

WILD NEWS

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

Number 2002-01

January-February 2002

JANUARY 21 MEETING

Fight the winter blahs by coming to the annual member slide show meeting to see enchanting photos of plants and places in warmer times. Members are invited to bring slides of their nature-related travels to share with fellow members. Marion Lobstein will also have a LCD project and laptop computer available if anyone else wants to share digital photos. Nicky Staunton plans to present slides from her trips this past year, including the Bruce Peninsula in Canada. Joann Krumviede will share some slides of Idaho, and Marion has slides from Florida. There's still room on the program for you, too. Call Program Chair Charles Smith at 703-361-5125 if you can present photos so he may coordinate the entire evening's program.

Following the program there will be a short business meeting to discuss upcoming events and issues. It will be concluded with a drawing for door prizes.

The meeting, which is open to the general public, will be held on the usual third Monday of the month, January 21, at 7:30 p.m. at Bethel Lutheran Church, corner of Sudley Road/Rt. 234 and Plantation Lane in Manassas. For further information about the meeting, call Nancy Vehrs at 703-368-2898.

March 18 Meeting

Mark your calendar now for the next meeting at 7:30 p.m. on March 18 at Bethel Lutheran Church. The program topic has not yet been finalized.

GARDEN ECOLOGY: WHAT IS INTERESTING ABOUT INVASIVES?

If you have followed the ongoing debate about invasive plants, then you are probably aware that "invasives" present a unique threat to the environment. Invasive plants are plants that are so prolific and successful that they outcompete native vegetation, and in some cases alter the local environment so that native vegetation cannot survive. There are many facets to the problem of invasives, and the debate has moved far beyond a discussion of the biology of these organisms to arguments about the sale of imported plants, the consequences of new plant introductions, and the economic impact of exotic weeds. As you might predict, there are many different points of view. I am going to do my best in this article to avoid the controversial issues and talk about the fascinating biology and ecology of invasive plants.

Invasive plants are common in our area. Russian olive, mimosa, and tree of heaven are all easy to find in here. Asked to tell where you'd seen these plants, you would probably respond, "along some roadside." This has been my observation too. Invasive plants commonly colonize roadsides and other disturbed areas. To be sure, there are invasives that will thrive in undisturbed pristine areas, but disturbance seems to offer an irresistible opportunity to invasive plants. Why are invasives so successful and what explains their attraction for disturbed areas?

Many invasive plants have characteristics in common with weeds. They mature quickly. They grow under a wide range of environmental (continued on page 4)



From the President -Nancy Vehrs

Visit the Botanic Garden! It's a wonderful tropical oasis next to the Capitol on the Mall in D.C. After a four-year renovation, it reopened last month and it is fabulous! It was still decorated for the holidays when I visited; two main galleries featured beautifully decorated Christmas trees, one had many trains encircling it. That display was arranged by a club that combines model trains with gardening.

The main room is called the jungle and it houses all kinds of tropical splendor. It even has a catwalk from which visitors can view the landscape from above. Other rooms are also thematically arranged such as world deserts, medicinal plants, and my favorite, the orchid room, with its drop dead gorgeous flowers and heady fragrances. Rare and endangered plants also have their own room.

My big complaint was that there was nowhere to safely check one's heavy winter coat and sweaters - only unsecured coat racks were available and my friends and I certainly didn't want to take a chance on losing our coats on a bitter cold day. How I longed to walk the lush gardens unencumbered in the dead of winter.

I look forward to returning to the garden soon when the courtyard gardens are completed and a new season of blooms is upon us. There is no admission charge and the garden is now open 10 a.m. to 5 p.m., 365 days a year.

All those seed and garden catalogs arriving in the mail now also make me long for spring. I always enjoy the photography and vivid descriptions in the White Flower Farm catalog, but its stock is quite pricey. This year it's offering three species of lady's slippers that were nursery propagated - at a price of \$145 for a bareroot plant! Wow! I know they're difficult to propagate, but I think I'll just be satisfied to view them in the wild at that price!

- Nancy

Where's www.nps.gov?

Has anyone noticed that the website for the National Park Service has been down since early in December? At first there was only a message noting that the site had been taken down for reasons beyond the Park Service's control, but now at least some basic phone numbers for popular parks are listed. A judge ordered all Interior Dept. websites (including the Bureau of Land Mgt.) to be taken down because of their vulnerability to hacking - and not because of anything related to the September 11 terrorist attacks. This case deals with the apparent mismanagement of funds held in trust for American Indian tribes by the Department. All Interior Department computers that house or connect to that trust data had to be shut down and a contractor is reviewing the security of each one.

In the meantime, concerned individuals and groups that hoped to peruse environmental documents online must turn back the clock at least 5-10 years and request those voluminous records in paper form.

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

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

November Meeting Minutes

The meeting was called to order by Vice-President Leo Stoltz at 7:40 p.m. The members gathered at Bethel Church. Charles Smith introduced Chris Strand from Green Spring Gardens Park. Green Spring holds the national collection of witch hazel because of Chris Strand's efforts. He shared numerous colorful slides of native and non-native witch hazels.

Here are some of the highlights from the presentation. Witch hazel is found from Maine to Florida and from Texas to Arkansas in North America. There are from four to six species and one hybrid commercially available. Pollinators include honeybees, flies, and wasps. Surprisingly, not all witch hazel blooms are yellow and one rare native has beautiful red flowers. Chris included the history of Hamamelis (witch hazel) as well as growing tips. It is known as a woodland shrub or small tree that grows in acid to neutral soil. It prefers moist, but well drained soil in full sun or part shade. Flowering depends on the age of the plant, the soil conditions, and the amount of sunlight. Most propagation is done by grafting. Cuttings don't seem to overwinter well. Seeds of natives are doubly dormant. Some companion plants suggestions: crocus, hellebores, red twig dogwood, salvias, pansies, acuba, or yellow twig dogwood. Witch hazel is still used in pharmacies and was a medicinal plant of Native Americans. The bark is the most valuable part of the plant. Branches and twigs are bundled together and sold in large quantities. Later they are boiled to create an extract that is added to alcohol.

We had a brief intermission and enjoyed cookies and drinks provided by Joann Krumviede. Our business meeting followed, led by Nancy Vehrs. Jeanne Endrikat made the motion to approve the minutes of the September meeting as printed in the *Wild News*. Carol Thompson seconded it and the motion carried unanimously.

Marie Davis gave the treasurer's report, which consisted of the current balance held by PWWS. Marie gave the total as \$2,792.32 in the checking

account. This total reflects the recent gift of another \$1,000 to the *Flora of Virginia* Project.

Nancy Vehrs encouraged members to sign up for the wildflower license plate. Currently there are not enough orders to offer the plate. A total of 350 orders are needed. Contact the DMV by website or phone if interested.

Nancy attended a Fairfax County public hearing. Delegates are being sought who would sponsor legislation to control mass removal of trees and to encourage replacement by native species.

A growing concern is the threat of Sudden Oak Death Syndrome that is present on the California coast. The destruction of oaks would be a major loss to wildlife on the East Coast.

Marion Lobstein gave her botany report next. She expressed her appreciation for the recent gift to the *Flora of Virginia* Project. Marion suggested that if members would like to see witch hazel they may want to explore the Manassas Campus nature trail. It is in bloom at this time. She will be teaching general botany (both lecture and lab) in the spring semester of 2002. The classes are held at NOVA on the Manassas Campus. The botany lecture will be 4:30 p.m. to 7:15 p.m. on Tuesdays, with the lab on Thursdays (same time). It starts in the middle of January 2002.

Nicky Staunton mentioned that Mason Neck will need volunteers to help develop the Meadowood Farm site. Land there that belonged to Mr. Lynch will be the home of wild horses and wild burros. Meadowood Farm will be controlled by the Bureau of Land Management.

Nicky presented a gift to Charles Smith for his work on fund raising and membership for the Virginia Native Plant Society. His long time contributions to the Society will be missed.

Charles reminded people that our plant sale 2002 would hopefully feature more trees and shrubs. Please pot them up this fall so that they will be ready for spring purchase.

Gina Yurkonis emphasized the need for pond plants at the sale. Southern States may have good (Continued on next page) Wild News Jan-Feb 2002

(Minutes - continued from previous page) prices on them at this time. If members pick up bargains, please share pieces with the PWWS for the plant sale. Good choices include: arrowhead, dwarf cattails, and water irises.

Those members who would like to share nature slides for the January meeting are to contact Charles Smith. We need display gardens for our Spring and Summer Garden Tours. Contact Nancy Vehrs if interested.

Joann Krumviede asked members to save shallow plastic containers which can be used to pot *Iris cristata* and *Phlox stolonifera* for the plant sale.

The meeting was adjourned at 9:30 p.m.

- June Najjum, Secretary

Attendance: Donna Byler, Tiana Camfiord, Marie Davis, Barbara Deegan, Jeanne Endrikat, Diane Flaherty, Pat Hagarty, Amy Hamilton, William Hendrickson, Judy Jellen, Tracy Johnson, Joann Krumvide, Marion Lobstein, June Najjum, Wendy Pierce, Raylene Russell, Charles and Effie Smith, Nicky Staunton, Leo Stoltz, Carol Thompson, Robyn Thoreson, Nancy Vehrs, Helen Walter, Karen Waltman, Audrey Wilson, Helen Winn, and Gina Yurkonis.

3rd Annual National Invasive Weeds Awareness Week

The Invasive Weeds Awareness Coalition has designated February 25-March 1, 2002, as National Invasive Weeds Awareness Week. The coalition seeks to raise the awareness of the public and members of Congress to noxious and invasive weeds and the problems they are creating on public lands. Many events and activities are scheduled that week in D.C. Visit the website www.nawma.org/niwaw.htm for more information on specific events.

(Invasives - continued from page one) conditions. They produce abundant seeds which can remain viable for extended periods of time. Unlike indigenous weeds, invasive plants are imported or exotic and have, therefore, evolved outside the influence of local competitors and predators. Plant species evolve within plant communities and develop strategies to compete with one another. Insects and animals learn to prey upon the plants in their local environment. There are often few of these natural checks on the reproduction and survival of exotic invasives; this is one reason they are so successful.

Disturbed areas are a great place to look for invasive plants. We are surrounded by road cuts. new subdivisions, and recently graded landscapes. Forget for a moment the unnatural origin of these disturbed areas and reflect on the fact that disturbance happens in nature too. Forest fires, wind thrown trees, and avalances are all natural and not uncommon. Many plants have evolved strategies to take advantage of these occurrences. Most of these plants would be recognized as weeds by gardeners, but in nature they perform an important job admirably. Native weeds colonize open ground and yield over time to other species until a disturbance if erased by the reestablishment of a mature plant community. This process is called succession. Think of areas of disturbance as islands within a larger egosystem. Weeds grow and reproduce on their islands of disturbed habitat and scatter thousands upon thousands of their seeds throughout the rest of the local environment. These scattered seeds wait for the next island to emerge, whereupon they will grow and reproduce - keeping the cycle going.

In many ecosystems there is a constant cycle of disturbance and succession taking place. Islands of disturbance appear and disappear as time passes and weeds continue to reproduce and scatter seeds. One of the classic theories in plant ecology was developed to describe the fate of organisms on islands and I think we can apply it to islands of disturbance. This theory, the

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Equilibrium Theory of Island Biogeography, can offer insight - even in an oversimplified form - into the success of invasives in our urban areas. The theory states that the number of organisms on an island is in a state of equilibrium between opposing rates of colonization and extinction. This statement is perhaps a little over-technical for our purposes. Stated in another way, the number of weeds on one of our islands of disturbed habitat is determined by the number of seeds that successfully germinate and grow and the number that die. Pretty obvious, right? Count the number of seeds that germinate, subtract the number that die, and you are left with the number of plants in the current population.

What makes the theory interesting is that the equilibrium I just described can be affected by a few simple variables. Increase the rate of colonization (i.e. the number of seeds that make it onto the island) and the population of weeds will increase the size of an island (i.e. the area of disturbance) and the population will increase because there is less competition between seedlings for light and water and more space to colonize.

What we see in urban habitats is that we have managed (or should it be mismanaged) all of the variables in favor of weeds. We have created large areas of disturbance that are very close to one another. From a weed's perspective, it couldn't get any better. These urban archipelagos foster high rates of colonization. In adition we have introduced weeds that have no natural predators with which our native plant communities are unprepared to compete. Unfortunately, the seeds from these urban islands of disturbance are making their way into natural ecosystems. On a recent trip to New York, I spoke with a researcher who has observed the forests of a local preserve for several decades. Disturbed areas in the preserve used to be colonized by native plants such as witch hazel and dogwood. Now they are quickly colonized by exotic invasives such as tree of heaven. It is likely that this process will continue as the seeds

of tree of heaven spread throughout the forest, waiting for their opportunity to grow and reproduce.

This sobering thought brings us back to the equilibrium theory. Just as the theory gives us some insight into the success of these plants, it can also suggest some solutions. I'm not trying to assign homework, but consider for a moment what has been done to facilitate the spread of invasives and then consider how this simple theory might provide us with ideas for slowing this process. As gardeners, we are all urban ecologiest who can apply these ideas to restore the local environment in our own backyards and neighborhoods.

-Chris Strand, Director Green Spring Gardens Park

(Ed. Note: The preceding article was reprinted by permission from the Winter 2001-2002 edition of Gardenline, the newsletter of Green Spring Gardens Park under the auspices of the Fairfax County Park Authority.)

Share Your Garden

Volunteer your garden or nominate the garden of a fellow PWWS member for the annual spring and summer garden tours, respectively. Our chapter is full of great native plant gardeners and we'd love for you to share your garden with the public to encourage native plant gardening. Don't be shy - contact Marie Davis (703-361-1626) or Nancy Vehrs (703-368-2898) today!

Next Board Meeting

The next PWWS Board meeting will be held February 18, 2002, at 7:30 p.m. at Bethel Lutheran Church. All members are welcome to attend. For further information, call Nancy Vehrs at 703-368-2898.

Tool Time for Streams

Join local environmental groups at the Northern Virginia Stream Confluence Conference on Saturday, January 26, 2002, 8:30 a.m. - 4 p.m. at the Algonkian Regional Park and Meeting Center in Sterling. This is a one-day workshop for citizens, environmentalists, and stream activists to learn new skills and to protect their streams.

Space is limited and will be reserved on a first come, first served basis. A registration fee of \$15.00 per person is requested to help defray the cost of renting the facility and providing lunch. To register, please send your name, address, email address, phone number, affiliation, and check made payable to Audubon Naturalist Society to Stella Koch, Audubon Naturalist Society, Rust Sanctuary, 802 Children's Center Rd. SW, Leesburg, VA 20175-2545. Direct questions to Stella at 703-669-3922, SKoch@AudubonNaturalist.org or Kim Hosen at 703-367-0069, khosen@pecva.org.

Nature Exalted - The Art of Gardening

The Shenandoah-Potomac District Garden Clubs will present Nature Exalted - The Art of Gardening, a daylong horticulture forum with C. Colston Burrell and Carole Ottesen on Saturday, March 16, 2002. The forum, which will be held at the National Conservation Training Center in Shepherdstown, West Virginia, will explore the concepts of landscape design to create beauty and refuge for people and wildlife in small suburban and rural yards. The forum benefits the Martha Smith Scholarship for Plant and Environmental Study.

Fine Gardening calls Burrell and Ottesen two of America's Best Gardeners. They are experts in the field of landscape design using native plants to create year round interest in open and woodland gardens. Burrell is the owner of Native

Landscape Design and Restoration in Free Union, Virginia and specializes in blending nature and culture through artistic design. A former curator of the US National Arboretum, Burrell has devoted a lifetime to studying native plants in the wild and in gardens. Ottesen of Potomac, Maryland is a garden writer; photographer, and designer whose works have appeared in countless magazines include Horticulture and Garden Design. Her books including *The Native Plant Primer* have chronicled the cutting edge of garden design in the United States. Her two-acre organic and native garden has been included in the Garden Conservancy Open Days Guide in 1999 and 2001.

Early registration is \$40 and includes lunch. Send checks (payable to Eastern Panhandle Horticulture Forum) to Eastern Panhandle Horticulture Forum, PO Box 1065 Charles Town, WV 25414. For more information call 304-725-2040 or 304-728-1355, or email JDAlfriend@aol.com or gcorliss@intrepid.net.

Order Wildflower License Plates Now

The Virginia Department of Motor Vehicles has only half of the necessary 350 prepaid orders to offer the Operation Wildflower license plate. Please complete and submit the form included in this issue to reserve one of the first of these lovely plates featuring native Virginia Bluebells (the PWWS logo flower), coreopsis, and butterfly weed. A \$25 check must accompany the form. For further information visit the DMV website (www.dmvnow.com) and click on "new plates in development" or call 804-371-6825.



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PARTRIDGEBERRY

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

Mitchella repens, commonly called partridgeberry or squawberry, is a perennial member of the Rubiaceae or madder family. This showy plant with evergreen leaves and bright red berries that may remain through the winter adds color to a winter walk. It is found in virtually every county in Virginia in dry to moist woods where it may become a groundcover. Its natural range is from eastern Canada south into Florida and Texas and as far west a Minnesota. The only other species of this genus is found in Japan.

The genus name Mitchella was assigned by Linneaus to honor John Mitchell, an early Virginia botanist who developed a treatment for yellow fever victims. The species name repens refers to the creeping nature of the growth form. Other common names, squawberry, twin berry, two-eyed berry, refer to the Native American uses of this species and the characteristics of the berry.

Partridgeberry's attractive, creamy white to delicate pink flowers are borne in pairs and bloom from May into early July. They have a fourparted calyx, a four-parted funnel-shaped corolla, four stamens, and a pistil with an inferior ovary and a four-parted stigma. The ovaries of each pair of flowers are fused. There are two types of flowers - in one form the stamens are longer than the stigma and in the other, the stamens are shorter. These differences ensure crosspollination. The half-inch long flowers that have a sweet lilac-like fragrance are pollinated by larger bees with long tongues and by butterflies. The single oval-shaped fruit that develops from the fertilized ovaries of each pair of flowers is a bright red berry about one-third inch long and containing eight small seeds. The remains of the two pistils on the upper surface of the berry resemble two small eyes. The fruit is eaten by

quails, partridges, and other birds and mammals and the seeds are then dispersed in their feces.

Partridgeberry is a creeping or trailing evergreen plant with individual leaf and flower or fruit bearing stems rising only several inches off the ground. Opposite oval dark-green leaves are shiny and smooth with a width of up to three-quarters of an inch. The shallow fibrous root system that forms at nodes on the stem enables the plant to spread asexually. An individual plant may be up to a foot or more long.

The berries can be eaten by humans but are rather tasteless and a bit seedy; more likely they will be eaten by wildlife. Medicinal uses by Native Americans are numerous. Tea made from the leaves and stems or extracts of the berries were used to treat female disorders, to ease the end of pregnancy and birth, to treat dysentery, to reduce fevers, to deal with insomnia, to treat hives, and to treat disorders of the urinary, nervous, and digestive systems including hemorrhoids and diarrhea. Extracts purportedly have diuretic, astringent, uterine relaxing, and other general tonic properties. A paste of the berries was used by Native American women to ease sore nipples during nursing. In herbal medicine and even until recently, partridgeberry has been used in pharmacognosy (the use of plants in pharmacy).

When you are enjoying winter walk in the woods, look for the cheerful red berries of this handsome plant. In late spring and summer come back to see the delicate flower pairs that will form a single berry. Partridgeberry is indeed a plant to enjoy in all seasons.



Hospitality Chair Sought

Do you enjoy coming to PWWS meetings and chatting with members and guests? Yes? Maybe you would enjoy serving as the Chapter's Hospitality Chair. The "duties" of this position include welcoming members and guests as they arrive at the meeting and providing nametags to everyone. Please see Nancy Vehrs at the next meeting if you would like to volunteer for this position.

Reserve Your Spot on the VNPS trip to the Bruce Peninsula in Canada

Once again VNPS President Nicky Staunton will be leading a group on a trip to see the spectacular flora of the Bruce Peninsula in Ontario, Canada June 15-22. "The Bruce" boasts 43 species of orchids amidst other rare treats. The trip requires a minimum of 14 participants

and there are still a few slots to fill. The cost is a bargain at \$550/person which includes a full week of lodging and meals. Deposits of \$100 are due immediately. Call Nicky at 703-368-9803 or email her at nstaunton@earthlink.net for details.

Nicky will show a few of her slides from the 2001 trip at the member slide show, but she will be presenting a complete slide program to the Lake Jackson Garden Club at 7:30 p.m. on Wednesday, January 16 at the Lake Jackson Firehouse on Coles Road near the Lake Jackson dam bridge off Route 234.

PWWS members and friends are welcome to attend. For further information, contact Diane Flaherty at 703-330-9862.

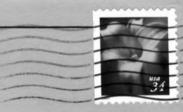
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PRINCE WILLIAM WILDFLOWER SOCIETY

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







Nancy Arrington 8388 Briarmont Lane Manassas, VA 20112 exp. 10/02

Next Meeting: 7:30 p.m., Monday, Jan. 21, Bethel Lutheran Church, Manassas Annual Member Slide Show

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