

Information FLOW™



Vernal Pools

By Joe Brehm, FLOW Intern

What is a vernal pool? The term comes from the Latin “vernus”, which means “belonging to spring”. Vernal pools “belong to spring” in that they are filled with water for only part of the year. Pools fill up with snowmelt and spring rains, and dry out by autumn. That vernal pools dry up for part of the year is incredibly significant because it excludes fish these pools, which may be as little as 6 feet across. Vernal pools are also referred to as ephemeral wetlands.

According to the Whetstone Prairie Project, 85% of Ohio’s wetlands were vernal pools before European settlement. After a loss of up to 90% of Ohio’s wetlands, there are only a few left in the Lower Olentangy Watershed. Vernal pools exist at Stratford Ecological Center, Highbanks Metro Park, Rush Run Preserve, and the Whetstone Prairie.

Vernal pools are amazingly variable and complex, especially when considering their relatively small size and ephemeral existence. The foundation for this complexity is simple: leaves. The leaves that fall each year into the vernal pools (which may be only dry depressions by autumn) are broken down by bacteria, insects, and other small creatures, forming the first links of the food chain, supplemented by algal growth. These simple building blocks help support an incredible diversity of organisms.

The surrounding forest not only provides a food source for life in the pools; it also provides cover. The many amphibians that rely on ephemeral wetlands for feeding and/or breeding also rely on a buffer of up to 200 meters of forest to feed, breed, or find cover. A study by Nancy Karraker published in 2008 showed that the egg masses of wood frogs and spotted salamanders were twice as large in pools in intact forest compared



Above: Vernal pool in spring and summer. Photos by David Celebrezze.

with those in pools along roadsides in the Adirondack Mountains of New York. This was due in part due to road runoff contaminated with deicing salts. These findings show the importance of high quality habitat buffers.

A study from Case Western University in northwest Ohio, published in 2007, revealed that pools in the most urbanized areas dried up the fastest. Organisms in these pools race against time to complete the necessary steps in their life cycles before the pools dry up. Increased urbanization has the potential to upset the delicate and amazing balance of life in these pools.

What can you do to keep an eye on these vernal pools? The Ohio Environmental Council and Ohio Vernal Pool Partnership run a volunteer monitoring program that you can be involved with. You can contact David at david@theoec.org for questions, or consult the OVPP’s website: www.ovpp.org. The Whetstone Prairie vernal pools are not being officially monitored, so you can e-mail any observations made at those pools to whetstoneprairie@gmail.com. Also, be sure to consult the FLOW calendar for monitoring opportunities at Stratford Ecological Center. Finally, you can visit and enjoy these unique habitats, and continue to learn more about them!

Explore

New MONITOR Program

FLOW seeks volunteers for our new MONITOR program in 2009. MONITOR stands for Monitoring, Observing, and Naming Impacted Tributaries of the Olentangy River. The program will focus on unnamed, unstudied streams in southern Delaware County, an area that is under pressure for land development. This program is an opportunity for you to learn more about our watershed and then give something back. Here's how:

Watershed 101 Class and Habitat Training:

Watershed 101 is a chance to get to know the Olentangy Watershed like never before. On Saturdays in late April and May 2009, we will provide a total of 40 hours of hands-on training on topics including watershed history, geology, native plants and wildlife, wetlands, stormwater, wastewater and drinking water treatment. The training will include slide shows, hand-outs, field trips, tours, and other activities. Participants will also receive training in either EPA Level II Headwater Habitat Evaluation Index or Level II Qualitative Habitat Evaluation Index.

The course is free and open to the public, and it is designed to be accessible to all knowledge levels—from beginner to more advanced. The material is well suited for college students seeking to gain additional experience. Teens are also invited to participate, with a parent or other adult. In exchange for receiving the Watershed 101 class, each participant is requested to volunteer an equivalent number of hours in the summer and fall to either the stream monitoring or stream naming programs.

Stream Monitoring: Using the skills learned in the Watershed 101 habitat training, volunteers will assess the health of streams in southern Delaware County. These streams are previously unstudied, and the data collected will help us advocate for stream protection and restoration.

Stream Naming: Through our stream naming program, volunteers will literally put unnamed streams on the map. Based on historical records and community input, the volunteers will submit petitions to the US Geological Survey to officially name the streams and include them on future maps, which will aid our protection efforts.

If you have questions about this program or wish to register, please contact hdean@olentangywatershed.org or call 614-267-3386.

Funding for this program is provided by a grant from the Ohio Environmental Education Fund.

Water Trail Updates

In the last few months of 2008, we made significant progress on developing the Olentangy Water Trail in Columbus. FLOW has received a \$1000 grant from the Kodak American Greenways Fund to create informational kiosks at three of the water trail access sites (Broadmeadows Pedestrian Bridge, Northmoor Park, and Tuttle Park). At the kiosks, paddlers will be able to find boater safety tips, maps of the river, warnings about potential hazards such as lowhead dams, facts about the geology and natural history of the watershed, and information about what they can do to help keep the river clean and safe. FLOW is partnering with the City of Columbus to create the kiosks, which, along with lowhead dam signage, are expected to be in place by this spring.



In October, we were also pleased to partner with volunteer Andrew Hoffman who made improvements to the water trail as part of his Eagle Scout service project. Andrew and his volunteers cleared invasive honeysuckle from access sites and helped to create portage paths around lowhead dams. They also planted native shrubs at the Tuttle Park access site. THANK YOU ANDREW!

FLOW: The Film

Join Friends of the Lower Olentangy Watershed and the Sierra Club to learn more about the global water crisis by viewing Irena Salina's award-winning documentary FLOW. (See <http://www.flowthefilm.com/> for more information and a trailer)

Location: Studio 35 at 3055 Indianola Ave., Columbus, Ohio 43202

Time: 6 PM for informal discussion with local organizations, 7 PM for the film

Date: February 19

Note: *The film (coincidentally) shares the same name as our organization, but does not feature the Olentangy River or FLOW. However, we do believe that the theme of the film will be of interest to our members.*

Adopt-An-Area of the Olentangy

With support from the Columbus Foundation and Keep Columbus Beautiful, FLOW will partner with local businesses, schools, and other organizations to adopt 7 key areas of the Olentangy. Volunteers will conduct regular clean-ups and invasive plant removal in those areas. Scheduled dates for 2009 are April 18, July 11, and October 3.

Here's how the program will work:

- Groups, businesses, churches, schools, families or individuals may adopt an area. Groups adopting an area need to clean the area at least 3 times each year.
- Keep Columbus Beautiful supplies groups with trash bags, gloves, and tools (on loan) to assist their efforts at no cost.
- After the 3rd cleanup, the city will install an Adopt-An-Area sign acknowledging the group adopting the area.
- FLOW will recognize participating groups in our newsletter and work with local media to attain publicity for the event.

Benefits of Adoption

- Adopting an area promotes cleaner rivers and streams and gives YOU an active role!
- You give your group positive attention for the valuable service you perform!
- You help the City of Columbus save tax dollars by volunteering to clean up. In 2007, over 8,700 volunteers donated over 26,054 hours of their time for cleanups and beautification projects, amounting to over \$470,193 saved!

For more information about adopting an area, please contact us at hdean@olentangywatershed.org or 614-267-3386.

CALENDAR of EVENTS

Be sure to check our spring newsletter in March for many great opportunities including clean-ups, tree plantings, volunteer trainings, vernal pool monitoring, and backyard conservation classes.

Volunteers helped to clean up the Olentangy near the Fifth Avenue Dam in October 2008.



Understand

FLOW

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Friends of the Lower Olentangy Watershed is a non-profit organization dedicated to keeping the Olentangy River clean and safe for all to enjoy through public education, volunteer activities, and coordination with local decision makers. FLOW is registered with the IRS as a tax-exempt, nonprofit charitable organization under Section 501(c)3 of the Internal Revenue Code. Donations are tax-deductible.

Because FLOW is a small organization, we rely heavily on volunteer participation to create positive change in our watershed. Please contact us for more information about how you can volunteer. We have a wide variety of opportunities to fit your schedule that will match your skills and interests.

FLOW is a member of Earth Share of Ohio. You may donate to FLOW through Earth Share's workplace giving campaign, available at numerous private companies, state and municipal government agencies, and Combined Federal Campaigns. For more information about workplace giving, please contact us.



YES! I want to support FLOW for cleaner water!

Choose a membership:

- Individual \$25
 Family \$40
 Supporting \$50
 River Steward \$100
 Business Basic \$175
 Bronze \$200
 Silver \$300
 Gold \$500
 Sustaining \$1,000

- Please check here if you would like more information about volunteering with FLOW.

Return this form to:

FLOW
 3528 N. High St., Suite F
 Columbus, OH 43214

Or give securely online at:
www.olentangywatershed.org

Fill in the following:

- New Member
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