivy from the trees under the terrific guidance of CRD volunteer coordinators. The ability for us as stewards to do such important work safely in the woods during the pandemic has been beneficial: easy to socially distance with good ventilation and nice fresh air to breathe! We are pleased to help end decades of ivy domination.



On the lake, we will be part of a larger monitoring effort in preparation for the planned oxygenation units. The BEES will work to assist in other action items laid out in the new Elk/Beaver Lake Watershed Management Plan to help ensure that it is implemented to the best of our collective ability.

So many people use the park! Nature enthusiasts, walkers, runners and folks out with their horses or dogs on the trails and rowers, kayakers, fishers, and swimmers on the water - everyone should be able to enjoy this site in the great outdoors. The BEES exist because we want to continue to enjoy the park in our lifetime and be part of gifting an amazing environmental legacy for future generations.

Do you want to help make Elk/ Beaver Lake a healthier habitat and more swimmable again? All are welcome to join the BEES. Our membership is free and whether you would just like to join to receive our emails or you want to take a deeper dive with something we are working on -you will be valued.

To join the BEES, contact Jamie Disbrow, BEES Coordinator at 250-881-4551, or email beaverelkbees@gmail.com and check out www.BEESVictoria.org. We have a lot to do to make a difference and we would love your help! Come on out!



Pathway to 100% Renewable Energy for G. R. Pearkes Recreation Centre



Saanich's G. R. Pearkes Recreation Centre's future can be climate-friendly thanks to a new 100% Renewable Pathway plan.

Pearkes is the first of Saanich's key facilities to have a completed 100% Renewable Pathway plan, identifying the actions needed to reach Saanich's climate targets of cutting greenhouse gas (GHG) emissions from municipal operations in half by 2025 and to net zero by 2040, and preparing for a changing climate.

Currently, emissions from Pearke's operations amount to about 350 tonnes of GHGs per year, the equivalent of driving 107 average cars per year, or burning 14,583 barbecue propane cylinders per year. The planned upgrades aim to reduce emissions by 93% by 2025, and to reduce energy use by 54%.

Completed Upgrades

Pearkes has already improved efficiency and reduced GHG emissions in the past 3 years through the installation of REALice vortex DE Aerators, use of electric zambonis, use of Direct Digital Control (DDC) systems, a premium efficiency compressor upgrade for the refrigeration system, Variable Frequency Drives (VFD) on the ice plant pump, and lighting upgrades.

G. R. Pearkes Recreation Centre

Pearkes houses two ice rinks, dressing rooms, a fitness gym, Saanich Neighborhood Place, the Centennial Public Library, a Field house/Trade Show space, teen activity centre, several multi-purpose rooms and offices. Approximately 425,000 visits are received from Saanich residents and regional visitors each year.

Proposed Upgrades

The ice rinks require considerable energy to keep frozen, generating significant waste heat. A mechanical system upgrade is proposed, which will include heat reclamation and installation of an air source heat pump (ASHP). This will enable reclaimed heat to be distributed for use in the rest of the building and will replace natural gas with renewable electricity. Any remaining natural gas used in back-up boilers will be offset by the purchase of Renewable Natural Gas (RNG).

Climate Adaptation

G. R. Pearkes is designated as a primary emergency reception centre/group lodging facility in the case of evacuations. The public library, Saanich Neighborhood Place, and fitness gym have existing cooling and have increased levels of air quality filtration, which supports users when the region is experiencing extreme heat and/ or wildfire smoke. The proposed mechanical system upgrades (subject to grant funding approval) will be designed to enable future cooling and increased filtration capabilities in additional areas of the facility. Early feasibility work has been completed for the potential future installation of photovoltaics and associated battery storage to increase resiliency through the provision of an on-site source of renewable energy generation.

Other Sustainability Features

G. R. Pearkes offers bike parking, a bike kitchen, two public Level 2 EV Charging Stations, direct bus service by BC Transit and a food rescue program operated by Saanich Neighbourhood Place. More public EV chargers are coming to Pearkes in 2021.

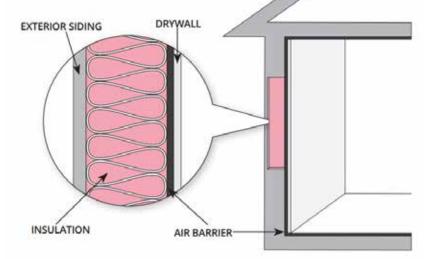
Want to know more?

Saanich implements multiple building energy retrofit projects each year to increase energy efficiency and move to renewable energy. These improvements not only reduce our GHG emissions, but can reduce costs and often improve user comfort as well. Visit the Saanich website's Sustainability section and click on "leading by example" to learn about more completed and upcoming climate-friendly improvements to Saanich's municipal buildings.



Insulating for a cozier home this winter

Saanich residents can get expert support from *Bring It Home 4 Climate* and rebates from *CleanBC!*



By Grant Stott Energy Efficiency Client Services Representative, City Green Solutions grant.stott@citygreen.ca

Have you felt uncomfortable in your home this winter? Or have your energy bills been higher than you would like? Adding insulation can be a great step to solving these problems, especially in an older home or where insulation may be less than adequate, damaged, or missing. However, there is more to an effective insulation upgrade than throwing in some new batts of insulation.

Air sealing and ample insulation are essential components of an energy efficient home. Air sealing may need to be undertaken on the inside and outside of the home to reduce air leakage. Then, by upgrading your insulation, you will slow the transfer of heat and cold between the inside and outside, keeping your home warm in the winter months and cool in the summer. Insulating values of R40+ in the attic and R20 in the exterior walls is average for a new-built home, while efficient homes may have even more! For retrofitting your home, speak with a <u>Program registered insulation contractor</u> to receive a quote and recommendation for upgrading your attic, wall, basement or foundation.

Insulating and draft-proofing not only improves home comfort and reduces bills – it keeps dust and insects out of your home. You will also prevent moisture from getting into your walls and condensing, where it can

cause harmful mold and structural issues which can be costly to address. You can learn more about air sealing and insulation at the <u>Bring It Home 4 Climate Resource Library!</u>

Rebates and Support Are Available!

In addition to the up to \$5,500 in CleanBC insulation rebates available, Saanich residents can access a free Virtual Home Energy Check-Up through the Bring It Home 4 Climate program! The Check-Up is a video or phone call consultation with an unbiased energy expert who can discuss your home energy concerns with you and suggest solutions that will work best for your specific home. Learn more about what the Bring It Home program is offering in the Capital Region at bringithome4climate.ca!



Resilient Saanich

Draft Goals and Objectives



We need to hear from you! This is the first opportunity for public feedback to help guide the development of an environmental policy framework named Resilient Saanich. We need your input on the draft vision, principles, goals, and objectives that will guide the development of Resilient Saanich.

The Process

The Resilient Saanich Technical Committee (RSTC) is a group of professionals appointed by Council and tasked with drafting the Resilient Saanich goals and objectives. Feedback on the draft will be gathered from the public and reported to Council for decision-making.

What is meant by vision, principles, goals, and objectives?

The long-term desired outcome for the future.	Vision
The values that guide progress towards the vision.	Principles
What is needed to achieve the vision . A goal guides decision-making.	Goals
Specific, Measureable, Attainable, Realistic and Time-bound steps to achieve the goals.	Objectives
A plan of actions to take to achieve the objectives .	Strategies

Vision

Saanich Council approved the **existing vision** from the <u>Official Community Plan</u> for Resilient Saanich:

"Saanich is a model steward working diligently to improve and balance the natural and built environments. Saanich restores and protects air, land, and water quality, the biodiversity of existing natural areas and eco-systems, the network of natural areas and open spaces, and urban forests."

The Resilient Saanich Technical Committee has **proposed this vision** for the framework: By 2030, coordinated efforts by all in Saanich/WSÁNEĆ yield measurable improvements in climate change resilience, habitat conservation, watershed health and ecological footprint, benefiting all those who share and inhabit our community.



Resilient Saanich

Draft Goals and Objectives



Principles

The principles are defined by the RSTC as cross-cutting values statements that will guide behaviour and decision-making within the Corporation of the District of Saanich including both elected officials and staff.

- 1. Recognize the intrinsic value of nature
- 2. Respect Indigenous knowledge and land uses
- 3. Consider future generations
- 4. Ensure evidence-based* decision making
- 5. Adopt the precautionary principle when facing knowledge gaps
- 6. Build upon foundational knowledge of historical land use
- 7. Lead by example through innovation and best practices
- 8. Look beyond our borders to achieve results at a bioregional scale
- 9. Address climate adaptation and mitigation in all that we do
- 10. Work in partnership with diverse interests to achieve outcomes that realize multiple values and benefits

Goals

The RSTC describes the goals as the outcome Saanich is looking for and proposes these goals:

- 1. Protect, restore and enhance the ecological function and biological diversity of Saanich.
- 2. Develop and implement complimentary and coordinated policies, strategies, regulations, and incentives grounded in the overarching set of guiding principles to achieve the vision.

Objectives

The RSTC describes the following proposed objectives as the purpose of actions intended to attain a desired goal.

- 1. Fairly and effectively manage the natural and built environment to adapt to climate change, and enhance biodiversity and other essential ecosystem services.
- 2. Foster resistance and regenerative capacity (i.e., resilience) in our landscapes against escalating environmental shock and stressors.
- 3. Engage and support citizens in diverse approaches to active and beneficial stewardship.
- 4. Update bylaws and policies across all departments to be transparent and consistent with the Environmental Policy Framework.

Providing Feedback

Visit our Virtual Open House: www.saanich.ca/biodiversity. Feedback can be provided by:

- Online feedback form (via web: <u>www.saanich.ca/biodiversity</u>)
- Filling out a printed feedback form (submitting by email, mail, or dropping off)
- Send questions and comments via email (biodiversity@saanich.ca)
- Send mail to: Environmental Services, Planning Department, District of Saanich, 770 Vernon Ave, Victoria, BC, V8X 2W7

^{*}Evidence-based decision making is supported by as much available and appropriate scientific data, models and research, Indigenous knowledge, historic and cultural documents.

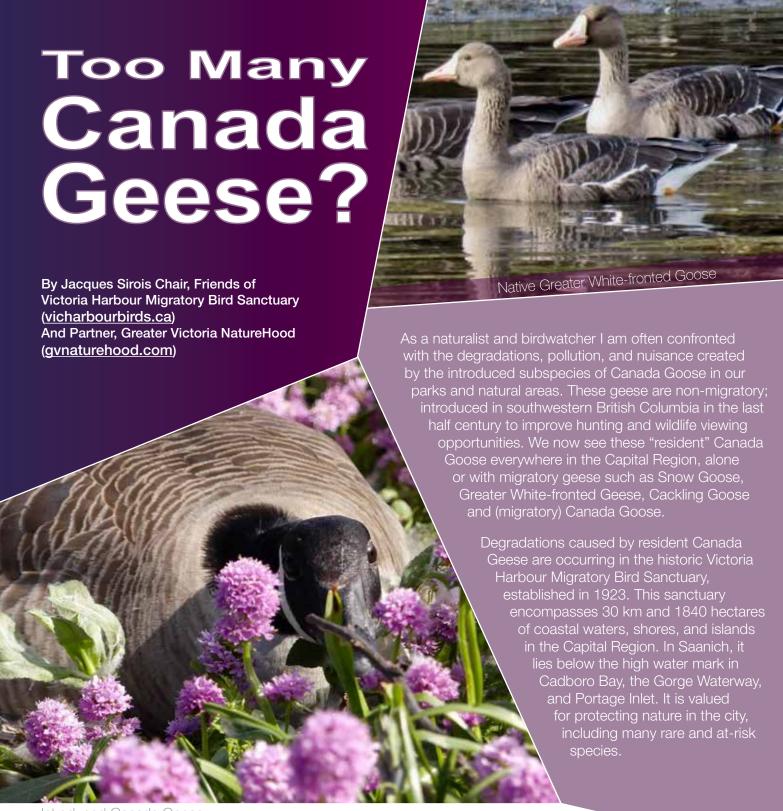


Peninsula Streams Society member Bob Iverson, who lives on Telegraph Cove Beach, has observed these removals for about 20 years, witnessing the beach degrade significantly over time. People were taking material for their yards by the truck-full instead of buying it from gravel marts! People believe they can take a little bit and it will do no harm but the damage is cumulative to the structure and biota. Fortunately, due to Bob and his neighbours' efforts, and support from District of Saanich staff, signage is now present to deter people from taking material from the beach. We need more people like Bob looking after our beaches as this theft is not only happening at Telegraph Cove but all over Greater Victoria, and includes seaweed, which also performs an important ecological function on the beach.

Do you want to be a beach steward too? Do you want to be a Citizen Scientist? There are a number of fun, COVID-19 safe and educational activities in the BEACH program. If you are unsure whether you would fit into the program, think no further. All are welcome! Our volunteers have included students, people with special needs and all ages. Activities include debris cleanups as well as

surveying for forage fish eggs that are spawned on our local sandy-gravel beaches. The forage fish that spawn on our beaches are Pacific Sand Lance ('needlefish') and Surf Smelt. Forage fish eat plankton and are in turn eaten by a diversity of ocean predators including larger fish, seabirds, and marine mammals - even Humpback Whales! They serve a very important role in the marine food web, transferring energy up the food chain. Our program aims to identify where and when these important fish are spawning so that we can better protect this habitat.

These activities are part of a greater Salish Sea initiative supported by World Wildlife Fund, TD Friends of the Environment, the Sitka Foundation, and others: https://tinyurl.com/yxqpldql We are operating all over the CRD and we need more stewards out on the beaches. Currently in Saanich we have only two groups covering 10 sites on six beaches - we could easily double these numbers with your support! So if you are ready for that productive walk on the beach or require more information, please contact Brian Koval at peninsulastreams@gmail.com. Let's hit the beach!



Introduced Canada Goose

The Migratory Bird Convention Act (1917) and the subsequent establishment of Migratory Bird Sanctuaries across Canada had to do with overhunting and plummeting populations of waterfowl and other birds. In Pacific Canada, the intense market hunting of Black Brant, a delicious and popular Christmas meal 100 years ago, was a serious concern. While the numbers of Canada Goose and other geese have bounced back over the last century, Brant numbers, although fair, have not. For various reasons, this small and beautiful sea goose remains vulnerable to this day.

Non-migratory Canada Geese have become a nuisance over the past few decades in public and private spaces, urban parks, farmland, and wildlife habitat throughout Greater Victoria.



If your garden is like mine – with lots of structure and no pesticides - there will be plenty of life each season. My wife and I have replaced our property's featureless front lawn with food plants for us, and flowers to support pollinators. The lawn in the back yard now is over-topped with raised beds and fruit trees. The garden is full of food - but not just for us.

Year-round, our garden is full of birds - seed eaters, insectivores, and raptors. But the secret to attracting winter birds is garden complexity. We leave dead plants where they drop. Dead bean shoots and raspberry canes provide shelter from predators (including free-ranging house cats), and territory for birds to search for worms, arthropods, and seeds. Our garden lacks suet and store-bought seed mixes, and instead, birds must root through compost piles and raised beds which are full of food. Even a wood trellis with dead cucumber stems provides shelter and perches.

All summer, weeds are cut and left in place (chop-and-drop) to simulate natural leaf litter. We also leave tree leaves on the ground to shelter insects and spiders, and prevent soil compaction. It's a lazy and quiet way to garden. We rarely mow the last remaining scraps of grass – with an electric mower.

We will soon harvest Alexanders (Smyrnium olusatrum) – it's a winter vegetable, tastes like celery and requires no effort to cultivate. Our herbs grow like weeds. Leeks and kale self-seed and are growing nicely. Cabbage is ready to be made into sauerkraut. Our backyard birds also share in the garden's bounty. If you like birds and fresh food, replace your lawn with a food forest and raised beds, or invest in a native plant garden. Backyard birds will sing your praises.







Swan Lake Nature Narratives The Raptor Show

By Lenny Ross, Retired Teacher and Swan Lake Volunteer





It is always exciting when the raptors show up at Swan Lake Christmas Hill Nature Sanctuary. Raptors are birds of prey with strong grasping talons and a hooked beak used to kill prey. They were a favourite topic of study by the students in my teaching days.

One day I was thrilled to see a Barred Owl tucked away on the limb of a fir tree. Imagine my delight, when just 65 metres down the path, I saw a second Barred Owl dozing in the morning sun. He started to wake up one eye at a time and made some little hoots. Barred Owls are named for the barring pattern on the feathers of their breast.

Barred Owl's calls sound like someone saying "Who cooks for you? Who cooks for you, all?" A very wise naturalist once taught my class that to make the Barred Owl call you have to pretend you have a large spoonful of peanut butter in your mouth and then try to say "Who cooks for you? Who cooks for you all?" Really! You have to talk out of the back of your mouth, very guttural and very funny. Now imagine 30 ten-year-olds having fun with that!



Swan Lake still had more raptors in store for me on my walk, because just beside the nature house I saw a beautiful Bald Eagle. She was perched peacefully when suddenly she started to screech in a very agitated manner and an immature Bald Eagle flew right over her head. They don't develop their classic white head until they are four years old - balde is old English for white. The juvenile landed in a nearby tree and started screaming, and suddenly he leapt into the air and flew right towards her perch. The adult was having none of that so she flew up into his path, almost knocking him, over while screeching for all to hear. At long last the young eagle flew away to hunt for food on its own. It takes some kids a long time before they are ready to leave the nest, literally!

What an amazing walk. It is not often you see four large raptors in one day, but Swan Lake Christmas Hill Nature Sanctuary can be full of surprises. If you would like to see more Swan Lake Nature Narratives they are available on the Swan Lake Christmas Hill Nature Sanctuary website at this address.

https://www.swanlake.bc.ca/online-programs/nature-narratives/

Swan Lake Nature Sanctuary

www.swanlake.bc.ca 250-478-3344

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.

Victoria Natural History Society

Visit http://www.vicnhs.bc.ca/?page_id=1518 for more programs

Zooming in to VNHS Presentations

With UVic closed for in-person meetings, VNHS is using the Zoom platform. See the Calendar listings (link above) for a direct link to the zoom presentations, then just follow the instructions provided to register for the meeting. Give yourself enough time if you've never done it before.

Natural History Night (every 2nd Tuesday)

Insects and Their Fungal Associates | Tuesday Feb 9, 7:30 pm

TBA | Tuesday Mar 9, 7:30 pm

http://www.vicnhs.bc.ca/?page id=1518

Botany Night (every 3rd Tuesday)

The curious case of rare plants on southern Vancouver Island | Tues, Feb 16, 7:30 Pm

TBA | Tues, Mar 16, 7:30 pm

http://www.vicnhs.bc.ca/?page id=1518

Birder's Night (every 4th Wednesday)

Saint Lawrence Island: Shoreline habitats in the Bering Sea | Wed Feb 24, 7:30 pm

TBA | Wed, Mar 24, 7:30 pm

http://www.vicnhs.bc.ca/?page id=1518

Marine Night (last Monday of the month)

The Past, Present and Uncertain Future of Pacific Herring in Victoria | Feb 22, 7:30 pm

TBA | Mar 29, 7:30 pm

http://www.vicnhs.bc.ca/?page id=1518

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Editor: Darren Copley | Phone: 250-475-5579 | Email: Darren.Copley@saanich.ca