Our Backyard

Naturescape Special Edition

23

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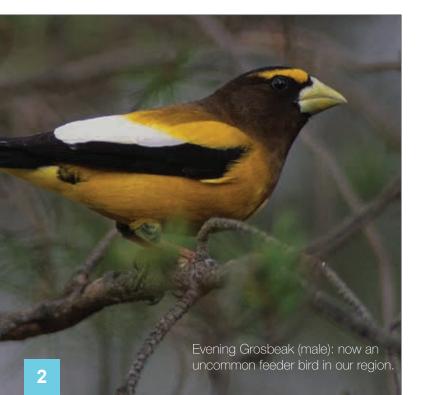


By Darren Copley, District of Saanich Environmental Education Officer

Providing food for local birds is a popular hobby for people who enjoy seeing wildlife around their homes. For some, it may be enough to place a store-bought bird feeder outside the kitchen window, while others must have all types of feeders, bird baths, nest-boxes, and even keep a list of all the different birds that have been seen in their yard. No matter what your idea of attracting birds involves, this article should provide you with some general guidelines and hopefully help stimulate interest in birds.

To attract a variety of birds through bird feeding it is recommended to place at least one feeder in a tree or on a post and one feeder on or near the ground. The feeder should be positioned near some shrubs so birds feel protected from predators. If you wish to get birds coming to a new feeder, place it near the most natural area in the yard and slowly, over a period of a few weeks, move it closer to your viewing site as the birds begin to use it, provided there is still some cover. If you are finding that birds coming to your feeder are hitting your windows, move the feeder to within a metre of the window. Although they may still occasionally hit the glass, they are usually not moving fast enough to be harmed by it.

Wild birdseed mixes often have seeds that many birds won't eat, so they can be quite wasteful and messy. A general rule is to use both black oil sunflower seeds and white millet. The black oil sunflower seeds attract finches, grosbeaks, chickadees, and nuthatches, while millet is good for the sparrows and quail. The most economical way to buy seed is in the 20 kg bag from a local feed dealer. This can be stored in a large metal garbage container with a tight lid. If you werte to feed only one type use sunflowers.



Attracting Binds b

Another popular bird food is suet cakes. If placed in a plastic-coated wire cage attached to a tree trunk all four of our common woodpeckers may use it. Fat can also be hung upside down in small mesh containers to deter larger birds like crows and starlings but chickadees, nuthatches, and bushtits will readily come to it.

Another way to attract birds is by providing water. Birds need water not only for drinking, but also for feather maintenance and parasite control, so it is important yearround. Some tips to follow when providing water are in the next article.

Most birds don't need our help to survive so we attract them mainly to enjoy their company. This does however place an obligation on us to provide these birds with a regular source of food and it is thought by some, including the author, that it is best to feed birds all year long if you have a feeder. For non-migratory birds, your feeder is an asset that a dominant male of a species might incorporate into their breeding territory in the spring. If you stop feeding as things warm up, an important asset is suddenly gone and that breeding territory may actually be inadequate. This could be very disruptive to the birds living in your yard and neighbourhood. It is also very important that all feeders and sources of water are cleaned periodically.



You may however, choose a more natural method of attracting birds, and save a lot of energy: remove your high maintenance landscape of lawn and horticultural plantings and opt instead for gorgeous and regionally-adapted native plants. They provide food and cover for wildlife, and are equally beautiful. Nothing is more satisfying than discovering all the different uses birds find from a native plant: flowers for nectar, fruits and seeds for food, nest material from the bark, leaves, or seeds, nesting sites, and, of course, hiding places!

And finally, no article about attracting birds would be complete without a reminder that pets and wildlife don't mix. Keeping cats indoors, or outdoors under supervision, is the only way to ensure that they aren't harming wildlife. The Society for the Prevention of Cruelty to Animals (SPCA) also recommends this to cat owners, so it's obviously not cruel! The benefits to cat owners are even more obvious: lowered vet bills because you never have to worry about parasites (internal or external), injuries from fights, or car accidents. Wildlife wins and pets are healthier and longer-lived.

Water for Wildlife

By Carolyn Richman, District of Saanich Environmental Education Officer

A key element of Naturescaping is providing a source of water for wildlife. This can be done very simply, but with great benefits: providing necessary water for birds, mammals, and other animals, as well as providing an aesthetically appealing element to your yard.

The location of the water is important. Wildlife need a safe place to drink or bathe. Place it near shrubs or low tree branches for shading the water and providing some protection from predators.

Bird baths can be very simple – using a hanging terracotta pot, a concrete pedestal even a metal lid. Birds do not like slippery surfaces, but if using something like a glazed pottery or smooth plastic, try adding a rock or two in the middle for perching. Make sure there are areas shallow enough for birds to stand and have a bath.

Add to your bird bath a feature to drip water into the bird bath and you may be amazed by the wildlife you attract with the sound. The sound of water in your yard can also be soothing to humans enjoying the space. The ultimate naturescape water feature is a pond with flowing water, aquatic plantings, rock features, and more. Once you build your first water feature, you'll soon be wanting to build more.

Cedar Waxwings are attracted to the berries of native trees and shrubs.

eeding lying lowers

By Claudia Copley, Entomology Collection Manager-Royal BC Museum.

Butterflies are popular even among the staunchest bughaters, so when people find out I am an entomologist I can usually still engage with them through these "self-propelled flowers", as Robert H. Heinlein called them.

These butterfly conversations are usually with gardeners, and many people are interested in landscaping to attract these beauties. Who can blame them! Butterflies are a joy to watch, add colour to a warm day, and always make me feel privileged to be near them. Of course they should be welcomed into your garden! But what is the best way to accomplish this?

The most important thing we need to consider are larval food plants - in other words: food for their caterpillars. Many species will accept only one or a few species of plants at this life stage. For adult butterflies, finding some nectar among the horticultural plantings that are in most people's gardens is not usually a problem. But exotic plants are not much help when it comes to helping increase butterfly populations because of their caterpillars' specialized needs.

It might surprise you to learn that 51 species of butterfly are resident and native to southern Vancouver Island. Not that many of them can still be considered common and, even more unfortunately, some only exist as historic records and museum specimens. In other words: we have changed the region enough that there are species that can no longer live here. It isn't possible to reverse all of the changes by changing our gardens, but we can still help some species through our landscape choices. I thought I would highlight just a few charismatic species to get a start on actually creating a *bona fide* butterfly garden: the swallowtails, Lorquin's Admiral, and the nettle-eaters.



Swallowtails: We have three species of swallowtails living in the region: big, boldly patterned in black and yellow, and hind wings with the characteristic tails – this is a familiar group and a great place to start when it comes to identifying butterflies and welcoming them into your garden. The easiest to plant for is the Anise Swallowtail (*Papilio zelicaon*) - as its name suggests the handsome caterpillar will eat anise (*Pimpinella anisum*), but more generally species in the carrot family (Apiaceae). So it is possible that you have already seen this species eating your dill or some other carrot-like plant, even if you haven't planted any native carrot relatives.

The two other swallowtails, the Western Tiger Swallowtail (*Papilio rutulus*) and the Pale Swallowtail (*Papilio eurymedon*) have some overlapping host plants for the caterpillars that are found among horticultural choices as well as native species: cherry (*Prunus*), and ash (*Fraxinus*) leaves. Other plants that will be eaten by the caterpillars include cottonwoods (*Populus*) and willows (*Salix*) and members of the rose, buckthorn, and birch families.

Lorquin's Admiral (*Limenitis lorquini*): I've chosen to focus in on this one species because it is also relatively common and easy to attract. Because it is territorial, it usually comes right towards you and flutters around your face. This gives you a good look and time to identify it. Its caterpillar has tastes similar to two of the swallowtails: cherry, willows, poplars, cottonwood, and Oceanspray, and it disguises itself from being eaten by predators by looking remarkably like a bird poop. What a great strategy for being left alone!



The Nettle Eaters: When you go to a garden centre and ask what to plant for attracting butterflies you will pretty much always get the same answer: Butterfly Bush (*Buddleia*). But by now you know that providing nectar for the adults is not critical, and this plant is now on invasive species lists because of its habit of "stepping out". Instead, spare an area for a patch of stinging nettle (*Urtica dioica*), a plant infamous for its painful presence, and you will be feeding the caterpillars of four species of butterfly: Satyr Anglewing (*Polygonia satyrus*), Milbert's Tortoiseshell (*Aglais milberti*), West Coast Lady (*Vanessa annabella*), and the Red Admiral (*Vanessa atalanta*). That is a lot of butterfly value in one plant! But even I can acknowledge that making room in your garden for stinging nettle comes with some risk. Maybe you will derive some satisfaction by eating the young shoots: it is a rich source of vitamins A and C, iron, potassium, manganese, and calcium. Make soup, tea, or pesto – there all sorts of edible options. Alternatively you can use it to activate your compost, or even harvest it for fibre if you are feeling especially ambitious and need a new fishing net! We do eat it in the spring as a pesto, but for the most part it is reserved for caterpillars in our garden. And it is tucked into places I rarely go to save me from surprise encounters.

So in order to really help butterfly populations in the Victoria area, we need to grow plants that provide food for the larval (caterpillar) stages. If a butterfly is found near your area, you can probably attract it and help increase its population by planting the correct food-plants for the caterpillars. Below is a list of a few somewhat common native butterflies and their caterpillar's food plant to help get you started on your butterfly garden.

For the complete list of all the species that live here please check out the butterfly chapter written by James Miskelly in *The Nature Guide to the Victoria Region*. Host-plant information can be found online for most species. Great resources are the Butterflies and Moths of North America website (butterfliesandmoths.org) and Efauna BC (bis.geog. ubc.ca/biodiversity/efauna/index.shtml).

Common Name	Scientific Name	Caterpillar Host-Plant	
Grey Hairstreak	Strymon melinus	Pea/Bean Family (Fabaceae)	
Moss' Elfin	Callophrys mossii	Sedums	
Mourning Cloak	Nymphalis antiopa	Willows, Poplars	
Mylitta Crescent	Phyciodes mylitta	Thistles	
Painted Lady	Vanessa cardui	Thistles	
Pine White	Neophasia menapia	Douglas-fir, other conifers	
Propertius Duskywing*	Erynnis propertius	Garry Oak	
Purplish Copper	Lycaena helloides	Native Polygonum, Rumex	
Sara's Orangetip	Anthocharis sara	Mustard Family	
Western Spring Azure	Celastrina echo	Ocean Spray, Dogwood, Hardhack	
Woodland Skipper	Ochlodes sylvanoides	Native Grasses	

Milbert's Tortoiseshell overwinter as adult butterflies.

Four different types of butterfly use Stinging Nettle as a host plant.

*this species is endangered in British Columbia. Don't remove your Garry Oak leaves from your yard: they overwinter tucked among them!

Providing Birds with Nesting Boxes

By Darren Copley District of Saanich Environmental Education Officer

One of the easiest ways to help some of our native birds is to provide them with a bird house, also known as a nestbox. Birds that use nestboxes would otherwise nest in a woodpecker hole (cavity) in a dead or dying tree (wildlife tree), but in urban settings these are not common. In British Columbia there are approximately 50 species of cavity nesting birds, including the woodpeckers that build them, and half of these occur in the Greater Victoria area. So if you can't provide a wildlife tree in your yard for a woodpecker to build a nest, the next best thing is a nestbox.

When deciding the location of the nestbox, look at the habits of the birds you are trying to attract. Chickadees and nuthatches prefer a mixture of trees and open areas; good locations for their nestboxes are on coniferous trees. Swallows need unobstructed access to the entrance hole and prefer locations with open areas to forage for insects, so under the eaves where your roof peaks is a perfect location. Other options are utility poles, or a 2x4 attached to a fence. House Wrens also require open areas with a



new nesting cavity every year.

Baby swallows looking out of a nestbox with a properly sized entrance hole, designed to prevent use by the introduced House Sparrow.



mixture of trees and dense shrubbery. All boxes should be firmly attached at a height of 2 to 5 metres ensuring safety from cats. Avoid territorial conflicts by spacing the nestboxes at least 10 metres apart, and try to make viewing accessible to yourself, as that is part of the fun.

Nestboxes should be installed as early as possible in the spring and kept out all year because some birds will use them to roost at night. They should be cleaned every year to eliminate parasites: remove the nest material and wash the inside thoroughly with soap and water. Do not use pesticides.



Sometimes unintended animals take up residence in nestboxes. These include wasps, bumblebees, and the introduced Eastern Grey Squirrels, House Sparrows and European Starlings. If a bumblebee chooses a nestbox I would let it be - they need our help too! Just clean it out in the winter when they are finished. But if your boxes end up being used by the invasives mentioned above, you may be doing more harm than good to our native birds. To ensure your boxes are used by the intended native birds, make sure you use the correct hole size, and regularly maintain the box. Nestboxes are becoming increasingly important as the availability of natural cavities decreases. Please remember that placing and maintaining these nest structures does not eliminate the need for preserving wildlife habitat and wildlife trees. The use of nestboxes should be considered as a technique for enhancing existing habitat but at the same time, the placement of nestboxes near your home provides a wonderful opportunity to observe nesting birds and can be an enjoyable family project.

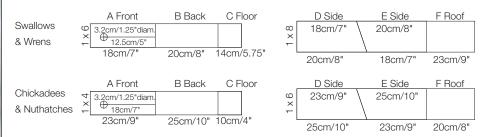
Woodpeckers excavate their own nest cavity every year in dead or dying trees, leaving them available in subsequent years for the other cavity nesters that can't excavate their own. These secondary cavity nesters (swallows, wrens, chickadees, owls, and even some ducks) are the birds that we target with nestboxes.



See below for information on how to construct your own nestbox. Rough cedar should be used because it is durable and doesn't need any preservative. Choose a nestbox design without a perch so predators cannot easily get inside and eat the birds. It is also important to have a means of opening the box for an annual cleaning.

Nest Box Specifics

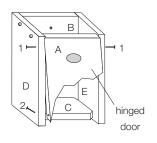
To build a nestbox, all you need is a hand saw, hammer, nails, and a drill with some drill bits. The plans below are made to use regular wood from a lumberyard, without having to "rip" lengthwise. We recommend rough cedar (smooth 1 side) 1x6 and 1x8 (real dimension is smaller than these numbers, e.g. 1x6 is actually 3/4"x5 1/2"). Cut the lumber as measured below for the two most effective local nestbox sizes.



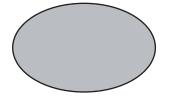
Optional: fill chickadee/nuthatch boxes with coarse sawdust to the bottom of the entrance hole to help deter House Sparrows. Do not tamp down the material very solidly.

Assembly Instructions

- 1. Attach [C] to [B]
- 2. Attach [D] to [B & C]
- 3. Attach [E] to [B & C]
- 4. Attach [A] to box, using only top nails [1] as shown for hinge
- 5. Attach [F] (not shown) to top of box using glue & nails
- 6. Drill oversized holes (angled downward) to accept locking nails [2]
- 7. Predrill mounting holes through back with Front open



European House Sparrow Exclusion Entrance Hole



Introduced House Sparrows compete with native cavity-users. This oval hole (38mm/1.5" x 23mm/15/16") will keep them out, while letting chickadees, nuthatches, swallows, and wrens in. You can make a small template out of 1x4 lumber and place it over top of the existing hole. Alternatively you can buy one at a birdfeeder store.

Tree Swallows require a natural cavity in trees, or an artificial nestbox if there are no dead trees.

Tips for Naturescaping

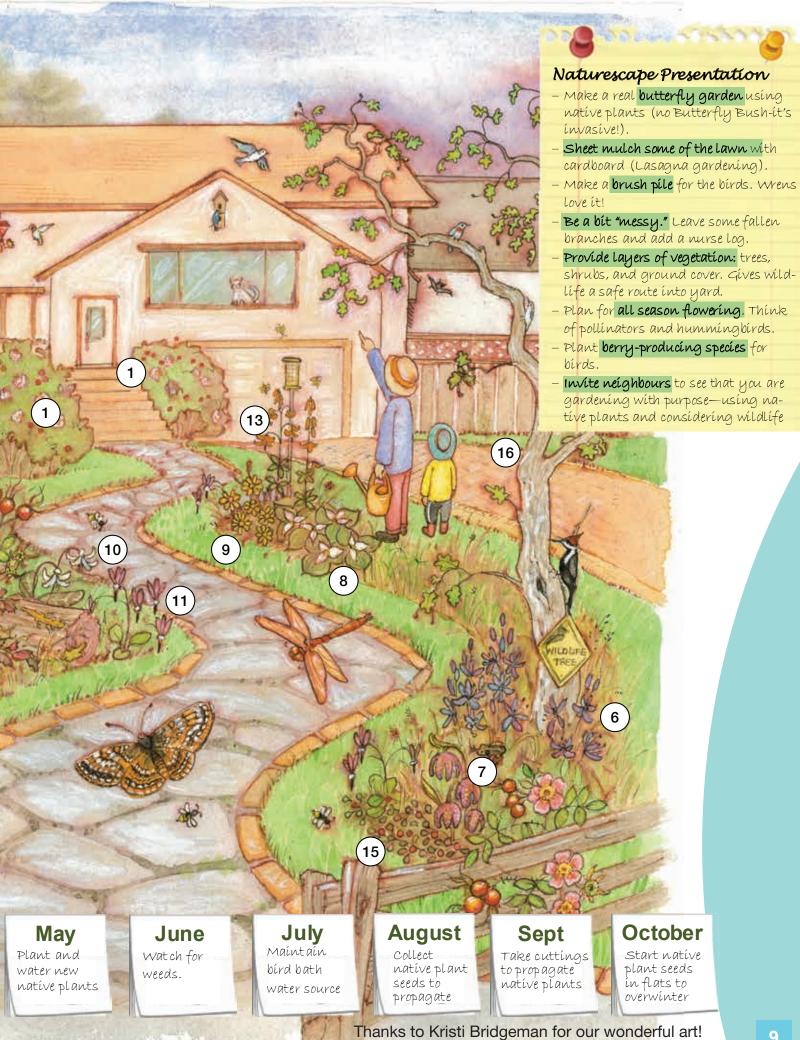
CETTER

Keep a dead tree standing so birds have a natural cavity to nest in. If it has to come down, leave on ground as habitat
Build a rock pile for snakes. They will help control invasive garden slugs.
Water, water, water! Put rocks in bird bath for shallow areas. Add a bucket above with a hole that drips to make noise (attracts birds). Overflow is fine because mud is needed by nesting birds and mason bees. Save up money

for flowing garden pond.

Suggested Native Plants		Berries/seeds for birds	nectar for bees or hummingbirds	pollen for native bees
1	Red-flowering Currant			
2	Nootka Rose			
3	Arbutus			
4	Oceanspray			
5	Dull Oregon Grape			
6	Common Camas			
7	Chocolate Lily			
8	Western Trillium			
9	Woolly Sunflower			
10	Easter Lily			
11	Shooting Star			
12	Salmonberry			
13	Tiger Lily			
14	Nodding Onion			
15	Kinnikinnick			
16	Garry Oak			





Native Plant Salvage Program Member Naturescape Projects

A Native Plant Pond

By Betty Sherwood, Native Plant Salvage Program Member



At first there was only a boring lawn with a Honeysuckle tree. We dug out a nice-sized pond, and then laid down a rubber lining made from recycled tires. Stones were added. I planted in Sword Fern, Deer Fern, Maidenhair Fern, and ground covers of Salal and Coastal Strawberry. Blue-eyed Grass was added on the edge, and Water Lily, Slough Sedge and cattails in the water. Later I added Broadleafed Marsh Marigold, Red-flowering Current, and Skunk Cabbage.

Many American Robins came in together. In the summer they sit up to their chests in the cool water. A Northern Flicker has been by and Dark-eyed Junco's love it. A Cooper's Hawk finds these little birds interesting. An otter came to see if there were any fish. A Canada Goose even checked it out!

Even in the cold months it remains a quiet and peaceful place of beauty.





- Look At My Lilies

By Joanne Thomson, Native Plant Salvage Program Member

A few years back I salvaged a few Fawn Lily bulbs and planted them in my front garden area and they have done very well, growing stronger each year. They companion well with Starflower, wild Bleeding Heart and some volunteer broad-leaved Hellebores and the ever-present mosses. *Thanks Saanich!*





Native Plants in My Garden

By Heather Pass, Steward, Rolston Reclaimers

In my eclectic garden, combining native and ornamental plants has been very rewarding. I have the pleasure of native plants settling in with everything else to enrich the local wildlife scene.

An amazing variety of pollinators, beyond European Honey Bees, thrive on Nodding Onion, Goldenrod, Kinnickinick, Stonecrop, Aster, and more blossoms. Also Bumblebees, Leaf-cutter Bees and Mason Bees nest happily in my yard. It is so comical to watch the Leaf-cutter Bees butting heads in a territorial dispute over "their" plant.

Common and Great Camas thrive in the hedgerow, rose bed, and oak barrel planter. Seeds from all my native plants are harvested yearly. I grow some and/or donate to my volunteer area of Colquitz River Park, my gardening clubs, and special projects. This is so satisfying for me.

Several years ago, I took down my bird feeders as the deer were eating more seed than the birds. There seems to be a greater variety of birds feeding ON my garden than were ever at the feeders. Birds flock to my shrubs and trees to feed on seasonal berries. Usually the Northern Flickers harvest the Red-osier Dogwood berries, but in 2016 the sparrows got there first. Many birds thrive on the Mountain Ash, Saskatoon, Twinberry, and Nootka Rose hips. It is always a race with the squirrels to harvest Beaked Hazelnuts. The squirrels usually win. I do have plans for the forgotten buried nuts that sprout every year, so there is some justice. A pair of Red-tailed Hawks plus an owl live on the street.

Beach Peavine grows happily in a wheelbarrow planter protected from browsers by the creative use of an umbrella skeleton and bird netting. I use bird netting everywhere in my unfenced garden for protection from the deer.

My passion with native plants started when I worked in a native plant nursery (now closed) in North Saanich for eleven years. Before then I wasn't at all aware of native plants. This led to a membership in the Native Plant Study Group plus volunteering for Saanich's *Pulling Together* Team. Consequently, I have become involved with middle school classes and the Victoria Green Team. When I think of the environmental impact that has developed from poking seeds and cuttings into soil in a nursery, I am amazed.







Nodding Onion is a hummingbird favourite

Pulling Together Volunteer Program

Volunteer Highlight Free Range Retirees Jo and Michael Motek

By Jenny Eastman, Coordinator of Volunteers Saanich *Pulling Together* Volunteer Program

There's much talk about the current need for kids to step away from screens and become "free range kids" again, but a pair of Saanich *Pulling Together* volunteers exemplifies free range retirees! Hiking, skiing, naturescaping their yard, volunteering to restore park ecosystems, wildlife gardening, and more – these two spend as much time in nature as they can.

"I grew up a bit of a feral child, always preferring the wilder spots", says Jo Motek who volunteers at Mount Douglas and Bow Parks with her husband Michael. Jo grew up near Chicago, then studied Respiratory Therapy, specializing in the care of premature infants. Michael agrees about "growing up wild". As a child in Victoria, he free-ranged the Dallas Road beaches and bluffs, followed by a career in computer science at the University of Victoria, but the foundations of life lived outdoors were in place, and the connection continues.

The Moteks retired on the very same day and committed to more time outside and in service of nature. They remove invasive species each week with Saanich Parks

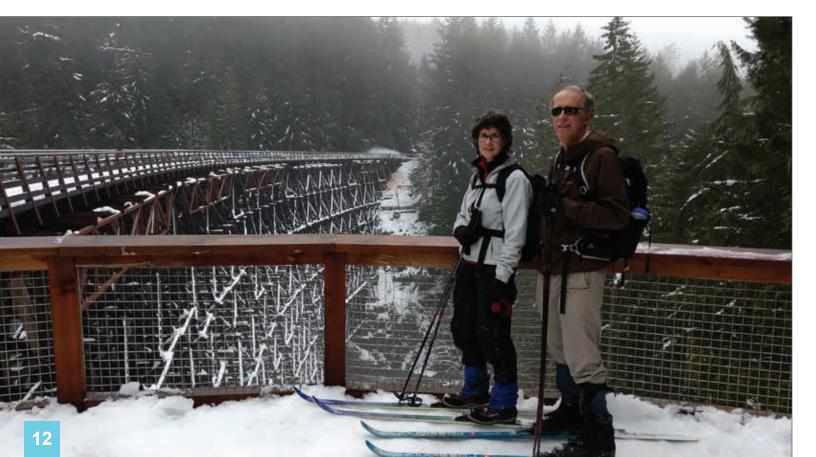
"I grew up a bit of a feral child, always preferring the wilder spots"

and they are active board members with the Rocky Point Bird Observatory, a local organization that conducts bird migration and population research using temporary net trapping of birds. Jo notes the similarity between her career

and her volunteer work with birds, "I get the same feeling holding a tiny human baby or a delicate songbird in my hands. It's the perfect retirement project for me."

As for volunteering with *Pulling Together* they both note, "We get to do what we'd be doing anyway. We can be outside, playing in the dirt, but with *Pulling Together* we get to do it with others, share a common purpose, get unique training, and collaborate on projects that mean a lot to us and our parks". Thank you Jo and Michael for all your efforts! All free-range (or want to be free-range) retirees are most welcome to join us. Learn more here:

saanich.ca/pullingtogether



Our Urban Wildspace

When I first moved to Saanich in 1991 I focused on food and planted an "edible border" with various fruiting shrubs. Shortly after we were married my wife and I attended a native plant workshop. As hikers we admired natural landscapes more than show gardens. Wanting to also conserve water, we decided we should "go native". We began by removing invasive plants such as English Holly and Ivy. We visited native plant nurseries and Swan Lake's native plant sales. After getting involved with Saanich's volunteer *Pulling Together* program, we learned of Saanich's Native Plant Salvage program, which we've since used as a source of plants for both our yard and Bow Park. Native trees and shrubs in our yard include Indian Plum, Red-flowering Currant and Red-osier Dogwood. We've also nurtured volunteer Garry Oaks. Some of our favourite and most successful plants have been Oregon Grape (both the Dull and Tall species), native roses (both Nootka and Baldhip), Camas, Fawn Lily, Shooting Star, and Chocolate Lily.

One of our delights is the Cascara that was planted before we moved in. It is a magnet for birds, attracting American Robins, Black-headed Grosbeaks, Bushtits, Cedar Waxwings, Chestnut-backed Chickadees, Downy Woodpeckers, Golden-crowned Kinglets, Purple Finches, Red-breasted Nuthatches, Ruby-crowned Kinglets, Steller's Jays, and Western Tanagers. In the spring it is also alive with many different types of bees.

Gardening is not our main passion so thankfully our yard has proven to be easy to maintain due to the drought-resistant and pest-resistant qualities of native plants. By not using pesticides or herbicides, birds and beneficial insects thrive.







Back to Our Roots Gardening for Nature!

By Chris Junck,

Back to Our Roots Project Manager, Garry Oak Ecosystem Recovery Team Society goert.ca/activities/back-to-our-roots chris.junck@gmail.com 250-384-9510

Are you looking for suggestions about which native plants would be most suitable for your yard? Would you like to know how to attract more birds, butterflies, and bees? Our experts will visit your property and provide free advice and helpful resource materials!

Back to Our Roots is a habitat certification program that provides on-site expert advice, printed and on-line resources, technical assistance, and incentives to help landowners plan and complete 'naturescape' projects. We can assist whether you merely want to add a few suitable native plants to your flowerbeds, or if you have more extensive naturescaping in mind. The approach and certification can be applied to small townhouse lots, large rural properties, and everything in between.



Marigold Elementary Children Create Habitat For Bees

By Alanah Nasadyk, Habitat Acquisition Trust Community & Development Coordinator

On November 17th, 2016, more than 45 students from École Marigold Elementary School broke ground naturescaping a garden of their very own, a habitat-focused learning space created through the Green Spots school program by Habitat Acquisition Trust (HAT).

"By creating something positive to focus on in the midst of this large McKenzie Interchange construction project, we are bringing student's attention to what they can do for our remaining Garry Oak habitats. The students are very passionate about nature on their school grounds and want to ensure it stays protected."

- Paige Erickson-McGee, HAT Stewardship Coordinator.

Empowering young learners to care for nature, students prepared the site for this naturally-inspired meadow, and enthusiastically removed invasive English Ivy from Garry Oak habitat at the school.

In a collaboration between HAT, Marigold Elementary, and the District of Saanich, the students of Marigold gleefully discovered how wildlife habitat can be found and nurtured all around them, even at school.

The Ministry of Transportation allowed a salvage of native plants within the interchange construction area with salvaged Fawn Lily bulbs planted into the garden afterward.

Wildflowers like Camas, Fawn Lilies, and native grasses that once flourished under the majestic Garry Oaks of Marigold's fields were brought back by the students, and with bees and butterflies in mind.

ncluding some of the planted spec

A planting plan created for the sit

children sipped on Licorice Fern tea. Marigold's new meadow offers learning opportunities for many. Pollinators, seasonal changes, and indigenous uses for plants are just a few learning opportunities.

HAT coordinates this project through their free outdoor learning program, Green Spots, funded by the Natural Sciences and Engineering Research Council of Canada and the Province of BC's Community Gaming Grant.

If you would like to support HAT in providing nature education to local kids through Green Spots visit hat.bc.ca/donate or call 250-995-2428. For those interested in volunteering please contact volunteers@hat.bc.ca



Below: Marigold students prepare the ground for planting by removing exotic grasses.

Above: Marigold students planting the native species in their freshly spread bed of soil.



Planting Plan 85 sq m planting area





By Carolyn Richman, District of Saanich Environmental Education Officer

Healthy soil is alive – full of billions of organisms we can and can't see. Healthy soil should be looked at as a living ecosystem. For gardeners and would-be gardeners, our attractive and abundant gardens start with maintaining healthy soils.

Elements of healthy soil:

- Texture: relative proportion of sand, silt, and clay
- Organics: non-mineral elements that are or were alive
- Soil Organisms: from worms and insects to bacteria, fungi, and nematodes. These organisms play important roles including transforming organics to nutrients for plants
- PH: acidic or alkaline: a good average pH range is 6.0-7.5
- Drainage: rate that excess water drains away

Plants need soil for support, air, water, and nutrients. Gardeners can constantly improve their soils as nutrients get depleted and other things impact soil over time:

- Add Organic Material: compost, aged manure, decomposed saw dust
- Sand: improves drainage for clay heavy soils
- Lime: raises pH for acidic soils
- Sulphur: slightly reduces pH of alkaline soils

Bringing soil to your garden can be a great boost for your landscaping, but can also bring problems with it, such as invasive species and contaminants. When purchasing soil, source it from reputable suppliers. There is a Ministry of Agriculture handout (see below) for tips on buying topsoil, including purchasing, choosing healthier soil products, and inspecting before delivery. Follow up with your supplier (and in some cases local authorities) if you end up with an invasive outbreak.

Please be aware that dumping soil and garden waste into natural areas is the leading cause of invasive plants spreading into our local ecosystems and public parks.

BC Ministry of Agriculture has the following handouts for gardeners

gov.bc.ca/gov/content/industry/agriculture-seafood/agricultural-land-and-environment/soil-nutrients

- Tips for Buying Topsoil
- Managing Clay Soils for Backyard
- Materials for Improving Garden Soil Structure
- Soil Improvement Methods for the Home Garden

Victoria Compost Education Centre

compost.bc.ca

- Fact Sheet #11: Soil Contamination
- Fact Sheet # 12: Best Practices for Healthy Urban Gardens

A few species to be aware of in our region that can

spread via soils:

Knotweeds: are spread primarily by extensive rhizomes that can start new infestations from very small fragments.

European Fire Ants: are usually spread by the movement of infested soils (very small red ants that swarm and sting).

Blessed Milk Thistle: a high-priority invasive previously controlled through regional efforts, but currently spreading through infected soils.



Capital Region Invasive Species Partnership

Check out the new website for CRISP!

You will find a status list of priority invasive species in the Capital Region, helpful resources and links, information about invasive programs, and much more.

crispinvasives.ca

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