

the Thalweg

Watershed Stewardship Program

Spring 2019

Volume 16, Issue 2

Cobb County Board of Commissioners

Michael H. Boyce
Chairman

Keli Gambrill
District One

Bob Ott
District Two

JoAnn Birrell
District Three

Lisa Cupid
District Four

Rob Hosack
County Manager

Cobb County Watershed Stewardship Program

662 South Cobb Drive
Marietta, Georgia 30060

770.528.1482
water_rsvp@cobbcounty.org

Staff

Jennifer McCoy
Mike Kahle
Lori Watterson
Angie Marcus
Deb Kay

www.cobbstreams.org



Add Pollution Prevention to Your Spring Cleaning To-do List

The Watershed Stewardship Program promotes behaviors that lessen the impact on our environment. To lighten your ecological footprint and help protect water quality by preventing non-point source pollution, here's a rainbow of tips to keep springtime colorful and clean. Remember, all storm drains in Cobb County lead to the nearest waterway and are often the link between your property and a stream. They also help prevent street flooding so only rain should go into the storm drain.

PET WASTE: BAG IT. TRASH IT.

Always pick up after your pets, on a walk, in the yard, everywhere. A single gram of pet waste contains 23 million fecal coliform bacteria. Complete the [Pick It Up Pals Pledge](#) and receive a free pet waste bag dispenser. Visit [cobbstreams.org](#) to register and post a photo of the pet you pledge to pick up after on our Pet Gallery.



CAR WASHING: PREVENT WASH WATER RUNOFF

The soap and car dirt rinsed onto the ground can pollute surface water as it runs down the road and into the storm drain. Car wash facilities recycle their wastewater and are regulated to prevent water runoff.

STORM DRAINS: KNOW THEIR FUNCTION

All storm drains in Cobb County drain to the nearest waterway. Never throw trash, pet waste bags, lawn clippings, leaves, or any other items down the storm drain. Learn more about storm drains and help educate your community by [Storm Drain Marking](#) in your neighborhood.

LAWN CLIPPINGS & LEAVES: RAKE IT. COMPOST IT.

Leaves and lawn clippings blown into the street end up in the storm drains, and storm drains are piped to streams. Vegetative waste can clog the drains, causing flooding and water quality issues. Excessive vegetative debris in waterways can result in nutrient overloads in our streams. Excessive nutrients can stress or kill aquatic organisms like fish, salamanders, frogs, and dragonfly larvae.

FERTILIZERS, HERBICIDES & PESTICIDES: LIMIT OR ELIMINATE IT

Lawn chemicals run off of your property and into storm drains and nearby waterways. If you choose to use chemicals in your yard, follow the directions carefully and use caution during application. If you hire someone to apply chemicals, ask to make sure they use sound and approved practices.



RAIN BARRELS: RETAIN THE RAIN

Rain barrels lessen the amount of stormwater runoff that would wash pollution from your property into a storm drain or stream. Capture free rain water for your plants and garden. Attend a seasonal [Make & Take Workshop](#), held monthly April-October.

DISAPPEARING FIREFLIES

Source: Ben Pfeiffer, Firefly.org

Like Fourth-of-July fireworks, cool swims on hot days, and lazy vacations, fireflies are a sign of summer. Many of us have cherished memories of spotting and catching them during warm summer evenings and running through fields that sparkled as if strewn with stars. But there are signs our kids may not grow up with the same firefly memories we had. That's because fireflies are disappearing from marshes, fields and forests all over the country—and all over the world. And if it continues, fireflies may fade forever, leaving our summer nights a little darker and less magical.

Why Are Fireflies Disappearing?

Nobody knows for sure. But most researchers blame two main factors: development and light pollution.

Most species of fireflies thrive as larvae in rotting wood and forest litter at the margins of ponds and streams. And as they grow, they more or less stay where they were born. Some species are more aquatic than others, and a few are found in more arid areas—but most are found in fields, forests and marshes. Their environment of choice is warm, humid and near standing water of some kind—ponds, streams and rivers, or even shallow depressions that retain water longer than the surrounding ground.

The problem is that in America and throughout the world, our open fields and forests are being paved over, and our waterways are seeing more development and noisy boat traffic. As their habitat disappears under housing and commercial developments, firefly numbers dwindle. Logging, pollution and increased use of pesticides may also contribute to destroying firefly habitat and natural prey.

Human traffic is believed to disrupt firefly habitat as well. While scientific studies have only been done for the past few years, there's plenty of anecdotal evidence in areas that were once full of fireflies—and much of it goes back generations. Some areas once had so many fireflies that they profited from running firefly tours in marshes and forests—but since human traffic has increased, firefly populations have gone down.

Too Much Light At Night

Scientists don't know enough about fireflies to tell for sure. But the signs are indicating light pollution as a major factor in the disappearance of fireflies all over the world.



Photo Credit: Terry Priest
<https://tinyurl.com/yagqkm3x>



Atlanta skyline at night
Photo Source: <https://tinyurl.com/yxnrrzkz>

Both male and female fireflies use their flashing lights to communicate. Some species synchronize their flashes, sometimes across large groups of thousands of insects. All species speak a language of light—scientists believe they use it to attract mates, defend their territory, and warn off predators.

Human light pollution is believed to interrupt firefly flash patterns. Scientists have observed that synchronous fireflies get out of synch for a few minutes after a car's headlights pass. Light from homes, cars, stores, and streetlights may all make it difficult for fireflies to signal each other during mating—meaning fewer firefly larvae are born next season.

If you keep lights on outside your house and in your garden or yard at night, you may be unknowingly contributing to the decline in firefly populations in your area. Luckily, it isn't difficult to be part of the solution instead. All you need to do is turn off exterior lights in the evenings when fireflies are active. This may help firefly populations increase in your area.

Where fireflies once had uninterrupted forests and fields to live and mate, homes with landscaped lawns and lots of exterior lights are taking over. The reduction of habitat and the increase in lighting at night may all be contributing to make fireflies more rare.

Fireflies are fascinating creatures that light up our nights and bring a sense of magic and mystery to our environment. If they disappear, it will be a great loss to habitats and generations of people all over the world.

FACTS ABOUT FIREFLIES

Fireflies talk to each other with light

Fireflies emit light mostly to attract mates, although they also communicate for other reasons as well, such as to defend territory and warn predators away. In some firefly species, only one sex lights up. In most, however, both sexes glow; often the male will fly, while females will wait in trees, shrubs and grasses to spot an attractive male. If she finds one, she'll signal it with a flash of her own.

Fireflies produce "cold light"

Firefly lights are the most efficient lights in the world—100% of the energy is emitted as light. Compare that to an incandescent bulb, which emits 10% of its energy as light and the rest as heat, or a fluorescent bulb, which emits 90% of its energy as light. Because it produces no heat, scientists refer to firefly lights as "cold lights."

Firefly eggs glow

Adult fireflies aren't the only ones that glow. In some species, the larvae and even the eggs emit light. Firefly eggs have been observed to flash in response to stimulus such as gentle tapping or vibrations.

Fireflies eat other fireflies

Fireflies are primarily carnivorous. Larvae usually eat snails and worms. Some species of fireflies feed on other fireflies—most notable is the genus *photuris*, which mimics female flashes of *photinus*, a closely related species, in order to attract and devour the males of that species. But adult fireflies have almost never been seen feeding on other species of bugs. Scientists aren't sure what they eat. They may feed on plant pollen and nectar, or they may eat nothing.



Firefly larvae just emerging from egg

Fireflies imitate each other

Female *photuris* aren't the only impostors among fireflies—the species is surprisingly devious when it comes to imitation. Sometimes male *photuris* imitate female *photinus* to attract females of their own species. She shows up looking for food, but instead he gets a mate. Even more interesting, scientists believe some *photinus* males imitate *photuris* females giving off bad impressions of *photinus* male flashes, scaring off other *photinus* males and reducing competition.

Fireflies are medically and scientifically useful

The two chemicals found in a firefly's tail, luciferase and luciferin, light up in the presence of ATP. Every animal has ATP in its cells in amounts that are more or less constant—or should be. In diseased cells, the amount of ATP may be abnormal. If the chemicals from fireflies are injected into diseased cells, they can detect changes in cells that can be used to study many diseases, from cancer to muscular dystrophy. But that's not all they're used for. Electronic detectors built with these chemicals have been fitted into spacecraft to detect life in outer space, as well as food spoilage and bacterial contamination on earth.

Fireflies don't make tasty prey

When attacked, fireflies shed drops of blood in a process known as "reflex bleeding." The blood contains chemicals that taste bitter and can be poisonous to some animals. Because of this, many animals learn to avoid eating fireflies. Pet owners should never feed fireflies to lizards, snakes and other reptilian pets.

Sources: <https://www.firefly.org/facts-about-fireflies.html>; <https://www.firefly.org/why-are-fireflies-disappearing.html>; <https://www.firefly.org/light-pollution.html>

CONSERVATION TIP



Photo Judy Gallagher <https://tinyurl.com/ydf12ujt>

One inventive method for attracting fireflies:

1. Don't rake leaves and put them on the curb. You are raking up firefly larvae and throwing them away.
2. Collect bags of leaves to make "Bag Compost". Collect 5-15 bags.
3. Wet bags down in a shady lawn area. Keep moist/wet for 3-6 months or up to a year.
4. Bags will attract snails/slugs. This is food for growing fireflies.
5. In Spring, put bag compost in your garden. Put it in mounds and till it into your soil.
6. Repeat each year. It might take as long as 5 years, or as quick as that same year, to get fireflies in your garden.

<https://www.firefly.org/build-firefly-habitat>

Earth Day 2019: Protect Our Species

Each year on April 22, more than 1 billion people participate in Earth Day activities throughout the world. An annual focus on a different theme assures global environmental concerns receive highlighted notice. Last year's campaign, **End Plastic Pollution** provided a straight-forward call to action where individuals of all ages could participate and experience an immediate sense of accomplishment through hands-on activities like creating a workplace plastics recycling program, joining a community cleanup day or signing a pledge to eliminate the purchase of single-use plastics.

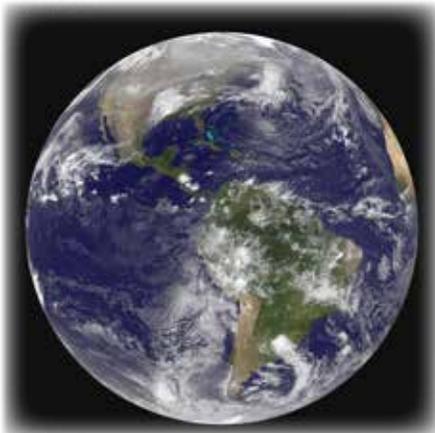


Photo source: <https://tinyurl.com/y9lalg2c>

Usher in Earth Day 2019, and the theme **Protect Our Species**. It's natural for the mind's eye to picture iconic endangered and vulnerable species like Siberian tigers, manatees, pandas, and whales. Other than donating funds to wildlife protection organizations, can an individual in Cobb County do anything more to **Protect Our Species**?

*"It is estimated that humans have modified more than 50% of Earth's land surface, which has affected many ecosystems as well as the range in which specific species of wildlife used to exist."**

As Cobb County development continues, loss of wooded areas, disruption of stream habitat and the resulting change in land use translates into displaced wildlife and increased human impact. Further urbanization results in greater levels of pet waste, pesticides, herbicides, and oil entering the watershed. Area stream habitats take on greater significance and require focused stewardship efforts locally to truly **Protect Our Species**.

How Can Cobb County Residents **Protect Our Species**?

- **Volunteer to monitor water quality with the Adopt-a-Stream Program.** Sign up for an upcoming Adopt-a-Stream Workshop and learn how you can make a difference.
- **Join WSP for a Privet Pull.** Privet is an invasive shrub species which forces out native plant life. The removal of privet by the roots helps to encourage the growth of native plants.
- **Participate in a Storm Drain Marking event.** In Cobb County, storm drains lead directly to the closest stream. Storm drains are part of the water system transporting rainwater away from our homes, businesses, and roadways. This water carries with it trash, pollution, and harmful substances. Join WSP for upcoming community events or mark the storm drains in your area on your own.
- **Utilize native plants and trees for landscaping in your yard.** Pollinators and native animal species rely on native plants for food and shelter. For more information about native plants in your area, visit <https://gnps.org/georgias-native-plants/sources-native-plants/>.

For more information and event registration, see the calendar on page 8 or visit our online calendar at www.cobbstreams.org

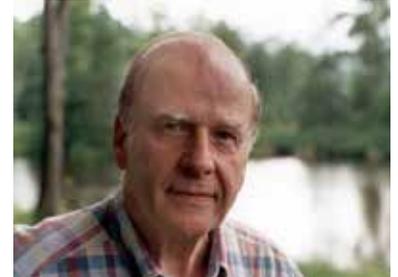
*http://www.biologicaldiversity.org/programs/biodiversity/elements_of_biodiversity/extinction_crisis



History of Earth Day

Earth Day was started as a grassroots movement in 1970. Its founder, Gaylord Nelson, then a U.S. Senator from Wisconsin, witnessed the massive oil spill in 1969 in Santa Barbara, California. After this, Senator Nelson created Earth Day as a way to force environmental issues onto the national agenda. At the time, smog was becoming deadly, biodiversity was in decline due to the heavy use of pesticides, and mainstream Americans were largely oblivious to environmental concerns. With a staff of 85 coordinating the first Earth Day, 20 million people across the United States were rallied on April 22, 1970. Thousands of colleges and universities held protests, and people gathered in public areas to talk about the environment and find ways to defend the planet. By the end of that year, the first Earth Day had led to the creation of the United States Environmental Protection Agency and the passage of the Clean Air, Clean Water, and Endangered Species Acts.

Earth Day continued to be celebrated each year throughout the United States. In 1990, Earth Day went global, with 200 million people in 141 countries participating. Each year Earth Day has grown, with more than 1 billion people across the globe participating in Earth Day activities. Earth Day continues to encourage a day of action that changes human behavior and rouses policy changes. The countdown has begun to celebrate the 50th anniversary of Earth Day on April 22, 2020 and the most globally diverse Earth Day yet.



Gaylord Nelson. Earth Day Founder

Osprey

Ospreys are very large, distinctively shaped hawks. Despite their size, their bodies are slender, with long, narrow wings and long legs. Ospreys fly with a marked kink in their wings, making an M-shape when seen from below. Ospreys are brown above and white below, and overall they are whiter than most raptors. From below, the wings are mostly white with a prominent dark patch at the wrists. The head is white with a broad brown stripe through the eye. Juveniles have white spots on the back and buffy shading on the breast. Ospreys search for fish by flying on steady wingbeats and bowed wings or circling high in the sky over relatively shallow water. They often hover briefly before diving, feet first, to grab a fish. You can often clearly see an Osprey's catch in its talons as the bird carries it back to a nest or perch. Look for Ospreys around nearly any body of water: saltmarshes, rivers, ponds, reservoirs, estuaries, and even coral reefs. Their conspicuous stick nests are placed in the open on poles, channel markers, and dead trees, often over water.

<https://www.allaboutbirds.org/guide/Osprey/id>

Photo credit: Aaron Maizlish

<https://tinyurl.com/y7kuqpd8>

OBSERVATIONS



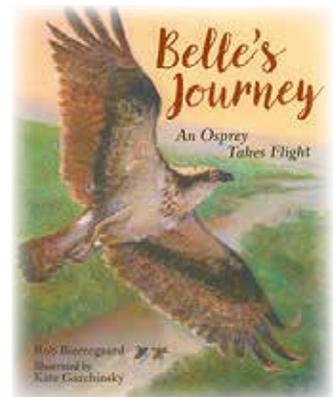
RECOMMENDED RESOURCES

Belle's Journey: An Osprey Takes Flight

by Rob Bierregaard (Author), Kate Garchinsky (Illustrator)

"In this book, for the 7 to 10 year age group, children follow the work of a Dr. B., a scientist who studies osprey. What makes this book so appealing is that it is based on a true story of an osprey named Belle – and it was written by the real Dr. B. The story is about Belle's early life on Martha's Vineyard in Massachusetts where she learns to fly and catch fish on her own. With the coming of fall, she sets off on an amazing 4,000 mile journey to South America. Along the way she is chased by a falcon and is even caught in a hurricane. Delightfully illustrated, entertaining and educational, this book is sure to be a childhood favorite."

Source: <http://noba-web.org/books18.htm>



Stewardship Stars Excellence in Data Collection

The following volunteers have submitted data each month during the December, January, and February quarter:

Bishop Lakes - Chemical Monitoring in Willeo Watershed
Boss Environmental - Chemical Monitoring on Mud Creek
Carter 2018 - Chemical Monitoring on Noonday Creek
Castle Lane - Bacterial Monitoring in Sewell Mill Watershed
Cobb Progressives - Chemical & Bacterial Monitoring on Noonday & Proctor Creek
ERM Atlanta - Chemical & Visual Monitoring in the Chattahoochee Watershed
GA Lake Monitoring - Chemical Monitoring on Lake Allatoona
Keep Smyrna Beautiful - Chemical Monitoring in Nickajack Watershed
Lakewood Colony - Chemical & Bacterial Monitoring in Rubes Watershed
Lassiter HS APES Classes - Chemical & Bacterial Monitoring in Rubes Watershed
Ledbetter - Chemical & Bacterial Monitoring on Poplar Creek
Loch Highland - Chemical & Bacterial Monitoring in Willeo Watershed
McCleskey MS - Chemical, Bacterial, & Macro Monitoring on Rubes Creek
Noses at Silver Comet - Bacterial Monitoring on Noses Creek
Pope HS Environmental Science Classes - Chemical Monitoring in Sewell Mill Watershed
Riverston Montessori Adolescent Program - Chemical Monitoring on Olley Creek
Sedalia Park ES - Chemical Monitoring on Sope Creek
Sierra Club Centennial Group - Chemical, Bacterial, & Macro Monitoring on Rotterwood Creek
Simon Locke - Chemical & Bacterial Monitoring on Butler Creek
The Garden School - Chemical Monitoring in Noonday Watershed
Village N. Highland Subdivision - Chemical & Bacterial Monitoring in Willeo Watershed
Walton HS APES Classes - Chemical Monitoring on Sope Creek & in Sewell Mill Watershed

Thank you for your hard work and dedication!

w e l c o m e

New Volunteer Groups

Angie's Northeast Cobb Streams
Chemical Monitoring in Noonday Watershed

Concord Wollen Mill
Chemical Monitoring on Nickajack Creek

Friday
Chemical Monitoring on Poplar Creek

Washburn
Chemical & Bacterial Monitoring on Butler Creek and in Noonday, Allatoona, and Powder Springs Watersheds



2016 Georgia River of Words Winner
"Untitled" by Gabriela Carisma, Grade 6
The Stonehaven School, Marietta
Teacher: Nancy Rodriguez

ANNOUNCEMENTS

Save the Date! 2019 Watershed Stewardship Fair Annual Volunteer Appreciation

Wednesday, March 27, 2019
6:30 - 8:30 PM
Cobb County Water Quality Lab
662 South Cobb Drive, Marietta, Georgia 30060

Please join us on Wednesday, March 27th, 2019, for our annual Watershed Stewardship Fair. This event provides volunteers with the opportunity to showcase their water protection efforts and meet others who share their passion for keeping our waterways healthy.

Participants are encouraged to share their stream observations and project goals with the community. Each group is invited to create a poster displaying their water quality conservation efforts and speak a few minutes, sharing success stories, concerns, and frustrations with a like-minded audience. We will also celebrate the accomplishments of our volunteers and partners by presenting several Watershed Stewardship awards. In addition to a fun evening of education and mingling, participants can tour the Cobb County Water Quality Laboratory. This is your opportunity to learn from and support other Cobb County volunteers! Refreshments will be provided.

Please contact us at 770-528-1482 or water_rsvp@cobbcounty.org for more information.

Welcome to the 2018-19 Chattahoochee Challenge Competitors!

Dominion Christian Science Department
Earth First
Lassiter Environmental Club
McCleskey Middle School
Osborne High School
Pope Environmental Club
Walton High Environmental Club

We are excited to announce the schools and clubs that are registered in our 2018-19 *Chattahoochee Challenge*. These groups are participating in numerous volunteer opportunities including creek cleanups, storm drain marking projects, privet pulls, and water quality monitoring. They are also coordinating their own activities that teach others about water quality and help protect Cobb County waterways.

Participating groups log and submit their event description, volunteer hours, and group participants. The group that accumulates the most volunteer service hours by April will win a free rafting trip on the Chattahoochee River with a National Park Ranger.

Best of luck to all our competitors!

To register, visit our online calendar at www.cobbstreams.org and click on the event.

Storm Drain Marking Events

- March 13 • JJ Daniell Middle School • 1:45pm - 3:45pm**
- March 23• Chimney Springs Subdivision • 10:00am - 1:00pm**
- April 13• Echo Mill Subdivision • 10:00am - 12:00pm**

A great way to help protect our water quality is to participate in an upcoming *Storm Drain Marking* event. Polluted stormwater runoff has been identified by the U.S. EPA (Environmental Protection Agency) as the nation’s main cause of water quality problems. This service project is great for families, clubs, and community organizations! During the event you’ll mark storm drains and hang educational materials on neighborhood mailboxes. As you mark a storm drain, you will record the location on the provided map. All materials are provided to volunteers.



Rain Barrel Workshops

- April 16 • Water Quality Lab • 1:00pm - 2:00pm**
- May 6 • Water Quality Lab • 12:00pm - 1:00pm**

The Watershed Stewardship Program is again facilitating free community *Rain Barrel Make & Take* workshops. Workshops are held once a month from April to October, on various days and times. All workshops last one hour and are open to Cobb County residents only, allowing one barrel per household. The workshop includes information about installing and utilizing rain barrels, all the needed materials, and step-by-step instruction on how to build and assemble your barrel. Making the barrel is simple, and no experience is necessary. At the end of the workshop you will drive away with a ready-to-use 35-55 gallon rain barrel. Space is limited.

Frog Monitoring Workshop

- March 21 • Hyde Farm Visitors Center • 7:00pm - 9:30pm**
- April 25 • Lost Mountain Park • 7:00pm - 9:30pm**

Attend one of these workshops and at least one guided Frog Walk in May to become an official Frog Monitoring Volunteer for Cobb County. These workshops introduce you to local species, teach identification by frog call and show how to use the ESRI CollectorApp which utilizes species data to provide insight into the conditions of our local watersheds. Space is limited.



Sunset Frog Walks

- May 2, 9, 16, 23, 30 • Noonday Creek Trail • 8:00pm - 9:15pm**

Frogs, fresh air, friends, and exercise...

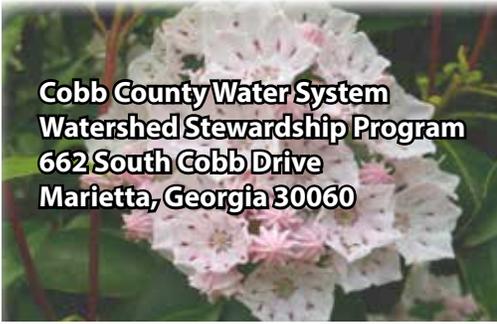
Join us each Thursday evening throughout the month of May to walk along a portion on the Noonday Creek Trail for our weekly sunset frog walk. While we walk and practice identifying frogs by their calls, we’ll record and report the species that we hear along the way. *Sunset Frog Walks* are free and open to all ages (minors must be accompanied by an adult at all times).

ECOPEDIA

Charismatic Megafauna

Charismatic megafauna are large animals that have widespread popularity. Most people can recognize these animals and may even know a few facts off the top of their head. Common examples are lions, tigers, gorillas, giant pandas and elephants. In the aquatic world, dolphins, penguins and otters are examples. Visitors to zoos typically come to see the charismatic megafauna animals, but are then introduced to lesser-known species and may come away with an appreciation of another animal. The broad appeal of these species is generated by several factors, including looks, behavior and overall relatability. Since charismatic megafauna are appealing to and easily recognized by the general public, environmental activist groups often use them in conservation campaigns. The idea is that these species will draw more public attention, incite emotional reactions, and foster increased conservation success. Additionally, these charismatic species tend to inhabit large, biodiverse ecosystems, which are host to a diverse range of plant and animal species. Their popularity means that working to save these charismatic megafauna species and their habitats could indirectly save a number of other, less popular species.

Source: <https://tinyurl.com/y5w9tf25>



**Cobb County Water System
Watershed Stewardship Program
662 South Cobb Drive
Marietta, Georgia 30060**



Cobb County...Expect the Best!

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

Calendar of Events

March

- 7 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
- 8-10 EEA Conference • Albany, GA • <https://www.eealliance.org/>
- 9 Privet Pull • 10:00am - 12:00pm • Heritage Park
- 9-23 Atlanta Science Festival • Atlanta, GA • <https://atlantasciencefestival.org/>
- 11 Privet Pull • 4:00pm - 6:30pm • Sweat Mountain Park
- 13 Storm Drain Marking • 1:45pm - 3:45pm • JJ Daniell Middle School
- 13 Adopt-A-Stream Bacteria Monitoring Workshop • 6:30pm - 9:00pm • Cobb County Water Quality Laboratory
- 14 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
- 15 Lunch & Learn: Household Hazardous Waste • 12:00pm - 12:45pm • Cobb County Water Quality Laboratory
- 21 Rain Garden Work Day • 9:00am - 11:00am • Cobb County Water Quality Laboratory
- 21 Frog Monitoring Workshop • 7:00pm - 9:30pm • Hyde Farm Visitors Center
- 22-24 Adopt-A-Stream Confluence • Unicoi State Park • Helen, GA • <https://adoptastream.georgia.gov/>
- 23 Storm Drain Marking • 10:00am - 1:00pm • Chimney Springs Subdivision Clubhouse
- 27 Watershed Stewardship Fair • 6:30pm - 8:30pm • Cobb County Water Quality Laboratory

April

- 13 Storm Drain Marking • 10:00am - 12:00pm • Echo Mill Subdivision Pool
- 13 Last day for submitting Chattahoochee Challenge events**
- 16 Rain Barrel Make & Take Workshop • 1:00pm - 2:00pm • Cobb County Water Quality Lab
- 18 Rain Garden Work Day • 8:30am - 10:30am • Cobb County Water Quality Laboratory
- 18 Adopt-A-Stream Chemical Monitoring Workshop • 6:30pm - 9:00pm • Cobb County Water Quality Laboratory
- 19-20 Master Gardener Plant Sale • 10:00am - 4:00pm • Jim R Miller Park • <https://www.cobbmastergardeners.com/calendar/garden-fair/>
- 25 Rain Garden Work Day • 8:30am - 10:30am • Cobb County Water Quality Laboratory
- 25 Frog Monitoring Workshop • 7:00pm - 9:30pm • Lost Mountain Park

May

- 2 Sunset Frog Walk • 8:00pm - 9:15pm • Noonday Creek Trail
- 6 Rain Barrel Make & Take Workshop • 12:00pm - 1:00pm • Cobb County Water Quality Lab
- 9 Rain Garden Work Day • 8:30am - 10:30am • Cobb County Water Quality Laboratory
- 9 Stream Cleanup Mob • 4:30pm - 6:00pm • Noonday Creek
- 9 Sunset Frog Walk • 8:00pm - 9:15pm • Noonday Creek Trail
- 16 Rain Garden Work Day • 8:30am - 10:30am • Cobb County Water Quality Laboratory
- 16 Sunset Frog Walk • 8:00pm - 9:15pm • Noonday Creek Trail
- 22 Adopt-A-Stream Chemical Monitoring Workshop • 6:30pm - 9:00pm • Cobb County Water Quality Laboratory
- 23 Rain Garden Work Day • 8:30am - 10:30am • Cobb County Water Quality Laboratory
- 23 Sunset Frog Walk • 8:00pm - 9:15pm • Noonday Creek Trail
- 30 Rain Garden Work Day • 8:30am - 10:30am • Cobb County Water Quality Laboratory
- 30 Sunset Frog Walk • 8:00pm - 9:15pm & 9:30pm - 10:00pm • Noonday Creek Trail

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