

WILD NEWS

Prince William Wildflower Society, A Chapter of the Virginia Native Plant Society

Number 2004-01

January - February 2004

JANUARY 19 MEETING

Just because the deep freeze of winter has arrived is no reason to hibernate. Come join fellow PWWS members as we view awe-inspiring slides from our natural world. Nicky Staunton will show slides from her summer trip to Newfoundland, and Marion Lobstein will use Powerpoint to show images from her trip around Lake Superior. Marion will bring her LCD projector and computer if anyone else wants to show digital images of their photos. Over the years we have visited vicariously places as diverse as Scandinavia, the Florida Everglades, the Bruce Peninsula in Canada, Italy, and the Rocky Mountains. Call President and Program Chair Charles Smith at 703-361-5125 if you can present photos so he may coordinate the entire evening's program in advance.

Following the program there will be a short business meeting to discuss upcoming events and issues.

The meeting, which is open to the general public, will be held on the usual third Monday of the month, January 19, at 7:30 p.m. at Bethel Lutheran Church, corner of Sudley Road/Rt. 234 and Plantation Lane in Manassas.

LOOKING AHEAD

March Meeting

Mark your calendar now for the March 15 meeting at Bethel Lutheran Church at 7:30 p.m. The program has not yet been set. See the next edition of *Wild News* for details.

SPRING WILDFLOWER DEVELOPMENT

This time of year wildflower enthusiasts are waiting for the beauty of the burst of activity of spring wildflowers in the deciduous woods. What are some of the ecological factors that affect the development and flowering of this special group of plants?

The deciduous forest spring wildflowers have a number of environmental challenges with which to cope by the end of winter. The temperature of both air and bare ground is below freezing much of the time in January and February. However, leaf litter as well as snow on the forest floor can maintain a temperature of 34 degrees F. even if the air temperature is as cold as 10 degrees. There is continued underground shoot development of many of these spring species in their rhizomes, corms, and bulbs. Many species such as Erythronium (trout lily) and Dicentra (Dutchman's breeches and squirrel corn) will not initiate growth unless exposed to a minimum cold treatment. This prevents their initiating growth in fall or early winter after a warm period. Other species such as Claytonia (spring beauty) do not require such cold exposure and may initiate growth in the fall.

The role of temperature in initiating growth in the early spring is a complex interaction of soil and air temperatures. Soil temperature is the more critical factor for initiating shoot growth (by stimulating rhizome development) while air temperature is more critical in controlling vegetative growth and flowering. Soil temperatures begin to rise quickly in early spring (continued on page five)



From the President -Charles Smith

My Two Cents

This winter has begun to make us forget that it is supposed to be a time of dormancy for plants and most cold-blooded creatures. I recently saw irises blooming outside of the National Art Gallery, heard a tree frog call in the afternoon, and saw a red bat foraging over a road just before dawn - all signs of temperatures up in the 50s. We may have a sorry spring if warm days coax buds into opening only to be followed by more normal freezing temperatures.

I was reminded in late December about what a splendid form winter "dormancy" can take in our region. I was participating in the Fairfax Audubon Christmas Bird Count in western Fairfax. I was out early "owling," and ended up in a favorite large field complex just as the first bit of light began to intrude on the night. I thought I had seen a shape flying earlier, and now it appeared again. It had the flight pattern of an over-sized bat - bouncing through the air as it flew over the fields. It was a short-eared owl.

Short-eared owls spend their summers and raise their young farther north - with the exception of some areas of West Virginia. Winter snows in those regions drive them south in search of more accessible food. They require large, mature fields and old fields where meadow voles convert the roots, stems, shoots, and buds of our beloved native plants (and palatable aliens) into meat. Meadow voles are the great tenders of fields throughout North America. They are our most abundant mammal, attaining population densities of up to 8,000 per acre. They are credited with delaying or preventing field succession to trees and shrubs by eating all seedlings that try to make a go of it. They are active and breeding 365 days a year, day and night. They are apparently a lot easier to catch than mice, and a colleague and I recently discovered while weighing small mammals that a meadow vole is worth two mice in weight.

Everybody eats them. Red foxes avidly

cache food to be eaten later. They always eat their meadow voles before other cached food. Red-tailed hawks, northern harriers, black racers (that wonderful, fast snake) - all prefer meadow voles (the black racers tend to prefer the lactating females).

I felt the presence of thousands of meadow voles moving in the field in their grass tunnels as the short-eared owl bounced and floated not far off the ground listening for them. Occasionally the owl would drop into the grass. In the 15 minutes or so that I was privileged to watch, it did not catch anything. At one point it noticed me and flew over to investigate. It flew over my head four or five times. It apparently decided that I was neither of great interest nor a threat and went back to work hunting voles.

This image of winter "dormancy" will stay with me for many years. It will also inspire me to work to preserve mature field systems. Of course this is partly selfish - I want to go back and see more short-eared owls.

-Charles

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Deadline for the March-April issue is March 1, 2004. Mail information to Nancy Vehrs at 8318 Highland St., Manassas, VA 20110-3671 or send email to nvehrs@attglobal.net.

November Meeting Minutes

The Prince William Wildflower Society met on November 17, 2003, at Bethel Lutheran Church, Manassas, Virginia.

Marion Lobstein introduced the guest speaker, Dr. Kenneth Lawless. Dr. Lawless is the founder and now Professor Emeritus of the University of Virginia's Department of Materials Science. He is an avid photographer of the flora of Virginia. He shared with us how he began his hobby of photographing nature as a young boy scout. He is a popular speaker and regular presenter at the annual Wintergreen Symposium. His presentation, Native Blue Ridge Flora, was decorated with gorgeous photographs - only some of the over 1500 of the plants of Virginia that he has photographed (and dotted with stories that told of his enthusiasm and passion for his avocation). The show opened with photos of ferns and fern allies followed by seed plants by season. Dr. Lawless took us up and down the Blue Ridge to show us the common plants that many have seen as well as rare species or varieties that he has found. He treated us to very (up close and personal) views of wildflowers, to include pollinators! Everyone looks forward to his return to PWWS to present his collection of photos of plants of the coastal plain.

At 9:15 p.m., President Charles Smith called the meeting to order. He announced that this meeting would be recorded as the chapter's annual meeting.

Treasurer Diane Flaherty reported the current balance at \$4803.35. The 2004 budget will be prepared with no major changes from 2003.

No other officer reports were submitted.

Charles called for the election of the nominating committee. The slate is Carol Nelson, Karen Waltman, and Linda Stoltz. There being no further nominations from the floor, Charles called for the vote. The slate was accepted by a unanimous voice vote.

The meeting was adjourned at 9:20 p.m. Post adjournment announcements:

Gina Yurkonis gave birth to a little boy on

November 16, 2003.

Marion will be teaching the Field Botany Course at Blandy June-July 2004.

Following the meeting, members enjoyed refreshments provided by Joann Krumviede.

Respectfully submitted, Charlotte Cochard, Secretary

Attendance: Nancy Arrington, Tiana Camfiord, Charlotte Cochard, Toni Crouch, Diane Flaherty, Jean Fontana, Jeanne Fowler, William Hendrickson, Joann Krumviede, Marion Lobstein, Phil Louer, Frances Louer, Peter McClurkin, June Najjum, Wendy Pierce, Sandra Sheriff, Martha Slover, Charles Smith, Nicky Staunton, Nancy Vehrs, Helen Walter, Karen Waltman, Sanford Yoder

Proposed Budget for 2004

Treasurer Diane Flaherty provides the following budget proposal with the final approval to take place at the February board meeting.

PROPOSED FY 2004 BUDGET (November 1, 2003-October 31, 2004)

RECEIPTS:

\$ 1,000
3,750
\$ 4,750

DISBURSEMENTS:

SEMENTS:	
Postage	\$ 875
Printing	1,350
Gifts and Honoraria	500
Programs and Speakers	1,000
Sales Tax	200
Special Events	825
Plant Sale	
Garden Tours	
Annual Meeting	

\$ 4,750

TOTAL

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Events of Interest

January 19: Citizens' Lobby Day sponsored by the Virginia Conservation Network with addresses by Lt. Gov. Kaine and Senator Hanger. 10 a.m.-4:30 p.m., Valentine Richmond History Center, 1015 East Clay Street, Richmond. To schedule an appointment with your Delegate and Senator, contact Melanie Roberts at 804-255-1902 or mroberts@valcv.org or Ellen Shepard at 804-266-3476, ellenshepard@yahoo.com. Registration form for the event is available at http://www.vcnva.org/news/news_articles/2004/01/07a.php. \$15 fee covers lunch and materials, with additional donations appreciated.

January 20: "Spring Birds and Wildflowers—Their Interwoven Worlds" presented by Stan Shetler, sponsored by Loudoun Wildlife Conservancy. Rust Library, 380 Old Waterford Rd, Leesburg.

January 25: Historic Treasures: The Horticultural Potential of Lewis and Clark's Plants. Green

Spring Gardens Park, 1:30-3 p.m., \$7. Call 642-

5173 to register.

January 25: Piedmont Chapter Winter Walk, 2 p.m. Winter tree and grass identification plus hot cider. Carrie Blair leads. Clifton Farm near Warrenton. Call Jocelyn Sladen at 540-349-3248 for information.

February 3: Program on the "Health and Sustainability of Our Woodlands and Forests" sponsored by the Piedmont Chapter. Speakers are arborist Ed Milhous, Shenandoah National Park superintendent Doug Morris, and award-winning environmental writer Chris Bolgiano. 5 - 9 p.m., Parish House of Emmanuel Episcopal Church, 105 East Washington Street, Middleburg. Program fee, including dinner: \$40 for members and \$45 for nonmembers. Send registration & payments to VNPS Piedmont Chapter, PO Box 336, The Plains, VA 20198 by Jan. 27. For information, contact Michael Calley at mgcalley@aol.com or 540-338-4830; Mary Ann Gibbons at 540-253-5409, or Mary Olien at meo9r@virginia.edu or 540-837-1758 Ext. 30.

February 3 and March 2: Extension Office Workshops, The Elements of Design and

Implementation of Design Elements (a two-part series). Learn the elements of design and how to use them to achieve the look you want in your landscape. Bring a plat of your property and tracing paper and pencils. 7 p.m. – 8:30 p.m., Community Room, Bull Run Library, 8051 Ashton Avenue, Manassas. Free. Attend one or both. Call 703-792-7747 to register.

February 7: Second annual GWU Landscape Design Program Career Fair, Washington, D.C., 12 noon- 5 p.m. Email Ray Wu-Rorrer at wurorrer@vt.edu or call 703-927-7804 after Jan.20 for more information.

February 7: Winter Twig ID presented by Carrie Blair at the State Arboretum at Blandy, Boyce. 10 a.m. \$4 for VNPS members, \$6 non-members. February 17: Extension Office Workshop on Bog Gardens. 7 p.m. - 8:30 p.m., Community Room, Chinn Park Regional Library, 13083 Chinn Park Drive, Prince William, VA. Free; call 703-792-7747 to register.

February 19: A "Growing" Demand: A workshop on Local Requirements for Conservation Landscaping Techniques and the New Market for Native Plants sponsored by Potomac Watershed Partnership, 10 a.m.-4 p.m., Behnke's Nursery, Beltsville, MD.

<u>February 19-22</u>: Maymont Flower and Garden Show, "Festivals in Flower." Greater Richmond Convention Center. www.maymont.org, 804-358-7166.

March 6: VNPS Winter Workshop on "Virginia's Biological Diversity." Lewis Ginter Botanical Garden. Watch for more information from VNPS.

March 6: Extension Office workshop "Designing around the Footprint of Your House." Fit the space and give your landscape a unique look. Bring a copy of the plat of your property or a drawing of your front yard. 9 a.m.—noon, Occoquan Room, McCoart Government Center, One County Complex Court, Prince William, VA. Free; call 703-792-7747 to register.

March 13: Winter Lecture at Blandy Library, State Arboretum, 9:30 a.m.- noon, *How Plants* get the Invasive Label by Kevin Heffernan, followed by Native Alternatives to Common Invasive Plants by Claudia Thompson-Diehl. \$20 for VNPS members, \$24 for non-members. March 13: 2004 Horticulture Forum hosted by the Shenandoah-Potomac District Garden Clubs at the National Conservation Training Center in Shepherdstown, West Virginia. Botanist, author, and landscape designer Rick Darke will present "Livable Landscapes," focusing on the balance of nature and culture in the regional North American landscape. His latest book The American Woodland Garden, received the American Horticultural Society's Book Award and the Garden Writers Association Golden Globe Award for book photography. Early registration is \$45 and includes lunch. Tickets are now available from Nancy Alfriend at 304-725-2040. If seats are still available after March 1, the cost is \$50. No tickets sold after March 6.

March 21: Marion Lobstein resumes her monthly wildflower walks, 10 a.m.-12:30 p.m. at Great Falls Park, Va. Contact Marion at 703-536-7150 or by email at mblobstein@earthlink.net for further information.

April 25: Annual PWWS Spring Garden Tour May 8: Annual PWWS Plant Sale June 21-24, June 28-July 1, July 5-8: Field Botany Course at Blandy Experimental Farm taught by Marion Lobstein. Contact Marion at 703-536-7150 or by email at mblobstein@earthlink.net for further information.

Seed Bank Seeks Participants

Kew Gardens in England is involved with the Millennium Seed Bank Project that is an international collaborative plant conservation initiative. This worldwide effort aims to safeguard 24,000 plant species from around the globe against extinction. For more information, visit http://www.rbgkew.org.uk/msbp/index.html. Contact Nicky Staunton at 703-368-9803, email nstaunton@earthlink.net, if you would like to receive training to participate as a seed collector for Virginia.

Spring Wildflower Development

(continued from page one)
as snow melts. A temperature rise to 49-50
degrees F. can take place in only three days after
snow melt. Soil warming may not be as dramatic
if there is no snowcover, but it also may be
significant. Air temperature in early spring may
vary in one day from 32 to 77 degrees F. Most
insect pollinators do not become active until
temperatures reach 55 degrees F. Bumblebees are
an exception and become active at 41 degrees.

The overhead tree canopy begins developing in mid-April and is completed by early May. In March 55 percent of the light is available, by mid-April it is 32 percent, and it drops to 10 percent by early May. The filling in of the canopy not only affects the light intensity that reaches the forest floor, but also the amount of moisture that reaches the ground. Moisture availability is another critical factor in considering the ecology of spring wildflowers and their seedlings.

In addition to the role of average soil and air temperatures for an area of deciduous forest. microclimate factors such as precipitation, soil moisture, relative humidity, evaporation, wind, orientation of slopes, altitude, soil temperature at various depths, nutrient variation, etc., are all important factors playing a role in controlling shoot development and flowering. For example, the threshold temperature or summation of air temperature is 40 degrees F. for spring beauty and wild bleeding heart, but 50 degrees for Dutchman's breeches and is slightly higher for squirrel corn. In the same general area for the same species there can be a two to three day delay of development on north facing slopes compared to south facing ones.

It is during the narrow time window from March or early April that a balance must be accomplished by these species—enough warmth to begin and continue above ground development, enough light and moisture to sustain photosynthetic activity so that energy may be locked in underground storage structures for the (continued on next page)

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next year's development, yet still enough warmth
that insect pollinators can be active.

The ecological factors affecting spring wildflower development and flowering are complex but interesting to consider. Underground storage structure, pollination, and fruit and seed dispersal are other factors in the total life cycles of these special plants. These plants have special fascination throughout all stages of their life cycles.

-Marion Lobstein Assistant Professor of Biology Northern Virginia Community College, Manassas

(Ed. Note: The preceding article was originally printed in the Jan-Feb 1991 edition of Wild News.)

February Board Meeting

The PWWS Board will next meet on February 16 at 7:30 p.m. at Bethel Lutheran Church in Manassas. Board meetings are also open to all members. Call President Charles Smith at 703-361-5125 for further information.

US Forest Service Newsletter

As reported in our sister chapter's current edition of *Potomack News*, the US Forest service publishes an occasional newsletter, *Lingua Botanica*. Find past issues of this journal for botanists and plant ecologists on the web at http://www.fs.fed.us/biology/resources/pubs/plants/index.html.

PRINCE WILLIAM WILDFLOWER SOCIETY

A Chapter of the Virginia Native Plant Society PO Box 83, Manassas, VA 20108-0083





exp. 10/04

Nancy Arrington 8388 Briarmont Lane Manassas, VA 20112-2755

Next Meeting: 7:30 p.m., Monday, January 19, Bethel Lutheran Church, Manassas "Member Slide Show"

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