



# Friends of Sligo Creek

Newsletter November 2017



*Ellen X. Silverberg photo*

## Contents

WSSC Talk Nov 13

Meadow Gets 200 New Plants

African Youth and FOSC

"Humane Gardener" Author Nov 15

Why Leaves Turn Red

Need to Reach Us?

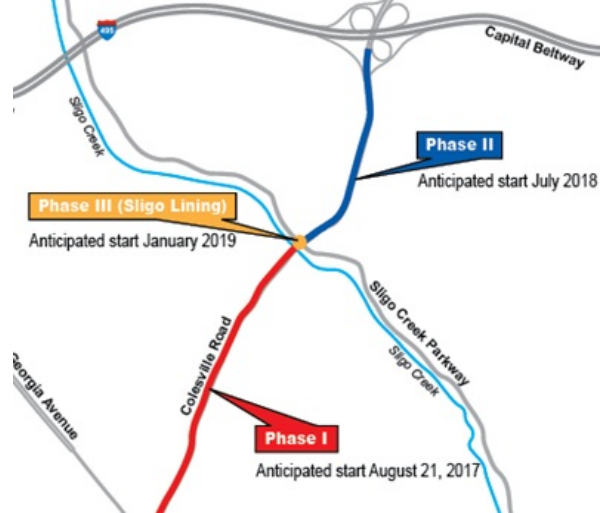
## WSSC Discusses Colesville Water Main and Becca Lilly Pipe on Nov 13

Find out more about the major water main replacement beginning along Colesville Road, as well as recent issues with an exposed sewer pipe at Becca Lilly Neighborhood Park, from three staff members of the Washington

Suburban Sanitary Commission on Monday, November 13, at the Silver Spring Civic Building.

The event begins at 7:30. Come at 7:15 for snacks and socializing.

The two-year project along Colesville Road is scheduled for three phases, beginning this fall between Spring Street and Sligo Creek Parkway. Next summer, work begins between the parkway and the Beltway. Finally, in 2019, construction begins on the lining of sewer pipes along Colesville (the same kind of work WSSC recently completed along Sligo Creek and Long Branch).



Three phases of water main replacement along Colesville Rd (WSSC map)

On hand from WSSC will be Brandon Stewart, customer advocate; Melanie Deggins, project outreach manager; and Jason Brown, who will discuss the exposed pipe at Becca Lilly Playground from his position as section manager (Montgomery County) in the Water/Wastewater Systems Assessment Division.



WSSC crew installing the kind of zinc-coated ductile iron pipe wrapped in protective coating that will go into the Colesville Rd project (WTOP photo)

The two-year project on Colesville will replace almost two miles of 90-year-old iron pipes with zinc-coated, ductile iron pipe wrapped in a protective coating, expected to last at least 100 years.

We will also get an update on the exposed sewer line at Becca Lilly Neighborhood Park (near the confluence of Sligo and Long Branch), which was discovered by Chris Victoria during this fall's Sweep the Creek on September 30 and October 1.

WSSC inspected the site later in October and reported that it had previously been reinforced with a slip liner, which WSSC describes as "more or less another solid pipe within a

pipe." They also noted that it is "not uncommon for WSSC to have exposed sewer in waterways which would be due to the ground conditions along with other connecting sewer lines. We will make sure, however, that the line is reinforced and not a hazard to the environment or the community."

## Sligo Meadow Widened With 200 More Plants

Twenty-five volunteers helped Montgomery Parks plant more than 200 native plant seedlings at the Sligo meadow across from the golf course on November 2.

Everyone's enthusiasm was such that all 209 plants got in the ground in 45 minutes, and the "introductory remarks" from representatives from Parks and Friends of Sligo were postponed until the end.

This latest planting widened the meadow considerably and augmented the nearly 1,000 plants put in during three previous plantings since spring of 2016.



*Sligo meadow is readied for planting on Nov 2. (Sidwell photo)*

The meadow is located just south of the Beltway, between the parkway and the creek, across from the golf course.



*Volunteers hard at work during the Nov 2 planting at the Sligo meadow (Bergmann photo)*

Thanks to Rochelle Bartolomei of Montgomery Parks' Pope Farm Nursery for providing the 209 seedlings, which included 57 purple-top, 57 beaked panic grass, 11 broomsedge, 25 little bluestem, 10 frost aster, 15 wingstem, 26 early goldenrod, and eight swamp milkweed. Thanks also to Tenley Wurglitz at Parks for scheduling the event and helping to recruit volunteers.

Plant ecologist Carole Bergmann of Montgomery Parks explained that the species were chosen "based on the current availability of aggressive pioneer-type meadow species, but the main factor was species that seem to be less preferred by our over-abundant deer, or plants that can stand up to the damage from deer browsing.

"I made these choices after several site visits to the Sligo meadow and other recently planted Parks restoration areas," she continued. "At all of the sites, I found serious browse damage among any plants that are at all attractive to deer, unless the area was caged. And we are not caging the Sligo meadow!"



*Volunteers and Parks staff after the Nov 2 planting at the Sligo meadow (Bergmann photo)*

The meadow will be mown once a year, in late winter, to keep down trees and shrubs and mimic the long-lost effect of large prehistoric grazing mammals (such as mastodons), who maintained meadow-grasslands in our region until shortly after the end of the last Ice Age.

For further information on this project, email [naturalhistory@fosc.org](mailto:naturalhistory@fosc.org).

---

## South African Family Inspired by FOSC



*The Akojee family constructs their "trash trap" based on Friends of Sligo Creek examples.*

In a suburb of Johannesburg, South Africa, a mother with two grade-school children searched the web for ideas on controlling trash in their local stream. Near the top of her search results was a Friends of Sligo Creek page about "litter skimmers" made with readily available materials. She was immediately intrigued, especially with her kids' science fair approaching.

After email exchanges with our president, Corinne Stephens, her grade school children, Khaleel and Hanaan Akojee, built their skimmers and ended up winning the Environmental Management Prize and Silver

Their goal was to stop trash from entering the Jukskei River, which flows northward through the family's suburb of Buccleuch and merges further north with the Crocodile River, part of the Limpopo River watershed.

"I was researching ways to clean up rivers and found a few solutions on the internet," wrote their mother, Umm Hanaan Khaleel. "The one that intrigued me most was from Sligo Creek, which used milk bottles as a litter skimmer." The FOSC page she found was created in 2006 by Ed Murtagh and Debi Veliz [here](#).

"It was time for my kids' science expo and we decided that this would be a great project to benefit the community and the environment. We contacted Sligo Creek and they gave us some tips and mentioned their litter skimmer.

"We started collecting milk bottles and all the materials we required for this project. By June, we had collected enough milk bottles. At my parents' home, my father Ali Bhai Mohomed assisted my kids with the first trap."



*South African family and their award-winning trash trap inspired by  
Friends of Sligo Creek (Umm Hanaan Khaleel photos)*

The expo judges wrote that the student (in grades 2 and 5 of the Qurtuba Islamic Academy) had "tested and proven the effectiveness of their project by implementing it in the real world, with the help of family and friends. 'Juksej Dirt [trash] Catcher' is a pollution reduction solution for waterways, using a floating catchment net (buoyed by re-used water bottles cable-tied into a sturdy plastic fencing material) that catches floating waste in the river, and a pulley system to collect the rubbish and get it packed into bags and sent to be recycled and disposed of properly."

"According to their project write-



Limpopo River watershed. The Jukskei River is a tributary that originates in Johannesburg, near Pretoria. (21stcentech.com)

up on display," the judges continued, "they have already pulled 45 bags of rubbish from the Jukskei River in Buccleuch, during the collections they've made between 29 May and 21 July, just two months."

Eskom Expo for Young Scientists described itself as a "science fair, where students have a chance to show others their projects about their own scientific investigations. At the Expo, students discuss their work with judges, teachers and students from other schools, with parents and with other interested people. By participating at the Expo

students increase their awareness of the wonders of science, add to their knowledge and broaden their scientific horizons. Eskom Expo's mission is to develop young scientists who are able to identify a problem, analyse information, find solutions, and communicate findings effectively."

For further information on this inspiring story, contact Corinne at [president@fosc.org](mailto:president@fosc.org)

---

## Author of "Humane Gardener" Nov 15



Nancy Lawson (humanegardener.com photo)

Did you know that most bees nest underground, not in hives? That baby birds eat caterpillars, not birdseed? That skunks are garden helpers, eating insects who eat plants?

Learn more about these and other aspects of gardening for wildlife when Nancy Lawson discusses her new book, *The Humane Gardener: Nurturing a Backyard Habitat for Wildlife*, at Historic Takoma, on Wednesday, November 15. The talk begins at 7:30 pm.

Historic Takoma is located at 7328 Carroll Avenue, near the Takoma Park Coop.

The event is sponsored by the Takoma Horticultural Club and is open to the public.

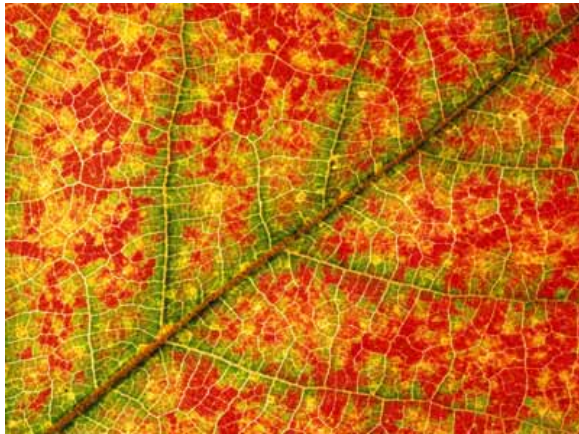
"Traditional landscaping practices," the author writes, "exploit myths about our fellow species and ignore their needs." The book addresses "how to cultivate an ethic of compassion and a wildlife-friendly habitat instead, welcoming nature back to your own backyard."

Nancy Lawson writes the Humane Backyard column for *All Animals* magazine, published by the Humane Society of the United States. She worked for 15 years as an editor for Humane Society publications. The *Washington Post* reviewer wrote that Lawson "has come to see her garden as a place that is no longer territory to be defended against the squirrels, the moles and other invading critters, but a place to be extended to them . . . . The book is . . . at its heart, a plea to rethink our mentality about other species on our patch."

The Takoma Hort Club asks attendees to bring a snack to share, wear a recycled name tag, and ask a friend to join you. The club's annual election and leadership meeting will take place this evening as well. For further information, contact Kit at [advocacy@fossc.org](mailto:advocacy@fossc.org).

---

## Why Do Autumn Leaves Turn Red?



*Some leaves make red pigments in fall as chlorophyll breaks down to reveal yellow pigments. (science.howstuffworks.com)*

When I was in high school in the early '70s, our biology teacher told us that autumn leaf coloration was due to the breakdown of chlorophyll, revealing other pigments that had been previously hidden.

Though a wonderful teacher (with a PhD in chemistry), he was not quite up-to-date on the relevant research. In 1971, biochemists reported that the red color in some fall leaves were due to new pigments actively produced by the plants in autumn. Unlike the yellow

pigments, these red chemicals (anthocyanins) do not exist in the leaves until they are synthesized in the fall.

Since then, numerous theories and experiments have sought to crack the mystery of what possible advantage plants might gain from devoting precious energy and nutrients to this task just before dropping their leaves.



Two camps emerged in an often acrimonious debate. One perspective emphasizes the physical benefits to plants, including the anti-oxidant qualities of anthocyanin and its apparent ability to prevent ultraviolet radiation from slowing the movement of sugars from leaves to stems. These scientists have found that yellow leaves contain much more nitrogen upon falling than red leaves, indicating that many nutrients did not get moved into stems for storage in time.

Another line of thinking looks at the way red coloration seems to deter insects from laying their over-wintering eggs on stems, thus limiting damage to young leaves when their hungry larvae emerge in spring.

Toward this second end, scientists in Britain have experimented with aphids,



*Eggs of woolly alder aphids on silver maple, whose leaves turn yellow in fall. The larvae emerge in spring and feed on young leaves. (riveredgenaturecenter.org)*

In Japan, scientists have shown that aphids colonize maples with yellow fall leaves much more heavily than red-leaved species.



*Red leaf color in fall (like this red maple) deters insects from laying eggs and enhances nutrient transfer to stems. (Wilpers photo)*

which spend the spring and summer on grasses and wildflowers but migrate to trees and shrubs in fall to lay their eggs.

These biologists offered fall leaves from 113 species of woody plants to aphids of 56 kinds and compared their attraction to various colors. In their 2009 paper, wonderfully titled "Autumn leaves seen through herbivore eyes," Doring, Archetti, and Hardie showed that red leaves attracted many fewer aphids than did yellow leaves.

The scientists also determined that aphids, despite lacking a photo-receptor for red, are nevertheless able to distinguish the color by combining spectral information for green and blue.

Sligo species with red fall foliage include red maple, dogwood, sumacs, Virginia creeper, black gum, poison ivy, sassafras, and scarlet oak. The yellow in Sligo fall is mostly tulip-tree, with the additional yellow of elm, hickories, walnut, Norway maple, catalpa, and spicebush, among others.

For more information,  
email [naturalhistory@fosc.org](mailto:naturalhistory@fosc.org).

-- M. Wilpers, Natural History  
Committee/Newsletter Editor



*Leaves of black gum (left) and mockernut hickory in Kensington (Wilpers photos)*

This article based on journal publications by J. E. Sanger, M. Archetti, T. Doring, S. Brown, and W.D. Hamilton (among others) and on D. Lee, *Nature's Fabric: Leaves in Science and Culture* (U. Chicago Press 2017).

---

## Need to Reach Us?

President (Corinne Stephens): [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 (Kit Gage): [advocacy@fosc.org](mailto:advocacy@fosc.org)

Natural History (Bruce Sidwell): [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)

Webmaster (Sherrell Goggin): [webmaster@fosc.org](mailto:webmaster@fosc.org)

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



Find us on Facebook!



*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.*