



SEA BLUSH ON WOODSHED GREEN ROOF

## NATIVE PLANT STUDY GROUP

## GREEN ROOF

Ruth Keogh had some misgivings about just plunking a shed on her forest property to provide protection for her kayaks from the overhanging trees. She wanted to make sure the small boat shelter was harmonious with the surrounding habitat, that it blended in and was hard to see, and that the lost footprint was recovered. She did this by enlisting two equally dedicated naturalists for her fun and creative green roof project.

It began in March, 2008, when Susan Bastin and Michael Costello arrived with two freshly-cut birch poles, a bag of quick-drying cement and a can of WD40 to be used as a wood preservative because it does not leech out into the soil. The foundation posts were installed and left to harden for two weeks. Next, the shed was built, using harvested fresh-fallen fir, oak, maple and arbutus. Now they were ready to build the roof. Ruth had envisioned a flat roof, but the trio decided it would be better for the swoop of the roof to mirror the terrain, so they fashioned fir planks into an undulating and sail-like irregular surface. A pond liner was draped on the fir and that was covered in a two-inch layer comprised of 80 per cent

red pumice and 20 percent two-year-old leaf mold and mulch.

It was quite a feat to carry buckets of pumice up a ladder, but even that job was a creative exercise, with the ladder being left in place to form part of the bucolic design and to act as a trellis for climbing plants. Ruth added micro-drip irrigation on the northeast side because the shed is in a dry and shady spot and she used slabs of old wood to keep everything from rolling off while the roof was being build.

Finally, the planting could start.

Collected fireweed seeds, lovely licorice fern and moss from a salvage site, plugs from Susan and Michael's nursery stock, potentilla, false lily of the valley, shooting stars, blue-eyed Mary, gumweed, mitella, maianthemum, rattlesnake plantain, lots of plants that don't need a lot of soil. On the northwest side she planted sedum, woolly sunflower, *Fragaria virginiana* to capture the late afternoon sun.

The greatest thrill of the project was being down at the beach, looking up and not seeing a shed at all—just the little yellow flowers of the woolly sunflower plants, looking like little floats blending in with the

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habitat and the environment. As well as giving pleasure to many people, the shed is doing a stellar job at its intended purpose of keeping the sap off the kayaks.

It's been an exciting on-going experience, and she's waiting to see if she was pushing her luck by planting camas in material that is only three inches at its deepest. For anyone interested in building a green roof of their own, Ruth recommends the book, *Green Roof Plants* by Edmund and Lucie Snodgrass. She also consulted BC standards for extensive green roofs in make her plant selections.

*Written by NPSG member Hilary Stead*



**Agoseris grandiflora** Large-flowered Agoseris

## GETTING FROM HERE TO THERE

by Peggy Young, 1981

It's time to go! To every seed-bearing plant a time comes when the newest generation of seeds leaves home. Some seeds take off as soon as they are ripe, and some remain on the parent plant for six months or more after ripening, but in the end they all set out to begin a new life in new ground. The methods they use for getting from here tot here vary widely.

They sail on the wind, float down rivers or blow like windsurfers across lakes and ponds. They hitch-hike on the fur or the feet of passing animals and travel great distances in the digestive tracts of birds. They are carried off and buried by ants or picked up and stored away by rodents. Some are shot into the air by sudden,convulsive movements of the seed-capsule and others simply drop to the ground at the foot of the plant where they grew. Some travel alone and some go in groups inside a fruit like a busload of tourists on a package tour. Every seed is furnished with the right equipment for its own particular mode of travel, and when its departure time comes, away it goes.

Transportation by air is one of the most common means of travelling, and many seeds are joined to tiny parachutes of fine hairs capable of keeping them aloft for hours. The long plumes of mountain avens, the feathery tufts of thistle-down,or the little umbrellas of dandelions can be seen in late summer blowing across the landscape like out-of-season snowstorms.

Fireweed seeds, each with its tuft of silky hairs, develop inside long, narrow capsules. When ripe, the capsule splits into four segments and the hairs expand into a dense, fluffy mass ready to be dispersed by the slightest breeze. Ripe cattail seeds, too, wait for a breeze before taking to the air; their tufts of hair, tightly packed until disturbed, expand when shaken by the wind, forcing the seeds out and away.

The mere fact of being light in weight is enough for some types of seed, and grass seeds have been encountered by aircraft flying at an altitude of over 900 metres. Orchid seeds, so small that they can be seen only with the aid of a microscope,are said to be blown like dust for hundreds of miles.

Even quiet, windless air helps some of these travellers on their way. Pine seeds, each furnished with a single broad wing, escape from the cone one at a time and come twirling down at an angle that brings them to earth a little distance from the tree they left. Maple seeds follow the same route. Joined in pairs they hang from the ends of branches until the critical moment, then break off for their rotating flight downwards and outwards, away from the parent tree. Con't on page 4

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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.

**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](http://www.crd.bc.ca/parks)

South Vancouver Island Mycological Society:  
[www.svims.ca](http://www.svims.ca)

Vancouver Island Rock and Alpine Society:  
[www.virags.ca](http://www.virags.ca)

Swan Lake & Christmas Hill Nature Sanctuary:  
[www.swanlake.bc.ca](http://www.swanlake.bc.ca)

Victoria Natural History Society: [www.vicnhs.bc.ca](http://www.vicnhs.bc.ca)  
Native Plant Society of BC:  
[www.npsbc.org](http://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 the-lynns at shaw.ca or 250-721-0634 if you need more information.

Check the VNHS website for events at [www.vicnhs.bc.ca](http://www.vicnhs.bc.ca)

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.*

Please visit our lovely website: [www.npsg.ca](http://www.npsg.ca)

*Designed and maintained by NPSG co-chair Valerie Elliott, co-owner of design company id2 (id2.ca). Thanks Valerie and Stephan for the superb work and generous commitment!*

**Sun May 24** VNHS Wild Side of Madrona Farm  
Enjoy the beautiful wildflowers and the special birds that spend time in the higher reaches of this property. Birding starts at 7:30 a.m. and botanizing at 10:00 a.m.



*Delphinium menziesii* Larkspur

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We may also spend some time in Mt. Douglas Park. During our visit, Natalie and David will be able to tell us about what they have been doing in recent years with the property and their hopes for the future of the land. Please be aware that the areas where we will be meandering are steep. Meet at 4317 Blenkinsop Road. Carpool or bike or bus to the event as parking is limited.

## **Fri May 29** Plants and Birds of Cattle Point and Uplands Park

This is an area of interest both to botanists and birders so we'll enjoy some of each. Dr. Chris Brayshaw spent many years documenting the rare plants in this area so we will try to find some of these as well as enjoy the birds along the way. Cattle Point/Uplands Park is on Beach Drive between Oak Bay and Cadboro Bay. Meet at the nature sign at the Cattle Point waterfront parking area at 10:00 a.m. Bring a snack and a drink if you wish.

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

**Sun June 14** San Juan Ridge Adventures  
Enjoy the *Erythronium montanum* and other early sub-alpine flowers. The prime purpose of the event is to scout for the Breeding Bird Atlas but we'll enjoy flowers and birds equally. Be prepared for cold and/or

wet weather and bring gumboots in case we have time to stop at the bog. Some rough ground and, potentially, a reasonably steep hike at a slow pace. Bring lunch, snacks and lots to drink for the day-long outing, starting in Victoria at 8:00 a.m. You

must pre-register for this trip due to transportation limitations and potential change of plans due to snow cover. Guaranteed spot if you are willing to bring your 4-wheel drive for carpooling!

**Sat June 27** CRD Parks 12:30-2 pm  
Weeds of the Sea  
Seaweeds are the forests of the marine world. Find out how important marine algae can be – not just for the sea's creatures,

but also for you and me! We'll amble along the beach and explore treasures washed ashore.

Be prepared to get your feet wet (bring sandals or beach shoes). Meet at the information kiosk at the end of Witty Beach Rd.

## **July 16 - July 18** Botany BC

In 2009 Botany BC will be centered out of Munchos Lake in the northeast corner of BC. Information about registration and the program will be found, as it becomes available (Feb/Mar '09), on the Botanical Electronic News website at:  
<http://www.ou.edu/cas/botany-microben/>

*The Native Plant Study Group meets on the third Thursday of the month from Sept through May except Dec at 7 at the MacLaurin Building, UVic. Please join us. Membership fees are \$15.00 annually or a \$2.00 charge for drop-in. Check Room Schedule for new meeting locations.*



*Saxifraga cespitosa* Tufted Saxifrage

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## GETTING FROM HERE TO THERE Con't

Seeds enclosed in fleshy pulp are often given a free ride by birds and mammals (especially by bears, whose taste for sweet things is notorious). The seeds of countless berries and other soft fruits travel inside the creatures that eat them until finally, softened and conditioned by the digestive juices of their carriers, they are deposited far from their point of origin.

Some hitchhiking seeds come equipped with hooks, barbs or bristles that fasten onto anything that brushes against them. Buttercup, wild carrot, bedstraw and forget-me-not are among those that use this method of getting away. Burdock's hooked burrs are perhaps the most difficult to dislodge of all these hangers-on, although the long narrow fruits of sweet-cicely are almost equally tenacious and cling to the clothing of hikers in the woods as if with a life of their own.

Seeds that travel by water usually possess a hard outer covering that remains impermeable until the seed has had time to reach some far shore. The yellow pond lily uses a complicated system whereby the seeds ripen underwater and are released singly, each one surrounded by a layer of jelly filled with air bubbles.

They drift around on the surface of the water until the jelly melts, the bubbles burst, and the seed sinks to the lake bottom in some new spot.

Sometimes the journey from home is abrupt and explosive. Broom seeds are violently propelled into the air when the pod suddenly splits and twists with a sharp crack - one of the memorable sounds of summer. Violet seeds are borne in capsules which split when ripe into three narrow segments. The sides of the segments gradually contract, squeezing the seeds out one at a time with enough force to send them flying. Wild geranium seeds develop at the ends of carpels that are held like springs under tension. The springs suddenly break loose at one end and, like little catapults, hurl the seeds aloft. This trip that every seed must make is based on the fundamental concept of the continuation of the species. Millions of years of evolution have produced the adaptations that theoretically enable each individual seed to reach the precise spot best suited for its germination and growth. The fact that very few of them actually survive and grow to maturity is be

side the point - at the start, when it first begins its once-in-a-lifetime journey, every seed is superbly equipped for its own particular method of getting from here to there.

Reprinted from the defunct magazine *Wildlife Review*, Autumn 1981 issue.

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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 at-large 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