

water matters

Cobb County Water System

Fall 2019

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www.cobbstreams.org



An Update from the Volunteer Frog Monitoring Program

For the past ten years, Cobb's volunteer watershed stewards have been trained to identify frogs and toads by their unique calls and have been helping collect distribution information about local anuran species. By utilizing smart phone technology, data collection and submission have become as simple as downloading an app, going for a walk, and touching a few buttons on your phone. Thanks to Cobb County's GIS team, who worked with our Watershed Stewardship staff over the past few years to develop and pilot this new methodology, we are now training volunteers on how to access the ESRI Collector App for frog monitoring. Data is easily submitted and ready to view instantaneously. The Collector App also provides a public place to store, view, and share the data.



In piloting this new technology, we needed to conduct routine data collection and use the tool to learn how it functions, ensure the app was working and accurately mapping the data points, and understand how the data would be displayed for the user. We decided to use this opportunity to engage with the community. So, in May of 2018 and 2019, staff members led weekly sunset walks along the Noonday Creek Trail. By walking the same trail each week, we could track the diversity of species calling as the month progressed. In 2018, we heard a total of six different species during our evening walks: Green Treefrog, Cope's Grey Treefrog, American Bullfrog, Green Frog, Fowler's Toad,

and Eastern Narrowmouth Toad. As the month progressed, Green Treefrog and Cope's Gray calls increased from individual vocalizations to full choruses. The other species were heard sporadically or only once throughout the month. The data from May 2019 reflected less calls overall, with calls from some of the 2018 species absent and fewer individuals vocalizing.

Many factors determine when and why frogs are calling. Moisture and weather are major contributors. 2018 was the wettest year since 1948 and frogs take advantage of wet weather. The wetland section of the Noonday Creek Trail where we walked usually has standing water for much of the year. During the third week of May 2019, this wetland was nearly dry. Other sections of the floodplain, which typically have shallow standing water, were dry for two of the five weeks in May 2019. These notable observations from the data collected during our public frog walks resulted in anecdotal comparisons between the 2018 and 2019 seasons and reflect the importance of recording visual observations and noting ambient conditions as well as the actual vocalizations. For our volunteer data, it appears the Cope's Grey Treefrog enjoyed a longer calling period in 2019. While in 2018, the Green Treefrog was the most vocal species. More vocal species could mean a better breeding season. Over time, these trends could provide insight to possible shifts in population, distribution, and clues about the health of the surrounding environment.



Data collected by our volunteers, videos, maps, and natural history facts about our local species can be found on our Frog Story Map at cobbstreams.org, under Volunteer. If you would like to become a trained frog monitor for Cobb Water, email water_rsvp@cobbcounty.org. Our spring frog walks dates will be published in early 2020.

Owls See the World Much Like We Do

By: JoAnna Klein

<https://www.nytimes.com/2013/07/03/science/owls-vision-brain.html>

Owl eyes are round, but not spherical. These immobile, tubular structures sit on the front of an owl's face like a pair of built-in binoculars. They allow the birds to focus in on prey and see in three dimensions, kind of like humans — except we don't have to turn our whole heads to spot a slice of pizza beside us.

Although owls and humans both have binocular vision, it has been unclear whether these birds of prey process information they collect from their environments like humans, because their brains aren't as complex. But in a study published in the *Journal of Neuroscience* on Monday, scientists tested the ability of barn owls to find a moving target among various shifting backgrounds, a visual processing task earlier tested only in primates.

The research suggests that barn owls, with far simpler brains than humans and other primates, also group together different elements as they move in the same direction, to make sense of the world around them.

"Humans are not so different from birds as you may think," said Yoram Gutfreund, a neuroscientist at Technion Israel Institute of Technology who led the study with colleagues from his university and RWTH Aachen University in Germany.

A critical part of perception is being able to distinguish an object from its background. One way humans do this is by grouping elements of a scene together to perceive each part as a whole. In some cases, that means combining objects that move similarly, like birds flying in a flock, or the single bird that breaks away from it.

Scientists have generally considered this type of visual processing as a higher level task that requires complex brain structures. As such, they've only studied it in humans and primates.



Photo Credit: m.shattock
<https://tinyurl.com/y6ftu5r>

The researchers also recorded activity from the ocular tectum, a brain area involved in basic visual processing in owls and many other vertebrates. They found that it activated more or less depending on the movement of the dots, suggesting it was responsible for performing this seemingly complex task. "What we find is considered higher level processing in an area that is not traditionally considered a higher level area," Dr. Gutfreund said. He thinks this ability was conserved through evolution in a similar part of the human brain called the superior colliculus, which helps direct attention among other functions.

But how the ability evolved, or how it may play out differently in birds and mammals is still a mystery, Dr. Gutfreund said. For now, they want to determine the path traveled through the owl's brain by these movement-grouping signals.

"It's not so easy to do these experiments," said Dr. Gutfreund, but he believes this motion grouping ability is widespread in the animal kingdom. "I think that the visual system basically evolved to identify targets for behavior. This is why we have the brain."



Photo Credit: Phil Haynes
<https://tinyurl.com/y2yntsvj>

But Dr. Gutfreund and his team believed this ability was more basic — like seeing past camouflage. A barn owl, for example, might have evolved a similar mechanism to detect a mouse moving in a meadow as wind blows the grass in the same direction.

To test visual detection tactics in their feathered subjects, they showed barn owls screens of black, moving dots on a gray background and attached cameras to their heads to track their gazes. Then the team measured how long it took the birds to turn their heads toward a target dot, moving in a different direction than numerous other shifting dots.

The owls were able to spot the target. They were better at finding it when the contrasting dot direction was uniform rather than scattered. Even though the elements were all black dots, the direction they were moving made a big difference in the owl's perception of the world — and how its brain responded.

Mysterious Facts About Owls

1. OWLS CAN TURN THEIR HEADS ALMOST ALL THE WAY AROUND—BUT NOT QUITE.

It's a myth that owls can rotate their heads 360 degrees. The birds can actually turn their necks 135 degrees in either direction, which gives them 270 degrees of total movement. According to scientists, bone adaptations, blood vessels with contractile reservoirs, and a supporting vascular network allow the owls to turn their heads that far without cutting off blood to the brain.

2. OWLS HAVE FAR-SIGHTED, TUBULAR EYES.

Instead of spherical eyeballs, owls have "eye tubes" that go far back into their skulls—which means their eyes are fixed in place, so they have to turn their heads to see. The size of their eyes helps them see in the dark, and they're far-sighted, which allows them to spot prey from yards away. Up close, everything is blurry, and they depend on small, hair-like feathers on their beaks and feet to feel their food.

3. THEY HAVE SUPER-POWERED HEARING.

Owls are capable of hearing prey under leaves, plants, dirt, and snow. Some owls have sets of ears at different heights on their heads, which lets them locate prey based on tiny differences in sound waves. Other owls have flat faces with special feathers that focus sound, essentially turning their faces into one big ear. (The "ear tufts" on some owls are feathers.)

4. OWL FLIGHT IS SILENT.

Unlike most birds, owls make virtually no noise when they fly. They have special feathers that break turbulence into smaller currents, which reduces sound. Soft velvety down further muffles noise.

5. OWLS SWALLOW PREY WHOLE, THEN BARF UP THE CARCASS.

Getting killed by an owl is gruesome. First the owl grabs the prey and crushes it to death with its strong talons. Then, depending on the size, it either eats the prey whole or rips it up. The owl's digestive tract processes the body, and the parts that can't be digested, like fur and bones, are compacted into a pellet, which the owl later regurgitates. Sometimes, those pellets are collected for kids to dissect in school.

6. THEY'RE MASTERS OF CAMOUFLAGE.

Many owls sleep in broad daylight, but the colors and markings on their feathers let them blend in with their surroundings.

7. OWLS ARE NATURAL PEST CONTROL FOR FARMERS.

Owls eat a lot of rodents. A single barn owl family will eat 3000 rodents in a four-month breeding cycle. One owl can eat 50 pounds of gophers in a year. Many farmers are installing owl nesting boxes in the hopes that owls will clean out pests like gophers and voles from their land. This natural form of pest control is safer and cheaper than using poison, and it's better for the owls too. Many owls die each year from eating rodents that have been poisoned.



Photo Credit: Tom Spine
<https://tinyurl.com/y2rqvsb8>



Photo Credit: Brian Bailey
<https://tinyurl.com/yyemtf3h>

Source: <http://mentalfloss.com/article/68473/15-mysterious-facts-about-owls>

CONSERVATION TIP

Owls are beautiful and mysterious raptors that are favorites for birders and non-birders alike. Unfortunately, they also face many threats and almost one-quarter of the world's owl species are considered officially endangered, threatened or vulnerable to severe population declines. There are many easy things you can do to help owls and encourage their preservation.

- Turn off the lights: Most owls are active either at twilight or during the night. They hunt better and feel more comfortable in the dark. Turning off porch lights, landscape lighting and other outdoor illumination will help owls roam more freely. Likewise, decorative string and net lights should be minimized to not only reduce light levels, but to minimize the risk of hunting owls getting tangled in the wires.
- Eliminate Pesticide Use: As owls consume mice and other rodents that have consumed pesticides and rodenticides, these birds can accumulate lethal levels of chemicals in their blood, leading to illness and death. Instead of relying on chemicals to control rodent populations, invite owls to hunt with appropriate habitat and they will naturally keep the prey in check.
- Attract Backyard Owls: Different species prefer different types of habitats, but as long as prey is abundant, owls will inhabit nearly everywhere, including suburban and urban areas. Putting up owl boxes and providing an owl-friendly yard help to create a safe, inviting habitat and are a great start to attracting backyard owls.



Photo Credit: Stan Lupo
<https://tinyurl.com/y4hsx8ft>

Your Better Bathroom is Closer Than You Think

This October, Cobb County Water System is promoting the U.S. Environmental Protection Agency's (EPA) conservation initiative Better Bathrooms Month. This program encourages homeowners to take one simple action, replace old bathroom fixtures to create a better bathroom. Bathrooms are by far the largest water users in the home, accounting for more than half of all the water that families use indoors. With advances in plumbing technology and design, the latest faucets, showers, and toilets use significantly less water than older models while still delivering the rinse, spray, and flush you expect. Let's take a closer look at the fixtures that can make your bathroom better.

Toilets:

Toilets installed before 1993 use about 3-5 gallons of water per flush. Most toilets on the market today use less than 1.5 gallons per flush, a substantial difference from the past. By replacing your old toilet, you will see significant savings on your water bill. *Cobb County Water System's Toilet Rebate Program* enables specific residential and commercial Cobb County Water Customers to receive a credit on their water bill for each toilet replaced. For our residential customers, homes built before 1993 are eligible for a \$100 credit on their water bill per replaced toilet, with a lifetime maximum of three toilets per property. Commercial properties developed before 1993 are eligible to receive a \$50 credit per water efficient toilet installed, with a maximum of 100 toilets. Since its inception in 2007, this program has led to the replacement of more than 30,000 toilets, leading to a savings of an estimated 600,000 gallons of water per day in the county. To apply for a toilet rebate, visit cobbwater.org, under Customer Service.



Photo Source: <https://tinyurl.com/y2hyt2yh>

If you are not ready to purchase a new toilet, but would like to check if your current toilet is working properly, an easy way to check for leaks is by using food coloring. Place a few drops of food coloring in your tank, wait 15 minutes without flushing, and if the food coloring appears in the bowl then you have a leak! Often the issue is the flapper does not seat properly and is unable to form a tight seal against the valve seat. This lets water leak from the tank into the bowl, resulting in increased water use and a higher water bill. A simple adjustment or replacement of the flapper could solve your water wasting woes and give you a better bathroom.



Photo Source: <https://tinyurl.com/y4goudxe>

Faucets:

Do you ever think of how much water is coming out of your sink when you leave the water running while brushing your teeth or washing your hands? Older models of faucets often drip when turned off, and when turned on release almost 3 gallons of water per minute! What are the best ways to save water at the sink? Begin with the aerator at the end of the faucet. An aerator is a mesh screen that breaks the flow of water into multiple small streams, adding air in between. By diluting the water stream with air, aerators reduce the volume of water flowing from the faucet. The latest sink aerators reduce the amount of water coming out per minute, while providing enough pressure to wash your hands. To install a new aerator, simply unscrew the old aerator screen on your faucet, twist the new one on, and save water. Make sure to regularly replace or clean your faucet aerators, they can become clogged with silt and other debris over time. A simple brush and rinse will usually do the trick, though sometimes a multiple-hour soak in a vinegar-water mixture will be necessary.

Showerheads:

Did you know that dated showerheads can use up to 3-5 gallons of water per minute? That means if you take a 10-minute shower, that's 30-50 gallons of water down the drain! Today's showerheads use approximately 1.5 gallons per minute, while still providing nice pressure to wash off your soapy suds! Older showerheads can be replaced with a "Flow-Control" showerhead. These showerheads use a valve temporarily slow the flow of water. Push the valve one way to reduce the flow while you lather up, push it back and it returns to full flow while you rinse off. Popularly known as a "navy button", "military shower," or "soap & save". This shower control valve allows the conscientious user to save the maximum amount of water and energy.

If you are interested in creating a better bathroom, Cobb County Water Department offers a **free Indoor Water Efficiency Kit**. This kit includes toilet leak detector dye tablets, a sink aerator, a kitchen sink aerator, a showerhead, and an indoor efficiency audit that will guide you through an audit of your indoor water fixtures. If you are a Cobb County Water customer and would like to order your free kit, submit your request on our webpage cobbwater.org, Customer Service, Water Saving Kits.



Photo Source: <https://tinyurl.com/yyrwan35>

**Declared Water Restrictions Status:
Non-Drought Status**

Outdoor water use: irrigation permitted daily before 10 AM and after 4 PM.

No restrictions on other outdoor water uses: car washing, pressure washing, and hand watering.

U.S. Drought Monitor: Abnormally Dry

Soil Moisture: 19.8 inches

Rainfall Level: Normal

- 2019 Total: 33.09 inches
- Jan-August Historical Average: 33.18 inches

Rainfall June - August 2019:

- June: 2.98 inches
- July: 6.02 inches
- August: 3.20 inches

Allatoona's current level:
840.25 feet, above normal

**Chattahoochee River
and tributaries:**
At normal ranges

Lake Lanier:
Normal level

RECOMMENDED RESOURCE

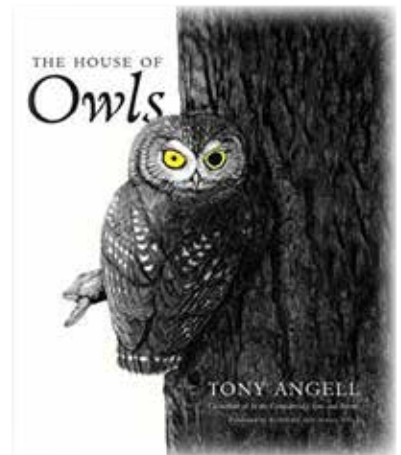
The House of Owls

by Tony Angell

"For a quarter century, Tony Angell and his family shared the remarkable experience of closely observing pairs of western screech owls that occupied a nesting box outside their forest home. The journals the author recorded his observations in, and the captivating drawings he created, form the heart of this compelling book—a personal account of an artist-naturalist's life with owls. Angell's extensive illustrations show owls engaged in what owls do—hunting, courting, raising families, and exercising their inquisitive natures—and reveal his immeasurable respect for their secret lives and daunting challenges.

Angell discusses the unique characteristics that distinguish owls from other bird species and provides a fascinating overview of the impact owls have had on human culture and thought. He also offers detailed scientific descriptions of the nineteen species of owls found in North America, as well as their close relatives elsewhere. Always emphasizing the interaction of humans and owls, the author affirms by his own example the power of these birds both to beguile and to inspire."

Source: <https://tinyurl.com/yxvh43rj>



ANNOUNCEMENTS

ECOPEDIA**Crepuscular**

Most people are familiar with the terms nocturnal and diurnal, but many species are only active during the time of dawn and dusk. Crepuscular animals utilize this time for a variety of reasons: predators need to hunt at times of day when their prey is available, prey try to avoid the times when their principal predators are out, and the temperature at midday may be too high or at night too low.



Examples of crepuscular animals are owls, deer, and fireflies.

waterSmart Contests

Each year, Cobb County Water System partners with Cobb County-Marietta Water Authority to sponsor three art contests that encourages students' creativity while emphasizing water conservation.

waterSmart waterArt Calendar Contest

Cobb County middle school students are invited to use their talent and create a 2-D work of art that answers the question, "How is water important to me?" All entries will be displayed in at The Art Station-Big Shanty with 12 winners appearing in the 2020 waterSmart calendar. **Deadline for submissions: October 8, 2019.**

Adventures with Tappy Turtle and Allatoona Ally

This contest invites Cobb County fourth and fifth grade students to create coloring book illustrations depicting Lake Allatoona's ambassador, Allatoona Ally, and her friend from Cobb Water, Tappy Turtle. Winning designs are featured in the Allatoona Ally & Tappy Turtle coloring book distributed throughout the community. **Deadline for submissions: December 6, 2019.**

Photo Contest

Cobb County contains many beautiful water features, high school students are encouraged to get document these while focusing on the theme "How is water important to me?" Winning photos will be developed into notecard sets distributed throughout the county. **Deadline for submissions: February 7, 2020.**

For more information on these contests email waterefficiency@cobbcounty.org.

Welcome to Shaundon Moore

Shaundon Moore joins the Watershed Stewardship team with a broad range of experience in environmental research, conservation, and outreach. He graduated from Valdosta State University in 2016 with a Bachelor of Science in Biology, during which time he spent two years conducting ecological research with the Rocky Mountain Biological Laboratory (Crested Butte, CO), Hancock Biological Station (Murray, KY), and Mott Macroecology Lab (Valdosta, GA). Immediately after attaining his degree, Shaundon moved to Michigan to pursue graduate studies in conservation biology at the Central Michigan University Institute for Great Lakes Research. He spent his tenure in Michigan conducting research on amphibian behavior, teaching college labs in zoology and cell biology, and preparing for his career as an environmental professional. After moving back home to Georgia in 2019, he spent some time working as a photographer at Georgia Aquarium before accepting his current position at the Cobb Water System. Shaundon will be responsible for coordinating and presenting middle school environmental programs.



Welcome to Charlee Martin

Communications & Education would like to welcome **Charlee Martin** as our new full-time Environmental Program Specialist. Charlee joins our team with an extensive background of environmental education and wildlife rehabilitation. Charlee graduated from Clayton State University in 2007 with a Bachelor of Science in Biology and a Chemistry minor. She began her career with the Ecological Society of America in Washington DC, coordinating an undergraduate diversity and inclusion program. An internship with the Georgia DNR - Wildlife Resources Division spring boarded her Environmental Education career and experience working with native reptiles and birds of prey. She then taught and cared for the native and exotic animals at Fernbank Museum of Natural History, adding Egyptian Fruit Bat presentations and wildlife rehabilitation while at Cochran Mill Nature Center. During her most recent position at the Wylde Center, she taught environmental, culinary, and Farm to School programs. Charlee will be responsible for coordinating and presenting high school programs.

Thank You to our Summer Interns!

The Watershed Stewardship Program would like to thank our summer interns **Anna van Eekeren** and **Fafa Toure**. Both are high school seniors this year and have proven themselves to be hard workers and all-around wonderful people. Anna worked on a project compiling and comparing historical data from two Adopt-A-Stream sites on Rottenwood Creek and Fafa updated the formatting and content of our Garden Blog. Both assisted with other duties including presenting community education programs and water quality monitoring workshops. Thank you Anna and Fafa for a great summer and all of your dedicated help!



Join the 2019-2020 Chattahoochee Challenge!

In this exciting challenge, scouts, families, clubs, community groups, and businesses are encouraged to attend and organize waterway events and projects throughout Cobb County. At the end of the contest, the group that has accumulated the most volunteer service hours receives a free rafting trip on April 25th. The rafting trip will take place on the Chattahoochee River with a National Park Ranger. Qualifying events must take place between August 1, 2019, and April 12, 2020, and be waterway-based service projects. Challenge participants can organize their own service projects or participate in events offered by the Watershed Stewardship Program. Upcoming events can be found on the calendar at cobbstreams.org. Groups must be registered by December 1st.

Register your group at www.cobbstreams.org located under Volunteer/Chattahoochee Challenge

Best of luck to all our competitors!



Stewardship Stars Excellence in Data Collection

*The following volunteers have submitted data each month during the
June, July, and August quarter:*

Bishop Lakes - Chemical Monitoring in Willeo Watershed
Boss Environmental - Chemical Monitoring in Mud Watershed
Bushart - Chemical Monitoring in Sewell Mill Watershed
Cobb Progressives - Chemical & Bacterial Monitoring in Noonday Watershed
Cobb Progressives - Chemical & Bacterial Monitoring Proctor Creek
Cobb Progressives - Chemical & Bacterial Monitoring Lake Acworth Watershed
Concord Woolen Mill - Chemical Monitoring on Nickajack Creek
Connie Ghosh - Chemical & Bacterial Monitoring on Rubes Creek
ERM Atlanta - Chemical & Visual Monitoring in Chattahoochee Watershed
Georgia Lake Monitoring - Chemical Monitoring in Lake Allatoona Watershed
John Keiler - Chemical Monitoring in Lake Allatoona Watershed
Keep Smyrna Beautiful - Chemical Monitoring in Nickajack Watershed
Lakewood Colony - Chemical & Bacterial Monitoring in Rubes Watershed
Loch Highland - Chemical & Bacterial Monitoring in Willeo Watershed
Richard's Creek - Chemical Monitoring in Allatoona Watershed
Sierra Club Centennial Group - Chemical, Bacterial, & Macro Monitoring on Rottenwood Creek
Simon Locke - Chemical & Bacterial Monitoring on Sope Creek
Team Salty - Chemical Monitoring on Sope Creek
Village N. Highlands Subdivision - Chemical & Bacterial Monitoring in Willeo Watershed

Thank you for your hard work and dedication!

welcome

Chattahoochee Stream Stewards
Chemical Monitoring in Chattahoochee Watershed

Glazebrook
Chemical Monitoring on Sewell Mill Creek

Gram's Collins Gals
Chemical Monitoring in Willeo Watershed

Lauren's Thalgew
Chemical Monitoring on Nickajack Creek

The Days
Chemical & Bacterial Monitoring in Proctor Watershed

Rainwater
Chemical Monitoring on Poplar Creek



SEASONAL HAPPENINGS

Stream Cleanup

Saturday • October 19, 2019 • 10:00am - 12:00pm

We will provide you with trash bags, grabbers (litter sticks), orange safety vests, blue latex gloves (sizes small, medium, and large), and data cards to record the debris we collect. For the stream cleanups, wear clothes that can get wet and closed-toes shoes like tennis shoes or water shoes.



Fairy Pumpkin House Workshop

Saturday • November 2, 2019 • 10:00am - 12:00pm

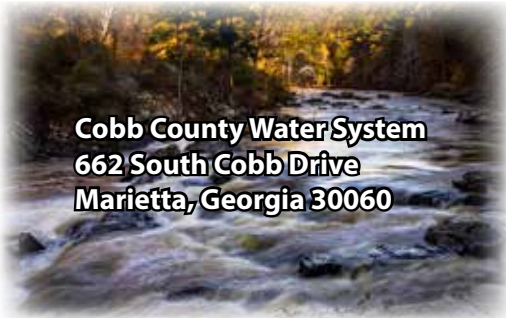
Designed to foster a foundation of service, an appreciation for being outdoors, and a sense of wonder for the natural world, Cobb County's Fairy Habitat Helpers is a youth service project that helps ensure all creatures have a healthy and secure home place. Our youngest environmental stewards will have a chance to use pumpkins and natural materials collected from along the trail to create shelters for fairies and other small creatures. Fairy pumpkin houses will be taken home to provide habitat to the creatures at your house. Workshop will take place, rain or shine, at the Water Lab, 662 South Cobb Drive, Marietta.

Storm Drain Marking

Thursday • November 7, 2019 • 4:30pm - 6:30pm

Each pair of volunteers will have a bucket full of supplies: maps, pens, storm drain markers, adhesive, educational material packets, and trash bags. Teams will mark the storm drains, pick up litter and distribute packets to each home to educate them on the newly marked storm drains.

To register for a space in these
free upcoming events,
visit our website,
www.cobbstreams.org,
under Calendar.



Cobb County Water System
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Marietta, Georgia 30060



This is an official publication of the Cobb County Water System, an agency of the Cobb County Board of Commissioners.

Calendar of Events

October

10 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
15 Stream Habitat Demo Project Workday • 4:30pm - 6:30pm • Noonday Creek at Bells Ferry Trailhead
17 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
17 Adopt-A-Stream Bacterial Monitoring Workshop • 6:30pm - 9:00pm • Cobb County Water Quality Laboratory
19 Stream Cleanup • 10:00am - 12:00pm • Olley Creek in Tramore Park
19 Rain Barrel Make & Take Workshop • 11:00am - 12:00pm • Cobb County Water Quality Laboratory
26 Outdoor Learning Symposium • Chattahoochee Hills, GA • <http://www.eealliance.org/outdoor-learning-symposium>

November

2 Pumpkin Fairy House Workshop • 10:00am - 12:00pm • Cobb County Water Quality Laboratory
6 Adopt-A-Stream Chemical Monitoring Workshop • 6:30pm - 9:00pm • Cobb County Water Quality Laboratory
7 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
7 Storm Drain Marking • 4:30pm - 6:30pm • Allatoona Watershed
12 Privet Pull • 4:30pm - 6:30pm • Sweat Mountain Park
14 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory

December

5 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
5 Lunch & Learn: Carnivorous Plants • 12:00pm - 12:45pm • Cobb County Water Quality Laboratory
7 Adopt-A-Stream Visual Monitoring Workshop • 10:00am-1:00pm • Cobb County Water Quality Laboratory
7 Privet Pull • 10:00am-12:00pm • Heritage Park
12 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
19 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory

Events in BLACK are Cobb County Watershed Stewardship events.
More information can be found on our Calendar at www.cobbstreams.org.