



THE BULLETIN OF THE

Botanical Society of Western Pennsylvania

Call for Stories

How did you get started in botany? What led you to BSWP? These were some of the topics discussed around the table as longtime and newer Society members gathered together at the recent 125th anniversary luncheon.

One hundred years ago the Botanical Society of Western Pennsylvania produced its first publication, a document that began a rich written record. Subsequent publications, including the *Trillia* series, continued to document the Society's activities. Organizational records, meeting summaries, expanded presentations and papers, trip reports with plant lists, compilations of local botanical knowledge and personal accounts are all part of the heritage left to us by earlier members. Fine examples of the latter include Frank R. Alker's "My First Lesson in Botany" in *Trillia V* (you'll find it reprinted inside the back cover) and W.E. Buker's "Recollections and Reflections of an Amateur Botanist" in *Trillia XII*.

The 125th anniversary year provides an excellent opportunity to renew and refresh the Soci-

ety's written record. To that end, we invite all members of the Botanical Society to submit stories relating to their botanical activities. Or better yet, take the opportunity to talk to a member that you may not already know and learn about their botanical path. What are some of their memorable field experiences? Are there any favorite plants or notable first encounters that inspired their botanical life? As evidenced from the luncheon, the ensuing conversations will be quite rewarding.

Jeff Irwin will be collecting and collating these stories and adding them to the Society record (the exact format to be determined). If you would like to contribute your story, please contact him at jsi107@hotmail.com or by phone at 412.302.7959. Handwritten notes can be mailed to President Bonnie Isaac, Collection Manager, Section of Botany, Carnegie Museum of Natural History, 4400 Forbes Ave., Pittsburgh, PA 15213. Stories will be accepted through January 2012.

November Meeting

NOVEMBER 14. Charlotte Tancin will be our speaker this month on the subject of *Inspiration and Curiosity: The Teacher Linnaeus and His Students*.

Ms. Tancin is Librarian at Hunt Institute

November & December Meetings Info Continued on Back Cover

Holiday Party

DECEMBER 12. The Holiday Party will be held Monday, December 12, at the A.J. Palumbo atrium and Room 107 starting at 7 p.m. at Carlow College, 3333 Fifth Avenue, Pittsburgh, PA (Oakland). As you approach

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.

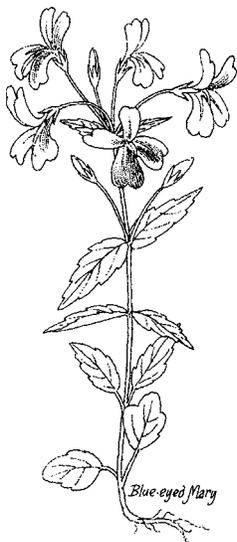
If the weather is inclement, a BSWP meeting will cancel if Carlow University cancels classes. To learn if that has happened, call the Carlow Weather Line at 412-578-6677.

Blue-eyed Mary (*Collinsia verna*), 1981. Courtesy of Arabelle Wheatley, Illustrator.

wildflowers

NOVEMBER
DECEMBER
2011

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.

November Field Trip

Registration for Botanical Society field trips is not required. Everyone is welcome, including non-members. Trips last 3 to 4 hours but one can leave at any time. For questions, call the field trip leader or Loree Speedy at 724-872-5232. Wear shoes that can get wet or muddy. Water and a hat are recommended.

Sunday, November 13, 1 p.m.

**Loyalhanna Gorge, off Route 30 toward Darlington
 Westmoreland County**

Leader: Loree Speedy, mousemapper@verizon.net, 724-518-6022

Directions: From Pittsburgh, take I-76 PA Turnpike to Exit 67, Irwin, and head east on US 30 for 25 miles. At the traffic light at the intersection of US 30 and PA 217 (Kingston Dam), continue east on US 30 on the divided highway. After 3 miles and a sign for Darlington on the right, make a slight right onto Darlington Road (just before a highway bridge crossing Loyalhanna Creek). There will be a gravel parking lot on the left. Park here.

Notes: Fall fruits will be plentiful along the moderate uphill climb to abandoned quarries and interesting waterfalls in limestone outcrops. The trail is a rocky jeep trail, so wear sturdy shoes and bring your walking stick.

North Park Arboretum Clean-up

Dianne Machesney reports that about 30 people from five different groups (including left to right: Jeff Irwin, James Nusser and Bob Machesney) braved the brisk breezes and low temps to work in clearing the North Park Arboretum on Saturday, October 15. The entire area where the pale green orchid once grew was cleared. James thought there was a good chance that the ground held a seed bank that would now be able to germinate. Another approximate acre of multiflora rose and buckthorns was cleared in the gentian area. At noon homemade minestrone soup, hot apple cider and cookies, paid for by BSWP and prepared by Dianne Machesney, revived the weary workers. Many asked if there would be more days scheduled so the work could be finished. If there is enough interest, we could do it again in 2012.



125th Anniversary Celebration Highlights

On Saturday, October 8, the Botanical Society of Western Pennsylvania celebrated 125 years at the Amici's Banquet Center. Fifty members and guests socialized and viewed photographs from the previous banquets and past field trips. After a banquet luncheon, President Bonnie Isaac opened the program with a slideshow with reminders of what our world was like in 1886, but no event or trinket stirred us more than the announcement of our first meeting held on October 7, 1886.

Our keynote speaker, James Bissell, Curator of Botany at the Cleveland Museum of Natural History, was an exemplary spokesperson to celebrate our long history of interest in and concern about our local flora. Throughout the early 20th century, O. E. Jennings, past president and secretary of the Botanical Society, studied ecological succession on the Presque Isle peninsula. Jim Bissell has continued this work and taken the study of Presque Isle one step further by responding to changes that became evident at the end of the 20th century — habitat loss through urbanization and invasive species. His years of devoted service and study of Presque Isle actively involve him in large-scale invasive plant control work there, an activity, he finds, closely related to the survival, and in many cases the reappearance of rare plant species.

Jim discussed the natural communities found on Presque Isle and the challenges these communities face. Years of observations demonstrated how lake levels correspond to the presence of certain plants found on the Palustrine Sand Plain. Control of deer browsing and the invasive Morrow's honeysuckle allows lupine (*Lupinus perennis*) to thrive in the Black Oak Lupine Sand Barrens. Efforts to combat *Phragmites australis* and Narrow-leaved Cattail, *Typha angustifolia*, are restoring the biological diversity of emergent marshes.

Attendees with over 25 years of membership were introduced: Frank and Jane Lutinski, Anne Bahl (traveling from eastern Pennsylva-



Clockwise top: Gerry Settlemaier, Bob Machesney, Dianne Machesney, Mary Jane Seipler, Mike Fialkovich and Tom Pearson. Clockwise middle: Olivia Robinson, Recording Secretary James Nusser, Rev. Andrew Clarke, Jeff Irwin and Laurie Giarratani. Left to right, bottom: Anne Bahl, her daughter Sister Constance Bahl, Sister Ann Insanger and Vice-President Dr. Mary Joy Haywood.

nia), Billy and Phyllis Monk, Paul McWhorter Brown, Mark Bowers, Mary Paoli (traveling from central Pennsylvania), Dr. Mary Joy Haywood, Eva and Werner Emmerich and Luc Berger. With 24 years and 9 months of membership, it was impossible not to recognize Jeanne Poremski, who traveled from Uniontown, Ohio.

Our thanks go out to Dr. Haywood, Jill Preston and Bonnie Isaac for organizing this celebration of plants and people!

If you would like to donate a copy of *Wildflowers of Pennsylvania* (BSWP's labor of love, co-authored by Dr. Mary Joy Haywood and Phyllis

Monk) to a library in one of Pennsylvania's 67 counties, contact Dr. Haywood (contact information is inside newsletter front cover). Book donation information will also be on www.botsocwpa.org.

Energy Development Vs. Imperiled Plants?

Reducing emissions to avoid grave impacts from climate change requires us to modify and diversify energy production in addition to reducing energy use. If we fail, the International Panel on Climate Change estimates we'll face the consequences of losing 20 to 40 percent of global species by the century's end.

A May report to Congress outlined the U.S. Department of the Interior and U.S. Department of Agriculture's "New Energy Frontier," to "curb our dependence on foreign oil, reduce use of fossil fuels and promote new industries here in America." The focus is on energy development on public lands, including onshore oil and gas drilling and renewable energy.

Much of this land is in the West, with our largest remaining natural areas and many endemic (locally unique) and imperiled plants. Eleven Western states (Ala., Calif., Colo., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo.) have 2,397 (57 percent) of the plants ranked critically imperiled or imperiled by NatureServe. "People think because it's a harsh environment, it's tough," said Rita Dodge, director of conservation for Red Butte Garden and Arboretum in Salt Lake City, Utah. In reality arid lands are delicate. Damaged desert habitats take 100 years or more to recover.

PLANT CONSERVATION CHALLENGES. We need to achieve energy development while sustaining natural resources, during tough economic times. Guiding energy development will require attention, cooperation, and the generous participation of scientists, industry, agencies and citizens to achieve the best possible planning, installation and management.

HOW TO BALANCE DEVELOPMENT AND CONSERVATION. Conservationists recognize the need for sustainable and clean energy development. Greg Suba, conservation program director for the California Native Plant Society, says, "Conservation organizations want to see energy development projects done right." Maximizing urban energy projects like rooftop solar panels on large buildings, and choosing rural sites that are already disturbed can reduce the need for use of wildlands.

Fortunately, natural resource laws ensure that goals for long-term sustainability of natural resources have a role in project planning. The examination of impacts and alternatives required by the National Environmental Policy Act (NEPA), and "Section 7" consultations with the U.S. Fish and Wildlife Service required for species listed under the Endangered Species

Act (ESA), engage agency biologists in work with applicants to avoid, minimize, or provide compensatory action to conserve and restore species.

Evaluations make sure projects don't inadvertently drive species to extinction or preclude maintaining areas critical for recovery. Plant surveys may be needed, especially in remote areas previously considered low impact zones. "Part of the problem is that many rare plant species in the desert are poorly documented, therefore we don't really know what we stand to lose," said Naomi Fraga, conservation botanist at Rancho Santa Ana Botanic Garden.

HOW EXTENSIVE ARE AREAS BEING CONSIDERED? Retooling U.S. energy production will involve large areas. Current activities show the potential extent of projects. An Environmental Impact Statement is being prepared to examine issues associated with oil shale and tar sand resources of Bureau of Land Management (BLM) lands in Colorado, Utah and Wyoming. The Pew Environment Group reports that uranium mining claims in a 1 million acre zone of the Breccia pipes formation jumped from 320 in 2004 to 3,200 in 2006, with 2,900 additional claims filed in 2007. The U.S. Fish and Wildlife Service has opened a public comment period on a proposed Habitat Conservation Plan (HCP) for a plan by 19 energy companies to establish a wind energy corridor across nine states in the Central Flyway. In 2010 Senate appropriations testimony, Department of Interior officials noted that 45 million BLM acres are leased for oil and gas development. Interior Secretary Ken Salazar noted in 2010 that there were 52 proposed solar projects in the California desert, with approval of nine expected by year's end.

RENEW YOUR
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NEWSLETTER SUBSCRIPTION
NOW FOR 2012!

Fill out the form, detach with scissors and bring with your check to the holiday party or mail to: Judy Boyer, 211 Lee Ave., Pittsburgh, PA 15237

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.

This article focuses on plant habitat issues related to energy resource development primarily in the western US, but contains information about what concerned citizens can do to participate in decision making processes regarding the impact of this kind of development in our own region.

WHAT ARE THE POTENTIAL IMPACTS WE'RE CONCERNED ABOUT? Populations in the path of energy projects may be destroyed, or suffer habitat fragmentation that isolates sites and severs continuity of landscape processes. This can cause a variety of negative consequences (interfering with pollination or seed dispersal, reducing genetic variation, etc.) for vulnerable species. Disturbances that would be relatively minor for a large widespread species might be catastrophic for a species reduced to a few sites and teetering on the edge of extinction.

Each type of energy project has its own environmental impacts. Full-field oil and gas development requires production facilities, staging areas, waste dumps, drill pads, many miles of pipelines, transmission lines and roads that can alter or destroy habitat. Even "green energy" is not impact-free. Utility-scale solar farms cover vast areas, require roads for construction and maintenance, shade out vegetation and require large transmission lines. Sites are graded and sprayed with weed-control and dust-abatement chemicals. Roads created or widened along ridge tops for wind farms can devastate native vegetation.

CPC IS COMMITTED TO HELPING. Increasing landscape disturbances and population losses heighten the importance of developing restoration techniques.

Seed banking to secure the genome of vulnerable plants makes materials available for future restoration trials and projects. In 2006 CPC began work with the BLM, collecting six sensitive species likely in the path of energy projects. Six Participating Institutions (The Arboretum at Flagstaff, Denver Botanic Gardens, Desert Botanical Garden, Rancho Santa Ana Botanic Garden, and the Red Butte Garden and Arboretum) are collecting an additional 42 species. Scientists also collect data from field sites and help survey for sensitive species.

CPC and 11 institutions also partner in the BLM Seeds of Success program to develop commercially available sources of common native species for habitat restoration. This innovative project will also support our work to restore rare plant habitats.

WHAT CAN YOU DO? Most NEPA reviews have a public comment period. Citizens can support alternatives that minimize impacts; examine whether reports considered impacts to imperiled plants; and ask that they do so, especially in fragile desert systems where restoration science is in its infancy. The Red Lodge Clearinghouse, www.rlch.org, works to engage citizens in natural resource policy, tracking comment periods. We also can support state and federal agency budgets that provide the manpower to complete project evaluations quickly and advance restoration efforts; and work locally to support energy conservation programs and community based energy generation projects in areas that do not require destruction of wildlands.

Working together to identify problems, find solutions, and pick the best path forward will help us ensure responsible energy development and abundant plant diversity.

This article is reprinted from the Plant Conservation Center's Autumn 2011 Volume 24 Number 1 newsletter with permission.

My First Lesson In Botany

by Frank R. Alker Reprinted from Trillia V 1919

Some attribute it to one thing some to another, but I am satisfied a longing for flowers brought about the introduction to one of the commonest weeds you or I ever saw or heard of. Why am I so positive? Let me tell.

In a populous section of a large city dwelt a lad of eight summers whose whole world, in extent about a mile square, contained very little to encourage a natural desire for things that grow and are beautiful. Houses, shops, factories, mills, associated in well-nigh unbroken regularity, were not likely places to find plant life, though here and there adventitious and implanted vegetation did find a precarious footing until the poisonous atmosphere of the locality prematurely stilled its unmerited wretched existence; anything beside grasses had to be sought elsewhere. So it happened that the boy occasionally repaired to an adjacent hillside — as became his duty — to gather the leaves of the burdock (*Arctium minus* Bernh.) from which was brewed a decoction regarded in his household as a sovereign specific for minor evils of the blood. On one of these visits to this refuse-strewn field an unusual sight met his eyes; on every side appeared plants beset with white flowers of a shape

quite different to any he had seen before. They must be lilies, he reasoned; whereupon his excitement increased to such a degree that burdock leaves were forgotten in the eagerness to pluck the huge bunch of posies he intended surprising the good housewife with. His arrival home and the surprise were almost simultaneous; for, on untying his parcel the kind mistress gave one glance at its contents and the next instant had thrust the entire bouquet down a nearby drain! Could this be true or was it imaginary? Perhaps vexation at the non-delivery of the burdock caused the act? He hardly knew who was the most surprised — or mystified. Finally came the explanation — unscientific, yet effective withal — out of which evolved my first and most lasting lesson in botany. It was only another case of a child experiencing his initial acquaintance with the notorious juvenile-seducing jimson weed (*Datura Stramonium* L.).

Wildflowers

November–December 2011

Botanical Society of Western Pennsylvania

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Wildflowers of Pennsylvania (400 pages, 612 color photos) can be purchased for \$20 (plus \$1.40 sales tax for PA residents). 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; mhaywood@carlow.edu

November Meeting, Continued

for Botanical Documentation at Carnegie Mellon University where she curates the Strandell Collection of Linnaeana, one of the largest Linnaean collections outside Sweden. Charlotte earned a BA in philosophy from Mount St. Mary's College, Emmitsburg, Maryland, and a master's in library science and advanced certificate in preservation management from the University of Pittsburgh. She is a member and past officer of the Council on Botanical and Horticultural Libraries, and in 2008 received its Charles Robert Long Award of Extraordinary Merit. She is a Fellow of the Linnean Society of London, represents Hunt Institute in the Linnaeus Link project, and is a member of the Society for the History of Natural History. She is also a research associate in the Museum Library at the Carnegie Museum of Natural History. Most recently she was part of the team that developed the exhibition "Botany and History Entwined: Rachel Hunt's Legacy," at Hunt Institute's gallery through December 15.

Details of BSWP field trips & meetings are located on our website on easily viewable and printable pages! www.botsocwpa.org/calendar.php. To buy member patches, sweatshirts and *Wildflowers of Pennsylvania*, go to <http://www.botsocwpa.org/bswp-shop.php>.

December Meeting, Continued

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 creative. Join us with or without a wild food offering.

This is also Member's Night. After feasting, 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.

