



# Bulletin

A publication of the VIRGINIA NATIVE PLANT SOCIETY

*Conserving wild flowers and wild places*

## *Native shrubs are source of beauty and fascination*

Walking through woods and fields, we tend to avoid thickets and hedgerows as difficult to move through, and as hiding possible dangers (snakes, briars or whatever). We walk around, perhaps skirting soggy ground, and give little attention to the shrubs which form these thickets. The rhododendron, so beautiful in bloom, was called a "laurel hell" by mountain folks who saw these thickets from inside! But there is beauty and fascination in these unkempt patches of brush.

Over 50 species of shrubs are found throughout Virginia. Some, like bunchberry or ground dogwood, wild azaleas, swamp hibiscus and fringe-tree are showy. Others have less conspicuous flowers, for example, alder, wax myrtle, willows, button-bush and sea myrtle. All contribute to thickets, hedgerows or brushy edges that provide food and shelter for wintering or nesting birds, sources of food or shelter from summer heat for deer and other animals, and food for us as well. Blackberries, raspberries, chinquapins and hazelnuts are all shrubs.

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### Maymont Show slated for Feb. 19-22

If you enjoyed Catharine Tucker's article on Virginia shrubs, you might pencil in the Maymont Flower and Garden Show on your calendar. The show will be held from Thursday February 19 until Sunday February 22 in the Richmond Centre, 5th and Marshall Streets. The hours are 9 a.m. to 8 p.m. on Thursday through Saturday, and 9 a.m. to 6 p.m. on Sunday. Tucker's talk, "Virginia's Native Plants: Mountains to the Sea" will be Friday, February 20 at 11:30 a.m. VNPS will have an educational exhibit on the second floor in the Mezzanine.

Hedgerows form natural travel corridors between areas of food and cover for quail, cardinals and sparrows, and rabbits, mice and voles. They then become hunting areas for kestrels, fox and feral cats! Hedgerows are found not only in wild or farm areas but also in our yards and gardens, where they serve as cool hiding places for children, pets and other small animals on hot August afternoons. Riparian thickets of dogwood, willow or ninebark, for example, prevent bank erosion into streams, provide shade to cool the water, and protect fish, frogs and smaller stream dwellers from kingfishers, herons and other anglers.

What distinguishes these shrubs that form thickets,

hedgerows and "hells" from other plants? They are woody perennials as are small trees, but shrubs are less than 40 feet tall at maturity (some less than six inches!) and branch at or near the ground to produce multiple stems. They often sprout new plants from roots or underground stems, form-  
(See *Shrubs*, page 8)

## Wildlife habitat means plants too

WILDLIFE IS MORE THAN FAUNA... and the Virginia Department of Game and Inland Fisheries (VDGIF) is charged to protect and manage wildlife by maintaining healthy habitats that include suitable plants, clean water, air and soil and ample space. Law enforcement and boating have demanded more responsibilities from an inadequately supported agency. More personnel and

funds are desperately needed to protect our Virginia environment. A survey of Virginians reveals their awareness of this need. The same report reveals that declining sales of hunting licenses has drastically reduced funding while responsibilities and aged facilities, such as old fish hatcheries, need restoration or replacement. The Auditor of Public Accounts reveals that existing  
(See *VDGIF*, page 8)

### Inside this issue

#### SPECIAL INSERT

- Winter Workshop Registration Form

- Know your VNPS chapters...page 4

# From the President

## MUSINGS ON THE PAST YEAR...

*In thinking about environmental events during the past year, I can't help but wonder about the people whose desires for preserving and protecting their habitats seem to be thwarted by interests whose money can buy them political patronage. Musing about to what and to whom the people can turn for assistance for their determination to prevent destruction of wildernesses precious to us all, I realize that there are few avenues open for them. In some cases, state and local governments appear immune to the interests of the people. There are professional personnel specializing in ecological areas who could lend assistance and support, but, they fear to do so because of reprisals jeopardizing their livelihoods. Approaching an individual government delegate for support might work only if the persons concerned about a habitat in peril did so as a bloc, or with a petition, which would remind the delegate that his position relies on their votes. News is seldom sensational in these days of peace. The news media looking for some action could be recognized as allies in publicizing these struggles between the people and the governments and industry over ecological concerns. Notice how quickly involved governmental officials react to bad publicity! Nevertheless, these are just some of the ideas I have been thinking about in order to develop support for our ecological concerns.*

*Your President, Marie F. Minor*

## Chapters should watch these issues across the state

A project at Olmsted Woods on National Cathedral Grounds, Washington D.C. is showing progress. Work to halt soil erosion, overgrowth of underbrush and replanting are part of this renovation effort. Without the restoration, "...the Cathedral Woodlands are faced with extinction..." according to one source. To learn more, contact: All Hallows Guild, Olmsted Woods Restoration, 2nd Floor, Cathedral Library, Washington D.C. 20016, or call (202) 298-8109.

The Stafford County Planning Department has obtained an Urban Forestry grant to protect wildlife corridors in the county as development expands. When was the last time you heard of county planners putting effort into such a concrete way to protect wildlife habi-

tat? Encourage Cornell Gordon of the Stafford Planning Department by telling him of your support at (540) 659-8668.

Champion International Corporation has dedicated its 25-acre tract called Hemlock Bluff as the 43rd of its "Special Places in the Forest" program, exempting the land from logging. Preserved is a rare stand of 350-year-old eastern hemlocks near Lunenburg in Southside Virginia. "The species covered Virginia 18,000 years ago," said Mark H. Swecker, Champion's manager of forest resources for the region. Some of these trees measure 38 inches in diameter and remain a valuable seed source for the future. So far they have escaped damage by the hemlock woolly adelgid. Huzzah for Champion's protection, and long life to the eastern hemlock! (See *Conservation*, page 6)

## VNPS Nominating Committee seeking nominations

The VNPS Nominating Committee is charged to prepare the following Slate of Nominees for 1998: 1st Vice President, Recording Secretary, Treasurer and Membership Chair, two Directors-at-Large; plus election of Fund Raising Chair and Publications Chair. Nominees must come from membership of

## Mark calendars for annual meeting

The Potowmack Chapter is very pleased to be able to host the Virginia Native Plant Society's annual meeting this year! We extend an invitation to all the VNPS membership to join us September 18, 19, and 20 for a truly wonderful experience! We are planning to use the National Wildlife Federation's beautiful Laurel Ridge site near Tyson's Corner, Virginia, which has ample parking, easy access to some unique natural areas, and many things to see and do right there! So mark your calendars now and plan on joining us for what promises to be a great wildflower weekend!

## Quilt raffle a success

The Wildflower of the Year queen size quilt made by Mrs. Lorene Edmunds of Harrisonburg was a big fundraiser at the 1997 annual meeting. VNPS spent \$1,219 for the quilt and raffle tickets and took in \$2,326 in raffle sales. That works out to a net gain of \$1,107!

## Bruce trip almost full

The Bruce Peninsula trip is filling rapidly. There are several spaces remaining that have been released by last year's waiting list members. The trip is scheduled for June 13-20 at Wildwood Lodge. The cost is \$450 a person which includes room, board and the great boat ride to Flowerpot Island. The botanical adventure will be led this year by Nicky Staunton (on her fifth trip!) and field trip botanist Cris Fleming. Several new sites are being considered for inclusion, plus the Lake Iris and Robert's Oak Fern sites. This year might include an excursion to locate Hooker's orchid. Let us know of your interest immediately. Contact Nicky Staunton at (703) 368-9803.

*Bulletin* readers should take a close look at the wonderful renderings of chapter flowers found on page 4. The drawings are the work of artist and Potowmack Chapter member Joan Van Ryzin. A self-taught artist, Joan has enhanced her talents through courses at such places as the School of Visual Arts in New York City and The Art League in Old Town Alexandria. She also depicts the natural world through the use of pressed flowers and watercolors.

VNPS and recommendations and names of persons volunteering for a position will be considered. Contact Nicky Staunton, Chair; Ted Scott, Elaine Smith, Nancy Luria, Butch Kelly or Gay Frix if you would like to be considered for one of these important positions. Don't be shy. Let us know!

Winter reading

# Gardening essays make delightful reading

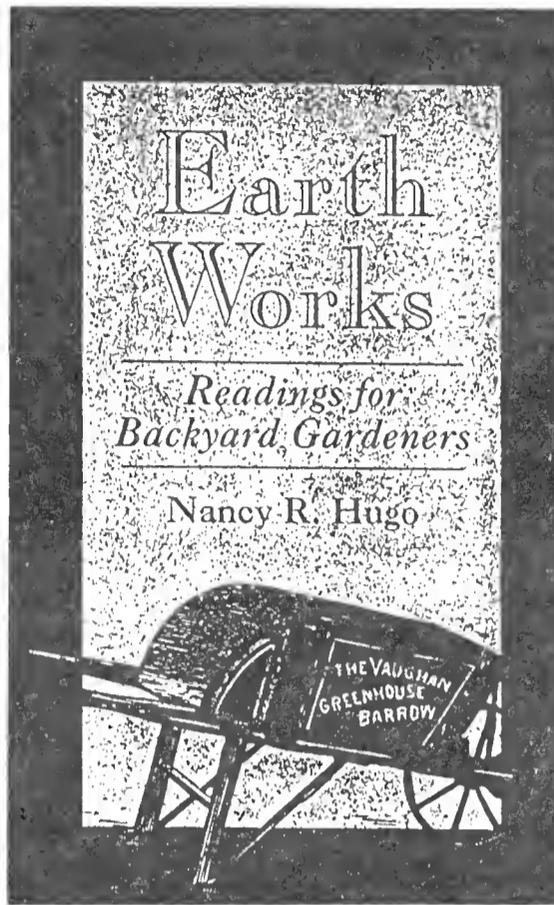
*Earth Works* by Nancy R. Hugo, University Press of Virginia, 1997, 180 pages

What a joy to have a gardening book that can be read either from beginning to end or from anywhere one opens. *Earth Works* is a compilation of short essays most of which have been published before, primarily in *The Richmond Times-Dispatch*. These essays, arranged month by month, are full of practical garden knowledge that even long-time gardeners can find helpful. The author imparts lore ranging over a spectrum of garden-related subjects from toads to trees.

Mrs. Hugo, who is the state VNPS publicity chair, writes from her own mattock-wielding gardening experiences in both Ashland and Buckingham County, Virginia. "February," she writes, "is to seed flats as bathing suits are to inches--the further you get into the former, the more you wish you had fewer of the latter." She admonishes that the seed flats will still need attention in March when outside the crocuses and daffodils cast their lure. Her advice is to plant in flats only those seeds that are difficult to germinate out of doors, those that need a jumpstart to bring to proper size by their spring blooming time, and those seeds of plants one wishes to harvest at the earliest possible time.

Another entry pays tribute to a trowel. There is nothing like a proper tool. Nobody wants a trowel that bends with use or is the wrong size or gets lost when laid down because its handle is green. After paying homage to *her* particular trowel, she shares with readers the catalogue name where it can be obtained. In another essay she touts and describes the mattock. Her advice is practical. For example, in buying pansies, she urges choosing not the most floriferous flat but the one with the most compact plants.

Some of her essays counter long-held truths; well, maybe not truths,



but folk beliefs. For example, we all know that tree roots go down deep, that the image of the tree above ground is replicated underneath. Right? Wrong! Most trees are shallow-rooted and their roots and rootlets extend well beyond the tree's dripline. Trees should be planted in a shallow, broad hole and fertilized NOT at the time of planting, but rather at the end of a complete growth cycle. We all know that it is the honeybee which stings and not the bumblebee. Wrong again. Bumblebees can sting and sting repeatedly. What about fastidiously raking the mown grass? Cut grass isn't good for the lawn...or is it?

What too many people throw away Mrs. Hugo treasures: pine needles and leaves. "Thinking of pine needles as the down comforters of the plant world will make you less likely to discard them," she says. She writes of the benefits of composting, the use of oak leaves as mulch, and reveals that the average humus pile contains

twice the feeding elements of an old manure pile!

In the delightful snippets of *Earth Works*, the author's concern for other aspects of the outdoor world is apparent. She suggests not raking all the leaves so wintering birds can probe the leaf litter, leaving unmown edges in lawns as toad refuges, leaving clover in the lawn for the goodness it does, planting nectar-rich flowers for the butterflies, and avoiding the use of Sevin.

What does this garden writer say about native plants? Importantly, she emphasizes that digging them from the wild is not done. She extols the color and shape of a favorite, the *Silene virginica*, which she plants with rue anemone or star chickweed whose small white flowers act as a foil to the dazzle of the fire pinks. She includes an essay on the butterfly weed, one on the *echinacea*, and a December entry about winterberry. "...even my winterberry that had the chlorotic leaves is loaded with berries. That's one of the nice things about winter landscape effects anyway--they attract attention without demanding maintenance. Pass by the red berries of your winterberry, admire them, then trot inside and flop down in front of the wood stove. Such are the pleasures of winter gardening."

Although the reader could wish for an index and for a list of tool and plant sources, particularly for the native plants, the book is well-written despite misspelled *foliage* and use of pant for pants. These are but venial sins. The book is charming and witty, imparts knowledge, advice, and etymologies in delectable doses. Furthermore, there are Clare Leighton's appropriate wood engravings to introduce each month. This uplifting volume should be a welcome addition to every Virginia gardener's library.

Carroll Lisle, Shenandoah Chapter

# Know your VNPS Chapters



**Blue Ridge Wildflower Society**  
*Trillium grandiflorum*, large flowered trillium  
Membership: 165



**Piedmont Chapter**  
*Clematis ochroleuca*, curlyheads  
Membership: 176



**Prince William Chapter**  
*Mertensia virginica*, Virginia bluebell  
Membership: 115



**Jefferson Chapter**  
*Jeffersonia diphylla*, twinleaf  
Membership: 91



**Pocahontas**  
*Tradescantia virginiana*, spiderwort  
Membership: 76



**Shenandoah Chapter**  
*Pieris floribunda*, mountain fetterbush  
Membership: 64



**John Clayton Chapter**  
*Claytonia virginica*, spring beauty  
Membership: 145



**Potowmack Chapter**  
*Viola hirsutula*, southern wood violet  
Membership: 362

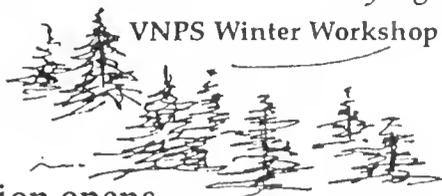


**South Hampton Roads Chapter**  
*Kosteletskya virginica*, seashore mallow  
Membership: 73

# Celebrating Appalachian Spring

"A program highlighting the flora of eastern woodlands"

VNPS Winter Workshop 1998, Saturday, March 14, University of Richmond, Richmond, VA



9:00 a.m. Registration opens

9:15-9:30 Resource Fair and Exhibition of Field Notes Display: "The Fine Art of Keeping Field Notes"

Bring your field notes and let us display them with others collected by Ann Regn, Environmental Education Coordinator for the Department of Environmental Quality, and by garden columnist Nancy Ross Hugo. The purpose of the display will be to illustrate the value of keeping field notes as well as to demonstrate techniques that will enhance your record keeping. Suggestions for activities that encourage children and students to keep field notes will also be highlighted.

9:30-9:45 Opening remarks

9:45-10:30 The Evolution of Virginia Landscapes: A Geologic Perspective

Dr. William G. Melson, Senior Scientist at the Smithsonian's National Museum of Natural History, will discuss some of the geologic forces that have shaped Virginia's landforms and describe the responses of plants to those forces. For example, his presentation will provide insight into how plant distributions reflect the area's long history of landscape and climate changes, including glacial intrusions north of Virginia.

10:30-11:15 Spring Ephemerals of Virginia's Forests and Woodlands

Dr. Stanwyn G. Shetler, Curator of Botany Emeritus of the Smithsonian's National Museum of Natural History, will describe "the soul of Appalachian spring"-- that fleeting period between the time when the days begin to lengthen and late winter sunlight begins to warm the forest floor and the time when the forest canopy again closes and shades the woodland floor. His presentation highlights the showy wildflowers uniquely adapted to "jump-start" and race through life cycles during this brief period.

11:30 -12:30 Keynote Speaker Rick Darke, Curator of Plants, Longwood Gardens, will share his slide presentation entitled "Exploring the Landscape Potential of Our Eastern American Woodlands." Through his evocative images and sensitive designs, Darke will explore the physical patterns and seasonal events that characterize the unique beauty of the eastern deciduous forest, and he will illustrate ways gardeners and other land managers can celebrate these landscapes in their own designs.

12:30-1:15 p.m. Lunch and opportunity to view exhibit (Bring a bag lunch. Soda and juice machines will be available.)

1:15-1:30 Restoring the American Chestnut to its Native Habitat

Lucille Griffin, Executive Director of the American Chestnut Cooperator's Foundation, will describe her organization's integrated management plan to reintroduce blight-resistant American chestnuts to suitable sites in eastern deciduous forests. She will describe the Foundation's breeding program as well as her views on the necessity of biological controls for chestnut blight.

1:30-2:15 Knowing and Growing Ferns

Wesley Greene, landscape supervisor and gardener for Colonial Williamsburg, will speak on how to identify and grow some of Virginia's native ferns.

2:15-2:45 Winter Twig Identification

Dr. John Hayden, Chair Department of Biology, University of Richmond, will provide keys and advice regarding how to identify trees and shrubs by their twigs in winter.

2:45-3:00 Closing and announcement of door prize winners

3-3:30 Optional Hands-on Winter Twig Identification Session.

Try your hand at identifying a selected group of winter twigs using skills you've learned from Dr. Hayden.

*Special Event!*

Bring an example of your field notes and receive a chance to win a door prize. We want to exhibit as many different ways of keeping field notes as possible and hope you are willing to share yours. Bring something as simple as your wildflower field guide with dates penciled in beside flower names or as elaborate as a page from a flower diary with watercolor illustrations. We're as interested in content as form (when did the first bluebell bloom last year; who recorded it; where?) Don't be shy; let's see the records you're keeping.

## REGISTRATION

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_

Are you a VNPS member? \_\_\_ Yes

\_\_\_ No, but I would like to join VNPS (\$15 for individual, \$25 for family) and attend the Winter Workshop. The workshop is free to VNPS members, but you must be a member to attend.

MAIL registration to: Effie Fox, Education Chair, P.O. Box 3362, Warrenton, VA 20188. For more information, call Effie Fox at: (540) 347-4090.

REGISTRATION DEADLINE: MARCH 9, 1998

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<https://archive.org/details/bulletin1719unse>

# Native plant societies beyond Virginia's boundaries

## ALABAMA

Alabama Wildflower Society  
240 Ivy Lane  
Auburn, AL 36830-5771

## ALASKA

Alaska Native Plant Society  
P.O. Box 141613  
Anchorage, AK 99514-1613

## ALBERTA

Alberta Native Plant Council  
52099, Garneau Postal Outlet  
Edmonton, AB, Canada T6G 2T5

## ARIZONA

Arizona Native Plant Society  
P.O. Box 41206  
Sun Station  
Tucson, AZ 85717-1206

## ARKANSAS

Arkansas Native Plant Society  
P.O. Box 250250  
Little Rock, AR 72225

## BRITISH COLUMBIA

••Garry Oak Meadow  
Preservation Society  
A-954 Queens Avenue  
Victoria, BC Canada V8T 1M6

••Victoria Horticultural Society

Native Plant Study Group  
P.O. Box 5081, Postal Stn. B  
Victoria, BC Canada V8R 6N3

## CALIFORNIA

California Native Plant Society  
1722 J St. Suite 17  
Sacramento, CA 95814-2931



## COLORADO

Colorado Native Plant Society  
P.O. Box 200  
Fort Collins, CO 80522-0200

## CONNECTICUT

Connecticut Botanical Society  
10 Hillside Circle  
Storrs, CT 06268

## DISTRICT OF COLUMBIA

Botanical Society of Washington  
Dept. of Botany, NHB 166  
Smithsonian Institution  
Washington, D.C. 20560

## FLORIDA

Florida Native Plant Society  
P.O. Box 6116  
Spring Hill, FL 34606

## GEORGIA

••Georgia Native Plant Society  
P.O. Box 422085  
Atlanta, GA 30342-2085

••Georgia Botanical Society  
1963 Ferry Drive NE  
Marietta, GA 30066-6250



## IDAHO

Idaho Native Plant Society  
P.O. Box 9451  
Boise, ID 83707-3451

## ILLINOIS

Illinois Native Plant Society  
Forest Glen Preserve  
20301 E. 900 North Road  
Westville, IL 61883

## INDIANA

Indiana Native Plant &  
Wildflower Society  
5952 Lieber Road  
Indianapolis, IN 46208-1319

## KANSAS

Kansas Wildflower Society  
R.L. McGregor Herbarium  
University of Kansas  
2045 Constant Avenue  
Lawrence, KS 66047-3729

## KENTUCKY

Kentucky Native Plant Society  
Dept. of Natural Science  
E. Kentucky University  
Richmond, KY 40475

## LOUISIANA

••Louisiana Native Plant Society  
216 Caroline Dormon Road  
Saline, LA 71070

••Louisiana Project Wildflower  
Lafayette Natural History  
Museum

637 Girard Park Drive  
Lafayette, LA 70503-2896

## MAINE

Josselyn Botanical Society  
P.O. Box 41  
China, ME 04926

## MARYLAND

Maryland Native Plant Society  
P.O. Box 4877  
Silver Spring, MD 20914

## MASSACHUSETTS

••American Wildflower Society  
11 Johnson Avenue  
Chicopee, MA 01013

••New England Wildflower Society  
180 Hemenway Road  
Framingham, MA 01701-2699

## MICHIGAN

••Michigan Botanical Club  
Dept. Biology, Univ. of Michigan  
Ann Arbor, MI 48109-1048

••Wildflower Association of  
Michigan  
P.O. Box 80527

6011 W. St. Joseph, Suite 403  
Lansing, MI 48908-0527

## MINNESOTA

••Friends of the Eloise  
Butler Wildflower Garden  
P.O. Box 11592  
Minneapolis, MN 55412

••Minnesota Native Plant Society  
220 Bio. Sci. Center  
University of Minnesota  
1445 Gortner Avenue  
St. Paul, MN 55108-1020

## MISSISSIPPI

Mississippi Native Plant Society  
Mississippi Museum of  
Natural Science

111 N. Jefferson Street  
Jackson, MS 39202

## MISSOURI

Missouri Native Plant Society  
P.O. Box 20073  
St. Louis, MO 63144-0073

## MONTANA

Montana Native Plant Society  
P.O. Box 8783  
Missoula, MT 59807-8782

## NEVADA

••The Mohave Native Plant Society  
8180 Placid Street  
Las Vega, NV 89123

••Northern Nevada Native  
Plant Society  
P.O. Box 8965  
Reno, NV 89507-8965

## NEW JERSEY

The Native Plant Society of  
New Jersey  
P.O. Box 231  
Cook College

New Brunswick, NJ 08903-0231

## NEWFOUNDLAND

Canadian Wildflower Society  
Newfoundland Chapter  
Dept. Biology, Memorial Univ.  
St. John's NF Canada A1B 3X9

## NEW MEXICO

Native Plant Society of  
New Mexico  
P.O. Box 5917

Santa Fe, NM 87502

## NEW YORK

••Amherst Museum  
Wildflower Society  
3755 Tonawanda Creek Road  
East Amherst, NY 14051

••Long Island Botanical Society  
45 Sandy Hill Road  
Oyster Bay, NY 11771-3111

••New York Flora Association  
New York State Museum  
3132 CEC  
Albany, NY 12230

••Niagara Frontier Botanical  
Society

Buffalo Museum of Science  
1020 Humboldt Parkway  
Buffalo, NY 14211

Woodinville, WA 98072-0576

## NORTH CAROLINA

••North Carolina Wildflower  
Preservation Society  
N.C. Botanical Garden

Totten Garden Center 3375  
Univ. of North Carolina  
Chapel Hill, NC 27599-3375

••University Botanical Gar-  
dens at Asheville, Inc.  
151 W.T. Weaver Blvd.  
Asheville, NC 28804



# Plant societies

## NOVA SCOTIA

Canadian Wildflower Society  
Nova Scotia Wild Flora Society  
Nova Scotia Museum  
1747 Summer Street  
Halifax, NS, Canada B3H 3A6

## OHIO

- Cincinnati Wild Flower Preservation Society  
338 Compton Road  
Wyoming, OH 45215
- Native Plant Society of Northeastern Ohio  
2651 Kerwick Road  
University Heights, OH 44118
- Ohio Native Plant Society  
6 Louise Drive  
Chagrin Falls, OH 44022

## ONTARIO

- Canadian Wildflower Society  
East Toronto Chapter  
43 Anaconda  
Scarborough, Ont., Can. M1L 4M1
- Canadian Wildflower Society  
Dogtooth-Wellington Chapter  
Botany Dept., Univ. of Guelph  
Guelph, Ont., Canada N1G 2W1
- Canadian Wildflower Society  
London Chapter  
665 Windermere Rd. #711  
London Ont., Canada N5X 2Y6
- Field Botanists of Ontario  
c/o W.D. McIlveen  
RR #1, Acton, Ont., Canada L7S 2L7

## OKLAHOMA

Oklahoma Native Plant Society  
Tulsa Garden Center  
2435 S. Peoria  
Tulsa, OK 74114-1350

## Conservation

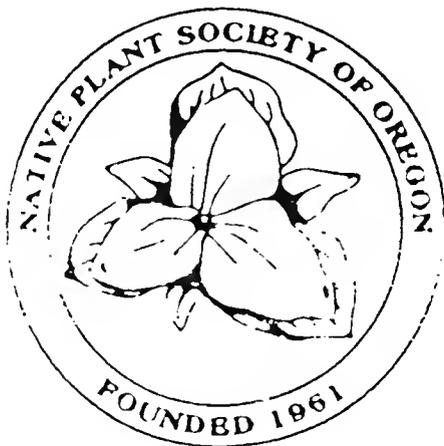
*(Continued from page 2)*

As the U.S. Forests' master comprehensive plan is being reviewed for the Jefferson and George Washington Forests, there is need for an observer of the forest to note conditions of the areas visited regularly on outings. If you hike or botanize in this region and would be willing to watch the forest, please advise Nicky Staunton, VNPS Conservation Chair through the VNPS mail box: PO Box 844, Annandale VA 22003 or by phone: (703) 368-9803.

The issue of creating a Western Transportation Corridor through Prince William County, Fauquier County, and Loudoun County to the Potomac River is unsettled. Maryland does not want the connector as proposed and county residents see the transporta-

## OREGON

Native Plant Society of Oregon  
2584 NW Savier Street  
Portland, OR 97210-2412



## PENNSYLVANIA

- Botanical Society of Western Pennsylvania  
401 Clearview Ave.  
Pittsburgh, PA 15205
- Delaware Valley Fern & Wildflower Society  
263 Hillcrest Road  
Wayne, PA 19087

## ••Pennsylvania Native Plant Society

P.O. Box 281  
State College, PA 16804-0281

## RHODE ISLAND

Rhode Island Wild Plant Society  
12 Sanderson Road  
Smithfield, RI 02917-2606

## SOUTH CAROLINA

Southern Appalachian Botanical Society  
Newbury College, 2100 College St.  
Newberry, SC 29108

## SOUTH DAKOTA

Great Plains Botanical Society  
P.O. Box 461  
Hot Springs, SD 57747

## TENNESSEE

- Tennessee Native Plant Society  
P.O. Box 856  
Sewanee, TN 37375

- The Wildflower Society  
Goldsmith Civic Garden Center  
750 Cherry Road  
Memphis, TN 38119-4699

## TEXAS

- El Paso Native Plant Society  
7760 Mays Avenue  
El Paso, TX 79912

- Native Plant Society of Texas

P.O. Box 891

Georgetown, TX 78627-0891

## UTAH

Utah Native Plant Society

P.O. Box 520041

Salt Lake City, UT 84152-0041



## WASHINGTON

Washington Native Plant Society  
P.O. Box 576

Woodinville, WA 98072-0576

## WEST VIRGINIA

W.Va. Native Plant Society

P.O. Box 2755

Elkins, WV 26241

## WISCONSIN

Botanical Club of Wisconsin

Wisconsin Academy of Arts,

Sciences and Letters

1922 University Avenue

Madison, WI 53705

## WYOMING

Wyoming Native Plant Society

1604 Grand Ave., Suite 2

Laramie, WY 82070

## NATIONAL NATIVE PLANT SOCIETIES

- American Association of Field Botanists

P.O. Box 23542

Chattanooga, TN 37421

- American Penstemon Society

1569 South Holland Court

Lakewood, CO 80226

- Canadian Wildflower Society

4981 HWY 7 East

Unite 12A #228

Markham, Ont., Can. L3R 1N1

- Center for Plant Conservation

Missouri Botanical Garden

P.O. Box 299

St. Louis, MO 63166

- Eastern Native Plant Alliance

P.O. Box 147

Hillsboro, MD 21641-9999

- National Wildflower

Reserach Center

4801 La Crosse Boulevard

Austin, TX 78739

- Natural Areas Association

320 South Third Street

Rockford, IL 61108

- Operation Wildflower

National Council of State Garden Clubs

9516 Glenbrook Drive

Charlotte, NC 28175-9030

- Society for Ecological

Restoration

University of Wisconsin

Arboretum

1207 Seminole Hwy.

Madison, WI 53711

- The Wild Ones

P.O. Box 23576

Milwaukee, WI 53223-0576

*A special thank-you goes out to the Canadian Wildflower Society for compiling this useful list.*

tion corridor as a threat to opening the rural farm area to unwanted over-development.

Chapman's Landing across the Potomac from Virginia's eastern shore of the river is still under threat of destructive development in eagle nesting areas and also in wetlands containing rare flora. Rod Simmons of the Potowmack Chapter and President of the Maryland Native Plant Society could give more detailed information. Contact at mnps@geocities.com. Stan Shetler, VNPS Botany Chair, is also informed on this issue.

An issue exists in the John Clayton area near Williamsburg where a park is being developed. Pat Baldwin, field botanist and Director-at-Large of VNPS would welcome help in protecting the rare environment and plants found there. Call Pat at (804) 836-2064.

# Wildflower Clippings: Information and warnings

 National Wildlife Federation members recently visited a Tucson high school during their annual meeting in Arizona. The school site was not only certified along with the NWF's many other Schoolyard Habitats, but showed that even a barren turnaround area for a bus can have wildlife potential. Sunnyside High School earned a \$3,000 matching grant from the Arizona Department of Game and Fish along with many local donations. The habitat students constructed represents the Sonoran Desert in its plant and animal make-up. The inner-city, predominantly Hispanic youth are trying to establish native plants and animals. Next in their plans: they are seeking a grant to build a reservoir that will serve as a brood tank for a local species of endangered fish.

 On September 1, the U.S. Botanic Garden Conservatory closed its doors for two years to renovate and create a privately financed outdoor National Garden. The plans are quite spectacular, but what many VNPSers may find particularly interesting are the plans for the garden. The new 3-acre facility will include a showcase garden which they say "will present outstanding plants native to the mid-Atlantic region in

naturalistic settings along a moisture gradient." How many will be cultivars rather than true natives has yet to be seen, but it is an ambitious project. \$10 million have been set aside for the National Garden alone in the first project authorized by Congress for the Architect of the Capitol to use which has been financed by privately donated funds. Part of the funds are being raised by sale of a 1997 Botanic Garden silver dollar.

The Showcase Garden portion will feature a wetland created with rainwater that is recirculated on the same site and will incorporate many butterfly larval host plants. Additional information can be found on the Architect of the Capitol web site (<http://www.aoc.gov>).

 This message, sent by Idaho soil scientist Jerry Niehoff, was recently circulated via e-mail to interested agencies and individuals. Until more information comes in, it may be wise to use caution and wear gloves if you are pulling weeds.

Niehoff wrote that "about 5 years ago, I had spent most of a mid-July day pulling knapweed with my bare hands. At the end of the day, I had broken the skin on the little finger and the adjacent ring finger of my right hand. I also suspect that in pulling the knapweed, I broke knapweed stems and got sap directly into my tissues

through the broken skin. I noticed that these injured sites in the joints of these two fingers were slow in healing and I always seemed to have pain in them. About 6 months later, I started to develop a lump in my little finger, so I decided to see my family doctor. He aspirated the lump and figured it was a cyst.

About 6 months after my initial doctor's visit, the finger got worse. I went to a hand surgeon who operated and found a very aggressive benign tumor. A month or two later, it came back, so they operated again.

After the second surgery, the tumor really started to spread toward the hand, so they removed the little finger. Shortly thereafter, I started to get tumors in my ring finger. This time I went to the cancer center at the University of Washington. After several surgeries on that finger with the same results, they ended up removing that finger also. The doctors said that there is a compound in knapweed that is carcinogenic. This compound was isolated in Russian knapweed and probably occurs in spotted and diffuse knapweeds also. It has been 2 1/2 years since my last surgery, and no problems have occurred in my other fingers at this point. If someone else can avoid what happened to me, I would be very pleased."

See the address label for your membership's expiration date.

## VNPS Membership/Renewal Form

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City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Individual \$15       Family \$25       Student \$10

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Associate (group) \$40; delegate \_\_\_\_\_

To give a gift membership or join additional chapters: Enclose dues, name, address, and chapter. (Non-voting memberships in any other than your primary chapter are \$5).

I wish to make an additional contribution to \_\_\_\_\_ VNPS \_\_\_\_\_ Chapter

in the amount of  \$10  \$25  \$50  \$100  \$ \_\_\_\_\_

Check here if you do not wish your name to be exchanged with similar organizations.

Check here if you do not wish to be listed in a chapter directory.

Make check payable to VNPS and mail to:

VNPS Membership Chair, P.O. Box 844, Annandale, VA 22003

Membership dues are tax deductible in the amount they exceed \$5. Contributions are tax deductible in accordance with IRS regulations.

### The Bulletin

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Marie F. Minor, President  
Nancy Sorrells, Editor

Original material contained in the *Bulletin* may be reprinted, provided credit is given to the author, if named. Readers are invited to send letters, news items, or original articles for the editor's consideration. They should be typed (double-spaced, please) or sent as a Macintosh text file to the Editor at Rt. 2, Box 726, Greenville, VA 24440. The deadline for the next issue is Feb. 1

# • VDGIF

(Continued from page 1)

funding will not support current levels of resource management past 2000.

In the southeastern United States, Virginia is NEXT TO LAST IN PER CITIZEN EXPENDITURE FOR WILDLIFE MANAGEMENT PROGRAMS. VDGIF HAS NEVER RELIED ON GENERAL FUND TAX APPROPRIATION FOR ITS OPERATIONS. Funding sources are derived from the following categories: 54 percent from sale of hunting and fishing licenses; 24 percent from federal excise taxes on equipment; 14 percent from boating sales and use taxes; 8 percent from other sources.

VNPS cares about this cooperating agency and its funding problems. We have shared educational efforts regarding invasive exotic plants. Prior to that, though, VNPS has been proud of its first registry site: The G. Richard Thompson Wildlife Management Area in Linden, Virginia. *Trillium grandiflorum* call Blue Mountain "home," along with wild turkey and deer populations. Migratory warblers and scarlet tanagers can be spotted in the tall trees above green violets and trillium.

While president of VNPS, I served on the VDGIF Advisory Board to study funding problems. We could see that we "passive" public consumers of VDGIF locations were essentially on a "free ride" when we hiked the DGIF

locations in search of native plants, and birds. A way we could help would be to encourage sales tax revenue from equipment related to our interests--binoculars, cameras and film--be designated as funding for the agency's increased work load.

HJR 522 legislative committee has endorsed two proposals to solve the funding problem of VDGIF. The first, concerning designated sales tax, is mentioned in the previous paragraph. The second would allow the VDGIF board to adjust license prices on a two-year basis according to the CPI not to exceed \$1 per biennium for resident licenses and \$2 for nonresident licenses.

To receive a brochure with details on this proposed legislation, call VDGIF (804) 367-0167 or write: Fund-

## • Shrubs

(Continued from page 1)

ing clones around the parent plant. These are the mound-like thickets of dogwood we see at Big Meadows, or of sumac along the highways.

Multiple interior branching and low growth habit of these plants make for tough walking for us, but provide these plants with maximum leaf exposure to sunlight and protection from adverse weather. They survive snow, wind, ice and floods with surprising ease. If you would like to learn more about our native shrubs, I recommend

ing Initiative VDGIF, 4010 W. Broad Street, Richmond VA 23230. Help by contacting your state delegate and senator to express your support, and encourage others to do the same. The brochure includes further ways you can help. Also, David K. Whitehurst VDGIF Director, Planning, Policy and Public Relations is willing to speak to VNPS chapters and other groups to present more information.

Learn about the VDGIF Funding legislation proposals and then support efforts to resolve increased environmental protection in the face of decreased funding. All lands managed by VDGIF are part of our treasured native plant habitats. Rally around to help!

Nicky Staunton, Conservation Chair.

starting with *Trees and Shrubs of Virginia* by Oscar W. Gupton and Fred C. Swope (1981, University Press of Charlottesville) and *The Natural History of Wild Shrubs and Vines* by Donald W. Stokes (1989, The Globe Pequot Press).

Catharine Tucker, Pocahontas Chapter.

**REMINDER: If your chapter or group has events (hikes, lectures, sales, etc.) for the *Bulletin* spring wildflower calendar, send them to Nancy Sorrells, Rt. 2, Box 726, Greenville, VA 24440 by Feb. 1**

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# Bulletin

A publication of the VIRGINIA NATIVE PLANT SOCIETY

Conserving wild flowers and wild places

## Spring ephemerals are early garden beauties

Through the long, cold winter (or even a short warm one!), wildflower gardeners eagerly anticipate the spring ephemerals. Among the earliest plants to emerge in woodland gardens, they flower and set seed before the tree canopy fills in.

The plants discussed here are native to Virginia's deciduous forests and are easy to grow in similar conditions in the garden: sun before the trees leaf out, shade through summer and fall and a humus-rich soil that is moist yet well-drained. All are available from wildflower nurseries or chapter plant sales.

*Claytonia virginica* - In its natural habitat spring beauty, named for 18th-century Virginia botanist John Clayton, forms extensive colonies. Plants are about 6 inches tall with grass-like basal leaves and a pair of smooth leaves on the flowering stems. Small starry, five-petaled flowers are white or pink with darker veins. In the garden, small clumps will spread into ever larger patches sometimes even invading the

lawn where mowing should be delayed until they've gone dormant.

*Dentaria* - Three species of toothwort (*D. diphylla*, *D. heterophylla*,

*breeches* has low growing, bluish-green ferny foliage and clusters of white flowers on 8-10-inch stalks. Plant them in areas that won't be

**"Ephemeral - Lasting for only a short time. An ephemeral flower lasts only about a day or less."**

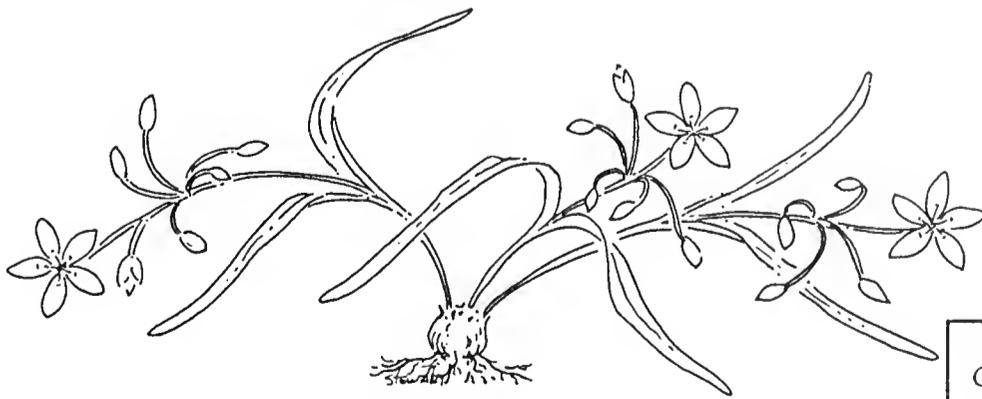
**Manual of Vascular Plants, Gleason & Cronquist**

*D. laciniata*) are native to Virginia and all can be cultivated. This is a great little plant to tuck here and there among rocks and along paths where its delicate pinkish-white flowers on 8-16-inch stems can be enjoyed up close. Basal and stem leaves are shallowly lobed or deeply cut depending on the species.

*Dicentra cucullaria* - Dutchman's

disturbed because their tiny pink tubers grow close to the soil surface. They make a nice foliage combination with partridge-berry (*Mitchella repens*) which will fill in after the Dutchman's breeches have gone dormant.

*Dodecatheon meadia* - Shooting star's flowers, resembling miniature white or pink cyclamens, have swept-back petals and beak-like stamen arrangements. At 10-24 inches tall, this graceful species makes a showy accent among shorter natives. The rosette of broad leaves can be up to a foot across. It and Dutchman's breeches are usually  
(See *Ephemerals*, p. 10)



Spring Beauty  
*Claytonia virginica*  
Illustration by  
Barbara Stewart

### Inside this issue...

- Wildflower Calendar of Events, pages 5-6
- Respect for native plants "Down Under," page 3
- News from the VNPS chapters, page 7

# From the President

## *Dreaming of a green winter?*

Trying to get into the mood to write a piece for the Bulletin, I look out of my windows at the rain and wind of the nor'easter this last week of January. As I look around, I notice that the sea myrtle (*Baccharis halimifolia*) is an ever-green this winter. The greening of grass creeps across the yard. Dandelions bloom and the birdfoot violets (*Viola pedata*) are still green and had flower buds until mid-December. Spring witchhazel (*Hamamelis vernalis*) bloomed before mid-January instead of mid-February. With milder temperatures and lots of rain, this winter was a good time to experiment with plants falling into the semi-hardy to hardy category. I have been closely watching the dwarf palmetto (*Sabal minor*) and needle palm (*Rhapidophyllum hystrix*) as well as "hardy" gardenias which were planted in backyard beds. They are all doing very well, so far! So, by now it looks as if we have been really experiencing a long cold spring rather than a winter. How could anyone have the winter blahs except maybe those of you in the western part of the state? And yet, a continuation of this weather will make a gardener antsy. Just think of all of the things that need to be done outside while you are in the house watching the rain. February and March are the months in which the gardener is the busiest. Between garden jobs (notice I didn't call them chores), you can take time to run off and check on wildflowers or any other plants which are blooming. When you are outdoors in spring, you feel very alive like you've had a shot of adrenaline. Aaahhh, spring! Don't remember the allergies that you had last year! Now that it's March, go look outside and see if the maples are flowering.

Your President, Marie F. Minor

## *Society members will enjoy trio of new books*

### **Gleason and Cronquist has illustrated companion**

At last, plant lovers can rejoice with the publication of the *Illustrated Companion to Gleason and Cronquist's Manual*. The book is edited by Noel H. Holmgren and collaborators and published by New York Botanical Garden.

The veracity of the adage "a picture is worth a thousand words" is probably never better borne out than when it comes to well-prepared botanical illustrations. No matter how detailed and thoughtfully rendered written descriptions of plant species may be, there is no substitute for a good line drawing to confirm or reject a plant identification. An illustration is the next best thing to having an herbarium at hand for comparison. Even professional botanists rely on illustrations to confirm their conclusions reached initially through the use of technical keys.

Four years in the making, the *Illustrated Companion to Gleason and*

*Cronquist's Manual* is based on the original artwork of the *New Britton and Brown Illustrated Flora of the Northeastern United States and Adjacent Canada*, published in 1952. But the new book is much more than a reprint, it has been completely restructured and enhanced to include new illustrations of several species not treated in the earlier work as well as many useful diagnostic details previously omitted from the old illustrations.

Eight hundred and twenty-seven plates containing meticulously rendered botanical illustrations are arranged especially and labeled to cross-reference with the second edition of Gleason and Cronquist's *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. ISBN 0-89327-399-6, Hardcover, \$125, New York Botanical Garden, Bronx, NY 10458. Phone: 718-817-8721; fax: 718-817-8842; e-mail: scipubs@nybg.org  
From *Flora of North America Newsletter*

### **Duke to speak at annual meeting**

If you haven't already done so, make sure you set aside the dates of September 18, 19 and 20 for the annual meeting hosted by the Potowmack Chapter. The meeting will be held at the Holiday Inn in Alexandria with some of the events slated for Green Spring Gardens Park which is nearby. You won't want to miss the keynote speaker, James Duke, on Saturday night. World renowned as a writer, Duke is the coauthor of *Peterson's Field Guide to Medicinal Plants*. He recently wrote *The Green Pharmacy*, which was published by Rodale Press.

### **Wetland plants of N.C. book reprinted**

The Wetlands Education Program associated with the Virginia Institute of Marine Science has obtained permission from North Carolina State University to reprint the famous Ernest Beal book *Marsh and Aquatic Vascular Plants of North Carolina*. This manual covers most marsh and aquatic species common to Virginia as well as North Carolina. The original book is no longer in print.

A limited number has been reprinted using heavier paper for greater durability and in a ring-style binder for easier field use.

The books are \$15 each, plus \$3 shipping and handling. Send order and make checks payable to: Wetlands Education Program, Virginia Institute of Marine Science, P.O. Box 1346, Gloucester Point, Virginia 23062.

(See Books page 10)

## Down Under:

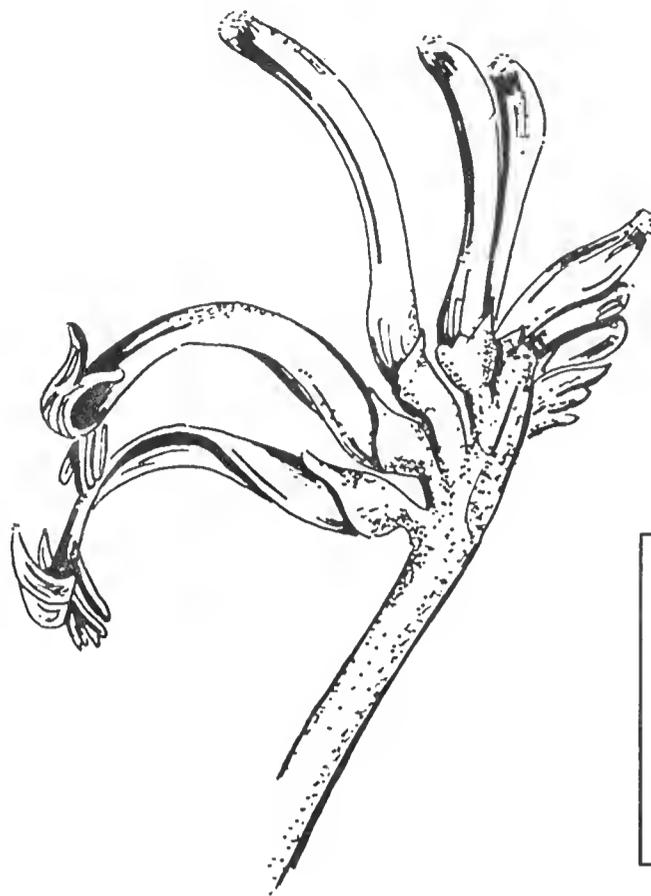
### *Native plants part of Australians' psychological makeup*

Flying into an Australian city at first seems much like flying into any American city, below are the usual suburbs and highways surrounding a city-center. Then perhaps you see a large swath of green which in America almost always turns out to be a golf course or maybe a city park. In Australia it is invariably a botanical garden. Such is the awareness and appreciation of botany and native flora that even the smallest of Australia's cities have botanical gardens.

Consider the example of Rockhampton, situated on Australia's east coast, a city of approximately 56,000, founded in 1855. It is considered the "Beef Capital" of Australia, yet in 1869, only 14 years after its founding, the citizens of Rockhampton established for their city a botanical garden. Compare this with our own state capital, Richmond, population 203,056, incorporated in 1782 and considered the cultural and governmental center for the state. It was not until 1984 that Richmond got its first botanical garden with the establishment of Lewis Ginter Botanical Garden--202 years after its incorporation. Not that the people of Richmond had not thought about it from time to time. After all there was the "recent unpleasantness" of the Civil War, but why did it take us so long?

The case holds true for the rest of Australia as well. Arriving in Darwin from Indonesia in 1995 I traveled south to Alice Springs in the desert heart of the continent then flew over to tropical Cairns. Over the next two months I drove down the entire east coast through Brisbane, Sydney, Melbourne and eventually by ferry to Tasmania and the city of Hobart. Each major city along the way had a botanical garden highlighting native plants. Re-

March 1998



Kangaroo  
paws  
*Anigosanthos  
manglesii*  
Illustration by  
Michael Sawyer

gardless of geography and through varied habitats ranging from tropics in the north, desert and grasslands in the middle to the temperate forests in the south, they all had botanical gardens. It seems indigenous species and the Australian psyche are decidedly entwined.

Australia does have some fantastic flora. Its isolation from the supercontinent of Gondwanaland some 55 million years ago and its separation from Antarctica some 40 million years ago assured that. Contact with Europeans in the 18th century began our scientific study of Australia's native plants and unfortunately the beginning of serious threats to its habitat. On Captain Cook's voyage to Australia in 1770 such was the impression local flora made on the travelers that names such as Botany Bay have been added to the map. Samples collected on this and other voyages created excitement and intrigue among the scientific communities of Europe.

Similarly in America during the 17th and 18th centuries, European explorers marveled at the flora and fauna of the New World. Examples of our plants and animals were sent back to the courts of Europe where they were held as curiosities and specimens of scientific study.

Evidence of this is in the exhibition of Mark Catesby's, the 18th-cen-

tury British naturalist, original work which is currently being shown in the United States for the first time from its home in the Royal Library at Windsor Castle. Beautiful watercolors of our native plants and animals, often rendered together in a single composition, such as one of a blue jay perched among a tangle of *Smilax laurifolia*, are on display. What happened along the way that made us forget the uniqueness of our New World while in Australia people held on to the originality of their land?

In my own case, having left America in 1991 to live in The Netherlands for four years, then spending an additional year traveling through the tropics, I found myself looking at America through new eyes when I returned. How unique the flora seemed. Familiar yes, but the patterns and textures seemed exotic and unique to this part of the globe.

I can remember being fascinated by a large loblolly pine, *Pinus taeda*, growing in my backyard. Now there is nothing more common than a loblolly pine in this part of Virginia, but after seeing the eucalypts of Australia our pines seemed exotic with their bark of thick interlocking plates and the soft, fine texture of the dark green needles.

Contrast this with a description (See *Australians*, page 8)

## Wintergreen schedules 15th Wildflower Symposium

The Wintergreen Nature Foundation is pleased to announce the 15th annual Spring Wildflower Symposium to be held at Wintergreen Resort May 8-10. This event is an exciting mix of hiking, slide presentations and practical "hands-on" work with some of the region's most noted scholars and naturalists.

This year there will be over 60 programs to choose from throughout the weekend with titles like "The Rare Flora of Virginia's Shale Barrens," "Tiptoeing through the Green Pharmacy," "Spring Wildflowers: Their Beauty and their Secrets," "Reading the Forest: What Wildflowers Tell Us," "Diverse Beauty: Wild Lilies of Forest and Meadow," "Trout Stream Flora," "Good Garden Natives: Frost to Frost," and "Fern Frolic."

Participants of this event will explore the diversity of mountain ecosystems and plant life in the setting of the beautiful Blue Ridge region of central Virginia. There will be some off-site field trips to surrounding areas in order to view the diversity of vegetation they offer.

Join the Wintergreen Nature Foundation and Wintergreen Resort for a fabulous weekend with such knowledgeable instructors as Dr. James Duke, ethnobotanist and author of *Green Pharmacy*; Dr. Peter Leimgruber, research scientist for the National Zoological Park's Conservation and Research Center; Catharine Tucker, botanist and fly angler; Allen Hale, field ornithologist, and owner of Buteo Books; Marion Lobstein, botanist and associate professor of biology at Northern Virginia Community College in Manassas, and many others.

Rooms are available through the resort, and symposium participants get a discount on their rooms. Child care is available through the resort for an additional fee. For more information, contact Laura Covert at: P.O. Box 468, Wintergreen, Virginia 22958; 804-325-8172, fax 804-325-1464, or wtgnf@aol.com.

## Wildlife habitat incentives program offered

The United States Department of Agriculture has announced a new Wildlife Habitat Incentives Program (WHIP) which will be under the direction of the Natural Resources Conservation Service. The program is a voluntary one which gives landowners a chance to create or improve wildlife habitat on their land. The continuous sign-up for the program began in early January.

M. Denise Doetzer, NRCS State Conservationist in Virginia, says that the program gives landowners a chance to create or improve wildlife habitat on their land. "We've all seen the decrease in habitat in Virginia. WHIP and other Farm Bill programs can help change this trend. This is an opportunity for each of us to do our part to improve wildlife habitat," she said.

Interested landowners can apply at their local Natural Resources Conservation Service Department or the Soil and Water Conservation District office. Each month, applications on hand will be ranked,

with the highest scores being accepted into the program until funds for the year are exhausted. Landowners whose applications are selected will enter into a 5- or 10-year contract depending on the practices to be installed. The landowners is responsible for maintaining the practice for the length of the contract.

## Spring wildflower identification workshop offered

The Prince William Wildflower Society, the Prince William Natural Resources Council, and Nature's Wonder World, Inc. are co-sponsoring a workshop, "Spring Wildflowers," on April 8 and April 22 from 4:15-6:15 p.m. The workshop is being held at Manassas National Battlefield Park. The instructor is Marion Lobstein who will present the basics of spring wildflower identification while incorporating the ecology and life cycles of plants.

Participants will use actual plant specimens in order to learn the basics of flower structure and how

## Conservation forum slated

The Garden Club of Middle Peninsula, the Sierra Club, The Friends of Dragon Run, The Mattaponi - Pamunkey Rivers Association, the Tidewater RC&D, and the Chesapeake Bay Foundation are sponsoring a forum, "Conservation In Our Everyday Lives: Taking Our Heritage Into the Future."

This will be held on Saturday, March 28 from 9 a.m. (registration) to 3 p.m. at Middlesex High School Auditorium in Saluda, VA. The forum is free! Advance registrants can include \$7 for a box lunch. On the program are:

Craig Tufts of the National Wildlife Federation speaking on "Wildlife in Our Big Backyard: Conserving and Creating Habitat." Included with the speaker on this talk will be wildlife biologists Thelma Dalmas, Fairfax Settle and Bill Portlock. They will present information on habitats for birds and other animals including marine life.

Billy Mills and Nancy Hugo will present "Our Own Backyards: Landscaping for the Environment." Their discussion includes the use of native plants.

Mills will also participate on a panel representing conservation groups. The panel will discuss "The Future of Our Big Backyard: Preservation Through Conservation."

Various education exhibits, including ones from the John Clayton and Pocahontas Chapters, will be displayed.

For information, call Ann Chenoweth 804-769-4844 or Laura Anne Brooks 804-769-2248.

to use the common guides. Supplies provided include a checklist of spring wildflowers and handouts on wildflower identification and ecology. The field section allows participants to practice identification skills covered during the first week.

Workshop fee is \$30. Members of the Prince William chapter or the Prince William Natural Resources Council receive a \$5 discount. To register, make checks payable to Nearby Nature, and mail to: Nature's Wonder World, Inc., 2500 Paxton Street, Woodbridge, VA 22192.

# Virginia Wildflower Celebration 1998

The nine chapters of the Virginia Native Plant Society celebrate the rich diversity of the native flora of the Commonwealth each year in April and May. For the next two months, Society members will share their enthusiasm for wild plants and wild places on field trips and wildflower walks, and during garden tours, plant sales, and a variety of other programs throughout the state.

You are cordially invited to any of the activities listed below; they are all open to the public. As some events require reservations, fees or additional instructions, use the telephone numbers provided to obtain further information. Plants propagated by members will be available at chapter plant sales.

The 1998 Virginia Wildflower of the Year, wild columbine, qualifies as one of Virginia's most graceful and ornamental natives. Wild columbine is a plant of wooded or open, rocky or sandy ground, dry slopes, exposed rock ledges and crevices, and even peat bogs. Typically *Aquilegia canadensis* blooms in April and May or, at higher elevations, in June. It may continue to produce flowers well into July. This delicate but hardy perennial herb with thin, woody rhizomes and slender much-branched stems occurs throughout Virginia with the exception of the Eastern Shore and several southern counties.

## Calendar of Events

**March 21, Saturday, 9 a.m.-6 p.m.**  
**Early spring foray to Frye Preserve in Northumberland Co.** John Clayton members and guests will be doing an initial survey of the flora of this protected two-acre property of pine flatwoods. Leaders Harriett and John Frye. Other yet to be determined sites in Northumberland Co. will also be visited. Leave from Williamsburg. Pre-registration required. Contact Donna Ware to register 757-221-2213 or e-mail: dmware@facstaff.wm.edu.

**March 28, Saturday, 11 a.m.-3 p.m.**  
**South Hampton Roads Plant Sale.** Francis Land House, Virginia Beach, Holly Crusier, 757-481-2285.

**March 28, Saturday, 10 a.m.**  
**Arcadia Spring Ephemerals trip.** Meet Jennings Creek bridge on Rt. 614. Blue Ridge, Rich Crites, 540-774-4518

**April 4, Saturday, 1:30 p.m.** Trip to North River roadside, east of Mt. Crawford, meet at Bridgewater Quick Stop, Shenandoah, Jacob Kagey, 540-828-3297.

**April 4, Saturday, 1 p.m.**  
**Catawba Dry Run Branch field trip.** Meet at Homeplace Restaurant on Rt. 311. After trip, eat at Homeplace. Bring wet area footwear. Blue Ridge, Butch Kelly, 540-384-7429.

**April 4, Saturday, 9 a.m.-3 p.m.**  
**10th Anniversary Celebration of Zoar State Forest & wetland and native plant sale.** Guided trail hikes and canoe trips utilizing new trail guides. Events at Zoar State Forest Nature Trail. Trail located on Rt. 600, 2 miles west of Aylett in King William County. Contact the Mattaponi and Pamunkey Rivers Association at 804-769-0841.

**April 4, Saturday, 9:30 a.m.**  
**Summerfield Farm, Gloucester Co.** John Clayton trip to see trailing arbutus, lady-slipper and other spring flowers at Summerfield Farm. See the eight acres added to the farm. Pre-registration required. Call Mary Hyde Berg, 804-693-3568 to register.

**April 8, Wednesday, 1 p.m.**  
**Bassett Hall Woods, Colonial Williamsburg** guided walk by Wesley Green. See *Orchis spectabilis*, and other spring flowers. Rain date Wednesday, April 15. Pre-registration required. Call Michael Sawyer 757-566-4848 or e-mail: Waterborne@aol.com to register.

**April 11, Saturday, 9:30 a.m.** New River Nature Area, 400-acre site near Radford. Meet at Orange Market near Hanging Rock Park. Bring lunch. Blue Ridge, Butch Kelly, 540-384-7429.

**April 14, Tuesday, 11 a.m.-2 p.m.**, Balls Bluff Wildflower Walk with Marion Lobstein, for reservations 703-536-7150.

**April 18, Saturday, 10 a.m.-noon.** Bluebells are Blooming, walk at Manassas National Battlefield Park led by Nicky Staunton. Prince William, 703-490-0455.

**April 18, Saturday, Zuni Pine Barrens trip, South Hampton Roads.** Leader Becky White, 757-489-7067.

**April 18, Saturday, Dragon's Run Wilderness Area.** Leave Friday night. Blue Ridge, Bob Eubank, 804-239-9756.

**April 18, Saturday, 10 a.m.-2 p.m.**  
**The Virginia Museum of Natural History Arbor Day Festival.** Features ceremonial tree planting, free seedlings, children's activities, information

booths, plant and craft sales, food and drink sales. Sponsored by VMNH in Martinsville, 540-666-8621.

**April 19, Sunday, 1 p.m.**  
**Greenhaven, Norge, James City Co.** John Clayton plant survey of 32-acre, mixed hardwood forest--an agricultural-forestal district where native plantings are increasing biodiversity. Management plan developed by Virginia Forestry. Pre-registration required. Call Michael Sawyer, 757-566-4848 or e-mail: Waterborne@aol.com to register.

**April 19, Sunday, 10 a.m.-12:30 p.m.** Great Falls Park Wildflower Walk with Marion Lobstein. For reservations call 703-536-7150.

**April 19, Sunday, 8:30 a.m.** Lost River State Park trip featuring birds and wildflowers. Meet at Mauzy interchange off I-81 and bring drink and lunch. Diane Holsinger will lead. Shenandoah, call Lib Kyger 540-828-6252 for more info.

**April 19, Sunday, 25th annual Bluebell Walk** at Bull Run Regional Park in Centreville. Marion Lobstein's walks depart at 2 and 3:30 p.m. For more information call the Potomac Overlook Regional Park, 703-528-5406.

**April 24-26, Friday-Sunday, Annual Wildflower Pilgrimage** by Science Museum of Virginia, Blue Ridge Wildflower Society, Roanoke Valley Bird Club. Dorothy Bliss keynote speaker. Call Betty Kelly, 540-384-7429.

**April 25, Saturday, 1:30 p.m.** Trip to Middle River to see sessile trillium and Dutchman's breeches, meet at Bridgewater Quick Stop, Shenandoah, Jacob Kagey, 540-828-3297.

## Calendar of Events

**April 25-26, Saturday & Sunday, 11 a.m.-5 p.m. & 1-5 p.m. Prince William Garden Tour,** Helen Walter, 703-330-9614.

**April 26, Sunday 1-4 p.m. Jefferson Chapter Plant Sale.** Ivy Creek Natural Area in Charlottesville. The plant sale is held as part of a Natural History Day. Representatives from more than a dozen environmental groups will be set up with displays/information at the Natural Area on that day. Jefferson, Glenn Metzler 804-589-1685.

**April 30, Thursday, 7:30 p.m. South Hampton Roads meeting** at Norfolk Botanical Garden. Holly Crusier, 757-481-2285.

**April 30, Thursday, 10:30 a.m.-1:30 p.m. Thompson Wildlife Management Area (Linden) Walk** with Marion Lobstein. For reservations, call 703-536-7150.

**May 2, Saturday, 10 a.m. Lassiter Swamp, Merchants Mill Pond State Park, N.C.** John Clayton trip to see silky camellia, resurrection ferns, bald cypress, Spanish moss and migratory

birds. Canoe trip with state park ranger; a small fee for the canoe rental. Camping facilities available to make a weekend of it and visit the Great Dismal Swamp on Sunday. Limited space available, so register early. Call Michael Sawyer, 757-566-4848 or e-mail: Waterborne@aol.com to register.

**May 3, Sunday, 2 p.m. Buffalo Creek Nature Area trip.** Meet at trail, 2 miles east of Evington. Westvaco and a VNPS Registry site. Blue Ridge, Dorothy Bliss, 804-845-5665.

**May 9 & 10, Saturday and Sunday, and May 16 & 17, Saturday and Sunday. Saturdays 9 a.m.-3 p.m. Sundays noon-4 p.m. John Clayton's Annual Native Plant Sale,** co-sponsored with the Virginia Living Museum. Sale is at VLM, 524 J. Clyde Morris Boulevard, Newport News.

**May 9, Saturday, 10 a.m.-noon, Time for Trillium,** Walk at Thompson Management Area led by Nicky Staunton, Prince William, 703-490-0455.

**May 9, Saturday, 9 a.m.-noon. Prince William Plant Sale,** Bethel Lutheran Church, Manassas, Helen Walter, 703-330-9614.

**May 9, Saturday, 10 a.m.-2 p.m. 14th annual Blue Ridge Wildflower Society Plant Sale** at Virginia Western Community Arboretum. Members may begin purchasing at 9 p.m.

**May 9, Saturday, 1:30 p.m. Trip to Massanutten Visitor Center** off of Rt. 211, meet at Bridgewater Quick Stop, Shenandoah, Jacob Kagey, 540-828-3297.

**May 16, Saturday, 8 a.m.-noon, Insect and Plant Relationships,** lecture and field trip at Occoquan Bay National Wildlife Refuge by Cliff Fairweather, Prince William, 703-490-0455.

**May 16, Saturday 9:30 a.m. Summerfield Farm and Robin's Pond, Gloucester Co.** John Clayton trip to see diverse species of violets (at least 7 species), yellow lady-slippers, plus native dogwoods, *Aronia*, *Kalmia*, and New Jersey Tea in bloom. Pre-registration, call Mary Hyde Berg 804-693-3568 to register.

**May 17, Sunday, 10 a.m.-12:30 p.m. Great Falls Park Wildflower Walk** with Marion Lobstein. For reservations call 703-536-7150.

**May 17, Sunday, 1:30 p.m. Tillman Road** to see sword leaf phlox, meet at Bridgewater Quick Stop store, Shenandoah, Jacob Kagey, 540-828-3297.

**May 17, Sunday, 1 p.m. Nature Trail Governor's Land,** Rt. 5 near Chickahominy River. Meet at Governor's Land Sales Center. John Clayton trip. Contact Donna Ware to register 757-221-2213 or e-mail: dmware@facstaff.wm.edu.

## Historic Richmond house to hold plant sale

The Pocahontas Chapter will be participating in the annual plant sale at Virginia House in Richmond. The event, sponsored by the Virginia Historical Society, is Saturday, April 11 and Sunday, April 12 from 9 a.m. to 5 p.m.

The chapter was asked to present an exhibit at the event because many plants offered by small nurseries are native, and also many native plants are featured in

the landscaping and gardens of the Virginia House.

The Virginia House is located in Richmond at 4301 Sulgrave Road in Windsor Farms by the James River. As the name suggests, it is a historical site with 18th- and 19th-century gardens. Along with the plant sale will be the exhibits and garden tours. For more information, call the Virginia House at 804-353-4251.

## Appalachian Natural History Field School offers unique opportunity

Have you always wanted to learn more about the flora, fauna and geology of Southwest Virginia? The Department of Conservation and Recreation (DCR) is sponsoring the second annual Appalachian Natural History Field School just for you. Join expert staff from the Natural Heritage Program, Virginia State Parks, the Virginia Game and Inland Fisheries, and the U.S. Fish and Wildlife Service for a full weekend in the field May 15-17.

With Hungry Mother State Park as your base, the weekend will fea-

ture field trips to outstanding scenic natural areas including Pinnacle Natural Area Preserve, the Clinch River, Whitetop Mountain and Grayson Highlands. You will study in the field with a team that includes experts in geology, herpetology, ornithology, botany, aquatic biology and zoology. Birding, hiking, and natural history exploration will all be included in the all-day field trips.

Some of the Appalachian Natural History Field School staff are botanist Allen Belden, geologist

Terry Brown, and zoologist Chris Hobson, all from DCR Natural Heritage; ornithologist Gary Williamson from DCR State Parks; mussel recovery biologist Leroy Koch from the U.S. Fish and Wildlife; and ichthyologist Mike Pinder from DGIF.

The cost is \$225 per person and includes two nights lodging at Hemlock Haven Conference Center, meals and transportation between sites. For more information or to register, contact Virginia State Parks Reservation Center at 1-800-933-PARK (In the Richmond area, call 225-3867.)

## *Piedmont Chapter calls for community involvement for healthy habitats*

A largely overlooked price of growth in our region is the loss of the rich diversity of native plants and varied wildlife, according to the Virginia Native Plant Society's Piedmont Chapter members. "Many of our wildflowers, songbirds and other wildlife do not survive developments, highways, shopping centers and modern agriculture," says Jocelyn Sladen, the chapter's co-chairman for conservation. "The good news is that we can do much to reverse the process if we have the will and a little knowledge."

The Piedmont Chapter is calling for widespread community support for preserving and restoring native plant and wildlife communities in its region by applying imaginative strategies in gardens, backyards, roadsides and farmlands. Much of the conservation movement focuses on a few obvious species such as deer, quail and wild turkeys. Too often we forget the rest of the creatures, from salamanders and fireflies

to monarch butterflies, not to mention the homelier grubs that keep ecosystems healthy. All of them are essentially dependent upon delicately balanced natural communities that are, in turn, dependent upon wild plants.

To launch its campaign, the chapter assembled a roster of top native plant and wildlife experts for a symposium held in early March. The symposium, "Coming Home: Native Plants for the Ecological Health of the Piedmont" was open to the public.

Members of the Piedmont Chapter believe that most residents can help protect wild natural communities in one way or another. Many of our agricultural practices are responsible for loss of native plants and wildlife. There's not much cover or available food in a typical cattle field, especially when the fence lines are kept clean. Without some thickets or hedgerows, birds and other small wildlife cannot find a home. A hedgerow, however, can be a veritable supermarket for wildlife.

Another source is a soggy field bottom that can support rare wild terrestrial orchids as well as dwindling populations of frogs. As for our home gardens, there is wonderful potential to create habitats for birds, butterflies and beneficial insects with imaginative plantings.

Golf courses, too, can contribute. The U.S. Golf Association is developing experimental native plant patches for the purpose of encouraging native insect pollinators. This kind of positive and innovative approach to restoration could make a tremendous difference in keeping natural diversity in a changing landscape.

"We need to get into this as a community," comments John Fry, President of the Piedmont Chapter.

For information about the chapter's community involvement initiative, contact: The Piedmont Chapter of VNPS, P.O. Box 336, The Plains, VA 20198 or Jocelyn Sladen 540-349-3248 or Celia Rutt 540-338-3495.

## Chapter News

### South Hampton Roads helps NBG win grant

The South Hampton Roads Chapter was instrumental in helping the Norfolk Botanical Garden receive a grant of \$18,900 from the Stanley Smith Horticultural Trust in California. The grant money will be used for the development of gateway display beds, and for development of programming and signage to interpret horticulturally significant plants indigenous to the Tidewater area. As part of the grant application, the chapter submitted a letter containing positive benefits of using native plants, including environmental, education and aesthetic benefits.

### Member has Internet homepage

If you happen to be surfing the net, make sure you land at the homepage of VNPS member Marion Blois Lobstein. Marion, who is an

associate Professor of Biology at Northern Virginia Community College in Manassas and an adjunct professor of biology at Blandy Experimental Farm, can be found at <http://www.nyx.net/~kbilton/marion.html>.

Page visitors will find information on ordering the spring wildflowers video which Marion co-produced as well as wildflower walks she is leading and courses she is teaching.

### *VNPS Maymont exhibit captures blue ribbon*

The South Hampton Roads Chapter took home a blue ribbon for its exhibit at the Maymont Flower and Garden Show in Richmond. Sometimes folks were lined up three-deep trying to get to the chapter's VNPS booth, which won first for best educational display in the show. The chapter set up the VNPS display and used the green felt panels to attach pictures of natives in

three categories: waterscaping, wet & wild and a beneficial uses section. The entire exhibit went under the title "Celebrating our Partnership With Water" to fit the overall flower show theme of "Water, Water Everywhere."

### Prince William editor retires after 15 years

Many readers of the VNPS statewide *Bulletin* will recognize Nancy Arrington as the author of the "For Wildflower Gardeners" column. What some do not know, however, is that she has been editor of her chapter newsletter as well. For the past 15 years, Nancy has edited the Prince William Wildflower Society's *Wild News*, an attractive, informative newsletter. She will, however, continue her gardening columns, one of which readers will find on page one of this *Bulletin*. Nancy's editorship will be taken over by yet another Nancy, Nancy Vehrs.

# Australians respect their indigenous habitats

(Continued from page 3)

of the eucalypts by Australian, Robert Hughes in his book *The Fatal Shore*, "with their strings of hanging, half-shed bark, their smooth wrinkling joints (like armpits, elbows or crotches), their fluent gesticulations and haze of perennial foliage. Not evergreens but evergreys..." Imagine if you can the smell of an eucalyptus grove and then think about the smell of our own Southern pine forests. It was said that when the earliest explorers came to America they could smell the dense, coastal pine forests far out at sea, long before they ever saw land.

Early Virginians such as John Clayton, Lady Skipwith and, of course, Thomas Jefferson had a deep appreciation of native flora and incorporated it into more traditional plantings of Old World plants. What is it about us as Americans that we lost our senses to the world around us? The spirit of our founding was quite a different one than that of Australia. The people who settled Virginia, for the most part, chose to come here. Often they were second sons of English gentry who wished to create for themselves estates like those of their feudal homeland. They brought with them ideas of land use and class structure that echo down to us today.

The Australians, however, were cast away from their homeland, shipped off as human refuse to someplace out of sight and out of

mind. These people were the victims of the English class system who had few fond memories to nostalgically reminisce over and no well-heeled connections or relations at home backing them in their new life. What the Australians had was themselves and their new land. It's no wonder the Australian psyche is so entwined with the natural world. Self-preservation and preservation of the environment are things an Australian deeply understands.

Bringing us back to the present as we prepare to enter the 21st century, it is Australia where people are on the cutting edge of environmental action. Throughout the tropical north and desert center of Australia, it is commonplace to see solar panels producing electricity and hot water for heating. The resort complex at Ayers Rock, now referred to by the aboriginal name, Uluru, sets the standard for native plant protection. The resort consisting of hotels, hostels and camping facilities was designed with environmental protection in mind. Before construction, the fragile desert topsoil was carefully removed and stored in warehouses to be redistributed after building to insure that native flora, whose seeds were in the topsoil, would be present for germination and would match the surrounding vegetation perfectly. The hotels and other facilities are landscaped exclusively with native plants. Fantastic plants like kangaroo paws, genus, *Anigozanthos*; bottlebrushes

(*callistemons*); grass-trees, family, xanthorrhoeaceae, some of which are hundreds of years old; and the Stuart pea, *Clianthus formosus*, all are to be seen.

North of Cairns in the sensitive rain forest of the Daintree Reserve, structures are built like outposts on another world. Perched on stilts in the rain forest, equipped with solar panels and composting toilets, human impact is kept to a minimum. Phone lines and water pipes are run under boardwalks that rest atop the forest floor so that no soil is compacted or disturbed. In the city of Melbourne, volunteers at the Melbourne Botanical Garden run a program researching the uses of native plants as natural dyes. Thousands of woolen color swatches are on file showing an immense range of hues. These are a few examples of Australia's response native habitats-from tourist areas in the desert at Uluru, and tropical rain forest protection in Daintree, to native ethnobotanical research in the city of Melbourne.

Australia is still not without threat, from population increase and loss of habitat, but the people do seem to be addressing their problems and looking to the future. Perhaps it is Australia's unconventional birth that has allowed it to move forward without falling into the trappings of counterproductive tradition. In any event let us look and learn from this southern nation as we prepare to move into the 21st century.

Michael Sawyer, John Clayton Chapter

## Spring wildflower video produced by member

Nearly 100 species of spring wildflowers are covered in a new video co-authored and co-produced by VNPS member Marion Lobstein. *Spring Wildflowers of the Mid-Atlantic Region* includes information on identification of common spring wildflowers as well as information on medicinal and edible uses, life

cycles, conservation and plants to be avoided (such as poison ivy!). The co-authors are Marion Lobstein; John DeMary, a teacher and naturalist in residence at Smithsonian Naturalist Center; and Suzanne Lohr, a biology and chemistry teacher at Loudoun Valley High School in Purcellville.

The video was published by

Botanical Views, LLC which is a company formed by the three video authors.

The video retails for \$19.95 plus \$.90 tax. It can be ordered by mail (include \$3 shipping) from: Botanical Views, LLC, P.O. Box 2756, Purcellville, VA 20134, or call Lobstein at 703-536-7150.

# From Near and Far.....

## Web pages feature native plant information

(This information was taken from an article by Jean Haley in *The Rhode Island Wild Plant Society Newsletter*, September 1997, Vol. 11, #2)

1. [http://www.comnet.edu/QVCTC/student/bmoney/wld\\_flrs.html](http://www.comnet.edu/QVCTC/student/bmoney/wld_flrs.html)

This is the site of the Rhode Island Wild Plant Society. It includes general introduction to the state's native plants and photos along with links to other sites.

2. <http://www.ultranet.com/~newfs/newfs.html>

This is the site of the New England Wild Flower Society. There is information on sites, programs, and publications. It also allows one to visit the museum shop and library.

3. <http://www.wildflower.org/index.html>

This is the homepage of the National Wildflower Research Center in Austin, Texas. It contains information about national events, organizations, and gardens which contain native plant material.

4. <http://www.aqd.nps.gov/natnet/npci>

This is the homepage of the

National Plant Conservation Initiative. This organization is a consortium of federal agencies and non-federal "cooperators" who work collectively to solve problems of native plant extinction and native habitat restoration. There is news on grant programs, conferences, and activities of other native plant conservation groups.

5. <http://www.inhs.uiuc.edu/~kenr/corridors.html>

This web page is for those interested in establishing native plants in median strips and along highway corridors. It also includes a description of the Corridors of Tomorrow project in Illinois. This project is investigating ways to provide habitats for native plants and animals along the highways.

## Sea plant society formed

Native plant enthusiasts will be interested to learn about the formation of the North American Sea Plant Society, Inc. This national organization's mission is to promote the study and enjoyment of plants indigenous to coastal areas throughout North America.

NASPS membership is open to anyone with an interest in sea plants, defined by the NASPS as "any botanical specimen which is affected

either in a direct or indirect manner by natural salt sea spray." The association is of special interest to gardeners and horticulturists--whether they live along the coast, or just wish to bring a bit of the sea to their own backyards. Learning how to raise sea plants in diverse geographical locations (or even indoors), and then sharing this knowledge with others is one of the goals of NASPS.

Members receive the quarterly publication, *Maritima*; have access to the NASPS seed exchange program; may request on-line computer searches for a nominal fee; and obtain assistance in the formation of local units through the country.

A one-year membership is \$12. Further information about NASPS may be obtained by contacting Pamela D. Jacobsen, NASPS, Inc., P.O. Box 262, Feeding Hills, MA 01030-0262. FAX 413-789-2076. NASPS welcomes inquiries from public and private garden associations, home gardeners, environmental organizations, horticultural communicators, members of the plant growers industry, horticultural publications and other interested individuals.

See the address label for your membership's expiration date.

## VNPS Membership/Renewal Form

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Individual \$15       Family \$25       Student \$10

Patron \$50       Sustaining \$100       Life \$400

Associate (group) \$40; delegate \_\_\_\_\_

To give a gift membership or join additional chapters: Enclose dues, name, address, and chapter. (Non-voting memberships in any other than your primary chapter are \$5).

I wish to make an additional contribution to \_\_\_\_\_ VNPS \_\_\_\_\_ Chapter

in the amount of  \$10  \$25  \$50  \$100  \$ \_\_\_\_\_

Check here if you do not wish your name to be exchanged with similar organizations.

Check here if you do not wish to be listed in a chapter directory.

Make check payable to VNPS and mail to:

VNPS Membership Chair, P.O. Box 844, Annandale, VA 22003

Membership dues are tax deductible in the amount they exceed \$5. Contributions are tax deductible in accordance with IRS regulations.

## The Bulletin

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Marie F. Minor, President  
Nancy Sorrells, Editor

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E-mail: [nsorrell@leo.vsla.edu](mailto:nsorrell@leo.vsla.edu)

The deadline for the next issue is April 1

# • Ephemerals

(Continued from page 1)

found in alkaline soil in the wild, but both grow well in fairly acid garden soil.

*Erythronium americanum* - In its wild haunts trout-lily forms large carpets of maroon mottled foliage and an occasional yellow flower with curving petals arising on 8-inch stems from older plants that have a pair of leaves (single leaved plants don't flower). I've read that the bulbs grow downward until they encounter a rock, at which time they'll start blooming. I've been happy with *E. umbilicatum* (grows throughout Virginia) ordered from We-Du several years ago because the catalog promised "every plant will bloom."

*Mertensia virginica* - Probably the best-loved and most often planted spring ephemeral, Virginia bluebells' nodding clusters of one-inch flowers on 18-inch tall plants begin blooming in early April. They can be grown in woodland gardens or partially shaded perennial borders where other plants will fill in later. Soil must be well-drained through summer because the fleshy roots can rot in wet soil. Unlike the other ephemerals discussed here, bluebells don't go gently into dormancy. Like daffodils, their leafy foliage should be left to mature which takes several weeks. Anything planted

with them won't look good while they are going dormant, so try fall blooming woodland species such as blue-stemmed goldenrod (*Solidago caesia*) or white wood aster (*A. divaricatus*).

Spring ephemerals are on such a fast forward schedule that they often have to be checked daily for seed maturity. Sow seed immediately before it dries out, otherwise germination will be sparse or nonexistent. When growing in suitable conditions, all these species will spread by seed or roots so that you will have even more ephemeral treasures to look forward to each spring.

Nancy Arrington, Horticulture Chair



Shooting Star  
*Dodecatheon meadia*  
Illustration by  
Barbara Stewart

# • Books

(Continued from page 2)

## Public gardens directory published by AABGA

The American Association of Botanical Gardens and Arboreta has published the *Directory of Gardens in North America*. More than 300 gardens are arranged by state and province and listed with all the information necessary to plan a quick trip: location, telephone number, size, admission fee and type of garden. The guide is small enough to fit in a glove box, purse, or back pocket for quick reference on the road or on vacation. Copies of the *Directory of Gardens in North America* are available for \$4.95 each with discounts for 10 or more copies. Send request and check payable to AABGA, Garden Directory, 351 Longwood Road, Kennett Square, PA 19348 or phone 610-925-2500.

## VNPS photo contest

VNPS photographers should begin taking wildflower photos for entry into the 1998 VNPS Photography Contest. Both slides and 8x10 prints will be accepted for this year's contest. The entry deadline will be late summer. Watch for complete rules in the May *Bulletin*. And remember, get those elusive twinleaf pics in May!

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# Bulletin

A publication of the VIRGINIA NATIVE PLANT SOCIETY

Conserving wild flowers and wild places

## Annual Meeting plans under way

The VNPS annual meeting, hosted by the Potowmack Chapter, should already be inked in on everybody's calendar, but just in case you have not gotten to that chore, mark September 18, 19 and 20. Renowned author James Duke has been booked as the Saturday night speaker.

Watch for complete registration information in the August Bulletin, but early birds may make their hotel reservations now by contacting the Holiday Inn Eisenhower in Alexandria (phone: 703-960-3400; fax: 703-329-0953). The rate for a double room is \$79 plus 9.5 percent tax. Registrants must identify themselves as VNPS members to re-  
(See Meeting, page 2)

## Natural Heritage Program fares well with General Assembly

The support of the Virginia Native Plant Society (VNPS), The Nature Conservancy, and others played a key role in much needed new resources for Virginia's Department of Conservation and Recreation's Natural Heritage Program (NHP).

In the past eight years, the demands on NHP's conservation efforts have increased tremendously, and the Virginia Natural Area Preserve System has grown from 0 to 22 preserves which total over 12,000 acres.

During this time, the program's general fund budget has decreased. However, the 1998 General Assembly budget included a \$430,000/year increase, and 18 new positions for the NHP. Eight of the positions will be funded

with part of the \$430,000, and 10 with funds the NHP raises through grant and contract work.

The Assembly's budget is now on Governor Gilmore's desk for approval by late April. Hats off to VNPS members for their support of the Natural Heritage Program. You can visit the NHP web site to learn more about Virginia's natural heritage at: [www.state.va.us/~dcr/vaher.html](http://www.state.va.us/~dcr/vaher.html)

Two other state agencies also came out ahead in the General Assembly. The 1998 Virginia Assembly created funding for the Virginia Department of Game and Inland Fisheries by enabling DGIF to receive a portion of its support from the General Funds' income from certain sales taxes on items relating to wildlife and to DGIF Wildlife Management Areas.

In addition, Virginia Senator  
(See General Assembly, page 9)

## New fact sheets available on invasive plants

*Alternanthera philoxeroides* - Alligator weed

*Arundo donax* - Giant Reed

*Hydrilla verticillata* - Hydrilla

*Ligustrum sinense* - Chinese Privet

*Microstegium vimineum* - Japanese Stilt Grass

*Polygonum cuspidatum* - Japanese Knotweed

Six new VNPS fact sheets giving detailed information about the invasive alien plant species of Virginia (listed above) are now available. To obtain fact sheets, which describe these alien plants that pose a threat to Virginia's natural habitats, please send a self-addressed, stamped (55 cents) envelope to: VNPS Invasive Factsheets, P O Box 844, Annandale VA 22003.

## Inside this issue

- Wildflower gardening. page 3
- VNPS Photo Contest page 4
- Calendar of Events page 5

# From the President

*The month of May is getting toward the end of the spring wild flower blooming period. But the weather is so balmy that everyone wants to get out and do something. Of course, if you are a gardener like me, you are going to be out doing something anyway because this is the busy season for the gardener. There are so many events planned for this month that an individual often has trouble choosing which to attend. It's even worse for the gardener who also has to find time to take care of the usual chores gardens require. So, one winds up frustrated because if he/she elects to attend an event, then even though it may be enjoyable, the gardener feels guilty that he/she is not home tending to necessary work.*

*If, on the other hand, the gardener elects to stay home and do his/her work, then the whole time is spent wondering what is being missed at the event. You can't win!*

*I do have one suggestion, though! Is everybody paying attention? Schedule indoor events in mid- to late-winter. That is when there is very little to see outside and little gardening to be done, but when a good percentage of the population has developed a strong case of spring fever. Then in good warm weather, the gardener can choose either to garden or go to outdoor events which don't make him/her feel so guilty.*

*Now that we are well into spring, however, take a look at the calendar of events included in this issue. Push the guilt aside and attend as many of the events as possible. Some are hikes, others are plant sales. You will be supporting VNPS, learning about Virginia's habitats and plant populations, and having a good time as well. If you are a shutterbug, bring your camera and snap a few pictures. Who knows, your winning photo might wind up on next year's VNPS Wildflower of the Year brochure!*

**Your President, Marie F. Minor**

## •Meeting

*(Continued from page 1)*

ceive this special rate. A block of rooms will be held until August 26.

Field trips for the weekend are being planned to such varied spots as the National Arboretum, Theodore Roosevelt Island (site of a VNPS project to help remove invasives), Green Spring Gardens Park (including the Potowmack Chapter's Native Plant Trail), several different locales and habitats along the Potomac River as well as some natural areas and refuges.

## Homepage correction

In the March *Bulletin* we offered up this homepage for Net surfers: <http://www.aqd.nps.gov/natnet/npc>, but we inadvertently called it the National Plant Conservation Initiative homepage. The group's name is the Native Plant Conservation Initiative of the Federal Native Plant Conservation Committee. It is a consortium of federal agencies and non-federal "cooperators" who work collectively to solve problems of native plant extinction and native habitat restoration.

## Nominations sought for eight VNPS state candidates

The 1998 VNPS Nominating Committee consists of five members: Gay Frix (JF), Butch Kelly (BRWS), Nancy Luria (PT), Elaine Smith (SH) and Nicky Staunton, Chair (PWWS). Ted Scott has graciously agreed to assist this year's committee. A change of VNPS by-laws is being considered to restructure the committee and make its task in the future an easier one.

Beyond the committee, however, each member of VNPS is either an unnamed member of the committee or a possible candidate for a three-year term in leading our society. Without your help, the committee's task of identifying candidates with leadership skills is impossible.

The 1998 VNPS offices to be filled are: **1st Vice President** (3-year term); **Recording Secretary** (3-year term); **Treasurer** (3-year term); **Fund Raising** (1-year term); **Membership** (2-year term); **Publications** (2-year term); **Director-at-Large** (3-

year term); and **Director-at-Large** (3-year term).

The Committee requests submission of your name or other names of members willing to serve in one of the capacities named above. Be sure to obtain permission of persons whose names you submit.

Candidates for treasurer should contact Ted Scott at: phone 540-568-8679; e-mail: [vnpscott@shentel.net](mailto:vnpscott@shentel.net)

Candidates for membership should contact Nicky Staunton at: phone 703-368-9803; e-mail: [staunton@erols.com](mailto:staunton@erols.com)

All other potential candidates should be submitted to one of the members of the 1998 Nominating Committee: Gay Frix 804-293-8997; Butch Kelly 540-384-7429; Nancy Luria 703-351-9723; Elaine Smith 540-432-6833 or e-mail: [smithes@jmu.edu](mailto:smithes@jmu.edu)

The deadline for submitting candidates is May 30. This will enable the VNPS Board to accept the slate of officers at the June 4 board meeting.

## For the Wildflower Gardener

*Columbine a versatile addition to any garden*

In the 1998 Wildflower of the Year brochure, VNPS botany chair Stan Shetler lists columbine's many wild habitats including shady woods, open sunny areas, dry rocky slopes and even peat bogs. It grows throughout Virginia, and in "Native Plants for Conservation, Restoration, and Landscaping" (published in 1997 by the Virginia Department of Conservation and Recreation and VNPS) it is recommended for cultivation in the state's three major regions--mountain, piedmont and coastal.

In talking to members in regions other than my own (central) to find out how they use columbine in their gardens, I heard about almost as many cultivated habitats as wild ones, with the exception that I found no one growing columbine in a bog!

Virginia Beach garden designer Holly Cruser says plants fare best in the heat and sandy soil of her area when placed in dappled shade or with just morning sun. Plants will need supplemental watering during dry springs and mulch is necessary to conserve moisture and keep roots cool. In these ideal conditions, plants will bloom up to eight weeks beginning in early spring. She notes that in full sun bloom period is only three weeks while leaf color fades and foliage burns or the plants go dormant.

Across the state in the cooler western mountains near Roanoke, well-known gardener and plantsman Paul James can grow columbine in full sun as well as shade. He says it performs equally well in light, loamy soil and in heavy clay



*Aquilegia canadensis*, wild columbine  
Illustration by Nicky Staunton

as long as the clay is well drained. Paul says occasionally leaf miners will cause whitish markings on the leaves, but they do no permanent damage. Foliage can be cut off after flowering to control the miners and to cause plants to produce new growth that stays attractive until frost.

In my area of Virginia, I also find columbine adaptable and easy to grow in a variety of sites. In rich soil in a perennial border with two to three hours of sun, robust plants will be three feet tall and almost as wide. However, I personally prefer the smaller, more delicate plants produced by a lean, rocky soil. I agree with Neltje Blanchan who

wrote in *Wild Flowers Worth Knowing* in 1924: "Although under cultivation the columbine nearly doubles its size, it never has the elfin charm in a conventional garden that it possesses wild in Nature's."

Color conscious gardeners tend to choose whites, yellows and non-lavender blues to pair with columbine's nodding red and yellow spurred flowers. Holly thinks it's a great contrast for the cool blues of blue star (*Amsonia tabernaemontana*) and blue-eyed grass (*Sisyrinchium angustifolium*). Paul likes it blooming with wood poppy (*Stylophorum diphyllum*) in his shade garden and uses it in sunnier spots in the rock garden with alumroot and coral bells (*Heuchera* spp.)

A favorite combination in my garden has fluffy, white-flowered foamflower (*Tiarella cordifolia*) trailing among clumps of columbine and green and gold (*Chrysogonum virginianum*). Holly likes columbine's lacy foliage and mounded shape with spiky vertical plants like spiderwort (*Tradescantia* spp.), golden ragwort (*Senecio aureus*), daylilies and iris.

Current references give conflicting information for growing columbine from seed. Recommendations range from cold, wet storage (stratification) of seeds for four weeks to two years dry storage at 70 degrees Fahrenheit. The easiest method is to let plants self-sow naturally or to sow fresh seed in an outdoor bed or in flats left outdoors through the winter.

Nancy Arrington, Horticulture Chair

## 1998 Virginia Wildflower of the Year brochure

Make sure you distribute the 1998 Virginia Wildflower of the Year brochure far and wide. Special thanks for this year's "Wild Columbine" brochure go to Stanwyn Shetler, Nicky Staunton and Carolyn Bates.

Stan, the VNPS Botany Chair,

wrote the text for the brochure, and Nicky sketched the line drawing. This year's venture into full-color printing was a success because of the prize-winning photograph supplied by Carolyn. Her photo was selected as the best example of *Aquilegia canadensis* among the entries

in last year's VNPS photo contest. The map used in the brochure to tell readers the county-by-county occurrences of wild columbine in Virginia was taken from the *Atlas of the Virginia Flora*.

# 1998 Virginia Native Plant Society Photo Contest

## Rules

1. Open to VNPS members only (Members of VNPS Photo Committee ineligible to compete)
2. Each photographer may submit one photo per category of photograph. Photographs must be of Virginia native plants. The three categories are listed below.

1999 Virginia Wildflower of the Year (*Jeffersonia diphylla*, twinleaf)

- A. Plant Specimen: Photograph of one twinleaf specimen
- B. Habitat: Twinleaf in a natural or cultivated habitat

C. Favorite Native Plant Photograph: includes all vascular and non-vascular species; ferns; terrestrial or aquatic plants, shrubs, vines, trees, etc. of Virginia

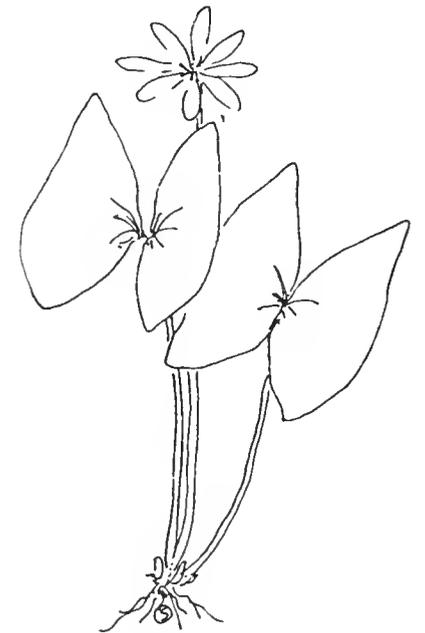
3. Entries must be 8 x 10 inch color or black and white prints with stiff backing (no matting, no frames) or slides

4. A fee of \$2 per entry is to accompany each photograph to defray costs of contest and return postage

5. Contestant's name, address, phone number, and submitted category for the photograph as detailed in item 2 above should be placed on back of the photograph. If possible, please furnish technical data such as film, camera settings and lighting

6. Deadline for entries: August 1, 1998 postmark

7. Mail entries to:  
VNPS Photo Contest  
P.O. Box 844  
Annandale VA 22003



AWARDS: Each of the categories will receive a first, second and third place award. An honorable mention may be awarded. There will be one grand prize winner.

VNPS reserves the right to use winning photographs in an exhibition and possible use in production of the 1999 Virginia Wildflower of the Year brochure, giving proper credit to the photographer. Winners grant permission for VNPS by entering the contest and will be expected to furnish the slide or negative for the winning prints if requested.

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE \_\_\_\_\_

CATEGORIES ENTERED (circle) A B C Fee enclosed \_\_\_\_\_

Return coupon & photos to: VNPS Photo Contest, P.O. Box 844, Annandale, VA 22003

## Calendar of Events

**May 9, Saturday, 10 a.m.-2 p.m.** 14th annual Blue Ridge Wildflower Society Plant Sale at Virginia Western Community Arboretum. Members may begin purchasing at 9 a.m.

**May 9, Saturday, 10 a.m.** Friends of Bull Run Mountain Wildflower hike led by Carrie Blair and Emily Morgan. For more information, call 703-753-2631.

**May 9 & 10, Saturday and Sunday, all day, Annual Mothers Day Garden Fair and Plant Sale** at the State Arboretum in Boyce. 540-837-1758.

**May 10, Sunday, 4-7 p.m.** The Beavers at Banshee Reeks, a future Loudoun County Park. Participants visit this complex and discuss the importance of beavers. Banshee Reeks includes rich meadows, upland forests and wet forest along its two miles of Goose Creek frontage. Meet at Simpson Middle School in Leesburg. Preregistration required. Call Phil Daley 540-338-6528.

**May 16, Saturday, 10 a.m. -3 p.m., Native Plant Sale,** Potowmack Chapter & Green Springs Gardens Park, 4603 Green Spring Road (off Little River Turnpike near Braddock Road) in Annandale. Call 703-642-5173.

**May 16 & 17, Saturday and Sunday, all day. The 12th Annual Wildflower Weekend** at Shenandoah National Park. Hikes, led by rangers and local wildflower experts, held throughout the park in various habitats and elevations. For more information, call Mara Meisel at 540-999-3282.

**May 18, Monday, 7 p.m.** Blue Ridge Membership meeting, Center in the Square, Roanoke, Robert Wooding discusses Edible and Medicinal Plants. This is a pot luck, don't bring a covered dish, bring a potted plant to exchange!

**May 19, Tuesday, 7:30 p.m. Vernal Pools.** Michael Hayslett will describe the ecology of vernal pools and their importance. Held at the Smithsonian Naturalist Center. Call Joe Coleman at 540-554-2542.

**May 23, Saturday, 10 a.m.** Buffalo Mountain Field Trip, Meet at milepost 125 on Blue Ridge Parkway. Bring lunch. Blue Ridge, Butch Kelly 540-384-7429.

**May 23, Saturday, 9 a.m.-2 p.m.** Clean-up day at the State Arboretum. Tools available or bring your own favorites. Picnic lunch, beverages and snacks provided. For more information call the arboretum at 540-837-1758, ext. 26.

**May 31, Sunday, 1 p.m.** Oak Shade Farm field trip. Piedmont Chapter field trip to a farm near Rixeyville. Farm features a woodland trail, native plants and Christmas tree nurseries and shiitake mushroom operation. For more information call 540-937-5062.

**June 7, Sunday 10 a.m.-noon.** Conway Robinson Memorial Forest. Wildflower walk led by Nicky Staunton to see colonies of pink and yellow lady-slippers, putty root and pennywort. Two-mile walk with slight incline. Prince William, Registration and fee. Call 703-490-0455.

**July 11, Saturday, 8 a.m.-noon.** "Mushrooms and other Fungi" class at Leesylvania State Park by Dr. David Farr. Learn about the interesting and diverse fungi in your own back yard. Prince William, Registration and fee. Call 703-490-0455.

**June 13, Saturday, North Carolina Botanical Gardens and the Sarah P. Duke Gardens Bus Trip** sponsored by the Blue Ridge Wildflower Society. Call Butch Kelly, 540-384-7429 for more details.

**June 13, Saturday, 8 a.m.-noon.** Occoquan Bay National Wildlife Refuge, workshop on grasses by Dr. Paul McCawley. Learn to identify grasses and examine some in the field. Registration and fee. Call 703-490-0455.

**June 13, Saturday, 10 a.m.-4 p.m.** Ice Mountain Field Trip, North River Mills Festival at the West Virginia Nature Conservancy, Capon Bridge. Kristin Zimet will lead a walk at noon of this very unusual ecosystem where ice accumulates beneath the mountain's sandstone and cools the surrounding area to create a microhabitat with many northern species. Located on Rt. 50 about 20 miles west of Winchester. For more information, call 540-869-0046.

**June 20, Saturday, 8 a.m.-noon.** "Butterfly and Plant Relationships" taught at Manassas Battlefield Park by Alonso Abugattas. Learn to identify and understand butterflies and their relationships to the plants around them. Prince William, Registration and fee. Call 703-490-0455.

**July 18, Saturday, 8 a.m.-noon.** "Ecological Succession" class at Occoquan Bay National Wildlife Refuge by Dr. Larry Underwood. Learn more about the regular and predictable progression of natural communities. Prince William, Registration and fee. Call 703-490-0455.

## List of plant needs available for State Arboretum

A 1998 plant list for the State Arboretum's Virginia Native Plant Trail is available to VNPS members who are interested in donating plants for this trail project either this spring or next fall. With construction now complete in the woodland section of the trail, more extensive planting is now possible, and a number of species, both woody and herbaceous, have been added to this year's list of plants wanted. To obtain the new list, please get in touch with Mary Pockman at 703-356-7425; pockman@alumni.princeton.edu; or 7301 Hooking Road, McLean VA 22101.

Members who would like to help with the actual planting are cordially invited to come to the State Arboretum, located on Route 50 about 10 miles east of Winchester, for a work day Saturday, May 23, from 9 a.m. to 2 p.m. Tools will be available, or you may bring your own favorites. A simple picnic lunch will be provided, as well as beverages and snacks during the morning. For more information call the arboretum, 540-837-1758, ext. 26.

## Winter Workshop participants ready for spring

The 1998 VNPS Winter Workshop "Celebrating Appalachian Spring" was a gathering of 125 members eager for spring. Our hosts, the University of Richmond and Pocohantas Chapter, made us welcome. Here are a few highlights:

The Field Notes Display revealed some extraordinary and inspiring work. Greeting participants as they entered Gottwald Science Building, the display contained some excellent field sketch books with appropriate notes of who, what, where, when and details of flowers, insects and interesting surroundings. Water color and ink drawings were extremely effective. Another collection of field notes was accompanied by excellent detail-revealing photographs.

Dr. William G. Melson of the Smithsonian set the stage for our ephemerals describing Virginia's regions, soils and geologic history. Dr. Stanwyn Shetler brought fresh color to us through his slide presentation of spring ephemeral native plants coupled with interesting facts.

Just prior to our lunch on the patio, Rick Darke took us "Exploring the Potential of our Eastern American Woodlands" with his lively perspective of Nature's garden. Beginning with "The Woodland Cycle" he utilized the

interesting photographic perspectives of a specific site from March 31, 1983 through February of 1993. The ever-fresh perspective from the same view followed creek bank trees from maturity through succumbing to nature's gardening tools: sun, wind, floods, while always presenting a fresh "garden view."

Highlights of autumn, winter architecture and color, architecture of landscape and garden, all introduced our members to Rick Darke's special perspective and skills for designing exhilarating landscapes. Rick was Curator of Plants at Longwood Gardens prior to his current employment in the landscape design business.

Lucille Griffin of the American Chestnut Cooperators Foundation delivered to us not only history, but current study results and a promising report for the future of the American chestnut. She also brought seednuts (which were eagerly snapped up) to plant "at home" in appropriate settings to meet the tree's needs. Seednuts are available and nursery bundles of seedlings are \$25 for a bundle of 25. You may visit their website: <http://ipm.ppws.vt.edu/griffin/accf.html> or, you may e-mail: [gagriffi@vt.edu](mailto:gagriffi@vt.edu) to communicate with Lucille Griffin

The author of *A Fern Sampler of the Eastern United States*, Wesley

Green shared his knowledge about knowing and growing ferns. His experience with gardens in Colonial Williamsburg gave him a lot of information to share with us through his slides.

The day's programs closed with our host, Dr. John Hayden keeping us interested and "on our toes" with his presentation on winter tree identification. "Identification of Woody Twigs in Winter Condition" is a printed handout which accompanied the slides; however, it is very helpful to have even without the slides. Somehow, the fact that the catalpa has a whorled leaf arrangement had not been a known key to some of us.

At the close of the program, there was high praise for our speakers and for the team who planned the workshop: Nancy Hugo, Publicity; Effie Fox, Education; Stanwyn Shetler, Botany; Nancy Arrington, Horticulture; Nicky Staunton, Conservation. We all left with the handsome, useful folders presented by Arrington & Sons, Inc. stuffed with printed material from many sources, including Department of Game & Inland Fisheries, such as their "Wildlife Watcher's Guide" which will lead us to see Virginia's spring ephemerals in choice locations.

Nicky Staunton, Conservation Chair

## Air pollution damaging flora and fauna in national parks

The November/December 1997 issue of *National Parks* included a scary story for anyone who enjoys the forests and other scenic beauty within the United States' national parks. "On a Clear Day," written by Michael Tennesen described the air pollution which is damaging our nation's waterways, forests and scenic views.

One of the hardest hit areas is

the popular Great Smoky Mountains National Park. There the acid rain and ozone from sulfur and nitrogen emissions have created clouds over the Smokies which are an incredible one thousand times more acidic than natural rainfall. The ozone levels over the park are twice as high as those over Nashville or Atlanta. On the list of affected flora are more than

30 species of plants and trees, including black cherry, yellow poplar, balsam fir, blackberry and milkweed.

"Pollutants [weaken] a tree by starving it, poisoning it, and burning its leaves. Then the next cold winter or pest that comes along finishes it off," explained Harvard Ayers, who is chairman of the Si- (See *Pollution*, page 7)

# Chapter News .....

## Botanic garden showcases southeastern native plants

The Randolph-Macon Woman's College Botanic Garden, located in Lynchburg, contains more than 200 species of plants native to the southeastern United States. The garden includes several endangered and rare plants as well as species of special botanical interest, such as the Ben Franklin Tree, a small tree no longer found in the wild.

The garden was established in 1994 through the efforts of Virginia Native Plant Society member Dorothy C. Bliss, a professor of biology, emerita, of the college. Dr. Bliss enlisted help from VNPS which donated plants, a bench, and volunteers. Paul James, the first president of the Blue Ridge Wildflower Society, contributed more than 100 native plants.

The purpose of the garden is to provide a showcase and outdoor laboratory of wildflowers and plants

native to the Southeast. The garden serves as an educational tool for students and visitors alike to pique their interest in nature, conservation, gardening, and botanical and zoological research. Students have access to rare and endangered species of plants, as well as to the insects and birds that the plants attract. The garden serves an important conservation function by providing a home for endangered plants and a habitat for wildlife. It is also a tranquil spot for visitors to stroll along the pathways, rest on benches, and appreciate nature.

In addition to the Ben Franklin Tree (*Franklinia alatamaha*), a number of other endangered and rare species are in the garden including: fringed campion (*Silene polypetala*), which occurs only along the bluffs of the Flint and Appalachian Rivers in

Georgia; Kankakee globe-mallow (*Iliamna remota*) which is endangered globally and found in only five Virginia counties; Tennessee cone flower (*Echinacea tennesseensis*) found only in Tennessee; smooth cone flower (*Echinacea laevigata*) which is rare in Virginia; nodding trillium (*Trillium cernuum*) also rare in Virginia; least or dwarf trillium (*Trillium pusillum*, var. *virginianum*) which is found in 11 eastern and three western Virginia counties; Canby's mountain lover (*Pachistima canbyi*) which is found in 11 western Virginia counties; and bearberry (*Arctostaphylos uva-ursi*) which is common in the northern United States.

The garden is located in Lynchburg on Norfolk Avenue between the Martin Science Building and the Lipscomb Library on the campus of Randolph-Macon Woman's College. To obtain a botanic garden brochure, call 804-947-8127.

### •Pollution

(Continued from page 6)

erra Club's Southern Appalachian Eco Region Task Force.

Although the problem is worse along the East Coast, views in the west, such as the Grand Canyon, are also affected. Pollution now diminishes the views at Grand Canyon National Park in Arizona 90 percent of the time, said park officials.

Because the pollution occurring in our national parks usually originates outside the park boundaries and sometimes hundreds of miles away, regulation is difficult. Studies have shown, for instance, that some of the pollution in the Smokies comes from the power plants in the Tennessee or Ohio River valleys, but other sources include New York and Atlanta.

Closer to home in Virginia, visitors in 1948 could reportedly gaze eastward from the Shenandoah National Park and see the Washington Monument 70

miles away. Today they are often lucky to see the Shenandoah River just below them. The same acid rain that has obscured the long-distance views has also seriously damaged a number of brook trout streams. In one test of one stream the trout fingerling mortality was 100 percent.

Those who are worried about the situation in the Shenandoah National Park and throughout the country are encouraged to send written comments to The Environmental Protection Agency.

The agency has been refining the Clean Air Act of 1977 by, among other things, trying to lower the allowable standards for particulate matter and ozone.

According to park officials, the tightened standards are necessary if the habitats are to survive. An official in the Smokies said: "If we reduce pollution, the trees, the plants, the streams, and the soils will recover. They are not too far gone [for us] to make changes and see the benefits."

### D.C. urban forest seeking plant donations

Anne Elsbree of the Woodlands Committee reports having located most of the spring plants needed to restore the Olmstead Woods in Washington, D.C. at the National Cathedral.

However, the committee has expressed a need to locate several fall plants as gifts for their project: *Rhododendron periclymenoides* and *Goodyera pubescens*.

If any VNPS members have some of these plants to spare, it would be greatly appreciated. It would be a wonderful side trip on your next visit to Washington, D.C. to visit the Olmstead Woodlands and get to know how your plants are helping to restore an urban forest. To reach Anne Elsbree to arrange delivering plants: 301-949-7825 or VNPS member, Chip Heartfield: 703-319-0330.



## 500-year forest established in Virginia Beach

The nation's first 500-year forest project has been established in Virginia Beach. The mission statement of the 500 Year Forest Foundation, recently formed by the Virginia Urban Forest Council for the purpose of creating "ancient forests of the future," reads as follows: "To foster stewardship of Forests of varying types and in varied settings where a reverence for all life is of paramount importance; where people develop new understandings and abiding interests in forests through their involvement; and where any guided impact on any Forest is for the highest good of that Forest."

Virginia's and the nation's first such forest has been established in the eastern part of the city of Virginia Beach near the headwaters of West Neck creek. This 100-acre tract was donated by developer Dickie Foster, owner of Baymark Construction Corporation. It represents a plant community found only in southeastern Virginia and northeastern North Carolina.

Trees are, of course, not the only living species to be protected and

encouraged in such forests. Virginia Beach's contains not only bald cypress and black gum, but also serviceberries, heath family shrubs, wildflowers such as blue flags, sundrops, lizard's tail and pickerel-weed. Not only wading birds and hawks, vultures and woodpeckers and warblers, but also deer, snakes and small mammals make their home here.

Virginia Urban Forest Council member Ted Harris came up with the idea of an urban forest that can be managed and protected "essentially forever," after reading about England's Woodland Trust, founded in 1972 to conserve that nation's trees. Harris is chairing a VUFC committee that is seeking non-profit status for the foundation. The initial goal is to raise \$10,000,000 for maintenance.

With the establishment of the 500 year forest, generations of Virginia Beach residents will be able to watch a new forest grow to full maturity and become an old forest.

--Taken from *Forest Fragments*, a newsletter of the Virginia Urban Forest Council

## Unique sinkhole habitats at Maple Flats

Maple Flats is a nearly level forested area on the western fringe of the Blue Ridge Mountains in George



Washington National Forest. This section of Augusta and Rockingham counties is shot through with sinkhole ponds, each distinctive in size,

shape, and associated plant and animal life. The Maple Flats area contains 21 fairly shallow sinkholes which developed when cavities dissolved out of the dolomitic limestone bedrock and the overlying soil collapsed into them.

The forest at Maple Flats is composed predominantly of red maples. Drier ridges are covered with a mixture of table-mountain and shortleaf pine, oak, hickory and black gum. American Chestnut even grows there. Lower-growing species in-  
(See *Rare plants*, page 10)

## Tree landscaping list offered

When Dwayne Jones, the horticulturist for the City of Waynesboro, Virginia, spoke to the Shenandoah Chapter he brought along a tree list he has created which he calls "Native Trees with a Twist." His talk focused on what native trees are and how to landscape with trees. Here is the list of North American natives he recommends for Virginia gardeners.

### TREE WANT-TO-BE'S (SHRUBS)

*Ilex decidua* 'Warren's Red'; Warren's red holly  
*Ilex verticillata* 'Bonfire'; bonfire holly  
*Hammamelis virginiana*, witch-hazel'  
*Aesculus parviflora*; bottlebrush buckeye

### FLOWERS

*Cercis canadensis*; Eastern redbud  
*Cercis canadensis* 'Appalachian Red'; Appalachian red redbud  
*Cercis canadensis* 'Forest Pansy'; forest pansy redbud  
*Chionanthus virginicus*; fringe-tree  
*Halesia diptera*; two-winged silverbell  
*Cladrastis lutea*; yellow-wood  
*Liriodendron tulipifera*; tulip poplar

### FALL COLOR

*Nyssa sylvatica*; blackgum  
*Oxydendron arboreum*; sourwood  
*Sassafras albidum*; sassafras  
*Liquidambar styraciflua*; sweetgum  
*Liquidambar styraciflua*;  
 'Rotundiloba'; fruitless sweetgum

### WINTER INTEREST

*Carya ovata*; shagbark hickory  
*Betula alleghaniensis*; Alleghany birch  
*Betula nigra*; river birch  
*Betula nigra* 'Little Kin'; Fox Valley river birch  
*Taxodium distichum*; bald cypress  
*Abies concolor*; concolor (white) fir  
*Juniperus virginiana* 'Nova'; Nova eastern red cedar  
*Pinus strobus* 'Contorta'; contorted white pine

## Wildflower video began as class project

Marion Lobstein, associate professor of biology at NVCC-Manassas and adjunct professor at Blandy Experimental Farm, along with two of her former students, John DeMary and Suzanne Lohr, from her Blandy Experimental Farm Field Botany class, has produced a video on spring wildflowers of Virginia.

John is currently the teacher and naturalist in residence at the Smithsonian Naturalist Center in Leesburg and a veteran biology teacher at Loudoun Valley High School in Purcellville. Suzanne is a biology and chemistry teacher at Loudoun Valley High School with a strong geological background.

What began as a class project developed by these students who were working with Marion, blossomed into the 44-minute video *Spring Wildflowers of the Mid-Atlantic Region*. The video includes information on nearly 100 species of spring wildflowers. The 35mm slides used to develop the visual part of the video provide details for identification as well as enjoyment. Life cycle information including information on ecological influences on vegetative and flower production, pollination, seed/fruit dispersal, and underground storage structures is also included as are the historical medicinal and edible uses of these wildflowers.

The video also describes, using detailed photos and information, plants (such as poison ivy!) to be avoided. If you have followed Marion's articles on wildflowers and on medicinal plants over the years, much of that information is included in the narrative.

Marion, John and Suzanne are all wildflower enthusiasts as well as teachers who are excited about sharing information on this exciting group of wildflowers with others. This video will be enjoyed by wildflower enthusiasts, students and nature lovers in general and will provide new insights into this group of wildflowers.

The video is now available to VNPS members at a 10 percent discount through mid-June. The cost of each video is \$18.80 (usually \$19.95 + tax) plus \$3 shipping and handling. Orders may be sent to: Botanical Views, P.O. Box 2756, Purcellville, VA 20134. Checks, money orders, or credit card orders are accepted. Chapters interested in purchasing the video at a wholesale rate are welcomed to do so. For more information, contact Marion at 703-536-7150 or visit her web page at: [www.mnsinc.com/mblobst/](http://www.mnsinc.com/mblobst/)

## •General Assembly

(Continued from page 1)

Charles Colgan reported that the Assembly approved his budget amendment for \$200,000 to develop plans for a nature center to be located at the Conway Robinson Forest Park on U.S. Route 29 in Gainesville, near I-66. The nature center will be developed by the Virginia Department of Forestry and the Department of Games and Inland Fisheries at a cost of \$2.5 million. It will be an educational center for children and a recreational area for families.

During the Virginia Assembly session, a few VNPS members received some background material on Virginia Assembly issues. Those members indicated on their membership form an interest in legislative issues. If you did not receive our mailing containing information about these issues, but would like future mailings, please indicate your interest either by a card or a call to me either now or when you renew your membership.

To VNPS members who used the furnished information to help achieve the funding goals for these three agencies which work with natural areas and wildlife: Thank you and good job!

Nicky Staunton, Conservation Chair

See the address label for your membership's expiration date.

### VNPS Membership/Renewal Form

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Individual \$15       Family \$25       Student \$10

Patron \$50       Sustaining \$100       Life \$400

Associate (group) \$40; delegate \_\_\_\_\_

To give a gift membership or join additional chapters: Enclose dues, name, address, and chapter. (Non-voting memberships in any other than your primary chapter are \$5).

I wish to make an additional contribution to \_\_\_\_\_ VNPS \_\_\_\_\_ Chapter  
in the amount of  \$10  \$25  \$50  \$100  \$ \_\_\_\_\_

Check here if you do not wish your name  
to be exchanged with similar organizations.

Check here if you do not wish  
to be listed in a chapter directory.

Make check payable to VNPS and mail to:

VNPS Membership Chair, P.O. Box 844, Annandale, VA 22003

Membership dues are tax deductible in the amount they exceed \$5. Contributions are tax deductible in accordance with IRS regulations.

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Nancy Sorrells, Editor

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The deadline for the next issue is July 1

# Rare plants, coastal relics dot ponds at Maple Flats

(Continued from page 8)

clude sassafras, flowering dogwood, sourwood, mountain laurel and deerberry. The latter three are members of the heath family, indicative of the acidic soil that has built up over the limestone bedrock.

Some of the sinkholes in the area are nothing more than circular, dry depressions surrounded by a dense stand of trees. Other are more distinct. Oak Pond is ringed with pin oaks whose limbs hang down close to the water surface. A thicket of dwarf willow has become established in the shallow water.

Deep Pond, the deepest of the area's sinkholes, holds as much as four feet of water in its lowest depressions. It is filled with Robbins' spike rush, a plant with grass-like stems. Deep Pond is encircled by pin oaks. On a slightly elevated ridge a few feet beyond them, species that prefer drier conditions, such as post oak, are found. Cricket frogs, salamanders, and other animals abound here.

Nearby is Twin Pond, so named because at low water levels it is divided in two by a low ridge. Two plants that grow in Twin Pond are unusual. One is the seven-angled pipewort (*Eriocaulon*

*septangulare*), a species rare in Virginia. The other is Virginia sneezeweed (*Helenium virginicum*), a yellow-flowered plant found in wet areas in and near Maple Flats and nowhere beyond these two counties. Painted turtles are common at this sinkhole.

The largest pond, Spring Pond, which has an underground water supply, fluctuates little from its average two-foot depth. Surrounded by a profuse mat of sphagnum, this pond is home to many plant species. The rarities include swamp pink (*Helonias bullata*), one of the prettiest pink wildlilies in the world; maiden-cane (*Panicum hemitomon*), a grass normally found in coastal areas; Virginia chain fern (*Woodwardia virginica*); and Oakes' pondweed (*Potamogeton oakesianus*) which lives in standing water. More common wetland plants include skunk cabbage, cucumber root, wild cranberry, round-leaved sundew, three-way sedge and swamp azalea.

Some of the bog-loving plant species at Maple Flats, such as wild cranberry, and skunk cabbage, are boreal forest plants that apparently migrated south because of Ice Age glaciation and remained behind even after the climate warming.

Some think that the coastal plain plants at Maple Flats are relics from before the last glaciation when the plain extended farther west.

Two other interesting sinkhole ponds in the area are Football Field Pond and Mosaic Pond. The former is rectangular and, during low water periods, is covered by low-growing, mat-forming grasses and resembles a football field. Mosaic Pond, named for its diverse patterns of vegetation, is home to the spotted turtle, a coastal plain reptile not found elsewhere on the western side of the Blue Ridge Mountains.

You can take a self-guided tour of this Augusta County sinkhole region by following the trail between Route 610 (Howardsville Turnpike) west of the town of Sherando and Coal Road off Route 664. This trail is shown on the U.S. Geological Survey of the Sherando Quadrangle and the area is noted as Maple Flats Ponds.

Robert H. Mohlenbrock, a long-time VNPS supporter, is Distinguished Professor of Botany at Southern Illinois University at Carbondale. This article is adapted from and excerpted with permission from Natural History (July 1990), copyright the American Museum of Natural History, 1990.

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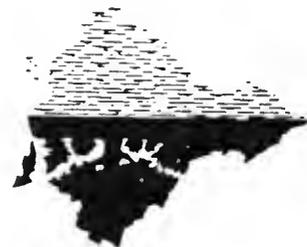
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# Bulletin

A publication of the VIRGINIA NATIVE PLANT SOCIETY

*Conserving wild flowers and wild places*

## New refuge

# Occoquan Bay becomes a reality

On Friday, June 26, 1998, at 4:45 p.m. the papers were signed transferring 586 acres from the U.S. Army to U.S. Department of Interior Fish and Wildlife Service. Now, Occoquan Bay National Wildlife Refuge, in northern Virginia, is an official entity.

Policies regarding access are being formed and there will be a formal opening of the refuge in several months. The OBNWR will be managed as one of three refuges comprising the Potomac River National Wildlife Refuge Complex. The other two are Mason Neck NWR and Featherstone NWR. Some former army land which became Marumsco NWR will be rejoined with the OBNWR.

VNPS members Elaine Haug and Nicky Staunton have been conducting the plant inventory of the 21

distinct habitats in the new refuge since the summer of 1993 and have produced a verified list of more than 650 plants with more waiting to have their identification confirmed. The goal beyond learning what plants are on site is to produce an herbarium on site with an accompanying slide library of the plants.

The habitats are also rich in other wildlife. There have been 55 butterfly species recorded by the national July Butterfly Count. Jim Waggener, accomplished birding expert and also a VNPS member, has been conducting a formal bird count since 1989. The count has topped 218 bird species.

As an outgrowth of the studies of birds and plants and the need to preserve the unique coastal upland meadows, the Prince William Natu- (See *Tour*, page 8)

# VNPS Annual Meeting

Exciting field trips, the opportunity to hear world-renowned author and botanist James Duke and time to renew friendships both of the people and plant variety are all part of the agenda at the annual meeting September 18 through 20.

This year's host chapter, Potowmack, has put together an unbeatable slate of trips that includes habitats in and around the Potomac River and the nation's capital. Visit our newest national wildlife refuge, Occoquan Bay, or see the native plant garden at the U.S. National Arboretum with curator Joan Feeley.

In the evenings, hear VNPS founder Mary Painter and John Trott on Friday night, and Duke on Saturday night. *The Green Pharmacy* will be the subject of Duke's lecture, delivered at the conclusion of the banquet.

Take a moment to look over the weekend's complete agenda and then fill out the registration form included in this *Bulletin*. Make a note that the special rate registration deadline for rooms at the Eisenhower Holiday Inn is August 26. That phone number is 703-960-3400.



# From the President.....

In the month of April, there were two honorable tree planting ceremonies at State Arboretum of Virginia. The first planting ceremony took place on April 10, 1998, for Mary Painter. A black gum (*Nyssa sylvatica*) was planted in her honor by her chapter, Piedmont. Mary is the founder of the Virginia Native Plant Society. She started it in 1982 as the Virginia Wildflower Preservation Society. Her intention was to make Virginians aware of the wonderful diverse native plants in their state. Also, she wanted to educate them to appreciate and conserve the plants as well. A little later, while raising a family, she started a nursery, Virginia Natives, which sells nursery-propagated native plants through retail and mail-order. It is a thriving business today, and she still is with the Society and is involved with the arboretum at Blandy Farm.

Another tree dedication ceremony occurred on April 24, 1998. Two swamp white oaks (*Quercus bicolor*) were dedicated in honor of Nicky Staunton and her late husband, Loren. One oak, which honored Loren, was planted during the ceremony. It joined another planted in Nicky's honor by her chapter, Prince William Wildflower Society in 1993. Nicky is one of the founding members of the Virginia Native Plant Society, has served six years as state president, and is currently serving on various VNPS committees. Unofficially, she has guided the Society through the years --- keeping it on a sure-footed path. Loren initiated her interest in native plants when they were first married. He was her prime supporter through the years in the Society, and had also been quietly supporting the Society through Nicky as well as participating in the organization through the chapter.

These members have been responsible for the success of the Virginia Native Plant Society, and for me, it was an honor to attend the ceremonies in recognition of their contributions. I am certain that the State Arboretum will receive more trees in the future in honor of members who have made outstanding contributions to the Virginia Native Plant Society. Blandy Farm is a fascinating place to visit, and I urge all of you to plan a trip at least once to visit the gardens there. During your visit, please look for these special trees, each of which will have a plaque designating the name of the person for whom it was planted.

**Your President, Marie F. Minor**

To The Board of Directors of the Virginia Native Plant Society (the Organization), as of October 31, 1997, and the related statement of revenues and expenses for the year then ended. These financial statements are the responsibility of the Organization's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. These standards require that I plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used, as well as evaluating the overall financial statement presentation. I believe that my audit provides a reasonable basis for my opinion.

In my opinion, the financial statements referred to present fairly, in all material respects, the financial position of the Virginia Native Plant Society as of October 31, 1997, and the results of its operations for the year then ended in conformity with generally accepted accounting principles.

June 3, 1998, Robert K. Hersh, C.P.A., 3213 N. John Marshall Drive, Arlington, Virginia 22207

## VNPS Fiscal Year 1997 Summary Income Statement Year-to-Date For the period ending Oct. 31, 1997

### INCOME

#### EARNED INCOME

Other earned income	\$14,670
<b>TOTAL EARNED INCOME</b>	<b><u>\$14,670</u></b>
<b>BUSINESS INCOME</b>	
Sales	\$136
Fees	\$8,031
Other income/business	\$2,152
<b>TOTAL BUSINESS INCOME</b>	<b><u>\$10,319</u></b>
<b>UNCLASSIFIED INCOME</b>	
Unclassified income	\$9,358
<b>TOTAL UNCLASSIFIED INCOME</b>	<b><u>\$9,358</u></b>
<b>TOTAL INCOME</b>	<b><u>\$34,346</u></b>

### EXPENSES

#### JOB RELATED EXPENSES

Other job related expenses	\$229
<b>TOTAL JOB RELATED EXPENSES</b>	<b><u>\$229</u></b>
<b>OTHER EXPENSES</b>	
Education expenses	\$18,714
<b>TOTAL OTHER EXPENSES</b>	<b><u>\$18,714</u></b>

#### TRANSFER TO LIABILITY ACCTS

Founders Endowment Fund	\$1,305
Fact Sheet Fund	\$403
<b>TOTAL TRANSFER TO LIABILITY ACCTS</b>	<b><u>\$1,708</u></b>
<b>BUSINESS EXPENSES</b>	
Office Exp./Business	\$8,115
<b>TOTAL BUSINESS EXPENSES</b>	<b><u>\$8,115</u></b>
<b>TOTAL EXPENSES</b>	<b><u>\$28,765</u></b>
<b>NET INCOME</b>	<b><u>\$5,581</u></b>

#### SUMMARY BALANCE SHEET

#### ASSETS

##### CURRENT ASSETS

Checking accounts	\$16,644
Savings accounts	\$12,159
Other Current Assets	\$1,305
<b>TOTAL CURRENT ASSETS</b>	<b><u>\$30,108</u></b>

#### MARKETABLE INVESTMENTS

Common Stocks	\$593
<b>TOTAL MARKETABLE INVEST.</b>	<b><u>\$593</u></b>
<b>TOTAL ASSETS</b>	<b>\$30,701</b>

#### LIABILITIES

##### CURRENT LIABILITIES

Accounts payable	\$239
<b>TOTAL CURRENT LIABILITES</b>	<b><u>\$239</u></b>

##### LONG-TERM LIABILITIES

Other long-term liabilities	\$5,238
<b>TOTAL LONG-TERM LIABILITIES</b>	<b><u>\$5,238</u></b>

##### UNCLASSIFIED LIABILITIES

Unclassified liabilities	\$3,356
<b>TOTAL UNCLASSIFIED LIABILITIES</b>	<b><u>\$3,356</u></b>

<b>TOTAL LIABILITIES</b>	<b><u>\$8,833</u></b>
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#### EQUITY

<b>TOTAL NET WORTH</b>	<b><u>\$21,868</u></b>
<b>TOTAL LIABILITIES&amp;NET WORTH</b>	<b><u>\$30,701</u></b>

# Across the state, VDOT is going native

For over 70 years, the Virginia state agency known as the "Highway Department," and later as the Virginia Department of Transportation (VDOT) has been building and maintaining roads throughout the Commonwealth of Virginia. The department is the caretaker of approximately 121,000 lane-miles of roadway and over 300,000 acres of adjacent land with more roads being built or improved every year.

VDOT's priorities for vegetation along the highways are safety, effective erosion control and low maintenance. While aesthetics are important, this aspect is usually considered after the three prior concerns have been addressed.

For most right-of-way areas, VDOT chooses vegetation that can be planted by seed and will establish quickly to control erosion. In the clear zone (generally 8 feet to 37 or more feet from the edge of the pavement, depending on the road), the department looks for low growing grasses that are aesthetically pleasing and can survive in this region with minimal maintenance.

Areas that will not be mowed, such as slopes that are greater than 3:1, are planted with invasive legumes like crown vetch or sericea lespedeza. Warm season grasses such as the invasive weeping lovegrass are also used on these low maintenance areas.

Other vegetation used to aesthetically enhance the rights-of-way such as trees, shrubs, ground covers and flowers are selected for their aesthetics and ability to survive with little maintenance.

To summarize, VDOT needs vegetation that can quickly form a dense vegetative cover or, in the case of trees, shrubs, ground covers and flowers, is very hardy, fairly easy to maintain, and, of course, pleasing to the eye. Therefore, much of the vegetation you see along Virginia's highways and byways has been selected because it meets some or all of these criteria.

However, many of the plants

used by VDOT in the past and currently, are not native to Virginia or even to this country. Tall fescue, for instance, meets the above mentioned criteria in that it is fairly easy to establish and maintain, is aesthetically pleasing (granted, beauty is in the eye of the beholder), and does an acceptable job controlling erosion. But tall fescue is a European native and is sometimes considered invasive.

Enter the idea of using native plants. For many years, VDOT has used native vegetation in its landscape plantings, wetland mitigation sites and some of its wildflower plantings. However, thanks to environmental programs and education information promoted by state agencies like the Virginia Department of Game and Inland Fisheries, the Virginia Department of Conservation and Recreation and organizations like Virginia Native Plant Society, local garden clubs and many others, VDOT's agronomists, horticulturists and landscape architects are looking to incorporate more native plant species into their projects and programs.

And for good reason. Plants that are native to this area have a proven track record of survivability. They are naturally hardy and tolerant of Virginia's climate, and native plants are attractive and their use is consistent with sound conservation and management practices.

Long aware of the practical reasons for including native vegetation in its programs, and of the negative effects on the environment from invasive alien plant species such as kudzu (*Pueraria lobata*), the Environmental Division at VDOT has been expanding its use of native plants.

VDOT's Environmental Division is currently working on including more native species of trees, shrubs and wildflowers into landscape designs and vegetation management programs. Trees and shrubs such as red maple (*Acer rubrum*), flowering dogwood

(*Cornus florida*) and southern wax-myrtle (*Myrica cerifera*) are being used in greater numbers on projects.

VDOT is also currently working with various local governments and civic organizations in the Tidewater, Blacksburg and Northern Virginia areas on reforestation projects using primarily native plants. These projects are being implemented to soften the appearance of the highways and enhance aesthetics of the adjacent areas.

Another exciting development worth mentioning is VDOT's Wildlife Habitat Program. Working with the Virginia Department of Game and Inland Fisheries, researchers from Virginia Tech and representatives from various private industries such as Virginia Power, VDOT began planting experimental sites using native warm grasses, such as little bluestem (*Andropogon scoparius*) and Indiangrass (*Sorghastrum nutans*), in selected low maintenance areas to provide diverse habitat areas for quail, songbirds and other wildlife.

Though this program is targeted specifically at restoring habitat for small game birds, there are other beneficial aspects to this effort that may equal or exceed the original intent. For instance, the use of native warm season grasses will be tested and evaluated not only for habitat purposes, but also for erosion control and aesthetics. These grasses have great potential for use in low maintenance areas when used alone, in mixes or when combined with wildflowers to create natural meadows. In turn, these meadows could provide much needed aesthetically pleasing, low maintenance habitat and food for wildlife and insects while still controlling erosion.

The effective use of native plants along Virginia's highways can help reduce the spread of invasive alien plant species such as Japanese honeysuckle and the tenacious kudzu vine.

VDOT is working with researchers from Virginia Tech and various (See VDOT, page 8)

## For the Wildflower Gardener

*Clethra fills the summer air with sweet fragrance*

*Clethra alnifolia*, summersweet  
Illustration by Nicky Staunton

If you've lived through July and August without enjoying the delightful fragrance of summersweet (*Clethra alnifolia*) in your garden, make plans to plant one before next summer. This aptly named shrub is attractive in all seasons, is easy to grow in almost any soil, in sun or shade, and has no serious pest problems or diseases.

*Clethra*, the single genus in the family Clethraceae, is a Greek word for alder and *alnifolia* means "leaves like alder." Only two species grow in North America and both are found in Virginia. Approximately 30 more spe-

cies grow in Japan and Central and South America. Summersweet, found in wetlands from southern Maine to Florida, grows along the coastal plain and into the piedmont areas of Virginia. Cinnamon or mountain clethra (*C. acuminata*) is native in mountainous areas from Pennsylvania and West Virginia south to Georgia including Virginia's far southwestern counties.

Summersweet is 8-10 feet tall and normally 4-6 feet wide, but suckers may form large colonies. Dark green, ovate leaves are 3-4 inches long and 1.5 inches wide. Blooming spikes, 4-6 inches long, are made up of numerous tiny, five-petaled flowers. Flowering progresses up the spike and new spikes begin blooming every few days, prolonging flowering for four to six weeks during July and August. Black peppercorn-like seed capsules remain until the following spring. They give both east coast species the additional common name of pepperbush.

In 1932, Louise Beebe Wilder wrote in *The Fragrant Path*, that summersweet perfumed the whole countryside. She said it was called "Sailor's Delight" around Gloucester, Massachusetts because men on incoming ships smelled its sweetness while still far out at sea. Around the same

time, Herbert Durand, author of *My Wild Flower Garden*, called it "...nature's most delightful and most tantalizing fragrance...a fragrance with a tang that makes the nostrils tingle and creates an insatiable desire for more." Branches cut for indoor bouquets remain fresh and fragrant for several days.

Summersweet is a perfect choice for a sunny, slightly acid, poorly drained area in the garden. It will also grow well in part shade with average moisture. However, flowering and fall coloring (pale yellow to rich golden brown) will be better in full sun.

Use summersweet as a background shrub in a mixed border or as part of a shrub border. Plant it near outdoor sitting areas or any place where you can enjoy its sweet lilac-like fragrance. Butterflies, bees and an unusual assortment of other insects are attracted to its nectar-rich flowers.

Propagate by seed, softwood cuttings in summer, or by digging out the suckers it produces. Pink flowering cultivars 'Rosea' and 'Pink Spires' and the dwarf, white 'Hummingbird' have been available for several years. Recent introductions include dark pink 'Ruby Spires,' late-blooming white 'September Beauty' and 'Creel's Calico' with white flowers and variegated foliage.

Nancy Arrington, Horticulture Chair

## Organization working to bring back the American chestnut

When the Europeans arrived in North America, every fourth tree in the eastern deciduous forest was American chestnut (*Castanea dentata*). These massive trees stood up to 100 feet tall with trunks 5-7 feet in diameter. They were valued for their straight-grained wood and nuts that fed wildlife, livestock and humans.

An Asian fungus, *Cryphonectria parasitica*, brought to New York around 1904, wiped out this species throughout its Maine to Georgia range by the late 1940s. The blight doesn't affect the roots, so shoots still sprout from stumps, live several years and may even fruit before succumbing to the blight.

There is hope for the return of the American chestnut. Since 1984 the Virginia-based American Chestnut Cooperators' Foundation (ACCF) has distributed seednuts from trees showing some blight resistance; seedlings have been distributed since 1989. Additionally, volunteers graft disease-resistant scionwood onto root systems that are surviving in the wild.

You can help by joining the all-volunteer ACCF (\$20 membership), planting nuts and seedlings, participating in grafting clinics, learning grafting techniques and becoming involved in other interesting projects. Free seednuts are available to members and organizations after the Octo-

ber harvest. Year-old bare root seedlings are available (\$25 for a bundle of 25) after mid-November. An information package is available from the foundation's website at <http://ipm.ppws.vt.edu/griffin/accf.html> or write to Lucille Griffin, Executive Director, 2667 Forest Service Road 708, Newport, VA 24128. You may also contact VNPS Prince William Chapter members who are growing seedlings after hearing Mrs. Griffin's presentation at the VNPS winter workshop.

Contributions help fund scientific projects like the search for chemical markers for blight resistance, development of biological control of the blight, lower nursery costs for seedlings, etc.

# Virginia Native Plant Society

Annual Meeting  
September 18-20, 1998

**Come to Potowmack Chapter's Potomac River valley to enjoy the habitats of Northern Virginia, to hear stimulating speakers, and to associate with old and new friends at the 1998 VNPS Annual Meeting. You will be glad you did!**

## Weekend Schedule of Events

### **Friday, September 18**

7-8 p.m. Registration at Green Spring Gardens Park and social hour  
Receive information on activities

8-10 p.m. Guest Speakers - VNPS founder Mary Painter will reminisce on early days. John Trott, former headmaster of Madeira School and noted Northern Virginia naturalist will present a slide-illustrated talk, "Wildflowers and Birds-A Memoir of Associations," featuring some of his favorite areas around the U.S., including Virginia

### **Saturday, September 19**

Breakfast on your own

8-9 a.m. Registration at Eisenhower Holiday Inn, meeting headquarters

9 a.m. Field trips leave from hotel parking lot

6-7 p.m. Social hour with cash bar; view photo contest entries

7-7:30 p.m. Business meeting

7:30-8:45 p.m. Banquet

8:45-10 p.m. Speaker: James Duke, world-renowned botanist, author and lecturer, recognized expert in plant phytochemicals, will speak on "The Green Pharmacy." Duke is the co-author of Peterson's *Field Guide on Medicinal Plants*, and recently published a book, *The Green Pharmacy*.

### **Sunday, September 20**

Breakfast on your own

9:00 a.m. Field trips leave Holiday Inn

9-2 p.m. Board meeting at Green Spring Gardens Park

## Accommodations

As reported in the May *Bulletin*, a block of rooms has been reserved at the Eisenhower Holiday Inn, Alexandria. **Make your reservation before August 26;** identify yourself as a VNPS member to receive the special rate of \$79. Phone number: 703-960-3400; Fax number: 703-329-0953.

## SATURDAY FIELD TRIPS

Field trips leave Eisenhower Holiday Inn at 9 a.m. A box lunch will be provided for all field trips. The trips listed below are full day, half-day morning or half-day afternoon. Please specify on the registration form the field trip number in which you plan to participate. Be sure to mark a second choice in case your first choice is at capacity when your registration is received.

### FULL DAY FIELD TRIPS

- 1 \_\_\_ Occoquan Bay National Wildlife Refuge** - Prince William members Elaine Haug and Nicky Staunton will lead this walk at Mason Neck. They have participated in bio-inventories identifying over 500 botanical species at this recently acquired Northern Virginia site with its variety of habitats. Visiting the upland meadow section you should expect to see bidens, gerardia, a variety of grasses, butterflies and birds.
- 2 \_\_\_ Potomac Palisades** - Explore Turkey Run along the Potomac River with its exceptionally fine hardwood forest and rich diversity of plants with Cris Fleming, a field ecologist for the Maryland Natural Heritage Program and VNPS member. Expect a variety of ferns in addition to leatherwood and fall flowers. After lunch, drive to Great Falls Park and walk the rocky River Trail searching for rare riverbank goldenrod and western sunflower as well as other fall wildflowers.
- 3 \_\_\_ Scott's Run & Runnymede Park** - Explore a several-hundred acre forest preserve along the Potomac with plant ecologist Roderick Simmons. See old-growth hemlocks and cove hardwoods, sugar maple, ferns, waterfalls and rugged laurel-capped cliffs along the river. After lunch at Runnymede, visit this remnant of the northern Triassic era, once covered by a shallow lake. The resulting soils provide for unique plant communities and a diversity of flora, many uncommon in Virginia. See an Indian grass meadow with blazing star, ragged-fringed orchid, green milkweed, pasture rose and shingle oak. Geologist John DeNoyer is a co-leader.
- 4 \_\_\_ U.S. National Arboretum** - Joan Feeley, curator of the Native Plant Collection at the Arboretum will take us through the 7-acre native plant garden where we can expect to see ferns and early wildflowers of woods and fields. After lunch, an arboretum volunteer will guide us through other garden collections at this national resource.

### HALF DAY FIELD TRIPS - Morning session

- 5 \_\_\_ Clark's Crossing** - Stephanie Mason, senior naturalist of the Audubon Naturalist Society, will lead this tour to one of the few habitats in the Washington, D.C. area which features both dry and wet meadow species including an abundance of asters, goldenrods and other fall flowers.
- 6 \_\_\_ Green Spring Gardens Park** - Enjoy Potowmack Chapter's Virginia Native Plant Trail with its varied habitats and representation of Virginia flora as well as other display gardens at this Fairfax County Park. VNPS member Brenda Skarphol, curatorial horticulturist at the park will lead the tour.
- 7 \_\_\_ Huntley Meadows Park** - Walk the boardwalk of this VNPS Registry site with Carolyn Gamble, park naturalist, to enjoy such wetland plants such as buttonbush, swamp rose, cardinal flower and lizard's tail. Good birding and maybe the opportunity to see monarchs feeding on hempweed.
- 8 \_\_\_ Theodore Roosevelt Island** - Marion Lobstein, biology professor at Northern Virginia Community College and adjunct professor at Blandy Experimental Farm, will lead the walk in this 88-acre Potomac River park. Freshwater marsh and swamp shrub habitat provide a variety of flowers including white turtlehead, hollow Joe Pye weed, ironweed and sneezeweed. VNPS helped initiate a reclamation project here in 1993.

**HALF DAY FIELD TRIPS - Afternoon session**

**9 \_\_\_ Dyke Marsh** - Potowmack Chapter members will lead a walk on the haul road, the heart of the largest tidal freshwater wetland on the Potomac near the capital. In addition a number of yellow composites, fall flowers include tear thumbs, jewel weed and marsh dayflower. Also great for waterbirds.

**10 \_\_\_ Runnymede Park** - See description under Scott's Run (trip 3)

**11 \_\_\_ The Winkler Botanical Preserve** - Visit this garden hidden amidst urban Alexandria where plants propagated on site are combined with others rescued from construction into a naturalized woodland and meadow setting. Preserve staff members will lead tour.

**SUNDAY TOURS**

**12 \_\_\_ Great Falls** - Marion Lobstein will lead a tour to Great Falls. See trip No. 2 for description.

**13 \_\_\_ Green Spring Gardens Park** - Sunday's tour will be led by Green Spring staff member Cathy Stragar. See trip No. 6 for description of park.

-----  
Detach here

**VNPS REGISTRATION FORM**

Name \_\_\_\_\_

Telephone \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Chapter \_\_\_\_\_

Number of persons \_\_\_\_\_

**Saturday Field Trips**

Circle below the number of your field trip preference (See attached list). Also indicate a second choice in case your first choice is at capacity when your registration is received.

1      2      3      4      5      6      7      8      9      10      11

**Sunday Field Trips**      Circle here      12      13

If you are registering for more than one person, fill in the trip preferences for the second person on a separate sheet of paper along with the name of the second person.

**Registration Fees**

**\$50 registration fee includes box lunch Saturday and dinner Saturday night**

\_\_\_\_\_ Indicate here if vegetarian box lunch is needed on Saturday

**Number of persons registered** \_\_\_\_\_ **(number x \$50) Amount** \_\_\_\_\_

Mail this form (with payment made payable to VNPS Potowmack Chapter) to:

**Liz Smith**

**7731 Tauxemont Road**

**Alexandria, VA 22308**

**Telephone: 703-768-1697**



# VNPS returns to the Bruce

## Plethora of orchids and bountiful botanizing enjoyed in Canada

Twenty-one members of VNPS enjoyed a wonderful week of botanizing on the Bruce Peninsula in mid-June. Glorious weather, good company, dramatic scenery, and a plethora of orchids all contributed to our pleasure. Even on the Bruce spring was early this year, so we caught just a farewell glimpse of calypso (*Calypso bulbosa*) and ram's-head orchid (*Cypripedium arietinum*). However, recent rains brought the late-blooming orchids to perfection, and we had splendid encounters with showy lady-slipper (*C. reginae*), white bog orchid (*Platanthera dilatata*), northern green orchid (*P. hyperborea*), grass pink (*Calopogon tuberosus*), rose pogonia (*Pogonia ophioglossoides*) and broad lipped twayblade (*Listera convallarioides*).

The sharp eyes of Mary McWhinney, a Canadian who just joined VNPS, spotted Loesel's twayblade (*Liparis loeselii*) and shining ladies' tresses (*Spiranthes lucida*) where the leaders, Nicky Staunton and myself, had failed to find them. And the equally sharp eyes of Lorna Wass found the only remaining flower of lake iris (*Iris lacustris*). All together, we saw 25 species of orchids (some only in leaf or bud), including a beautiful stand of white showy lady-slipper discovered by Ted Scott, the founder and former leader of the VNPS Bruce Peninsula trips.

Our first day at Flowerpot Island was full of "oh" and "wow" as we Virginians discovered northern species such as bunchberry (*Cornus canadensis*), twinflower (*Linnaea borealis*), goldthread (*Coptis groenlandica*) and fringed polygala (*Polygala paucifolia*), as well as 13 species of orchids. At Dorcas Bay, we explored the forest, fen, and shoreline, finding four species of carnivorous plants: pitcher-plant (*Sarracenia purpurea*), linear-leaved sundew (*Drosera linearis*), northern bladderwort (*Utricularia intermedia*) and butterwort (*Pinguicula vulgaris*). We spent a day visiting several fens where we saw more species of sundews, the bog orchids, false asphodel (*Tofieldia glutinosa*), arrowgrass (*Triglochin maritimum*) and tuberous Indian plantain (*Cacalia plantaginea*).

One fen was owned by the Saugeen Field Naturalists, so Karl Hohenstein aptly named our group the "Soggy Field Naturalists." Another day we explored the limestone flatrock habitat called alvar, where we saw rare species such as Robert's oak fern (*Gymnocarpium robertianum*) and lakeside daisy (*Hymenoxys herbacea*).

Early morning birders led by Bryan Samuel were rewarded with 36 species, including swooping black terns, several common loons and a lone American bittern. Everyday we saw bobolinks on the fence

posts lining the fields, and every morning we heard American redstarts and black-throated green warblers right outside our cottages.

We walked through the old-growth forest at Walkers Woods and marveled at the huge northern white-cedars (*Thuja occidentalis*) and the lush growth of ferns and mosses. There we saw buckbean (*Menyanthes trifoliata*), a northern species found also at our own VNPS registry site, Mueller Marsh. On our last day at the Bruce, we found the rare Hart's tongue fern (*Phyllitis scolopendrium*), as well as walking fern (*Camptosorus rhizophyllus*), holly fern (*Polystichum lonchitis*) and male fern (*Dryopteris filix-mas*).

During our week on the Bruce, we identified 263 plants, including 39 species new to the VNPS cumulative list. Adding to the perfection of the trip was the delicious food at Wildwood Lodge, the dazzling sunsets over Lake Huron, and the camaraderie of our own group which also included Linda Ardrey, Frank and Anne Coffey, Cliff and Shirley Gay, Virginia Hohenstein, John Murray and Nancy Slocum, Eilane Norman, Joan Nowicke, Dustinn and Gerry Pratt, and Joe and Mary Howard. The 1999 Bruce Peninsula trip is June 11-19. Call Nicky Staunton 703-368-9803 for more information or to sign up.

Both Bruce articles by Cris Fleming, VNPS Bruce Peninsula trip co-leader.

### Globally rare alvar habitat and its associated plants explored at the Bruce

Alvar is a Swedish name for a large expanse of open limestone flatrock. Alvars are globally rare habitats, known to occur only in southern Sweden, Estonia and the Great Lakes region, with Ontario having 85 percent of the North American alvars.

Curious about this newly recognized habitat of the Bruce Peninsula, our VNPS group visited the known alvar at Dyers Bay Road, a new Federation of Ontario Naturalists preserve called the Bruce Alvar, and a large alvar within Bruce Peninsula National Park.

Like other bedrock habitats, alvars

have little or no soil and very few trees; they are hot and dry in summer and often freezing and windblown in winter. Some alvars are so open and flat that they look like pavement or parking lots. However, because the limestone is porous, vertical cracks often develop. These cracks are called grykes. Inside the grykes, the temperature on a hot day can be 20 degrees cooler than on the flatrock. Soil and moisture also accumulate. (See Alvar, page 8)

*Hymenoxys herbacea*, lakeside daisy  
Illustration by Nicky Staunton



## Wildlife habitat program promotes use of native plants

Steve Capel of the Virginia Department of Game and Inland Fisheries recently announced that the Wildlife Habitat Incentive Program (WHIP) has received another \$150,000 funding from USDA Natural Resources Conservation Service (NRCS, formerly Soil Conservation Service). The funds are available to farmers and other landowners.

Designed to emphasize the use of native plants in restoring wildlife habi-

tat, there are four major categories for Virginia.

- 1) Grassland/early succession habitat restoration
- 2) Riparian corridor restoration
- 3) Migration corridor restoration
- 4) Unique habitat restoration

These four were selected in Virginia to target our most threatened wildlife groups, especially those that had been adversely impacted by agricultural activities in the past. Grassland restoration will rely on native warm season grasses.

Riparian res-

toration will utilize native hardwoods, fencing livestock out of creek bottoms to permit native vegetation to return. The migration corridors will be targeted at filling in the gaps in woodlands with hardwood plantings, especially in the eastern part of the state where forest fragmentation has been more significant.

And finally, the unique habitat restoration will give opportu-

nities to tailor restoration activities at fens, mountain bogs, shale barrens, and many more such unique habitat areas in Virginia, primarily under direction of the Natural Heritage staff at the Department of Conservation and Recreation.

The NRCS will require use of native plant material for all of these processes. It is also attempting to address the supply side of the equation through the collection

of native plant seed stock for propagation on a large-scale basis. This could well be the largest, landscape-level change toward the use of native plants that has ever occurred in Virginia. This is a great opportunity to enhance our native plant restoration through this program.

Landowners should contact their local Natural Resource Conservation Service (formerly SCS) office for further details. Or, Steve Capel may be called at 804-598-3706.

### Wanted: seed collectors

There is not an abundance of native species available in the seed industry, much less "local" seed for most native species. In an effort to remedy this situation, the NRCS and Gwen Meyer, a grass establishment researcher at the Wetland Science Center in Laurel, Maryland, are making an effort to collect seeds of native grasses that offer particular promise. The seeds collected will be grown out in rows for selection. The most promising selections will be increased and propagated for the seed trade.

Still needed are Virginia sources for cool season grasses as well as grasses of warm season. Even more pressing is the need for a legume that can be included in pasture seedings to accompany the grasses. Some native legumes which are needed: *Tephrosia*, *Apios*, *Galactia*, native *Lespedezas*, *Baptisia*, and *Strophostyles*. Needed native perennials include *Echinacea*, *Eryngium*, *Asclepias tuberosa*, *Liatris*, *Helianthus*, *Cassia* and *Ratibida*.

Contact Gwen Meyer at 301-497-5591 for seed collection forms and bags (they require some detailed info on each collection). For this project, only a small amount of seed is needed, such as an ounce or even partial ounce quantity. Seed can be collected from the wild or from gardens.

The DGIF is sponsoring a Warm Season Grass Workshop on Aug. 15 near Tappahannock. Call Debbie Flippo at 804-598-3706 to register.

## Hatch's book on Monticello's fruits and fruit trees is comprehensive

*The Fruits and Fruit Trees of Monticello*, Peter J. Hatch, University of Virginia Press, Charlottesville and London, 1998.

The title says it all: this book reflects the botanical experiments at Jefferson's homeplace two centuries ago, their successes and failures, as well as the difficulties of the present in reestablishing similar plantations. Introductory sections cover these issues not just with a summary of Jefferson's activities, but also through illustrations about the entire fruit-ex-

ploring American world of that time.

Parts II and III deal specifically with cultivars of apples, peaches, cherries, pears, plums, apricots, nectarines, almonds, quinces, grapes, figs, strawberries, currants, gooseberries and raspberries. There is usually a general chapter about what contemporary pioneers and nurseries experienced with these fruits before specific selections for Monticello are discussed.

The author builds his text upon thousands of quotations and notes from historic literature, and there will

be few who are willing to compare the sources and verify them. Due to the bulk of information, the numerous pictures, maps and sketches, this publication has attracted some positive attention by various critics, and I agree with them. The book somewhat exhausts its subject. Its complexity promises good information for everybody, however it does not intend assistance for the conservation orchardist and his actual struggle in obtaining stock from the present nurseries around the country and sometimes the whole world.

Volker Imschweiler, PWWS member

## Wildflower brochures available from PWWS

Prince William Wildflower Society has recently updated and reprinted two wildflower brochures.

*Wildflowers for Butterfly Gardens* gives suggestions for providing backyard habitats for butterflies. A list of nectar-rich native perennials is included along with food plants for caterpillars of around 20 common species. A list of books and organizations offering additional help is also included.

*Wildflowers for Woodland Gardens* briefly describes the process of designing, installing and maintaining a woodland garden. Lists of suggested perennials, ground covers and ferns are given.

The brochures were written for Northern Virginia gardeners, but gardeners in other areas of the state should find them helpful. For a copy of either or both brochures, send a business-size SASE to: PWWS, P.O. Box 83, Manassas, VA 20108. Large quantities are available for a nominal charge.

## Invasive plant fact sheets now number 24

With the production of six new fact sheets on invasive exotic plants in Virginia, there are now 24 fact sheets available plus the list of most significant invasive exotics in Virginia. Work is currently under way for six more fact sheets. To obtain copies, please send self-addressed, stamped (\$.55) envelope to VNPS Invasive Factsheets, P. O. Box 844, Annandale VA 22003.

- Alligatorweed *Alternanthera philoxeroides*
- Asiatic sand sedge *Carex kobomugi*
- Autumn olive *Elaeagnus umbellata*
- Russian olive *E. angustifolia*
- Bush honeysuckles *Lonicera x bella*;  
*L. fragrantissima*; *L. maackii*; *L. morrowii*;  
*L. tatarica*; *L. xylosteum*
- Chinese lespedeza *Lespedeza cuneata*
- Chinese privet *Ligustrum sinense*
- Common reed *Phragmites australis*
- Crown vetch *Coronilla varia*
- Garlic mustard *Alliaria petiolata*
- Giant reed *Arundo donax*
- Hydrilla *Hydrilla verticillata*
- Japanese honeysuckle *Lonicera japonica*
- Japanese knotweed *Polygonum cuspidatum*
- Japanese stilt grass *Microstegeum vimineum*
- Johnson grass *Sorghum halapense*
- Kudzu *Pueraria lobata*
- Mile-a-minute *Polygonum perfoliatum*
- Multiflora rose *Rosa multiflora*
- Oriental bittersweet *Celastrus orbiculatus*
- Porcelain-berry *Ampelopsis brevipedunculata*
- Purple loosestrife *Lythrum salicaria*
- Spotted knapweed *Centaurea maculosa*
- Tall fescue *Festuca pratensis (elatior)*
- Tree-of-heaven *Ailanthus altissima*

• New fact sheets

See the address label for your membership's expiration date.

### VNPS Membership/Renewal Form

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Individual \$15       Family \$25       Student \$10

Patron \$50       Sustaining \$100       Life \$400

Associate (group) \$40; delegate \_\_\_\_\_

To give a gift membership or join additional chapters: Enclose dues, name, address, and chapter. (Non-voting memberships in any other than your primary chapter are \$5).

I wish to make an additional contribution to \_\_\_\_\_ VNPS \_\_\_\_\_ Chapter

in the amount of  \$10  \$25  \$50  \$100  \$ \_\_\_\_\_

Check here if you do not wish your name to be exchanged with similar organizations.

Check here if you do not wish to be listed in a chapter directory.

Make check payable to VNPS and mail to:

VNPS Membership Chair, P.O. Box 844, Annandale, VA 22003

Membership dues are tax deductible in the amount they exceed \$5. Contributions are tax deductible in accordance with IRS regulations.

### The Bulletin

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Marie F. Minor, President  
Nancy Sorrells, Editor

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The deadline for the next issue is Oct. 1

# Tour of refuge planned for annual meeting

(Continued from page 1)

ral Resources Council was organized by Jim, Elaine and Nicky and a core of Prince William environmentalists.

This refuge is to become not only a visitor's destination to witness upland birds and migratory species, but also a center for environmental education in Northern Virginia. Students in the Prince William County Schools and area community college have already benefited by their time spent on watershed studies, small mammal surveys and water studies.

A tour of the refuge is scheduled for the VNPS Annual Meeting in Sep-

## • Alvar

(Continued from page 5)

late in the grykes, so ferns and even trees get footholds there.

Because the habitat is so rare, many species that have adapted to this harsh environment are also rare. Among the characteristic alvar plants are Richardson's sedge (*Carex richardsonii*), tufted hairgrass (*Deschampsia cespitosa*), death camass (*Zigadenus elegans*), rock sandwort (*Arenaria stricta*), Seneca snakeroot (*Polygala senega*), calamint (*Calamintha glabella*), balsam ragwort (*Senecio pauperculus*), the rare lance-leaved coreopsis (*Coreopsis lanceolata*) and the globally endangered lakeside daisy (*Hymenoxys herbacea*).

tember. The upland meadow grasses should be beautiful and tickseed sunflowers should be covering low wet meadows. The migrating monarchs might even be passing through. Occoquan Bay National Wildlife Refuge is readily accessible via I-95 to Route 1 in Woodbridge. It is located on Dawson Beach Road. Until further information is available, before visiting call the U.S. Fish and Wildlife Office at 703-690-1297. Greg Weiler, manager; Joe Witt, biologist; Yvonne Shultz, refuge outdoor recreation planner; and Barbara Mitchell, refuge office assistant, will all be anticipating your calls.

Appreciation is expressed to those who helped keep this site in its natural state by their written and

## • VDOT

(Continued from page 3)

industry suppliers to identify native species of plants for its landscape, wildflower and wildlife habitat programs and to ensure a viable supply from local growers.

In addition, the development of native plants can help the local economy as existing growers gear up to meet the increased demands for native vegetation and new busi-

ness opportunities are created. spoken efforts during the times it was sought by commercial developers. U.S. Senators Charles Robb and John Warner; and Representatives Jim Moran and Tom Davis and Virginia Senator Joe Gartland are among our elected officials who deserve credit for their efforts to have the land transferred to U.S. Fish and Wildlife from the army. Also, John Gottschalk, former Director of U.S. Fish and Wildlife, helped greatly to effect this transfer.

Through everyone's effort, the place that once saw worldwide radio transmissions and classified army electronics research, will now be used as our newest refuge by migratory birds such as osprey, northern harriers and eagles.

Nicky Staunton, Conservation Chair

ness opportunities are created.

So the move has begun as VDOT seeks to improve its goal of safe, low maintenance highways that will be aesthetically pleasing and environmentally friendly.

To find out more information about these programs or any other VDOT environmental program, please contact the author of this article, Ken Oristaglio, Environmental Program Planner at 804-371-6825.

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# Bulletin

A publication of the VIRGINIA NATIVE PLANT SOCIETY

*Conserving wild flowers and wild places*

## VNPS opens state office at Blandy

The board of directors of the Virginia Native Plant Society has accepted the offer of Dr. Michael Bowers, Director of Blandy Experimental Farm (BEF), to provide a state VNPS office at Blandy, near Boyce, Virginia, west of Middleburg and east of Winchester. The farm is part of the University of Virginia. The society's growth in membership and outreach is the reason for centralizing the VNPS state office.

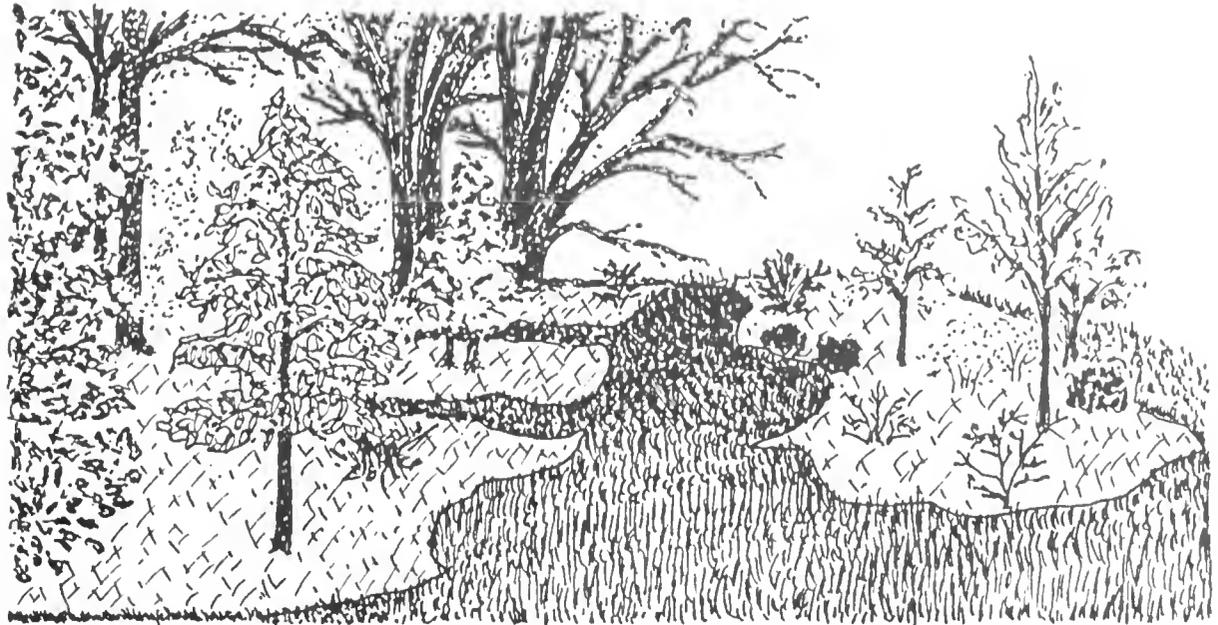
When fully implemented, much of the administrative and financial functions of VNPS will be handled at the Blandy office. Society members from the Potowmack and Piedmont chapters are already participants in the education and conservation programs at BEF. Every expectation is that this participation will increase with more programs initiated by VNPS. In addition, joint efforts between the society and the Foundation of the State Arboretum at Blandy, which numbers many active VNPS people among its member-

ship, will be facilitated by the new office. The Native Plant Trail at Blandy already exists as a joint effort between the two organizations. The trail is sponsored by the arboretum foundation and has several specimen trees dedicated to VNPS members along its path.

The use of the extensive facilities for education and meetings at Blandy and the association with botanical organizations will have a positive impact on VNPS efforts to "conserve wild flowers and wild places."

The VNPS office operation, when staffed with a paid employee in the future, should shift many of the routine, necessary clerical functions away from state and chapter officers. As membership increases and the society grows, this will permit these dedicated volunteers to turn more of their energies to management and involvement in native plant programs that piqued their initial interest in the society and caused them to volunteer. With a state office, VNPS anticipates being even more effective in preserving Virginia's natural heritage.

**New address & phone**  
**Virginia Native Plant Society**  
**at Blandy Experimental Farm**  
 Rt. 2, Box 214  
 Boyce, VA 22620  
 540-837-1600



Virginia Native Plant Trail at Blandy Experimental Farm, Boyce, Va. 11/98

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# From the President

*If you didn't attend the Annual Meeting and related events on September 18, 19, and 20, you really missed a good time! It was held in Alexandria and hosted by the Potowmack Chapter. For openers, on Friday night in Green Spring Park, Mary Painter, founder of the Virginia Native Plant Society reminisced on the early years of the society. Guest speaker and well-known naturalist John Trott gave an interesting slide presentation on all aspects of nature particularly birds in Texas as well as Virginia and the Carolinas.*

*Saturday was the big day for all kinds of field trips. I usually think of Northern Virginia as packed with developments, but I was surprised at the number of parks located within the area. It was more surprising to find such a diversity of plant and animal life in these parks. Visiting the Theodore Roosevelt Island (located in the Potomac River) in the morning, I saw a beautiful marsh full of all sorts of flowering plants. It rivals Chesterfield County's Point of Rocks Park. Yet, it was surrounded by downtown Alexandria and D.C. Stan Shetler led the walk.*

*After a delightful lunch provided by the Potowmack Chapter, many of us took a guided tour, led by Rod Simmons (VNPS member and president of the Maryland Native Plant Society) at Runnymede, a strip of oasis amid a residential area in Herndon. There I was thrilled to find one of my favorite shrubs, ninebark (*Physocarpus opulifolia*) with its multi-colored bark, flat clusters of white flowers, and drooping clusters of cinnamon-colored seeds. We finished the walk by drinking iced spicebush tea (*Lindera benzoin*) which was refreshing.*

*On Saturday night following cocktail hour, the short business meeting was held during which modifications of the by-laws allowing for changes in the selection, composition, and terms of members of the nominating committee to result in staggered terms of its members was approved by a quorum of the VNPS members.*

*New officers were introduced and outgoing officers were honored. Ted Scott, first vice-president, and Cris Fleming, director-at-large, each received a Jefferson cup and certificate of appreciation. Ted collaborated with the Division of Natural Heritage to produce a series of brochures on Native Plants for Conservation, Restoration, and Landscaping coastal, piedmont, mountain and valley of Virginia. The collaboration also produced invasive alien fact sheets, some of which can be found on the VNPS web site. John White, treasurer, and Phoebe White, membership chair, each received a certificate of appreciation and both received signal flags for their boat. They have moved to a coastal community in Maryland. Aileen Smith, recording secretary, received a certificate of appreciation.*

*Guest speaker, Jim Duke, co-author of Peterson's Field Guide to Medicinal Plants and author of The Green Pharmacy, presented a lecture on the medicinal use of plants (particularly of the Amazonian rain forest). He was a lively, persuasive speaker. Sunday morning brought more lovely walks. The weather was cooperative for these events.*

*I want to salute the members of the Potowmack Chapter, especially Norma Vermillion, president, Liz Smith, Alonso Abugattas, Marion Lobstein, Barbara Farron, Ann Crocker, Billie Trump, and all of the trip leaders for making this year's Annual Meeting a most enjoyable time.*

**Your president, Marie F. Minor**

## VNPS Executive Committee

President	Marie Minor	804-443-5950
1st VP	Butch Kelly	703-384-7429
2nd VP	Ben FitzGerald	703-280-4918
Treasurer	John Fry	540-364-3046
Secretary, C.	Elaine Smith	540-432-6833
Secretary, R.	June Griffin	804-296-3219

## Committee Chairs

Botany	Stanwyn Shetler	202-786-2996
Conservation	Nicky Staunton	703-368-9803
Education	Effie Fox	540-347-4090
Acting Fund Raising	Nicky Staunton	703-368-9803
Horticulture	Nancy Arrington	703-368-8431
Membership	Charles Smith	703-361-5125
Publication	Pam Weirigo	540-343-8596
Publicity/PR	Nancy Hugo	804-798-6364
Registry	Boleyn Dale	804-725-5451
D-A-L	Pat Baldwin	804-836-2064
D-A-L	Jessica Strother	703-323-5278
D-A-L	Allen Belden	804-786-7951
D-A-L	Cole Burrell	804-975-2859
D-A-L	Jim Bruce	804-749-4415
D-A-L	Faith Campbell	703-569-8745

## New board members

**Ben FitzGerald** (Potowmack) is a retired army officer. Wildflower and fungus photography are his special interests.

**Charles Smith** (Prince William) is an historian for the Fairfax County Park Authority. His native plant interest is conservation in fragile systems and restoration of impaired systems.

**Cole Burrell** (life member at large) is a garden designer, freelance garden writer and photographer and native plant zealot.

**Butch Kelly** (Blue Ridge) has taught science for 26 years and has spent 13 seasons as a natural history interpreter.

**John Fry** (Piedmont) worked for the Institute for Defense Analysis. His plant interest is conservation oriented.

**June Griffin** (Jefferson) is the editor of her chapter newsletter and has a lifelong interest in wildflowers and native plants.

**Pam Weirigo** (Blue Ridge) is chapter treasurer and editor of her chapter newsletter.

**Allen Belden** (Pocahontas) is field botanist for DCR-Division of Natural Heritage.

**Jessica Strother** (Potowmack) is an urban forester for Fairfax County.

# Campaign seeks to raise awareness of forgotten pollinators

The Forgotten Pollinators Campaign is a multi-organization, multi-media effort to call international attention to the importance of pollinators in putting food on our plates and in protecting healthy wild communities around the world.

While domestic bees are the most well-known pollinators, there are many other species of wild bees, butterflies, moths, bats and other animals that share this essential role. Habitat fragmentation, pesticide exposure, diseases, parasites, and the introduction of exotic species have caused many pollinator populations to decline or become extinct. Globally, over 180 species of vertebrate pollinators are threatened or extinct, and an unknown number of invertebrate pollinators are threatened or have been lost.

This trend has repercussions for both domestic crops and wild plants. An estimated three-quarters of the crop and vegetable plants that feed the world and many plant-derived medicines require pollination by in-

sects or animals to produce healthy, viable seeds and fully developed fruit. Wild plants studied in a recent survey were also in danger of reduced seed set due to a lack of pollinators. Only one in 15 plants on the federal endangered species list has had its pollinator identified, and even fewer have had the health of their pollinator population identified.

The campaign's goal is to identify common ground between plant and animal conservationists, beekeepers, growers of orchards and field crops, and researchers attempting to protect pollinators from mites, Africanized honey bees, habitat loss, and biodiversity loss. The protection and expansion of pollinator habitat, such as the use of native plants and sustainable practices, is also being encouraged.

*Article provided by the Forgotten Pollinators Campaign. For information: Forgotten Pollinators Campaign, c/o Arizona-Sonora Desert Museum, 2021 N Kinney Rd., Tucson, AZ 85743; <http://www.Desert.NET/Museum/fp/>*

## Deadly fungus threatens butternuts

The butternut tree (*Juglans cinerea*), native throughout Virginia and other states, is in danger of being wiped out from its entire natural range and booked into the lists of endangered species. An introduced fungus with the beautiful name *Siroccus clavignenti-juglandacearum* infects the bark through scars, wounds or dead twigs, then grows in cankers until it finally girdles and kills the tree.

People motivated to save this valuable member of the walnut family may help by searching in mixed hardwood forests for trees which show some resistance to the fungus, and which eventually might become parents of a future blight-immune generation.

In addition, interested individuals may plant butternut seed-

lings in appropriate locations, thus learning firsthand about the tree's biology. If blight occurs on these planted trees, it would create special experiences to convert "good ideas" into suitable methods and programs that help the trees to overcome this deadly disease.

*Volker Imschweiler, PWWS*

## Native Plant Trail at state arboretum to be dedicated

The State Arboretum of Virginia will dedicate its Native Plant Trail Sunday, November 22 as part of the Foundation of the State Arboretum's Annual Meeting which is at 2 p.m. At about 3 p.m. participants will move to the Native Plant Trail dedication ceremony. The trail will be dedicated to Nancy Larrick Crosby, the Winchester philanthropist who has served as the guiding inspiration for the trail's development. Mrs. Crosby provided substantial funding, consistent encouragement and "a bit of cajoling to keep the trail's progress on track." The trail will be named the Nancy Larrick Crosby Virginia Native Plant Trail.

*Information from Arbor Vitae, newsletter of the State Arboretum of Virginia at Blandy Experimental Farm.*



## Annual Workshop to focus on plant-insect partnerships

"Nature's Partnerships: The Plant-Insect Connections" is the title of the VNPS annual workshop to be held Saturday, March 13 at the University of Richmond.

The workshop will be a day filled with interesting connections between plants and insects. Included in the session subjects are galls, urban habitats for moths and butterflies, native bees, honey bees and bumblebees.

The workshop is limited to 100 participants, so sign up early to avoid disappointment. Registration fee for VNPS members is \$10. The fee for non-members is \$25 (this includes the \$15 VNPS membership fee). For more information, contact Effie Fox at 540-347-4090. A complete schedule, information and registration form will be in the January Bulletin.

## For Wildflower Gardeners

# *Native Virginian writes wildflower encyclopedia*

With the holiday gift-giving season approaching, C. Colston Burrell's *A Gardener's Encyclopedia of Wild Flowers* (Rodale Press, 1997) is a wonderful book to consider for a gardening friend or for your own winter reading. VNPS members may remember Cole as a society charter member and the first native plant curator at the U.S. National Arboretum. After several years in Minnesota where he had a landscape design and restoration business, he is back in Virginia and will establish a similar business in the Charlottesville area. His book is the result of over 20 years of studying, photographing, growing and designing with native plants in both states.

The introductory section discusses different types of wildflower gardens and the "how to's" of site preparation, planting, watering, mulching, weeding, cleanup and pest and disease control. A propagation section covers seeds, cuttings and divisions. Cole cleverly handles these necessary topics in a manner that is helpful for beginners but not boring for the more advanced gardeners.

The encyclopedia section of the

book consists of a page devoted to each of 126 plants. A wealth of information is condensed and organized in a pleasing, easy to understand format. Essentials such as botanical and common name, hardiness zone and native habitats and range can be quickly grasped in the shaded title box. More detailed information is included in paragraphs that describe the plant, and cover its garden uses, cultivation and propagation. For most plants the author also includes a second shaded box with related species, recommended cultivars or suggested garden companions. Excellent color photographs are included for all featured plants.

The book's final section, "Designing with Wildflowers," includes a plan, plant list and description of several wildflower gardens. A glossary, a list of recommended books, some mail order nurseries and a very complete index extend the book's usefulness.

I am usually skeptical of gardening books that cover the whole country because gardening, especially native plant gardening, is such a local endeavor. However,

maybe because Cole deals with only perennials and because he is, after all, a native Virginian, I find myself referring to this book over and over. It has joined my list of favorites that includes Hal Bruce's *How to Grow Wildflowers and Wild Shrubs, and Trees in your Own Garden*, Viki Ferreniea's *Wildflowers in your Garden*, Bebe Miles' *Wildflower Perennials for your Garden*, Harry Phillips' *Growing and Propagating Wild Flowers*, and Taylor and Hamblin's *Handbook of Wildflower Cultivation*.

When choosing books for your holiday giving or winter reading, remember these other books which have been recently reviewed in the *Bulletin*: *Earth Works* by Nancy Hugo (University Press of Virginia, 1997, reviewed January 1998), *The Fruits and Fruit Trees of Monticello* by Peter J. Hatch (University Press of Virginia, 1998, reviewed August 1998), and *The Native Plant Primer: Trees, Shrubs, and Wildflowers for Natural Gardens* by Carol Ottesen (Harmony Books, NY, 1995, reviewed May 1997).

Nancy Arrington, Horticulture Chair

## *Radel's winning tulip tree photo shows 'neat perspective'*

The perspective of David Radel's tulip tree photograph caught the eye of the judges enough in this year's VNPS photo contest to be the top winner. The close-up photo of *Liriodendron tulipifera* had "neat perspective, excellent details, comfortable composition" according to judge Dr. Bob Lyons. An engraved VNPS Jefferson Cup was awarded to Radel of Leesburg. His photograph was taken with a Nikon 6006 with Gitzo tripod, 105mm microlens on Kodak Gold 400 in natural light.

Four other individuals were also winners in the contest. In the twinleaf (*Jeffersonia diphylla*) category, Polly Rowley took first place in the specimen division, while Carolyn Bates was second. Carolyn Bates was also first in the twinleaf habitat division.

The favorite native plant photograph category was won by Radel. Kelly Wilson took second with a photograph of *Rhododendron arborescens*, while Elizabeth H. Aulakh was third with her Jack-in-the-pulpit picture.

Other entries in the contest were Melinda Abrazado with a bluebell photograph, Juanita A. Garside's pink lady-slipper; Nancy Sorrells' wild azalea, and Kelly Wilson's skunk cabbage.

Contest organizer Nicky Staunton noted that the efforts of the eight VNPS members who participated by entering eleven photographs were appreciated as was the work of Dr. Lyons as judge. Dr. Lyons helped with the contest during an extremely busy time in his life as he decided to leave Virginia Tech to be the new director of the J. C. Raulston Arboretum and professor at N. C. State University. "We are grateful to him and wish him continued success with his new venture," said Nicky.

# Hawaii's native plants find trouble in paradise



The Hawaiian natives seen in this box are all threatened species. They are, left to right: *ohi'a* (*Metrosideros polymorpha*), a member of the myrtle family and a rain forest remnant; *white hibiscus* (*Hibiscus waimeae* ssp. *hannerae*), thought to be extinct until rediscovered in 1976; and *alula* (*Brighamia insignis*), a member of the bellflower family which was saved by botanists who rappelled down cliffs to assist in pollination and also to collect seed. Drawings from the Limahuli Garden guidebook.

Although the Hawaiian Islands may not yet be a paradise lost, for the native plants and animals in this unique millions-of-years-old archipelago, the trouble in paradise is very real indeed. I recently had the opportunity to view and learn about the struggle against all odds to retain this unique ecosystem that developed on the most remote islands in the world. On Kaua'i (the oldest of the Hawaiian Islands at 6 million years old) and at Hawaii Volcanoes National Park on the youngest island, Hawaii (which is still being born) I was able to see and understand by walking through some unique preserves and sanctuaries and talking to some people who care a great deal about winning the fight in which they are engaged.

Because the Hawaiian Islands are 2,000 miles from the Marquesas Islands, 2,500 miles from North America, and 5,000 miles from the Philippines, very few plants or animals ever made it to the volcanic outcroppings that began poking above the Pacific waters 70 million years ago. Gradually a few insects, seeds and spiders arrived either on currents of air or water and a few more came courtesy of birds either

clinging to their feathers or within their digestive tracts. Organisms that didn't fly or float never made it to these remote islands. The only mammals were bats and seals; amphibians and reptiles never arrived at all.

Until the last two millennia the immigration rate was very slow, approximately one new species of plant or animal every 70,000 years. The best estimate is that 240 different insects, 23 land snails, 15 land birds, 135 ferns and allies, and 291 flowering plants established themselves.

Over time, these immigrants evolved into many more species unique to life on an island chain where there are no natural predators. Defense mechanisms needed in the old habitats were lost in Hawaii so that, for instance, rain forests that normally depend on a protective canopy well above the forest floor had vegetation which extended to the ground. Living there were flightless birds, nettleless nettles, mintless mints and stinkless stink bugs. The inhabitants of paradise depended upon each other for survival: the unique Nene, or Hawaiian goose, feeds on the berries of a slow-growing native bush, the flightless honeycreepers developed beaks that

could milk the nectar from particular native flowers. Eventually the tropical paradise contained native flora and fauna that was more than 90 percent endemic, meaning it was found nowhere else on earth.

The first change came about 200 A.D. with the arrival of Polynesians. These seafaring adventurers brought plants and animals they needed to survive, including pigs, dogs, chickens and 27 different species of plants. Included in their plant introduction were taro, (*Colocasia esculenta*), breadfruit (*Artocarpus altilis*), coconut trees, banana (*Musa acuminata*), and sugar cane (*Saccharum officinarum*). Some of these plants had been propagated by humans for so long that they no longer reproduced by seed and instead needed small cuttings to reproduce. The breadfruit and the ti plant (*Cordyline fruticosa*) are two such examples.

The Polynesians' impact on the Hawaiian islands during the last 1,800 years, however, was minuscule compared to the devastating introductions since 1778 when Captain Cook "discovered" the islands and brought them to the attention of the European and American worlds. Botanists estimate that 8,000 plant species have arrived on Hawaii's (See *Battle*, page 8)

# Positives of natural landscapes far outweigh negatives

On Friday, August 21, 1998, the Wall Street Journal printed an article on naturalistic landscaping that gave the impression that these landscapes, as an alternative to lawns, attract unwanted and troublesome wildlife. The article cites cases in which coyotes, mountain lions, and snakes have appeared in the yards of people who have naturalistic landscapes and generally has a negative tone about alternative landscaping techniques, giving the impression that everyone should really just strive for a clean cut lawn. The article does not

once mention the birds, butterflies, and other harmless wildlife that are mainly what are attracted to and inhabit naturalistic landscapes. The article gives the false impression that what is really the exception to the rule is in actuality the norm. The following article was written by Craig Tufts, Chief Naturalist at the National Wildlife Federation, as a rebuttal to the WSJ article.

Mutiny is taking place in backyards across America, and

more than one manicured lawn is being asked to walk the plank. Participants in this insurrection aren't some radical anti-turf revolutionaries. They're your average law-abiding homeowners who are realizing the benefits of natural landscapes and the joys that come with gardening for wildlife.

These backyard naturalists are rejecting the 50's approach of sterile and mono-cultural gardening because they understand their natural landscapes contribute positively to the overall quality of the environment by improving air, water, and soil quality throughout the community while providing much-needed wildlife habitat. Habitat restoration is critical for wildlife in urban and suburban settings where commercial and residential development has eliminated most natural areas.

The positive aspects of natural landscaping for both the individual property owner and the community far outweigh the occasional negative perceptions of those addicted to the traditional lawn. With the help of the National Wildlife Federation, habitat enthusiasts have learned how to make their landscapes more hospitable

to wildlife while building a haven for escaping the stresses of everyday life. Time spent surrounded by a more natural landscape gets people closer to nature and in touch with her real beauty. Children especially love secret spots in the garden where they can hide, think, get away from big people, and learn about the natural world in their own way, at their own pace.

These new gardens are nurtured by individuals who want to invite the natural world back into their lives; to

see butterflies dance from flower to flower, frogs splash across a water garden, turtles sunbathe on rocks and to hear the trill of songbirds fill the air. It's a way to connect with the natural world. And while occasionally an unwanted critter may venture in, the vast majority of wildlife species that are attracted to these refuges are welcomed.

By establishing a more natural landscape, environmentally conscious gardeners

are endorsing the use of plants native to the soils and climate of an area. These plants provide the best overall food sources for wildlife, while requiring less fertilizer, less water, and less effort in controlling pests. Over time this translates to less cost to maintain a garden. Americans spend \$27 billion a year on lawn care, 10 times more than we spend on school textbooks. The average lawn requires 9,000 gallons of water per week, and 5-10 pounds of fertilizer per year, more than the entire country of India uses for its food crops. With natural landscaping many of these costs are weeded out. Best of all, these landscapes demand less routine maintenance so people can spend more time enjoying and feeling connected to the wonders of nature.

Simply stated, natural landscaping is designed to work with, rather than against nature. Natural landscapes also provide people with a sense of place that distinguishes where they live from the rest of the world. Why for example, should a yard in Las Vegas look like one in New Orleans or Portland?

(See *Natural landscaping*, page 9)

## Abstract of the Wall Street Journal article

LANDSCAPING: THE NATURAL LOOK MAY BRING WILDLIFE --Homeowners striving to replace manicured lawns with "Earth-friendly" environs are discovering unexpected and occasionally unpleasant side effects, the *Wall Street Journal* reports today.

"Naturescaping," or creating "chemical-free lawns that mirror the natural milieu," has grown in popularity over the last decade. VP Al Gore joined the wave by pulling up non-native ivy and trees around the VP mansion and replacing them with indigenous plants.

But many enthusiasts are discovering that "the wild look is an open invitation" to troublesome wildlife. Colorado homeowner Sarah Squire reports that coyotes have investigated her children's sandbox, while foxes and bears have also made appearances in her yard. In St. Petersburg, FL, Debra Bittner blames her neighbor's "natural garden" for attracting the yellow-crowned night herons that throw up half-eaten seafood in her pool.

Despite the prospect of "unwanted fauna," the wild lawn look has "some very loyal converts." Joy Buslaff of Big Bend, WI: "If the only thing that moves in your backyard is a lawnmower, it's time to plant natives" (Rebecca Lowell, *Wall Street Journal* 8/21/98).

# VNPS Chapter News

## *Native plant lists available to chapters for distribution*

Late last year a supply of lists of native plants useful for Conservation, Restoration and Landscaping in three regions of Virginia-Coastal, Piedmont, and Mountain and Valley-were distributed to VNPS chapter presidents for the members of each chapter to receive upon request. A note accompanying the supply advised that when this initial supply was exhausted a resupply was available from Ted Scott.

Nearly a year has passed since that first distribution and no requests have been received for replenishment. Upon investigation it was discovered that some chapters are out and others have them but have never made them

available to their members. We think this latter condition has arisen because we asked that they be distributed "upon request" and very few members seem to be aware that they exist. Please make it known that these lists are available, upon request (because they are not cheap to reproduce, we would like them to go to those who will use them).

Please call members' attention to display samples at your chapter meetings and that they are available upon request. For a resupply, please contact Ted Scott at 100 Sunnyside Drive Unit 32, Harrisonburg, VA 22801 or 540-568-8679 or vnpscott@shentel.net

## VNPS members honored across the state

VNPS members have received a number of honors in the last few months. Former Prince William Wildflower Society Education Chair Nancy Herwig was honored by the Fairfax County Board of Supervisors for her 18 years of service as a naturalist, camp administrator and environmental education manager on the Reston Association staff. Because of her "infectious enthusiasm for life" she was dubbed "Nature Nancy" by her appreciative campers.

## Atlas of Virginia flora available

*The Atlas of the Virginia Flora III* by A.M. Harvill, Jr., Ted R. Bradley, Charles E. Stevens, Thomas F. Wieboldt, Donna M.E. Ware, Douglas W. Ogle, Gwynn W. Ramsey and Gary P. Fleming is available from: Virginia Botanical Associates, Inc., P.O. Box 853, Vinton, VA 24179. Copies are \$10, plus \$1.78 for shipping and handling, for a total of \$11.78. Make checks payable to Alton M. Harvill. Questions can be sent to Harvill's fax 804-395-2879.

Blue Ridge Wildflower Society member Betty Winfree was presented the Achievement Award by the Garden Club of America. Twenty years ago, she conceived the idea of a wildflower garden on Mill Mountain in Roanoke. As a result of her work, the Mill Mountain Wildflower Garden is now a regular feature of the annual Wildflower Pilgrimage and was the site of the Young Botanists Walk during 1998.

Potowmack Chapter member Marion Lobstein and her former students John DeMary and Suzanne Lohr received a prestigious Telly Award for their video "Spring Wildflowers of the Mid-Atlantic Region" which was described in the May 1998 *Bulletin*. The Telly is a national award established in the early 1980s for excellence in non-network video and film productions.

## Blue Ridge Wildflower Society visits registry site

Eight members of the Blue Ridge Wildflower Society visited their VNPS Rosebay Rhododendron Registry Site in Altavista (Campbell County). The visit began with a sign-in at Ross Laboratories, the owner of the site.

The June trip coincided with the peak blooming period of *Rhododendron maximum* which lined the creekbanks with pale pink and nearly white blossoms. A variety of ferns were found, including chain fern, *Lorinsenia areolata*. A featherbell, *Stenanthium gramineum*, with a flower stalk was also sighted.

## Bridgewater park gets help from Shenandoah members

Shenandoah Chapter members have been helping the town of Bridgewater, in Rockingham County, restore a small town park ravaged by the waters of the North River during Hurricane Fran in 1996. In addition to the restoration, the chapter used the opportunity for educating a number of local elementary students as well.

At the suggestion of chapter members, Bridgewater town officials agreed to set aside a portion of Wildwood Park as a native plant refuge. A number of chapter members have been involved in the grant-funded project including Mike Hill who was appointed by the town council as the principal consultant for the project.

Also held in conjunction with the project was an educational/work activity day for 600 elementary students in the park. Small groups of children arrived throughout an October day to receive a lesson in ecology. The riparian buffer system of plants and how such a system operates to protect the river and the flood plain were emphasized. Each child was also given the opportunity to set at least one plant into the ground in holes already dug by Bridgewater town employees.

The educational day was made possible by Shenandoah Chapter members Carol Gardner and Mike Hill as well as local teacher Donna Barber, Kary Phillips who worked to get a matching grant from the Alliance for the Chesapeake Bay Pure Water 2000 Forum, and the Bridgewater town council.

# Battle to save Hawaiian native plants is uphill

(Continued from page 5)

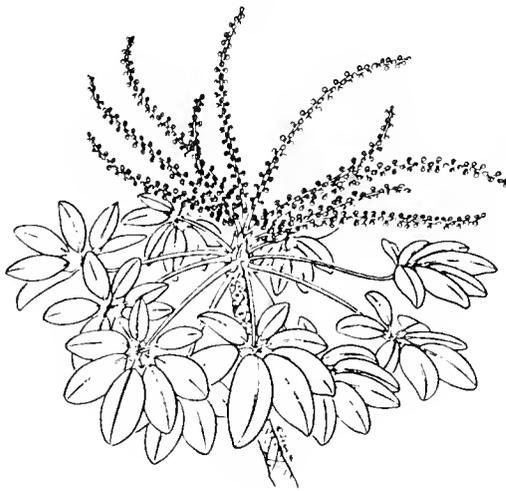
shores since 1778 with crippling effects on the native ecosystem. Most of the exotic plants and flowers associated with the islands today are modern introductions, the ginger plants coming from India, the heliconias and the plumerias used to make leis from Central and South America, the guava fruit from Brazil, and the mango from India.

Some of the aggressive, fast-growing tropical plants, recognizable to Virginians as our struggling house plants, have shoved aside many of the unique Hawaiian natives. Perhaps the best example is the octopus tree (*Schefflera actinophylla*) so nicknamed in Hawaii for its tendency to send out tentacles of flowers and fruit that overrun everything in its path.

Many of the aggressive aliens are landscaping escapes, but others were deliberately planted as fast-growth plants in the early 20th century in order to reforest overgrazed areas. Either way, the results have been catastrophic.

A walk through the Limahuli Garden, a National Tropical Botanical Garden in Hanalei, Kaua'i tells the story. The National Tropical Botanical Garden, of which Limahuli is a part, is a privately supported research garden chartered by the U.S. Congress in 1964. The mission is "to be an internationally recognized leader and resource for the propagation, conservation and study of tropical plants, and to share what is discovered so that public attitudes and behavior can be enlisted to help protect and enrich the environment." There are five gardens and three preserves on three of the Hawaiian islands and in Florida.

I know Hanalei (Yes, as in "Puff the Magic Dragon") is not exactly around the corner for most VNPSers, but if you are ever in the neighborhood, this garden is a must-see. In 1997 the American Horticulture Society named it the best natural botanical garden in the United States. The self-guided botanical walking



The invasive exotic octopus tree  
(*Schefflera actinophylla*)

tour points out natives, Polynesian introductions, modern introductions, weaves the story of Hawaiian folklore and gets the point across about the struggle of native ecosystems. This is all done in the setting of a rainforest with craggy volcanic cliffs to your back and a blue lagoon far below.

The setting would be idyllic if not for the sad story that unfolds. As we walked the trail we noticed a number of small scraggly plants surrounded by protective circles of lava rock. Invariably these were the native plants struggling to survive in their native habitat. Nearly all of the native plants in the 17-acre garden are extremely rare. Approximately 100 unique Hawaiian plants are already extinct and another 100 are represented by less than 200 plants remaining in the wild.

The garden's secrets are not all sad. One success story is the thriving population of *Brighamia insignis*, of the bellflower family, found along the top slopes of the garden. For 20 years, staff members from here rappelled down Hawaiian cliffs to keep tabs on the surviving populations of these endangered plants. When needed, the staff helped pollinate the plants and collected seeds for propagation at the garden. Today there are more of these plants at the preserve than live in the wild, enough that some reintroduction to wild habitats is taking place.

Not all of the threats to Hawaii's native plants are from invasive exotic plants. A beautiful *Hibiscus waimeae* was in full bloom along the

garden trail, but a close examination showed that the leaves were ragged, obviously a meal for some fauna. Indeed this plant which was thought to be extinct until 1976 is under attack from an introduced insect from which the hibiscus has no natural defense.

The war against invasive exotics is also being fought on the Big Island of Hawaii where some of the world's most active volcanoes change the ecosystem on a daily basis. While the focus at Limahuli Garden is on research and growing plants for reintroduction, the work at Hawaii Volcanoes National Park is concentrated on fending off the invaders. Here rangers focus "on the most biologically diverse habitats and those that offer the best chance for successful restoration." Their strategy is through control, by erecting fences to keep out feral animals, tracking and killing feral pigs and ripping out invasive plants like firetree, banana poka, guava and ginger.

The work is perhaps turning the tide. We walked among several nene geese and stood in a true Hawaiian rain forest. It is the hope of park rangers that soon the numbers of endemic animals like Hawaiian honeycreepers, Kamehameha butterflies and happyface spiders will again flourish among Koa trees (*Acacia koaia*), native fern understories and ohia'a (*Metrosideros polymorpha*) forests. The ohia'a tree is particularly important on the Big Island because it is an early colonizer on lava flows and the native birds feed on the nectar of its flowers.

The fight to retain the unique ecosystems on Hawaii's oldest and youngest islands as well as on all the other islands is a long way from over. There have been some small victories but any celebration is still far in the future. Until then, this volcanic archipelago remains a troubled paradise.

Nancy Sorrells, Bulletin Editor

To learn more about the propagation, conservation and study of tropical plants as well as the study of Hawaii's native plants, write: National Tropical Botanical Garden, P.O. Box 340, Lawa'i, Kaua'i, Hawaii'i 96765. For more on the fragile ecosystems at Hawaii Volcanoes National Park, write: Supt., P.O. Box 52, Hawaii National Park, HI 96718-0052 or visit [www.nps.gov/havo](http://www.nps.gov/havo).

## Natural landscaping on the rise

(Continued from page 6)

Since 1973, N.W.F. has certified 22,000 Backyard Wildlife Habitats. The number of yards certified annually has doubled in the last 10 years demonstrating the popularity of this trend. Each one of these habitats is making a difference. Ken Druse, author of *The Natural Habitat Garden*, says that "if even a fraction of America's 38 million gardeners turned a quarter of their landscape into a wild garden (only one tenth of an acre each) there would be a measurable impact...a tremendously positive gain for America's, and the world's, ecology."

N.W.F. has received countless testimonials from program participants who find their efforts to create a habitat not only rewarding, but fun for the whole family and an inspiration to their neighbors. In fact, there are several communities where many residents have gone native and had their backyards certified.

It's not just homeowners who are jumping on this band wagon. Several large corporations are also recognizing the benefits of natural landscaping, especially toward the bottom line. CIGNA is implementing several naturalistic cost-saving landscaping practices at its nearly 600 sites across the country. At CIGNA headquarters in Connecticut, the number of grounds maintenance crews has been cut in half and their annual landscaping budget has been reduced by \$400,000. Conservation Design Forum, a Chicago based firm, estimates that a mature native landscape can result in an annual maintenance cost saving of \$4,000 per acre compared with a traditional turf landscape. That's good business in addition to the community goodwill companies can gain from demonstrating a commitment to environmental stewardship.

Laws that prosecute natural gardeners, commonly called weed laws, are gradually being overturned as the benefits of these green oases are being acknowledged. Even the federal government has taken a supporting stand. In 1994 President Clinton recognized the natural landscaping movement by issuing an Executive Memorandum that not only recommended natural landscaping at all federal facilities and federally funded projects, but presented guidelines for doing so. The use of native plants around the vice-presidential mansion is (See *Native lawns*, page 10)

## Head to Canada's Bruce with VNPS

The VNPS trip for members to Canada's Bruce Peninsula is scheduled for June 12-19, 1999 at Wildwood Lodge. There will be a limit of 18 participants with two co-leaders. The cost per member has been \$450. No increase is anticipated at this time, but the final figure will be announced in the next issue of the VNPS *Bulletin*. The cost includes housing and food while at Wildwood Lodge. The travel costs of gasoline and motel and meals to and from Canada are the responsibility of the participants. Car pooling will be arranged for each day's expeditions to see the beautiful Canadian wildflowers and their ecosystems. There are opportunities for some early morning birding. The boat ride to and from Flowerpot Island is always a highlight of the trip.

If you would like to sign up to go to the Bruce in 1999 or have questions, please contact Nicky Staunton 703-368-9803 or e-mail: (staunton@erols.com). A description of the 1998 trip can be found in the August 1998 *Bulletin* (Vol. 17, No. 4). The article was written by 1998 co-leader Cris Fleming whose expert field botany skills immeasurably enriched the trip.

See the address label for your membership's expiration date.

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Individual \$15       Family \$25       Student \$10

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To give a gift membership or join additional chapters: Enclose dues, name, address, and chapter. (Non-voting memberships in any other than your primary chapter are \$5).

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The deadline for the next issue is Dec. 1

# • Native lawns popular across the nation

from page 9)

one example of how the government is implementing this new mandate.

Lorrie Otto, a Milwaukee natural landscaping activist who has been referred to as the "high priestess" of the natural landscape movement, makes the argument for natural landscapes best when she says "if suburbia were landscaped with meadows, prairies, thickets, or forests, or combinations of these, then the water would sparkle, fish would be good to eat again, birds would sing and human spirits would soar."

The National Wildlife Federation is committed to the conservation of wildlife, wild places and a healthy environment for people and wildlife alike. Educating people about how they can make a personal contribution to conservation efforts and instilling a passion in them to make a difference is key to the long-term health of our environment. Creating natural landscapes in their own backyards is often the first step people take toward a life long commitment to global environmental stewardship.

## Upcoming environmental conferences

Two upcoming conferences might be of interest to VNPS members. The first, "Resolving Environmental Conflicts by Building Community Consensus," will be held January 6-7 (Wednesday and Thursday) and Monday, March 8 in Charlottesville. The \$60 cost includes materials, meals and one night's lodging. Call Mike Ellerbrock at 540-231-7722.

The second event, "Connecting Our Common Wealth," is the State Greenways and Trails Conference, on May 2-4 in Roanoke. It is sponsored by the Virginia Urban Forest Council, 540-231-2411.



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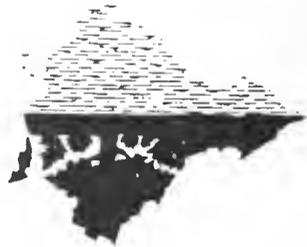
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