

WILD NEWS

PRINCE WILLIAM WILDFLOWER SOCIETY, A Chapter of the Virginia Native Plant Society

Number 01-06

November-December 2001

NOVEMBER 19 MEETING

Join fellow members and guests at the November 19 meeting to hear guest speaker Chris Strand discuss the natural history and horticultural uses of witch hazel (genus *Hamamelis*), our only local winter-blooming shrub and the Virginia Native Plant Society's Wildflower of the Year for 2002. Chris is the Director of Green Spring Gardens Park in Alexandria, Virginia; a 27-acre public park that is home to the national witch hazel collection. A slide show and discussion will be followed by refreshments.

Before coming to Green Spring, Chris worked at the Arnold Arboretum of Harvard University, Callaway Gardens, and the Denver Botanic Gardens. Raised in Colorado and with a degree in plant ecology, it wasn't until graduate school that Chris was introduced to the diversity of plant material available to Mid-Atlantic gardeners. A graduate degree in public horticulture sponsored by Longwood Gardens quickly convinced him that he needed to learn more about the eastern flora. His current interests are the genus *Hamamelis* (witch hazels), beeches and oaks, *Convallaria* (lily of the valley), and succession (i.e. the process by which one plant community replaces another). He is particularly interested in helping gardeners take advantage of the wide range of ornamental plants available to them in this part of the country.

The meeting will begin at 7:30 p.m. on Monday, November 19 at Bethel Lutheran Church, corner of Sudley Road (Rt. 234) and Plantation Lane in Manassas. For further information about the meeting, call President Nancy Vehrs at 703-368-2898.

WHERE HAVE ALL THE BIRDS GONE?

Over several months this year Rebekah Baity, an undergraduate researcher in the University of Delaware College of Agriculture and Natural Resources, and I began to measure the amount of leaf area eaten by insects on more than two dozen plants and trees. The research site is 10 acres of long uncultivated farmland in Chester County, Pennsylvania, where non-natives - specifically, oriental bittersweet, autumn olive, Japanese honeysuckle and multiflora rose - have crept into unmowed fields once inhabited by native plants.

In evaluating the food preferences of native insects, we found that the insects consumed 239 square centimeters of the leaves on black oak, a native American tree, as compared to 12 square centimeters of Norway maple, a highly invasive species rapidly spreading throughout eastern North America. Although a number of studies have been conducted on ecological problems caused by non-native plants, the focus has been on the economics of unchecked invasion and the biological threat of displacing native plants. I believe this is the first study to quantify the effects of non-native plants on the food supply of insects and relate it to the food supply of birds as well as the ultimate consequence to ecological balance.

Fast-growing non-native vines such as bittersweet, Japanese honeysuckle, and climbing bushes such as multiflora rose can actually strangle a healthy tree - even huge ones. All plants vie for sunshine for photosynthesis, yet vines have an advantage. Before long, the tree weakens, first losing its ability to bear leaves,

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From the President - Nancy Vehrs

What delightfully sunny weather we've been having! The clear blue skies have been truly awesome. But is this a good thing? Rain has been so scarce this fall that I fear that our dear plants may pay a steep price for those blue skies. Trees have already been stressed by several recent droughts, especially the one in 1999. Though some of you may beg to differ, I believe that the fall colors were somewhat muted and short-lived this year. I hope some rain appears in the forecast soon.

Everyone knows that Northern Virginia has horrible traffic congestion. One way I cope with it on my commute to and from Fairfax is to take advantage of the opportunity to view nature. Sometimes I'll spot a hawk on his frequent perch on a wire near an elementary school or I'll look for a certain tree that I know always has great color in the fall. The crossroads in Centreville has been a giant open wound on the landscape during massive road construction there, yet if one can look beyond to the mountains and setting sun in the evening, it can be an inspiring sight. For several recent evenings I have been awed by the swirling black clouds of birds above me there on Route 28. The flocks of thousands of birds seem to change direction magically and instantaneously. What with all the new development in that area, I suppose the birds are having difficulty seeking roosting sites for the night. I must admit that while I love to see them in flight, like most people, I do not appreciate the racket and messy habits of blackbirds and starlings.

I'm pleased that we had great weather for a good turnout at the annual meeting in September. Many thanks to the Davises for hosting the event. We had some great plants at the plant swap - and you didn't need to bring anything to come away with a plant since many members brought extras to share.

Program Chair Charles Smith lined up an excellent speaker for a timely program on witch hazel, the VNPS Wildflower of the Year for 2002. Chris Strand, an expert on that topic, might already be familiar to some astute newsletter readers. I have used his articles on succession and fragmentation, respectively, in previous editions and plan to print others in the future.

- Nancy

With Paintbrush and Shovel

William and Mary botanist Donna Ware and writer Nancy Kober will present a slide lecture on November 15 at 7 p.m. at the Arts Club of Washington (2017 I Street NW in DC) on the WPA project that put women to work creating a wildflower sanctuary in Petersburg, Virginia during the 1930s. They have written a book, *With Paintbrush and Shovel*, with illustrations by Bessie Niemeyer Marshall. Following the lecture will be a book signing and reception, which is free and open to the public.

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VNPS home page: <http://www.vnps.org>

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|-------------------------|--|
| President | Nancy Vehrs, 703-368-2898, nvehrs@attglobal.net |
| VP/Publicity | Leo Stoltz, 703-791-6175, osamukato@aol.com |
| Secretary | June Najjum, 703-494-1891 |
| Treasurer | Marie Davis, 703-361-1626 |
| Botany | Marion Lobstein, 703-536-7150 |
| Conservation | Wendy Pierce, 703-754-2932 |
| Education | Kim Hosen, 703-491-8406 |
| Historian | Robyn Thoreson, 703-335-1015 |
| Hospitality | OPEN |
| Imm. Past Pres | Gina Yurkonis, 540-347-1027 |
| Membership | Nancy Vehrs, 703-368-2898 |
| Programs | Charles Smith, 703-361-5125 |
| Plant Sale | Nancy Arrington, 703-368-8431 |
| Refreshments | Joann Krumviede, 703-938-4378 |
| Registry Site | Claudia Thompson-Deahl, 703-754-9235 |
| Editor | Nancy Vehrs, 703-368-2898 |
| Original Artwork | by Nicky Staunton, 703-368-9803 |

Deadline for the Jan-Feb issue is Jan. 1, 2002. Mail information to Nancy Vehrs at 8318 Highland St., Manassas, VA 20110-3671 or send email to nvehrs@attglobal.net.

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seeds and fruit, then declining to the point that a wind or ice storm finishes it off. The result is a loss of plant food for insects and protein and shelter for birds. Bird studies conducted over the past decade reveal that native bird populations are in decline. Until now, however, the findings seemed to indicate that the decline was the result of a loss of habitat, both in the tropics and the United States.

The multiflora rose is an example of a shrub introduced into this country as an ornamental plant. This rose offers excellent nesting sites and berries for birds to forage in fall, so marketers purposely appeal to people who want to encourage wildlife into their yards and gardens. But now this aggressively growing bush has overtaken creek banks and roadsides all over the United States, effectively choking out native plant species. Yes, multiflora rose does provide nesting and berries for winter-feeding birds, but what is overlooked is that native birds also nest in native plants. More important, when raising their young in the spring, birds depend upon a supply of insects and larvae to feed the hatchlings. If the insects are eliminated, so are future generations of birds.

And the problem is not limited to Pennsylvania. Multiflora roses are among the many non-native plants that now dominate much of the American countryside. Unchallenged by insect pests from their homeland, this exotic shrub grows wild, crowding out plants native to North American open areas and forests, upsetting the balance of nature.

When people see green open spaces, they think nature has taken over. What they don't recognize is that the fields of green in many parts of southeastern Pennsylvania and the Delmarva Peninsula are overrun with 90 percent non-native growth. A green field in which the native plants have been choked out by invasive non-native ones is no more productive than a parking lot when it comes to providing food for insects, birds and other animals.

The non-native butterfly bush is another case in point. People plant butterfly bushes in the mistaken idea that they are helping nature. The bush does attract butterflies for its flower nectar, but they will not lay their eggs on these leaves, because the foliage offers no nutrition to the hatching larvae. Planting a native species, such as viburnum, milkweed, Joe Pyeweed or purple coneflower for every butterfly bush - now that would really help nature.

I am optimistic that the data we have collected will attract the attention of birders, who may be able to influence the garden marketplace. And I hope the scientific evidence gathered in this study will help spur home gardeners into action. Just imagine the future impact on bird populations and our natural heritage in the Delaware Valley if homeowners replaced the non-native ornamental plants on their property with plant species historically native to the area.

*-Dr. Doug Tallamy
Professor of Entomology and Applied Ecology
University of Delaware*

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(Editor's note: The preceding article was printed with permission from the author.)

| Junk Food for Insects | Foods Insects Like |
|------------------------------|---------------------------|
| Multiflora rose | Viburnum |
| Oriental bittersweet | Hickory |
| Japanese honeysuckle | Oak |
| Autumn olive | Black walnut |
| Mile-a-minute weed | Blackwillow |
| Garlic mustard | Elderberry |
| Norway maple | Goldenrod |
| Ox-eye daisy | Black cherry |
| Red clover | Red maple |

Pollinators, Pest Plants and Paradise; 10th Annual Irvine Native Plant Seminar

On August 25th the Irvine Nature Center in Stevenson, Maryland held its 10th annual Native Plant Seminar. The accompanying plant sale featured 13 native plant nurseries from surrounding states. Three speakers gave presentations to discuss native plants, wildlife, and invasives.

Colin Stewart, a post-doctoral candidate at Univ. of Maryland made recommendations for 'Planting a Paradise for Pollinators and other Beneficial Insects.' Dr Stewart emphasized the importance of providing a series of plants that produce supply of nectar and pollen throughout the growing season.

Bumblebees and other solitary bees are prolific pollinators that are immune to the mites that are causing decline in honey bee population. By careful selection of plants, gardeners can attract these and other beneficial insects. Stewart recommends Dr. Karen Strickler's site; <http://www.pollinatorparadise.com> for further information.

Laurie Anne Albrecht, president of the Mid-Atlantic Exotic Pest Plant Council, spoke on the financial and environmental impact of non-native plants. She wants taxpayers to understand that this is an issue that affects them. When Japanese knotweed grows through asphalt, fills wetlands, and creates floods, there is a price to pay. Invasive nonnatives can change the pH of the soil, nutrient cycles, and fire regimes, and reduce biodiversity.

English ivy, reed canary grass, mugwort, lesser celandine, purple loosestrife, oriental bittersweet, *Ailanthus altissima*, multiflora rose and Japanese barberry are some of the more aggressive plants that are known to replace native species.

Hand pulling before plants can go to seed can be effective as well as use of pre-emergent

herbicides to stop weed seeds from sprouting in the spring. Throwing weeds into the woods to create compost or habitats may spread the problem. Ms. Albrecht recommends using the Nature Conservancy site, <http://www.tncweeds.ucdavis.edu> for links to information on identification and control of invasives.

Author, photographer, garden designer, and member of VNPS, Cole Burrell shared some of his design expertise in his presentation "Native Plants with Panache." Design for "maximum drama at all times"; consider form, texture, color and fragrance when selecting and grouping plants. Create a place for the eye to rest; a void, a pool of light. Understand the sunlight and soil conditions in the garden and make plant choices appropriately.

Examples of beautiful native plant design can be seen at Green Spring Gardens Park in Alexandria, Virginia; Niche Gardens in North Carolina; Mount Cuba Center in Delaware; and in Burrell's many publications.

-Wendy Pierce

September Meeting Minutes

A potluck dinner was served before the meeting, with plenty of garden space to roam on the charter members' eight acres of land. The Annual Meeting was called to order by Nancy Vehrs at 2:30 p.m., on Sunday, September 16 at the home of Marie and Paul Davis. We observed a moment of silence for those who died last week during the terrorist attacks of September 11, 2001.

The next order of business was a summary of the Annual Report that was submitted to the VNPS Board on Sept. 8, 2001. Nancy Vehrs gave everyone a review of past PWWS accomplishments as well as a few disappointments from November 20, 2000, until September 16, 2001.

Next a vote was taken to elect the nominating committee for a two-year term. Jeanne Endrikat, Diane Flaherty, and Martha Slover were

unanimously elected by a count of 38 ballots tallied by Vice-President Leo Stoltz.

The treasurer's report was next. The proposed budget prepared by Marie Davis passed unanimously. Martha Slover had moved to accept it and Linda Stoltz had seconded it.

Marion Lobstein gave her *Flora* update. She reported that at the August 25, 2001, Board of Directors meeting in Richmond, the bylaws of the *Flora* Project were passed. She again expressed her appreciation for the generous donations by the Prince William Wildflower Society. Marion commented that with the past and present support of the chapter, the project is ready to get organized and move forward.

Other announcements:

- Nancy Vehrs thanked Paul and Marie Davis for offering their home for the meeting.
- The November meeting will feature Chris Strand's talk on "Witch Hazel." (From Green Spring Gardens)

The business meeting adjourned at 2:42 p.m. It was followed by the plant swap, and guided wildflower walks led by Marie Davis and Marion Lobstein.

June Najjum, Secretary

Attendance: Nancy Arrington, Tiana Camfiord, Marie and Paul Davis, Jeanne Endrikat, Stan Fowler, Jeanne Fowler, William Hendrickson, Bill and Jane Lehman, Marion Lobstein, June Najjum, Wendy Pierce, Rosemary Quigley, Mary Quigley Sigl, Cheryl Hughes-Slezak, Martha Slover, Charles Smith, Linda and Leo Stoltz, Nancy Vehrs, Helen Walter, Karen Wier, Helen Winn, and Gina Yurkonis

Next Board Meeting

The PWWS Board will not meet in December. The next Board meeting is February 18, 2002. For further information, call Nancy Vehrs at 703-368-2898.

STRAWBERRY BUSH

Marion Lobstein
Associate Professor of Biology
Northern Virginia Community College-
Manassas Campus

One of the most colorful native shrubs to set fruit in the fall is the strawberry bush or hearts-a-bursting (or bustin' if one's grammar slips). In September and October, *Euonymus americanus* sets bright red fruits that resemble a strawberry or a heart with three seeds bursting out of it. It is a member of the Celastraceae, the stafftree family, and is found in damp rich woods and on stream banks. Its range is from New York State south to Florida and west to Texas and Illinois. The genus *Euonymus* is from Greek "eu" meaning "good" and "onoma" meaning "name" and the species *americanus*, of course, means "American."

The strawberry bush blooms in May and into June. One to three flowers form on pedicles at leaf axils. The one-third inch wide flowers have five sepals, five yellow-green (sometimes with a touch of purple) petals, 5 stamens, and a fleshy disk-like pistil. The nectaries at the base of the pistil secrete copious nectar, and the flowers give off a sweet fragrance that attracts short-tongued bees and flies that serve as pollinators. The fruits

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that form by September or October are red capsules just less than an inch in diameter. These warty capsules split open to reveal three oval orange seeds which are often eaten and dispersed by birds.

Strawberry bush is usually a straggly shrub that can be up to six feet tall. The stems are four-sided and green, which means they are photosynthetic, an unusual condition for a woody plant. Opposite bright green leaves are one to three inches long, one-half to an inch wide, finely toothed, smooth, and lanceolate to elliptical.

This native shrub was used by Native Americans for a variety of purposes such as an antiseptic, expectorant, astringent, diuretic, and laxative as well as to reduce fever, to induce vomiting, to treat female ailments, and venereal disease, to relieve sinus, even to treat dandruff and scalp problems. The powdered bark and the root are the plant parts usually used; however, the seeds can be used as a strong laxative.

Euonymus atropurpureus, known as wahoo or burning bush, is another member of this genus found in our area, although much less commonly. *Celastrus scanden*, native climbing bittersweet, and *C. orbiculatus*, Asiatic bittersweet, a naturalized species from the Orient, are also found in our area. All of these family members have interesting fruits that split open in a manner similar to that of the strawberry bush.

This fall you may have already missed the bright red fruits of strawberry bush, but you can find its green, woody stems this winter. Once you have located a site for strawberry bush, next year enjoy the understated beauty of its flowers and then watch the handsome fruits develop in late summer and early fall.

Botanical Society Symposium

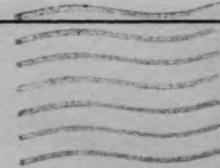
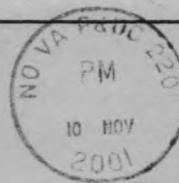
On December 8 the Washington Botanical Society is presenting an anniversary symposium. The event features seven noted speakers (including VNPS Botany Chair Dr. Stan Shetler) in a full range of topics about area flora. Registration can include a dinner or just the afternoon's speakers (1-4:30 p.m.). The charge for just the afternoon will be \$40. For reservation information, visit the website <http://www.fred.net/kathy/symp.html>.

January 21 Meeting

Mark your calendar now for the annual member slide show at 7:30 p.m. at Bethel Lutheran Church. Call Program Chair Charles Smith at 703-361-5125 if you have some slides you can share. Nature-related slides from trips or gardens are all welcome.

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PO Box 83, Manassas, VA 20108-0083



exp. 10/01

Nancy Arrington
8388 Briarmont Lane
Manassas, VA 20111



Next Meeting: 7:30 p.m., Monday, Nov. 19, Bethel Lutheran Church, Manassas
Chris Strand on "Natural History and Horticultural Uses of Witch Hazel"