

POTOWMACK NEWS

Potowmack Chapter of the Virginia Native Plant Society

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VNPS Registry Sites SCOTT'S RUN NATURE PRESERVE BY LAURA BEATY



SCOTT'S RUN FALL FLOODPLAIN COMMUNITY; PHOTO BY LAURA BEATY

Scott's Run Nature Preserve is one of several Potomac River Gorge designated sites along the Virginia palisades of the Potomac River. This ancient waterway has an estimated age of 600 million years based on dating by the U. S. Geological Survey of exposed metamorphosed sedimentary rocks in the Mather Gorge Formation at Great Falls Park. Many geological events over hundreds of millions of years influenced the topography of Scott's Run today, even back before the existence of the Atlantic Ocean, when the continental plates collided and the Appalachian Mountains were created and eroded.

The current drainage system of the preserve developed more recently. Approximately 10,000 years ago, the Laurentide Ice Sheet reached as far south as Pennsylvania. Although the glaciers never made it into Virginia, the thick ice sheets to the north and the sheer volume of their melt water played a major role in cutting drainage systems and watersheds into the Potomac River area.

Cooler climates associated with the glaciers pushed some northern plant species such as Eastern Hemlock, *Tsuga canadensis*, south into Virginia. The terraces and coves cut into the north-facing, steep

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Upcoming Events

What Is a Healthy Forest? Joe Marx

Wed, Sept 16, 7:30 pm at Huntley Meadows

From new information about the pre-Columbian forest to changes wrought by invasive exotic species & climate change, explore the future of our Eastern forests in this talk set up by the Friends of Dyke Marsh at Huntley Meadows.

VNPS Fall Native Plant Sale

Saturday, Sept 19, 9 am-3 pm

In conjunction with Green Spring's Fall Garden Day, VNPS sells a wide variety of native plants and offers native plant advice at our propagation beds behind the Horticulture Center.

Ferns, Ferns, Ferns

Thurs, Oct 8, 7:30 pm

Paulette Royt, retired microbiologist from GMU, will talk about ferns in the Hort Center at Green Spring. She'll also lead a fern walk at Green Spring perhaps Sat, Oct 10. Watch for further info.

Annual Meeting

Sunday, Nov 8

Hold the date; more info to come, but we can say that the meeting will be at Green Spring Horticulture Center where Marcia S. Mabee will speak about owning a nature preserve.

All events are free and open to the public.

Join our listserve at

<http://groups.yahoo.com/group/vnps-pot> to receive notices with walk registration links

WORD OF THE MONTH:

MYCOHETEROTROPHIC (adjective) describes a plant indirectly parasitic on a photosynthesizing plant through the medium of a mycorrhizal fungus.

BOTANIC NAMES: THEY'RE A REAL ZOO

BY MARGARET CHATHAM

A wide variety of animals find their way into the botanic names of familiar plants, sometimes because of a similar shape or appearance, sometimes because of the way the plants were used. Some of these are echoed in the plants' common names, others aren't.

So *Elephantopus* really is from the Greek for "Elephant's Foot" (some tropical species have very large leaves), *Chenopodium* really means "Goosefoot" in Greek and *Chelone* for the genus of Turtleheads is derived from the Greek for "tortoise." *Geranium* comes from the Greek *geranos* meaning "crane," and many geraniums are commonly called "Cranesbills" for their long, pointed seedpods. *Equisetum* comes from Latin *equus* (horse) and *seta* (bristle), close enough to "Horsetail." "Adder's Tongue" fern is a good translation of *Ophioglossum*: Greek *ophis* (serpent) *glossa* (tongue) – for the shape of its fertile frond? And the specific epithet of *Matteuccia struthiopteris* does indeed translate from the Greek to "Ostrich Fern." *Coreopsis* species are sometimes called "Tickseeds" and the genus name translates that way: Greek *coris* (bug) and *opsis* (appearing), for the shape of the seeds. *Hieracium*, the genus of Hawkweed, comes from the Greek *hierax* (hawk), because some European species was used in ancient times to improve eyesight.

But sometimes the common and botanic names don't match. "Columbine" comes from the Latin for dove, while its genus name *Aquilegia* comes from Latin for eagle. I don't see an eagle's talons in its spurred flowers myself, but someone did. Where we see softly furry Pussytoes, the botanic name *Antennaria* sees insect antennae in its pappus (modified calyx pieces at the top of the seed in composites). *Echium vulgare* is Viper's Bugloss: Greek *echis* (viper) for its nutlets shaped like viper's heads, but "Bugloss" is itself from Greek *bous* (ox) and *glossa* (tongue) for the shape of the leaves. Larkspurs are in the genus *Delphinium*, named for dolphins.

Then there are botanic names whose animal connections have no echo in their common names. Forget-me-not is *Myosotis scorpioides*: Greek *myos* (mouse) *otis* (ear) and the inflorescence unfurls like a scorpion's tail. *Ipomoea* for the genus of Morning Glories also comes from Greek: *ips* (worm) and *homoios* (resembling) for its twining habit. Buttercups' genus of *Ranunculus* comes from the Latin for "little frog" because many of them grow in wet places.

PHOTO: EAGLE OR DOVE? BY MARGARET CHATHAM



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SCOTT'S RUN CONTINUED FROM PAGE 1

bluffs of Scott's Run Preserve provided the cool microclimates necessary for the ancient hemlocks to survive there these many thousands of years. Like so many of the hemlocks in other parts of Virginia, those in Scott's Run Preserve are suffering or have succumbed to the hemlock woolly adelgid. Recent treatments to destroy the insect are proving successful, and young hemlocks are showing up in the preserve. Park management has scheduled future treatments, so there is reason to hope that the Eastern Hemlock will remain as a living souvenir of the last ice age.

The political origin of the preserve took less time than the glacier and included the singing of "This Land Is Your Land" by citizen activists. This drama occurred after the 1966 death of the owner of the property referred to locally as the "Burling Tract". According to a June 2009 article in *The Washington Post*, Edward B. Burling Sr., the co-founder of a Washington DC law firm, had a cabin in what is now Scott's Run Nature Preserve. He enjoyed both the solitude of the site and its convenience as a meeting place for Washington's power-brokers, but he refused to allow telephone lines to his cabin because he did not wish to cut of any trees. He visited the cabin into his 90s.

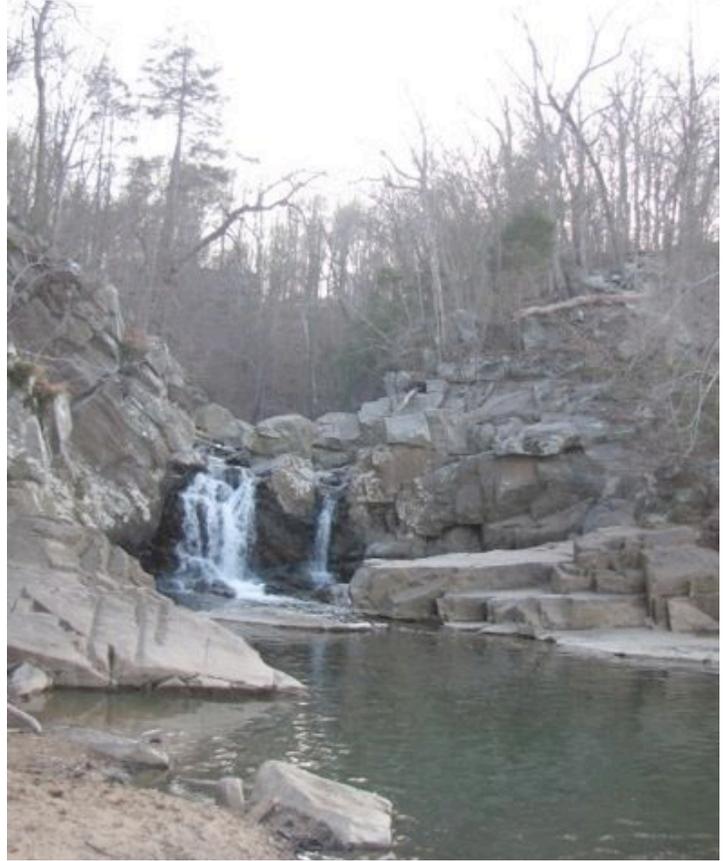
After Burling's death, the property was purchased for \$2.4 million by a local developer who intended to build luxury homes but preserve half of the land for walking trails. When neighbors saw a public planning commission notice tacked to a tree, efforts to save the Burling Tract from development began in earnest, leading to peaceful protests along Georgetown Pike and local students carrying petitions door-to-door.

The activists wanting to preserve the site had to persuade the Fairfax County Planning Commission, the Northern Virginia Regional Park Authority and the Fairfax County Park Authority to change their positions. They were aided by support from The Nature Conservancy and Virginia Senator William B. Spong Jr. Positive coverage from *The Washington Post* and *The New York Times* helped the cause. Virginia Governor Lynwood Holton appealed to the developers to halt tree cutting during price negotiations with the county. During the tree cutting, activists gathered to sing, beat on pans, and show support for preserving the site.

The land was purchased on Sept. 5, 1970 for \$3.6 million and the tract became the Dranesville District Park. It was later re-named Scott's Run Nature Preserve to recognize the creek whose watershed begins at Tyson's Corner and enters the Potomac River over a picturesque 15' waterfall.

Growing developments around Tyson's Corner and elsewhere in the watershed are increasing runoff and creating serious erosion problems along the banks of Scott's Run inside the preserve. Marijke Gate, a member of the staff at nearby Riverbend Park that oversees Scott's Run, indicates that mitigation efforts are planned along the banks of Scott's Run upstream, outside the preserve's boundary, by the Natural Resource and Protection Division of the Fairfax County Park Authority.

John Callow, the manager of both areas, will soon be implementing new resource protection initiatives at Scott's Run. A new park map is being created to help protect fragile resources. Off-path "social trails" that have been forged by the increasing numbers of visitors will be closed to allow plant communities to recover, especially near streams



and pools. Since the stream running through the preserve originates at Tyson's Corner, the water is only of moderate quality. Regardless, illegal water recreation compromises stream-bank plant communities, and off-leash pets create problems for wildlife and fragile off-trail plant communities.

Ongoing activities both to educate preserve visitors and to engage volunteers include wildflower walks by Riverbend Park staff, invasive plant removal efforts, watershed clean-ups and deer management efforts. The MEWE (meaningful watershed experience), a Fairfax County program, requires all 7th graders to learn about water quality, live stream organisms, biodiversity along the floodplain and land use. Although not fully documented as yet, the deer management program appears to be providing some relief for the understory on slopes and in the upland forest. Like invasive plant removal, success requires ongoing programs to keep ahead of resource damage.



Native plant enthusiasts will find great enjoyment in the large diversity of plant species within the 384-acre preserve. Quoting a passage from *Finding Wildflowers in the Washington-Baltimore Area*, by Cristol Fleming, Marion Blois Lobstein, and Barbara Tufty: "Botanist Albert Radford of the University of North Carolina described the area as 'the most diverse forest, from a plant community and species viewpoint, seen in the entire Piedmont.'" A plant survey done prior to 1995 records 175 species of flowering plants and 20 species of ferns.

Every change in soil and moisture conditions is echoed by a change in plant communities that thrive in those conditions. The Acidic Oak/Hickory Forests of the dry, upland areas host Scarlet Oak (*Quercus coccinea*) and Chestnut Oak (*Q. montana*) with an understory of ericaceous plants such as Mountain Laurel (*Kalmia latifolia*) and Trailing Arbutus (*Epigaea repens*). The Mesic Mixed Hardwood Forest occupies land a little less dry, but still acidic and infertile. Trees in this area include American Beech (*Fagus grandifolia*), Tulip (*Liriodendron tulipifera*), and White (*Q. alba*) and Red Oaks (*Q. rubra*) with an herb layer of Christmas (*Polystichum acrostichoides*) and NY Ferns (*Parathelypteris noveboracensis*). The Basic

Mesic Forest-Rich Slope Forest includes fertile ravines and river bluffs supporting Sugar Maple (*Acer saccharum*), American Beech (*Fagus grandifolia*), Hemlock (*Tsuga canadensis*) and Bitternut Hickory (*Carya cordiformis*), with understory stands of Pawpaw (*Asimina triloba*), and Spicebush (*Lindera benzoin*). A rich herb layer associated with this community includes Bloodroot (*Sanguinaria canadensis*), Canada Waterleaf, *Hydrophyllum canadense*, Heart-leaved Foamflower (*Tiarella cordifolia*), Blue Cohosh (*Caulophyllum thalictroides*), Star Chickweed (*Stellaria pubera*), and Bluets (*Houstonia caerulea*).

Hikers looking to welcome spring will be astounded by the wealth of early blooming native plants, and it just gets better as the seasons progress. From the earliest appearance of Skunk Cabbage (*Symplocarpus foetidus*) and Harbinger-of-Spring (*Erigenia bulbosa*) through Dutchman's Breeches (*Dicentra cucullaria*) and Virginia Bluebells (*Mertensia virginica*), Wild Hydrangea (*Hydrangea arborescens*) and Downy Rattlesnake Plantain (*Goodyera pubescens*), Crane-fly Orchids (*Tipularia discolor*) and Elephant's Foot (*Elephantopus caroliniana*) right through to late season goldenrods and asters and winter greens, Scott's Run is a treasure to preserve.



FALL NATIVE PLANT SALES (AN INCOMPLETE LIST)

For woody plants and herbaceous perennials, fall is the best time to plant. In the spring, plants are busy growing leaves and flowers, but in the fall, they concentrate on growing roots. Take advantage of their root growth season to get your new treasures well settled and ready for many years of enjoyment.



Elm-leaf Goldenrod, *Solidago ulmifolius*
Margaret Chatham photo

Weds, Sept 2, Oct 7, Nov 4, 10 am-1 pm
VNPS-Potowmack Chapter First Wednesday Sales
in the propagation beds behind the Horticulture Center at Green Spring Garden Park. For these sales, cash or check is best. And you can always bring back any empty pots you don't need.

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Sat, Sept 12, 9 am-3 pm

Loudoun Wildlife Native Plant Sale

Morven Park, Leesburg brings in Hill House Farm, Nature By Design, and Watermark Woods. Visit their websites (www.hillhousenativeplants.com; www.nature-by-design.com; www.watermarkwoods.com) for lists of plants offered or to order in advance, to ensure that the plants you want are brought to the sale.

Sat, Sept 19, 9 am-3 pm

Green Spring Fall Garden Day

Plant sales by Friends of Green Spring, both native plant and non-native plant nurseries, and VNPS-Potowmack Fall Native Plant Sale behind the Horticulture Center at Green Spring Gardens Park.

Sat, Sept 19, 1-4 pm

Long Branch Nature Center,

625 Carlin Springs Rd, Arlington

<http://parks.arlingtonva.us/events/fall-native-plant-sale/>

Sat, Sept 26, 9 am-2 pm

Northern Alexandria Native Plant Sale

The Church of St. Clement, 1701 N. Quaker Lane, Alexandria. Street parking for the area's most extensive gathering of native plant nurseries.
www.facebook.com/NorthernAlexandriaNativePlantSale

Sun, Sept 27, 10 am-2 pm

Earth Sangha Open House and Plant Sale

Earth Sangha Plant Nursery, Cloud Drive entrance to Franconia Park, Springfield. Plants are also available for sale on garden workdays. www.earthsangha.org

WHERE YOU CAN WHACK SOME INVASIVE PLANTS

Falls Church Habitat Restoration Team

Help restore the local ecosystem in city parks. Remove invasives and plant natives that will benefit local birds and butterflies. For more information contact Melissa Teates at 703-538-6961 or melanite@verizon.net

Arlington County's Remove Invasive Plants (RiP) Program

Help Rescue Arlington parks from alien plant invaders! Please bring your own tools. For more information, contact Sarah Archer at 703-228-1862 or sarcher@arlingtonva.us

Marie Butler Leven Preserve

Workdays led by Earth Sangha. www.earthsangha.org

Reston Association's Habitat Heroes Program

Help restore local wildlife habitat through invasive plant removal and replanting with native plants. Contact Ha Brock at 703-435-7986 or ha@reston.org.

Fairfax County's Invasive Management Area (IMA) Program

Help remove invasive plants and learn about new species. For more information, contact Erin Stocksclaeder at 703-324-8681 or erin.stocksclaeder@fairfaxcounty.gov

Monotropa uniflora, Indian Pipe



White, waxy stalks rise from dark places on the forest floor in summer, blackening when bruised. At first each flower bud hangs down, but as it opens it rises to welcome pollinators. Once it has been pollinated, it straightens to point upward, and loses its glowing whiteness. By the time its thousands of tiny, 10-cell seeds are ripe, the plant has faded to an ordinary brown.

It has long been known that Indian Pipes are flowering plants that contain no chlorophyll and so perform no photosynthesis of their own. They used to be called “saprophytic” because it was thought that they lived off dead plant material. New research shows that they actually are tapping into mycorrhizal fungi (often one of the Russulaceae), collecting both the minerals the fungi gather and the sugars their partner trees produce. If the Indian Pipes produce anything of value to the network, no one yet knows what that might be. Modern terms for their lifestyle are “mycoheterotrophic” or “epiparasitic.”

While usually found only in small patches, this year there’s a hillside full of them uphill behind Gulf Branch Nature Center in Arlington.

They may all have gone to seed by now, but there should be something there to see.



Photos: *Monotropa uniflora* and a *Russula* mushroom. Mushroom ID by Mary Jane Epps, photos by Margaret Chatham.

If you would like to receive this newsletter (in full color!) electronically, contact Alan Ford at: amford@acm.org

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