Butler County Stream Team
October 2014

Volunteer Stream Monitoring in Southwest Ohio
Next Sampling Day - October 11

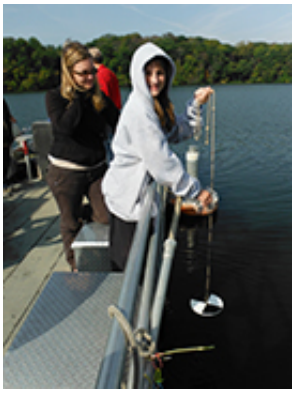
Water Plant Tour

Don't forget to sign up for the water plants tour. We will be visiting the Drinking Water Plant followed by the Waste Water Plan in Fairfield on Oct 30. We will meet in Waterworks Park, Groh Lane, Fairfield, at 12:15 and the two tours should be over by 2:45. Add your name to the sign up list at http://doodle.com/bugp3iidf9eikcqw

Great Miami River Cleanup
Saturday, October 25

See if you can find the weirdest garbage along the Great Miami River during this fun annual clean up event. There are multiple locations from Middletown to the Ohio River. Find out more and even pre-register at

www.greatmiamirivercleanup.org



Acton Lake Tour

Thank you to Mike Vanni and Tera for taking us out on the lake to show off their research. You missed a fun boat trip! If there is enough interest, we can perhaps pick a date in the Spring for another trip.

Upcoming Events

Sampling Saturdays

We only have two more sampling Saturdays left this calendar year

- Oct 11
- Nov 8

Great Miami River Cleanup

Saturday, October 25 from 9 am - 12 noon. See website for details and to register.

Water Plant Tour

Oct 30, 12:15 - 2:45, Fairfield. See info on left.

Conservation District's Open House and Elections

Butler Soil and Water District is having their Open House on Monday, November 10, from 3 - 7 pm. Join Lynn and the other conservation district staff to learn about this years project. Butler County residents and landowners can also vote in the Board of Supervisor Elections. More info about the candidates will be posted on the District's website as the election draws closer.

Potluck / Data Sharing Breakfast

Mark your calendars for data sharing breakfast to be hold on the February sampling date of Feb 14.

Volunteer Spotlight

Alex DeValle and Taylor Myatt

Leaves and Yard Waste

Kelly Crout

It's that time of year again! The leaves are changing color and starting to fall. That means that an increase in yard clippings and leaves will be collect from your yard. Although we want our lawns to be clean and look nice—we must be conscience of what happens to that organic waste. The best option would be to compost all of the materials, though its understandable that some people are a little icked out by some of the critters that can live in there. Another option is to bag up your grass and leaves for the trash collectors. The main thing is to stop your organic waste from entering the storm drain or your local stream. I know that I am not the only sampler that sees people dumping their grass clippings and leaves in the creek.

When organic matter goes into a stream it increases the nutrient load (phosphorous, nitrates, etc.) This increase in nutrients can negatively influence the fish and macroinvertibrates that live in the stream. The increase in nutrients can also negatively impact the overall health of the stream itself and can cause a depletion of dissolved oxygen as well as increasing turbidity in the stream. These nutrients can cause an increase in bacteria and even cause algal blooms. An increase in organic matter in streams can also cause an oily sheen on the surface of the water—people can often mistake this organic sheen for oil spills. The oil sheen is from the breakdown of the organic matter (like leaves and grass clippings). The easiest way to determine if the sheen is from oil or organic matter is to disturb the water's surface. If the sheen swirls back together then it is oil, but if it breaks apart and stays apart then it is from

Alex and Taylor are the grad students that do a lot of the behind the scenes work at the lab. If you visit the lab, Alex and Taylor will train you on a test and help you with any issues. They also spend a lot of time taking care of the monotonous jobs such as counting bacteria colonies.

Alex: I am currently a second year Masters student at Miami University's Institute for the Environment and Sustainability with a concentration in applied ecology and conservation. I obtained my bachelor's Degree from Kent State University in May of 2012. This past summer I interned at the Clermont Soil and Water Conservation District. I helped sample East Fork (Harsha) Lake to monitor harmful algal blooms. The samples I collected will be analyzed for indicators of harmful algal blooms and the toxins they produce. The data will be used by the USGS to create a predictive model of HABs. Molecular methods in addition to the data I collected will be used to better understand the link between cyanobacteria type and abundance, environmental and water quality factors, and the occurrence of toxins.

Taylor: I am a 1st year graduate student in the Master of Environmental Science program at Miami University with a concentration of Applied Ecology

organic matter or other natural sources.

There is nothing wrong with wanting to keep your lawn looking nice, but remember to also keep your local streams clean as well.

If you would like to find out more about composting, please visit the Conservation District's website.

Storm Drain Labeling

The fall is a great time of year to get out and label storm drains in your neighborhood. If you are interested in receiving the supplies for your neighborhood, please email Beth Downs, who was just hired to replace Amy Cameron at the Conservation District. Many of you may know Beth as she was the Graduate Student Lab Manager for Stream Team a few years ago.

Lending Library Titles

We all have lots of books that we would love to share with someone who has similar interests. So we thought this might be a way to share them with people we know like streams! If you have books, DVDs or other things - especially about water - that you would like to contribute, feel free to bring them along anytime. Or, if there are particular books you would like us to buy, let us know and once a year or so we can add a few to our collection.

Here's our list to date:

*A Guide to Common Freshwater Invertebrates of North America
*A Guide to Ohio Streams
*After the Storm - DVD
*An Introduction to the World's Oceans
*Bugs of the Underworld: a fly fisher's guide to the natural history of aquatic insects (DVD - available on request)
*Exploring the World Ocean
*Fostering Sustainable Behavior: An introduction to community-based social marketing
*Guide to Aquatic Insects & Crustaceans
*Gulf Hypoxia: Action plan 2008
*Handbook for Developing Watershed Plans to Restore and Protect Our Waters
*Introductory Oceanography
*Life in the Soil: A guide for naturalists and gardeners
*Marine Ecology
*Migratory Shore and Upland Game Bird Management in North America
*Monitoring Guidance for Determining the Effectiveness of Nonpoint Source Controls

and Conservation. In 2012, I obtained a Bachelor's degree in Environmental Biology from Mount Vernon Nazarene University in Mount Vernon, Ohio. My undergraduate background includes an independent research project analyzing the Black Fly (*Simuliidae*) population in Ohio watersheds. This project included macroinvertebrate sampling, specimen preservation, habitat evaluation, and biotic indices of streams. I was also a laboratory assistant in the department of biology for 3 years. After obtaining my degree, I worked as a zipline tour guide giving nature tours in the tree canopy for a summer. I then joined the Davey Resource Group where I became an International Society of Arboriculture (ISA) Certified Arborist. I worked for 20 months on the Asian Longhorned-Beetle Eradication Program in Bethel, Ohio as a surveyor, tree climber, and foreman of the climbing crew. I am currently a Graduate Assistant at Miami University where I participate in the Butler County Stream Team Lab performing stream water quality testing. I expect to finish my degree in 2016. My personal interests include cycling, bird watching, hunting, backpacking, and various other forms of outdoor recreation.

Crisis Spot

Crisis Spot emails can be sent to Teresa Barnes at BarnesT@bceo.org

*Oceanography
*Ohio Vernal Pools: Diamonds in the Rough (DVD - available on request)
*Our Waters, Our Health
*Pond and Brook: A guide to nature in freshwater environments
*River of Words
*Stemming the Tide of Coastal Fish Habitat Loss
*Swamp and Bog: Trees, shrubs, and wildflowers of eastern freshwater wetlands
*The Colorado: A river at risk
*The Evolution of North America
*The Face of the Deep
*The Mill Creek: An Unnatural History of an Urban Stream
*Watersheds: A Practical Handbook for Healthy Water

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