

Email not displaying correctly? View it in your browser.

## Butler County Stream Team September News - 2017

*Next Sampling Day - Sept 9*

**If you cannot sample, contact Teresa at [513-706-8991](tel:513-706-8991) or Lynn at 513-615-2538**



### In this Issue

- [New Sampler](#)
- [Lab Needs Volunteers](#)
- [Stream team grad Students](#)
- [Artificial Sweeteners](#)
- [Diving Bell Spiders](#)
- [Wetlands Photo Contest](#)
- [Water News](#)
- [Sampling Reminders](#)
- [Events](#)
- [Webcast](#)
- [Waterfest Volunteers](#)

### Still Looking for a New Sampler on East Side of Hamilton

If you know of anyone that could that may be interested, [please contact Lynn.](#)

### Lab Needs Volunteers

Girl scouts are visiting the lab this weekend, so a few more volunteers would be much appreciated. We will also have a few extra samples due to the free well water testing that is offered once a year. See

<http://doodle.com/poll/y95ptqhpakn6pub>

### Stream Team Grad Students

Each year, stream team is lucky to have two grad students from the IES program at Miami assist Tera with the lab. through this assistantship, they work on prepping the materials, bacteria counts, and much more. This year, we have a new grad student, Celeste, and Julie who is a returning grad student.

#### Celeste Bronson

I received my Bachelor of Science in Environmental and Ecological Engineering at Purdue University. In the last three years, I participated in the Purdue Chapter of Engineers without Borders. My career interests are in water quality and

### Stream Team Sampling Dates

Sept 9  
Oct 14  
Nov 11

### Save The Date

#### Day in the Country

Saturday, Sept. 16th

Izaak Walton League's Day in the Country Saturday, Sept. 16th Gates open at 8:00am, fishing derby starts at 9:00am to 12 noon. Poles, bait available, prizes for all. Hayrides, archery lessons, b-b gun shooting, exhibits, games and programs all day. See <https://www.facebook.com/hamiltonchapterIWLA/>

#### Horse Dayz

Saturday, Sept. 16th

Elk Creek MetroPark, Sebald Area

#### Hikeathon

Saturday, September 23

Next to DeWitt Cabin [4824 Oxford Rd Oxford, OH 45056](https://www.google.com/maps/place/4824+Oxford+Rd,+Oxford,+OH+45056) See <http://miamioh.edu/student-life/natural-areas/index.html>

#### Upper Mill Creek Cleanup

Saturday, September 23, 9 am

Find out more at <http://millcreekwatershed.org/5th-annual-upper-mill-creek-cleanup/>

#### Clean Sweep of the Great Miami River

Saturday, October 28 from 9 am - 12 noon

We are still confirming all of the locations and the online registration will be available soon. All info will be posted at <http://greatmiamirivercleanup.org/>

### Webcast: Modeling For Water Quality

Date: Wednesday, September 13th, 1:00 - 2:30 p.m.

Location: Butler County Engineers Office- 1921

air pollution control. Personally, I enjoy music, reading, kickboxing, Bible studies and other church related activities.

### **Julia Hamilton**

I'm a second year graduate student at Miami University in the Institute for the Environment and Sustainability with a concentration in Environmental and Public Health and GIS. This is my second year working with Stream Team. I received my bachelor's degree from Michigan State University in Environmental Science. After graduation I plan on pursuing a career in Environmental Consulting or Environmental Health and Safety.

## **Artificial sweeteners present in the aquifer, but what's safe?**

**By Mike Ekberg, Manager for Water Resources Monitoring and Analysis**

MCD staff recently found artificial sweeteners in five of 12 groundwater samples. The samples were collected from monitoring wells installed in the buried valley aquifer. This is further proof that many of the chemicals we flush down a toilet, rinse down a sink, or apply to our lawns and gardens ultimately end up in our rivers, streams, and aquifers.

It should be noted that none of the wells sampled in the study are used for drinking water. MCD uses its monitoring wells in the buried valley aquifer to act as a network of sentinels. Samples from the wells provide information on human impacts as well as natural changes in the quality of water over time.

### **So what's the concern?**

Artificial sweeteners in groundwater are a concern for two reasons: First, their presence is an indication that human sewage is flowing into the aquifer. Human sewage contains low levels of many contaminants that pass through the sewage treatment process and enter into natural waters. Second, artificial sweeteners are considered to be potential endocrine disruptors because they may interfere with the body's endocrine system and harm people and animals.

The endocrine system is a chemical messaging system within the human body that regulates organ function. Fortunately, the artificial sweeteners were present in the groundwater at very low concentrations – parts per trillion.

Fairgrove Avenue, Hamilton, Ohio 45011

(<https://goo.gl/maps/MYBMH>)

**Cost: FREE !!!** (attendees will receive 1.5 PDH's)

### **Description:**

Modeling is frequently used in watershed and stormwater planning to help build understanding of a problem or calculate possible changes over time when monitoring is not an option. Modeling can also be used to compare courses of action to determine effective strategies for addressing a problem and the potential cost for each strategy. Non-point source modeling tools are an important tool in estimating compliance with TMDL allocations and developing an overall watershed plan to meet water quality. In this webcast we will look at several tools for estimating pollutant loads, discuss the possible applications, and look at case studies to illustrate how a model was employed to achieve the desired goals.

## **Volunteer for the Butler County Children's Waterfest**

### **Friday, Oct 13**

From about 8 am - 1:30 pm

Bob and Lynn work on this great event for over 1000 elementary students each year. The kids learn about water pollution, safety, and much more. We are always looking for volunteers to lead a class of children and their teacher around campus to different presentations. We also need other volunteers to help with logistical things such as unloading presenters, delivering school lunch boxes, etc. [Contact Lynn](#) or visit to find out more and register online at <http://events.r20.constantcontact.com/register/event?oeidk=a07eecs04kt80a9b0bb&llr=ljrobcoab>

All volunteers receive lunch and a t-shirt

## **Present at the Butler County Children's Waterfest**

### **Friday, Oct 13**

From about 9 am - 1:30 pm

If you have ever worked with students that are 4-6 grade level, [contact Lynn](#) to discuss presenting at the festival. Presentations run 25 minutes and are repeated 5 times. All presenters receive lunch and a t-shirt.

## **Three Valley Conservation Trust Summer Events**

Three Valley Conservation Trust is sponsoring a series of community outreach and outdoor education events/activities this summer, free to all! Check out our web site for more details on each of the following programs ([www.3vct.org](http://www.3vct.org)):

**Beautiful Biking** - (mostly) **2<sup>nd</sup> Thursday evenings, through Sept 14<sup>th</sup>** – Join Amy Weber in

## One part per trillion:

*It's like one square foot of tile in a kitchen the size of Indiana*



### Endocrine disruptors in more products than you think

These "endocrine disruptors," as they are known, are present in many products we use every day, including plastic bottles, detergents, flame retardants, cosmetics, and pesticides.

Among the other chemicals MCD found in the samples were:

- Bisphenol A (BPA), a compound found in plastics.
- DEET, an active ingredient in insect repellent.
- The herbicides atrazine, metolachlor, simazine, and sulfometuron methyl.
- Meclofenamic acid, a drug used for joint and muscular pain and arthritis.
- Propylparaben, an ingredient in many cosmetics.

BPA is becoming a big concern because human exposure to the compound is widespread. Some animal studies report effects on fetuses and newborns exposed to BPA.

How dangerous are endocrine disruptors?

### How dangerous are endocrine disruptors?

None of the chemicals found exceeded any human health-based standards. The jury is still out, however, on what the standards should be for some of these chemicals. It's possible that new standards will be set once we better understand how these chemicals affect the human body.

If we want clean, safe water, we may need to support investments in advanced water treatment technologies to remove potentially harmful compounds from water.

## Diving Bell Spiders



biking to beautiful local properties in Butler and Preble Counties. Routes will vary in difficulty, but all will be OK for teens to adults.

**Silvoor Saturday – Sept 24<sup>th</sup>** – Join us for a BioBlitz in Silvoor Biological Sanctuary! Children, families, and experts will work together to find and identify different animals, insects, and plants in order to update the catalogue of species that call the sanctuary home.

Had to introduce you to a strange spider that lives under water in Britain and other areas of Europe. I'm not a great fan of spiders, but this one is kind of cool.

<https://www.youtube.com/watch?v=dGte6j3WkwE&feature=youtu.be>

---

## Water News

**Houston's Flood Is a Design Problem: It's not because the water comes in. It's because it is forced to leave again.**

[www.theatlantic.com/technology/archive/2017/08/why-cities-flood/538251](http://www.theatlantic.com/technology/archive/2017/08/why-cities-flood/538251)

### **Fish mistaking plastic debris in ocean for food**

Fish mistaking plastic debris in ocean for food, by confusing plastic for an edible substance because microplastics in the oceans pick up a covering of biological material, such as algae, that mimics the smell of food, according to new study published in Proceedings of the Royal Society B.

<https://www.theguardian.com/environment/2017/aug/16/fish-confusing-plastic-debris-in-ocean-for-food-study-finds>

### **Poor manure practices culprit in thousands of fish deaths**

Poor manure management has been blamed for about 66,000 fish deaths along three western Lake Erie tributaries this month, with a fourth site heavily polluted but narrowly averting disaster.

[www.toledoblade.com/State/2017/08/24/Poor-manure-practices-culprit-in.html](http://www.toledoblade.com/State/2017/08/24/Poor-manure-practices-culprit-in.html)

### **Acid Zone in Chesapeake Bay Identified**

A new article identifies pH minimum zone in Chesapeake Bay. The area, 30-50 feet down, threatens shellfish such as oysters, clams and scallops.

[www.sciencedaily.com/releases/2017/08/170828093737.htm](http://www.sciencedaily.com/releases/2017/08/170828093737.htm)

---

## Wetlands Photo Contest

*Give Us Your Best Wetlands Shot!* is the Ohio Wetlands Association's 2017 photo contest that celebrates the joy of wetlands through photography. Subjects will include the flora, fauna and variety of landscapes within Ohio's diverse wetlands.

Click [HERE](#) for information about Ohio's different types of wetlands. The contest runs from February 2, 2017 (World Wetlands Day) to September 15, 2017 and features six categories you can enter.

Contest details and submission information can be found [HERE](#)

---

## Sampling Reminders

- Remember to sign in your samples in the lock box then place your sample in the cooler.
- 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.
- Remember the cooler locks are different from each other. See info above.
- **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

[Unsubscribe](#) from this list.

Our mailing address is: 102 Boyd Hall, Institute of Environmental Sciences, Miami University, Oxford, OH 45056

Phone: 513-785-6666

E-mail: [whitelr@butlercountyohio.org](mailto:whitelr@butlercountyohio.org)

Website: [www.butlercountystreamteam.org](http://www.butlercountystreamteam.org)

Copyright (C) 2015 Butler County Stream Team All rights reserved.

[Forward](#) this email to a friend

[Update your profile](#)

MailChimp