



# Friends of Sligo Creek

Newsletter April 2016



*Ellen X. Silverberg photo*

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## Next "Sweep the Creek" is April 23-24

This spring's Sweep the Creek will be held on Saturday, April 23, from 9 to 11 am and Sunday, April 24, from 1 to 3 pm. Please click this link [here](#) to view the meeting sites for each participating section.

Most sections of the park will be cleaned up on Saturday, April 23, from 9 to 11 am, including sections 2, 3, 5, 6, 7, 8, 10 Lower, 10 Middle, 12, and Long Branch Village. On Sunday, April 24, 1-3 pm, we'll clean sections sections 1, 4, and 9.

We welcome individuals, groups, families, and students; students can receive service-learning credit for their work (we provide the forms and signatures). We also provide gloves, bags,

water, cleaning wipes, sign-up sheets, and guidance on what help is most needed in each section (some sections may also request help with removing invasive plants). All you need to bring is your community spirit -- and a willingness to get a little wet and dirty!

There is no need to sign up ahead of time, but if you will be bringing a group or have questions, it is best to contact the Sweep Coordinator in advance.

We look forward to sharing the honor of stewardship with you during this spring's Sweep the Creek, and thank you in advance for your partnership in this



wonderful event.

This spring's event is part of the fourteenth consecutive year for Sweep the Creek, which began in September 2002.

For any questions, email Patton Stephens at [litter@fosc.org](mailto:litter@fosc.org).



*Family admires trash haul during last fall's Sweep in the Kemp Mill area.*

## Look for Spring Birds on May 1



Join local birder Mary Singer to look for Sligo's spring birds on Saturday, May 1, from 8 to 10 am. Meet in the parking lot near the intersection of the Parkway and Dallas Avenue.

The outing is designed for all ages, though children should be accompanied by an adult. Please bring your own binoculars. It will go forward in a sprinkle but will be cancelled in the case of heavy rain.

Mary and the group will be on special lookout for Yellow-crowned Night-heron, Barn Swallow, Chimney Swift, Wood Thrush, Blue-gray Gnatcatcher, Yellow-rumped Warbler, Black-throated Blue Warbler, Northern Parula, Louisiana Waterthrush, Eastern Towhee, Baltimore Oriole, Scarlet Tanager, Wood Duck, Eastern Phoebe, Carolina Wren, and Red-winged Blackbird.



*Experienced and novice birders attended our outing last fall.*

Mary Singer has lived in the Sligo watershed for ten years and is a member of the Maryland Ornithological Society. She started birding in the South and has since taken birding trips to the West Coast, Africa, and Central and South America.

For further information, contact outing organizer Ross Campbell at [mwyllie10@comcast.net](mailto:mwyllie10@comcast.net).

## **Learn About County Response to Emerald Ash Borer on May 10**

Find out how the Emerald Ash Borer is affecting Sligo -- and what county and state managers are doing to cope with it -- when Montgomery Parks horticulturalist Patrick Harwood speaks at the Silver Spring Civic Building on Tuesday, May 10, at 7:30 pm. Come early to socialize and enjoy snacks.

Patrick will provide a natural history of the Emerald Ash Borer (EAB), its arrival and spread in the U.S, and its devastating effect on ash trees in North America. He'll provide an overview of Montgomery Parks'

response to the EAB infestation and explain how citizens can help.

Patrick is heading up the county's response to EAB in county parkland. He has worked in the arboriculture industry for over 15 years, seven of those with Montgomery Parks. Patrick is a board-certified master arborist with the International Society of Arboriculture as well as state-certified as a Professional Horticulturist in Maryland.

Ash trees in Sligo will start falling soon when Montgomery Parks cuts trees near playgrounds, picnic areas, the hiker-biker trail, and the parkway. Most of the cutting so far has focused on Rock Creek Park, where ash trees occur in much higher density than in Sligo, according to Parks forest ecologist Carole Bergmann. Parks removed 80 ash trees from county land in 2015 and expects to cut 3,000 more this year.



*Patrick Harwood at site of ash tree cutting in Rock Creek Park (Bill O'Leary/Wash. Post photo)*

The non-native Emerald Ash Borer, a beetle from East Asia, has killed tens of millions of ash trees in the upper Midwest and Northeast U.S. and is now making its way through our parkland. The Maryland Department of Natural Resources recently approved release of this beetle's natural predator in East Asia (a parasitoid wasp) within the county this spring.

The state-run release of an East Asian parasitoid wasp that preys on this beetle will be run by a team from the University of Maryland. They have control over where and when the releases will be conducted. Montgomery Parks will post information on the its website as they learn more about the university's plan.



*Typical D-shaped exit hole left by adults of the Emerald Ash Borer when they emerge from ash trees.(Photo courtesy of Montgomery Parks)*

## **FOSC President Receives County Stormwater Honor**

Kit Gage, president of Friends of Sligo Creek, received official recognition for her many years of varied contributions to stormwater awareness and management from Montgomery County on March 5 during the county's annual "H2O Summit."

She was honored by Lisa Feldt, executive director of the county's Department of Environmental Protection (DEP) ,at the Rockville Senior Center.

Kit was joined at the event by her family and leaders of Friends of Sligo Creek as she received the "H2O Summit Community Volunteer Stream Advocate Award."

Kit is the second winner from Sligo, preceded by Ed Murtagh, who won the initial prize in 2012. Other winners have come from the Seneca Creek, Rock Creek, and Muddy Branch watersheds, along with lifetime awards for Keith Van Ness of DEP and Doug Redmond of Montgomery Parks.





*Kit Gage (with granddaughter) is surrounded by (from left) Pat Ratkowski (FOSC Water Quality Committee), Lisa Feldt (DEP), Corinne Stephens (FOSC board), and Ed Murtagh (FOSC Stormwater Committee). (DEP photo)*

In her presentation of the award, DEP director Lisa Feldt lauded Kit as an "outspoken environmental leader with outstanding accomplishments in community engagement and coordination and encouraging local stewardship to improve water quality. Kit's 'get it done' attitude has inspired many people both inside and outside the boundaries of the Sligo Creek watershed."

Lisa specifically noted Kit's work as community liaison for DEP green streets projects in Sligo Park Hills, Breewood Manor, and Forest Glen.

"She was one of the first green landscapers certified through the green business certification program and has worked closely with the Latino community over the years providing training for CASA workers on green practices."

In addition, Lisa noted Kit's work in watershed restoration with the Washington Suburban Sanitary Commission; the National Capital Watershed Stewards Academy; advice, designs and guidance on projects funded through the County's watershed restoration and outreach grants; and an effort to turn the St. Camillus Church landscaping into a showcase for RainScapes

"When it comes to fighting for the Sligo Creek watershed," Lisa concluded, "Kit just never says no, regardless of what else she has going on."

Congratulations, Kit!

## Open House Draws Public & Officials

At least 65 people turned out for our annual "Inspiration Works" open house on March 22, to hear talks, meet neighbors, enjoy sandwiches, learn about our activities, and hear about the county's upcoming stormwater management projects.

Our featured speaker was Pam Rowe of the Montgomery County Department of Environmental Protection who discussed recent and upcoming stormwater management projects and opportunities.

Most of those who filled out the sign-up sheet heard about the event from neighborhood listservs. Others cited our flyers and kiosk postings.

In attendance were county councilman Tom Hucker, who offered to help us in any way he can, and director of Montgomery Parks Mike Riley, who expressed his love of working at Parks headquarters in Sligo and biking along the creek. Two visitors asked president Kit Gage how they can join one of our committees.



*Pam Rowe of the county's Department of Environmental Protection takes questions from attendees at our annual open-house. (Ed Murtagh photo)*

## **Sligo Middle School Nominated for National Green Award**

Sligo Middle School has been nominated by the Maryland State Department of Education (MSDE) for the National Green Ribbon Schools Award.

Sponsored by the U.S. Department of Education, the award recognizes schools that save energy, reduce costs, feature environmentally sustainable learning spaces, protect health, foster wellness, and offer environmental education to boost academic achievement and community engagement.

"This nomination is an acknowledgment of the tireless efforts that our students, staff and parents have put into ensuring Sligo is a school that is making an impact on the future of our community," said Sligo Middle School Principal Cary Dimmick.

Through the School Energy and Recycling Team, students implement energy conservation practices and lead recycling efforts throughout the school. Through its environmental literacy curriculum, the school connects students to the Sligo Creek watershed and maintains an outdoor classroom with gardens.

The other 2016 Green Ribbon School nominee is Broadneck High School (Anne Arundel County Public Schools).

The Green Ribbon School winners will be announced by U.S. Education Secretary John King on Earth Day, April 22.

(adapted from <http://www.mymcmedia.org/sligo-middle-school-nominated-for-national-green-ribbon-school-award/>)

## Second Water Quality Workshop Focuses on Maple-Piney Branch Area

An enthusiastic group turned out for the Water WatchDog program's second pollution ID and reporting workshop on March 5 at the home of FOSSC President Kit Gage.

Among the group were local residents, a return participant who wanted to learn more, local Weed Warriors, and the Anacostia Riverkeeper, Emily Franc.

This workshop focused on the creek and its tributaries between Piney Branch Road and Maple Avenue, although the lessons can be applied anywhere.

During the indoor portion, water quality specialist Lori Lilly showed slides of pollution types that can appear in Sligo, along with photos of pollution on streets that ends up in the Creek through our storm drain system.



*Lori Lilly explains water pollution ID at the stormwater outfall pipes near Maple Avenue.*

Water WatchDog co-founders Anne Vorce and Kathleen Samiy then explained the email system for reporting pollution: If you spot an odd color or smell in the creek water, send an email and photo to [ReportSligoPollution@fosc.org](mailto:ReportSligoPollution@fosc.org). Your report will be relayed to staff with the county Department of Environmental Protection (DEP), who will then investigate.

Anne and Kathleen emphasized the additional value of reporting pollution before it goes into the stream, such as leaking dumpsters or uncovered dirt piles on construction sites that can send smothering silt and sediment into the creek via storm drains



Workshop participants then headed outdoors to the large outfall pipes located just downstream from Maple Avenue that drain more than 500 acres into the short Brashears Run and thence to Sligo. Studies have shown toxic substances often enter the creek from these pipes, though the sources have yet to be found.

The workshop group had a chance to report pollution in real time when they spotted a bluish-green substance in the creek. They made Water Watchdog email reports to alert DEP and the FOSC community. DEP later discovered that Holy Cross Hospital had used too much of an EPA-approved dye during a test of its storm water system. The hospital has since changed its practices.



*Kit Gage (right) leads workshop participants near the Park Valley Road Bridge.  
(K. Samiy photos)*

The next pollution ID and reporting workshop will take place near the headwaters of Sligo Creek, on Sunday, May 22. These workshops are made possible through a grant to the Friends of Sligo Creek from the Chesapeake Bay Trust, through the Montgomery County Department of Environmental Protection's Water Quality Charge Program.

For more information on Water WatchDogs and the May 22 workshop, contact Anne Vorce at [avorce@aol.com](mailto:avorce@aol.com).

## Silver Spring Lab Tracks Pollen Patterns

As a fine green powder accumulates on windshields, window sills, and porches again this spring, we can thank a local U.S. Army allergy lab for giving us long-term data on the pollen released by trees in the Sligo area. It's also the perfect time to contemplate some surprising

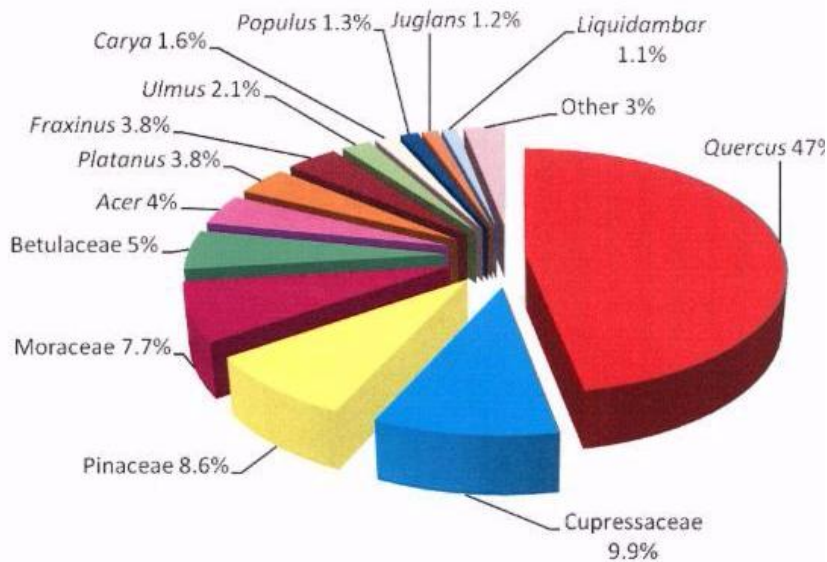
reasons this pollination method evolved.

Two long-term studies led by Susan Kosisky (over five- and ten-year periods) show that nearly half of all airborne pollen grains near Sligo come from oak species. Another twenty-five percent are released by pines, mulberries, and junipers. No other type of tree accounts for more than five percent.

All of our trees release pollen over an extended period, from a two-month span for ashes to a five-month period for alders and red-cedars, but most of any tree's pollen is released within a two-week window of peak release. A single male flower will release pollen for just two or three days, and only when the humidity is low.



Male flowers and pollen on fallen twig of Northern Red Oak (learn2grow.com photo)



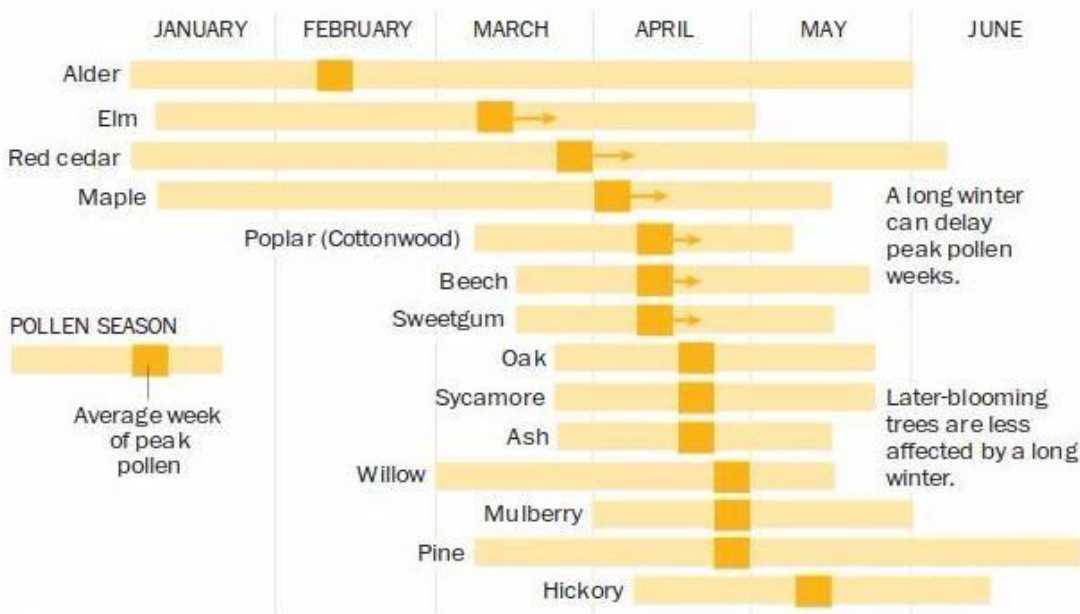
Average annual source of pollen grains collected in Silver Spring

red = oaks, blue = junipers, yellow = pines, purple = mulberry  
(Image from *Annals of Allergy, Asthma & Immunology*)

One might expect evolution to favor the more precise methods of animal pollination carried out by insects, hummingbirds, and bats. Wind pollination seems primitive and wasteful in comparison, as vast quantities of pollen fall to earth without fertilizing female flowers

Amazingly, wind pollination actually evolved later than insect pollination in flowering plants. (The more ancient conifers, which lack flowers, are all wind pollinated.) The most primitive flowers in the world are pollinated by beetles not wind. Sligo's most ancient tree lineages, the Magnolia family (Tuliptree) and Rose family (Black Cherry), are insect pollinated. Recent molecular studies have shown that insect-pollinated trees evolved toward wind pollination many times, including three instances just among the oaks.

How could this happen? Plant seeds from insect-pollinated species disperse over long distances, so they might find themselves growing in habitats far from their animal pollinators. Or pollinating insects can disappear through disease, predation, competition, or a shift in climate. In either situation, selection will favor an alternative method to achieve pollination.



*Months of pollen release for common trees in Sligo 1998-2007. Bars begin when at least one percent of total yearly pollen grains were collected per day and end after 99 percent was counted. (S. Kosisky graph from Wash Post)*

It's been long-noticed that wind pollination becomes more common as you travel further from the equator. In tropical climates, foliage is evergreen and blocks breezes, and trees of any one species tend to be distantly scattered, making wind pollination impractical. Meanwhile, flying insects are active year-round for pollination purposes.

Temperate climates like ours are more conducive to wind pollination because individual trees of any species are not isolated but rather clumped together. At the time, the leafless condition of early spring makes wind more effective. Finally, dramatically different seasons provide reliable cues, in light and temperature, for plants to coordinate the release of pollen and the receptivity of female flowers.

So, next time you find yourself brushing away the conspicuous green powders of spring (or suffering from its allergic effects), consider the long road of evolution that brought about this remarkable phenomenon.



More information on wind pollination among our native trees can be found in articles by Susan E. Kosisky et al. in *Annals of Allergy, Asthma and Immunology*, volume 104 (2010): 223-235; and volume 78 (1997): 381-392; P. J. Regal in *Annual Review of Ecological Systematics* 13 (1982): 497-524; W. Sharp and H Chisman in *Ecology* 42/2 (1961): 365-372; and T. Culley et al. in *Trends in Ecology and Evolution* 17/8 (2002): 361-369.

## 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.*