REMINDER: POTOWMACK CHAPTER ANNUAL MEETING, Wednesday October 20
Green Spring Gardens; Reception: 7:00 Meeting Begins at 7:30
PROGRAM: J. Douglas Ripley on
BOTANY IN THE WASHINGTON, D.C., REGION: A HISTORICAL OVERVIEW

HYBRIDIZATION AND EVOLUTION OF OAKS, NOVEMBER 11, 7:30 P.M.

Are our oaks changing? Can a pin oak hybridize with a scarlet oak? Can a chinkapin oak hybridize with a white oak? What will happen to the species? Are we seeing evolution?

Hear Alan Whittemore, PhD., research taxonomist with the U.S. National Arboretum discuss the hybridization and evolution of oaks on November 11, at Green Springs Gardens at 7:30 p.m.

Mr. Whittemore carries out research on the taxonomy and evolutionary genetics of various groups of woody plants, primarily the oaks and hackberries. He also oversees the 650,000-specimen herbarium of the U. S. National Arboretum, one of the few herbaria in the country to emphasize both wild and cultivated plants. Alan is currently managing editor of the journal Systematic Botany (American Society of Plant Taxonomists) and president of the Botanical Society of Washington.

Directions to Green Spring Garden. From Interstate 395, exit at Route 236 West (Little River Turnpike) in Alexandria, turn right at Braddock Road and proceed 1 block north to the park entrance

PARK BOND ISSUES ON THE NOVEMBER BALLOTS

If you live in Fairfax or Arlington Counties, or in the City of Alexandria, you will be voting on bond referenda in the election in November. The sale of bonds is a form of long term borrowing used by most municipalities to finance public facilities like parks. Long term bonds spread the cost of these improvements throughout the years that the facilities are used. In this way we ensure that both current and future park users help pay for land and park improvements. The bonds are critically important for our parks, recreation centers, trail systems, and athletic facilities.

In Fairfax County the bonds being requested are to be devoted to capital improvements for both the Fairfax County Park Authority and the Northern Virginia Regional Park Authority—$65 million is for Fairfax County, and $10 million for the Regional Park Authority. The Fairfax County bond is roughly divided 80/20. That is, 80% will be used for existing park renovation and maintenance, and 20% for land acquisition.

Arlington County has put forth a $75 million bond issue for parks. Two-thirds of this amount is to create a park on a 28-acre industrial site north of Crystal City and adjacent to Roach’s Run. The park will feature a world class aquatics and multiple activity center, trails, gardens, and athletic fields, and will connect to Roach’s Run. The bond also includes $4 million for land acquisition and money to complete the renovation of Barcroft Park that includes enhanced protection for the park’s natural area.

QUERCUS ”I have to admit being a tad overwhelmed by this amazing genus. With 90 species in North America alone, oaks are our most successful and widespread group of woody plants.” William Cullina in Native Trees, Shrubs, and Vines.

PRESIDENT’S MESSAGE: The Chapter’s fiscal year ends this month so we’ll celebrate on October 20th with our annual meeting. Most of our great board members are hanging in for another year but we welcome anyone who would like to join us.
COMPREHENSIVE WILDLIFE CONSERVATION STRATEGY: HELP NEEDED! (From the Virginia Department of Game and Inland Fisheries)

A significant project is underway that will provide meaningful guidance for the future of wildlife in Virginia.

The Virginia Department of Game and Inland Fisheries is leading the development of a Comprehensive Wildlife Conservation Strategy for the Commonwealth. This initiative presents a unique opportunity for the agencies and organizations in Virginia to work together to develop a common vision and strategy for wildlife conservation.

The focus of the Strategy is on the species of greatest conservation need and their habitats, but will include all wildlife. It will address threats to wildlife populations and habitats and describe conservation actions and priorities.

Your input and participation is vital to ensuring the success of the development of the Strategy and its subsequent implementation. Join us for the first of two community meetings to learn more about this initiative and provide your valuable local knowledge about the critical wildlife and habitat issues, trends and threats facing the Commonwealth.

We welcome your participation at any of the meetings throughout Virginia. Please be sure to RSVP by the deadline noted to ensure a reserved space. Questions? Contact us at wildlifeplan@dgf.virginia.gov or (804) 367-8351. Visit us online at www.vawildlifestrategies.org.

Note: Meetings will be held throughout Virginia at numerous locations. The closest meeting for Potomack Chapter members is:

Nov. 5: 9am-noon, Fairfax, Northern Virginia Community College Cultural Center.
RSVP: 804-367-4335 or wildlifeplan@dgf.virginia.gov. You may also comment on line at: http://www.vawildlifestrategies.org/action.html.

NATIVE SHRUBS WITH FALL AND WINTER INTEREST by Mary Ann Lawler

Virginia has a diverse array of native shrubs that are attractive in fall and winter. Some of these shrubs have eye-catching leaf color in fall, fruits both colorful and unobtrusive which provide food for wildlife, and texture and interest for
landscaping. One shrub with great leaf color is *Itea virginica*, or Virginia sweetspire, whose leaves become deep burgundy spears. Although found in wet soils, it is quite adaptable. *Itea* will become 3 to 5 feet tall and spread. Its racemes of white flowers will attract many pollinators in the spring.

Another shrub with wonderful leaf color is *Fothergilla major* (or *F. minor*). In fall its leaves become the color of persimmons. It also has racemes of white flowers which attract pollinators. If *Fothergilla major* is too large at 8 to 10 feet, try *F. minor*, which stays a compact three feet. They, too, prefer moister soils, but will adapt, unless the soil is too well-drained and dry.

For dry sunny slopes, the various sumacs will not only colonize to prevent erosion, but also attract pollinators, feed birds, and spread scarlet color across the fall landscape. *Rhus glabra*, *R. copilina*, and *R. typhina* are taller species. *Rhus aromatica* is somewhat smaller but can still reach 8 feet in height. Birds like the berries of the sumacs, but also feed on the insects which over-winter in the compact seed-heads of the staghorn sumac.

The red chokeberry, *Photinia pyrifolia* (formerly *Aronia arbutifolia*), not only has luminous crimson leaves in the fall, but holds its red berries well into January in our area. Then one day they all mysteriously disappear, when the cedar waxwings or robins determine they are ready to be devoured. (I’ve never been able to catch them in the act.) The chokeberries, both red and black (*Photinia melanocarpa*, formerly *Aronia melanocarpa*), have clusters of white flowers in the spring making them special year all year. Both are tolerant of a wide variety of conditions, but will produce more berries if they get some sun. They tend to sucker and spread, so give them some room.

For red leaf color plus red berries, another good choice is *Viburnum trilobum*, the American cranberry. Its brilliant fruits often last through winter and then are eaten by migrating birds in the spring. It is a little more fussy about good soil, and will be more prolific if you use several plants from different sources. They can grow to eight feet.

One species with different fall color and red berries is *Lindera benzoin*, the spicebush. Its leaves are sunflower yellow in fall. The fat, red berries on the female shrub (they are dioecious, so you need at least one male) are nutritious for migrating songbirds and possums in fall, so they don’t last long. These shrubs have the added attraction of small yellow-green flowers about the same time as the daffodils bloom in spring. And they are larval food for the spicebush swallowtail.

Other red-berried shrubs are the deciduous hollies, which need male and female plants. A favorite with gardeners is *Ilex verticillata* (winterberry), whose berries cover the stems of the female plant. The red berries of the *Ilex vomitoria* (Yaupon holly) will also remain on the stem. Both these shrubs are particularly eye-catching in hedges, which can grow from 6 to 10 feet (*I. verticillata*) or 12-20 feet (*I. vomitoria*). Another deciduous holly with red berries lasting into winter is *Ilex deciduas*, the possumhaw, but it can grow 20 to 30 feet tall and is more of a tree, so needs lots of space.

And we haven’t forgotten the beautyberry, *Callicarpa americana*, a native of southeastern Virginia. Its magenta berries are stunning in fall and remain on the plant to be eaten later by birds, particularly for those in an area where the bobwhite roam.

(Continued on page 4)

**NATIVE SHRUBS WITH FALL AND WINTER INTEREST** (continued from previous page)

Evergreen shrubs add color and texture to the dull winter landscape. A favorite with many gardeners is *Ilex glabra* (inkberry), which has small evergreen leaves. Its berries are blue and are also a delight for the birds. It can grow more than six feet tall. Because it, too, is dioecious, you’ll need a mix of male and female plants for fruiting.
INVASIVE PLANTS IN RIPARIAN AREAS

This Pennsylvania publication describes 24 of the most significant invasive plants, vines, shrubs and trees in Pennsylvania. It is designed for use by volunteers in targeted invasive plant removal projects. Its information is applicable to Virginia. Each plant is identified by a color photo, a black & white drawing and comprehensive information on its leaf, flower and seed. The number of laminated guides available is limited. They may be ordered for $2 from: Pennsylvania Department of Environmental Protection, Bureau of Watershed Conservation at 717-772-5807 or ordered through the DEP website at http://www.dep.state.us/ (choose Stream ReLeaf as the subject). View it or download it online: http://www.acb-online.org/pubs/projects/deliverables-145-1-2004.pdf

MICROSTEGIUM SYMPOSIUM

Dr. Joe Neal at NC State University has created an excellent website that provides the abstracts and PowerPoint presentations of the Microstegium symposium that was held at the Northeastern Weed Science Society annual meeting. This site is located at newss.org. The direct link is: http://www.newss.org/default/publication/microstegium/index.htm

JIM LEHRER NEWS HOUR PIECE ON INVASIVES

Of the 50,000 non-native plant and animal species that have arrived in the United States from foreign countries, many are considered invasive and cost an estimated $138 billion a year in environmental and economic damage. If you missed this program, you can read the transcript or see it on: http://www.pbs.org/newshour/bb/environment/july-dec04/species_7-1.html

FOREST KILLERS

VNPS member, Faith Campbell, has written short summaries on more than two dozen invasive pests and pathogens that have caused (or may cause) problems for forests in North America for The Nature Conservancy website. Are you confused about the differences between the balsam woolly adelgid and hemlock wooly adelgid? Or the European oak bark beetle vs. the European spruce beetle? Check out The Nature Conservancy’s “Gallery of Pests” at: http://tncweeds.ucdavis.edu/products/gallery/gallery.html

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

NEW THEORY ON FERN EVOLUTION

Ferns comprise more than ten thousand living species, the second largest group of vascular plants after flowering plants, which began to evolve 144 million years ago, long after ferns had been around. Ferns were thought to be relics from an ancient era, some 250 million years ago. But biologists have presented evidence that when flowering plants, or angiosperms, evolved, ferns took advantage of ecological niches in the new angiosperm forests to diversify into a far richer array of species.
The study funded by the National Science Foundation and conducted by Duke University researchers offers a new insight into the critical period in evolution when the rise of flowering plants sparked a dramatic increase in species diversity that eventually fostered the rise of birds, bees and mammals, including humans.

The researchers based their findings on concurrent analyses of the fossil record of plant species as well as genetic studies of existing species. They analyzed the DNA sequences of telltale genes in ferns and angiosperms and found family trees charting the relationships among ferns and angiosperms, which revealed their evolutionary history. The team used insights from the genetic comparisons to reevaluate the fossil record, and to assign fern and angiosperm fossils to currently existing lineages.

The researchers theorize that the key to ferns' ability to diversify—literally in the shade of angiosperm forests—was the evolution of a low-light photoreceptor in the ferns, which responded to a wider range of light wavelengths, giving ferns an evolutionary advantage in the low-light conditions in angiosperm forests.

LOCAL EVENTS AND LEARNING OPPORTUNITIES:

**Nov 4. The Natural Beauty of Virginia** 7:00 pm, Northern Virginia Community College, Community Cultural Center. Sponsored by Audubon At Home. Call 703-256-6895 for reservations or go online at www.aah@fairfaxaudubon.org.

**Nov. 7. Top O' the Bay** 9am – 4:30pm hike at Elk Neck State Park and Susquehanna State Park near the top of the Chesapeake Bay. Audubon Naturalist Society $38 for non-members. For Information call: 301-652-9188 x16

**Nov. 13 Late Autumn on Sugarloaf Mountain, MD.** 10am – 3pm hike. See common witch-hazel in bloom and learn to identify the trees and shrubs. Audubon Naturalist Society $31 for non-members. For Information call: 301-652-9188 x16

**Nov. 13 Invasive removal/cleanup Dyke Marsh.** Alexandria, 10am to noon Call Brooke Andrews of the Northern Virginia Senior Environment Corps at 703-549-1607 Ext. 141 for information. Registration: All volunteers need to register upon arrival. The registration table is located near the brown bathrooms next to the benches and water fountain in Belle Haven Park (left of the parking lot). Individual volunteers will need to fill out a National Park Service Volunteer Agreement Form. If a volunteer is representing a group only one form is required for that group. Volunteers under the age of 18 need to get a parental approval form signed by a parent or guardian. Returning volunteers do not need to fill out an agreement if already done so. What to bring: The National Park Service will provide all trash bags and gloves. Volunteers should wear pants, sturdy shoes, bug spray and bring sunscreen if needed. If working with invasive plants please also wear a long-sleeve shirt.

**Nov. 6, 2 p.m. Fall Colors Hike, Potomac Overlook Regional Park.** Nature’s palette will be on view on this free, guided hike through the forests of the Northern Virginia Regional Park Authority’s nature preserve in North Arlington. Reservations are required; call 703-528-5406. To reach NVRPA’s Potomac Overlook Regional Park, take I-66 to the Lee Highway-Spout Run exit; turn left on Lee Highway, right on Military Road, continue on Military and turn left when it divides; turn right on Marcy Road and park at the end of the cul-de-sac in the lot for Potomac Overlook Regional Park.

**Dec. 5, Winter Weed Walk.** 10am to 2:30 pm Walk through the woodland and meadow habitats of McKee-Beshers Wildlife Management Area nears Poolesville, MD, for an introduction to winter weed and wildflower identification. Audubon Naturalist Society $28 for non-members. For Information call: 301-652-9188 x16

**Wed, Jan 12-Mar 16 Winter Woody Plant Identification (10 classes and 3 field trips).** USDA Graduate School; Woodend Sanctuary, Chevy Chase Wednesdays 7 – 9pm. Classes plus 3 field trips: $315. Call 202-314-3320 or register on line at www.grad.usda.gov

### Chapter Plant Sale Statistics:

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<td>189 sun plants</td>
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<td>388 shade plants</td>
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PLANT TREES AT RIVERBEND PARK, OCTOBER 30

Earth Sangha is seeking volunteers to plant 500 white oak, swamp chestnut oak, and American persimmon saplings at Riverbend Park along the Virginia shore of the Potomac on Saturday, October 30, from 10AM on. All the trees come from the Earth Sangha’s own Wild Plant Nursery, which produces native plants from local wild populations, for use in local ecological restoration projects. The Riverbend event is cosponsored by Starbucks Coffee. To sign up or for more information, call Lisa Bright at (703) 764-4830 or send her an e-mail at lbright@earthsangha.org

Directions: From the beltway, take Georgetown Pike (193) west, past Great Falls Park to the stop sign at the intersection with River Bend Road (603); turn right on River Bend Road; turn right again at Jeffrey Road; follow the signs to the park’s visitor center.

VDOT’S I-66 STUDY

The Virginia Department of Transportation, as part of its study on how to reduce congestion on I-66 westbound between Rosslyn and the Dulles Access Road, has set up two public workshops in late October and an open house on November 3rd. The public workshops will be held at Marshall High School (in Falls Church) on Tuesday, October 26 and Washington-Lee High School (in Arlington) on Wednesday the 27th. Both events are scheduled to begin at 7:00 pm. The open house is also to be held at Washington-Lee H. S., beginning at 6:30 pm on Wednesday, November 3. The public meetings are posted on the official website: http://www.idea66.com/downloads/Fall2004-Meetings.pdf

Chapter Events Calendar

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| Oct. 20 | Annual Meeting  
Program: Botany in the Washington Area  
7:00 pm  
Green Spring |
| Nov. 11 | Oak Hybridization and Evolution  
7:30 pm  
Green Spring |

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

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