

Raccoon Creek News

Spring 2012

“You mean there’s fish in Raccoon Creek!”

A Message from the Chairperson

Dear Raccoon Creek Partnership Members,

Spring has truly sprung in Raccoon Creek and we’re moving into a busy season on all fronts! Due to a rainy fall, a few of our construction projects from last year are going to be finished up this spring before we move onto new projects for 2012 including draining Lake Morrow at Broken Aro Wildlife Area. Waterloo Aquatic Education Center will be full of activity with the upcoming Spring Day Camp, Family Fun Day and two sessions of summer watershed camps for kids! Raccoon Creek Partnership is also doing some spring cleaning and maintenance on the Education Center; if you are interested in lending a hand, please get in touch. The Raccoon Creek Water Trail Association is moving quickly forward with their application for water trail designation and is holding a public float open to all at the end of April. I hope you are all enjoying the good weather and invite you to Explore Raccoon Creek!



Natalie Kruse, Raccoon Creek Partnership Chair

Upcoming Watershed Employment Opportunities

Amy Mackey, Raccoon Creek Watershed Coordinator

Looking for a job that makes a difference in the watershed?? Become a Raccoon Creek summer intern or AmeriCorps member! Positions are posted on our website, www.raccooncreek.org. Check the website for position details and application deadlines, or email me at mackey@ohio.edu for information.

Ohio River Clean Sweep

Kim Brewster, RCP AmeriCorps Member

Raccoon Creek Partnership will be participating again in this year’s Ohio River Clean Sweep! The Clean Sweep, organized by the Ohio River Valley Water Sanitation Commission, is a litter cleanup for the Ohio River and its tributaries. On June 16th, thousands of volunteers will collect tons of trash and debris in six states bordering the entire length of the river from Pittsburgh, Pennsylvania to Cairo, Illinois. RCP and RCWTA will be holding cleanups at two sites within the Raccoon Creek watershed: one to be accessed by canoe along Raccoon Creek and one to be cleaned by foot on the riverbanks. More information about meeting time and locations will soon be available on the RCP website. Volunteers are needed for this exciting event! If you would like to volunteer (and receive a free t-shirt!), contact Kim at kb271306@ohio.edu or 440-708-6148.

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

Thanks to the Kroger Community Rewards Program, you can give to RCP every time you use your Kroger card and still keep your fuel discount! Sign up Today by Following These 6 Easy Steps:

1. Go to www.krogercommunityrewards.com and click “Sign in/Register” at the top of the screen.
2. Click on “Sign up Today” on the Right hand side of the screen.
3. Simply fill in the requested information and a confirmation email will be sent to you.
4. Click on the link provided in the email from Kroger, and “Sign in”.
5. Click on the “Edit Community Rewards Information” near the bottom of the screen. This will open a new window. In the “Find Your Organization” field, type in “Raccoon Creek Partnership”. Follow just a few more easy steps, and you’re done!
6. Swipe your Kroger Rewards Card every time you shop and help RCP grow!

ATHENS

GALLIA

HOCKING

JACKSON

MEIGS

VINTON

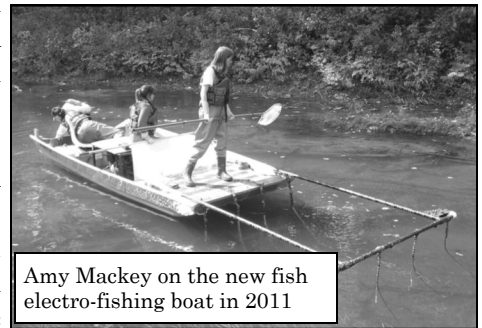
Message from the Coordinator

Amy Mackey, Raccoon Creek Watershed Coordinator

Thanks to all of our partners, members, and supporters, 2011 was another successful year for Raccoon Creek! As highlighted throughout this newsletter, Raccoon Creek has seen chemical and biological improvements, increased public interest, participation, and membership, and recognition by ODNR DMRM for Outstanding Abandoned Mine Land Reclamation and Exemplary Reclamation Techniques.

To date, 12 reclamation and treatment projects have been completed in the watershed at a total cost of nearly 10 million dollars. These completed projects have successfully removed 5,438 pounds of acid per day, and 1,057 pounds of metals per day from entering Raccoon Creek. 111 of 119 stream miles monitored are now meeting the watershed pH target of 6.5. Acid and metal load reductions and pH levels are key to the recovery of aquatic ecosystem.

2011 was a busy year for construction in the Raccoon Creek watershed. The East Branch Phase III project was completed in spring 2011 and the 2 new steel slag leach beds are adding alkalinity to the headwaters of Raccoon Creek. Two new projects, as well as a multitude of maintenance projects, began in 2011 and will be completed in 2012. Both projects, West Branch Harble Griffith and Orland Gob Pile, are reclamation/source control projects that will reduce the amount of water coming in contact with the acid-producing coal spoil. The Harble Griffith Project, a 29 acre reclaim in southern Hocking County, is expected to reduce metal loads by about 53 pounds per day and acid loads by about 326 pounds per day. This project will also include a 9.5 acre treatment wetland in the West Branch floodplain. The Orland Gob Pile Project, in northern Vinton County is a 5 acre reclaim visible from State Route 56. This project will assist in the recovery of the Raccoon Creek Headwaters by removing up to 60 pounds of acidity per day and 14 pounds of metals per day. Both projects are located in the West Branch of Raccoon Creek and will contribute to the biological recovery of West Branch and the Raccoon Creek Headwaters. These projects were scheduled for a fall 2011 completion, however, the intense fall and winter rains have delayed completion. The final earth moving, seeding, mulching, and wetland planting will take place in spring/summer 2012. Two new projects are planned for 2012, draining an acidic strip pit (Lake Morrow), and enhancing an existing wetland to help store precipitated metals (Flint Run Wetland Berms). These projects are currently in the design stage and construction is planned to begin in late summer 2012. Special thanks go out to the volunteer board of directors of RCP as well as our amazing staff, students, partners, landowners, and volunteers who make it all possible!!



Amy Mackey on the new fish electro-fishing boat in 2011

Winter Owl Prowl

Eliza Dennis, Age 9, Owl Enthusiast

In February we went to Waterloo Aquatic Education Center for the Owl Prowl. When we got there we snacked on graham crackers and hot chocolate. Yum! We made masks of owl faces and we dissected owl pellets. I found bones and a skull; I think it was a shrew or a mouse. There were lots of people there. I was concerned that when we went outside to hear the owls that so many people would make so much noise!

A naturalist (Pat Quakenbush) first brought out a big Great Horned Owl, named Ivan the Terrible. He *looked* terrible! He had big eyes and low eyebrows and huge "horns" and talons. He got his name because there was a guy Pat worked with and he wanted to pick Ivan up. Pat said "sure!" and was turning around to tell him how to do it but he had already picked him up

without a glove and Ivan had sunk his talons into his arm! The guy was saying "get it off me!" over and over. Pat said there are three ways to get him off you: wait; get some pliers to pry him off; or, turn your arm and he'll let go, but not before he gives a tight squeeze. He eventually got the owl to let go and the guy said, "I know his name! Ivan the Terrible!" (continued on page 3)



Winter Owl Prowl (cont.)

There was a cute little owl named Luna. I think she was a barred owl. She looked pretty small compared to Ivan! Pat showed us her ear hole and it was huge! We don't usually see them because they're covered in feathers. Owls have really good hearing and really good sight but not a very good sense of smell. Their eyes are so big, they take up lots of their head space, so there is not much room for a smart brain! We went outside on a walk at night and I heard owls. The people kept quiet, but their clothes didn't, which made it hard to hear, but I'm pretty sure I heard maybe a barred or a screech owl. I love owls - the owl prowls is definitely something you should go to if you're quiet enough.



Raccoon Creek Water Trail Association

Molly Gurien, RCP Board Member, Raccoon Creek Water Trail Association Chairperson

Spring is upon us and we have many exciting events and news to share! Our first public float of the year will be held on Sunday April 29th. This will be an all day float, so come prepared with food and water. We are paddling a middle section of Raccoon Creek, putting in at Clarion Rd. near Wilkesville, Ohio. Details will be on our web site. If you would like to reserve a free canoe contact me at the email address below. We are also planning a cleanup float for June 16th as part of the Ohio Clean Sweep in Vinton and Gallia Counties.



We are making progress on the official Water Trail. We have our sites identified and are finalizing the inventory. A graduate student at Ohio University is preparing a detailed Water Trail Map for us and we expect it to be ready for publication in late May or June. It will also be posted on our web page for downloading.

All of these endeavors require funds, and once again as part of our fundraising drive, we will again be raffling a kayak this year. The drawing will be at the Paw Paw Festival in September. Tickets can be obtained at any of our events, or contact us to purchase them.

The Water Trail Association meets regularly on the 2nd Thursday of each 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 paddlemelot@yahoo.com or visit our web page at www.raccooncreek.org.

Land Use Stories in the Watershed

Bob Eichenberg, RCP Board Member

Pete Woyar has many agricultural interests but making maple syrup is one of his favorites. "It's a seasonal thing that reminds me spring is here," he said when I chatted with him in his kitchen before we wandered out to see his sugar operation a few weeks back.

Pete and his wife, Marge Kramer, own a 125 acre farm near New Marshfield in Athens County. The sugarbush occupies about 7 acres of the 50 acres of woods. The farm's remaining 75 acres is hayfield and pasture for horses.

"In 1975 we started out with a few buckets and flat pan in the driveway," Pete reminisced. "It's a neat process to make something directly from nature." A new "sugar shack" was built in 2000-2001 to replace an earlier version built in the early 80's and the higher tech facility allows several thousand gallons of sap to be processed into 40-50 gallons of delicious syrup. Sap is gathered from 275 taps on about 200 trees.

Pete knows his tree business since he is a consulting forester and a retired forestry instructor who taught for many years at Hocking College. "This year is down considerably due to a warmer season. The woods decided to take a year off." He added that 2010 and 2011 were good years for syrup production.

Neighbors and watershed residents will continue to enjoy this sweet bounty helped along by syrup producers like Pete and Marge. We'll hope that production is back up next year.



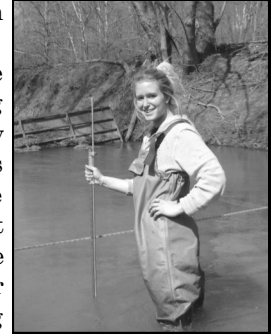
Pete checks sugar content of the sap with a refractometer

Raccoon Creek Student Intern

Laura Markel, Ohio University Student

My name is Laura Markel and I am a senior at Ohio University studying Marine, Freshwater, and Environmental Biology. I am interested in conserving the biodiversity and beauty that is left on our planet.

Raccoon Creek Partnership has given me a great opportunity to reach out in the community, while doing things that I hope to be doing for the rest of my life. What interests me the most is working in aquatic ecosystems and with the organisms that flourish in these habitats. I am currently assisting with field work and doing chemical water quality sampling in and around the Athens community. I am so thankful to be able to test water and help to make it healthier for future generations. I also love to inform others of the ways in which they can do their part. I worked at the 2011 RCP summer camp doing various activities with a group of about fifteen children. We made all sorts of crafts, visited the nature center, went canoeing, and learned the importance of our environment. The AmeriCorps leaders at Raccoon Creek Partnership are wonderful and inspiring people. It has been a blessing working with such a great program.



Raccoon Creek Water Quality Update

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

The water quality in Raccoon Creek is improving, and there are fish and macroinvertebrates (insects, crayfish, snails, mussels, etc.) to prove it! Biological data on fish and macroinvertebrates are collected by the Ohio Department of Natural Resources (ODNR) Division of Mineral Resources Management, Raccoon Creek Partnership, Ohio EPA Division of Surface Water, Ohio University, and ODNR Division of Wildlife. Fish are scored using the Index of Biotic Integrity (IBI) on a scale of 12-60 by the type, quantity, and health of fish found. Macroinvertebrates are scored using the Macroinvertebrate Aggregated Index for Streams (MAIS) by the type and quantity found. Some types of macroinvertebrates and fish can withstand poor water quality, whereas other types are intolerant of pollution and can only be found in cleaner, less contaminated water. Therefore, fish and macroinvertebrates are used as indicator species to determine biological health of aquatic ecosystems.

According to the ODNR Division of Wildlife, in the late 1950's there were very few species of fish found in most of the Raccoon Creek watershed. The least amount of fish found were in Little Raccoon Creek and in the upper section of Raccoon Creek around Zaleski State Forest and Lake Hope State Park. The far upper section had fish scores in the 20's or less in the 1980's and early 1990's and now has scores in the 30's and low 40's according to 2011 data. Little Raccoon Creek, the largest tributary to Raccoon Creek, has seen steady improvement in both fish and macroinvertebrate scores over the last 25 years. Little Raccoon Creek received the lowest possible fish scores in the mid 1980's. It scored an IBI score of 12, with only 1 species of fish found, which indicated a stream that was devoid of life; essentially a dead stream. In 2011, fish scores in Little Raccoon Creek were in the 40's, with 18 fish species recorded, and it was meeting or exceeding the criteria for Warm Water Habitat target at six sites. Macroinvertebrate scores in Little Raccoon Creek have also continued to improve over time with two sites achieving individual high scores in 2011.

Local watershed residents now remark on the existence of fish in areas where there had not been any fish for decades. Improvement in water quality and the re-establishment of fish and macroinvertebrate populations would not have been possible without funding available through the Abandoned Mine Land programs, ODNR-DMRM, Ohio EPA, Office of Surface Mining, the Voinovich School of Leadership and Public Affairs at Ohio University, the support of local communities in the watershed, and leadership provided by the non-profit Raccoon Creek Partnership. Despite the progress made so far in improving water quality in the Raccoon Creek Watershed, there is still an extensive amount of work left to be done to remediate acid mine drainage to help restore the watershed to create a healthier stream and community. Check out the RCP website for remediation project updates and www.watersheddata.com for more information on Raccoon Creek's leaps and bounds toward restoration. Sarah can be reached at sdlanders@gmail.com



Litter clean-up picture from a November 19th, 2011 clean-up submitted by Nathan Kallet, age 7

Let's Learn About Mosquitoes

Kristin Kindler, RCP AmeriCorps Member

There's nothing more annoying than something buzzing around your head, biting you and leaving those familiar red, itchy welts. Yes, I'm talking about mosquitoes. There are currently more than 3,000 species of mosquitoes in the world. Mosquitoes go through 4 different life cycles: egg, larvae, pupal and adult in a time period of about 1 week. Not all mosquitoes are bad; however, there are three species of mosquitoes that are primarily responsible for some of the world's deadliest illnesses. Mosquitoes not only transmit diseases to humans, they can also transmit disease to animals. The most common disease in animals is dog heartworm. Horses, cows and birds can also be affected by disease. Female mosquitoes bite you and take your blood because they need the protein before they lay their eggs in shallow or standing water. The female mosquito has mouth parts that pierce the skin of its host when bitten and her saliva is injected into the skin of the victim. The saliva is an anticoagulant to keep the blood from clotting while she gets her blood. The red, itchy welt that you get from a mosquito is an allergic reaction to the saliva. A mosquito wing beats from 300 to 600 times per second. Now, some interesting facts about mosquitoes. Enjoy!

The most effective mosquito repellent is still DEET, which was developed more than 50 years ago

Mosquitoes are more attracted to dark clothing than light clothing

Some people are more attractive to a mosquito than others due to their body chemistry

Mosquitoes prefer blondes, biting them more frequently than brunettes

Beer drinkers attract more mosquitoes

"A Day in the Woods" Workshop Series: OSU Extension Vinton County

The 12,000 – acre Vinton Furnace State Experimental Forest is one of the 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. Here's the best part; it's right in our back yard near McArthur in Vinton County. "A Day in the Woods – 2nd Friday Series" will feature classes covering topics ranging from tree identification and selection to woodland game and non-game wildlife. Classes will be offered the 2nd Friday of each month from May through November 2012 at the forest. Classes will run from 10am to 3:30pm and the registration fee for each class will be \$10 which will include lunches and handout materials. For more information visit us at <http://seohiowoods.wordpress.com>.

Raccoon Creek Partnership - Current Board of Directors

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

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 Thursday of every month

<u>April 21st</u>	Family Fun Day – Archery & Fishing at WAEC
<u>April 29th</u>	RCWTA spring float on Raccoon Creek
<u>June 16th</u>	Ohio River Clean Sweep – 2 locations along Raccoon Creek
<u>June 18th – 22nd</u>	Summer Day Camp (for youth ages 6 and up) at WAEC
<u>July 30th - August 1st</u>	Summer Day Camp (for older youth) at WAEC
<u>September 14th – 16th</u>	Come visit us at the Pawpaw festival!

"Like" us on Facebook!

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



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