



# Friends of Sligo Creek

Newsletter November 2016



*Ellen X. Silverberg photo*

## Contents

Welcome New Board Members!

Sligo Meadow Grows

President's Message

Ash Cutting Progresses

Sligo Seeds Go Ballistic

Need to Reach Us?

## Welcome New Board Members!

Two new members joined the board of the Friends of Sligo Creek this fall, bringing fresh perspectives and energy to our governing body.

Wes Darden became active with FOSC in November of 2015 and has worked primarily with the Outreach Committee to increase public awareness of water quality issues in Sligo Creek. You may also



*New board member Wes Darden*

recognize him from our program meetings, where he has provided invaluable help in bringing, setting up, removing, and storing all of our hospitality supplies.

Wes reports that his involvement with FOSC has enabled him to better understand the impact of development on the environment around us. He is currently finishing a master's degree in environmental management and is excited about becoming more involved in Friends of Sligo Creek.

Melinda Villanueva has worked often with FOSC from her position on the faculty of Washington Adventist University, located in Takoma Park, where she teaches biology and chemistry. Past collaborations have included class field trips led by FOSC members and joint projects on the campus's stormwater management.

"Growing up in Nigeria and Kenya," Melinda writes, "where a 'white Christmas' meant spending the day at the beach, I gained an early appreciation for the beauty and diversity of the natural world. Although my educational career has led me to the world of molecular biology, I have retained this fascination with the flora and fauna around me.

"Whenever possible, I have my students outside looking at the biological laboratory surrounding them. This led me to the Friends of Sligo Creek, and I have been fortunate to draw on their expertise several times.

"Last summer, I received invaluable help from FOSC in setting up a laboratory for my students to sample macroinvertebrates in Sligo Creek. I am honored to serve on the FOSC board, so that I might continue this close association while also giving back to this organization that has added so much to my classes over the past 11 years."



*New board member Melinda Villanueva*

Melinda and Wes join eight other members of the board: Delia Aguilar, Jim Anderson, Sarah Jane Marcus, Dee Clarkin, Sherrell Goggin, Corinne Lackner, Mike Smith, and president Kit Gage.

# New Sligo Meadow Expands

Montgomery Parks widened the new meadow across from Sligo Golf Course in October and planted 375 more seedlings to further the creation of a primarily native plant habitat attractive to butterflies, bees, and other wildlife.

Their contractor, Habitat Enhancers, removed another swath of turf grass and planted herbaceous perennials on October 24. The new plants came from the county's Pope Farm Nursery with coordination by nursery staff member Rochelle Bartolomei.

The seedlings include 24 common milkweed, 45 mountain mint, 30 vervain, 75 grasses (broomsedge, panicgrass, and Indian grass), and 195 from a variety of genera in the Aster Family, according to Parks' Forest Ecologist and Field Botanist Carole Bergmann.



*New meadow across from Sligo Golf Course*

Parks staff member Bob Servis met the contractors on site and helped make sure they avoided the native seedlings put in last May as they planted the new wildflowers and grasses.

Bob also made sure that signs mark the area as "no-mow" and "Meadow Management Project." "All we need to do now," says Carole, "is hope for more rain!!"

Carole notes that, "We all have the goal of keeping the Sligo meadow mainly a volunteer-based project, so I anticipate that in the future we will have FOSC volunteers and Weed Warriors to do any additional plantings. They will also be the



*One of the 375 seedlings added to the meadow in October (Wilpers photos)*

primary ones to do spot removal of non-native invasives (NNIs).

"Now that our new Weed Warrior Volunteer Coordinator, Tenley Wurglitz, is on board, she will be working with Friends of Sligo Creek when the time comes to talk about NNI management or enhancements to the meadow in the spring."

Park managers will bush hog the meadow once a year to prevent woody plants from getting established and to help control NNIs. This heavy-duty mowing will take place between mid-February and mid-March after wildlife have used the area as cover through the winter and before it starts to re-grow in the spring.

Added Carole about FOSC, "Again, thank you so much for all of your support, hard work, and enthusiasm in regards to this project."

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## President's Message: A Burbling Little Creek and Its Amazing People

More than two and a half years into being president of Friends of Sligo Creek, I have a better sense of the creek, of the park, and, especially, of you all. I fell in love with the park in 1984, and I've lived in its vicinity ever since, looking out onto it every day from my windows. I am a lucky dog.

Now I'm asking you to participate more fully in the life of the park: by making a donation to Friends of Sligo Creek, by joining a committee, or by volunteering to do something more for the creek this coming year. Here's a link where you can [donate](#). To indicate



*"Many hands make light work."  
Gloves at our fall 2016 Sweep the Creek*

your interest in a committee, go [here](#). If you'd like to join our list-serv, click [here](#).

I'm so proud that we monitor our park so thoroughly in order to understand it better and improve it more effectively. Our Water Quality Committee measures key aspects of water pollution to track down sewer leaks. Our Water WatchDogs team trains residents to notice and report irregular colors and smells that reveal pipe breaks and illicit dumping. The U.S. Geological Survey constantly tracks significant variables in the creek.

This year, we also reported on the abundance and diversity of 89 native bees in our powerline corridor. And we share our observations of plants and animals in the park through the FOSC Sightings page. Twice a year, we even quantify trash in the park while removing it.

Another thing that pleases me greatly is our recent work to include more sectors of the public in appreciating and improving the Park: From running workshops at local schools, to diversifying our board and establishing a Latino Outreach Committee, and collaboratively producing the first Festival del Rio Anacostia.

Many are the park users who tell me how much they've learned from reading the postings in our kiosks, joining our nature outings, attending our programs, or helping pull invasive plants.

You and I are bound by love to Sligo Creek and the Park, and you and your efforts are amazing. Now please help Friends of Sligo Creek better facilitate your efforts.

Yours for the Park and Creek,

Kit Gage  
President

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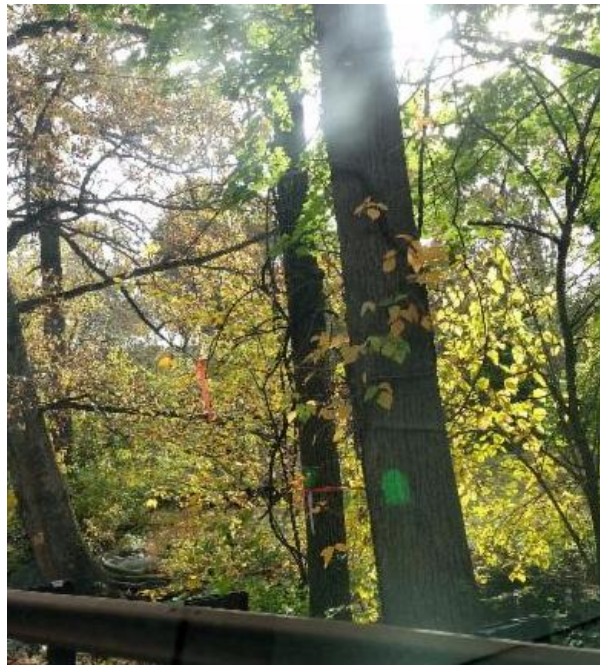
## Cutting of Ash Trees Continues

About a third of the ash trees to be removed from Sligo Creek

Park have now been cut down as part of the Parks Department's aggressive effort to cope with a highly invasive beetle from East Asia that has killed millions of ash trees in the eastern U.S.

Of the 272 ashes identified in Sligo, 89 have been cut down, leaving many large stumps along the trail, around picnic areas, and near playgrounds.

Montgomery Parks is cutting the ashes to prevent them from falling suddenly in publicly used areas; a dead or diseased ash tree can appear externally healthy but fall without notice.



*Ashes marked with green squares at Wayne Ave*



*Five ash tree stumps on the west side of Sligo  
across from the soccer fields (Wilpers photos)*

Crews are proceeding downstream from University Boulevard toward New Hampshire Avenue. After completing that stretch of the Park, they will focus on the area north of University.

Where possible, trunks are being left in place to decay on the forest floor and provide soil nutrients and sites for wildlife. Within woodland interiors, the trees are being left standing to die in place and become "snags," which are valuable habitat for cavity-nesting birds and mammals.

"After this initial wave of removal, there is a possibility we may reassess to check if we missed some trees," reports Parks forester Patrick Harwood.

Although Montgomery County was approved for testing of a parasitic Asian wasp that preys on the beetle, the University of Maryland determined that Sligo did not have a high enough density of ashes for the study to be successful. According to Patrick, Sligo may qualify for a different, subsequent

study of the wasp, in which case it would be released in summer 2017.

The emerald ash borer arrived in the U.S. from East Asia in 2002, reached Maryland a year later, and appeared in Montgomery County in 2012. Millions of ash trees have died from infestation in the Eastern U.S. in the last ten years.

The county will not treat infected trees with insecticide because of the high cost and labor-intensive demands of injecting each tree repeatedly over a two-year span.

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## Sligo Seeds Go Out with a Bang

Witch Hazel is the last of at least thirteen plants in Sligo to release its seeds through a remarkable mechanism known as "ballistic" or "explosive" dispersal. In addition to being the last to do so in each growing season, Witch Hazel also propels its seeds the furthest: up to 40 feet.

Observing the plant's explosive spectacle is difficult to plan, as the fruits expel their seeds only within a narrow range of temperature and humidity. The recent *Flora of Virginia* describes the Witch Hazel fruit as "bursting elastically." Earlier writers called it a "squeezer" fruit because of its propulsion mechanism. This "squeezer" method also evolved in the violets, whose seeds are thrown two to three feet (but then carried by ants into their underground nests).

The unsettling sound of these seeds raining down loudly onto dead leaves gave rise to one theory as to a spooky source of the tree's common name. It most likely came from the use of its branches in traditional "water witching," under the belief that a forked branch carried over the landscape would point to sources of water, minerals, or lost objects.



*Flowers and fruits of witch-hazel (Urban Ecology Center photo)*

Other Sligo natives that eject their seeds are Carolina Cranesbill, Wild Geranium, Orange Jewelweed, Violet Wood-sorrel, Dillen's Wood-sorrel, and our six species of violets. The naturalized Hairy Bittercress and the invasive Chinese Wysteria also use explosive dispersal.

A dramatic Smithsonian video (linked [here](#)) provides a slow-motion view of the exploding fruits of violets and jewelweeds.



*Orange Jewelweed fruit before and after bursting open;  
along Wheaton Branch in fall 2016 (Wilpers photo)*

Jumpseed (also known as Virginia Knotweed) ejects its seeds nine to twelve feet. Cranesbill and Wild Geranium propel their seeds about ten feet. Within the fruits of ballistic plants, internal pressure builds-up in squeezed, twisted, or reflexed tissues that suddenly spring into a new shape, flinging seeds outward. In our wood-sorrels, it is the seed-coat itself that swells and bursts, ejecting the rest of the seed outward.

The world champion of explosive seed is probably the Sandbox Tree of the American tropics, which shoots its seeds up to 100 feet away. Its nickname, Dynamite Tree, tells you what it sounds like if you're nearby when it happens..

Ecologists suspect that most ballistic plants rely on additional dispersal methods to complement their explosive devices, such as movement by birds, mammals, wind, and flowing water.

Sources: W. Matheny, ed., *Seed Dispersal* (1931); L. van der Pijl, *Principles of Dispersion in Higher Plants* (3rd ed 1982); Flora of North America ([efloras.org](http://efloras.org)); N. Stamp and J. Lucas, "Ecological Correlates of Explosive Seed Dispersal," *Oecologia* 1983; "Seed Dispersal," Wikipedia; H. Howe and J. Smallwood, "Ecology of Seed Dispersal," *Ann Rev Ecol Syst* 1982; J. Eastman, *The Book of Forest and Thicket* (1992)

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## Need to Reach Us?

President (Kit Gage): [president@fosc.org](mailto:president@fosc.org)

Invasive Plants (Jim Anderson): [invasives@fosc.org](mailto:invasives@fosc.org)

Litter (Patton Stephens): [litter@fosc.org](mailto:litter@fosc.org)

Advocacy (Bruce Sidwell): [advocacy@fosc.org](mailto:advocacy@fosc.org)

Natural History (Michael Wilpers): [naturalhistory@fosc.org](mailto:naturalhistory@fosc.org)

Stormwater (Elaine Lamirande): [stormwater@fosc.org](mailto:stormwater@fosc.org)

Water Quality (Pat Ratkowski): [waterquality@fosc.org](mailto:waterquality@fosc.org)

Outreach (Sarah Jane Marcus): [outreach@fosc.org](mailto:outreach@fosc.org)

Treasurer (Dee Clarkin; asstnt treasurer Sherrell Goggin): [treasurer@fosc.org](mailto:treasurer@fosc.org)

Newsletter Editor (Michael Wilpers): [editor@fosc.org](mailto:editor@fosc.org)



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*Friends of Sligo Creek is a nonprofit community organization dedicated to protecting, improving, and appreciating the ecological health of Sligo Creek Park and its surrounding watershed.*