THE THREAT TO BIODIVERSITY FROM INVASIVE ALIEN PLANTS (MARCH 13)

Learn how invasive alien plants affect biodiversity in a program presented by Dr. Faith Campbell of the American Lands Alliance at 7:30 p.m. in the Library at Thomas Jefferson High School for Science and Technology at 6560 Braddock Road, Alexandria (Fairfax County). **NOTE: THIS IS A NEW LOCATION**

**Directions:** From 495 go east on Rt 236 (Little River Turnpike) and turn right on Braddock Rd.

MEMBER WALK WITH DR. STANWYN SHETLER AT BALLS BLUFF (APRIL 5)

**Dr. Stanwyn Shetler**, VNPS State Botany Chair and Botanist Emeritus, Smithsonian, will lead a walk at Balls Bluff Regional Park on Saturday, April 5 from 1:30 to 4:30 pm. Some of the plants we will hope to find, at least in early flower, are bird's-foot violet, bloodroot, Dutchman's-breeches, early saxifrage, harbinger-of-spring, sessile trillium, shadbush, spring-beauty, squirrel-corn, twinleaf, Virginia bluebells, and white and yellow trout-lilies.

To register, call Shirley Gay at (703) 920-1913 or email shirleywg@comcast.net. Please include your telephone number in any message as space is limited. The trip will be cancelled for heavy rain, but not for drizzle.

**Directions:** From Route 7 turn north on Route 15 Bypass east of Leesburg about 1.5 mi. Turn right onto Battlefield Parkway (3rd or 4th light). Take first left onto Ball's Bluff Road after 1/4 mile. Go about 1/2 mile, curving around to the right, up to woods. Drive into woods short distance to parking lot.

WILDFLOWERS FOR BEGINNERS (APRIL 10 and 12)

Marianne Mooney and Mary Ann Lawler will present a program for novice native plant enthusiasts April 10 at 7:30pm at Green Spring Gardens Park to help them learn how to identify native plants using field guides and keys. It will include a slide presentation on some of the more common and beautiful of our local wildflowers and information on where to find them. On April 12, they will also lead a Wildflower Walk for Beginners at 2:00 at Turkey Run as a follow-up to the program.

**PROGRAM LOCATION MAY CHANGE; PLEASE CHECK WITH MARIANNE 703-534-8179**

**Directions to Green Spring Gardens Park:** From Interstate 395, exit at Route 236 West (Lit Run) in Alexandria, turn right at Green Spring Road and proceed 1 block north to the park entrance. Directions to Turkey Run will be provided at April 10 program.

VNPS-MNPS “BIoblitz” PART I, GLENCARLYN PARK, ARLINGTON (APRIL 26)

Led by Registry Chair and field ecologist Rod Simmons, join members of VNPS and the Maryland Native Plant Society Saturday, **April 26, from 10:00 am to 3:00 pm** on a field trip and natural resources inventory at one of Arlington’s most beautiful natural places. Historic Glencarlyn Park is a long, wooded complex of springs and converging stream valleys along Four Mile Run. Much of the vegetation is mature, oak-hickory-heath forest with remnant American chestnuts, some of which are fairly large. Numerous old-age stands of oak and hickory occur on the slopes and uplands. The gravelly slopes and uplands are densely vegetated with mountain laurel and other heaths and are excellent examples of Terrace Gravel Forest. A diversity of herbaceous plants grow along the woodland floor. The stream valleys have picturesque outcrops of weathered, mica-schist of the Indian Run Formation. We’ll also visit the remnant Magnolia Bog downstream.

“The beauty of the wilderness is similar to Washington’s Rock Creek Park, with deep ravines, wooded bluffs, and tumbling streams, besides the two famous old springs [Carlin Springs]...shaded by ancient oaks and sycamores in the glen.” - Eleanor Lee Templeman, Arlington Heritage

The two VNPS-MNPS joint “bioblitz” outings this spring are intended as field studies of Terrace Gravel Forest communities, common to northern Virginia, D.C., and Maryland. As part of an ongoing inventory, we will record all the wildlife we observe. A flora checklist for the park will be available. Bring a bag lunch for picnic in pavilion; water will be provided. Walk cancelled for heavy rain only. **Contact:** Rod Simmons cecropia13@msn.com or 703-256-7671.

**Directions:** Take Rt. 50 (Arlington Blvd.) to Carlin Springs Rd. Head north on Carlin Springs Rd and immediately turn into small parking lot on right (just below intersection of Rt. 50 overpass and Carlin Springs Rd). If lot is full, park in lot, on other side of Carlin Springs Road.

SAVE THESE DATES: **SUN**, **APRIL 27 POTOWMACK CHAPTER GARDEN TOURS; SAT, MAY 4 BIoblitz PT. II FT. DUPONT; SAT, MAY 10: GREAT FALLS WALK** (Details in May/June newsletter)

“Around the world about 60,000 flowering plant species are in danger of disappearing from the wild forever. The consequences of these losses are enormous; the extinction of one plant can cause extinctions of as many as 30 kinds of animals and insects which depend upon it.” From the Royal Botanic Gardens, Sydney, Australia
PRESIDENT’S MESSAGE:
I’m sure spring is just around the corner but there’s time for one more indoor event, the VNPS Workshop on March 8. This year’s workshop, planned by our own program chair, Shirley Gay, is entitled Biodiversity: Virginia’s Keystone. Speakers from the Nature Conservancy, Smithsonian Institution and the Division of Natural Heritage in the Virginia Department of Conservation and Recreation will provide insight to the incredible diversity of our flora and fauna from the coastal plain to the mountains, with every microhabitat in between. It’s sure to be a great event; send in your registration now!
And when spring finally arrives, plan to join us on one of our walks. There’s a lot of excitement about the recently discovered magnolia bog along with the likelihood of a major bloom year. Support your local natural areas, visit them often and learn about the uniqueness of our area’s flora.

Marianne Mooney

DIVERSITY OF THE FALL LINE AREA
The chapter’s January program featured Rod Simmons, life-long botanical explorer of our area. Rod shared his deep knowledge of the unique habitats of our region, emphasizing the geology and plant associations for each ecosystem. Attendees had an in-depth look at the fascinating natural areas that surround us. More importantly, Rod demonstrated the basics of conservation through example. In years spent identifying the botanical riches of our area, Rod’s documentation has contributed to their preservation. In order to protect plant communities, knowing what’s there is the most important factor. In a nutshell, doing surveys of sites, scientifically documenting species, publicizing these areas and getting people interested in preserving them is how it works. Places aren’t always saved but it’s important to try.
As Rod’s talk progressed through various habitats, it was apparent that plant communities were the indicators of soil and geological conditions. Terrace gravel forests, formerly dominated by chestnuts, now have five species of oaks as well as hickory trees and heaths in a gravelly, acid soil. White ash and chinquapin oak grow in shell-marl ravine forests on calcareous fossil deposits. The rich soils of riverine communities like Scott’s Run are dominated by tulip poplars and beeches several hundred years old. Magnolia bogs, what’s left of them (see article on page 3), have sweetbay magnolia, giant ferns and other wet-loving species. Virginia cedars are indicators of diabase communities that rest on old volcanic igneous rock. And within these communities are a variety of microhabitats from seeps and swamps to rocky outcrops. Perhaps the most varied of all is the Potomac Gorge area, home to over ten distinct plant communities. But who can explain the mysterious mistletoe corridor that runs through Centerville?
Our area is reputed to have the greatest plant diversity of the eastern United States. It’s up to us to appreciate and protect it. And to acknowledge and thank all our local botanists that are out there surveying sites, usually on their own time.

WANT TO JOIN THE CHAPTER LISTSERV? Send an e-mail to Mary Ann Lawler at malawler@aol.com and in the message section write subscribe to vnps-pot, your e-mail address, and your full name. Or visit http://groups.yahoo.com/group/vnps-pot/join

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(All numbers should include the 703 area code, unless otherwise noted. Potowmack News is published 6 times per year, in Jan, Mar, May, Jul, Sep, and Nov. The deadline for submissions is the 15th day of the month prior to publication. Call Mary Ann Lawler for more information or e-mail her at malawler@aol.com.)
SMALL REMNANT OF HISTORIC FOUR MILE RUN MAGNOLIA BOGS DISCOVERED

In late December of 2002, Rod Simmons and Lou Aronica discovered a small remnant of a Magnolia Bog seepage at the foot of the steep, forested hillside terrace (Allie S. Freed Park) at Barcroft Park along Four Mile Run in Arlington County, Virginia. Much of the bog that once existed at this site has been lost. However, the springs which supply the seepage flow and the seep itself still remain in good condition, largely because the upland Terrace Gravel Forest immediately surrounding the seep has been preserved. (Magnolia Bogs, named for the characteristic assemblage of Sweetbay Magnolia (Magnolia virginiana), Sphagnum Moss, and other bog flora, are actually acidic, fen-like seeps uniquely associated with high elevation gravel terraces of the inner coastal plain near the fall line – with the Washington, D.C. area being the heart of their range.)

Many characteristic Magnolia Bog plants still thrive at this site, including Sphagnum Moss (Sphagnum sp.), Sweetbay Magnolia, Poison Sumac (Toxicodendron vernix), Swamp Azalea (Rhododendron viscosum), Swamp-haw (Viburnum nudum), Highbush Blueberry (Vaccinium corymbosum), Black Highbush Blueberry (Vaccinium atrooccum), Fetterbush (Leucothoe racemosa), Winterberry Holly (Ilex verticillata), Fringe Tree (Chionanthus virginicus), Alder (Alnus serrulata), Cinnamon Fern (Osmunda cinnamomea), Royal Fern (Osmunda regalis), White Turtlehead (Chelone glabra), numerous Carices (Carex ssp.), Slender Wood Oats (Chasmanthium laxum), and likely others. The seep grades into an Acidic Seepage Swamp that is dominated by very large Sweetbay Magnolia (some over 2’ in circumference at breast height), Black Gum (Nyssa sylvatica), Red Maple (Acer rubrum), Willow Oak (Quercus phellos), River Birch (Betula nigra), and Skunk Cabbage (Symplocarpus foetidus), and was probably once the heart of the bog. Sweetbay Magnolia, Poison Sumac, Swamp-haw, and Slender Wood Oats are all records for Arlington County in the Atlas of the Virginia Flora, 3rd edition. (A small voucher specimen of each will be carefully collected so as not to disturb the plant and deposited in the U.S. National Herbarium at the Smithsonian Institution.)

Much of the site is remarkably pristine, with large, moss-covered, quartzite cobbles scattered throughout the seep and swamp. A small stream that flows into Four Mile Run is formed by the springs and helps keep people from the picnic pavilion and playing field out of the boggy area. Invasive exotic plants are mostly absent from the site. However, numerous bottles and cans from park-users litter the surface and should be picked up. Troublesome invasive exotics like English Ivy, Wisteria, Lesser Celandine, and Autumn Clematis have degraded the swamp section closer to Four Mile Run and threaten the upper reaches of the site. Yard debris from the adjacent townhouse development that is habitually dumped into the swamp and a small planting of Periwinkle are also highly detrimental to the future sustainability of this rare wetlands. Any park maintenance efforts should take great care not to disturb the soils and hydrology, and to not import any plant, rock, or other material to the site or surrounding area.

In A Sketch of the Natural History of the District of Columbia, W.L. McAtee in 1918 noted several Magnolia Bogs in the Four Mile Run Valley near Green Valley and along the north side of Four Mile Run Hill. A similar bog also once existed near the electric trolley line on the Arlington Estate (Arlington National Cemetery) and flora was collected in the 1930s from bogs at Aurora Hills and Virginia Highlands (both along the upper east slope of Arlington Ridge Road). Urbanization has claimed all of these bogs in Arlington, with this small remnant probably as the only surviving one. The Potomack Chapter of the Virginia Native Plant Society will offer its assistance in monitoring the site, removing trash and invasive exotic plants, and suggesting management guidelines to help the county ensure the long-term survival and high quality of this special site.

We will visit this site on April 26 as part of the VNPS-MNPS “Bioblitz.” However, we will not walk in the bog, so as not to damage it.

FALL LINE MAGNOLIA BOGS OF THE MID- ATLANTIC REGION

By Roderick Simmons and Mark Strong [Reprinted from the October 2002 issue of Audubon Naturalist]

Magnolia Bogs have long been regarded as one of the most interesting natural features in the Washington, D.C. area. W.L. McAtee, a Washington area naturalist who first defined these bogs in 1918, termed them “Magnolia Bogs” for the unique assemblage of sweetbay magnolia (Magnolia virginiana), Sphagnum moss, and other bog flora. Occasionally they are referred to as “McAteean Bogs,” after McAtee, or “Seepage Bogs.” These bogs usually form on hillsides or slopes where a spring or seep flows from an upland gravel and sand aquifer over a thick, impervious layer of underlying clay which prevents the downward infiltration of water. This seepage flow and the highly acidic, gravelly soils create optimal conditions for the formation of bogs. (Continued on page 4)
**MAGNOLIA BOGS (Continued from page 3)**

The term “bog” as applied here, although technically a misnomer, has traditionally been used by people in general, including botanists, to describe acidic, sphagnum wetlands that strongly resemble bogs. Magnolia Bogs are actually acidic, fen-like seeps uniquely associated with high elevation gravel terraces of the inner Coastal Plain near the Fall Line, which divides the Coastal Plain and Piedmont physiographic provinces in the mid-Atlantic region. Their distribution generally follows the Fall Line in a narrow east-west band from the Laurel area, at the northern extent of their range in Prince George’s County, Maryland, to their southern extent near Fredericksburg, Virginia.

Throughout their range, they were never common or very large, usually occupying an area an acre or less in size. Nevertheless, they are vitally important resources both for the pure, naturally filtered waters which flow continuously from them – even in drought periods – and the relic populations of ancient northward and westward migrations of often rare Coastal Plain flora, which have persisted in small communities well inland and fairly close to the Piedmont. Included in these relic communities are plants such as bog clubmoss (*Lycopodiella appressa*), twisted spikerush (*Eleocharis tortilis*), slender beaksedge (*Rhynchospora gracilenta*), bunched beaksedge (*Rhynchospora cephalantha*), hairy umbrella-sedge (*Fuirena squarrosa*), darkgreen sedge (*Carex venusta var. minor*), bog yelloweyed grass (*Xyris difformis var. difformis*), ten-angled pipewort (*Eriocaulon decangulare*), smooth winterberry (*Ilex laevigata*), red milkweed (*Asclepias rubra*), zigzag bladderwort (*Utricularia subulata*), and Elliott’s goldenrod (*Solidago latissimifolia*). Other well-known bogs near Washington in Anne Arundel County, Maryland that are more eastward of the Fall Line – such as the extirpated Glen Burnie Bog and the Magothy and Severn Bogs - are not characteristic Magnolia Bogs, despite some floristic similarities, because of different geological conditions and plant assemblages.

Peatlands, pocosins, fens, and bogs throughout the Coastal Plain are now extremely rare as a result of habitat disturbance, fire suppression, and fragmentation. Magnolia Bogs are also increasingly rare and surviving ones degraded throughout their range because of extensive development of the gravel terraces that surround the bogs - destroying or severely depleting their water supply. Most of the famous ones surveyed by the Smithsonian Institution and W.L. McAtee nearly a century ago, like the Holmead Swamp, Terra Cotta Bog, and Powder Mill Bogs, have long been destroyed (although we recently uncovered a small remnant of the latter, along with a small population of ten-angled pipewort).

Some, like the Suitland Bog and Oxon Run Bogs, have survived, although the Suitland Bog is greatly disturbed with the addition of a boardwalk, numerous outplantings of non-native (to the site) carnivorous Pitcher Plants (*Sarracenia purpurea*) which rob valuable habitat for native species, a sewer line, and encroaching housing developments. Urbanization, stormwater runoff, siltation, off-road vehicles, and invasive exotic plants have degraded most of the few remaining Magnolia Bogs and greatly threaten their future survival. Unless adequate protection is uniformly given to these sites, most of them will disappear in the decades to come.

For the past five years as part of a research project mainly for conservation purposes, we have been conducting an exhaustive search for any remaining Magnolia Bogs in the region. All available information regarding the historic Magnolia Bogs – going back to the Civil War – was also researched and documented. We have been aided in these surveys by other botanists with the Maryland Native Plant Society (MNPS), and the preservation of surviving Magnolia Bogs has become a major campaign of MNPS. Although most of the historic sites have been destroyed, some new sites were discovered - the mostly pristine but threatened Araby Bog is a stellar example.

A dozen Magnolia Bogs are known to exist today in Maryland, D.C., and Virginia, three of which are in the path of the proposed Inter County Connector. Several small remnants of historic bogs like the Ammendale and Powder Mill Bogs have been discovered. While most of the rare orchids and lilies have largely disappeared, several very rare plants that had not been seen for many decades – halberd-leaved greenbrier (*Smilax pseudochina*), low rough aster (*Aster radula*), and Long’s rush (*Juncus longii*), for example – have been rediscovered. Several previously unreported plants for Maryland – including featherbristle beak sedge (*Rhynchospora oligantha*) – have also turned up.
PLANT SALE AND PROPAGATION BEDS

This year's spring plant sale will feature our wildflower of the year, Yellow Trout-lily, *Erythronium americanum*, along with ferns and other perennials and woodies. It will be held **May 3** at Green Spring Gardens Park in Annandale from 9am-1pm. VNPS cordially invites our members to join the propagation crew on Wed. and/or Sat. mornings April—October at Green Spring. Would you rather play in the dirt or do housework? The housework will always be there but the possibilities of being with other gardeners, learning from each other about native plants, birdwatching, bugwatching, and having a great time are endless. Our efforts culminate each year in plant sales and donations to schools, scouts, etc. By propagating native plants we are able to educate the general public about the benefits and beauty of our wildflowers, native trees, and shrubs. So stop on by and join the fun! Give Laura Beaty 703-534-8746 or Beth Smith 703-644-1760 a call. We'd love to hear from you.

TOP 10 GREEN TIPS FOR GARDENING

Thursday, March 13, 7:30 - 9 p.m. Arlington Career Center, 816 S. Walter Reed Drive, Arlington. Learn more about how our gardening and landscaping practices affect local water quality and the health of the Chesapeake Bay. The program will include an overview of water quality issues in the Chesapeake Bay region plus practical information on what to do in your garden. For gardeners of all levels. Speakers include Tom Tyler from the Virginia Cooperative Extension and Tom Miller from the Maryland Cooperative Extension. Refreshments will be served. Sponsored by Arlingtonians for a Clean Environment, Friends of the Potomac, and the Virginia Native Plant Society.

ARLINGTON’S RIP PROJECT

**Wed Mar 12th - Ideas for Volunteer Recruitment - (How to Get People to Help Out in Your Area)**
7-9 pm, Rm. 10, Fairlington Community Center

**Tues Mar 25th - Mapping as a Tool -**
Learn how mapping can be used for planning and monitoring invasive plant control efforts.
7-9 pm, Rm. 10, Fairlington Community Center

For information about any of these events, please contact Jan Ferrigan, Invasive Species Program Coordinator at 703 228 7636 or jferriga@vt.edu

OTHER ACTIVITIES IN THE METRO AREA:

**Mar 1 Invasives removal Fraser Preserve** 9:30am-12:30pm. Includes walk and orientation to this Nature Conservancy property. Bring leather work gloves, water, lunch, a hat, sunscreen, sturdy shoes, and your own pair of loppers or hand clippers (or both) if you have them. Questions? Contact Scott Boven anytime at (434) 295-6106 or sboven@tnc.org

**Mar 8 Winter Tree Identification** 9am to 2pm
Audubon Naturalist Society, Woodend Sanctuary, Chevy Chase; $28 for non-members. For Information call: 301-652-9188 x16

**Mar 8 Dyke Marsh invasives removal** 10am to noon
Call Lindsey Schuh 703-549-1607 for information

**Mar 8 Invasives removal Pimmit View Park** Tysons/Pimmit Hills area. 10am Orientation. Stay as long as you like. Questions/Directions? Call Carol Shuh 703-903-9046 or ShuhC@state.gov

**Mar 8 Laurel Hill House Invasive Species Removal** 9am-11:30am
Join No VA Conservation Trust & Friends of Laurel Hill at the historical Laurel Hill House in Lorton. Bring clippers and be prepared to get dirty. Events may be cancelled or changed. Please check NVCT.ORG. For information call 703-354-5093 or email jmcperson@nvct.org

**Mar 9 Friends of Runnymede** Annual meeting including program on invasives and keeping property “native.” 6:30-9:00 pm at Herndon Community Center Multipurpose Room. Guest speaker **Liz Nalle** For information, contact Susan Lilly: 703-787-7303 Ext. 121

**Mar 12 Midweek Meander by Metro to Roosevelt Island** 10am to 12:30pm
Audubon Naturalist Society $18 for non-members For Information call: 301-652-9188 x16

**Mar 15 Creating a Backyard Habitat** Carol Hadlock 9am to noon; Fairfax High School, Fairfax Audubon Society; $35 for non-members Call 703-256-6895 for information.

**Mar 20 Alien Invasion: Native and Non-Native Plants** 7 pm
Arlington Central Library. Learn which plant is which and what to preserve and what to destroy Free Northern Virginia Regional Park Authority. No reservations. Call Potomac Overlook Regional Park at 703-528-5406 for information.

**Mar. 22 Explore Accotink Creek** 10am - 1pm
Join No VA Conservation Trust to explore Accotink Creek at Eakin Community Park in Fairfax County. Co-sponsored with the Audubon Naturalist Society, NOVA Soil & Water Conservation
Chapter Events Calendar

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Potowmack Chapter
Virginia Native Plant Society
P.O. Box 5311
Arlington, VA  22205

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