

NPSG
OCTOBER
2006



NATIVE PLANT STUDY GROUP

GREEN, SOD, TURF, ECO OR LIVING ROOF

Adam Weir is an owner/operator of the local landscape and green roof design/build company, Paradise Cityscapes. Unfortunately I missed the September meeting and instead of writing about Adam's experiences, I have lifted "whole cloth" some pieces from the following website:

http://www.canadiangardening.com/howto/ideas_green_roofs.shtml

My apologies to Adam for any inaccuracies or points missed.

Known from previous times as soddies or dugouts and used by early Inuit, Danes, Norse, and Plains Indians, living roofs have been around for hundreds or thousands of years. Buildings in the Orkney Isles of Scotland from 3600-2500 years ago are thought to have been constructed with sod roofs. In bitterly cold climates with few trees, using turf was an pioneering way to stay somewhat warm and dry. Of course, modern construction practices eliminate rotting timbers; leaking, dripping mud; and snakes and rats that found equal comfort in a sod roof. Nowadays, living roofs have been engineered to withstand the additional weight, moisture and rooting capabilities of a rooftop garden. Living roofs provide insulation properties, both from temperature and sound; they perform

stormwater run-off mitigation; they decrease the "heat island" effect of concrete and asphalt in urban areas; they supply oxygen; they provide habitat for invertebrates and they can be used as a safe site to grow some rare plants.

The industry divides green roofs into two main categories, extensive and intensive roofs. Extensive roofs have shallower soil (to 12 cm or 6 inches) and use plants adapted to droughty conditions. In Metchosin we have planted (with Adam's advise and labour), an intensive living roof on the new municipal Pavilion and on my woodshed roof. Both have done well with very minimal (once) supplemental watering. Sedums, farewell-to-spring, sea blush, onions, and long-stoloned sedge have all preformed well. The roof was a riot of pink in late spring and as the forbs died back under the summer's relentless drought, the long-stoloned sedge and sedums remained tidy, neat and green. Already the fall rains have germinated the sea blush seeds. Intensive roofs have deeper soil that will support perennials, some shrubs and trees. They need more management and frequent watering.

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“Green roofs must be installed by experienced professionals. Be prepared to pay \$10 to \$15 per square foot for material and installation (depending on how accessible the roof is), including the cost of plants, which generally runs about the same as it would for a ground-level garden. Drought-resistant sedums or appropriate native plants work best. Before you call a professional, make sure your roof is:

- in excellent condition, with absolutely no leakage
- meets local load-bearing requirements, generally 50 to 100 lbs. per square foot.
- either flat or has a pitch not exceeding 30 degrees.

The simplest green roofs are composed of three layers installed over the basic roof:

- a drainage layer made of a springy, porous material.
- filter cloth, sometimes called landscape fabric.
- specially prepared soilless mix, which is lightweight, resists wind displacement, retains water and is sometimes impregnated with a slow-release fertilizer.

For information on constructing your own green roof, be it for a doghouse, woodshed, cobb workshop or eco-home, contact Adam Weir at Paradise Cityscapes, 3515 Quadra Street, Victoria, BC V8X 1H1 (250.386.9900)

SCHEDULE OF SPEAKERS

The NPSG meets the 3rd Thursday Sept-May (excluding Dec) at 7:00 pm in Room D116, MacLaurin Bldg., UVic.

November 16

Andy MacKinnon

Join renowned local author of *Plants of Coastal British Columbia* and global authority on Coastal Douglas-fir forests (CDF), Andy MacKinnon as he speak on the international importance of our coastal Douglas-fir forests and Garry oak ecosystems, the rarest forests of Canada and the best remaining examples of CDF in the world.

January 18

Dr Richard Winder

Fall rains bring thoughts of fabulous fungi, but spring is also a season that harbours delectable mushroom delicacies. Join Richard Winder, director with SVIMS (South Vancouver Island Mycological Society) on an ecological and identification journey into the world of mushrooms.

VOLUNTEER OPPORTUNITIES

Garry Oak Restoration Project (GORP)

Volunteers Appreciated! All Dates are on a Saturday from 9:30-11:30 am except where noted.

Oct 21: Feltham Park:

Remove ivy and daphne

Oct 28: Little Mt Douglas

Remove broom

Nov 4: Chatterton Hill Park

Remove invasives & mulch

Nov 18: Mahon Brook

Sheet mulch

Nov 19 (SUNDAY): Feltham Park

Remove ivy, blackberries and ivy

Nov 25: Camas Park:

Remove invasives, mulch

Dec 2: Wetherby Park:

Remove invasives, mulch

To volunteer contact Nathalie Dechaine at dechainn@saanich.ca or 475-5475



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MUSHROOM MUSINGS

When the summer gardens begin to lose their glory and long hot days give way to cool misty weather—the first autumn rains drench the baked earth and set in motion the emergence of many forms of mushrooms. Invisible throughout most of the year, unknown to many and yet stretching like the veins of life almost everywhere that plants grow, mushrooms evoke both delight in the subtle pleasures of autumn and a sense of dread to the uninitiated.

If you compare mushrooms to marigolds, the underground, threadlike portion of the mushroom or mycelium can be compared to the roots, leaves and stem of the marigold and the mushroom as we recognize it, is like the flower holding within it the potential of reproduction. And it is that “flower” or fruiting body, that can be relished as an epicurean delicacy or feared as a deadly poison.

By decomposing organic matter to free up essential nutrients or by supplying these nutrients through a mutually beneficial relationship with other plants, mushrooms and their kin contribute to the well-being of our planet. The health of almost all plants from the mighty Douglas fir to the stately white pine forests, from Scottish heathers to wild blueberries, from red barked arbutus to exquisite orchids, depend on relationships with mushrooms.

Jelly babies, dead man’s foot, purple fairy club, witch’s butter, turkey tail, destroying angel and shaggy mane are some of the evocative names used to



TURKEY TAILS
TRAMETES VERSICOLOR

conjure the myriad shapes, extraordinary colours and fearsome properties you can discover on an early autumn journey through your local woodland. Why not to bring a small sketchpad or a camera to capture the magic of their variety?

To many people the first question is: is it safe to eat? At one time toads were considered to be poisonous and by just sitting on a toadstool, they could imbue it with their toxins. The old distinction that mushrooms were safe and toadstools were poisonous has been debunked and they are now all considered mushrooms. If you are interested in exploring the fungal world, buy a field guide, go on several field trips with an specialist to thoroughly acquaint yourself with the different varieties and, to save your sanity, leave the LBJ’s or little brown jobs to the experts.

Although mushrooms are commonly associated with fall rains, the end of winter also heralds the appearance of some well known spring fruiting mushrooms. Investigate our local forests and exclaim over the colourful and poisonous *Amanita muscaria*, upon which the caterpillar of “Alice in Wonderland” fame was pictured; search diligently for the delectable black morels (*Morchella* sp) occasionally associated with the incomparable calypso orchid (often found in burnt over open spaces) and investigate small humps in the forest duff for that other black gold-truffles, sometimes found under oak trees. In fall, explore carefully near spruce and hardwoods such as birch and oak for king Bolete (*Boletus edulis*) prized in Italy as the porcini mushroom; sniff the gills of



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the pine mushroom (*Armillaria ponderosa*) for its cinnamon-like defining scent; and in our Pacific Northwest, the coniferous forests are the preferred habitat of chanterelles (*Chantarellus cibarius*), one of the most favoured mushrooms in North America.

Whether you search as a beginner or an expert, for food or for interest, mushrooms can beguile you with their beauty, their astonishing forms and their palette of colours, extending from the understated and subtle shadings of cream and brown to the obvious and vivid, yellows, reds and greens. A feast for the eyes as well as the stomach.

This piece was originally written for my sister, April Cornell, with permission to reprint.

MEMBER'S PRESENTATION

Ken Wong, ever knowledgeable and enthusiastic, informed members of his experiences growing shiitake (*Lentinula edodes*) mushrooms on hardwood logs. The Chinese name for shiitake is xianaggu, which translates as fragrant. According to the Western Biologicals flyer they are "the most extensively cultivated mushroom in the world", appreciated for their "meaty texture and flavour". In addition to being "a source of B vitamins, minerals and protein", they are attributed to "lowering blood cholesterol, immune system stimulation and anti-tumour activity" and prevent premature aging. And for all you vegans, it is a natural source of vitamin D.

Ken grows his health giving fungi on oak logs which need at least a 4-10 inch diameter and 2.5-3 ft in length. Maple or alder may be used but the denser hardwoods can keep producing for up to 6 yrs while the softer woods might last only 3 years. In spring or fall he purchases

the shiitake mycelium plugs from Western Biologicals, drills holes 6 inches deep into the logs in a diamond pattern, inserts the plugs, covers the logs with oak leaves and sprays to increase humidity-once a week in summer.

The spawn will take approx. 18 months before mushrooms appear but can continue fruiting

for years. Shiitakes can be eaten fresh, baked, grilled, or used in soups and stir-fries. Pulling apart or tearing the mushroom helps preserve the flavour.

To purchase mushroom spawn and paraphernalia of various sorts, contact Western Biologicals, Box 283, Aldergrove, BC, V4W 2T8 Tel: 604-856-3339

BOOK REVIEW

**Prairie Phoenix by
Bonnie J Lawrence
& Anna L Leighton**

A beautifully conceived and executed

book documenting the history, biology and ecology of the Western Red Lily, *Lilium philadelphicum*. Chock-a-block full of historical and present day photos, drawings and sketches of the landscape that nurtures and sustains the provincial flower of Saskatchewan as well as many easy to follow diagrams and maps. The two authors spent 10 years researching the secrets of the red lily, discovering and understanding the interactions between the lily and its climate, location, predators and human settlement. Particularly interesting is the role of fire on the landscape, perhaps there are lessons that can be applied to our Garry oak ecosystems.



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EVENTS and OUTINGS

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

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

Oct 20, Friday, 7 pm Restoring Our Communities by Taking Back the Maps. A Community Happening with Briony Penn. Royal Roads Continuing Education. <http://www.royalroads.ca/continuing-studies/GLAE1108-Y06.htm>

Oct 21, Sat., 2-4 pm, Greywater Systems Workshop. Compost Education Centre, 1216 North Park St. \$15. 386-WORM to register.

Oct. 21 Sat., Musical Hats
A night of food, drinks & musical acts benefiting Habitat Acquisition Trust. We're celebrating 10 years of conservation legacies. White Eagle Hall, 90 Dock St, James Bay. \$20, \$12 with membership, \$16 students. Tickets at HAT, 620 View St or Wilderness Committee Store 651 Johnson. Geoff Huber 995-2428 hatmail@hat.bc.ca

Oct. 22, Sat., 9:30 -3 pm Herb Walk: Learn How to Identify, Harvest and Use Local Herbs, with Don Ollsin. \$ 75 + GST Royal Roads Continuing Education <http://www.royalroads.ca/continuing-studies/GLNA1118-Y06.htm>

Oct 22, Sat., 10 am The Important Role of Trees with Rob Duncan, Forestry specialist at Sierra Club. Wander Goldstream Park and Mount Finlayson while exploring both the role of trees in climate change, and their importance to the fate of endangered species. Meet at Goldstream main parking lot. \$5 by donation. Sierra Club contact Tracie at 415-6071

Oct 28, Sat. 9:00-5:00 Identifying Mushrooms
Join mycologist Rob Countess for this extensive,

eight hour workshop. Hand-outs will be provided. Please bring a mug, bag lunch, bucket or basket for collecting and dress for the weather. Pre-registration required. *Cost - \$50, Friends of Swan Lake \$45.*

Oct 29, Sun. 10:00-4:00 Wild Mushroom Show
A special presentation by the South Vancouver Island Mycological Society. Discover the world of wacky and wonderful mushrooms of Vancouver Island. A huge variety will be on display. Bring your specimens for identification by members of the Mycological Society. Admission by donation.

Oct 29, Sun. 8:00-5:00 Mushroom Foray
Learn to identify mushrooms in the field, with a focus on edible mushrooms. This full day workshop takes place in the Cowichan Lake area. Hand-outs will be provided. Please bring a mug, bag lunch, bucket or basket for collecting and dress for the weather. Pre-registration required at countess@island.net - Cost \$80/person (includes transportation) Meet at Helmcken Park-and-Ride at 8:00 am.

Nov 2, Thurs., at 7 pm Monthly SVIMS Meeting at Pacific Forestry Centre
Mushroom Identification DVD by Taylor Lockwood
<http://www.fungiphoto.com/Treasurechest/MIT/mit.html>

Nov 5, Sun., from 9 am-noon
Saanich's 12th Annual Tree Appreciation Day
Plant 100 Garry oaks. Bring your shovels, and gloves and dress for the weather. Refreshments will be provided. Meet at the Cedar Hill Golf Course Clubhouse at 1400 Derby Road. Contact Cathy Weston at: westonc@saanich.ca or 475-1775, ext. 3506

Nov 26, Sun., 1:00-4:30
Landscape Design with Native Plants
Pat Johnson and Christina Nikolic are teaming up for a workshop on garden design with native plants. Pre-registration required. *Cost - \$40, Friends of Swan Lake \$36.*

Check out **CRD Parks** great line-up of fall hikes and activities at:
www.crd.bc.ca/parks/documents/2006_fall_programs.pdf

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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.

Victoria Area Native Plants That Can Be Used For An “Extensive” Living Roof

<i>Carex inops</i>	Long-stoloned sedge
<i>Stipa lemmonii</i>	Lemmon’s needlegrass
<i>Danthonia californica</i>	California oatgrass
<i>Luzula multiflora</i>	Many-flowered wood rush
<i>Sedum spathulifolium</i>	Broad-leaved stonecrop
<i>Sedum oregonum</i>	Oregon stonecrop
<i>Allium cernuum</i>	Nodding onion
<i>Allium acuminatum</i>	Hooker’s onion
<i>Clarkia amoena</i>	Farewell-to-spring
<i>Plectris congesta</i>	Sea blush
<i>Potentilla chiloensis</i>	Coastal strawberry
<i>Olsynium douglasii</i>	Satinflower
<i>Sisyrinchium angustifolium</i>	Blue-eyed grass
<i>Camassia quamash</i>	Common camas
<i>Mimulus alsinoides</i>	Chickweed monkeyflower
<i>Saxifraga rufidula</i>	Rusty-leaved saxifrage
<i>Saxifraga cespitosa</i>	Tufted saxifrage
<i>Saxifraga integrifolia</i>	Grassland saxifrage
<i>Lithophragma parviflorum</i>	Small-flowered woodland star
<i>Selaginella wallacei</i>	Wallace’s selaginella
<i>Polytrichum</i> species	Haircap moss



CLARKIA AMOENA
FAREWELL-TO-SPRING

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