VNPS REGISTRY SITES REPORT 2018

PIEDMONT CHAPTER
September 24, 2018

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Calmes Neck Bluffs: This site continues to be used by the Chapter for viewing spring ephemerals and ferns in April on our annual bluebell walk. Covenants of the homeowners' association only allow members of the VNPS to participate. One more house is being built on the bluffs but it so far has not significantly damaged the natural integrity of the site. Our newsletter article on the bluebell walk is attached on page 2.

Carter Run Wetlands: The last visit to this site was in late spring 2017 by Piedmont board members Jocelyn Sladen and Cathy Mayes. They hoped to see the purple fringeless orchid (*Platanthera peramoena*), the main motivation behind registering the site but it was not in view, although the cardinal flowers (*Lobelia cardinalis*) were nice. Japanese stiltgrass (*Microstegium vimenium*) has severely impacted the area. While the owner is willing to treat it, timing is critical. The area is difficult to reach in the best of times and wet weather this year was a further hindrance.

G. Richard Thompson WMA: The variety of terrain, microclimates, and habitat in the Thompson WMA make it a frequent destination for walks among our membership. In the past year, we visited it three times: in early March to view the seep, its skunk cabbage (*Symplocarpus foetidus*), marsh marigolds (*Caltha palustris*) and its unusual population of black ashes (*Fraxinus nigra)*; in late March to pull invasives; and in early May to see the white trillium (*Trillium grandiflorum*) and other spring flowers. (See lower portion of page two for our newsletter article on our early March visit to the seep.)

Rod and Dianne walked G. Richard Thompson WMA on July 3, 2018 and added a state rare plant for seepage fan over fractured, mafic dike that gives rise to the seepage swamp: Pear Hawthorn (Crataegus calpodendron). Identification was checked and confirmed by hawthorn expert Ron Lance from a specimen sent by Ron to the Western Carolina University Herbarium (WCUH) in Sylva, NC.

Bluebell Walk at Calmes Neck–Diane Krumme

April 8 we took our annual walk at Calmes Neck led by Dr. Emily Southgate and Jocelyn Sladen. Emily has an enthusiasm for botany and willingly shares her vast knowledge of plants and the ecosystem. Jocelyn, a founding member of the VNPS with a long history of advocating for native plants, added great depth of understanding and was happy to answer any questions. I found this hike delightful and veryeducational.

The walk covered three types of areas. It started on a northeast facing slope that led to a ravine you follow down to bluffs overlooking the Shenandoah River. This area is over dolomite limestone, rich with magnesium, that creates a lime-rich soil that grows a magnificent array of spring ephemerals. Calmes Neck at one time was timbered, but was not plowed, thereby preserving the roots and seedbank of the native plants. Cattle grazed on the area for some time but when the grazing stopped, the deep-rooted native plants came back.

Spring ephemerals are late this year. Bluebells (*Mertensia virginica)* were just starting to open, but we saw plenty of ferns and flowers. Heading down the slope towards the ravine, we saw Cutleaf Toothwort (*Cardamine concatenata),* Puttyroot *(Aplectrum hyemale),* Twinleaf (*Jeffersonia diphylla),* Toadshade (*Trillium sessile)* and Trout Lilies, (*Erythronium americanum*). Jocelyn explained how Trout Lilies have a symbiotic association with Maple trees (*Acer sp*.). Trout lilies provide nutrients to the nearby Maples by passing nutrients to them through mycorrizhae fungi in the soil.

Many more flowers were in the ravine plus a massive grape vine. Emily explained how the grapevine climbs a sapling and then as the tree grows the grapevine grows along with the tree. On the bluffs above the Shenandoah were Blue Cohosh *(Caulophyllum thalictroides*), Dutchman's Breeches *(Dicentra cucullari*a), Rock *Twist (Draba ramosissima)* and Walking Fern *(Asplenium rhizophuyllum).*

Early Spring at the Thompson Seep–Karen Hendershot & Ron Hughes

"The Seep" may sound a bit creepy but "mysterious or magical" are much better descriptors. That's how it seemed on March 11, when we toured a Central Appalachian basic seepage swamp at the Thompson Wildlife Management Area. Ron Hughes, Land Manager for the Department of Game and Inland Fisheries, led us to this rare plant community covering approximately 30 acres. He described how, unlike a spring, the water of a seep does not bubble up at a single place but seeps out of the ground. It has been created by a dike of talus (rock fragments) that backs up the water. Relatively little water is visible on the surface. The area is more a mosaic of streamlets and muddy areas intermixed with drier sites. It lies below surrounding ridges, so cold air sinks down into the network of seeps, yielding microclimates that are much cooler than the

surrounding landscape. These cooler conditions support plant species normally seen further north, as well as a few endemic (found nowhere else in the world) invertebrates.

While most of the forest floor still slumbered, the seep was alive with growth. Mysterious-looking blossoms of Skunk Cabbage (*Symplocarpus foetidus*) were all around us. A member of the Arum family (*Araceae*), Skunk Cabbage inflorescences have a large spathe surrounding and protecting a short, round spadix on which the flowers grow. Ron explained that they generate heat and smell like carrion, attracting ants, spiders and flies. The picture at the right shows the open spathe, allowing a peek inside to the flowers on the spadix.

In the wettest areas, we found Marsh Marigold (*Caltha palustris*) blooming, not far from the deeply-ribbed leaves of False Hellebore (*Veratrum viride*) and the evergreen Shining Clubmoss (*Huperzia lucidula*). We also saw Bedstraw (*Galium*) and Swamp Saxifrage (*Saxifraga pensylvanica*) as well as the basal leaves of Two-leaved Miterwort (*Mitella diphylla*).

Among the most precious inhabitants of the Thompson seep is Black Ash (*Fraxinus nigra*),a tree species uncommon in Virginia, a disjunct from its main populations further north. They enjoy the cold, damp environment of the seep. Their soft, irregular, corky bark, which can easily be rubbed off, distinguishes them from other Ashes. Last winter Piedmont Chapter members helped Ron Hughes locate and mark individual trees that were subsequently chemically treated in the spring to protect them from the Emerald Ash Borer (*Agrilus planipennis*), which is an non-native insect destroying Ashes throughout our area. The Black Ash is particularly vulnerable to this insect, having been extirpated throughout 97% of its range by the borer! This year the Department of Game and Inland Fisheries will be releasing parasitic wasps in the seepage swamp to try to help stem the invasion.

We also saw other signs of higher elevation spring. A few delicate lavender blossoms of Round-lobed Hepatica (*Anemone americana*) were pushing up from the forest floorin advance of their shiny, three-lobed leaves. The dandelion-like (and alien) yellow blossoms of Coltsfoot (*Tussilago farfara*) were also seen. Finally, the previous week's wind storm had sent us a unique opportunity for a close-up look at the duckbill-shaped buds of a Tuliptree (*Liriodendron tulipifera*). The Thompson WMA is a true treasure. We'll be back soon to witness the beauty of its diverse inhabitants later this spring.

POTOWMACK CHAPTER
December 1, 2018

Chapter Contact:
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Huntley Meadows Park: This site continues to be managed actively by the site staff. In early fall 2018 the Natural Resource Manager position was upgraded and Dave Lawlor was promoted, providing strong support for natural resource management. VNPS volunteers continue to plan a critical role supporting botanic survey, inventory, management and herbarium maintenance. In late September VNPS registry volunteers along with Potowmack chapter volunteers provided comments on the draft natural resource management plan for Huntley Meadows being developed by the Fairfax County Park Authority. The plan contains good information about the communities found on site, but needs significant improvement on outlining stressors, proposed management actions, resource needs, etc. VNPS stressed in its comments the need to state specifically that a primary objective for site resource management is to make the site a Virginia Natural Area Preserve in order to provide greater protection for the resources. VNPS and Potowmack Chapter volunteers also commented on efforts remove proposed trails from the Fairfax County Comprehensive and Transportation Plans that would directly and indirectly impact sensitive resources and directly conflict with both areas identified for Natural Area Preserve designation and staff's resource management goals and objectives.

Riverbend Park: This site continues to be managed actively by the site staff. In early fall 2018 the Natural Resource Manager position was upgraded and Rita Peralta was promoted, providing strong support for natural resource management.

Scotts Run Nature Preserve: This site continues to be managed by Fairfax County Park Authority staff from Riverbend Park and Area 6 Management. Non-native invasive species to include wavy-leaf basket grass, illicit human activity and severe deer browse continue to threaten resources here.

Potowmack Chapter "Lycophytes and Ferns of Scott's Run Nature Preserve" field trip on June 24, 2018 led by Carl and Jerry Taylor with Rod Simmons as co-leader. Another fern - Osmunda spectabilis – was added to the Lycophyte checklist (developed by Carl and Jerry – see attached) for Scotts Run for the pristine acidic seep and small seepage stream along the toe slope of the "Blue Trail". There were 30 participants, not including leaders.

City of Alexandria Herbarium (AVCH): AVCH has been processing and imaging hundreds of 15-20 year old specimens of flora mostly from Runnymede Park, but also Elklick Preserve and Huntley Meadows Park for the NSF-funded SERNEC project coordinated by Andrea Weeks at George Mason University Herbarium (GMUF).

PRINCE WILLIAM WILDFLOWER SOCIETY
December 1, 2018

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Manassas National Battlefield Park: PWWS volunteers led by Nancy Vehrs continue to work with National Park Service staff to replace the expired memorandum of understanding between VNPS and NPS for the four registry sites at the battlefield (Deep Cut, two Buchnera americana sites, and the spring ephemeral area in the floodplain around the Stone Bridge across Bull Run). In early October NPS staff mowed Deep Cut. This timing is highly problematic in that it does not match any preferred mowing window either to promote native plant species or support overwintering animal habitat. The explanation provided by NPS staff is as follows:

> "We do realize it is best to mow between November-March, but this year we have had a contractor mow the area in preparation for a fall burn, should weather and resources permit. The fall burn would be best for reducing the woody species that dominate large portions of that area and that prevents us from preserving the lines of sight needed to interpret the battles. The other advantage of a fall burn over a spring burn is we would not impact ground nesting birds that frequent that area.
>
> Establishment of a warm season grassland/meadow habitat throughout that area remains our long term goal.
>
> Both parks are managing according to their enabling legislation which is battlefield viewshed. Wildlife value is an added benefit."

PWWS volunteers provided feedback to the NPS resource management staff on another meadow area at the battlefield that they are having problems managing due to dense Lespedeza cuneata coverage. PWWS provided recommendations to control that species, a short list of native species observed on the site, and recommended management actions. PWWS will continue to work with NPS staff both in the management of the registry sites and to support other resource management efforts at the battlefield that promote health native flora.

Lycophytes and Ferns of Scott's Run Nature Preserve
Fairfax Co., Virginia

Lycopodiaceae

_____ *Dendrolycopodium obscurum* (Flat-branched Tree Club-moss)

_____ *Diphasiastrum digitatum* (Southern Running-pine)

Ophioglossaceae

_____ *Botrypus virginianus* (Rattlesnake Fern)

Osmundaceae

_____ *Osmunda claytoniana* (Interrupted Fern)

_____ *Osmundastrum cinnamomeum* (Cinnamon Fern)

Pteridaceae

_____ *Adiantum pedatum* (Northern Maidenhair)

Dryopteridaceae

_____ *Dryopteris intermedia* (Glandular Evergreen Wood Fern)

_____ *Dryopteris marginalis* (Marginal Wood Fern)

_____ *Polystichum acrostichoides* (Christmas Fern)

Polypodiaceae

_____ *Polypodium virginianum* (Rock Polypody)

Cystopteridaceae

_____*Cystopteris protrusa* (Lowland Brittle Fern)

Diplaziopsidaceae

_____ *Homalosorus pycnocarpos* (Glade Fern)

Thelypteridaceae

_____ *Parathelypteris noveboracensis* (New York Fern)

_____ *Phegopteris hexagonoptera* (Broad Beech Fern)

Athyriaceae

_____ *Athyrium asplenioides* (Southern Lady Fern)

_____ *Deparia acrostichoides* (Silvery Glade Fern)

Onocleaceae

_____ *Matteuccia struthiopteris* (Ostrich Fern)

_____ *Onoclea sensibilis* (Sensitive Fern)