
WILDFLOWERS

The Bulletin of the Botanical Society of Western Pennsylvania • November 1999

Next Meeting is November 8

The next meeting will be Monday, November 8, at 8:00 p.m., at the Kresge Theater at Carlow College, 3333 Fifth Avenue, Pittsburgh, PA (Oakland). Kresge Theater is on the top floor of Grace Library.

Steve Grund presents "How Rare Is It?" Steve is a botanist for the Western Pennsylvania Conservancy. He will discuss how one determines how rare a plant species actually is. He will also discuss the Pennsylvania Natural Diversity Inventory.

SNOW Alert! – Know if the meeting will be cancelled

Vice President Phyllis Monk is arranging a "telephone tree" of members who want to be notified that a meeting is cancelled due to inclement weather. If you want your name on that list, please call Phyllis at (412) 831-2724 by November 15th.

Additional members will be needed to assist in making the calls. Please let Phyllis know if you can help.

Field trips in late fall and winter are also subject to cancellation due to inclement weather. Call Loree Speedy at (412) 521-9425 the morning of the field trip to confirm any cancellation.

Have you visited the Bruce yet?

In 1987 and 1995, the Botanical Society of Western Pennsylvania joined Eagleland Consultants for a guided trip to the Bruce Peninsula.

Eagleland Consultants would like to sponsor another tour in late June 2000. Are you interested in visiting this fabulous, orchid-loving, limestone paradise? Call Dr. Mary Joy Haywood at (412) 578-6175 for more details.

A Fern Reserve

The following article is continued from the October newsletter. It was written by member Joan Gottlieb and printed in the Hardy Fern Foundation Newsletter in 1992.

Other uncommon ferns of note that can be found at trailsides [at Raccoon Creek Wildflower Reserve] include the Glade Fern (*Athyrium pycnocarpon*), with its handsome once pinnate fronds, broad and compact if sterile, narrow and elongated if fertile, and with the linear sori characteristic of the genus. The related Silvery Glade Fern (*Athyrium thelypteroides*) is harder to find in the reserve, but several plants grow in damp low-lying sites, displaying their sharply tapered fronds and the characteristic silvery coverings (indusia) over the young sori. The common Lady Fern (*Athyrium filix-femina* var. *angustum*) is also present as is its striking form *rubellum* with wine-red stalks. Thus, all three of Pennsylvania's native Lady Ferns (*Athyrium*s) are found in this one, small area.

Among the fern allies there are carpets of Running Cedar (*Diphasiastrum* [*Lycopodium*] *digitatum*) at woodland edges, pockets of Field Horsetail (*Equisetum arvense*) in sandy areas near streams and large clumps of Meadow Spikemoss (*Selaginella apoda*) co-mingling with the grass near the Visitor Center. A complete list of the twenty-five species and their

varieties found at the Raccoon Wildflower Reserve follows.

The fact that a rich diversity of ferns and higher plants have found a home at the Raccoon Reserve suggests the great value of identifying and preserving these rich habitats before they are claimed by the bulldozer for yet another mall or still more suburban sprawl. By demonstrating how many species (including rarities) live in such places, land conserving organizations like the Nature Conservancy or the Western Pennsylvania Conservancy can become active in the purchase of these key properties at critical times. Then they can be turned over to government administrative entities to remain forever wild while allowing educational and compatible recreational uses by the public. Each area preserved must be self-sustaining, i.e. have a sufficient watershed share, no influx of toxics, harmful sediments or other pollutants. The Raccoon Reserve, by example, is adjacent to sizable Raccoon Creek State Park, giving it a well protected buffer zone from future land development.

Humans have played a dominant role in claiming much of the earth for our own needs or wants. It is time to look to the needs of the other species with which we share the planet and to preserve the habitats needed for their survival. The next generation of food crops, medicines, useful chemicals and an irreplaceable genetic "bank" are represented by these species. This bio-diversity is vital to our own survival, enjoyment, scientific advancement and last, but hardly least, our conscience. Our grandchildren will not forgive our failure to act wisely in matters of their natural heritage.

Ferns of Raccoon State Park Wildflower Reserve.

Since publication of this article in the Hardy Fern Foundation Newsletter, five additional ferns have been found. Most of the park's ferns and allies can be found along the Jennings and Wagon trails.

Adiantum pedatum – Maidenhair Fern
Asplenium platyneuron – Ebony Spleenwort
Asplenium trichomanes – Maidenhair Spleenwort
Athyrium filix-femina var. *angustum* – Lady Fern, northeastern variety

Athyrium filix-femina var. *angustum*, forma *rubellum* – Lady Fern, northeastern variety with wine-red rachis and stipe
Athyrium pycnocarpon – Glade Fern
Athyrium thelypteroides – Silvery Glade Fern
Botrychium dissectum var. *obliquum* – Grape Fern, Broad Pinna Form
Botrychium dissectum var. *dissectum* – Grape Fern, Dissected Pinna Form
Botrychium virginianum – Rattlesnake Fern
Camptosorus rhizophyllus – Walking-Leaf Fern
Cystopteris fragilis – Fragile Fern
Cystopteris protrusa – Bladder Fern
Dennstaedtia punctilobula – Hay-scented Fern
Diphasiastrum digitatum – Running Cedar (*Lycopodium digitatum* and *L. flabelliforme* are alternate names)
Dryopteris carthusiana – Spinulose Wood-Fern
Dryopteris cristata – Crested Shield Fern
Dryopteris goldiana – Goldie's Wood-Fern
Dryopteris intermedia – Glandular Wood-Fern
Dryopteris marginalis – Marginal Shield-Fern
Equisetum arvense – Field Horsetail
Huperzia lucidula – Shining Clubmoss (*Lycopodium lucidulum* is an alternate name)
Matteucia struthiopteris – Ostrich Fern
Onoclea sensibilis – Sensitive Fern
Osmunda claytonia – Interrupted Fern
Ophioglossum vulgatum – Adder's Tongue Fern
Polypodium virginianum – Rock Polypody
Polystichum acrostichoides – Christmas Fern
Selaginella apoda – Meadow Spikemoss
Thelypteris noveboracensis – New York Fern
Thelypteris palustris – Marsh Fern
Woodsia obtusa – Blunt-lobed Woodsia

Joan Gottlieb

The Hardy Fern Foundation is a non-profit organization formed to seek out ferns noted for hardiness and ornamental garden value.

Contact them at PO Box 166, Medina, WA 98039-0166 or on the web at

<http://darkwing.uoregon.edu/~sueman/>

Best of luck, Anne

Member Anne Bahl has moved to the eastern part of Pennsylvania to be closer to her daughter and grandchildren. Her new address is 505 East Lancaster, Apt. 319, St. Davids, PA 19087.

Members at the October meeting voted her an honorary member! We wish her the best of luck in her new home. Her kind words, her enthusiasm, her help and her love of botany will never be forgotten.

Field Trip Schedule

Registration is not required. Everyone is welcome, including non-members. For questions, call Loree at (412) 521-9425.

Saturday, November 13, 1999

Seldom Seen Greenway

Time: 1:00 p.m.

Leader: Kathy Murphy

Directions: From Pittsburgh, travel south through the Liberty Tunnels. Take Route 51 North a short distance to Crane Ave. Turn left onto Crane and continue to John Brashear High School on the right, where we will meet in the parking lot.

Kathy Murphy of Friends of the Green and Seldom Seen will lead us in search for plants and trees in the late fall.

This trip could be cancelled due to bad driving conditions. Call (412) 521-9425 the morning of the hike for a cancellation message.

Botanist and silviculturist comment at Impact of Deer Conference

Experts shared their points of view about the impact of white-tail deer on the biodiversity and economy of Pennsylvania at a conference in late September 1999. Two experts focused on native plant populations.

Botanist Anne Rhoads of the Morris Arboretum noted that deer are dictating the structure of the natural forest community. Deer seek out specific plant species, like lilies, orchids, Canada Mayflower and Canadian Yew (*Taxus canadensis*), and over-browsing can seriously decrease the populations. Cucumber Magnolias cannot get past the deer browse line. Some forests no longer have a browse line, just an understory layer of unpalatable vegetation like the Hay-scented Fern.

Forests lumbered between the 1890's and 1930's regenerated. But forests lumbered today are not regenerating, mainly due to the hearty appetite of deer for acorns and seedlings. Dr. Rhoads believes many forests in Pennsylvania will recover only if we re-introduce certain plant species. Not enough plant refuges like rock outcrops exist in these forests to allow these plants to spread again from seed.

Silviculturist Susan Stout of the United States Forest Service said that the disappearance of Hobblebush (*Viburnum lantanoides*) and Canadian Yew was observed as early as the 1920's. Man eliminated the natural predators of deer, and created ideal deer habitat through lumbering and development. Foresters are discovering that high deer densities in many areas make it impossible for certain tree species to regenerate. The unpalatable ferns left behind shade the forest floor, preventing other species from germinating.

Many people do not recognize that this thick understory of Hay-scented Ferns is unnatural and that a regenerating forest should contain Hobblebush and Canadian Yew. Dr. Stout recommended that we "teach our eyes" to recognize the impacts of deer.

Deer fencing is proving effective, but can cost between \$150 to \$200 per acre to erect and maintain.

Dr. Stout noted that the designation of "special areas" could be the root of common ground between hunters and conservationists. A density of eight deer per square mile is considered favorable to biodiversity but unfavorable to most hunters. But this "eight deer average" need not be applied to all areas. Deer managers can apply one deer density goal to lessen the deer impact to "special areas" with notable plant, animal or bird populations, and apply a greater density goal to areas set aside for recreational hunting.

Loree Speedy

Botanical Society of Western Pennsylvania – November 1999

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Pittsburgh, PA 15217

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WILDFLOWERS - Bulletin of the Botanical Society of Western Pennsylvania

Editor: Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217 Telephone: (412) 521-9425;
E-mail: <yoree@sgi.net>.

President: Dr. Mary Joy Haywood (412) 578-6175; Vice-President: Phyllis Monk (412) 831-2724

WILDFLOWERS is published monthly by the Botanical Society of Western Pennsylvania. We welcome short articles of botanical interest, drawings, letters to the editor, and notices of botanical events and group activities. Send to the editor at the above address. Deadline for submissions is the 20th of the previous month.

The Botanical Society of Western Pennsylvania - Membership Information

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. Our members include both amateurs and professionals. Annual dues are \$10.00 for individual and \$15.00 for family. Students can join at half-rate. To join, mail your name, your address, and check payable to "Botanical Soc. of W PA" to Loree Speedy, 5837 Nicholson Street, Pittsburgh, PA 15217. Your membership includes a subscription to the monthly bulletin WILDFLOWERS.

The Society meets the second Monday of each month, September through June, at 8 p.m. sharp, at Trinity Hall or Kresge Theater, Carlow College, 3333 Fifth Avenue, Oakland. All are welcome. An informative program follows the business meeting. Visit the Botanical Society Homepage at <http://home.kiski.net/~speedy/b1.html>.