

Raccoon Creek News

Spring 2013

Spring Environmental Education Smorgasbord

A Message from the Chairperson

Dear Raccoon Creek Partnership Members,

The Raccoon Creek Partnership hit the ground running (hit the water swimming?!?) in 2013. More than 120 people attended this year's environmental education kick-off event; our annual Owl Prowl, and we saw new faces as well as old friends at our subsequent events. Check out page 5 to see more of our winter/spring events that are becoming annual staples that you'll want to be sure to catch next year. 2012 reclamation and remediation projects were completed and we are already starting to see reductions in acid and metal loads! With those projects complete, we are already gearing up for more projects in 2013.



If you have thought "Wow, I would really like to support Raccoon Creek Partnership but I don't know how", we have an EASY way for you to help us in our watershed restoration and environmental education efforts. Through the Kroger Community Rewards Program, you can give to RCP every time you use your Kroger card (and still keep your fuel discount!). The program resets every April, so if you were previously registered, you need to re-register your card. If you haven't registered

your card yet, now is a great time to do it. See the 5 easy steps below to get started.

Don't forget to check out our upcoming events calendar here in this newsletter, visit our website www.raccooncreek.org, and "like" us on Facebook. We hope to catch you creek-side soon!

Natalie Kruse, Raccoon Creek Partnership Chair

Raccoon Creek Partnership - Current Board of Directors

Natalie Kruse (Chair), Molly Gurien (Vice-chair), Amber Brookins (Treasurer), Bob Eichenberg (Secretary)
Monte Edwards, Heike Perko, Rob Wiley

It's time again to re-enroll your Kroger Plus Card!

Sign up Today by Following These 5 Easy Steps:

1. Go to: www.krogercommunityrewards.com - Click "Sign in" or "Create an account" at the top of the screen.
2. To Create an account: simply fill in the requested information and a confirmation email will be sent to you.
3. Click on the link provided in the email from Kroger, and "Sign in".
4. Once signed in click on the "Edit Community Rewards Information" near the bottom of the screen. Then, in the "Find Your Organization" field, type in "Raccoon Creek Partnership". Select us and Save your Selection.
5. Swipe your Kroger Rewards Card every time you shop and help RCP grow!

Projects Completed in 2012 are Looking Good!

Amy Mackey, Raccoon Creek Watershed Coordinator

2012 was a good year for AMD reclamation and treatment projects. Three projects (West Branch Harble Griffith Reclaim, Orland Gob Pile Reclaim, and Pierce Run Slag Bed) were completed. The dry summer was perfect for finishing construction, and the fall rains came just in time to green up the newly planted vegetation.

West Branch Harble Griffith Reclamation – This 30 acre reclamation project in southern Hocking County was completed in the summer of 2012. Acidic pits were removed and positive drainage was established throughout the site. A 9.5 acre wetland was created in the borrow area. This wetland will serve as a settling pond for any residual metals and sediments leaving the site. In early 2013, some trees were replaced that did not survive the winter and a frost seeding was completed. (continued on page 2)

ATHENS

GALLIA

HOCKING

JACKSON

MEIGS

VINTON

Projects Completed in 2012 are Looking Good! (continued from pg. 1)

This involves spreading seed when the ground is frozen and allowing it to sprout in the spring. The channel draining the reclaim that enters the wetland has been flowing during the fall and spring rain events. The wetland is full of water and the vegetation is starting to establish itself. Monthly post construction monitoring began in November 2012 and will continue for 12 months. Acid and metal load reductions have been observed at all 3 tributaries draining the site and at the mouth of West Branch. A post construction tour of the West Branch Harble Griffith Reclamation site will be held on May 10th, 2013. The tour is open to the public. Contact Amy Mackey at 740-597-1473 or mackey@ohio.edu for more details.

West Branch Orland Gob Pile – This 6 acre gob pile reclamation in northern Vinton County was completed in the summer of 2012. Coal waste was capped and vegetation established. A limestone channel was created to convey water from the site into the West Branch of Raccoon Creek. Post construction monitoring has occurred every other month since June. Acid load reductions have been observed at the tributary draining the site and at the mouth of West Branch.

Pierce Run AMD Treatment Project – Initial construction of the Pierce Run steel slag leach bed was completed in 2010, but modifications were needed. The primary overflow standpipes shifted, and water was seeping under the dam. In 2011, ODNR DMRM completed the design for a slurry wall to seal the dam and to remove the damaged standpipes. The Pierce Run project modifications were completed in November of 2012 by King Environmental out of Findlay, Ohio. The entrance to the project site was improved and the contractors installed a bentonite slurry wall through the dam to prevent water from seeping through / under the structure. The damaged double standpipe overflow was removed, and the spillway will function as the primary overflow for the project. The overflow was grouted to prevent damage due to the friction of fast flowing water. Though the project was complete in November and the source pond filled quickly with the fall rains, the slag bed was not turned on until January 2013 to minimize sediment entering the bed. Post construction sampling has been conducted in February, March, and April 2013 and will continue quarterly.



Pierce Run Project Dam, April 2013

To Infinity and Beyond—2013 Projects in the Watershed

Sarah Landers, Raccoon Creek Water Quality Specialist (Ohio Valley RC&D)

Now that 2012 projects are wrapped up in the Headwaters (Harble Griffith Road, Orland Gob Pile) and Middle Basin (Pierce Run) of Raccoon Creek, our watershed restoration work continues in 2013 in the Little Raccoon Creek subwatershed. Little Raccoon Creek's Acid Mine Drainage Abatement and Treatment (AMDAT) Plan was recently updated and some of the focus in the next two years will be constructing projects to continue to improve the water quality of Little Raccoon Creek

Lake Morrow – This project is located in the Flint Run/Broken ARO Wildlife Areas in Jackson County. The lake will be drained and a dam consisting of coal spoil will be modified and a culvert installed to keep water from collecting behind the dam. An Office of Surface Mining grant to help provide funding for project construction was put together by Ohio Valley RC&D, Ohio Department of Natural Resources Division of Mineral Resources Management, and Amy Mackey, Raccoon Creek Watershed Coordinator and the grant was approved for this project.

Middleton Run – This reclamation project is located in Jackson County in the vicinity of SR 124 and Hiram Road West. This project involves reclaiming ridgetop surface mines/gob piles and open limestone channels will be installed and acidic strip pits will be drained. An Office of Surface Mining Grant was also sought for this project and is pending approval.

Employment Opportunities

Amy Mackey, Raccoon Creek Watershed Coordinator

Looking for a job that makes a difference in the watershed?? Become a Raccoon Creek AmeriCorps member! Members assist with chemical and biological monitoring, outreach and education, grant writing, member recruitment, etc. Position details are posted on our website, www.raccooncreek.org. Application deadline, June 7th, 2013. Check the website, then email me at mackey@ohio.edu for more information.



Raccoon Creek Water Trail Association Update

Molly Gurien, Water Trail Chair & Rebekah Korenowsky, RCP AmeriCorps member

This has been an exciting and productive year for the Raccoon Creek Water Trail Association! Our primary goal had been to raise enough money to print the beautiful Water Trail map that Karla Sanders, Ohio University MSES Student, designed for us. This fall we raffled a kayak at the Ohio Pawpaw festival and held a joint fundraiser concert at Uncle Bucks with the Athens Building Industries Association.



Through a successful Kickstarter campaign, which was put together by our Hocking College Intern, Savannah Freeman, we received enough funding to print the water trail maps! It was very rewarding to hear from so many enthusiastic water trail supporters and we have made many new friends along the way. We are hoping to have maps available for purchase by mid May. Information will be posted on our website (www.raccooncreek.org) on how to obtain a map when they are available for purchase. They will be printed on water and tear resistant paper. A few unfolded copies suitable for framing will also be available.

AmeriCorps Volunteer, Rebekah Korenowsky applied for and successfully received a grant from the Ohio Division of Watercraft to purchase a new canoe trailer. We were overdue for an upgrade and the new trailer can hold more canoes. Join us on the canoe trailer's maiden voyage on our spring float scheduled for May 18th. The float is a part of the "Ready, Set, Wear It!" Life Jacket World Record Day and occurs during National Safe Boating Week. The Water Trail Association meets regularly on the 2nd Wednesday of every month. We welcome your participation and encourage anyone with a love of paddling and interest in protecting our natural resources to become involved. We hope you can join us for this year's floats or at one of our monthly meetings. For more information, contact Molly Gurien at paddlermerlot@yahoo.com or visit our web page at www.raccooncreek.org.

RCP UPCOMING EVENTS AND OPPORTUNITIES

*Visit www.raccooncreek.org for details about upcoming events and activities, as well as event and meeting locations. Many of our educational events take place at the Waterloo Aquatic Education Center (WAEC).
Event dates and times subject to change!*

***Monthly RCP Meetings are held the Last Wednesday of every month
Monthly RCWTA Meetings are held the Second Wednesday of every month***

- | | |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>May 10th</u> | Harble Griffith Post-Construction Tour 2:00—4:00pm Contact Amy Mackey for more information |
| <u>May 18th</u> | Raccoon Creek Water Trail Association Canoe Float Boating Safety Campaign: 10:00am on Raccoon Creek @ Hope School House Contact Molly Gurien at paddlermerlot@yahoo.com to reserve a canoe |
| <u>June 15th</u> | Ohio River Sweep Litter clean-up via canoe: 10:00am Thivener Rd. at SR 218 intersection (Raccoon Creek Water Trail access #21) |
| <u>June 17th-21st</u> | Summer Camp: Water Rocks! - 2nd-4th Grade (9:00am—4:00pm) |
| <u>June 24th-27th</u> | Summer Camp: Biodiversity - 5th grade & up (9:00am—4:00pm) |
| <u>September 28th</u> | Gallia County Farm City Day— O.O. McIntyre Raccoon Creek County Park 10:00am—2:00pm, everyone is welcome! |

"Like" us on Facebook!

To find RCP on Facebook, type "Raccoon Creek Partnership" in the search box and "Like" our page!

Raccoon Creek Student Interns

We are fortunate to have so many institutions of higher education in the region to provide us with students eager to help with field work, data entry, and outreach and education. These students volunteer their time (unpaid!) to meet academic internship requirements and get valuable experience in the field of water quality monitoring. Meet Raccoon Creek's spring semester interns:

Emily Logan: "Overall, my internship at RCP has been a valuable and rewarding experience. I enjoy sampling and learning about the watershed. My internship here has led me to a full-time position with the Midwest Biodiversity Institute doing water quality research this summer. I will successfully graduate in May with an AAS degree in GeoEnvironmental Science from Hocking College. I would like to eventually continue my education in the field of Environmental Sciences."



Emily and Alie flumin' (measuring discharge)

Alie Hermanutz: "Working with the RCP has been a pleasure from my first day. Everyone I worked for, and alongside, were amiable, easy to get along with and most importantly, knowledgeable. I'm glad to have contributed my time and efforts and I'm happy about meeting everyone along the way. Being a geology major made my work all the more valuable, educationally speaking. After my graduation from Hocking College in May, I am hoping to find employment with an organization centered around soil and water conservation and environmental restoration. Thanks for having me, Raccoon Creek Partnership!"

Ian Kloos: "As a student studying Geography, Geology and Environmental Studies at Ohio University, working with Raccoon Creek as an intern has been a great change of pace for me. I have been assisting Raccoon Creek with data entry and analysis, as well as project maintenance at multiple sites. I have also helped AmeriCorps members (Darcy and Rebekah) with public outreach and education activities. My experience with Raccoon Creek has been an unforgettable part of my senior year. I have learned so much and met a group of amazing people. Involvement with the Raccoon Creek Partnership has been a memorable way to end my undergraduate career at Ohio University. I feel that I can leave southeastern Ohio knowing that it is a better place than I found it four years ago, thanks to my experience with the Athens community and Raccoon Creek Partnership. Everyone involved with Raccoon Creek truly play an important role in southeastern Ohio, and for that, I thank you!"



Ian doing project maintenance at Pierce Run

Least Brook Lamprey

Darcy VanDervort, RCP AmeriCorps Member

The least brook lamprey (Family: Petromyzontidae; Species: *Lampetra aepyptera*) is a jawless, scale-less, aquatic species found native in Ohio streams. It is Ohio's most common lamprey species and can be found in muddy stream bottoms of slow-flowing streams as juveniles or in clear, fast-flowing streams as adults. Rather than attaching to other fish to get nourishment, the non-parasitic least brook lamprey feeds on microorganisms and organic matter with its disk-like mouth. The seven holes located just behind the head are gills, and the thin circular muscles along the body are muscle segments called myomeres seen in Photo 1. In the spring the adult lampreys (3 years or older) migrate to rocky, headwater streams to spawn in large groups as shown in Photo 2. During spawning a female can release over 1,000 eggs. Least brook lamprey were spotted spawning during post construction chemical water quality monitoring in the Pierce Run tributary on April 10th, 2013.

Least brook lamprey found in Pierce Run



Least brook lamprey spawning in Pierce Run's rocky substrate



Reference: Least Brook Lamprey. ODNR Division of Wildlife, A to Z Species Guide: Fish.

What's Up Waterloo

Rebekah Korenowsky, RCP AmeriCorps Member

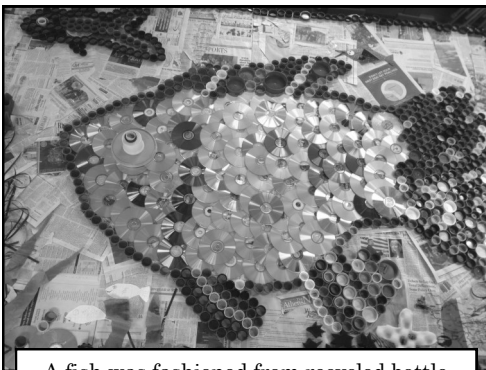
We've been having some great events out at the Waterloo Aquatic Education Center; here's a little taste of what has been going on:

On January 24th, more than 120 people packed the house for our Owl Prowl featuring a presentation and owl-calling hike from Hocking Hills State Park Naturalist, Pat Quackenbush and his helpful assistant, Ivan the Terrible. Pat taught the crowd all about owls of Ohio before taking it to the woods and giving a barred owl a call. Even with the large group, an owl called back! Kids were also guided through owl pellet dissection and made some cool owl masks! Chocolate milk was donated by Snowville Creamery.

Our very own Heike Perko led a Winter Tree ID Hike on February 10th with a group of enthusiastic naturalists and nature-lovers. Heike began by showing examples of branches and buds of various local trees. We then hiked around and (successfully!) identified a good number of trees!



Pat Quackenbush &
Ivan the Terrible



A fish was fashioned from recycled bottle caps at the November Recycle mania camp (photo by Jane Broecker)

For our Rain Barrel Workshop on March 9th, we took a break from Waterloo and headed to the New Marshfield Senior Center to get some more space. Athens Soil and Water Conservation District Environmental Educator, Teresa Caldwell and her entourage joined us to give a great presentation on water conservation and rain barrels. The group of 12 participants designed and built their own rain barrels to take home!

Our fall and spring Saturday morning day camps continued and the themes were: Recycle mania, Critters and Creatures, Amphibians, and Bird Camp.

Another recent event in close proximity to our Waterloo Aquatic Education Center was a Bird Hike at Lake Hope State Park on April 20th. The hike was lead by birding expert, Bob Scott Placier and had 15 attendees.

"A Day in the Woods" Workshop Series is Back! - OSU Extension - Vinton County

Dates have been set for the 2013 edition of this exciting 2nd Friday workshop series. The workshops take place at the 12,000 acre Vinton Furnace State Experimental Forest, which is one of Ohio's best kept secrets. It is Ohio's newest state forest and one of the premier research and demonstration forests in the United States. ~ and it's located right in our backyard near McArthur in Vinton County!

2013 classes include: Identifying Understory Plants, Song Birds (bonus Saturday), Tree Identification, Invasive Plan ID and Control, Oak Regeneration, Creating and Using Woodland Maps, Enhancing Wildlife Food Production, and Identifying Trees in Winter.

Classes will run from 9:00am to 3:30pm and the registration fee for each class will be \$10 which will include lunches and handout materials. For more information visit: <http://seohiowoods.wordpress.com>

Notes from Greenfire in the Raccoon Creek Watershed

Richard Hogan, RCP Member

Dear Friends, See the essay below from the Green Fire Times "Thinking Like A Watershed" for a thought provoking article toward ReGeneration of a living planet... and a clean water commons: <http://greenfiretimes.com/wp-content/uploads/2009/05/Green-Fire-Times-2009-Nov-Edition.11.1Final.pdf>. Terra Nova, a circle of learning action, (COLA), meets at Greenfire Farm and Earth Regeneration Center (every 2-4 weeks) starting Wednesday 5/1/13 @ 5:30pm. Visit: www.tamera.org to find out more.

All are invited and see www.greenfirefarm.org for location and additional information.

A Pod solar greenhouse (pictured right) is currently being constructed at Greenfire Farm. Also see: www.youtube.com/SolaRoof



Send To:

Athens, OH 45701

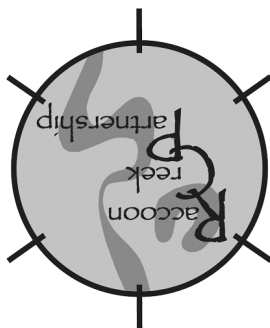
The Ridges, Bldg 22

Voinovich School

c/o Amy Mackey

Raccoon Creek Partnership

Place
Postage
Stamp
Here



RCP Membership Application

*A local partnership working towards conservation,
stewardship, and restoration of the watershed
for a healthier stream and community*

Individual Membership

| | | |
|--------------------------|------------------|-------|
| <input type="checkbox"/> | Yellow Warbler | \$15 |
| <input type="checkbox"/> | Wood Duck | \$30 |
| <input type="checkbox"/> | Kingfisher | \$100 |
| <input type="checkbox"/> | Great Blue Heron | \$500 |

Organizational Membership

| | | |
|--------------------------|-----------------|--------|
| <input type="checkbox"/> | Channel Catfish | \$50 |
| <input type="checkbox"/> | Grass Pickerel | \$100 |
| <input type="checkbox"/> | Spotted Bass | \$500 |
| <input type="checkbox"/> | Muskie | \$1000 |

Yes, I (we) would like to help protect Raccoon Creek

Name

Address

Phone

E-mail

Your contributions are tax deductible.

Please make checks payable to the:

Raccoon Creek Partnership

and send to:

Raccoon Creek Partnership

Voinovich School of Leadership and Public Affairs

c/o Amy Mackey

The Ridges, Building 22 Athens, Ohio 45701