

Raccoon Creek News

Fall 2018

Fresh Starts, Farewells, and Future Fall Fun

Welcome New AmeriCorps Members

Welcome Nikki!

Hi! My name is Nikki Salas, and I'm very excited to become an AmeriCorps member. I moved down here to Nelsonville/Athens from a town in northwestern Ohio to attend Hocking College. I successfully completed my Associate's degree in Geoenvironmental Science in the summer of 2018. I completed my internship for Hocking College at the Monday Creek Restoration Project in New Straitsville, which led me to this position. I'm looking forward to learning more about the culture and people of Southeastern Ohio and contributing to the great cause of improving and protecting water quality in our watershed!



Welcome Annika!

Hello! My name is Annika Gurrola and I am very excited to serve with Raccoon Creek Partnership this year as an AmeriCorps member. I graduated in April from Alma College up in Michigan and spent the summer in Montana, so I am eager to continue exploring the Athens area. I have a Bachelor's degree in Environmental Sciences with a concentration in aquatic biology and ecology. After doing a capstone project on the impact of oil spills on freshwater invertebrates, my interest in environmental contaminants continues to grow. I am eager to work among the local waterways to see firsthand the impact of acid mine drainage in the area while striving for a cleaner future for the Raccoon Creek watershed.

Raccoon Creek Partnership Annual Dinner

The Raccoon Creek Partnership 2018 Annual Dinner is a great opportunity to find out what's new in Raccoon Creek and how you can get involved in the restoration, conservation, and stewardship of the creek. Charlene Hopkins, a graduate student in Ecology and Evolutionary Biology at OU will be speaking about her research on the impacts of roads on amphibians and reptiles as well as the general effects of roads on waterbodies.

- When: Saturday, November 3rd, 4:00 p.m.
Where: New Marshfield Community Center
Located in New Marshfield, across from the post office
What: Family style potluck, please bring a dish to share
More Fun: Charlene Hopkins' presentation, Raccoon Creek updates, silent auction, and 50/50 raffle!

Be sure to bring cash or your checkbook to renew your membership and to bid on some of the amazing local goods in our silent auction! Watch our Facebook page for a preview of items in the auction. If you have items to donate for the auction, please contact Amy Mackey at mackey@ohio.edu.

RCP has experienced recent board vacancies and five board positions are up for re-election or need filled. Nominees must be current RCP members in good standing by the time of the election. If you are not yet a member, there is a membership form on the back of this newsletter!

Send nominations to Nora Sullivan at sullivan1@ohio.edu by **October 1st**.



ATHENS

GALLIA

HOCKING

JACKSON

MEIGS

VINTON

Farewell Abby & Emily!

August has crept up on me once again. However, unlike other Augusts when I realize I'm almost late buying birthday gifts for relatives, I realized that I am almost done with my AmeriCorps term with Raccoon Creek Partnership! This bitter moment of saying goodbye has been something that I have avoided devoting any time to, because I have treasured my time here so very much.

This year has been magical. I was able to see data that I collected over a year ago with the Ohio EPA add to RCP's findings, leading to the consideration of Raccoon Creek as Warm Water Habitat. Being part of that full circle has made me proud in the work I've done and that I am doing. With RCP, I've sampled, laughed, and busted my back serving with some of the most amazing people that I have ever met. I never thought that being this happy in a position was possible, and I never would have believed that having a supervisor as great as Amy Mackey was possible either.

It has been my pleasure to serve here, and I hope that all of RCP (the board, members, and supporters) feel the same passion for this amazing organization as I do. As a new period rolls around, I wish RCP support through times of change or challenge, laughter and joy through times of accomplishment and success, and peace of mind when things slow down enough to catch one's breath. Thank you Amy, Sarah, and Emily for being the best team EVER and for making this year of service something I will treasure always.

*By Abby Costilow,
AmeriCorps member*



It seems like it was just yesterday that I was sitting here writing my introduction article. It is hard to believe a year has come and gone, but sure enough, time waits for no one. Over the course of the year, Abby and I have talked about how lucky we are to be here. When you can look back on a really busy week and say, "Wow, I had an absolute blast", you know you are in the right place. This year has brought with it a wealth of knowledge. Before this year, I couldn't tell you any of the macroinvertebrates that you would find in a stream, now I'm slightly ok at it. I had the opportunity to see a reclamation project from the beginning (or close to it) to nearing completion! I have grown to love and appreciate even more the different aquatic life, such as the adorable dragonfly nymphs and hog suckers. I could go on and on about the different opportunities I have had, but I don't want to make this too long. This year with Raccoon Creek Partnership has been amazing, but it was made so much more so due to the people I got to work with. Amy and Abby, and so many others, made this position that much more enjoyable and memorable. I really hate goodbyes and tend to deny their existence, but it's never really goodbye is it?

*By Emily Keil-Loudner,
AmeriCorps member*



Thank You Raccoon Creek Outfitters!

By Abby Costilow, AmeriCorps member

It's often not easy being a non-profit organization. However, it's amazing how much support we receive from different individuals, organizations, and/or companies. Lately, one company has been supporting us in ways we can't even begin to adequately thank enough. Raccoon Creek Outfitters has been an amazing partner and supporter of us at Raccoon Creek Partnership. The Hoy's, Dustin and Bobbi, are the owners of the outfitters, and their support has meant the world to us! Recently, they donated the most impressive kayak that we have ever seen. It was put up for raffle to raise funds for RCP. Their support has been unwavering, and it has allowed us to move forward with our mission to work toward conservation, stewardship, and restoration of the watershed for a healthier stream and community. From the deepest part of our hearts, we thank you.

Interested in entering the raffle? We will be selling raffle tickets at Raccoon Creek Outfitters (74815 U.S. Highway 50, Albany) and Raccoon Creek Partnership's office (Building 22 Office 208, The Ridges, Athens—please contact Amy Mackey (mackey@ohio.edu) before stopping in) until September 16th! We will also be selling tickets at the 2018 Paw Paw Festival at Lake Snowden in Albany on September 14-16th at the RCP Booth. Tickets are \$5 each, or you can buy 6 tickets for \$20. For more information about the kayak and raffle or to buy tickets online, please visit our website <http://www.raccooncreek.org/>

The winner of the raffle will be selected on September 16th at the RCP's Paw Paw Festival booth! Good luck!

KAYAK RAFFLE

bonafide
SS127

Retail Price
\$1,599.00

Donated by:
RACCOON CREEK
OUTFITTERS

Raccoon Creek Restoration Project Updates

By Amy Mackey – Raccoon Creek Watershed Coordinator, Ohio University Voinovich School

2018 has been a very busy year for projects in the Raccoon Creek Watershed, with two reclamation projects (Daniels Reclaim and Ilesboro Reclaim), and a low-head dam removal (Big Sandy Run Low-head Dam Removal).

Daniels Reclamation Project

(Jackson County, Little Raccoon Creek) – This project is COMPLETE as of August 1st, 2018! The Daniels Reclamation Project is located in Jackson County and drains directly into Little Raccoon Creek. This project was funded by a Watershed Cooperative Agreement Program Grant through the Office of Surface Mining, the Abandoned Mine Land Fund (ODNR Division of Mineral Resources), and Health and Safety (ODNR Division of Mineral Resources). Dirt Works Express LLC of Logan, Ohio began construction in 2017. The contractors drained two acidic strip pits and reclaimed 10 acres of acid-producing spoil. The acidic spoil was re-contoured and limed, covered with a clay cap and top soil, and revegetated to reduce the amount of water coming in contact with the acid and metal laden spoil. A dangerous highwall and a historic dump site were also remediated. Native hardwood trees will be planted along a tributary on the project site in the spring. This completed project will reduce the amount of metals and acidity entering Little Raccoon Creek, thus improving downstream water quality.



Daniels Reclamation Project

Ilesboro Reclamation Project (Hocking County, West Branch Raccoon Creek) – This project is on schedule for completion by December 31st, 2018. The Ilesboro Reclamation Project is located in Hocking County and drains into the West Branch of Raccoon Creek. This project is funded by a Section 319 (h) Nonpoint Source Grant (Ohio EPA), Watershed Cooperative Agreement Program Grant through the



Ilesboro Reclamation Project

Office of Surface Mining, and Abandoned Mine Land Funds (ODNR Division of Mineral Resources). Ohio Erie Excavating LLC of Bolivar, Ohio began construction in February of 2018. The contractors cleared the site, treated and drained the two acidic strip pits, and reclaimed 34 acres of coal spoil and aluminum-laden shale. The spoil was re-contoured and limed, and is in the process of being capped and covered with top soil. When the re-soiling is complete, the site will be revegetated and limestone channels will be installed to convey water across the site and into the West Branch of Raccoon Creek. This project, when complete, will reduce the amount of metals and acidity entering the West Branch of Raccoon Creek, thus improving downstream water quality.



Big Sandy Run Low-Head Dam

Big Sandy Run Low-head Dam Removal (Vinton County, Big Sandy Run – Lake Hope) – This project is scheduled for a fall 2018 start date. The Big Sandy Run Low-head Dam Removal project in Vinton County is located just upstream of Lake Hope, on Zaleski State Forest property. The project is funded by a Section 319 (h) Nonpoint Source Grant (Ohio EPA) and ODNR Division of Forestry is conducting the dam removal. This low-head dam (composed of 2 concrete structures), originally a component of the 1980 Lake Hope underground mine sealing project, acts as a barrier to fish passage and degrades aquatic habitat in Big Sandy Run. Preliminary biological sampling confirmed that many species of fish are not able to move upstream of the dam. Twelve species of fish were documented at the two sampling sites downstream of the dam, with only four species occurring at the

two sites upstream of the dam. Removing the center 50% of the concrete structures will allow fish passage to upstream habitats and will help to return the stream morphology to a more natural state.

Project photos and updates are posted to the Raccoon Creek website. Follow the projects at <http://www.raccooncreek.org/category/project-updates/>. You can also view annotated 360° photos of our current projects at <http://watersheddata.com/Education/Stream1.html>

Still the Season for Lightning Bugs

By Kaylin Callander, Naturalist at Lake Hope State Park, Division of Parks and Watercraft

Worldwide there are over 2,000 species of lightning bugs, 12 being found in Ohio. These insects are beetles, not true bugs or flies, as the common names suggest. They are medium-sized, black, with red or yellow markings, especially behind the head. The wing-covers are rectangular, while the posterior of the abdomen usually has a light-emitting organ. This light is created by mixing oxygen with two chemicals: luciferin and luciferase.

In the summer, lightning bugs are often observed shortly after dusk, when they emit a yellow or greenish-yellow blinking light to attract members of the opposite sex. Both adults and larvae prey upon small, soft-bodied insects, but the former sometimes appear on flowers, where they seek nectar or feed on pollen. This time of year, as adult numbers become scarce, larvae can be seen glowing faintly on the forest floor.



Mating

The general procedure is as follows: the males fly towards the females, flashing their coded messages of "I'm healthy!" and "I'm able to produce strong offspring!"; the motionless females reply. The males fly closer, ad nauseam until they get together and copulate. The flashing of the male acts as an honest signal of the male's fitness, with average or faster-than-average flashes being preferred (Branham & Greenfield, 1996).

Copulation lasts about 20 minutes, and each female mates only once, and multiple times under exceptional circumstances. The system is apparently very successful, as lampyrids rank among insects as being very successful at mating.

Growing Up Underground

When ready to deposit their eggs in late autumn, female lightning bugs do so in the ground. The eggs hatch into larvae after four weeks. The larvae stay underground over the winter, growing and feeding on worms and slugs. Some may spend an additional year underground. As spring arrives, the lightning bug larvae pupate in preparation for becoming adults. They do not feed during this stage; instead, they devote their energy to developing adult parts like wings.

Lake Hope will be hosting two programs devoted to finding the glow worms. Both will be held at the Hope School House on Wheelabout Road at 8pm on Saturday September 15 and Friday September 21.

In October, we will be hosting our 39th Annual Fall Hike on October 20th at 10am and our annual ROAR Day celebration is on October 27th at 10am.

For more information on upcoming events please visit us at: ohiostateparks.org/LakeHope or on Facebook or call the Nature Center at 740-596-3030

Raccoon Creek Water Trail Public Float

By Molly Gurien, RCP Board Member

Raccoon Creek Partnership is pleased to join with other regional organizations to commemorate Appalachian Ohio National Public Lands Day as part of the larger National Public Lands Day initiative. Public Lands Day activities promote an understanding and appreciation for public lands and waterways through stewardship and recreation. Join the Raccoon Creek Partnership on September 29th for a canoe/kayak float on Raccoon Creek in Gallia County as we celebrate and appreciate our local rivers. This event will highlight outdoor recreation, public access, water safety and environmental stewardship of a local waterway.

Registration is required. Canoes and kayaks are available by reservation. This event is free and open to the public. Children under the age of 18 are welcome, but must be accompanied by an adult. We will meet at 10 am, on Yellowtown Rd, just west of where Raccoon Creek crosses Rt. 218 in Gallia County. **Contact Molly Gurien (740-707-6655 or gurien@ohio.edu) for more information and to register for the event.**



Summer Camp Fun

By Emily Keil-Loudner, AmeriCorps member

The week of June 18-22 was a beautiful, warm and sunny week, the perfect week for summer camp! It started with learning about the biology in streams, perfect for the two hottest days! The kids played in the streams looking for macroinvertebrates and catching fish and turtles with minnow traps, all the while about learning their importance in the streams. Camp continued on with learning archery, fire building, and different wild edibles. There was a special trip to the Bishop Educational Gardens in the Hocking Hills, where the campers were able to paint their favorite part of the gardens. The week ended with lots of rain, but the kids were still able to explore the Nature Center at Hocking College and end the day with a swim.



Ongoing Research in Hewett Fork Subwatershed

Through November 1st, Jennie Brancho will be continuing her Masters thesis research in Hewett Fork subwatershed. Jennie is investigating how sediment movement, nutrient concentrations, and biofilm abundance change in response to precipitation patterns at six sites in Hewett Fork. By working in Hewett Fork, Jennie is also hoping to better understand how these parameters change over a gradient of water quality improvement created by the Carbondale doser treatment system.

RCP UPCOMING EVENTS & OPPORTUNITIES

Monthly RCP Meetings are held the Last Thursday of every month at 6:30 PM
For details about upcoming events and activities, as well as event and meeting locations, visit www.facebook.com/raccooncreekpartnership. Unless otherwise noted, many of our educational events take place at the Waterloo Aquatic Education Center (WAEC).

Event dates and times subject to change.

- Paw Paw Festival at Lake Snowden** _____ **September 14-16th**
- Raccoon Creek Water Trail Public Float** _____ **September 29th**
- Fall Day Camp at Waterloo** _____ **October 13th**
- Rural Ohio Appalachia Revisited (ROAR)** _____ **October 27th**
- Raccoon Creek Partnership Annual Meeting** _____ **November 3rd**

Raccoon Creek Partnership Board meetings are the last Thursday of each month and open to the public and special committees as needed.

****All events subject to change. ****

For info or directions visit our Facebook page:

<https://www.facebook.com/raccooncreekpartnership/>

Or e-mail raccooncreekpartnership@gmail.com or mackey@ohio.edu



Raccoon Creek Partnership

c/o Amy Mackey

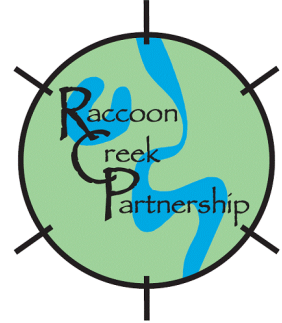
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Athens, OH 45701

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

Paddlefish	\$1000	<input type="checkbox"/>
Flathead Catfish	\$500	<input type="checkbox"/>
Spotted Bass	\$100	<input type="checkbox"/>
Grass Pickerel	\$50	<input type="checkbox"/>

Organizational Membership

Golden Redhorse	\$500	<input type="checkbox"/>
Longear Sunfish	\$100	<input type="checkbox"/>
Fantail Darter	\$30	<input type="checkbox"/>
Striped Shiner	\$15	<input type="checkbox"/>

Individual Membership

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