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# **Butler County Stream Team**

March News - 2013

Volunteer Stream Monitoring in Southwest Ohio Next Sampling Day - March 9th - Tomorrow!



Check out the spring list of Stream Team activities - We have figured out some great things to do. Mark your calendars and let us know your interest soon!

# What's happening ...

Stream Team coordinators got together recently to set up the 2013 slate of activities. Amazingly, Stream Team is involved in about a dozen activities each year, besides sampling days!

Below is information on what's going on this spring and summer, as well as list of activities happening this month to commemorate the 1913 flood and an announcement about the Clean Sweep. We're trying a few new things this year, so get your calendar handy and see what sounds interesting and fits your schedule! Contact Donna at <a href="mailto:mccollds@miamioh.edu">mccollds@miamioh.edu</a> or Penny at <a href="mailto:feltnepc@miamioh.edu">feltnepc@miamioh.edu</a>. We would love to have you, your friends, or your family at any and all events!

# **Butler Soil and Water Tree and Garden Sale**

Order deadline is March 22.

Orders ready for pickup April 18 and 19.

This sale benefits the district's educational program, including college and conservation camp scholarships along with grants for school outdoor classrooms. Sale includes many native species of trees, shrubs, and perennials, DIY rain barrel kits, compost bins, cover crop seed mix and more. Click <a href="here">here</a> for more info and an order form.

# Dinner and a Lecture .... Niel deGrasse Tyson - Science as a way of knowing - Monday, April 8th

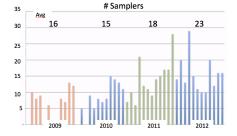
Dinner at 6:30 p.m. at Phan Shin, Oxford Talk at 8 p.m. at Shriver Center, MU, Oxford

Niel deGrass Tyson is a renowned astrophysicist and science communicator. He hosted the PBS

# Volunteer Spotlight All our 2013 volunteers!

2013 w as a stellar year for stream team, thanks to ALL our volunteers, so we w anted to say a hearty thanks to you all and show how Stream Team has progressed in its six years of existence. We have been steadily gaining in all aspects; number of samples analyzed, number of volunteers in lab and collecting samples, and number of consistently sampled sites. Check out the figures below. In all graphs, the columns represent months and colors are different years.

For the number of samplers from 2009 to 2012 (below), the average number of people collecting is now at 23. This is a 40% increase since 2009 and 28% over 2011.



For the number of people helping in lab from 2009-2012 (below), we are now averaging 16 volunteers per month. This is a 78% increase since 2009 and 14% higher than last year. Wow! What a lot of help!

science program NOVA until 2011 and currently is a director at New York's Hayden Planetarium. His forte is talking about complex topics in a way everyone can understand! Tickets are free and available to the public on April 5th - it likely will be busy, so call the box office at 513-529-3200 early on the 5th! We'll meet for dinner (on your own) at Phan Shin, then head to the lecture.

# **DIY Rain Barrel Workshop - April 27th**

9 -11:30 a.m.

Registration fee \$25 for Butler Co. residents Registration deadline - April 19th Butler Soil and Water office, Hamilton

One way to decrease runoff is to capture rain where it falls, with rain barrels, rain gardens, or wetlands. This annual workshop is sponsored by Butler Soil and Water Conservation District. More info: <a href="https://www.ButlerSWCD">www.ButlerSWCD</a> or call Lynn White 513-887-3720

# Renovated Retention Basin tour - April 30th

Potluck at 5 p.m. at Wetlands Park West, 6950 LeSourdsville West Chester Rd, W.

#### Chester

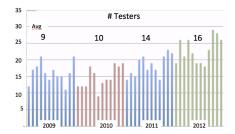
Tour of renovated urban retention basin - 6 p.m.

In 2006 the Stream Team and its partners took part in implementing an innovative approach to retention basins more ecologically functional by retrofitting an existing basin into a wetland. This suburban site lets storm water runoff, even from small rain events, be purified naturally. It has been a tremendous success, both for residents and the Mill Creek. Feel free to join us for the pot luck or be at the park by 6 to head to the wetland.

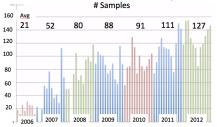
# **Lab Tour and Stream Report - May 11th**

Presentation 10-11 a.m. Lab tour - 11 a.m. Room 217 Boyd Hall, Oxford

If you've wondered what happens to your sample after you drop it off, or if you want to hear what your samples have told us about our Butler County streams in 2012, this event is for you. We put off our normal open lab last spring thinking we would have one in our new lab in the fall, but our move has been put on hold, probably until this fall. So we wanted to make sure you had an opportunity to tour the lab and also want to



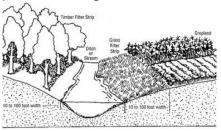
The number of samples we process each month has also risen (below), from 21 in 2006 when the program began to 6 times that in 2012! But because of the extra help in lab, we are finishing no later than we used to with few er samples.



# Down on the Farm: Vegetated buffer Strips By Amy Cameron

There are many practices utilized by landow ners that can protect water quality. Last month, we discussed the practice of cover cropping, which protects soil as well as water quality. This month's article will focus on vegetative filter strips; what they are, how they are utilized and how they can protect water quality.

A filter strip is an area planted with native vegetation, usually situated betw een a water source and an area of potentially polluted runoff. In agricultural areas filter strips are commonly installed betw een tillable ground and streams, as shown below. Like cover crops, implementing this practice can help decrease erosion and the amount of pollutants reaching streams.



So, how do filter strips protect water quality? One way is by slowing the

report what we see in our streams.

# **Earth Day events**

Hamilton - **April 19th** - lunchtime at gov't bldg Oxford - **April 20th** - see details next month

Each year the Stream Team distributes information about our program and Butler County streams at these two local Earth Day events. If you like to talk to people or run games for kids, let us know - we'd be happy to have your help!

Come see what local groups are doing to celebrate Earth Day.

# Training day and wetland walk - June 4th

Pot luck - 5:00 p.m. Sampling training - 5:45 p.m. Hike to wetlands ~ 6:30-7:30 p.m. 5398 McCoy Road, near Reily

**Samplers, WE NEED YOU HERE** if you have not done the sampling training in the last year.

Training our samplers allows us to keep our level 2 status with the Ohio EPA for our data. After eating and doing the training, we'll hike to look at the Edge of the Farm Conservation Area wetlands. Feel free to come to all or part of this event and to bring family or friends along!

# Macro Training - July 20th and 27th

Details in future newsletters

We are partnering with Butler County Metroparks to do some macro invertebrate training. We will be doing one day of field sampling and one of identifications in the lab. So stay tuned for details!

# Canoeing - Aug. 24th

Details in future newsletters

This is always a fun event, so if you're interested, let us know and we'll keep you informed as plans are developed.

# 1913 Flood Events

There are so many events it is impossible to give all the details here, but here is a partial list. For a full list and details, see the M J Colligan Project website.

Tues, March 12, 2:00 p.m., Jim Blount, Hamilton in Crisis: Who Came to City's Rescue after March 1913 Flood?

w ater dow n. An important component of the vegetated filter strip practice is the *vegetation*. As w ater flow s tow ard the stream, it is slow ed dow n by the filter strip vegetation. Slow ing the flow makes sediment, w ith its attached baggage of phosphorus or pesticides from agricultural fields, drop out of the w ater. Water making it to the stream is cleaner, not only of its dirt but of the pollutants dirt particles carry.

Filter strips are more effective when water runs off in sheets rather than in a defined channel or gully. If the water runs off in a defined channel, the likelihood that water will bypass the vegetation of the filter strip increases, since the runoff will not come into contact with its "filter". It is important, therefore, for vegetated filter strips to be kept in good condition.

Another way filter strips can protect streams is by reducing erosion on the stream bank. These strips are usually planted with native vegetation, whose deep root systems effectively hold soil in place despite rapid surface water flows. This keeps the stream banks from eroding and reduces soil in the stream. which means less turbid waters and a healthier aquatic environment. It also means landow ners benefit from vegetated filter strips because they reduce the amount of soil erosion that takes place on their property. Since stream systems are always changing, wherever there is a stream, there will be bank erosion. Filter strips simply reduce the rate of erosion.

So, if you have a stream running through your property and you're having issues with stream bank erosion, consider planting a vegetated filter strip along the edges of the stream. The next time you're out collecting your samples take a look along the banks. Try to compare areas of high vegetation to areas of little or no vegetation. It's very interesting to see how much difference vegetation makes!

## **Lending Library Titles**

We all have lots of books that we would love to share with someone who has

Registration required. Call 894-

## *7158*

Wed, March 20, 7:00 p.m., Hays Cummins, Geologic History & Flooding in the Miami Valley

Mon, March 25, 12:00 Noon, *City of Hamilton Centennial Commemoration* 

Tues, March 26, 7:30 p.m., Jim Blount, Community Symposium -The Dam Lie That Saved Lives: Hamilton Family Stories of the 1913 Flood - Images in Hamilton

Thur, March 28, 7:00 p.m., Valerie Elliott & Curt Ellison, Towns on the Tributaries in the Flood of 1913

Wed, April 3, 7:00 p.m., Julia Dian-Reed, 1913 and Today: Forecasting for the Extremes

Mon, April 8, 7:00 p.m., Dan Finfrock, The Bridges of Hamilton and the Floods that Affected Them

Tues, April 9, 2:00 p.m., Jim Blount, Remember the Promises We Made in the Attic! Obstacles to Preventing Another 1913 Flood
Registration required. Call 894-7158

Wed, April 10, 7:30 p.m., A Talk with Tom Rentschler, Achievements and Legacies of the Miami Conservancy District

Wed, April 17, 7:30 p.m., Kathy Creighton & Richard Piland,

The Lutie Gard Letters During the 1913 FL

The Lutie Gard Letters During the 1913 Flood: A Dramatization

Wed, April 24, 7:00 p.m., Dan Antenen, Hamilton, Ohio, How a New River Was Built in Hamilton: Engineering the Miami Conservancy District

Fri, April 26, 7:00 p.m., Video Documentary Premier: *The 1913 Flood: Shadow Over the Miami Valley* 

Fri, May 3, 7:00 p.m., *Hamilton Civic Leaders*Forum: The Future of The Great Miami River

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 Freshw ater 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

\*<u>Life in the Soil</u>: 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

\*Oceanography

\*Ohio Vernal Pools: Diamonds in the

Rough (DVD - available on request)

\*Our Waters, Our Health

\*Pond and Brook: A guide to nature in freshw ater environments

\*River of Words

\*Stemming the Tide of Coastal Fish Habitat Loss

\*Sw amp 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

#### in Civic Life

## **Walking Tours**

# A Guided Interpretive Tour of Hamilton 1913 Flood Sites

Sun, March 24 @ 2:00 & 4:00 p.m. Sat, March 30 @ 2:00 & 4:00 p.m. Sat, April 6 @ 12:00 & 2:00 p.m.

## **Museum Exhibits**

View museum exhibits telling the flood story: at Heritage Hall about industry, Fitton Center about bridges, Butler County Historical Society about neighborhoods, Hamilton Lane Library about Downtown, the Courthouse about the government response, Partners in Prime about Rossville, and in Oxford, at Smith History Library about regional flooding.

## **Community Festival**

Sat, May 4, Community Festival, public concert of Songs and Stories of River Life

## **Crisis Spot**

Crisis Spot emails can be sent to Donna McCollum at mccollds@miamioh.edu.

# **River Reflections**

What could go here but my favorite picture from 1913 .... a famous Hamilton landmark, the Rentschler building.

To see more, try the M J Colligan image



If you have any comments, concerns, or suggestions, please contact us at <a href="mailto:mccollds@miamioh.edu">mccollds@miamioh.edu</a>.

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