

Friends of Sligo Creek

Newsletter January 2016



Ellen X. Silverberg photo

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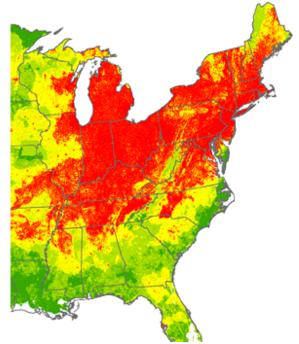
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County Reports First Damage to Sligo Trees by Emerald Ash Borer

Two of Sligo's most common tree species began showing damage from a highly destructive non-native beetle during 2015, according to a media release from Montgomery Parks. The Emerald Ash Borer, a beetle native to East Asia, attacks only ash trees and kills them within five years.

Ashes constitute twenty percent of all trees in county parks. Two species -- White Ash and Green Ash -- were found to be "fairly common" in Sligo in the 2003 survey of our native plants. 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.

Last year, for the first time, ash trees were found with damage from the beetle in Sligo and Rock Creek Parks, South



Detail of 2013 USDA Forest Service map showing risk of span.

damage from Emerald Ash Borer. Red is

"high" and yellow is "moderate."

Paras

Germantown Recreational Park, and Rosemary Hills-Lyttonsville Park.

"The Emerald Ash Borer is an extremely destructive bug and we are expecting large quantities of standing dead trees in Montgomery Parks," noted Colter Burkes, urban forester with Montgomery Parks.

The county's management plan (due out in March) will include continued monitoring, cutting of damaged limbs and trees in public-use areas, and planting other species as replacement trees. Use of bio-controls may be undertaken by the state.

Away from playgrounds and paved trails, infested ash trees will be allowed to die in place, becoming "snags" where birds can excavate cavities for nesting and roosting, among other wildlife uses. 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

Parasites of the beetle (wasps from East Asia) may be released in county parks if they are among the sites selected

this spring by the Maryland Department of Agriculture. Four species of wasp have been approved by the USDA for this purpose. County foresters are pushing for our parks to be included among those areas approved for release, which is also working with the University of Maryland on raising a supply of the wasps.



Emerald Ash Borer (photo from Montgomery Parks website)

The county will schedule public meetings later this spring for residents to learn more about their plans to manage dead and dying trees and about the prospects for biological control by the state.

For more information, see this Montgomery Parks webpage.

Sligo's Ed Murtagh Wins White House GreenGov Award

Ed Murtagh, Sligo resident and longtime advocate for stormwater management in the watershed, was named one of eight winners of the 2015 President's GreenGov Award, selected from federal units nationwide. Ed was chosen in the category of Sustainability Hero.

A White House press release noted that, "as the sustainable operations manager at the U.S Department of Agriculture's headquarters in Washington, D.C., Ed has created Green Teams, engaged senior leadership, developed outreach and education programs, and promoted an overall culture of sustainability throughout the agency.

"In addition, his efforts have resulted in the reduction of use of electricity, water, and steam; higher rates of waste diversion; greener infrastructure; increased use of environmentally preferable products; and meeting many sustainability goals, including achieving an Energy Star score of 99 at USDA's headquarters building."

In announcing individual and team winners in seven categories, the White House noted that these "honorees exemplify our federal workforce's commitment to meeting the President's directive to create a clean energy economy that will increase our Nation's prosperity, promote energy security, protect the interests of taxpayers, combat climate change, and safeguard the health of our environment."

Other winners of this year's awards were federal units in New Mexico, Oregon, Florida, Ohio, Tennessee, and Massachusetts.



Ed Murtagh (photo from mygreenmontgomery.org)

"Along with the amazing work Ed has done to green the USDA, he is also a green leader in the community," noted Jessica Jones of the Montgomery County Department of Environmental Protection. "He is a GreenWheaton founding member and current President who has lived in Wheaton for 20 years. He is also a member of the Friends of Sligo Creek and the Neighbors of Northwest Branch through which he encourages homeowners to manage their onsite stormwater management."

Adds FOSC President Kit Gage, "Ed is one of the most committed, consistent, and least ego-driven activists I've ever known. He's a gem with a wry wit."

Anacostia Watershed Committee Comes to Sligo

Members of watershed groups from across the Anacostia gather in Sligo next week when the Anacostia Watershed Citizens Advisory Committee (AWCAC) meets at the new Silver Spring Library on Tuesday, January 12.

The meeting begins at 7:15, preceded by refreshments and socializing. The library is located at 900 Wayne Avenue, at the intersection with Fenton St.

Speakers at the meeting include Tiaa Rutherford from the Prince George's County Department of the Environment, will talk about the county's new trash reduction program called "Adopt-a-Stream," and Tom Tayler of Beaverdam Creek

Watershed Watch Group and Trey Sherard of Anacostia RiverKeeper, who will discuss multi-lingual outreach efforts.

Phillip Musegaas of Potomac Riverkeeper and Trey Sherard will also discuss the challenges of working with Remedial Investigation/Feasibility Studies (RI/FS), which apply to major environmental projects and cleanup sites. Sligo's own Mike Smith will talk about his proposal to create a mascot for the watershed to appear at educational and public events.

AWCAC includes members from the watershed groups of Sligo Creek, Northwest Branch, Still Creek, Briers Mill Run, Quincy Manor Run, Indian Creek, Beaverdam Creek, Lower Beaverdam Creek, and Dueling Creek, as well as the Anacostia Watershed Society. The Committee's chair is Doug Stephens, husband of FOSC board member Corinne Stephens.

For more information, contact Aubin Maynard of the Council of Governments at his email address.



Trey Sherard of Anacostia Riverkeeper (from the organization's website)

Where Do Our Native Insects Go in Winter?

Underground. In leaf-litter. Behind tree bark. Lashed to branches. Mostly as the next generation, in the form of eggs, caterpillars, cocoons, chrysalids, and nymphs.

For almost all of them, only one stage is adapted to survive winter's cold, and it varies from species to species as to which stage can survive freezing temperatures.

In the creek waters of Sligo, our semi-aquatic insects remain active all winter long in their free-swimming immature nymph stage, including caddisflies and mayflies. In our stormwater ponds, nymph dragonflies and damselflies are still swimming and feeding this time of year.

Trees are a popular refuge for many wintering insects. Buds and twigs host a multitude of tiny moth and butterfly eggs, strategically laid in good position for the emerging caterpillars to eat fresh leaves (or even the buds themselves) come spring.

Tree branches and bark serve as anchors for the cocoons of hundreds of moth species. And the comparable chrysalis stage for some of Sligo's most abundant butterflies are also lashed by silk strands to our trees. Tuliptrees are a favorite locale for the chrysalids of Eastern Tiger Swallowtail. Black Locust trees host chrysalids of our abundant Gray Hairstreak, Eastern Tailed-Blue, and Orange Sulphur. The same Black Locusts are the winter home of our common Silver-spotted Skippers, which spend the season as caterpillars like most skippers. A few of our inchworm moths also survive the cold months as caterpillars, fully exposed on tree bark, freezing and thawing repeatedly over the winter months.



Cocoon of a Promethius Moth pupa near Hillwood Manor Park in Sligo



Egg case of Eastern Tent Caterpillar on the tip of a Black Cherry branch near Hillwood Manor Park in Sligo

The tips of Black Cherry branches are where eggs of Eastern Tent Caterpillars are found this time of year, in hardened cylinders about an inch long. Narrow branches of oaks can have golf-ball-sized distortions called galls, where the larvae of wasps and flies make a winter home – unless they've been replaced by an insect predator that drilled its way in. Some old galls are inhabited in winter by adult bees, ants, or beetles.

Crevices behind strips of bark are another prized location. Such hiding places are provided in Sligo by the loose bark of White Oak, Sycamore, River Birch, Silver Maple, and Virginia Pine.

Butterflies that overwinter as adults -- Mourning Cloak, Question Mark, and Eastern Comma -- slide into these crevices to get out of the cold and wind. Bark crevices also house mature beetles or the eggs of the Fall Cankerworm moth, whose adult females push eggs into such crevices in the fall.

Beneath our trees, the leaf-litter provides more protected sites. The familiar Woolly Bear caterpillar is one that utilizes the insulating layers of fallen leaves, as do the larvae of two common butterflies of Sligo: Horace's Duskywing and the Red-banded Hairstreak. These and other winter larvae have evolved the ability to replace most of their internal water in late fall with liquids that

freeze only at much lower temperatures. In open, sunny areas of Sligo, the galls (round or oval inflations) on dead goldenrod stems are where a variety of flies, wasps, and midges spend the winter as larvae.

Below the soil surface are other destinations for insects in winter. Some butterfly caterpillars tunnel into the earth before pupating into chrysalids in late fall. Dozens of native bee species spend the winter in their underground nests, mostly beneath bare ground. Sweat bees do so in a pre-pupa stage, leaf-cutter bees as newly hatched adults, and bumblebees as mated queens. Also underground are the eggs of our many crickets, katydids, and grasshoppers, laid there by females in the fall. Rocks and fallen logs provide more sanctuaries underneath for over-wintering insects, including adult wasps.

Several of our butterflies actually disappear from Sligo in winter. The Red Admiral and Painted Lady adults simply die off, leaving no progeny, to be replaced each spring by adult migrants flying up from the south. Two of our butterflies have evolved to migrate south during winter, including the American Lady and, of course, the Monarch, which makes its spectacular round-trip journey to Mexico over several generations every year.

-- Michael Wilpers

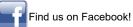
Useful resources for this article were books by D. L. Wagner, J. Glassberg, T. J. Allen, B. Heinrich, J. L. Capinera et al., and D. Stokes; the Univ. of Fla. entomology website; lakecountrynature.com; the Smithsonian's BugInfo website; and the FOSC checklist of butterflies.



Gall of the Small Spotted-wing Fly on goldenrod in the Pepco corridor along Sligo (all photos by Wilpers)

Need to Reach Us?

President (Kit Gage): president@fosc.org
Invasive Plants (Jim Anderson): invasives@fosc.org
Litter (Patton Stephens): litter@fosc.org
Advocacy (Bruce Sidwell): advocacy@fosc.org
Natural History (Michael Wilpers): naturalhistory@fosc.org
Stormwater (Elaine Lamirande): stormwater@fosc.org
Water Quality (Pat Ratkowski): waterquality@fosc.org
Outreach (Sarah Jane Marcus): outreach@fosc.org
Treasurer (Dee Clarkin; asstnt treasurer Sherrill Goggin): treasurer@fosc.org
Newsletter Editor (Michael Wilpers): editor@fosc.org





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.