My Experience as a Huntley Meadows Intern

By Max Ferlauto

My name is Max Ferlauto. I am studying plant ecology at Juniata College in Pennsylvania. I was the 2016 VNPS intern at Huntley Meadows.

Most know Huntley Meadows Park by its boardwalk trail. The ½ mile boardwalk spans a large portion of the emergent marsh. From it, you can see turtles, frogs, beavers, wading birds and birds of prey. In 2013, the marsh underwent a wetland restoration to solve problems such as silt deposition and invasive species. A berm and flowgate were put in so that water levels could be controlled to increase wetland biodiversity. However, the main wetland is only a small part of what Huntley Meadows has to offer. In the forest and meadows surrounding the marsh are some of the rarest plant communities in Northern Virginia. I had a great experience exploring and protecting them during my Huntley Meadows internship.

My main job was to map rare and invasive plant populations. I used a Spectra Precision GPS unit to take coordinate points and polygons. The information was put into an Arc GIS map. We used the maps to guide invasive management. We also used them to delineate where rare plant populations were located in the park. Then I wrote up reports on the state of rare plant populations in the park.

Huntley Meadows has the largest population of purple milkweed (Asclepias purpurascens) in the state. This rare plant is...
Where You Can Whack Some Invasive Exotic 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

Reston Association’s Habitat Heroes Program
Help restore local wildlife habitat through invasive plant removal and replanting with native plants. For more information, 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 invasive species. For more information, contact Leslie Gerhard at 703-324-8681 or leslie.gerhard@fairfaxcounty.gov

Where You Can Still Buy Native Plants This Season
Yes, this newsletter is late, having been delayed so it could include the annual meeting & budget information, so our own September sales are past. But it’s still a good time to plant!

Northern Alexandria Native Plant Sale
Saturday, September 24, 9 am-2 pm
The Church of St. Clement, 1701 N. Quaker La. Alex
The best local gathering of area commercial native plant growers

Earth Sangha Fall Open House & Plant Sale
Sunday, Oct 2, 10 am-2 pm
North end of Cloud Drive, Franconia
Locally propagated plants from local seed collection.
For plant lists and more information see www.earthsangha.org

VNPS First Wednesday Plant Sale
Wednesday, Oct 5, 10 am-1 pm
VNPS propagation beds, Green Spring Gardens
Our last sale of the year, behind the Horticulture Center.

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Submissions to Potowmack News may be sent to The Editor at vnps.pot@gmail.com

Potowmack Chapter
Virginia Native Plant Society
P.O. Box 5311
Arlington, VA 22205
http://www.vnps.org/potowmack
If you cannot attend the annual meeting, please send in this ballot by October 14 to Potowmack Chapter VNPS, PO Box 5311, Arlington, VA 22205, or email your vote to vnps-pot@gmail.com

Election of Officers for 2017

The board of the Potowmack Chapter VNPS presents the following slate of officers for the 2017 year, with terms beginning January 1. This slate will be voted on at the Annual Meeting on Sunday, October 15.
Contact Alan Ford for further information at amford@acm.org

Slate of Officers

| President:       | Alan Ford       | Write-in________________________ |
| Vice President: | Lori Bowes      | Write-in________________________ |
| Secretary:      | Pat Salamone    | Write-in________________________ |
| Treasurer:      | Scott Knudsen   | Write-in________________________ |

FY2017 Budget Approval

The Board of the Potowmack Chapter VNPS presents the following proposed budget for fiscal year 2017

**Income**

- Donations $600
- Member Dues $3,800
- Sales $9,200
- Other $100
- **Total Income** $13,700

**Expenses**

- Administrative $1,300
- Green Spring Fees $1,500
- Membership $200
- Registry $100
- Programs $3,500
- Education $100
- Newsletter $3,000
- Internship at Green Spring Gardens $3,700
- Plant Sales $800
- Printing/Publications $200
- Merchandise $200
- Special Board Action $1,000
- **Total** $15,600

Board Approved Expenses Against Savings

- Internship at Huntley Meadows $2,800
- Tree removal $1,000
- Plant NOVA Natives Guide $0
- Larry Morse Memorial Fund $200
- **Total** $4,000

I approve ______ disapprove_______ the FY2016 budget.
more shade tolerant than other milkweeds and can live directly in the forest. The purple milkweed had been extensively surveyed in 2015. It was my job to map the milkweed again and see if the populations had grown or shrunk. One easy way to find these patches was to follow the frillary butterflies that gorged themselves on the milkweed’s nectar. Purple milkweed is an important pollinator plant because it flowers early and can grow in shady areas where most other flowers cannot. It was interesting to try and figure out the habitat the milkweed preferred. While it was found in meadows, it could also be found in shady Microstegium infested forests. It seemed to like areas near flowing water and sunny open holes in the forest. Clonal patches could get very big. I found some with over 300 individual stems.

The coolest feature of Huntley Meadows is its rare, coastal plain depression swamp. It was recently made a Natural Area Preserve by the state. Huntley Meadows has more of this plant community than the rest of the state combined. The plant community is made of up sweet gum (Liquidambar styraciflua), black gum (Nyssa sylvatica), willow oak (Quercus phellos), greenbrier (Smilax spp.), highbush and lowbush blueberries (Vaccinium fuscatum & V. pallidum), and a variety of sedges. Two of these sedges, Carex buxbaumii and C. vestita are state rare. It was my job to find and map where the rare sedges were growing. They are colonial sedges and can take up an entire vernal pool. I have seen some patches take up about a quarter acre of the forest. In order to find them I had to wade through ankle deep water. Luckily, the sedges flowered during the spring so I had wonderful (bug free) weather. Being out in the middle of a depression swamp is a magical experience. Small hummocks emerge from the water covered in sedges. Large blueberry plants huddle in groves surrounded by thickets of greenbrier. Spongy sphagnum moss covers the roots of large willow oaks. Everything is green, even the black water reflects back the new sweetgum leaves. The sedges themselves are beautiful. Carex buxbaumii has ebony scales striped with a lime green midvein. Carex vestita has a long black staminate spike that shoots up from its leaves.

Unfortunately, the coastal plains depression swamp is threatened by invasive species. Microstegium carpets some parts of the southwestern section of the park and is encroaching eastward towards the rare sedge communities. Huntley Meadows has a 3-year plan with Invasive Plant Control (IPC) to spray the Microstegium with glyphosate. It was my job to map the Microstegium and monitor IPC when they sprayed.

White-tailed deer are another problem. Deer browse hacks most saplings down to your knees. Some new oak plants struggle to grow even a foot high. As successional pine species fall down in the southwestern section of the park, deer might limit the number and species of native trees taking their place. I helped conduct deer browse surveys to inspect the extent of the damage. The park is mitigating this problem with archery programs and sharp shoots.

My other project was to create an identification key for the Carex species of Huntley Meadows. Carex is quite a complicated genus and usually requires a hand lens to identify. Many naturalists don’t even try to learn the sedges. My goal was to create an easy to understand guide that would encourage the appreciation of these overlooked plants. In order to do so, I explained the anatomy of the three different types of inflorescences (gynandrous spikes with the pistillate portion above the staminate, androgynous spikes with the staminate portion on top, and separate staminate & pistillate spikes) and used it to identify the sedges in the wetland and depression swamp. Hopefully other naturalists and interns can use it as an introduction to sedges.

The Potowmack Chapter of the Virginia Native Plant Society has nurtured my interest in botany for about three years now. I volunteered with them and learned from them during my gap year last summer. I have met many amateur and professional
botanists. I have even made connections with botanists in other states. The Huntley Meadows internship allowed me to experience what working at a large wetland is like. I learned how they raise and lower the water, how they conduct plant surveys, and how they monitor water quality. I also learned about the different parts of the Fairfax County Park Authority and the range of projects that they want to complete. I want to thank the Potomac Chapter for giving me this valuable opportunity. I hope the partnership between Huntley Meadows and the Potomac Chapter will continue in the future.

**Cox Conserves Heroes: Congratulations, Alan Ford!**

As many of you know, this spring VNPS State President Nancy Vehrs nominated our own Potomac Chapter President Alan Ford for the Cox Conserves Heroes Award, and thanks to the votes of so many of you, he won the highest prize of $10,000 for our chapter. This money will support the internship at Huntley Meadows for the next few years.

**Word of the Month: Gynandrous/Androgynous**

Description of the arrangement of flower parts on sedge spikes that contain both staminate and pistilate flowers. Gynandrous spikes have the pistilate flowers grouped above the staminate, while androgynous spikes have the staminate flowers grouped above the pistilate. Pictured below left: the gynandrous terminal spike of Carex shortiana (Short’s Sedge) along with lower completely pistilate spikes. Pictured below right: the androgynous terminal spike of Carex wildenowii (Wildenow’s Sedge). Photos by Gaylan Meyer.

**Botanic names: Panic!**

By Margaret Chatham

Our English word “panic” goes back to Pan, the goat-footed Greek god of nature, so I had always thought that the grasses of the genus *Panicum* shared that derivation. By extension, I thought the term “panic” for the open, sort-of Christmas-tree-shaped inflorescence the Panic grasses display shared this derivation. Think again. The Panic grasses actually take their name from the Latin word *panus* meaning a swelling or the grain millet. Millet? We have two genera with that common name: *Setaria*, the foxtail grasses, which look nothing like Panic grasses, and the paniced *Milium* or Millet Grass, represented by only one species in Virginia: *Milium effusum*, Tall Millet Grass.

In the old books about grasses, *Panicum* is a very large genus. The Flora of West Virginia (1978) lists 35 species of *Panicum*. The Flora of Virginia (2012) only lists 11, because many have been renamed. The redesignated Panic grasses have gone into at least three other genera. Those that became *Dichanthelium* are the easiest to understand: they bloom twice in the same year (di = two, anth = flower) including the familiar Deertongue Grass, *Dichanthelium clandestinum* (hidden, because its fall inflorescence is often nestled among its leaves). They can be recognized by a common growth habit: straight up to a terminal inflorescence in the spring, then branching over the summer with several smaller inflorescences in the fall.

Virginia also has four native species (3 further divided into 2 varieties each) of the genus *Coleataenia* (colea = sheath, taenia = narrow) including the common *Coleataenia aniceps*, Beaked Panic Grass. One of two non-native species of the genus *Urochloa* (uro = tail, chloa = grass) in Virginia, *Urochloa ramosa* (branched), Dixie Signalgrass, was also once considered a Panic grass.

Panic grasses that remain in the genus *Panicum* include Switch Grass, *P. virgatum* (wandlike), and Witch Grass, *P. capillare* (hairlike).

*Panicum* is also recalled in many flowers with paniced inflorescences, like Narrow-leaved Tick-trefoil, *Desmodium paniculatum*. But now you know there’s no need to panic.
Oh, Deer! (What won’t you eat?)

Yes, if the deer are hungry enough, they’ll eat anything. But most mints are too strongly flavored for the average deer palate. Shown here: Monarda fistulosa, Wild Bergamot, at Riverbend Park, showing its credentials as a pollinator magnet while deer browse elsewhere in the same meadow. The same reasoning applies to Pycnanthemum species, and many other mints, both native and non-native.

For more deer-resistant natives, see http://www.plantnovanatives.org/deer---native-plants.html
Photo by Margaret Chatham