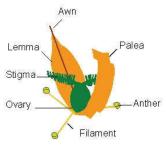


Native Plant Study Group

The flower is usually bisexual. It consists of an ovary containing 1 ovule (the female part). The ovary is usually surmounted by two feathery stigmas and is surrounded by three stamens. Each stamen (the male part of the flower) consists of an anther and a filament. There are no petals or sepals. Instead, the flower is protected by two sets of scales. The first set consists of the LEMMA and the PALEA which enclose the flower. This whole structure is called a floret.



One or more florets may be arranged on an axis (the RACHILLA), with all of the florets being protected by a second set of scales at the base called GLUMES. The glumes enclose the florets before

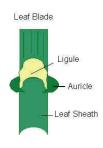


they are mature. The whole unit is called a SPIKELET. The Lemmas (of individual florets) and/or the Glumes, may have bristle-like extensions called AWNS arising from them.



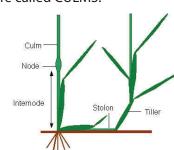
spikelet made up of 2 florets

The leaf blade is usually long and narrow, with parallel sides and veins and tapering to a pointed or blunt tip. At the



junction of the sheath and blade there is a small membranous flap of tissue called the LIGULE. This is sometimes just a fringe of hairs. In some grasses there are also projections on either side of the ligule called AURICLES. The structure and dimensions of the sheath, blade and ligule, and their hairiness provide good diagnostic features for identification.

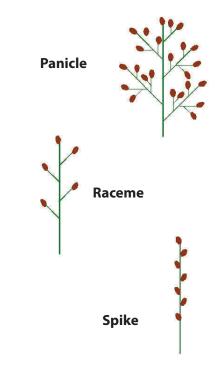
Grass Stems - are mostly hollow, cylindrical and interrupted at intervals by swollen joints or nodes. Stems are rarely branched above the ground and are called CULMS.



Some grasses have stems which creep along the surface of the ground and give rise to new shoots (TILLERS) at their nodes. The horizontal stems are called STOLONS. If the horizontal stems go underground they are called RHIZOMES.

Leaves - originate from the nodes. The lower portion of the leaf forms a sheath,

which encloses and protects the young shoots. The second half of the leaf then opens out into the leaf blade.
From: http://www.offwell.free-online.co.uk/grass_id/intro.htm



(cont from page 1) tree at Royal Roads, old enough to have been alive at the time of the signing of that historic document.

Before elections the powers that be like to announce positive green initiatives and this is an excellent time to work towards achieving specific environmental goals. With both provincial and municipal elections slated for this year (and who knows, possibly another federal election as well!), perhaps there is an opportunity for each of us to become an important, functioning cog in the machinery of preservation.



Native Plant Study Group

POLITICS & PLANTS

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 dependant on approval of the steering committee or, where indicated, by the at-large membership. Activities requiring funding must receive approval by the general membership.

Most of us enjoy native plants in our gardens and even more, in the their natural setting. We all appreciate the battles raging to protect environmentally sensitive areas and the February meeting hosted Calvin Sandborn, an esteemed lawyer at the Environmental Law Clinic who presented us with some ideas and know how on how to accomplish preservation.

Sandborn stressed the role of political activism, inspiring people to protect nature by thinking strategically and tactically. Even though individually we can feel like a very small cog in the powerhouse of politics, each voice raised in protest can contribute to positive change. During the 1970's there were plans afoot to flood the Skagit Valley which were scuttled by continuous grassroots protests. First Nations peoples gather in their regalia, host feasts and speak passionately about their history with the land to help achieve their demands. Successful activism combines protest with visual aids, to win the hearts and minds of the public. It is important to tell a story of the plants and animals, the land and its significance to garner the support of the public, politicians and panels. We were provided with examples of the weak and virtually unenforceable protective measures that are in place, such as the Forest Practices Code, where companies can argue "due diligence" and claim they are not at fault; the Wildlife Act, which protects only four species or COSEWIC, which applies only to a few species on federal lands.

Local dynamics can be crucial in attaining results. In the Victoria region, a coalition of partners worked together to prevent logging in the watershed and raised awareness with the public to successfully sell the idea of a Sea to Sea Greenbelt. Municipal level politics are often the preferred route to take to protect native plants by influence in the subdivision process of local properties through negotiations with the developers and councils, retaining green infrastructure before it is lost and prohibitive to replace. Sandborn recommended using the Community Charter to protect species at risk and combat the threat of invasive species. Liaising with land trusts such as Habitat Acquisition Trust (HAT), The Land Conservancy (TLC) and The Nature Conservancy (TNC) can preserve private lands through conservation covenants or outright purchase.

Sensitive areas inventories should be compiled to be able to quickly identify and act on any threats to these areas. Sanborn stressed that it is effective to be creative. Personalize a tree by naming it, such as the Magna Carta

SPRING 2005

April 21, 2005 - Rithet's Bog Restoration Project - Sharon

Hartwell, Project Manager

May 19, 2005 - Sylvia Pincott - The Beauty of Small Things



Native Plant Study Group



UPCOMING EVENTS

You are welcome to join any of the following outings. They are free of charge. Call Agnes Lynn at 721-0634 for more information, you can access a list of upcoming naturalist activities through cadborobaytoday.com

1 pm Gonzales Hill: Past Sat Mar 19 and Present at Gonzales Hill Regional Park

Sun Mar 20 1 pm Trail Tales at Albert Head Lagoon Regional Park

Mon Mar 21 1 pm Calls of the Wild at Road to Central Saanich Road, continue Matheson Lake Regional Park

Tue Mar 22 1 pm Bear Hill Bramble at Bear Hill Regional Park

Wed Mar 23 11 am-2:30 pm The Amazing Race at Devonian Regional Park

Thu Mar 24 10 am-1 pm Spring has Sprung at Thetis Lake Regional Park

Sat Mar 26 1 pm Wonderful Witty's at Witty's Lagoon Regional Park Sun Mar

Sun Sun Mar 2710 am-1 pm Nature Easter Escape at Elk/Beaver Lake Park

Sun Apr 10 10 am Spring wildflowers at Mill Hill with Joy Finlay and Agnes Lynn. Take the Colwood exit off Trans-Canada Highway and follow Old Island Highway. Turn right on Six Mile Road just before 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.

Sat Apr 16 Precious Wildflowers of Thetis Lake Park led by VIRAGS botanists.





Bring a lunch. Try to car-pool as parking is limited. Meet in parking lot at Horth Hill. To get to Horth Hill, take Pat Bay Highway north to Wain Road exit. Follow Wain Road west to cross over the highway, then turn right on Tatlow Road to the park entrance on right. To get to Bear Hill from Horth Hill, return to highway and go south. Turn right at Island View Road, left on Saanich Cross south on Central Saanich Road to right on Keatings Cross Road, left on Oldfield, left on Bear Hill Road to parking lot.

Sat Apr 23 at 9 am Camas Day in Beacon Hill Park.

Birding walk with Tom Gillespie 11:00 or Archaeology Walk w Grant Keddie @1:00, Wildflower Walk w Adolf Ceska @11 or 1 Walks are about 1 hour each. Meet at the flag pole atop Beacon Hill. Jointly sponsored by VNHS and Friends of Beacon Hill Park Society.

Sun Apr 24 at 10 am Spring wildflowers on Lone Tree Hill with Moralea Milne and Agnes Lynn.

Follow the Trans-Canada Highway to Millstream Road exit. Turn right on Millstream Road and continue to the iunction of Millstream Lake Road, Turn left to continue on Millstream Road to the park entrance on right.

Saturday and Sunday, April 23 and 24 10:00 a.m. to 3:00 p.m.

10th Annual Gardening for Wildlife A Native Plant Gardening Sale and **Demonstration at Swan Lake**

Over 100 species of Native Plants, as well as Seeds, Books, Bird Feeders, Nesting Boxes. Workshops, presentations, demonstrations and displays on gardening with droughttolerant native plants and developing wildlife habitat in urban settings are included in the admission price. Proceeds support the Nature Sanctuary's education programs.



WILD GARDEN PARTY PROJECT

Homes and Habitats Project in Sidney still looking for plants. As you organize your garden this spring please keep in mind that the Wild Garden Party Project of which the NPSG is a member of is still looking for plant donations. We would love any Nootka Rose, Snowberry, Oceanspray, Yarrow, or Red Flowering Currant. Anything you might have that is native and drought tolerant would be welcome. You can call or email Angela Deering at 595-5820 or angeladeering@shaw.ca about pick-up of plants or plants can be dropped off in the driveway of 3913 Saanich Road anytime. Special thanks to those who have already donated!

IDENTIFICATION BLUES

NATIVE GRASSES

Last month we examined some introduced grasses to relieve our grass identification blues. With a few of those under our belts, we can start to tackle some native grasses. One of the hardest aspects about identification of native grasses is finding some to identify. Our native grasses seem to be particularly hard hit by habitat destruction and invasive species. Some rocky knoll areas still have remnant populations of native grasses, try Lone Tree Hill, for example. My own property at Camas Hill still hosts a variety of native grasses, although it is home to many more introduced species.

A signature native grass species is Roemer's fescue (Festuca idahoensis ssp. roemeri), named for local botanical expert Hans Roemer. It is described in Illustrated Flora of British Columbia Volume 7, as a "perennial, densely tufted grass from fibrous roots; stems 30-100 cm tall, with visible nodes", while Plants of Coastal British Columbia add that the leaves are "inrolled, hairlike, soft, lax, mostly basal". It often has a thick mat of dead but not shredded leaves at the base. The flowers are an open but narrow panicle with short awns (2-6 mm). Many fescues are grown as garden ornamentals these days and maybe there is a place for Roemer's fescue in that milieu.

The native species that I confuse with Roemer's fescue, before it flowers, is **Lemmon's needlegrass** (Achnatherum lemmonii spp. lemmonii, previously known as Stipa lemmonii). The Illustrated Flora also describes this grass as "perennial tufted grass from fibrous roots, 15-90 cm tall". The blades are narrow (1-2 mm wide) and can be flat or inrolled. Fortunately the flowering heads are quite distinct from the fescue, the needlegrass having a narrow, spike-like panicle with awns that are conspicuously long and bent (20-35 mm long), while Roemer's fescue has a narrow but open panicle with 2-6 mm awns.

Another and probably our most common native grass is California oatgrass (Danthonia californica). I find it has a preference for vernally wet areas that dry out in the spring and summer and it often forms pure stands running down a hillside. Again, the Illustrated Flora describes it as "perennial, tufted grass from fibrous roots", but with "stems disarticulating (separating) at the nodes, 30-130 cm tall", so there is a very easy to identify look to the plant, with the leaves joining the stems with a very rigid angle. The leaves are wider and flatter than either the fescue or the needlegrass. I find the plant has a sort of curled look to it. Another helpful identification are the very hairy ligules, which appear at the joints or nodes. The flowerhead is also quite distinctive, with a raceme of 3-6 broad spikelets, the stems of which are longer than the flowerhead and slightly zig-zagging.

The last species of which I am somewhat familiar is **blue wildrye** (Elymus glaucus), described in Illustrated Flora as a perennial, bluish, tufted grass from fibrous roots or short rhizomes, 30-180 cm tall. It is by far the tallest of these grasses, the others all appearing short and delicate while blue wildrye is a very robust, large grass, usually forming large clumps. The flowering head is a an erect to slightly nodding spike, standing very tall over the whole plant. It is recommended for erosion control on steep and damaged terrain.

Propagation Techniques:

I have had easy success germinating Roemer's fescue and blue wildrye. Just sow and lightly cover with soil. The fescue

germinates within a month. Also easy to divide. I have had more difficulty with oatgrass for unknown reasons.

From Propagation of Pacific Northwest

California oatgrass seeds require a onethree day soak in running water and three months cold treatment. The seeds do not have a good germination rate however, once you get some started they are simple to divide while dormant.

Collect Lemmon's needlegrass seeds in early June, store in a paper bag in the fridge through summer. It is important the seed be cleaned well and remove the long awns. Cold stratify in potassium nitrate and gibberellic acid (what?!). (Planting outside in the fall probably gives it the necessary conditions to break dormancy).

Blue wildrye doesn't need any pretreatment to germinate, which is rapid, usually taking 6-10 days. The seedbed should be moist, fine-textured, very firm and weed free

Following are some of the more common terms used in grass identification: **Spike:** an unbranched inflorescence composed of stalkless spikelets arranged on a single axis.

Raceme: an inflorescence with stalked spikelets arranged along a single axis **Panicle:** a compound raceme, with spikelets arranged on branches of the main axis or on further branches of these. **Spikelet:** an individual grass flower, most inflorescences are composed of many

Awn: a slender, bristlelike appendage, usually at the tip of a structure.







Native Plant Study Group

BOOK REVIEW

building inside nature's envelope

by Andy Wasowski with Sally Wasowski, published by Oxford University Press, 2000.

Angela Deering generously offered to lend me this book when I stuck my nose into a conversation she was having. It is a quick read with valuable advise on how to build into an environment, while preserving many of the features that attract us to a landscape in the first place. Instead of the blast and clear approach favoured by some local developers, this book offers clear instructions on how to build less intrusively, from setbacks to invasive species clean-up. For anyone interested in municipal development issues or about to embark on their own building project, the book provides valuable information and the reassuring knowledge that it can be done with minimal intrusion.

IN MEMORY

Brenda Costanzo made the sad announcement of Dr. George Douglas' death at February's Native Plant Study Group meeting. I am sorry to pass on the news from Agnes Lynn that **Ruth Cleary-Dolan**, a long-time member of the Native Plant Study Group, was killed in a car accident earlier this year. She shared with many members of our group a love and appreciation of the natural world.

GARDEN VISITS

Last fall ten brave NPSG gardeners agreed to open their gardens to interested members this spring. Twenty-nine members expressed interest in visiting these gardens. These are not 'juried' gardens but works in progress and the purpose of the visits is to exchange information, advice and sympathy. The visits will take place on April 17, 24, May 1 and May 8. We will start at one garden and move as a group from garden to garden, so that people whose gardens are on display won't miss the other gardens on their day and everyone will be able to participate in the exchange of ideas. If you signed up you will have been contacted by now. If you missed the opportunity to participate last fall you can put your name on a wait list, as most gardens can only accommodate a limited number of people.

EARLY BLOOMING!!

First camas seen in bloom March 11th, fittingly enough on Camas Hill, Metchosin. Also seem in bloom that day were: rusty-haired saxifrage (Saxifraga rufidula), death camas (Zygadenus venenosus), satinflower (Olsynium douglasii), Western buttercup (Ranunculus occidentalis), shooting star (Dodecatheon hendersonii), springold (Lomatium utriculatum), small-flowered woodland star (Lithophragma parviflorum), grassland saxifrage (Saxifraga integrifolia), meadow nemophila (Nemophila pedunculata), monkeyflower sp (Mimulus sp.) fawn lily (Erythronium oregonum), blue-eyed Mary (Collinsia parviflora and C. grandiflora) and sea blush (Plectris congesta) and one or two others that remain nameless!



DOUGLAS, Dr. George Wayne Passed away on February 10, 2005 at Cowichan District Hospital, Duncan, BC. Known professionally as George W. Douglas, botanist and ecological consultant, his passing will be noticed by those concerned with the cataloguing and preservation of rare and endangered plants in the Pacific Northwest. George W. was a prolific researcher; the series on The Sunflower Family (Asteraceae) of British Columbia is part of his work. He was also proud of his contribution to the four volumes of The Vascular Plants of British Columbia (1989 1994), the Rare Vascular Plants of British Columbia (1998), the Rare Native Vascular Plants of British Columbia, 2nd Ed. (2002), eight volumes of the Illustrated Flora of British Columbia (1998 2002), numerous contributions to COSEWIC, and various books of botanical interest. In the Cowichan Valley, G. W. Douglas was one of three authors reporting on the Cowichan Garry Oak Preserve for the Nature Conservancy of Canada. A tea to celebrate the life of Dr. George Wayne Douglas will be held at Royal Colwood Golf Course (629 Goldstream Avenue, Victoria) on Sunday, March 20, 2005, from 11 a.m. to 1 p.m. Flowers are gratefully declined. Donations in his memory may be made to: Nature Conservancy Canada, 1205 Broad Street, Suite 300, Victoria, BC V8W 2A4 or to an organization of your choice involved in the conservation and preservation of nature. Condolences may be offered at www.sands-funeral.com 44525

