

Eagle Nest Monitoring in Saanich Ethnobotany at the Horticulture Centre of the Pacific Soil Bioengineering Cedar Hill Park Our Community in a Changing Climate Climate Action Update Upcoming Events Pulling Together Volunteer Program Volunteer Highlight



# Eagle Nest Monitoring in Saanich: Part of the Wildlife Tree Stewardship Program (WiTS)

By Laura Gretzinger, WiTS Nest Monitor lauragret@hotmail.com cmnmaps.ca/wits

In January of 2012, I bundled up and headed out with my scope into the cold and windy weather trying to find eagle nests. Volunteers were needed for the Wildlife Tree Stewardship Program (WiTS) so I answered the call. I had some experience in researching and monitoring raptors, so I offered to watch a "few" nests. I now monitor 26 eagle territories in the CRD, 11 within Saanich, and counting.

The Wildlife Tree Stewardship Program is an online atlas and database of Bald Eagle (*Haliaeetus leucocephalus*) nest information (cmnmaps.ca/wits/), a program of BC Nature. It was initially created by Environment Canada, the BC Ministry of Environment, BC Hydro, BC Nature, and the Community Mapping Network, and began on the island in 2001. It is a tool that can help preserve nest trees during urban land development. As a monitor, I personally forward information on nest locations to the Municipality of Saanich.

The Bald Eagle's nesting biology is important in assessing its status. As a WiTS monitor, I make observations throughout the year, documenting nesting activity during March/April and offspring during June/July. Initially, a pair will establish a bond, engage in courtship with vocal and aerial displays and mate, all while defending their territory. On the south coast of Vancouver Island, eagles return from migration in September, nest build from October to November, mate in February and lay eggs in March. Chicks hatch in April/May, finish developing by June and take flight in July.

Every year, as I continue to monitor and document eagle activity, the importance of the data I am contributing to really begins to hit home. I couldn't do it without the help of local residents and volunteers, so if you know of a nest or witness any eagle activity near you let me know and you can help watch eagles too.



# Ethnobotany at the Horticulture Centre of the Pacific

By Cheri Le Brun Community Education Coordinator, The Gardens at HCP

The Horticulture Centre of the Pacific (HCP) is a non-profit organization that manages a 43-hectare site in the Municipality of Saanich. About 10% of the land is occupied by display gardens and buildings used for education and management purposes. The remaining 90% is being restored as coastal Douglas-fir forest.

By 2006, the basic restoration work had been completed, and a new volunteer group (the EB Vols) was formed. The primary objective of the new group was to carry on with the sub-canopy and forest edge restoration work. They are called ethnobotany volunteers because they have opted to put most of their efforts into using plants that are important to First Nations peoples.

The current focus of this group is to complete a new, half kilometre trail that contains abundant displays of plants eaten and utilized by First Nations peoples. The plants will be clearly labeled and there will be a brochure for a self-guided tour of the site. The trail traverses a range of habitats from dry, rocky outcrops through forested areas, across deep rich soil and into the shallow waters at the edge of the Viaduct Flats covenanted wetlands.

We currently have a handful of volunteers who regularly show up for our Wednesday and Saturday morning work sessions. A few more people to help with field work and plant propagation and someone with web and computer skills to help with fund-raising would be a great aid in helping us to move this work forward. See the call for volunteers on the events page for more details.





## SOIL BIOENGINEERING

## for Treatment of Steep and Unstable Slopes

By Dave Polster, Garry Oak Ecosystems Recovery Team (GOERT) Co-chair

Soil bioengineering is the use of living plant materials to perform some engineering function. For example, retaining walls built of live willow cuttings can be used to treat steep slopes (Photographs 1 and 2) to stabilize them. The soil bioengineering system uses pioneering species; so later successional species such as conifers move into the site over time and provide a long-lasting cover of vegetation.





**Photograph 1 and 2.** Steep (65° in this case) slopes can be treated with small retaining walls built of live cuttings (left). These then sprout and grow, creating a dense cover of pioneering vegetation on the slopes.

Soil bioengineering systems can also be used on stream banks to address erosion issues. A technique known o as dense live staking can be used down at the water level to slow flow velocities and allow sediments to collect rather than eroding. Photograph 3 and 4 show a site where dense live staking was used in combination with wattle fences to address toe erosion on a large river that had caused a slump of the river bank. By providing effective riparian vegetation, dense live staking creates habitat for a variety of species.





**Photograph 3 and 4.** Dense live staking can be used where erosion is causing a problem. The dense pattern of the live stakes slows the flow velocity of the river and allows sediment to be deposited (red arrow).



Excess soil moisture can cause problems on slopes. Live pole drains are simply bundles of cuttings that provide a preferred flow path for soil moisture, allowing the slope to dry out and the moisture to be harmlessly removed. Photograph 5 shows a site where live pole drains are being installed in a slump caused by excess soil moisture. Photograph 6 shows how the drain provides immediate relief from the excess moisture by draining the slope while Photograph 7 shows the same site after a year of drainage. This site has continued to provide site stability for more than 30 years.







**Photograph 5, 6 and 7.** Live pole drains are bundles of living cuttings that provide a preferred flow path for soil moisture, draining excessively wet sites. They continue to drain the site for many years.

Soil bioengineering solutions are usually about 1/10th the cost of a typical engineering solution for the same problem. In addition, because soil bioengineering uses living plant material, the growth of the vegetation supports a diversity of wildlife.





Cedar Hill Park is a natural gem in the midst of Saanich. The park is a hub of activity for wildlife and people, with a golf course in the middle and a 4.2 km chip trail circumnavigating the perimeter.

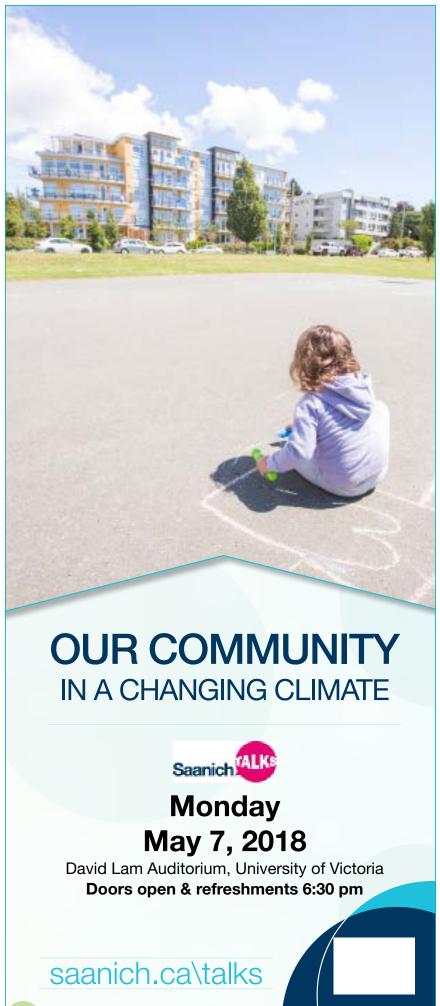
The Friends of Cedar Hill Park are conducting surveys of birds and people, and hope to expand that to include observable insects in the year to come. The *Pulling Together* group have been removing invasive weeds on Monday mornings for a decade now and have almost eradicated mature Scotch Broom from the park and are making good progress on the persistent Himalayan Blackberries.

A grove of English Holly has been removed to see if the native Garry Oak meadow plants will regenerate with more sunlight reaching the ground. English Hawthorne and English Ivy are proving a more difficult challenge, especially the ivy. All ivy has been removed from the trees, but it is still smothering the ground and is too hard on our ageing backs to pull out.

We've been planting acoms and watering them during dry spells, but more efforts are needed to plant native species. Restoring the Garry Oak ecosystem and other native trees and bushes would make both the park perimeter and golf course a lot more attractive to both birds and people. We're looking at selling the hundreds of golf balls we find to help pay for some nursery trees and bushes. The greens and tees could look like Augusta with more plantings behind them, and the fairways better defined with more trees.

Young Saanich bird enthusiast, Liam Singh, has completed two seasonal bird counts so far and will continue doing one each season so we have a better record of what birds rely on the park and to establish records of seasonal birdlife. In April, Liam will conduct a public bird walk to help more of us who enjoy walking the park identify some of the 45+ species he's identified so far. See his lists on the Friends of Cedar Hill Park website link below. We hope this remarkable young naturalist will tackle identifying common insects this year, which we believe would be a first for a Saanich Park.

Friends of Cedar Hill Park have been counting people too! Doing hourlong counts of chip trail users at various times of the day has shown just how many people are attracted to Cedar Hill Park for a pleasant walk and workout. As many as 120 walkers and joggers are enjoying the park each hour. On average, more than 60 people per hour are walking the trail. That works out to more than 800 a day in the spring, summer, and fall, and 500 in the winter months. Ninety percent are adults, with over a third being seniors. Almost 20% are joggers and nearly 10% are walking their dogs. Women make up almost 60% of the walkers. So the park is a wonderful, well-used natural facility and a key element in Saanich residents' choices for healthy activities. Family Day was particularly active, with a steady stream of young families out enjoying a beautiful walk in the park.



# Climate Action Update

Did you know that the District of Saanich has recently committed to becoming a 100% renewable energy community?

Saanich first developed Climate Action and Adaptation Plans in 2010, with 2020 targets. It is now time to develop a plan to take us to 2050 which will:

- transition Saanich as a corporation and a community to 100% renewable energy by 2050.
- achieve an 80% reduction in greenhouse gas emissions by 2050, and
- prepare for and adapt to a changing climate.

Starting this spring, the public and stakeholders will be invited to contribute to developing the plan. Visit saanich.ca and search for "climate action" to sign up for email updates about public consultation, to learn what you can do at home to shrink your carbon footprint, and to read previous climate plans and progress reports.



We grant seven environmental awards every year. Since 2000, we've recognized over 100 people and organizations that contribute to the natural environment in Saanich. The Awards are an initiative of the Saanich Environment and Natural Areas Advisory Committee (ENA).

#### **NOMINATE TODAY!**

Nominations close April 18, 2018 at 4 pm.

SAANICH.CA/ENVIROAWARDS

### **Upcoming Events**

#### Saanich Recreation Trails & Treks

saanich.ca 250-475-5408

#### Sunday Weekend Walks (FREE Drop-In)

Sundays | 1 pm to 3:00 pm

Discover the beauty of Saanich parks and nature in your backyard. No registration necessary. Please wear sturdy footwear and bring drinking water. Walks go rain or shine. Leashed, well-socialized dogs are welcome unless specified.

Apr 22 - Cedar Hill/ Braefoot and the Rhodos of Playfair Park Meet by Nellie McLung Library on Garnet Road, off Cedar Hill Road. May 27 - Swan Lake to Rogers Park

Meet at the Saanich Municipal Hall parking lot at end of Darwin Ave. Jun 24 - Blenkinsop Lake and Lower Mt. Doug

Meet in parking area on Lochside Drive, off McKenzie Avenue.

#### Gentle Walk & Talk (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.

Apr 19 - UVic Alumni Chip Trail

Meet at Henderson Recreation Centre, outside the main door.

Apr 26 - Mt. Tolmie and Finnerty Gardens

Meet at Henderson Rec Centre main entrance parking lot.

May 3 - Viaduct Flats to Horticulture Centre of the Pacific

Meet at Viaduct Flats, parking lot on Interurban, North of Camosun.

May 1 - Lambrick Park to Sierra Park

Meet at Gordon Head Recreation Centre front doors.

May 17 - Mt. Doug to Glendenning

Meet at the washrooms in main parking lot (Cordova Bay at Ash).

May 24 - Beaver Lake

Meet at the Beaver Lk Nature House parking lot (off Elk Lake Dr.)

May 31 - Glencoe Cove

Meet at Vantreight Park on Vantreight Road, off Ferndale Avenue.

#### CRD Parks & Environmental Services

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

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

#### Horticulture Centre of the Pacific

505 Quayle Rd, Saanich

hcp.ca 250 479 6162

#### **Ethnobotany Development Program**

needs a few more volunteers for our ethnobotany development program. We need people for our field work on Wednesday and Saturday mornings and would like someone with modest management skills to work on plant propagation or office skills to help with fundraising. Interested? volunteers@hcp.ca

#### 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.

#### **Gardening with Native Plants (Course)**

Saturday, May 26 - 9:30 am to 12:30 pm CRD residents are invited to this FR EE workshop on gardening with native plants. Jay Rastogi, expert gardener and Swan Lake Site Manager, will explore the many benefits of planting, propagating, and harvesting of native plants during this practical workshop. An overview of CRD Water Conservation programs will also be provided. Pre-registration is required.

#### Annual Native Plant Sale (Drop-in Event)

Saturday & Sunday, April 23/24 | 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.

#### **Victoria Natural History Society**

Visit www.naturevictoria.ca for more programs

#### Natural History Night (every 2nd Tuesday)

Klee Wyck Journal | Tues, Apr 10, 7:30 pm UVic Fraser Building, Room 159

#### Botany Night (every 3rd Tuesday)

Do Bald Eagles influence plant ecology? | Tues, Apr 17, 7:30 pm Swan Lake Nature Centre

#### Birder's Night (every 4th Wednesday)

Watching Birds Naked | Wed, Apr 25, 7:30 pm UVic Fraser Building, Room 159

#### Marine Night (last Monday of the month)

World Fisheries Trust | Apr 30, 7:30 pm UVic Fraser Building, Room 159

#### Saturday Morning Birding (most Saturdays)

Meets every Saturday morning, usually between 7 & 8 am. Check the Calendar page of the VNHS website (www.vicnhs. bc.ca/website/index.php/calendar) on the Thur/Fri before to find out the week's location. Novice and experienced birders welcome. Non-members can participate up to three times.

## **Native Plant Sale**



Sat-Sun, April 21-22 9 am to 3 pm 3873 Swan Lake Road



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

Have a look at our list of plants here: swanlake.bc.ca/plant-sale

Pre-orders over \$50 are available by calling 250-479-0211.

Parking is limited. Please carpool if possible.

#### Pulling Together Volunteer Program

# Volunteer Highlight Goward House Woodland Restoration Project Merle and Everett Peterson

By Merle and Everett Peterson and Jenny Eastman, Coordinator of Volunteers

Saanich *Pulling Together*Volunteer Program

Trees don't
grow easily on
farms near
Saskatchewan's
Great Sandhills
and there aren't
forests in London,
UK, but it's forestry
and plants that
brought Merle and

Everett Peterson together

and gave them a life connected to nature. Their first joint publication in the 1970's dealt with revegetation applicable to mining sites in northern Canada. Merle grew up in war-time London and as a child was evacuated along with her brother to a location near the Welsh border. Under parental instructions to never separate during evacuation,

Merle experienced nature by attending Boy Scouts with her older brother. The daughter of a keen gardener, Merle has always loved time spent with plants. In 1958, with a degree in history, book-loving Merle set off for Yale to pursue graduate studies. There she met Everett, a Canadian prairie boy pursuing graduate work in forestry, having grown up with a father who struggled to grow trees on his farm in southwestern Saskatchewan. Merle and Everett completed degrees at Yale, followed by Everett's UBC doctoral research on land-vegetation relations, a subject he later taught at universities of Colorado and Regina.

Their two children were born close to the publication of Rachel Carson's watershed, Silent Spring, a book that caused many people to think about the environment for the first time. That 1960's environmental awakening included concerns about revegetation of disturbed landscapes, a subject that inspired Merle and Everett in 1969 to form a forestry and vegetation consulting company, Western Ecological Services Ltd., which kept them busy for 35 years. Their Edmonton-based vegetation work was expanded to Victoria in 1979. For several years in the 1980's Merle and Everett lived not far from Goward House. On their daily drives past this Arbutus Road property they often wondered what ecological secrets lurked in the urban forest surrounding the former Goward family home. They began volunteering at Goward House woodland soon after John Hopkins started a vegetation management group that John described as his "Ivy League". Since that time, these exceptionally dedicated volunteers have been stewards of this urban forest. They spend time in this woodland nearly every day. Many other volunteers have assisted with this restoration program; since 2012, Merle and Everett have personally established over 200 planting spots for potted seedlings of native trees and shrubs and for transplants of native ferns and sedge. In Merle's words," We want to give back to the community; there is such satisfaction to see a landscape freed of English ivy and other invasive plants."







Be kept up to date on local community stewardship projects and environmental issues. Subscriptions to this quarterly newsletter are free and available in electronic or paper version. To subscribe, please send your contact information to the editor or visit saanich.ca/ourbackyard

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