



Friends of Sligo Creek

Newsletter March 2017



Ellen X. Silverberg photo

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Bee Expert Sam Droege Speaks at "Inspiration Works" March 21

Native bee biologist Sam Droege, of the Patuxent Wildlife Research Center, is the featured speaker at

our annual "Inspiration Works" open house event on Tuesday March 21, starting at 7:30 pm at the Dennis Avenue Recreation Building.

As always, the evening will include displays by the FOSC committees where you can get the latest news about our efforts in the areas of invasive plants, stormwater, natural history, water quality, and advocacy.

Enjoy sandwich wraps and take advantage of the opportunity to meet or reconnect with other Sligo residents who care about the ecological health of the watershed.

Sam's talk is titled "Bees of the Burbs: The Many Native Bees that



This sweat bee was the most abundant native species in our Pepco meadow in 2013-14.



Sam Droege of the Patuxent Wildlife Research Center

Live in Your Yard and the Suburban Wildlands We Keep Around." He'll provide an overview of our two native bee surveys of 2013 and 2014, which documented 90 species in Sligo's Pepco meadow and which his lab helped complete.

A Hyattsville native, Sam has pioneered an inventory and monitoring program for native bees along with online identification guides for North American species.

For more information about this event, email outreach@fosc.org.

Search for Frogs and Salamanders March 25

Hunt for frogs and salamanders with Sligo's resident expert herpetologist, George Middendorf, at our next

nature outing on Saturday, March 25, from 9 to 11 am.

Registration is limited to twenty people. You can register at this link [here](#). You'll be notified as to whether you're among the first twenty.

The group will gather at the southwest corner of the parking lot at Kemp Mill shopping center (near the path leading to the paved hiker-biker trail) and walk from there to the nearby stormwater ponds.

After studying the banks of those ponds, which often host American Toads in early spring, the group will head by car caravan to Dale Neighborhood Park. At the northern end of that area, Montgomery Parks has constructed a new wetland utilizing stormwater runoff. It's located at the second parking area upstream of Piney Branch Road.

Outing leader George Middendorf is a Sligo resident and professor of biology at Howard University where his research focuses on reptile and amphibian behavior, ecology, and evolution.

The outing will go ahead in a light drizzle but will be cancelled in case of heavy rain. For more information, contact waterquality@fosc.org.



Green Frog photographed in Sligo by Julie Mangin in May 2016

Next Water WatchDogs Event Apr 2

Your last chance this school year to get expert orientation to our Water WatchDogs pollution reporting system takes place on Sunday, April 2.

This session focuses on the stretch of Sligo Creek between Colesville Road and Forest Glen Road. It begins at 8:30 am at the home of Ross Campbell, 728 Guilford Court (near Brunett Avenue). Come at 8 to socialize.

Water quality expert Lori Lilly will teach you easy ways to identify different kinds of water pollution. You'll then learn how to use a simple email reporting system to reach key county staff who enforce the federal Clean Water Act in the county's Department of Environmental Protection. Leading this second portion of the orientation are Anne Vorce and Kathleen Samiy, Water WatchDog co-founders.

Please register before 5 pm on Saturday, April 1, by emailing avorce@aol.com.

This event is made possible by the Water WatchDog program of the Friends of Sligo Creek through a grant from the Chesapeake Bay Trust, funded through the water quality protection program of Montgomery County's Department of Environmental Protection.



Lori Lilly leads water quality outing in Sligo.

Large Turnout for Winter Tree Outing

A great crowd of 32 nature lovers turned out February 5 for our first outing on winter plant identification in ten years.

Emily Ferguson (of the National Park Service and US Department of Agriculture) balanced big picture and details, fielding a variety of comments and questions, and working in fun mnemonics and humor along the way.

During the walk, which meandered along the Sligo Creek path between Colesville Road and the Beltway, Ms. Ferguson even deployed a peanut butter-and-jelly reference to help the attendees learn to identify trees and shrubs during this blossom-less, leaf-less season.

Trees we met along the way included the tulip-tree (sometimes called tulip-



Outing leader Emily Ferguson (in blue) gives tips on identifying an American elm. (Ratkowski photo)

poplar), which grows tall and straight and announces its presence during winter with obvious dried flower remnants, pointing upwards, that remain on its high branches all winter.

We also learned to use opposite- or alternating-branch structures to narrow down possible woody plant suspects, how black cherry bark changes with age, how to tell white pine (5 needles) from Virginia pine (2 needles), and the many virtues of the spicebush smell test. And the reference to PBJ? When you look side-on at the soft bark of the American elm, you can make out thin layers of alternating dark and light, not unlike America's favorite lunch sandwich.

To learn more about identifying our trees in winter, see the *Peterson Field Guide to Eastern Trees* (which has excellent illustrations of twigs, buds, and needles), the *Sibley Guide to Trees* (which covers all those and bark), or Michel Wojtech's *Bark: A Field Guide to Trees of the Northeast*. Spring is just around the corner, but there's still time to head out and see your favorite trees

and shrubs in their winter gear.

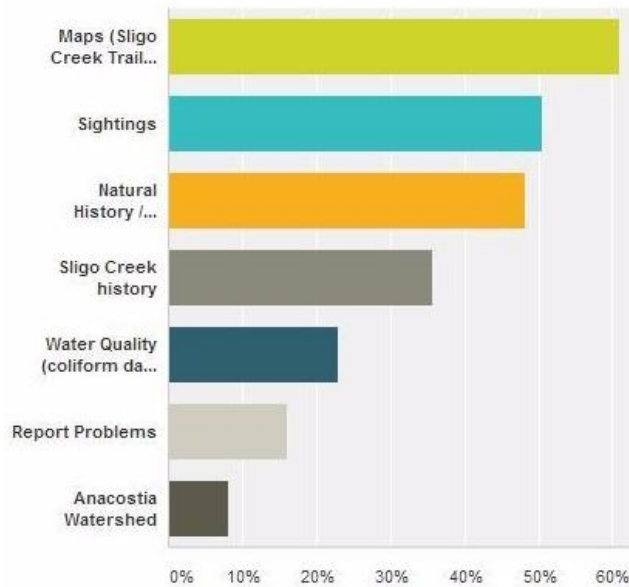
-- Pat Ratkowski

"Sweep the Creek" is April 22-23

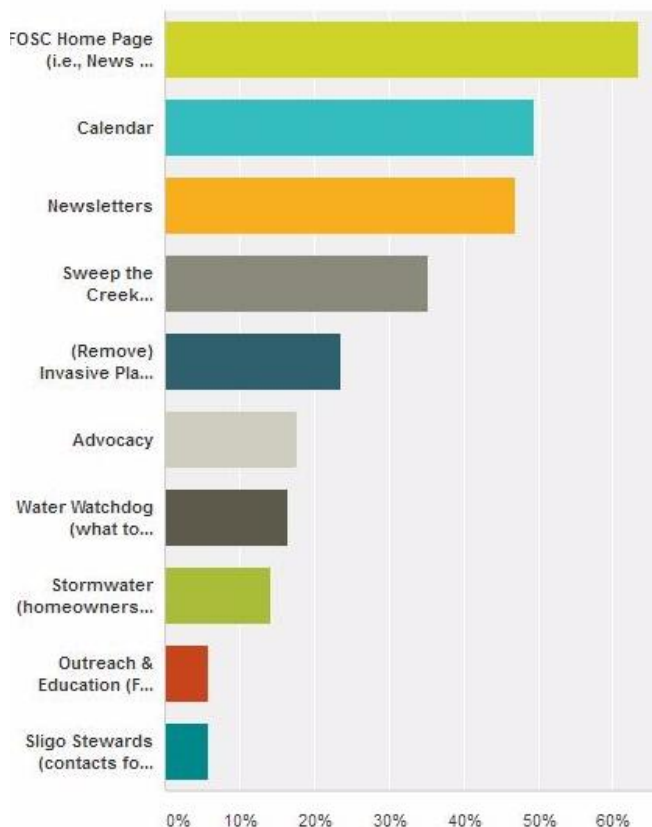
Save the dates: This year's spring "Sweep the Creek" is the weekend of April 22-23. As usual, our website will have the details as to which sections of the creek are hosting the clean-up on Saturday and which on Sunday. The April newsletter will contain more information as well.

So check back as April approaches at fosc.org.

Survey Shows Popularity of Website Resources



Above: Sections that visitors use for info on the Park



Sections that visitors use for information about FOSC

streamlined organization to make it easier to navigate, as well as having easier-to-browse photo galleries.

A total of 92 people completed the survey, which represents nearly a third of 350+ "opens" we get on average for the monthly newsletter.

The first-ever survey of our website users revealed that our rich variety of maps is the most common destination for people seeking information about the Sligo Creek Park and watershed, attracting over 60 percent of website users. See that page here: [maps](#).

Close behind these maps are the Sightings page (where residents post their observations of animals and plants in Sligo, see [sightings](#)) and our natural history resources (see [natural history](#)). Both attract about 50 percent of website users.

When visitors want information about the Friends of Sligo Creek, the most common destination is our home page, with its news and announcements, attracting 63 percent of users. Second and third, at just under 50 percent of visitors, are the calendar feature and our monthly newsletters.

Among the write-in suggestions we received on how to improve the website, we heard that people would like it to have a more

Most website users (70 percent) visit the site less than once a month, while 20 percent go there "a few times a month" and just under ten percent consult the site weekly or a few times a week.

Thanks to our new webmaster, Sherrell Goggin, for drafting the survey, circulating it for edits, getting it out, and compiling the results. What we've learned will help in the design of the new website using one of the more recently developed website content management systems.

"All That Glitters in Sligo Is Not . . .



Freshly broken Sligo rock shows its salt-and-pepper appearance caused by muscovite and biotite crystals.

. . . Fool's Gold" (pyrite) but another kind of crystal that has long tempted treasure seekers into thinking they've struck gold.

That crystal is mica, a class of minerals that sparkle because of their flat, sheet-like structure and high amounts of aluminum and silicon. Two kinds of mica are abundant in the rocks and soils of Sligo: muscovite ("white mica") and biotite ("black mica").

These micas are not readily visible on the surfaces of most rocks in Sligo Creek Park, which are too darkened by weathering or obscured by moss or lichens to show the twinkling micas.

However, they can often be seen glittering in disturbed soil and in sandy deposits left along the trail or creek banks during heavy storms.

You can also see micas sparkling in the capstones of three stone walls on Carroll Avenue, day and night (under sunlight or street lamps): one of these walls is in downtown Takoma Park, between Middle East Cuisine and Takoma Bicycle; the other two are on both sides of Carroll between the creek and Flower Avenue.

The rocks in these walls are granites, an igneous rock (formed directly from magma), which are not native to Sligo but were probably quarried to the west and northwest. Sligo's rocks are all metamorphic: sedimentary rock transformed by the intense pressure and high temperatures of mountain building.

Muscovite, the more abundant of Sligo's two micas, got its name from the windows of 16th-century Moscow churches, when mica provided a cheap alternative to glass. Black mica's formal name is biotite, after the early 19th-century French geologist Biot, who studied mica's optical properties.

Black mica breaks down into its constituent minerals much more quickly than white mica, but both of them release potassium and other important nutrients for plants, fungi, and microorganisms. Other nutrients in micas are sodium, calcium, iron, magnesium, silicon, and manganese, all of which join the organic molecules of decaying plants to form our soil.

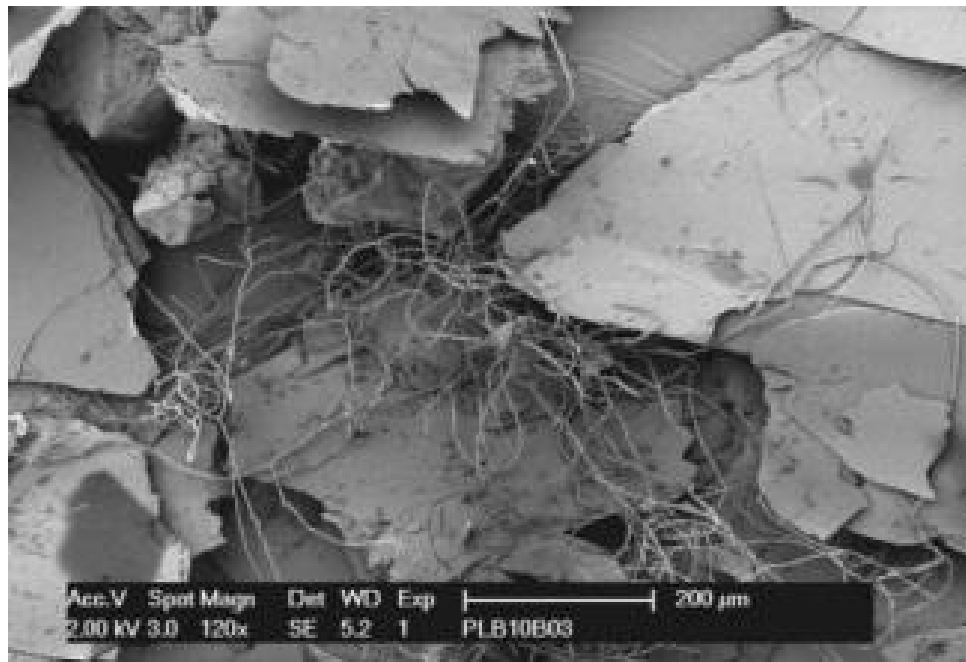
Corrosive acids seep into our micaceous rocks from rainfall and are also exuded into rocks and soil by the root-like appendages (hyphae) of fungi. These hyphae are often connected directly to plant roots or to the algae that partner with fungi to make up lichens.

These types of minerals in Sligo's rocks, and the size of the crystal grains, indicate that Sligo's rocks originated as a medium grade sandstone that cooled slowly enough from the high pressure and temperature of metamorphism for visible crystals to grow, but not slowly enough for very large crystals to form.

Many thanks to geologist Joe Marx for answering questions about stone walls along Carroll Avenue. For more information on the geology of Sligo, see this [photo-essay](#) on an outing led by local geologist Janet Douglas. For great detail on the weathering of micas into soil, see this 1929 online [article](#) from the USDA.



Black and white micas sparkle in a stone wall on Carroll Ave between the creek and Flower Ave.



*Tiny root-like strands (hyphae) of fungi infiltrate biotite crystals.
Each hypha averages 5 microns (0.005 mm) in diameter.
Total width of this image is about 1 mm. (Lund Univ)*

Need to Reach Us?

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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.