

GARDEN DIVERSITY ATTRACTS BUTTERFLIES

Butterflies, once splendidly abundant in Victoria, have been diminishing steadily. This is due both to loss of native plant species on which they are dependent and destruction of their habitat. Fletcher's account from 1901 demonstrates just how much has changed within the last 100 years:

"in August, the dead butterflies may be seen in vast numbers floating on the sea around Vancouver Island, or thrown up along the beach in windrows sometimes an inch or two in depth."

..... Of the approximately 190 species of BC butter-flies, 70 have been recorded on Vancouver Island. Of those, 55 are resident, 3 are resident non-native, 7 are migratory species and 3 are adventive (not native and not fully established) species. It is worth noting that the vast majority of these species are non-migratory and thus depend wholly on the resources of Vancouver Island. Prior to European settlement, much of southeastern Vancouver Island was dominated by Garry oak ecosystems. Some butterfly species are endemic to Garry Oak Ecosystems. For example, the only known host plant of Propertius Duskywing (*Erynnis propertius*) is Garry Oak (*Quercus*)

garryana). Propertius Duskywing pupate in the leaf litter of Garry Oaks. Unfortunately, many people remove leaves from beneath their trees to maintain a "tidy" appearance to their properties (see "Let's Do Less to Help Nature" NPSG newsletter March 2009). James Miskelly, our March guest speaker, points out that conventional gardening practises are just another form of habitat destruction – it's no wonder butterflies are in decline within the "Garden City". James is a conservation biologist who, among many other things, studies butterflies and has done extensive surveying of the grasslands of southeastern Vancouver Island to understand the habitat requirements of native butterflies and how to protect them into the future.

..... The winged insects we are most familiar with represent just one of four stages in the lifecycle of a butterfly. Prior to being an adult, butterflies go through two sessile stages, egg and larvae, followed by the mobile pupae stage. In light of the fact that we have destroyed much of the appropriate habitat for butterflies it is crucial that we rehabilitate a complex natural habitat for them. James emphasizes that but

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terflies have relatively simple needs and that we can make a meaningful contribution to their survival in our neighbourhoods.

..... All of the lifestages of a butterfly must be taken into account when planning a natural setting. Butterflies require warm habitats that contain a variety of nectar sources and potential food plants for when they are pupae. Not all flowering plants are a good nectar source for butterflies – many horticultural plants have had nectar producing capabilities bred out of them and the relatively short proboscis of

many butterflies cannot reach

the nectar of all plants. Butterflies are most attracted to yellow, blue and purple flowers and are particularly fond of plants from the Liliaceae and Asteraceae plant families. Southern Vancouver native plants, Spring-Gold (Lomatium utriculatum), Camas (Camassia quamash and C. leichtlinii), Hooker's Onion (Allium acuminatum), Woolly Sunflower (Eriophyllum lanatum) and Entire-Leaved Gumweed (Grindelia integrifolia) provide a succession of nectar for butterflies in dry sites. In wet sites, Early Blue Violet (Viola adunca), Camas, Self-Heal (Prunella vulgaris),

Mountain Sneeze-Weed (*Helenium autumnale*), and Douglas Aster (*Symphyotrichum subspicatum*) offer good nectar sources.

..... Butterfly larvae require food plants that are in the sun yet must not dry up before larval development is complete. Some species of butterflies like Dreamy Duskywing (*Erynnis icelus*), Western Tiger Swallowtail (*Papilio rutulus*) and Sylvan Hairstreak (*Satyrium sylvinum*) prefer Willow (*Salix* sp.) and *Populus* sp. like Black Cottonwood (*Populus balsamifera* ssp. *trichocarpa*, while others, like Persius Duskywing (*Erynnis persius*), Western Sulphur (*Colias oc*

cidentalis) and Western Tailed Blue (Everes amyntula) prefer Legumes (e.g. Lathyrus sp., Trifolium sp.and Vicia sp.). Satyr Anglewing (Polygonia satyrus) completes two generations on Stinging Nettle (Urtica dioca) and Milbert's Tortoiseshell (Aglais milberti), West Coast Lady (Vanessa annabella) and Red Admiral (Vanessa atalanta) also use it. Many butterflies are specialists on our native grasses but little is known about specific interactions between particular species of grass and their associated butterflies.

..... Recognizing the complexity of natural interactions and trying to facilitate

them by growing native plant

species in a way that replicates natural settings will promote the long-term health of Southern Vancouver Island's butterflies. A cosmetic approach to gardening banishes natural processes which are essential to the survival of butterflies and other wildlife. If you're interested in helping James with Victoria Butterfly Counts contact him at james.miskelly@gmail.com

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Guppy, C.S. and J.H.
Shepard. 2001. Butterflies of British Columbia. Royal
British Columbia Museum

and University of British

Columbia Press, Victoria and Vancouver, BC. 414 pp.



For UVic events:

UVic parking policy--pay parking is in effect 24 hours a day. You must purchase a \$2 parking permit for the evening.

The NPSG gratefully acknowledges the support of the RNS program at UVic in securing the use of the rooms and facilities.

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VOLUNTEER OPPORTUNITIES

The Anti-ivy League of Cadboro Bay is fighting an ongoing battle. Is your warrior spirit ready to tackle the soul-sucking expanse of this pernicious weed? Contact Agnes at 721-0634 or thelynns at shaw.ca for more info. Hospital Rock: Contact Agnes as above

Volunteer at Swan Lake Christmas Hill Nature Sanctuary For further details contact Joan at 479-0211 or email volunteer@swanlake.bc.ca.

Beacon Hill Park Ivy Pull, Saturdays (except long weekends), 9 am-Noon southeast woods near Cook and Dallas. Bring gardening gloves. No dogs. Volunteers welcomed. Call Cornelia, 920-3556 or kacy at islandnet.com.

Oak Bay Native Plant Garden meet every Fri. morning from 9-11, weather permitting. Corner of Beach Drive and Margate Avenue. New members welcome. Guided walks in March and April.

Brighton Avenue Walkway Restoration. Removal of invasives and re-planting of native species in a Garry Oak rocky outcrop situation. Work each Sun. 9:30 - 11:30. Meet at Hampshire and Brighton, 2 blocks south of Oak Bay Ave.

Native Plant Demonstration Garden at Glendale Gardens. Meet every Wednesday morning, snow, rain or shine: before coffee we work in the Western Woods restoration project and after coffee we work in the native garden. Volunteers welcome.

Garry Oak Restoration Project

The Haliburton Wetland Restoration Team is looking for native shrubs to use in hedgerows at the farm. Contact Kristen at 598-6546 or kristenh at uvic.ca

EVENTS AND OUTINGS

CRD Parks: www.crd.bc.ca/parks
South Vancouver Island Mycological Society:
www.svims.ca
Vancouver Island Rock and Alpine Society:
www.virags.ca
Swan Lake & Christmas Hill Nature Sanctuary:
www.swanlake.bc.ca
Victoria Natural History Society: www.vicnhs.bc.ca
Native Plant Society of BC: www.npsbc.org

For all VNHS events: No pets please. Bring a lunch and drinks for the all day outings. Where appropriate attire and footwear. Contact Agnes at thelynns at shaw.ca or 250-721-0634 if you need more information.

Fri Apr 17, 1-8 pm and Sat Apr 18, 9-4 pm VIRAGS Spring Show at Cadboro Bay United Church 2625 Arbutus Road Admission by donation. Specialty nurseries will sell plants during the entire show. Seeds will be on sale throughout. Afternoon teas

Sat/Sun April 18 and 19

Swan Lake-Christmas Hill Nature Sanctuary 10-3 Native plant sale and gardening workshops. Come to buy or learn or volunteer to help out. Admission price is \$3/day, \$5 for weekend pass. Phone 250-479-0211 for more information.

Sun Apr 19 VNHS Hike Jocelyn Hill 9 am Join Rick Schortinghuis to enjoy the wildflowers and the birds as well. Our goal is to see the Gold Stars in bloom. Follow the Trans-Canada Highway to Millstream Road exit. Turn right on Millstream Road and continue to the junction of Millstream Lake Road. Keep left to continue on Millstream Road. Go past Lone Tree Hill Park on your right and watch for Emma Dixon Road on the left. The trail head is on Millstream Road just past that intersection. Park on the right-hand side of the road. Call Rick at 250-885-2454 for more information.

Tues Apr 21 BOTANY NIGHT The Story of Richard Layritz Leslie Drew will talk about Richard Layritz, his life and his contributions to the botanical richness of the Victoria area. Swan Lake Nature House, 7:30 p.m. Admission free, everyone welcome. Bring your friends.

Fri Apr 24 VNHS Saltspring Botanical Adventure We'll visit a diverse selection of wildflowers. We will carpool to catch the 9 a.m. ferry, returning around supper time. Participants will be expected to share in transportation expenses. Bring a lunch and drinks. You must register for this event to assist in planning. Contact Agnes after April 1 at thelynns at shaw.ca or 250-721-0634 to obtain final details.

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Sat Apr 25 18th Annual Camas Day at Beacon Hill Park

This annual event will include guided walks for birds, wildflowers, and archaeology. Walks are about one hour each. Check details at www.vicnhs.bc.ca

Sun Apr 26 VNHS Wildflowers at Mill Hill Join us for a guided flower walk at 10:00. Joy Finlay will join Agnes Lynn to lead the walk to the top. Meet at the Mill Hill Regional Park information kiosk. To get to the park, take the Colwood exit off the Trans-Canada Highway and follow the Old Island Highway for a short distance. Turn right on Six Mile Road just before the bridge, then left on Atkins Road. Turn left at the four-way intersection to continue on Atkins Avenue that leads to the park entrance on the right.

Check the VNHS website for May events at www.vicnhs.bc.ca

Thurs Apr 30 – Sun May 3 BC Nature Conference and AGM

The spring conference and annual general meeting will be in Duncan this year; hosted by the Cowichan Valley Naturalists. Registration information will be posted on their website (http://bcnature.ca/index.html). Field trips and presentations focused on the region make these events a terrific opportunity to learn about an area. Everyone welcome.

Tues May 5 VHS Plant Sale. 7-9pm Opportunity to Buy and Sell a few Native Plants Garth Homer Centre, 815 Darwin Ave The Native Plant Study Group has been offered two free tables to sell native plants at the Victoria Horticul tural Society Plant Sale. Although the sale is predominantly offering non-native plants for sale, this is an opportunity to show the members what great native plants they can grow in their gardens. Agnes Lynn and Heather Pass will look after the tables but help selling

the plants would be appreciated (contact Agnes at 250-721-0634 for more details). The usual \$5.00 drop-in charge for non-members will NOT be in effect for this month".

Sun May 17 CRD Parks Horth Hill 1:00 pm - 2:30 pm Blooms, blossoms and bliss: our forests and hills are beginning to burst with colourful life. Join us to discover what spring has sprung and search for signs of more good things to come. Meet at the information kiosk in the parking lot off Tatlow Rd.

Sat May 30 CRD Parks Devonian 1:00 pm - 2:30 pm A rich storehouse of natural medicines grows all around us. Explore this vital botanical heritage used by First Nations peo-

ple, European settlers and others. Meet at the information kiosk in the parking lot off William Head Rd.



HYDASPE FRITILLARY ON SALVIA

July 16 - July 18 Botany BC In 2009 Botany BC will be centered out of Muncho Lake in the northeast corner of BC. Further information about registration and the program will be found on the Botanical Electronic News website at: http://www.ou.edu/cas/botany-micrøben/

Please visit our lovely website: www.npsg.ca Designed and maintained by NPSG co-chair Valerie Elliott, co-owner of design company iD2 (id2.ca).

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SPEAKER SCHEDULE

Unless otherwise noted all meetings are held in room D 116 MacLaurin Building, UVic at 7 pm.

May 21

"Swan Lake Nature Sanctuary: A Refresher Course in Conservation Imagination"

Rare species, native plant gardens and the changes that have occurred and are occurring at this destination nature sanctuary. June Pretzer joined the Nature Sanctuary staff in April, 2008. June, a graduate of the

Restoration of Natural Systems program at UVic., has a real passion for restoring and preserving the ecosystem within the Nature Sanctuary.

BUDS

by Al Grass, originally published in Wildlife Review, Winter 1980/81 issue.

Buds are the gems of life from which branches, twigs and flowers grow. They possess a beauty all their own, and come in a variety of colours from red to green and brown. Some are hairy, while others are shiny or sticky.

Buds can be a good aid to help with the identification of deciduous trees in winter.

If you examine twigs, we will notice that some buds are at the

tip of the stem (terminal) and some are on the sides of the stem (laterals).

Many buds are arranged along the length of the twig two basic ways: opposite and alternate. Buds growing across from each other are said to be opposite. Buds are alternate when they are staggered and spiral around the stem.

Functionally, buds of woody plants are of two kinds: leaf and flower. Leaf buds produce not only leaves but

also a leafy twig. Thus, a leaf bud contains rudiments of both leaf and stem. A flower bud contains an em bryonic flower and hence the fruit. A mixed bud, such as possessed by the broadleaf maple, is a combination of leaf and flower. Most buds have a protective coat of scales to prevent the delicate tissues from being killed by cold winter winds. In addition, the buds may have the added protection of hairs or resin. One notable exception is the Cascara, which has naked buds. Just below the bud is found the leaf scar. Scars come in a variety of shapes, including triangular, oval and

heartshaped. On a leaf scar, you will find tiny dots known as bundle scars. Bundle scars are from the bundles of conducting tissue that brought food to the growing leaf and bud. The leaf scars of many trees have three, five or seven bundle scars arranged somewhat in a curved line. Buds can form a significant part of an animal's diet. Grouse and ptarmigan regularly utilise willow buds. Evening grosbeaks seem to relish the buds of broadleaf maple, especially in early spring. The purple finch sometimes gets itself into trouble by eating cherry buds. Hares, deer and mice all utilise buds at some time during the year. Certain buds are said to have medicinal values. Sweet birch and

aromatic substance, oil of wintergreen. Certain poplar buds, such as black cottonwood, have a sticky coating

yellow birch buds contain an

known to many people as "blam of gilead" although the term properly belongs to another species. To help you appreciate buds, an 8x or 10x hand lens is essential. To learn more about buds, read: Winter Twigs by Gilky and Packard Winter Botany by W Trelease Native Trees of Canada by RC Hosie, 1969 North American Trees by RJ Preston Jr, 1961



BROADLEAF MAPLE BUD

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BUDS AND WILDLIFE

Quaking Aspen: Blue and Ruffed Grouse

Purple Finch, Mule Deer

Willow: Blue and Ruffed Grouse,

Pine Grosbeak, Mule Deer *Hazelnut*: Ruffed grouse

Birch: Ruffed Grouse, Purple Finch

Mountain Ash: Blue Grouse Cherry (Bitter): Blue Grouse

Maple (Broadleafed): Evening Grosbeak

BUTTERFLIES & HOST PLANT PREFER-ENCES (CATERPILLAR FOODS)

Woodland Skipper (*Ochlodes sylvanoides*)

Grasses: e.g. California brome (*Bromus carinatus*), Blue Wildrye (*Elymus glaucus*)

Western Tiger Swallowtail (Papilio rutulus)

Flowering shrubs and trees: e.g. Black Haw-

thorn (Crataegus douglasii)

Anise Swallowtail (Papilio zelicaon)

Carrots: e.g. Spring-Gold (*Lomatium utricula-tum*), Consumption Plant (*Lomatium nudicaule*)

Pine White (Neophasia menapia)

Pines, Douglas-firs, Yarrow (Achillea millefolium)

Western Spring Azure (Celastrina echo)

Oceanspray (Holodiscus discolor), Hardhack (Spiraea douglasii), Red-Osier Dogwood (Cornus stolonifera)

Western Elfin (Incisalia iroides)

Ericaceae: Arbutus (*Arbutus menziesii*), Salal (*Gaultheria shallon*), Kinnickinnick (*Arctostaphylus urva-ursi*), Manzanita (*Arctostaphylos columbiana*)

Satyr Anglewing (*Polygonia satyrus*)

Stinging Nettle (*Urtica dioca*)

Painted Lady (*Vanessa cardui*)

Thistles: e.g. Edible Thistle (Cirsium edule)

Lorquin's Admiral (Limenitis lorquini)

Oceanspray (Holodiscus discolor)

Willows (Salix sp.), Populus balsamifera ssp.

trichocarpa

NATIVE PLANT STUDY GROUP (Sub-group of the Victoria Horticultural Society)

The NATIVE PLANT STUDY GROUP is a non-political group dedicated to learning about B.C. native plants, as wild populations and in garden settings, and to supporting conservation of native plants and their habitats. The group is guided by a volunteer steering committee. Members are encouraged to volunteer for this committee. Participation in outside events, by the group, or by individual members using the NPSG name, is dependent on approval of the steering committee or, where indicated, by the atlarge membership. Activities requiring funding must receive approval by the general membership.

Co-Chair: Valerie Elliott
Co-Chair: Nathalie Dechaine
Speakers: Moralea Milne
Treasurer: Joan Varley
Newsletter: Moralea Milne
Plant Rescue: Todd Doherty
Field Trips: Jean Forrest
Pat Johnston

Membership: Agnes Lynn Publicity: Valerie Elliott

Room Set-up: Pat & Wayne Robertson

Plant Raffle: Heather Pass

List-serve: Linda Beare & John Olafson

Refreshments: Pat McMahon Archivist: Brenda Pilon VHS Liaison: Heather Pass

Native Plant Study Group members are required to become members of the Victoria Horticultural Society. Fees are \$25.00/yr and help pay for insurance to cover field trips. Send \$ to Box 5081 Stn. B, Victoria, V8R 6N3

The NPSG Newsletter is edited by Moralea Milne

Victoria Natural History Society www.vicnhs.bc.ca Native Plant Society of BC www.npsbc.org South Vancouver Island Mycological Society svims.ca