

THE COMPLEX & WONDERFUL WORLD OF GRASSES

Some people find grasses untidy and insist they be regulated into smooth emerald-green carpets. Others enjoy expanses of tall grasses rippling in the wind, turning various attractive shades of colours as seasons progress. But most amateur & professional botanists shudder at the identification of grasses, of which there are 7 tribes, 78 genera, and 253 species just in British Columbia. Most botanists recognise a number of the obvious grass species, such as the (dreaded & aggressive) orchard grass (*Dactylis glomerata*), and the pride of the local botanical community Roemer's fescue (*Festuca idahoensis* ssp. *roemeri*).

A couple of months ago the Native Plant Study Group was pleased to have David Blundon as guest speaker on the topic of The Family of Grasses. Dr. Blundon is at present the Chair of Biology at Camosun College, where he teaches sampling design, environmental statistics, and ecological restoration in the Environmental Technology Program. David Blundon's work has included taking samples from all across B.C. for the Forests & Range Ministry in their Range Reference Area Program. He recognises the great value of grasses. The Family of Grasses may well be looked upon as the dull side of the flowering world, but there is no question about their importance to humans and other animals, since they include all

grains and provide three times more food than do peas, beans, tubers, fruits, meat, milk, and eggs put together. Much wildlife also depend on grass and grassland or wetland habitats for shelter and completion of their life cycles. The First Nations people used grasses in many ways: for steaming cooking pits, baskets, preserving berries, stringing food for drying, floor coverings, and bedding.

With his good sense of humour and clear presentation (including an illustrated handout and grass samples), David Blundon did a good job of taking some of the terror out of the process of the identification of grasses.

Basic observations of grasses are: annual-versusperennial and bunch grass-versus-lawn grass. Identification of grasses must always begin with differentiating them from rushes and sedges which is done by checking the stem. The stems of grasses and rushes are round, those of sedges have edges; the stems of grasses are hollow or pithy with nodes on them, those of rushes are pithy without nodes. Details of the leaves and flowers are much more complex and require lots of practice and patience in observation, most often under a microscope.

Flowers of grasses are small and complex and have acquired a necessary, peculiar terminology. The main floristic part of grasses are the spikelets which are

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actually modified leaves protecting the reproductive parts, i.e. ovary, stigmas, and stamens. Very early on in identification one encounters the term inflorescence, which is needed to distinguish between some of the 7 tribes of grasses. Inflorescence is the section of the stem near the top where the spikelets are. For example: if the inflorescence is a spike (that is spikelets without stalks) it belongs to one tribe and if the inflorescence is a panicle or raceme (that is spikelets

with stalks) it belongs to another

tribe of grasses.

Related general factors may also be of interest, such as the habitat guide of natural & manmade environments: dry forest, riparian, disturbed soils, etc. On a broader scale are the 14 listed biogeoclimatic zones in B.C., like Douglas-fir Zone (including Garry Oak Ecosystem). Western Hemlock Zone, and Mountain Hemlock Zone (including higher elevations on Vancouver Island).

David Blundon concluded his presentation on the Family of Grasses with a brief discussion of vegetation management in contrast to conservation management. Vegetation management concentrates on a single plant species; an example is a project in the Okanagan where orchard grass propagation has been improved by extra watering to provide more forage for cattle. Conservation manage-

ment has a limited use, such as in publicly owned parks, where park botanists are trying to preserve and enhance threatened native plants and grasses. Dave recommended two books for reference: PLANTS OF COASTAL BRITISH COLUMBIA, by Jim Pojar and Andy MacKinnon, et al, Lone Pine Publishing, 1994. and

ILLUSTRATED FLORA OF BRITISH COLUMBIA, edited by George Douglas, Del Meidingen, & Jim Pojar, Ministry of Sustainable Resource Management, Oct.2001, Volume #7, Monocotyledons.

In all, it was an information-packed presentation by a good teacher, and was very well appreciated by all who attended. (Many thanks to Helen Oldershaw for her note taking and article).

We are looking for members to give five minute presentations at our meetings. Don't be shy, share your experience with a very accepting group. Contact Angela or Valerie at the meeting or through their emails, found at the end of the newsletter. We are also searching for a new treasurer and plant rescue coordinator, can you help out? The duties are not onerous!



Have you visited our beautiful website at www.npsg.ca? It has been built through the talented and generous efforts of Valerie Elliot and Stephan *Jacob of iD2 Communications* (www.id2.ca)

NPSG 2006/2007 FINANCIAL STATEMENT

Total Revenue is 5591.37 (including an in kind donation of \$4137.50 from iD2 for website and design work).

Total Expenses are 5546.09 (including the \$4137.50 expense of website and design work).

Our Total Equity is \$3.399.26

The Native Plant Study Group meets on the third Thursday of the month from Sept through May, except Dec, at 7 pm at the MacLaurin Building, UVic.

Please join us. Membership fees are \$15.00 annually or a \$2.00 charge for drop-in. Check the Room Schedule for new meeting locations.

NPSG ROOM SCHEDULE FOR 2007/2008

20 Sept MacLaurin D110

18 Oct. MacLaurin D110

15 Nov MacLaurin D116

17 Jan MacLaurin D116

21 Feb MacLaurin D288

20 Mar MacLaurin D110

17 Apr MacLaurin D116

15 May TBA

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SPEAKER SCHEDULE

October 18

On the Beach: Plants of Sandy Shores Matt Fairbarns will take us on a photographic journey to beaches and dunes on Vancouver Island. Beach and dune plants, the ecosystems where they live and the forces which shape those ecosystems will be explored, as well as contemporary forces which threaten these ecosystems and many of the rare species which occur there. Matt Fairbarns is an plant ecologist, owner of Aruncus Consulting-a private firm which does botanical ecological assessments, a member of the Oak Bay Parks and Recreation Commission and a member of the GOERT Plants at Risk Recovery Implementation Group (RIG).

November 15
Garry Oak Gardener's Handbook
Carolyn Masson is the Outreach Specialist with the
Garry Oak Ecosystem Recovery Team (GOERT).
They are in the process of publishing a handbook on

gardening in our Garry Oak ecosystem.

January 17, 2008
Invasive Plants of Southern Vancouver Island.
Strategies and Identification
Wendy Tyrell is a director with VNHS, a member of
the Invasive Species Steering Committee of GOERT
& Coordinator for the Coastal Invasive Plant Committee, a group concerned about the increase of nonnative plants in the coastal region of BC.

February 21
Dr Richard Hebda Topic TBA
An expert on native plants, Richard is Curator of Botany and Earth History at the Royal BC Museum, a beloved instructor in the Restoration of Natural Systems program at UVic, author of more than 90 scientific papers and author of many articles on native flora and ethnobotanical studies.

BARTRAMIA POMIFORMIS OR APPLE MOSS

According to MW Ryan in *Bryophytes and Lichens in the Victoria Area*, Bartramia pomiformis occurs only infrequently, most likely on near vertical rock faces that supply partial shade and protection from direct rainfall. Its leaves become twisted and contorted when dry. Bartramia stricta or rigid apple moss is a rare plant that has been collected from only three sites in BC,

two in Metchosin. It is found on bare, near vertical rock faces in sunny areas where the plant is partially protected from rainfall. Its leaves do not become twisted and distorted when dry and it is smaller than apple moss.



EVENTS AND OUTINGS

For information on many environmental activities in our area check the Green Diary from the EcoNews website at http://www.earthfuture.com/greendiary/

Check the CRD parks website for detailed information on their many programs: www.crd.bc.ca/parks

For all VNHS activities, please contact Agnes at 721-0634 or email her thelynns at shaw.ca if you need more information. No pets please. Bring a lunch and plenty to drink for the all day outings. Check the Victoria Natural History Society at vicnhs.bc.ca

Sat Sept 15 thru Mon Oct 8 VNHS "The Nature of Island Artists" Artshow

A biennial artshow featuring amazing art by Vancouver Island and Gulf Island artists, held at the Goldstream Park Nature House. Open daily 9-4:30 p.m. Contact the Goldstream Park Nature House at 478-9414 for more info.

Sat Sept 22 CRD Parks Nature's Buffet at Witty's Lagoon Regional Park at 1 p.m. Which wild plants are edible? Where can you find them? How do you prepare them? Learn all of this and the ethics of wild plant gathering. Meet at the Nature Centre in the parking lot off Metchosin Rd.

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Sat 22 11 am-1 pm, Composting Basics Workshop. Compost Education Centre, 1216 North Park St. Free. 386-WORM Corner of Raynor & Craigflower. 383-0689

Sat 22 2-4 pm, Seed Saving Workshop. Compost Ed Centre, 1216 North Park St. \$15. 386-WORM

Sun Sept 23 – CRD Parks Mt Parke Regional Park (Mayne Is) 1 p.m. Join a Mayne Island naturalist to

explore hidden treasures on the way to the summit. The views are the best in the Gulf Islands. Meet in the parking lot at the end of Montrose Road.

Mon Sept 24 VNHS Marine Night

Outer Coast Seaweeds Diane Bernard, known as the "Seaweed Lady" will speak about the natural history of seaweeds and their many uses. 7:30 p.m. Room 159, Fraser Building, University of Victoria.

Tues Sept. 25 VIRAGS meeting 7:30 to 9:30 pm at Gordon Head United Church Hall 4201 Tyndall Ave.

Speaker: Yvonne Rorison on Wildflowers of Patagonia plus a big plant sale

Sun Oct 7 VNHS Mosses and Lichens in Thetis Lake Park with Gerry Ansell. Meet at the main parking lot at 10:00 a.m. Parking is free in October.

Tues Oct 16 VNHS Botany Night

Phytogeography of Rhodiola integrifolia, Ledge Stonecrop. Join Heidi Guest as she describes her re search about this succulent species which grows in western North America and eastern Asia. Swan Lake Nature House, 7:30 p.m.

Wed, Oct 24 VNHS

The Coastal Dune Ecosystem of Cordova Spit. Glenn Bartley has been studying coastal dune ecosystems, which are an extremely rare ecosystem that have been heavily impacted by human interactions, Cordova Spit represents one of the best examples of an intact coastal dune ecosystem that is vital habitat to dozens of species of migratory birds, come and learn about these birds and the impact that humans are causing. We meet in room 159 of the Fraser building at University of Victoria at 7:30 p.m.

Fri Oct 26-Sun Oct 28 A Weekend of Mosses and Mushrooms



Join a collaborative event with the NPSG, VNHS and NPSBC as we host a book launch by UBC professor Laurie Ricou for his book Salal, Listening for the Northwest Understory in conjunction with the NPSBC AGM (free). We are also hosting a weekend moss workshop, "An Introduction to Mosses and their Habitats", with Dr Terry McIntosh (cost \$80) and a Sunday hike with Dr McIntosh and Dr Richard Winder to Royal Roads to search for mosses and mushrooms (free). Check our website: www.npsq.ca for details.

Mon, Oct 29 VNHS Hot Vents of Pacific Ocean Volcanic Arcs - Mariana and South Tonga. Dr. Kim Juniper will describe the unusual hot vent habitats and

biological communities on underwater volcanoes associated with arc volcanism in the western and southern Pacific Ocean. 7:30 p.m. Room 159, Fraser Building, University of Victoria. Everyone welcome.

Tues, Nov. 27 VIRAGS Speaker: Sean Hogan on High-Altitude Mexican Plants 7:30 to 9:30 pm at Gordon Head United Church Hall 4201 Tyndall Ave.

Contact Jean Forrest if you would like to be involved in a member's only garden tour in Spring 2008. 658-5740 or jforrest at telus.net

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YAMPAH aka Perideridia gairdneri

Flowering from late July through till September depending on altitude, this delicate member of the carrot family is another of the wild carrots historically used by First Nations. The roots were pounded into a flour that has an anise seed flavour or it can be eaten raw, boiled or roasted. Even when you know where it is located, it can be very easy to overlook unless it is in full bloom. It is described as occurring on dry to fresh, nitrogen medium soils. It is characteristic of dry sites. The plants on Camas Hill are found at the bottom of the hill on an open knoll and near the summit in a forest opening. The plants at the summit were host to a huge number of small and busy pollinators.



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

Hospital Rock: Contact Agnes as above

Every Sat at 1:30 pm: Tour of Wilkinson's Wildwood Forest, Ladysmith. Jay, 250-245-5540 http://www.ecoforestry.ca/WildwoodMap.htm

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, Sat (except long weekends), 9 am-noon at southeast woods near Cook and Dallas. Bring gardening gloves. No dogs. Volunteers welcomed. Call Comelia, 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.

GORP Schedule

All activities are scheduled for 9:30-11:30 am unless otherwise specified (Sun Nov 4 TBA). Contact Jennifer Eastman for more information at: 744-1710

Sat Sept 29 Mt Doug Summit Remove broom Sat Oct 13 Mt Tolmie Park Remove invasives Sat Oct 20 Chatterton Hill Park Remove invasives Sat Oct 27 Camas Park Remove Remove invasives Sun Oct 28 Feltham Park Remove ivy & blackberries Sat Nov 3 Playfair Park Remove invasives Sun Nov 4 Wetherby Park Tree Appreciation Day, tree planting

Sat Nov 17 Mahon Brook Sheet mulching Sun Nov 18 Playfair Park Remove various invasives Sat Nov 24 Chatterton Hill Park Remove invasives Sat Dec 1 Camas Park Remove invasives Sat Jan 12 Feltham Park Remove ivy & blackberries Sat Jan 19 Chatterton Hill Park Remove invasives Sat Jan 26 Camas Park Remove various invasives

Native Plant Society of BC 2008 Calendars

These ever popular and beautiful calendars of BC native plants will be available again this year. They make great Christmas gifts for the botanically inclined or anyone who appreciates beauty. Check your next NPSG newsletter or www.npsbc.org for more details.

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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.

NOTES

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 written and produced 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