

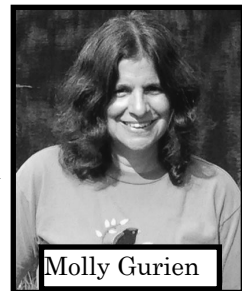
Raccoon Creek News

Spring 2016

Exciting Environmental Efforts Endure !

A Message from the Chairperson

Greetings Raccoon Creekers! While many of you know me as Chair of the Raccoon Creek Water Trail Association and a lover of all things water, I am excited to now lead the Raccoon Creek Partnership as Chair. We have had many great accomplishments in the watershed, thanks to our past leadership, and I am excited to move forward with this tradition. We have an exciting year ahead, building on our watershed restoration accomplishments, and providing environmental and recreational opportunities for children and adults alike. Look for some new activities this year, such as our family outdoors day, and a canoe/kayak slalom race this summer! We provide many opportunities for everyone to become involved and I look forward to working and learning with you in the watershed.



Molly Gurien

Raccoon Creek Partnership - Current Board of Directors

Molly Gurien (Chair), Heike Perko (Vice-Chair), Chelsi Hempstead (Treasurer), Bob Eichenberg (Secretary), Jessica Makosky, Vance Rannells, Lauren Dick

The Great Amphibian Migration

Dustin Gross- Raccoon Creek Partnership AmeriCorps Member 2015-2016



Vernal Pool in Vinton Co.

Lake Hope State Park in Vinton County is one of the best places in the region to experience a migration event that not many people get to see. On the first warm rainy nights of the year, salamanders of the family Ambystomatidae emerge from burrows and tunnels (hence their collective name, the mole salamanders) to travel to breeding grounds located in nearby wetlands and vernal pools. The most common mole salamander species in our area are the Spotted and Jefferson. On the right night, hundreds of these seldom-seen amphibians can be observed crossing roads, fields, and forests. Red-spotted Newts, Spring Peepers, Pickerel Frogs, and Wood Frogs can also be observed during this amazing natural event.



Spotted Salamander at Lake Hope

Family Outdoors Day



The Raccoon Creek Partnership will be holding a Family Outdoors Day at the Waterloo Aquatic Education Center on May 21st, from noon until 5pm. Activities will include archery, canoeing, guided plant identification hikes, bird watching, crafts, and much more. Be sure to stop out during the day and talk to the board members, enjoy some fun activities, and, most importantly, enjoy a beautiful day outside.



Register your Kroger card at www.krogercommunityrewards.com and select "Raccoon Creek Partnership". **You must renew every April!** Swipe your Kroger Rewards Card every time you shop & help RCP grow!



ATHENS

GALLIA

HOCKING

JACKSON

MEIGS

VINTON

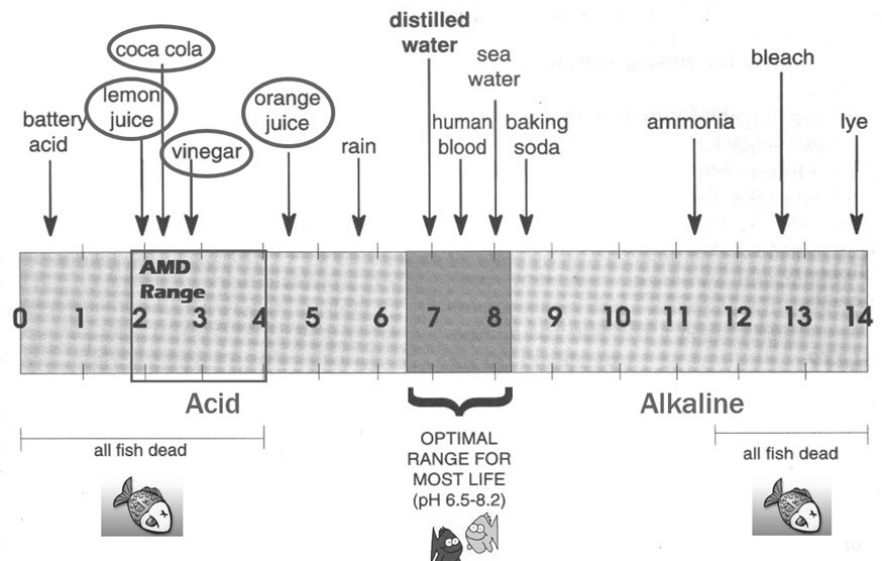
The History of Raccoon Creek: Industry, Restoration and Recovery

Amy Mackey— Raccoon Creek Watershed Coordinator

From the late 1800s through the mid- 1900s, many of the small communities of Southeast Ohio were booming towns of industry. The coal mining industry. Today, coal is seen as a controversial energy source, back then it was a way of life. Men, women, and children worked in the mines to feed their families, heat their homes, and to power a growing nation. Present day coal mining, though still occurring in the Raccoon Creek watershed, is highly regulated, primarily by the Surface Mining Control and Reclamation Act (SMCRA) of 1977. Today, the legacy of the historic coal boom lives on, in the form of acid mine drainage (AMD) and abandoned mine land (AML) issues.

Acid mine drainage (AMD) is formed when coal and the surrounding geology, normally buried deep within the earth, is disrupted (by mining or natural causes) and comes in contact with water and air. The iron pyrite (fool's gold) within the coal, reacts with the water and oxygen, forming, among other things, sulfuric acid. The acidic water then dissolves metals from the surrounding geology. In the Raccoon Creek watershed, the primary geology is sandstone, which is very rich in iron, shale, and aluminum. Streams impacted by AMD typically have a very low pH (acidic) and are high in metals (primarily iron and aluminum). These conditions cannot support a healthy biological community.

The pH Scale



A significant portion of the Raccoon Creek Partnership's time, effort, and resources are spent on acid mine drainage reclamation and treatment projects, and the biological and chemical monitoring of these projects. To date, there are 19 reclamation, treatment, and major maintenance projects completed in the Raccoon Creek Watershed at a cost of over 14 million dollars. Projects include a doser, limestone and steel slag leach beds, wetlands, surface reclamation, and more. These projects, funded by various state and federal sources, have resulted in the improvement of many miles of wildlife habitat in and along Raccoon Creek.

Chemical monitoring efforts in the watershed confirm that 116 of 117 miles of long term monitoring sites are now meeting or exceeding the pH target of 6.5, which is ideal for aquatic life. Biological monitoring (Fish Index of Biotic Integrity and Macroinvertebrate Aggregated Index for Streams) indicate that 42 stream miles are now meeting our criteria for Warm Water Habitat. Meaning, the fish and macroinvertebrates are there that should be there in a healthy aquatic system. We are seeing not only an increase in total fish numbers and numbers of species, but, a shift from a majority of pollution tolerant species to more sensitive species, confirming water quality and habitat improvements. Terrestrial species that rely on aquatic ecosystems have also begun re-establishing in recent years following the completion of treatment projects in the watershed. Trappers have reported an increase in beaver, mink, and muskrat populations and at least one otter has been trapped along Raccoon Creek. Blue herons, kingfishers, wood ducks, and mergansers are now regular visitors, often observed while conducting field work.

All of the chemical and biological data collected by Raccoon Creek Partners is available for public viewing and download at <http://www.watersheddata.com/map/map.aspx?WaterShed=RC1#>.

Detailed information about each project completed in the watershed and an annual stream health report is available at <http://www.watersheddata.com/>



Carbondale Doser

2016 Raccoon Creek Total Maximum daily load assessment.

Ohio EPA Division of Surface Water

Each year, Ohio Environmental Protection Agency (Ohio EPA) collects data from streams and rivers throughout the state. In 2016, Ohio EPA will be sampling the Raccoon Creek watershed in Gallia, Vinton, Jackson, Athens, Meigs and Hocking counties. During this survey, Ohio EPA will collect chemical samples, examine and count fish and aquatic insects, and take measurements of the stream. The physical, biological and chemical data will help determine water quality in the streams and identify any problem areas. Ohio EPA will share its results in a report with communities in the watershed. The study will help develop options for improving water quality in the impaired areas.

The last survey completed by Ohio EPA in Raccoon Creek was in 1995. Since then, Raccoon Creek Partnership (RCP) and Ohio Department of Natural Resources (ODNR) have completed numerous reclamation and restoration projects throughout the watershed. Ohio EPA has provided some of the funding through grants to RCP. As a result of these projects, mine drainage has been reduced and major improvements are expected.

If you're a stream side landowner, we may need your help. We might be asking you for permission to access Raccoon Creek from your property. All Ohio EPA staff carry photo identification. If you think your property has good access to Raccoon Creek or tributaries in the watershed, you can contact Kelly Capuzzi at (740) 380-5283 or Jordan Jenkins at (614) 836-8786. Thank you for your assistance!

Education with RCP

Steve Malueg- Raccoon Creek Partnership AmeriCorps Member 2015-2016

The education events of the fall and winter were a blast, and we hope to continue having a good time while learning as the weather warms up. Our "Fall Bird Identification," and "Junior Water Quality Specialist" day camps were a ton of fun, and everyone who came had a chance to see some wildlife. From the smallest insect, to the red-shouldered hawk that frequents Lake Penrod, we saw it all. Our Owl Prowl was another great success. Over 100 people came out to hear a presentation by Pat Quackenbush and to see the owls he brought, as well as the ones he could call in. Wild animals are, however, wild and, although we were unable to see any owls during the hiking portion, we did hear one off in the distance. Along with these larger events we have also been going out to schools and presenting to after-school programs. Our latest event had us taking middle-schoolers from Alexander, in Albany, out to the Carbondale Doser for a tour. As the weather warms back up our events will become more frequent. We are looking forward to more time on the water, visiting schools for pond studies and presentations, and our Family Outdoors Day coming up on May 21st. Our summer camps (which are both now full) will be held June 20th-24th and July 18th-22nd. We're looking forward to all of our events coming up and hope to see you out there.

RCP UPCOMING EVENTS AND OPPORTUNITIES

Visit us on **Facebook** or www.raccooncreek.org (website currently under construction) for details about upcoming events and activities, as well as event and meeting locations. Unless otherwise noted, many of our educational events take place at the Waterloo Aquatic Education Center (WAEC). Event dates and times subject to change!

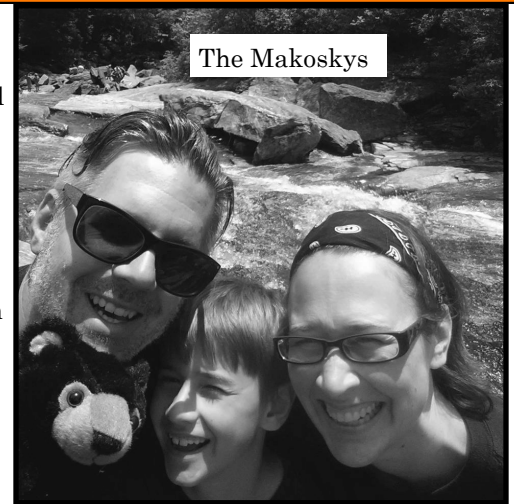
Monthly RCP Meetings are held the Last Wednesday of every month at 6:30 PM
Monthly RCWTA Meetings are currently being held in conjunction with RCP meetings the Last Wednesday of every month at 6:00 PM and are subject to change.

April 2nd	Appalachia Ohio Alliance tree planting Peacock Rd, McArthur @ 10:00 a.m.	May 21st	Family Outdoors Day Noon-5pm @WAEC, Contact rcp.americorps.2@gmail.com for info
April 17th Time TBA	Canoe Skills Training @WAEC, Contact paddlemr1ot@yahoo.com to register	June 20th-24th	"Water & Wildlife" Day Camp (FULL) 9:00a.m-4:00pm 1 st -4 th grade @WAEC
April 30th	Vinton SWCD Invasive Species Removal Zaleski, meet at Hope School at 1:00 p.m.	July 13th-17th	"Water & Wildlife" Day Camp (FULL) 9:00a.m-4:00pm 5 th -8 th grade @WAEC
		July 31st TIME TBA	Canoe Slalom at Lake Hope

An intro to the Board of Directors

Jessica Makosky- (Current Board member)

Swimming near Moonville almost 20 years ago was most likely my first introduction to the Raccoon Creek Watershed. Since then my family and I have settled into Hocking County just around the corner from Lake Hope, and we spend a large portion of our recreational time kayaking and hiking the region. It wasn't until my son attended an Amphibian workshop at the Waterloo Aquatic Education Center that I learned of the Raccoon Creek Partnership and all of the great work being done. When asked if I was interested in running for the board, it was an easy decision for me. By day, I work at the Heritage College of Osteopathic Medicine as the Telehealth Distance Learning Coordinator. For stress relief and an artistic outlet, I drum in 2 bands (The Revulvas and Amethystone) and play bass in a 3rd band (yet to be named). I've only been on the board a short time, but I've already learned so much. I'm excited to be a part of a group that not only works to make our world a better place to live, but also teaches future generations how to do the same.



The Makoskys

Hello Raccoon Creek!

Amy Mackey – Raccoon Creek Watershed Coordinator

Hello Raccoon Creek members, friends, and supporters! For those of you who don't know me, I wanted to take a little time to introduce myself. As a kid, I spent my time exploring the woods and streams of northeast Ohio. I graduated from Hocking College with Associates Degrees in Fish and Wildlife Management and Natural Resources Management, and have a Bachelors Degree in Wildlife and Fish Conservation and Management from the University of Rio Grande. After graduation I was an intern with the Ohio Department of Natural Resources: Division of Mineral Resources Management working in Acid Mine Drainage (AMD) impacted watersheds in southeastern and eastern Ohio. The internship familiarized me with AMD and Raccoon Creek. After serving several years as the Raccoon Creek Water Quality Specialist, I was hired as the Raccoon Creek Watershed Coordinator in 2010. My responsibilities with Raccoon Creek have varied from year to year, and from season to season, but tasks include water quality monitoring (chemical and biological), project maintenance, outreach and education, supervision of AmeriCorps members, students, and interns, grant writing and fundraising, and collaborating with agency personnel working within the watershed. I am most passionate about the biological ecosystems within the watershed. It has been exciting to witness the improvement in Raccoon Creek in the 9 years that I have been here. There are sections of stream that were practically devoid of life when I started here, that are now recovering. It's always exciting to see fish at a site for the first time, or to find a new species of fish or a new family of macroinvertebrates. To, me, that's the best part about the work that we do in Raccoon Creek; seeing creatures return to the watershed as a result of the projects and monitoring that we are a part of.



Amy in the field

AmazonSmile is the same Amazon you know. Same products, same prices, same service. Just shop on Amazon Smile and 0.5% of your eligible purchase price goes to RCP.

Just go to: <https://smile.amazon.com> and enter Raccoon Creek Partnership as your charitable organization. Then remember to go to smile.amazon.com next time you shop on Amazon! It doesn't cost you anything, and it helps to support the Raccoon Creek Partnership!

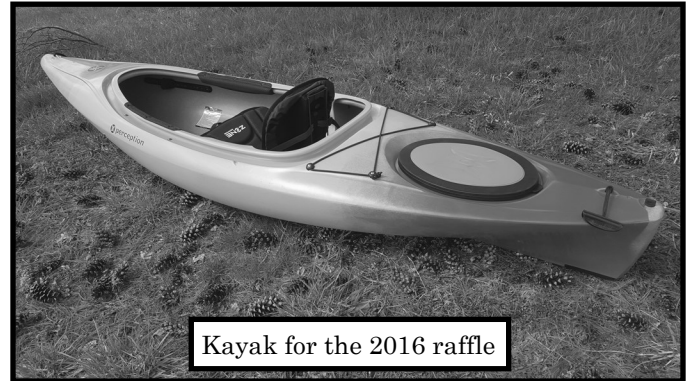


Water Trail Update

Molly Gurien, Chair, Raccoon Creek Partnership and Water Trail Association



The Raccoon Creek Water Trail Association is once again gearing up for a busy season on the water! With last year's ODNR Division of Watercraft funding we have a fleet of new American Canoe Association certified instructors ready to provide fun and safe experiences on the water! With our new instructors we plan to hold an introduction to canoeing skills class this April. This will take place instead of a spring paddle on the Creek. After taking this class you will be ready to navigate with skill, the twists and turns of Raccoon Creek! We have added a couple more kayaks to our fleet this year to expand the capacity on our paddling trips. This year's float will be in the Fall, stay tuned for more information. We will once again bring back our most popular fundraiser, the kayak raffle!



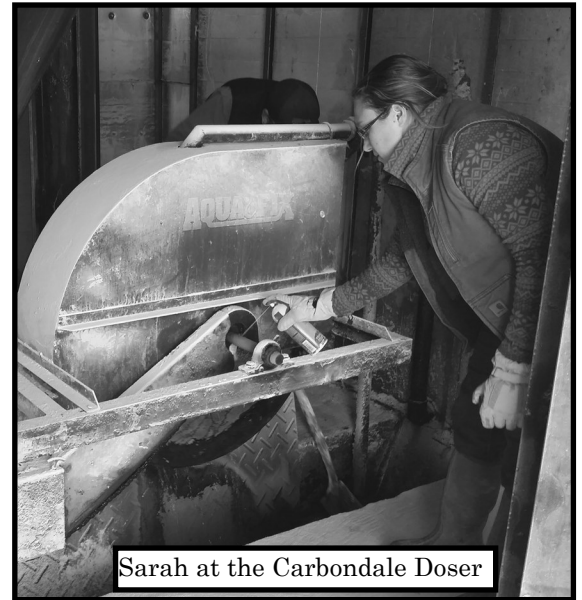
Kayak for the 2016 raffle

Raffle tickets can be purchased at any of our events or by emailing raccooncreekpartnership@gmail.com. The drawing for the kayak will be held September 18th at the Ohio Pawpaw Festival in Albany, Ohio. And something new for this year will be a slalom paddling course, July 31st! This will be open to both canoes and kayaks, and will test your skill and speed in a human-powered boat on a lake. There will be several entry categories to choose from, even a canine class! (canine must be accompanied by a human!). We are very excited about this new fundraising event and hope that you will take the challenge! Check our schedule for more events! Can't wait to see you on the water!

A Bit About... Sarah and Regional Watershed Restoration

Environmental Specialist & Raccoon Creek Water Quality Specialist, Ohio University Voinovich School

Some of you might not know who I am or what I do... so here is a bit about me and some exciting new work I am doing in the region! I grew up in Marietta, Ohio and got my undergraduate degree at Ohio University in Geography-Urban Planning. I then moved to Columbus, Ohio to attend The Ohio State University to get my Masters in City and Regional Planning with an environmental planning focus. I eventually returned to Southeast Ohio in the summer of 2010 to serve as a Rural Action Stream Restore Corps member with Raccoon Creek Partnership. Following my one-year AmeriCorps term I gained employment as the Raccoon Creek Water Quality Specialist. My primary work responsibility over the last 5 ½ years has been to keep Raccoon Creek alive and tell people about it. I monitor and maintain 19 acid mine drainage treatment and reclamation projects and organize and carry out chemical and biological water quality monitoring. I also manage data entry into the Ohio Watershed Data website (www.watersheddata.com), co-supervise AmeriCorps members, and provide technical assistance to Raccoon Creek Partnership.



Sarah at the Carbondale Doser

In addition to my work in Raccoon Creek I now have the opportunity to be part of the new Appalachian Ohio Clean Watershed Initiative (AOCWI), which is a collaboration between the Ohio University Voinovich School of Leadership and Public Affairs and Rural Action. This new initiative is funded by a grant through Ohio EPA and US EPA under the provisions of Section 319(h) of the Clean Water Act. This funding enables regional watershed professionals to build expertise in nonpoint source water pollution issues outside of acid mine drainage. Through the AOCWI my work can now extend beyond the six county Raccoon Creek watershed area which creates opportunities for new water management partnerships throughout the 30 county AOCWI service area.

Projects of the AOCWI happening in Raccoon Creek Watershed in the spring of 2016 include tree plantings, invasive plant removal, rain barrel workshops, and storm drain stenciling. If you are interested in volunteering for any of these events, have ideas for events of your own related to improving water quality, or would like to assist with water quality monitoring in Raccoon Creek contact me: Landerss@ohio.edu or 740-593-9601.

Raccoon Creek Partnership

c/o Amy Mackey

Voinovich School

The Ridges, Bldg 22

Athens, OH 45701

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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