Native Plant Study Group

October 2010

Photo by Kevin deBoer

Moss Talk

by Nathalie Dechaine

At our first meeting after the summer break, and what would have been normally the dormant moss season, Kem Luther came and taught us about the mosses of our region. Thanks to an unusually wet end of summer, this turned out to be a very timely presentation indeed!

Kem explained that mosses belong to the plant Kingdom, have their own Division, bryophata, and are related to the hornworts and liverworts. By definition, "a moss is a plant with a reduced vascular system, rhizoids instead of roots, having a dominant gametophyte stage and an unbranched sporophyte stage." This definition also applies to the liverworts and hornworts, though hornworts are rare in our region and the liverwort's 'thalus' (leaf-like structure) generally has three ranks.

Mosses have been around for at least 300 million years; and some fossil interpretations even suggest over 500 million years. These organisms may be the best living representatives of the first terrestrial plants. Mosses are present on every continent, including Antarctica (where they are the dominant plant life) and can be found in a diversity of habitats from hot springs to lake bottoms. There exists approximately 10,000 to 20,000 species of moss worldwide. B.C. is home to 700 species of moss.



Bryum miniatum Photo by Rod Innes

In case we needed convincing, Kem stated three main reasons to encourage us to learn to identify mosses. Firstly, if you are not aware of what you are looking at, you miss much of what is actually there. Secondly, mosses shine at a time of year (winter) when most other natural occurrences are either dormant or completely absent. Lastly, Kem pointed out the awesome rate of return for investing in learning to identify our mosses; if you learn 20 mosses in our region, you have covered around 90% of the common species!

What I enjoyed most about Kem's presentation was that he flushed out the important roles that mosses play in both the natural and human world. Slugs, aphids, mites, crane flies, moths, grasshoppers and midges all eat mosses as part of their diet. Particularly in the Arctic, mosses are also eaten by reindeer, geese, lemmings and voles. Mosses can also provide habitat for insects and banana slugs. They are a good quality nesting material for birds and a protective layer to prevent fungal hyphae from drying out.



Mosses are known to play a crucial role in ecosystem services too. For example, peat moss is thought to store more carbon than the same amount of biomass in other living systems. A study in Costa Rica suggests that mosses buffer up to 50,000 litres of rain per hectare! This, of course, protects the soil and releases the water slowly when the rains cease.

Kem then highlighted the benefits humans accrue from using mosses. In the floral industry, mosses are used as a soil amendment. Peat-use represents 10% of the energy use in Ireland since it is used as a fuel source. Mosses are also well-known for their absorbent and healing properties which were utilized by World War I veterans and First Nations peoples alike.

Kem pointed out that most mosses do not have common or English names, so he showed us slides of the more common species of our forests and urban environments. He shared some of the descriptive names he's applied to some of our local mosses to help us remember what we learned. He also provided a comprehensive list of resources to facilitate our moss education (see below). Most importantly, Kem pointed out that our region is incredibly wealthy with moss experts, so the best way to practice what we've learned is to get out to any local moss walk that we can attend.

Moss Resources:

- Jim Pojar and Andy MacKinnon. Plants of Coastal British Columbia. Vancouver, B.C.: Lone Pine Publishing, 1994
- W. B. Schofield. Some Common Mosses of British Columbia. Victoria, B.C.: Royal British Columbia Museum, 1992.
- Dale H. Vitt, Janet E. Marsh, Robin B. Bovey. Mosses, Lichens and Ferns of Northwest North America.
 Vancouver, B.C.: Lone Pine Publishing, 1988.
- Mike Ryan. The Mosses and Lichens of the Victoria Area. Unpublished.
- Robin Wall Kimmerer. Gathering Moss. Corvallis, Oregon: Oregon State University Press, 2003.
- Derrick Ditchburn (http://dereila.ca/dereilaimages/moss.html)
- British Bryological Society (http://www.britishbryologicalsociety.org.uk/)
- Bryophyte Flora of North America (http://www.mobot.org/plantscience/bfna/bfnamenu.htm)
 - o Volumes 27, 28 and 29 of the serial published Flora of North America are on mosses.
- Missouri Botanical Gardens Bryology resources (http://www.mobot.org/MOBOT/tropicos/most/welcome.shtml)
- Bryonet listserv at bryonet-l[at]mtu.edu



Antitrichia californica (wet) Photo from Kem's presentation



Antitrichia californica (dry) Photo from Kem's presentation



Native Plant Nurseries in Victoria

Cannor Nurseries	GardenWorks- Colwood
4660 Elk Lake Drive	1859 Island Highway
250-658-5415	250-478-2078
www.cannor.com	www.gardenworks.ca
GardenWorks- Saanich	Island View Nursery
4290 Blenkinsop Rd	(wholesale)
250-721-2140	2933 McIntyre Road
www.gardenworks.ca	250-544-4802
Lochside Nursery	Marigold Nurseries
Lochside Drive	7874 Lochside Drive
250-544-3100	250-652-2342
www.csll.ca/lochside.html	www.marigoldnurseries.com
Thousand Summers	Swan Lake Christmas Hill
Environmental Design	Nature Sanctuary
250-727-0229	250-479-0211
thousandsummers@shaw.ca	www.swanlake.bc.ca
Nature's Garden Seed Co.	Russell Nursery
Victoria, BC	1370 Wain Road
V8P 5S2	250-656-0384
250-595-2062	www.russellnursery.com
www.naturesgardenseed.com	

Nursery information found at: http://www.goert.ca



Bryum miniatum Photo from Kem's presentation



Acer macrophyllum Photo provided by Hans J. Koch The Native Plant Study Group meets on the third Thursday of the month from September through May at the MacLaurin Building, UVic.

Please join us!

The NPSG gratefully acknowledges the support of the Restoration of Natural Systems (RNS) program at UVic in securing the use of the rooms and facilities.

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

Save yourself the trouble by riding your bike or taking the bus! (http://www.bctransit.com/regions/vic/)

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For all VNHS events: No pets please. Bring a lunch and drinks for the all-day outings.

Wear appropriate attire and footwear.

Contact Agnes | 250-721-0634 | thelynns(at)shaw.ca | www.vicnhs.bc.ca

E vents and Outings

SeaChange Marine

Conservation Society and World

Fisheries Trust

Sunday, October 24
Workshop Exploring the Unique
Features of the Gorge Waterway
Come learn about the eelgrass and the
unique native oysters in the Gorge
Waterway and discover how you can be
a part of caring for this beautiful
waterway. Don't be shy to share your
stories and knowledge of the Gorge and
to meet people who share a love and
interest in the Gorge!

Please bring a mug to enjoy some fresh coffee and tea. There will also be some free pizza!

Don't forget to dress appropriately for the weather since it can get cold in the Education Centre (formerly Kinsmen Gorge Park)!

**If you know you will be attending please call or email World Fisheries Trust so we know how many refreshments to get.

Location & Time: 1070 Tillicum Rd 11am-1pm

Contact T: 250.380.7585 | info[at]worldfish.org or education[at]worldfish.org

Victoria Natural History Society

(VNHS)

Sunday, November 7 FIELD TRIP - Mushrooms at Royal Roads

Kem Luther and others will gently lead us around this area as it has a diverse



selection of mushrooms. This outing is intended for us to discover our own specimens and identify them. This is an observation trip and is not intended for collecting; however, a few selected specimens will be chosen by the leaders for closer examination.

Bring your field guide and we will have other material to assist you. Dress for the weather and please bring a snack and a drink.

**Parking fees are in effect

Location & Time:

Meet at Royal Roads University by the Tennis Courts @ 10am

Contact Agnes T: 250.721.0634 | agnes[at]thelynns at shaw.ca

Sunday, November 14 FIELD TRIP - Common Mosses of the Victoria Area

Our trip leader Kem Luther has stated that if we learn just 20 of the common mosses in the area that we will have covered about 95% of the total number of mosses in the Victoria area!

Dress for the weather and please bring a snack and a drink.

**Parking is free in November



Symphoricarpos albus Photo provided by Rod Innes

Location & Time:

Thetis Lake Park main parking lot @ 10am

Contact Agnes T: 250.721.0634 | agnes[at]thelynns at shaw.ca

Saturday, December 18 Victoria Christmas Bird Count Come out and join us for this annual tradition!

Contact | T: 250.652.6450 | motmot@shaw.ca

Native Plant Society of BC

Thursday, November 4 Seeds of inspiration: The basics of native plant seeds with Patrick Wilson, Linnaea Nurseries From the tiny seeds of Mimulus guttatus (yellow monkeyflower) to the fruitcovered achenes of Rosa nutkana (Nootka rose) and the winged samaras of Acer macrophyllum (bigleaf maple), seeds are a source of wonder - and mystery. Join Patrick Wilson for a primer on native plant seeds, including their structure, diversity, dispersal mechanisms and more. Patrick will also talk about harvesting and storing native seeds.

Location & Time:

5251 Oak Street (37th & Oak St) in Vancouver @ 7pm In the Cedar Room at VanDusen Botanical Garden

Contact Dawn Hanna | dawnhanna[at]telus.net



Reoccurring E vents

Victoria Natural History Society

Botany Night

3rd Tuesday of each month Go to <u>www.vicnhs.bc.ca</u> to become a member and support our local Natural History Society!

Location & Time
Swan Lake Nature Centre at 7:30pm
Contact| Darren Copley|
dccopley(at)telus.net|

http://www.vicnhs.bc.ca/

Glendale Gardens

Saturday, November 20 Introduction to Basketry using Northwest Materials

This workshop with Joan Carrigan will introduce participants to weaving with western red cedar bark, west coast sweetgrass, willow bark and beargrass. Joan will cover harvesting and preparation, weaving patterns including regular and reverse twining, twill weave and x-lashing. The materials are easy to work with and participants will enjoy their lovely baskets for years to come.

Location & Time:

Glendale Gardens and Woodlands 9:30 a.m. to 4:30 p.m.

Contact Jane Tice | T: 250-479-6162



Achlys triphylla Photo provided by Virginia Skilton

Location & Time:

Thursday, December 2

Ranunculaceae: From the pretty to

the poisonous with Daniel Mosquin

Deadly poisons. Garden ornamentals.

Common weeds. Rare species. Meet

photographic and narrative account of

this morphologically diverse family of

presentation will emphasize native

elsewhere in western North America.

with a few cultivated gems from around

the world thrown in for good measure.

some of the members of the family

Ranunculaceae. Join Daniel for a

mostly temperate species. The

plants of British Columbia and

5251 Oak Street (37th & Oak St) in Vancouver @ 7pm
In the Cedar Room at VanDusen Botanical Garden

Contact Dawn Hanna | dawnhanna[at]telus.net

Next month, on November 18th, the NPSG speaker will be...

Paul Spriggs is a Victoria landscaper and horticulturalist with a passion for hiking and alpine plants. He's owned his own Victoria landscaping company, Spriggs Gardens, for more than 20 years. He will talk about his specialty, rock gardening, with an emphasis on using native plants of western North America, and about his studies of plants that are native to Vancouver Island's mountainous areas.



Volunteer Opportunities

The Anti-Ivy League of Cadboro Bay

Seapoint Dr., Saanich

Volunteer for great camaraderie, loads of fun and a feeling of satisfaction. Start up early March and finish about early November.

Location & Time:

Konukson Park on 10-Mile Point every Wed. and Sat. from 9am-12pm

Contact Harry Drage | T: 250-477-9544 | hdrage(at)shaw.ca

Brodick/Bow Park

West of Univ. Heights shopping centre off of Cedar Hill Rd

Invasive species removal and site restoration. Training and tools provided.

Location & Time:

Schedule and location may vary every Mon. 10-12pm

Contact Judy Spearing | T: 250-472-0515 |

jandd_speaing(at)shaw.ca |

www.mountdouglaspark.ca/calendare.do

Swan Lake Christmas Hill Nature Sanctuary:

3873 Swan Lake Road, Victoria

Swan Lake has a wide range of volunteer opportunities involving plants: nature interpretation, gardening with native plants, and removal of invasive plants.

Contact Robyn Burton T: 250-479-0211 |

volunteer(at)swanlake.bc.ca

Glendale Gardens Native Plant Demonstration

Garden:

505 Quayle Road, Saanich

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.

Time

Every Wednesday morning

Contact | T: 250-658-5740

NATIVE PLANT STUDY GROUP (NPSG)

(Sub-group of the registered non-profit Native Plant Society of British Columbia and is guided by a steering committee)

The NPSG 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. 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 at-large membership. Activities requiring funding must receive approval by the general membership.

Co-Chair Valerie Elliott| T: 519-0404| co-chair@npsg.ca

Co-Chair: Nathalie Dechaine
Speakers: Hilary Stead
Treasurer: Joan Varley
Newsletter: Ilana Kronick
Hilary Stead

Plant Salvage Coordinator: Todd Doherty
Membership: Agnes Lynn
Publicity: Valerie Elliott

Room Set-up: Pat & Wayne Robertson

Plant Draw: Heather Pass

List-serve: Linda Beare & John Olafson

Refreshments: Pat McMahon
Archivist: Brenda Pilon
Sustain Supporters Liaise: Christine Nykiforuk
NPSBC Liaise: Moralea Milne

Native Plant Study Group members are members of the Native Plant Society of BC.