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Butler County Stream Team

September News - 2016

Next Sampling Day - Sept 10



If you cannot sample, contact Lynn at 513-615-2538 , or contact Teresa at 513-785-4142 or her cell at 513-706-8991.

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Sampling Volunteers

Reminder to NOT sample puddles or a stream that is not actively flowing.... Instead turn in the bottle with the label stating it was "*too low to sample.*"

Engineers Office Cooler- Please make sure that you place your sample in the usual locked cooler. The other cooler is for well water samples we are testing for nitrates and bacteria through a Miami Conservancy District program.

RSVP for the Potluck and Tour at Miami's Ecological Research Center Sept 17, 11 am

5806 Somerville Road, Oxford, OH 45056

The Ecology Research Center (ERC) is the focal point for ecological field research at Miami University. Jeremy Fruth, the ERC manager, will provide us with a tour of this 69-hectare field station. It contains a diversity of field sites and facilities that support both aquatic and terrestrial research.

Potluck: Tour will be followed by a potluck picnic at their shelter.

Stream Team Sampling Dates

Sept 10

Oct 8

Nov 12

Remember to let us know if you cannot collect your sample

Great Miami River Cleanup

Oct 22, multiple locations

Save the date for this fun event. See what the weirdest item you can find it.

More details will be posted soon at

<http://greatmiamirivercleanup.org/>

Mill Creek Cleanup

Sept 24, 9 am

Twin Creek Preserve, [12033 Best Place, Sharonville, Ohio 45241](#)

[Find out more](#)

Children's Waterfest Volunteers Needed

October 14 at Miami's Hamilton Campus

Volunteer to lead a class around the event. This basically involves reading a schedule and finding your way around campus. You get to see some fun educational programs. Volunteers receive lunch and a t-shirt.

[Contact Lynn](#) if you are interested.

Hikeathon

Saturday, September 24, 9 am - 3 pm

Dewitt Cabin, near Oxford. [4824 Oxford Rd., Oxford, OH 45056](#)

Discover local natural resources, learn from various demonstrations, and explore by hiking on marked trails at the Miami University Natural Areas. All ages welcome, no registration required and all activities are free!

Please RSVP: Contact Lynn [by email](#) or 513-887-3720

Milkweed Seed Collection

The



Annual Milkweed Collection will take place **September 1, 2016 through October 30th**. Drop off common milkweed seed pods, at our Office located at 1802 Princeton Road, Hamilton, Ohio. Call 513-887-3720 with any questions.

When to collect:

- 1) If pods are bright green, they are not ripe and not ready to be collected. You can gently place a rubber band around green seed pods now to stop them from opening.
- 2) Ready to pull pods will be gold/yellow or gray to brown in color.
- 3) Don't collect pods that are already open, as they might be infested with insects.
- 4) Test the seams of the pod, if they easily "pop" open with gentle pressure they are ready.
- 5) Freshly collected pods should be dried and kept in paper grocery bags (not plastic!) to avoid mildew.

Find out more at www.butlerswcd.org/pollinators
Life History of the Monarch Butterfly [video](#)

Volunteer to Collect Seeds with Beth and Lynn

There is a landowner in Wayne Twp that has millions of milkweed seed pods just waiting to get picked, and he needs help. If you are willing to spend a few hours picking pods, [please let Lynn know](#). It's worth it just to see the property. Ken has acres of land devoted to wildlife that are covered in native wildflower plantings, vernal pools, and ponds. The seed pods are currently still green, so we are looking at a weekday in a few weeks.

Purple Loosestrife *Lythrum salicaria*

Certainly one of the most beautiful invasive plants in

Horse Daze

September 17th 10am - 4pm

Sebald Park [5580 Elk Creek Road, Middletown, OH 45402](#)

Come to this free event and enjoy horse rides, hayrides, demonstrations, and more!

Brought to you by the Butler County Chapter of Ohio Horseman's Council Inc. and MetroParks of Butler County.

2016 Webcast Series

These webcast at shown at the Butler County Engineers Office on Rt 4 in Hamilton. 1921 Fairgrove Ave. from 1 - 2:30 pm

- September 14, **Incentivizing BMP Installation in Communities with Stormwater Utilities**
- October 12, **Retrofitting Revisited: Forward Into the Past**
- November 16, **Non-Traditional MS4s**

Caddisfly

Caddisflies are an order (*Trichoptera*) of insects with approximately 12,000 described species. The name Trichoptera, derived from the Greek words "*trichos*" meaning hair and "*ptera*" meaning wings, refers to the long, silky hairs that cover most of the body and wings.

Caddisflies have aquatic larvae and are found in a wide variety of habitats such as streams, rivers, lakes, ponds, spring seeps and temporary waters vernal pools. Adults are mostly nocturnal, weak-flying insects that are often attracted to lights.

Ohio, purple loosestrife is finding its way into Butler County. The photos below were taken on Coldwater Creek about a few weeks ago. Coldwater Creek runs parallel to State Route 63 in Lemon Township, and this large concentration of purple loosestrife is highly visible from the road.



Purple loosestrife was introduced to North America from Europe and Asia in the early 1800s and was valued as a medicinal herb and ornamental. It is found throughout most of Ohio.

Purple loosestrife is an erect perennial with opposite or whorled leaves. The thick taproot supports thirty to fifty stems that can attain a height of 3-6 feet. Leaves are lance-shaped and stalkless. The attractive magenta flowers bloom in long spikes. This non-native invasive may be mistaken for the native loosestrife, *Lythrum alatum* except *L. alatum* has alternate leaves on the upper stem, wider spaced flowers and is a shorter plant. Another difference is in the flower; *L. salicaria* has 12 stamens, while *L. alatum* has 4-6 stamens. It is illegal to sell fertile varieties of *L. salicaria* in Ohio.

Habitat: Purple loosestrife thrives in wetlands, including marshes, fens, wet meadows, stream and river banks, lake shores and ditches. It can also survive in drier conditions.

Invasive Characteristics:

Purple loosestrife has an extended flowering season, generally from June to September, which allows it to produce vast quantities of seed. The flowers require pollination by insects, for which it supplies an abundant source of nectar. A mature plant may have as many as thirty flowering stems capable of producing an estimated two to three million seeds per year. Commercially available "sterile" cultivars cross pollinate with the wild populations to produce viable seed (Jim Amon, pers. comm.).



Mechanical: Small infestations of purple loosestrife can be removed by hand-pulling. The entire root system must be removed from the ground; all plant material should be bagged and removed from the area. Mowing is not recommended because it can contribute to seed dispersal and seed bank exposure if the mower scrapes the soil.

One of the most interesting characteristics of the caddisfly larvae is the ornate and highly intricate protective cases many build. In most cases, the predatory species are free-living or spin silken structures in the water (webs or tunnels) to entrap prey. The scavengers and herbivores live within protective "cases" which they build from their own silk and stones, twigs, leaf fragments, or other natural materials. Case design and construction is distinctive for each family or genus of caddisfly. The case is usually portable, dragged around like a snail shell as the insect moves, and held in place by a pair of hooked prolegs at the tip of the abdomen. Most species have thread-like abdominal gills and get oxygen from water that circulates inside the case. All larval growth and development (including pupation) occurs within the case.

Artists have even taken caddisfly cases a step further, cultivating their own larvae and providing them with unique building materials like gold and pearls to create ornate protective cases that are preserved for their artistic merit after the caddisfly has undergone metamorphosis.

[Video](#)

Chemical: Systemic herbicides can be used effectively to control purple loosestrife. For small populations or individual, large plants, spot treatment is recommended (spraying or hand-wicking). Only herbicides approved for wetland use, such as Rodeo, Accord, Glypro, AquaNeat, or Garlon 3A, should be used. These herbicides may be most effective when applied late in the season before the plants become dormant. However, it may be best to do mid-summer and late season treatment to reduce the amount of seed produced. Cutting and treating the stems with herbicide is also effective. Foliar sprays can be applied after peak bloom in late August.

Biological: Several species of insects have been studied at Cornell University for their effectiveness in the control of purple loosestrife. Galerucella beetles have been approved for control and were introduced in Ohio in 1994. The beetles feed primarily on purple loosestrife leaves, stems, and flowers, but do not feed on other plant species. More than 1.5 million beetles have been released at 30+ sites by the Ohio Division of Wildlife in Lake Erie marshes and have slowly proven to be very effective at reducing purple loosestrife populations. Hylobius transversovittatus weevils lay eggs in the stem and upper root system. As the larvae develop, they feed on root tissue. Nanophyes marmoratus weevils feed on flowers. Although these insects will not eradicate purple loosestrife, they do control the populations at a tolerable level.

Water News

Great Miami Buried Valley Aquifer: Changing Water levels

Groundwater levels in the aquifer beneath downtown Dayton fluctuate throughout the year. Locally, groundwater levels often peak in winter or spring and decline to their annual low in the fall. However, we're seeing changes to the normal up-and-down cycle of groundwater in the aquifer in a couple of downtown wells [...read more](#).

Nutrient pollution is changing sounds in the sea

Nutrient pollution emptying into seas from cities, towns and agricultural land is changing the sounds made by marine life -- and potentially upsetting navigational cues for fish and other sea creatures, a new study has found. [...read more](#)

Why a giant green lake turned blood red

Like the famous [Aral Sea](#) between Kazakhstan and Uzbekistan and the [Salton Sea](#) in California, the salty

expansion of Lake Urmia in Iran has been drying up and shrinking for decades. Now the lake, once one of the largest in the Middle East, looks more like a gigantic crime scene. [...read more](#)

Art in Pond Scum

Sally Warring, a biologist, isn't afraid of getting her hands wet. She collects water samples from New York's murkiest waters and examines the colorful life within them. [...watch video](#)

Sampling Reminders

- Please mark the time and date on your labels of when you collected the sample. None of the sample times should be the same unless you are a time traveler
- Sign your sample into the cooler with the drop off time.
- Don't put the samples in the bag with the clean bottles
- Keep the cooler lid closed as much as possible
- Provide labels that say dry, or too low to sample, if that is the case.
- The combination of the cooler lock is **2278** which is BCST if you look at your phone keypad.
- Remember the cooler lock is weird, and that the numbers don't line up along the middle.
- **Duplicate samples** - when you sign them into the cooler, put the number "2" next to the sample ID.
- **Duplicate samples** - use the month that is on the label. Remember to talk to Teresa if you will be out of town that month and she can switch dates for you.

Butler County Stream Team Monthly Newsletter

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