



Botanical Society of Western Pennsylvania

If the weather is inclement, a BSWP meeting will cancel if Carlow University cancels classes. To learn if that has happened, call the Carlow Weather Line at 412-578-6677.

Holiday Party & Book Auction!

Be sure you've marked your calendar for the third, not the second, Monday of December to attend this holiday event.

Our annual Christmas Party will be held Monday, December 15, 7:15 p.m., at the Atrium of the A. J. Palumbo Hall at Carlow College, 3333 Fifth Avenue, Pittsburgh, PA (Oakland). As you approach the campus on Fifth Avenue (heading toward downtown), do not turn right into the Carlow Campus entrance. Instead, pass the entrance, stay in the right lane, and make the immediate right into the parking area. Park here and cross the street. Place a note on your dashboard saying "Botanical Society Meeting," or use your parking permit.

For the Wild Foods Holiday Party, members and guests bring an assortment of foods made from something found in the wild. Appetizers, cookies, candies, fruits, and berries: a challenge for the most daring and the most creative. Don't stay away if you have nothing to bring, for there will be plenty!

A wide variety of botanical and nature books from the collection of late member Virginia Phelps were donated to the BSWP, including general field guides, quality coffee table books, text books, regional field guides, and floras of notable

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January & February Meetings

Meetings are held on Mondays at 7:15 p.m. at Kresge Theater, Carlow University, 3333 Fifth Avenue, Pittsburgh, PA (Oakland). Kresge Theater is on the top floor of the Grace Library and is accessed from the upper campus. Place a note on your dashboard saying "Botanical Society Meeting," or use your parking permit.

JANUARY 12. Dr. Walter Carson will give a talk entitled "Threats to Preserving Eastern Deciduous Forest Biodiversity: How changes in fire regimes, browsing regimes and exotics threaten our local ecosystems".

Dr. Walter Carson is an Associate Professor at the University of Pittsburgh and received his PhD in 1993 from Cornell University. His research interests focus on testing theories in community ecology, specifically those theories that hone in on the mechanisms generating community composition, coexistence, complexity, and the maintenance of species diversity.

Currently he is conducting several studies involving plant community ecology. One study in Panama and Costa Rica examines the question of whether mammals and insects promote the maintenance of high species diversity in tropical forests. Another study in Minnesota tests the hypothesis that native specialist insects

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Wildflowers, Bulletin of the Botanical Society of Western Pennsylvania, is published bimonthly by the Botanical Society of Western Pennsylvania. We welcome short articles of botanical interest, drawings, and notices of botanical events and group activities. Send to the editor at the address below. Deadline for submissions is the 16th of the previous month. **Wildflowers** is printed on recycled paper.



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The Society meets the second Monday of each month, September through June, at 7:15 p.m. sharp, at Kresge Theater, Carlow University, 3333 Fifth Avenue, Oakland. All are welcome to the informative program and business meeting.

MEMBERSHIP INFORMATION

Annual dues are \$10 for individual and \$15 for family. Students can join at half-rate. To join, mail your name, your address, and check payable to "Botanical Society of W PA" to Judy Boyer, 211 Lee Avenue, Pittsburgh, PA 15237. Your membership includes a subscription to the bimonthly bulletin *Wildflowers*.



The Botanical Society was founded in 1886.

The object of the Society shall be to bring together those who are interested in Botany and to encourage the study of this science and a knowledge of plants.



PHIPPS' ANNUAL BOTANY IN ACTION DAY

SATURDAY, FEBRUARY 7

Phipps' Botany in Action program supports graduate students studying botany and ethnobotany (the study of how people use plants) in natural areas around the world. Program participants strive to preserve biodiversity and foster plant conservation so there will be time to tap the unknown power of the plants they find in these little-known areas while the plants can still be found. Students have worked in Cuba, Guatemala, Panama, Polynesia, Costa Rica, Cameroon, Madagascar, Tanzania, West Virginia, and even Pennsylvania.

Botany in Action students also serve as role models, encouraging youth involvement in botany and research. Once a year, students share their newfound knowledge at Phipps and in local schools through interactive programs that give participants a glimpse of a world they might not ordinarily see. Join some of the current participants on Saturday, February 7, as they share their research with you. Call 412-441-4442 ext. 3925 for a complete schedule or go to www.phipps.conservatory.org.

Botany in Action is supported by Garden Club of Allegheny County, The Jewish Healthcare Foundation, BSWP and many private individuals in our region.

A SAMPLING OF BOOK TITLES

Holiday Party Silent Auction Offerings

If you've read the announcement on the front cover about the upcoming Holiday Party to be held on Monday, December 15, then you already know that late member Virginia Phelps' donated book collection will be available to you at a silent auction to be held that night. There are nearly 100 books, so the following list highlights just a few of the many you can purchase if yours is the winning bid for any given book.

- Anderson, Frank J. *An Illustrated Treasury of Orchids*. Crown Publishers, 1979.
- Bailey, L.H. *How Plants Get Their Names*. Dover Publications, 1963.
- Blanchan, Neltje. *Wild Flowers Worth Knowing*. Nelson Doubleday Inc., 1924.
- Case, Frederick W. *Orchids of the Western Great Lakes Region*. Cranbrook Institute of Science, 1964.
- Correll, Donovan Stewart. *Native Orchids of North America*. Chronic Botanica Company, 1950.
- Craighead, Frank C. *Orchids and Other Air Plants of the Everglades National Park*. Univ. of Miami Press, 1963.
- Curtis, Carlton C. *A Guide to the Trees*. Greenberg Publisher Inc., 1925.
- Dana, Mrs. William Starr. *How to Know the Wild Flowers, a Guide to the Names, Haunts, and Habits of our Common Wild Flowers*. Charles Scribner's Sons, 1898.
- Gleason, Henry A. *The New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*, 1952. 3-volume set.

CONGRATULATIONS TO THE EMMERICHS!

Members Werner and Eva Emmerich were presented the Volunteer Couple of the Year award at the annual Westinghouse SURE meeting. The purpose of the event was to celebrate and honor Westinghouse retirees who provide member and community services. In between Botanical Society field trips, meetings and her gardening, Eva has found time to serve as a docent as Phipps, and as a volunteer at the Pittsburgh Zoo and a local food bank. Retired engineer Werner volunteers at the Carnegie Science Center.

Werner and Eva have been members of the Botanical Society since 1989.

In Memoriam

Member Betty Davis died after a long illness on September 25, 2008. She was an avid Pennsylvania master gardener and, in the words of husband Glenn, "everyone who got to know her loved her." Betty and Glenn celebrated their 40th anniversary on September 14, 2008. Memorials may be made to Doctors Without Borders, PO Box 5022, Hagerstown, MD 21741.

- Horn, Elizabeth L. *Wildflowers 3, The Sierra Nevada*. The Touchstone Press, 1976.
- Lemmon, R.S. & C.C. Johnson. *Wildflowers of North America*. Nelson Doubleday Inc., 1961. In full color.
- Mazzeo, Peter M. *Ferns and Fern Allies of Shenandoah National Park*. Bulletin 6, The Shenandoah Natural History Association Inc., 1972.
- Mazzeo, Peter M. *Trees of Shenandoah National Park in the Blue Ridge Mountains of Virginia*. Bulletin 3, The Shenandoah Natural History Association Inc.
- Munz, Philip A. *California Spring Wildflowers, From the Base of the Sierra Nevada and Southern Mountains to the Sea*. Univ. of California Press, 1961.
- Nelson, Ruth Ashton, revised by Roger L. Williams. *Handbook of Rocky Mountain Plants*, 4th edition. Robert Rinehart Publishers, 1992.
- Peattie, Donald Culross. *Green Laurels, the Lives and Achievements of the Great Naturalists*. The Literary Guild, 1936.
- Peterson, Edwin L. *Penn's Woods West*. Univ. of Pittsburgh Press, 1958.
- Rickett, Harold William. *Wild Flowers of the United States* Volumes 1–6. New York Botanical Garden.
- Stausbaugh, P.D. and Earl L. Core. *Flora of West Virginia* (in 4 parts). West Virginia Univ. Bulletin, 1952, 1953, 1958, 1964.
- Weber, William A. *Handbook of Plants of the Colorado Front Range*. Univ. of Colorado Press, 1961. (Good condition, flora w/keys).

A Nose for Natives

CAN DOGS HELP LOCATE RARE PLANTS? *By Jen Newlin Bell*

Rogue prefers his steak medium-well. But when it comes to sniffing out a rare plant, this dog performs work that's very well done, indeed.

The 4-year-old Belgian sheepdog is part of a Nature Conservancy collaborative project to test the efficacy of using dogs to sniff out the threatened Kincaid's lupine. The plant is host to the endangered Fender's blue butterfly, found only in Oregon's Willamette Valley.

Using detector dogs for such inventory work is new territory: No one's tried it before.

But since dogs use their remarkable sense of smell to uncover illegal drugs or locate missing persons, why not use them to help find and protect endangered plants and animals?

Rogue's reward for finding the correct plant? That steak. (Or sometimes mackerel.)

CAN DOGS DO A BETTER JOB THAN PEOPLE?

The project was the idea of Greg Fitzpatrick, steward for The Nature Conservancy in Oregon. The Conservancy has been working for more than a decade to improve habitat for the Fender's blue in Willamette Valley, where less than 2 percent of historic upland prairie and oak habitat remain.

For the rest of this story, please go to <http://www.nature.org/oregon>, where you'll see a link to the story (as well as see a slideshow and view a video). The article first appeared on The Nature Conservancy's web site, <http://www.nature.org>, this summer. Jen Newlin Bell is a writer and graphic designer for The Nature Conservancy.

If you do not have home access to the internet, consider asking a fellow member to print the story for you.

Searching for Rose Pogonia

PLANTS OF THE NEW JERSEY PINE BARRENS by Amanda Haney

For years, I have lusted after orchids of the New Jersey Pine Barrens. Finally, in early July, I began my quest. Pine Barrens is an unusual habitat comprised of acid sand with a high water table and numerous small rivers. The characteristic black *cedar water* is acidic from iron and tannins from **Atlantic White Cedar** (*Chamaecyparis thyoides*) and other evergreens. The New Jersey Pine Barrens comprises over one million acres, of which one third is public land.

We began our quest in Wharton State Forest, the largest section of public land within the Pine Barrens. We hiked Tom's Pond Trail, which starts at Batsto Village and follows the winding Mullica River. Rare plants are common. **Golden Club** (*Orontium aquaticum*) blooms in early spring, but a large patch of leaves was visible in a damp area along the river with **White Water-lily** (*Nymphaea odorata*) and lavender **Canby's Lobelia** (*Lobelia canbyi*). White stars of **Lanceleaf Rose Gentian** (*Sabatia difformis*) hung in masses over stream



Grass Pink (*Calopogon pulchellus*)

banks. Numerous small bogs showcased **Pitcher Plant** (*Sarracenia purpurea*). Three varieties of sundew (*Drosera intermedia*, *Drosera rotundifolia* and *Drosera filiformis*) were in bloom, including charming pink **Thread-leaved Sundew**. One **Fibrous Bladderwort** (*Utricularia fibrosa*) waved its extra-large yellow bloom from atop a beaver dam. On a tiny island near the dam, **Meadow Beauty** (*Rhexia virginica*) displayed large rose flowers. A spray of pale pink **Swamp Azalea** (*Rhododendron viscosum*) was still visible. Vivid red mushrooms glowed in boggy spots. However, no blooming orchids appeared. A conversation with a ranger later revealed the reason: as quickly as a flower appears along a trail, a hole develops soon after.

Drier parts of the trail were covered in **Jersey Scrub Pine** (*Pinus virginiana*) and **Pitch Pine** (*Pinus rigida*) that give the Pine Barrens its name. In open areas, delicate white blossoms of **Pine Barrens Sandwort** (*Arenaria caroliniana*) were in full bloom. In sandy places, deer flies were overwhelming and we were glad for long sleeves, in spite of the heat. **Black Huckleberry** (*Gaylussacia baccata*) and mounds of lichens were common.

The next day we headed east toward Webb's Mill Bog with high hopes. Since beavers had recently built a dam in the area we hoped

that water damage was minimal. Fortunately, the dam had been removed and the beavers had left. The short brushy trail to the quarter-mile boardwalk is tick territory and hides the bog from plant thieves. Finally my goal: pink orchids were everywhere. **Rose Pogonia** (*Pogonia ophioglossoides*) and **Grass Pink** (*Calopogon pulchellus*) grew right against the boardwalk. Pitcher plants and all three varieties of sundew were scattered throughout the bog. A photographer pointed out the rare and hard-to-spot **Curly-grass Fern** (*Schizaea pusilla*). Trees lined the drier edges, mainly **Red Maple** (*Acer rubrum*), **Atlantic White Cedar**, **Red Cedar** (*Juniperus virginiana*) and **Pitch Pine**. Yellow flowers of both **Fibrous Bladderwort** and **Horned Bladderwort** (*Utricularia cornuta*) brightened the wettest places. Dotting the scene were fuzzy cat's paw-like heads of **Golden Crest** (*Lophiola americana*). Tall yellow spikes of endemic **Bog Asphodel** (*Narthecium americanum*) grew in large patches. The bog, which includes the intersection of both northern and southern plant species, was the most botanically varied I have ever seen.

At least 29 species of orchids are found in the Pine Barrens and I've seen only two. I plan to return.

ENVIRONMENTAL BOOK CLUB MEETINGS

The Environmental Book Club meets at Borders Book Store on McKnight Road in North Hills on the first Monday of the month at 7:30 p.m. It is not compulsory to have read the book or bought the book here. Borders also makes the books available to us at 20% discount.

Upcoming meetings and books:

- Monday, December 1— *The World Without Us* by Alan Weisman
- Monday, January 5— *Robbing the Bees* by Holley Bishop

Contact Kim Metheny with any questions: kmetheny@hotmail.com.

Enjoy Your Wildflowers

WINTERBERRY by Anne S. Bahl

Mid to late autumn is the time to visit Pennsylvania's botanical gardens, state parks, and woodlands to see Winterberry in fruit. It is a large deciduous shrub with many twiggy branches that crisscross each other and form a dense plant up to ten feet high and eight feet wide. It is reputed to produce more berries than any other Holly, and Holly has more than four hundred species and many cultivars. Pennsylvania has six species, two almost throughout, one of which is Winterberry, and four with a limited presence.

Hollies are *dioecious*: Greek, two houses; the female and male reproductive organs are on separate plants. The flowers grow from the leaf axils, two or three for males, up to ten for females. For pollination to be achieved, both must be blooming at the same time. Winterberry blooms in June. Its flowers are white, 1/4-inch, with four petals. Female flowers have a round ovary in the center, male flowers have four stamens extending outward between the petals. Wind and bees are known pollinators; there may be others. When grown horticulturally, a branch of a male plant may be grafted to the female, so only one plant is required, a boon to people who do not have space for two.

The leaves are dark green, smooth above and slightly fuzzy reversed, up to three inches long and without spines. Occasionally leaves will have lenticels, tiny pores, visible through a microscope, for exchanging gases. The leaves shelter the berries. By August the berries have their color but the leaves remain. Eventually there is frost, the leaves turn black or yellowish, then fall.

Now Wintergreen's bright red-orange berries are displayed; they resemble bracelets on the stems. They are ready for the gasps of visitors. Depending upon the weather, wildlife and humans, some berries may remain beyond February. The berries are not for people. Birds and animals, as individual species, seem to choose whether or not they eat them in specific habitats.



Ilex verticillata

Winterberry's botanical genus name is *Ilex*, Latin, given by the poet Vergil to the Holm Oak. Linnaeus transferred it. Its species name is *verticillata*, Latin, whorled, for the berries encircling the stems. The Holly family is *Aquifoliaceae*, Latin for point, leaf, for the spines many Hollies have on their leaves.

In the wild Winterberry usually grows in moist to wet areas such as bogs, marshes, along streams and shores, in wet woodlands, even with their roots in water. As horticultural plants they adapt to other habitats.

Anne S. Bahl illustration

Yes, please renew/initiate my/our annual BSWP membership!

Name(s) _____

Street Address _____

City, State, Zip _____

E-mail Address _____

New member? Yes No OR: New mailing address? Yes No

Your check of \$10/person or \$15/family is payable to the BSWP.

It's that time of the year ...

RENEW YOUR
BSWP MEMBERSHIP AND
NEWSLETTER SUBSCRIPTION
NOW FOR 2009!

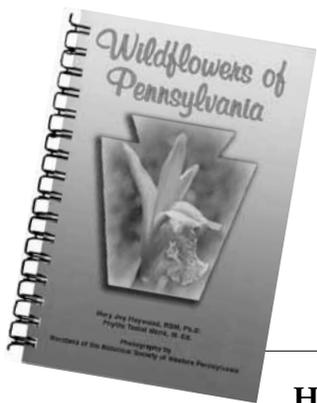
Fill out the form, detach with scissors and bring to the holiday party or mail with your check to:

Judy Boyer, 211 Lee Ave., Pittsburgh, PA 15237

Wildflowers

December 2008 through February 2009
Botanical Society of Western Pennsylvania
Post Office Box 97994
Pittsburgh, PA 15227

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Great for Gift-giving!

Sweatshirts bearing “Botanical Society of Western Pennsylvania” and green oak leaf art will be available at the holiday party for \$20.

Also available at the party:

Wildflowers of Pennsylvania (400 pages, 612 color photos) can be purchased for \$20 (plus

\$1.40 sales tax for PA residents). To order by mail, add \$2 postage and handling for one book, \$3/two, \$4/three, \$4.50/four. Forward your check, made payable to Botanical Society of Western PA, and your request to Dr. Mary Joy Haywood, RSM, PhD, 3333 Fifth Ave., Pittsburgh, PA 15213-3165; 412-578-6175; haywoodmj@carlow.edu

Holiday Party *Continued from front cover*

areas in North America. All of these books are available to the highest bidders by silent auction during the holiday party, where written bids may be made, in round dollar amounts only. Inside this newsletter you'll find a list of just some of the nearly 100 books, all of which will be on display that night. Come prepared to browse and purchase some gently used volumes, for the benefit of the Society!

Once again we will have Member's Night during the party. After enjoying wild foods and bidding on books, we'll share our botanical sightings over the year. A member can bring up to 12 slides or digital photos. A slide projector and a digital video projector will be available.

2009 Meetings *Continued from front cover*

severely constrain the size, density, biomass, and productivity of patches of three native clonal species of goldenrod. A third study looks into the causes of failed oak regeneration in eastern deciduous forests.

FEBRUARY 9. Len Lehman will talk to us about carnivorous plants. Mr. Lehman is a retired Biology teacher with degrees from Indiana University of Pennsylvania and the University of Tennessee. An avid gardener, he volunteers as a docent at Phipps Conservatory, and is also a certified horticultural show judge.