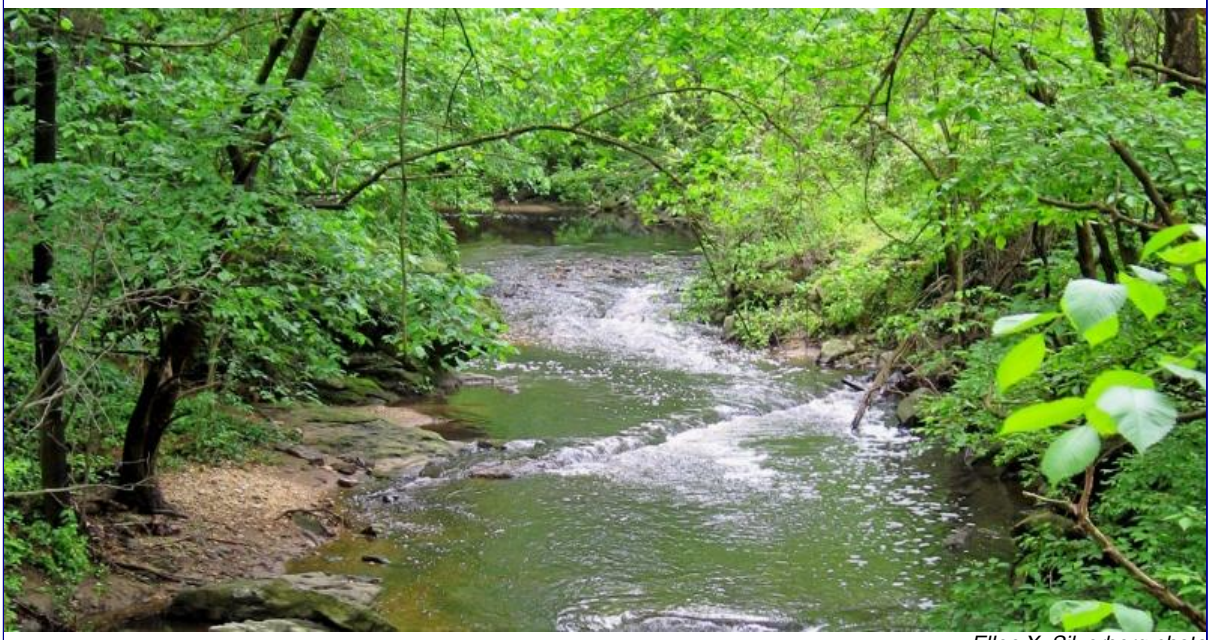
Friends of Sligo Creek

Newsletter January 2018



Ellen X. Silverberg photo

Contents

Seeking Volunteer(s) to Create and Post Kiosk Displays

Do you enjoy the creative displays in our kiosks along the trail? Are you interested in communicating with people about the plants, animals, and ecology of Sligo?

Perhaps you can imagine contributing to this informative and inspiring outreach activity of the Friends of Sligo Creek.

If so, we'd like to hear from you about taking part in this important aspect of our work of promoting the ecological health of the Sligo watershed.

We're looking for one or more folks to take on the kiosk displays and handouts, as Laura Mol, who has done this for the past six years, is retiring from this volunteer work. Many thanks to Laura for her tireless devotion to researching, writing, designing, and posting dozens of displays and handouts over the years.

The research and writing might be done by one person, with another handling the printing and posting. Or one individual (or team) could cover the kiosks in lower Sligo (say, below Colesville Rd.), while another handles upper Sligo. Many combinations are possible.

The nine kiosks, spread out along eight miles of paved trail from Hillwood Manor Park (below New Hampshire Ave) to Kemp Mill, provide a fun and interesting means to contribute to wider awareness of nature in our watershed.

The postings, and their accompanying handouts, allow us to share artful photographs, engaging poetry, and scientific knowledge relevant to nature in the woods and waterways of the Park.

A modest allocation in the FOSC budget covers the costs of reproducing high-quality photos, enlarged texts, and handouts, and for purchasing art supplies.

If you are interested in participating in this work, please contact our president, Corinne Stephens, at president@fosc.org.

Help Remove Invasives Jan. 15 and 27

Winter is a great time to cut invasive vines and shrubs, as many stand out with their evergreen leaves and their trunks are brittle and easily cut.

Join other invasives fighters to remove non-natives from Sligo on Monday, January 15 (for the Martin Luther King Day of Service), and Saturday, January 27.

On both days, the work runs from 9 to 11 am and takes place in the park between Forest Glen Road and Dennis Avenue.

On January 15, meet at the first parking lot north (upstream) from the Beltway (see X on map

below). If you're late, come to the work site, located across from the foot of Belvedere Blvd. at Dameron Drive, just downstream from the confluence of Wheaton Branch and the mainstem of Sligo. (See circle on map below.)

The work will focus on shrubs and vines such as wineberry, multiflora rose, porcelainberry, English ivy, winter creeper, Japanese honeysuckle, bush honeysuckle, and winged euonymus.

Leading both days is Weed Warrior Supervisor and Sligo resident Greg Odegaarden. **For more info, contact Greg at this email address.** For the location on January 27, please contact Greg.

Winter creeper vines stand out in January because of its evergreen leaves. (carolinanature.com photo)

Red X marks the meeting place for

Anyone can volunteer, but you must be at least 16 years old to use cutting tools in the park (loppers, clippers, or saws).

Bring your own tools and work gloves, if you have them, but some will be provided for anyone who needs them.

invasives work on Jan 15.

Sediment Removal Follows Water Main Break

Sediment from water main break flows down Easecrest Rd toward the Park.

A major water main break in the Kemp Mill neighborhood sent large amounts of sediment into Sligo Creek in December before the Washington Suburban Sanitary Commission (WSSC) and Montgomery Parks coordinated on removing some of it and discussing plans to rehabilitate the affected areas.

(During this month's extreme cold, other water main breaks occurred in the Sligo watershed, causing more sediment to run into the creek. We will try to report on these in the February issue.)

The break in December occurred on Easecrest Drive, sending large amounts of water into the street, heavily laden with clay sediments brought up to the surface from the soil around the underground break. The water and clay rushed through storm drains along the curbs and into the park through an outfall pipe near the creek.

Fine sedment can bury the small rocks and pebbles that our many small fish and semi-aquatic insects depend upon as anchors and cover for feeding and reproducing. Their absence, in turn, means that wildlife depending upon them as food (like birds and frogs) have fewer resources to live on.

Local residents Dana Best and Kathy Michels notified WSSC and Parks on the day the break occurred.

Crews from WSSC arrived to repair the pipe and clean the streets. WSSC met on-site with Parks staff members Matt Harper and Andy Frank

to evaluate the sediment damage to the creek and discuss ways for WSSC to mitigate the damage.

WSSC brought in two heavy-duty "vacuums" to suck sediment from the creek bed after diverting the normal creek flow with a pump. The vacuums piped sediment into two storage trucks parked on Ladd Street.

The vacuums "appeared to be relatively effective in this short reach of Sligo that had the most significant sediment build-up," noted Matt in an email.

The sediment damage could have been a lot worse, he pointed out, had residents not alerted authorities so quickly and were it not for the dry weather and a debris jam nearby downstream.

Sediment flows from water line break into Sligo Creek Park. Note clear water, far right, upstream from sewer outfall. (Murtagh photo)

Contractors with WSSC remove sediment from water main break. (MoCo Parks photo)

About 150 feet downstream from the outfall, a debris jam captured large quantities of sediment that would have typically washed straight downstream, especially in rain.

"WSSC should be given credit," Matt added, "for mobilizing quickly after we contacted them and doing what made sense to mitigate for the immediate impacts of the break."

How Do Our Tiny Chickadees

Survive the Frigid Cold?

Five basic adaptations help our Carolina Chickadees (and their close cousins, the Tufted Titmouse) get through the kind of brutal cold we recently experienced.

Carolina Chickadee with seed ready to hide (cache) for eating later (Joe Twiss phto via Flickr)

Like many birds, chickadees and titmice fluff-out their feathers in a cold snap, which makes them look fat but adds many layers of insulating air between their bodies and the cold. Studies have shown that bird feathers provide much better insulation than mammal fur.

A second way they maintain daytime body temperatures is to shiver, which burns calories but generates heat.

Another adaptation allows chickadees to drastically reduce their body temperature at night by more than 50 degrees Fahrenheit, from 108 to about 50. This process of "nocturnal hypothermia" saves considerable energy because the birds don't burn precious fat to maintain their daytime body temps over the long winter nights, which they spend alone in tree cavities.

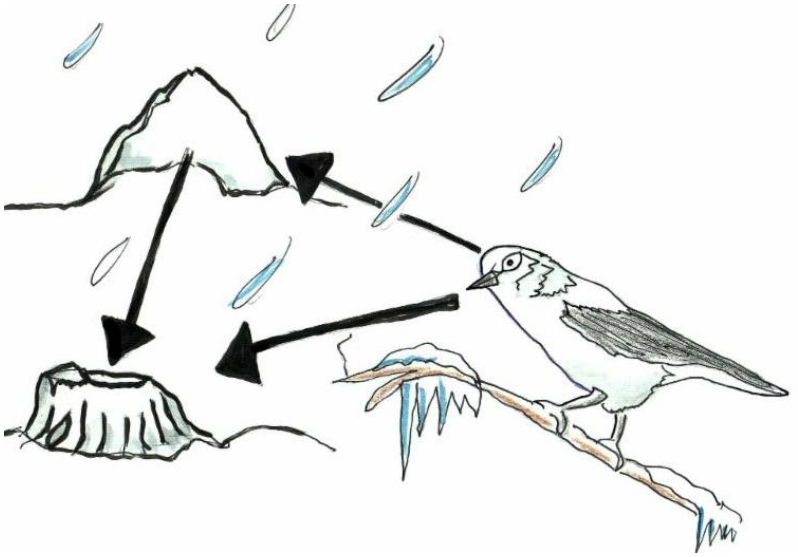
A fourth adaptation to cold is their ability to store vast numbers of seeds in hidden caches all over their huge flock territories in winter. A single chickadee can cache tens of thousands of seeds a year, each seed in its own hiding place, usually behind strips of bark. Some chickadees have been observed caching 1,000 seeds in a single day.

This caching of seeds would be useless without the chickadee's astonishing ability to remember their locations, which they do almost without fail over winter territories up to ten square miles.

Chickadees can add 30 percent more brain cells in fall for remembering hundreds of hidden seed locations. (NPR drawing)

Their remarkable spatial memory is created by a whopping 30 percent increase every fall in the capacity of the hippocampus, that portion of their brains (as in mammals) devoted to spatial memory.

In 1994, it was discovered that chickadees add a tremendous number of nerve cells to this part of their brains as winter approaches. Since then, scientists have shown that seasonal brain enlargement in chickadees is greater in more northern latitudes and at higher elevations, even in the same species.



Lab studies show that chickadees remember thousands of seed locations by relating them to angles or distances from landmarks. (nationalgeographic.com drawing)

Since severe cold (and predators) inevitably take their winter toll on chickadees, their backup plan is to rear up to nine chicks every spring, which improves the chances that a few will make it through the winter, no matter how cold it gets.

Here's a nice video about bird survival in winter and an NPR piece on brain enlargement in fall chickadees. For a scientific review of chickadee caching, and seasonal changes in their brains, see pages 9-23 of this online excerpt from The Ecology and Behavior of Chickadees and Titmice, K. Otter, ed., 2007.

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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.