Perhaps you’ve heard, but the state annual meeting our chapter hosted in the Shenandoah National Park was a resounding success. I am very proud of our Piedmont Chapter and all its hard work. It was a memorable weekend for our guests from all over the state. We were helped enormously by beautiful weather. The meeting room at Skyland, in the central section of the Park, proved to be a curiously intimate gathering place, for all its rusticity. We were surprised with good food and beautiful table settings by the caterer, Aramark, and our speakers and trip leaders were superb. Our keynote speaker Saturday evening was Gary Fleming, vegetation ecologist with the Virginia Division of Natural Heritage. To hear him share his deep and detailed knowledge of the natural world is worth a drive across several states.

The Park never looked prettier to me than it did this past summer and fall, when I previewed some of the hikes scheduled for the meeting weekend. This brought home to me what a treasure we in the Piedmont Chapter have at our own back door. We should never take for granted the places which are preserved for us and which are there for us to savor and enjoy.

In October we met at Clifton Farm outside of Warrenton for our annual chapter meeting and election of officers. While enjoying a delicious potluck luncheon under what is surely the largest maple tree in the Piedmont, we conducted a brief business meeting and held elections. Carrie Blair returns to the Board, and we welcomed Brenda Crawford as a new Director at Large.

Tom Wood, Director of Environmental Studies on the Piedmont, welcomed us and briefed us on the work of restoration and conservation going on at Clifton Farm. Then he led us on a walk through some of the 900+ acres to gain a sense of what he is trying to accomplish. It seems much easier to conserve than to restore. It is almost insurmountable to try to restore a wetland, a meadow, a wood to the diversity it had before impact from non-natural conditions. Still we applaud what his group and others like it are trying to do, and we do not stop trying!

You may have heard me mention the Virginia Master Naturalists. Eight members of the Piedmont Chapter Board are now VMN, belonging to two VMN chapters—the Old Rag chapter, based in Madison, and the Shenandoah chapter, based for now at Blandy Farm. The development of this program by the state and by other states, though not all, has been, certainly in Virginia, highly successful. There is a rigorous course of study—it is all volunteer—taught for the most part by experts in the field who are also volunteering, and its content covers a wide range of subject areas—geology & land types, weather & climate, soils, forestry, native plants, birds, mammals, amphibians & reptiles, fish and waterways, and the ability to interpret the natural world to the public. The goal is to train a cadre of volunteers who can supplement the work of the State in interpreting to the public what is going on in our public lands and preserved spaces. There is no limit to what we might be asked to do, but one is not required to do anything. Encouraged? Yes, at Sky Meadows State Park alone, we have Virginia Master Naturalists surveying the amphibians & reptiles, surveying the forests for tree species, monitoring the red-headed woodpecker, and refurbishing the bluebird trail. In a week or so I am going to be spending my Saturday building bluebird houses. Much better than mall shopping! A new Master Naturalist class is being planned for this spring at Blandy Farm. If you are interested, contact any Piedmont Chapter board member, or call Blandy after the first of the year.

We look forward to getting to know more of you and, as always, invite your participation in our walks and events.
The Virginia Native Plant Society (VNPS), founded as the Virginia Wildflower Society in 1982, is a non-profit organization of people who share an interest in Virginia's wild plants and habitats and a concern for their protection.

The Piedmont Chapter is a geographically defined sub-group of VNPS in the northern point of Virginia east of the Blue Ridge Mountains. It includes Loudoun, Fauquier, Culpeper, Rappahannock, Warren, Clarke, and Frederick counties.

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The Leaflet can be seen in color online at http://www.vnps.org/piedmont

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The Leaflet Editor
Richard Stromberg

Losing Paradise—Marjorie Prochaska

Losing Paradise: Endangered Plants here and Around the World is an exhibit of original watercolors and drawings of globally endangered plants at the Smithsonian’s Natural History Museum. Experts have estimated that more than 20% of the world’s flora is threatened with extinction, and that more than 50,000 plant species have never been described. But before a plant or animal can be listed as threatened or endangered by the International Union for the Conservation of Nature (IUCN), the US Endangered Species Act, or the Convention on International Trade in Endangered Species (CITES), scientists must have done a conservation assessment. The Botany Department in the Natural History Museum alone stores more than five million herbarium specimens. The challenge for Smithsonian scientists was how to quickly and accurately evaluate which plant species are most in danger. Gary Krupnik, head of NMNH plant conservation, and Curator John Kress have authored a book, Plant Conservation: A Natural History Approach, which shows scientists and conservationists around the world how herbarium specimens can aid in conservation effort.

Krupnik developed a decision tree which asks a series of questions. Depending on a yes or no answer, each question flows into the next question, and an estimate of status such as likely extinct, likely threatened, or not threatened can be given. A herbarium may store many specimens of the same species. The first question is, “All specimens collected before 1900?” If the answer is yes, then the status is likely extinct. If the answer is no, then one proceeds to the next question, “Specimens collected from six or more locations?” If the answer is yes, then the status is assessed as not threatened. If no, then one flows to the next question. There are four questions in all, and Krupnik and his team tested this assessment tool on some 5,000 species. If the flow chart determines that a species is likely threatened, then a field study needs to be mounted to determine if, indeed, the species is endangered.

In all of their work, the botanist is aided greatly by the fine work of the scientific illustrator. This is nowhere better demonstrated than in the work of Smithsonian illustrator Alice Tangerini. Her work is showcased in the exhibit. She tackles a species known only from its herbarium specimen. Using microscope, lenses, and fine brushes, and gifted with fine motor skills and superior eye-hand coordination, Tangerini can tease apart a pressed dried plant, most likely rehydrating it in the process, and from her work can draw the plant parts which show the scientist what to look for in nature when searching for the plant.

The bulk of the exhibit is devoted to the drawings and watercolors of globally endangered plants. Several artists’ names are familiar—Loudon County’s Karen Coleman drew Florida’s endangered Fuzzywuzzy Air Plant Tillandsia pruinosa. Lara Call Gastinger, the Flora of Virginia illustrator, drew the Dwarf Bear Claw Poppy Arctomecon humilis, a little cushion of white charm occurring only in an 800 acre preserve in southern Utah. The plant which quite captured my heart, however, was the bowl flower Cypripedium japonicum, found in China and Japan, but endangered in Korea, where less than 200 plants remain. With its accordion pleated leaves and white bowl petals mottled wine-red, I thought of ballerinas in tutus. I would cross rivers and climb mountains to see this plant in the wild. Sadly, the exhibit closes December 12.
November Walk at Banshee Reeks—Brenda Crawford

The Piedmont Chapter’s November 14 Second-Sunday Walk at Banshee Reeks Nature Preserve was attended by Piedmont and Prince William VNPS members, Master Naturalists, Friends of Banshee Reeks (FOBR) members, and Clifton Farm staffers. The walk was led by Carrie Blair, who quickly noted the profusion of Autumn Olive (*Elaeagnus umbellata*) in the fields. We were assured by FOBR members that Autumn Olive and other invasives are targeted and there is an aggressive removal program.

This 700 acre park was taken on by the Loudoun County Parks and Recreation Department in 1999. The land had been farmed for generations with, most likely, little thought for conservation and preservation. The move by the county to establish a nature preserve here and the formation of the FOBR is a start in the right direction.

We identified and examined autumn characteristics on trees, grasses, vines, shrubs, and, of course, no shortage of invasives. We saw plenty of evidence of damage to some fine trees by invading aliens. I noted a huge oak near a house site with a monster English Ivy (*Hedera helix*) “galloping” upwards.

And, we had a lovely walk about a mile long on a mowed path around a meadow on a really, really pretty day!

The park is open to the public only on weekends, 8 a.m. to 4 p.m. Permits for visits on other days are obtainable by calling 703-669-0316. For walkers, there’s the path around the meadow with several offshoots and, as well, another 20 or so miles of paths including areas along Goose Creek. Restrooms are in the buildings (posted hours) but there is a Portapotty. More information can be found at the Loudoun County Parks sites.

**SPECIES LIST FROM NOVEMBER WALK AT BANSHEE REEKS**

**TREES**
- White Ash (*Fraxinus americana*)
- Box elder (*Acer negundo*)
- Black Cherry (*Prunus serotina*)
- Bird Cherry (*Prunus avium*)
- Slippery Elm (*Ulmus rubra*)
- Hackberry (*Celtis occidentalis*)
- Black Locust (*Robinia pseudoacacia*)
- Bitternut Hickory (*Carya cordiformis*)
- Persimmon (*Diospyrus virginiana*)
- Sugar Maple (*Acer saccharum*)
- Red Maple (*Acer rubrum*)
- Silver Maple (*Acer saccharinum*)
- White Oak (*Quercus alba*)
- Swamp White Oak (*Quercus bicolor*)
- Pin Oak (*Quercus palustris*)
- Red Oak (*Quercus rubra*)
- Sycamore (*Platanus occidentalis*)
- Tree of heaven (*Ailanthus altissima*)
- Tulip poplar (*Liriodendron tulipifera*)
- Black Walnut (*Juglans nigra*)

**SHRUBS**
- Autumn Olive (*Elaeagnus angustifolia*)
- Blackhaw viburnum (*Viburnum prunifolium*)

**VINES**
- Bittersweet (*Celastrus orbiculatus*)
- Blackberry (*Rubus spp.*)
- Coralberry (*Symphoricarpos orbiculatus*)
- English Ivy (*Hedera helix*)
- Grape (*Vitis spp.*)
- Greenbrier (*Smilax rotundifolia*)
- Honeysuckle (*Lonicera japonica*)
- Wineberry (*Rubus phoenicolasius*)

**GRASSES**
- Indian (*Sorghastrum nutans*)
- Little bluestem (*Schizachyrium scoparium*)
- Purpletop (*Tridens flavus*)

**Black Walnut**
*Juglans nigra*
typical knotty twig
Calendar of Events

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Sunday Jan 9 1-3:30pm</td>
<td>Big Trees Tour</td>
<td>Loudoun &amp; Fauquier County. Carrie Blair leads a drive tour of giant trees on the back roads around Middleburg, The Plains, and Marshall, with warming refreshments at Carrie's. To sign up and get directions, RSVP to Carrie at 540-364-1232. Snow date: Jan 16.</td>
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<tr>
<td>Sunday Jan 23 2pm</td>
<td>Flowers at the Golden Gate National Recreation Area</td>
<td>Clarke County. Richard Stromberg will describe his “Volunteer Vacation” in the San Francisco area last summer and show pictures of the flowers he saw in the National Parks there. Meet in the library of the State Arboretum at Blandy. For information contact Richard at <a href="mailto:risy@embarqmail.com">risy@embarqmail.com</a> or 540-631-0212. Snow date: Jan. 30.</td>
</tr>
<tr>
<td>Sunday Feb 13 2pm</td>
<td>Bull Run Mountain Walk</td>
<td>Fauquier County. For the Second Sunday Walk in February, Bull Run Mountains Conservancy Director Michael Kieffer will lead us along the trails of the 800 acres of the Conservancy. It is located where Broad Run, I66, VA55 and the railroad split the mountain at Thorofare Gap along the border of Fauquier and Prince William Counties. An indoor program will be offered in case of bad weather. Contact Carrie Blair at 540-364-1232 for information or check the Conservancy website, brmconservancy.org/.</td>
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Volunteer Vacations—Richard Stromberg

Volunteer Vacations provide opportunities to travel and donate your time to a worthwhile cause. In addition to providing medical services or teaching math or digging at an archeological or paleontological site, you can also participate in an ecological/environmental activity. The U.S. National Park Service has a Volunteers-In-Parks program. Organizations like the Sierra Club, Appalachian Trail Conservancy, and the American Hiking Society all offer multi-day trips to work on projects to help the environment.

The work ranges from easy/moderate to strenuous and from urban to wilderness conditions. You could be working on removing invasives or repairing a boardwalk to building a trail on difficult terrain.

My wife and I volunteered for an American Hiking Society trip to San Francisco last June. It was categorized as strenuous, “Projects will include repairing trail tread and drainage systems, re-grading trails, cutting back encroaching vegetation along trail corridors, hauling heavy materials, maintaining and reconstructing trail features such as staircases, fences, and boardwalks.” We stayed in a dormitory at the Presidio. Formerly it was a barracks. Essentially, we had our own suite. We had an ulterior motive as it offered an opportunity to see our son, who lives in San Francisco, with cheap accommodations, $200 for a week’s room AND board.

We maintain trails at home for the Potomac Appalachian Trail Club, so we didn’t think the work would be too strenuous for us. It was strenuous and different than what we do at home because the terrain is different, especially building stairs on sand dunes. I will describe the trip at the January 23 talk in the Calendar above. I’ll also show lots of pictures of the flowers I saw there.

This work corroborated our justification for trail work at home. While the trail itself destroys habitat, if we can keep people on the trail, they won’t be trampling the rest of the habitat. And this is a prime objective of VNPS: save habitat.
Master Gardener Johan Guss called me had asked what a vine with thorns and yellow fruit was. I immediately thought of Horse Nettle (*Solanum carolinense*). It is not a vine, but, if it got knocked down, someone might think it was, and it certainly has thorns and yellow fruit.

The source of the query, Jim Pitzvada looked at Horse Nettle on the internet, and it did not fit, so he sent us pictures of the fruit. It looks like a lemon with lots of seeds. Lemons cannot grow here, but I thought it must be related. Citrus fruit are in the Rue family (**Rutaceae**), so I looked up **Rutaceae in the Flora of West Virginia** and found Hardy Orange (**Poncirus trifoliata**). Johan questioned that answer did not fit because Jim had described the plant as a vine, and Hardy Orange is a shrub.

Jim came back with pictures of the fruit on the tree. The trifoliate, compound leaves, green twigs and huge thorns confirmed it as Hardy Orange. Its branches are so tangled that you might think it is a vine. A cultivar, "Flying Dragon" is noted for its highly twisted, contorted stems.

**Poncirus trifoliata** is native to northern China and Korea and is also known as Chinese Bitter Orange and Trifoliate Orange. It has not shown up on any invasive alien lists. The downy fruit and compound, deciduous leaves differentiate **Poncirus** from the **Citrus** genus (oranges, lemons, grapefruit, etc.), but it is sufficiently related to be used as rootstock for **Citrus**, improving hardiness of the grafts. The fruit are very bitter but can be made into marmalade.

-- Richard Stromberg

Blue Ridge Regional Park—
Richard Stromberg

Led by Master Naturalist and Piedmont Chapter board member Robin Williams, thirteen people gathered at Blue Ridge Regional Park November 6th to remove invasives. Two Park Authority employees joined Robin and me and members of the Friends of the Park to tackle the problem.

Blue Ridge Regional Park is hard to find. Its entrance is an unmarked driveway on VA 601 between US 50 and VA 7. One of the Park employees parked his truck so we would know where it is. This 168-acre park offers 3 primitive camping areas that can accommodate 30 campers each. Basic necessities such as vehicle parking, fire rings, picnic tables, and portable restrooms are provided, but the Park is limited to registered campers only. However, more uses are foreseen in the future. The only structure remaining from the old farmhouse is the fireplace and chimney, but the Authority has taken advantage of them by building a large picnic pavilion in front of the fireplace.

Robin led us to a trail into the woods and showed us the two invasives we were after: **Oriental Bittersweet (Celastrus orbiculatus)** and **Wineberry (Rubus phoenicolasius)**. Off we went with pruners to cut off the Wineberry stems if we couldn’t pull them out to cut the Bittersweet vines out of the trees. We also had some saws for the Bittersweet which sometimes reached three inches in diameter. At one point as I was unraveling Bittersweet from a large fallen tree, I realized that I was standing in the old farm’s midden. The ground was littered with old jars and bottles, highlighted by an oil can labeled “Esso”. I thought of an archeological study, but one of the Friends thought of a Boy Scout recycling project.

After a couple hours work, we had made a dent in the invasives, but lots more is there, and they will come back, so more trips are to be planned. After some snacks, we were on our way home.
Please check the date at the bottom of your mailing label below. It is your VNPS membership expiration date. If your membership has expired, please contact VNPS at 540-837-1600.