



The Yellowthroat

Voice of the

Oconee Rivers Audubon Society

April 2017

Vol. 28, No. 4

Next Meeting:
Thursday, April 6, 7:00 p.m.
Sandy Creek Nature Center in Athens

For the 7:00 p.m. presentation:

Impacts of supplemental feeding on disease transmission in wildlife

Daniel Becker, a PhD candidate at the Odum School of Ecology, has studied the complexities of supplemental feeding and wildlife health since 2012. He will discuss how supplemental feeding can affect disease dynamics in wildlife, which species are at higher risk for disease transmission as a result of supplemental feeding, and how to reduce pathogen spread when providing supplemental feed to wildlife.

Many human activities intentionally or accidentally provide wildlife with abundance and accessible food resources, ranging from bird feeders and tourist handouts to landfills and agricultural fields. Changes to wildlife behavior and physiology can have complex effects on the spread of pathogens, some of which can have harmful effects on both wildlife and human health. Becker will discuss these issues and more.

Meetings are held... the first Thursday of the month at 7:00 p.m. To get to the Nature Center, take Highway 441, exit 12, off the north side of the perimeter, go north on 441 approximately one mile and turn left at the Sandy Creek Nature Center sign displaying this logo:



Go left at the end of this short road. The Education & Visitor Center building is a short way down the road on your right.

Spring Bird Walks – Think Spring!

Bird walks are from **8 a.m.-11a.m. or noon**. However, attendees may leave early. Please dress for the weather, wear practical shoes, hats and bring insect repellent and snacks/water as desired. (Also, check ORAS announcements and website for any last minute changes to this schedule).

If you have other questions please contact Ed Maioriello at: fieldtrip@oconeeriversaudubon.org

- Apr. 01: **Sandy Creek Park (SCP)**
- Apr. 08: **Lake Herrick/Oconee Forest Park**
- Apr. 09: **Sandy Creek Nature Center (SCNC)**
- Apr. 15: **Whitehall (S.Milledge & Whitehall Rd)***
- Apr. 23: **State Botanical Garden (Day Chapel)**
- Apr. 29: **SCP-Cook's Trail (clean-up)**
- Apr. 30: **ACC Landfill**
- May 07: **Lotsanotty (Jackson County)**

*(Attendees for Whitehall walk need to be on time).

Spring Field Trips (out of town) *

Apr. 22 6:00 a.m. Kennesaw Mountain
May 06 7:00 a.m. Charlie Elliott Wildlife Center

* Please check listserv announcements for any late changes.

The Backyard Wildlife Sanctuary

Become a Certified Backyard Wildlife Sanctuary Homeowner by providing habitat for birds, wildlife, and native plants in our community!

For more information: www.oconeeriversaudubon.org or email conservation@oconeeriversaudubon.org

Project Safe Flight Atlanta *summary of the March meeting by Liz Conroy*

Thanks to Adam Betuel, conservation director at the Atlanta Audubon Society (AAS), for his talk on March 2. He discussed the conservation initiatives he and his colleagues are working on in Atlanta. He described Project Safe Flight Atlanta (PSFA). PSFA is a program focused on the issue of bird-building collisions. Avian mortality caused by collisions with buildings is the third leading cause of bird death in the U.S. behind habitat loss and cat predation.

He expressed concern about other threats as well: invasive species, pesticides, climate change. Currently, his main focus is on educating the public on ways to reduce bird-building collisions by better design or retrofitting windows.

He noted the importance of “keeping common birds common” and not just taking them for granted. He gave the example of the Brown-headed Nuthatch. Due to habitat loss and lack of snags, this nuthatch is in decline at about 1 to 2 per cent a year. “It doesn’t sound like much,” he said. “But it adds up to a worrisome decline in this species.” An AAS nest box program for the Brown-headed Nuthatch is proving successful.

Another example of a common bird in decline is the Wood Thrush with its beautiful “flute-of-the forest” song. Due to habitat loss, invasive species and cats, it is suffering population loss each year. AAS sells shade-grown coffee to promote a product that helps keep the much-needed habitat in coffee-producing countries where migratory birds such as the Wood Thrush go each winter. “Please buy shade-grown coffee,” Betuel urged. “It helps the birds and is sold by other organizations such as the American Birding Association (ABA) and the Smithsonian as well.”

Creating bird-friendly communities includes habitat restoration, he said. The Atlanta Youth Corps (AYC) involves young adults in Atlanta who gain outdoor training through various projects. With a National Fish and Wildlife Foundation (NFWF) grant awarded to AAS, AYC was able to work with landowners on habitat restoration projects. AYC youth learn skills for outdoor jobs with the help of AAS and other grant partners while working to make the most of Atlanta’s fragmented landscape.

But bird-building collisions remain a major conservation threat, but it hasn’t been well studied. Estimates range from 365 to 988 million deaths in U.S. annually from window collisions. “Nocturnal light is a relatively new threat,” he noted. “Birds get confused and even get trapped in beams of light, sometimes they land in places they shouldn’t—like downtown Atlanta.” In addition to excess lighting, two major problems causing collisions involve reflective glass and transparent glass in windows.

Currently, Toronto has the best monitoring program on this issue and close behind are Chicago and Minneapolis-St. Paul. In Toronto, legislation has been passed to protect birds by requiring buildings to be retro-fitted for safer glass windows for birds.

PSFA surveys show that such collisions are primarily an issue for migratory birds. Betuel uses “Collector”, an app using the ESRI platform with technical support from the National Audubon Society (NAS) to collect data on bird deaths. He designed a specific route through Buckhead and downtown Atlanta. When he finds a dead or injured bird next to a building on his route, he notes time/date and species and takes 3-4 photos per bird with the setting behind it. In addition, there is D-Bird created by NYC Audubon and piloted by Minneapolis, Texas, and Atlanta Audubon. It is a web page that’s similar to Collector, but it allows only one photo per bird.

The list of most birds (of 70 species) killed in building collisions included such species as: RTHU, TEWA, CEWA, AMRO, and OVEN. The Ruby-throated Hummingbird was the most killed species. Partnerships with other organizations concerned about this increasing loss of bird life include: American Bird Conservancy (ABC), NAS, UGA, U. of N GA, Oglethorpe U., local building managers and owners.

Lights at night cause major problems for nocturnally migrating birds. The National September 11 Memorial in New York City has its beams of light turned off at night to release birds that have become trapped in the light. Cities such as Chicago have long been reducing their lights and a “Lights out Atlanta” program (March 31-May31 and Aug. 15- Nov. 15) encourages city residents to reduce their lights.

Work projects throughout college campuses, hospitals and other businesses involve retrofitting windows for the birds’ safety. Some films on windows can create a bit of a blur that seems to help. “Feather Friendly”, a product produced in Toronto, uses dots spaced evenly on windows to keep birds safe. (A 4x2 rule is needed for window markers; this means that dots or markers should be spaced 4 inches wide and 2 inches tall). UV embedded glass may help as well, but it’s not well known. Acid-etched glass seems to work but the view is lost although natural light still comes through the glass.

Making homes safer for birds involves simple additions such as window screens or exterior shutters. ABC offers tape to put on windows and evenly spaced parachute cords that dangle down in front of windows. Cords work really well. Put feeders really close or really far from windows to protect birds, and don’t place plants right against windows. Downshield all outdoor lights so they only focus beams down to the ground. There’s no need to light up the night sky.

Participate! Make your own home safer and talk to others as well to educate them. Help AAS do monitoring work. Survey your own office building and use D-Bird. Speak to politicians, architects, building owners and managers [including State Botanical Garden of Georgia administrators about the Visitor’s Center and bird collisions there]. Help injured birds that you find. Pick them up if they’re still alive so cats don’t find them, and let them recover in a safe place before releasing them.

Get Rid of Nandina and Help Save Birds

by Steve Holzman (President of Georgia Ornithological Society)

In April of 2016, I saw an email from Charles Reid detailing his observation of a number of dead Cedar Waxwings near the Decatur High School. I was aware of a report detailing the deaths of dozens of Cedar Waxwings in Thomas County, Georgia in 2009. The cause of death was determined to be cyanide toxicity due to their consumption of high numbers of Nandina (aka Heavenly Bamboo) berries.

I asked Charles to find the most intact specimen and to freeze it until I could get it to the Southeastern Cooperative Wildlife Disease Study (SCWDS) on the campus of UGA. In June of 2016, they necropsied the bird and confirmed that it also died of cyanide toxicity.

Cedar Waxwings winter in Georgia in large numbers. Their flocks can be seen and heard flying around neighborhoods in their search for berries to eat. By April, many of the native berries are gone and they will then descend upon Nandina shrubs, often ingesting a toxic amount of berries.

This year, I was determined to prevent more unnecessary deaths. I contacted Dr. David Dude, the Superintendent for the City Schools of Decatur. He talked to his Director of Facilities, Jason Ware. Before I knew it, Jason and his crew had removed all the Nandina bushes around the school preventing the deaths of many Cedar Waxwings.

I have also contacted the UGA landscaping department and alerted them to the hazards of this plant. In February, volunteers from Oconee Rivers Audubon and UGA were on campus stripping the bushes of these poisonous berries. Sometimes, all it takes is simple awareness of an issue to get people to act.

I realize that Nandina is everywhere, and we can only prevent more deaths if all homeowners and landscapers take the time to destroy this invasive and poisonous shrub.

It's not hard. Just cut it close to the ground and spray the stump with glyphosate. If you just treat the stump, it will not hurt any adjacent plants. Glyphosate is short lived in the soil and safe for homeowners to use. If you have an aversion to using herbicides you can pull up the plants, but watch for any stump sprouts. It can be a hard to get all the roots. If you don't want to give up your Nandina yet, please strip the berries and dispose of them in the trash.

We can't solve every environmental challenge, but this one is easy. Get rid of this un-heavenly bamboo and save the birds!



Photo of Cedar Waxwing feeding on Hawthorne berries at personal residence, by Jerry Amerson, Jones County, Georgia—December, 2003

Friends of Tallassee Forest Nature Preserve

by Joan Curtis

The mission of the Friends of Tallassee Forest Nature Preserve is to do everything we can to protect and preserve the ecosystem in the tract of land known as Tallassee Forest. That tract includes 300+ acres that run behind Tallassee Road. Most of the land is untouched. There is a wealth of wildlife and fauna there that exists because it has been left alone. Our goal overall goal is to make sure it continues to thrive in a protected environment with limited access.

To do that we are forming so that we can: 1) Speak in one voice about the value of that land to the residents of Athens-Clarke County as well as to commissions within the government 2) Stay informed about public meetings that might be of interest to the preservation of that land or that might threaten that ecosystem 3) Serve as advocates for the preservation and protection of the natural forest, and 4) Develop materials, reports, surveys that will help communicate and/or illustrate the vast nature of the species living on this property.

We welcome anyone who shares these goals! Send me your email with "I want to join the Friends of Tallassee Forest" in the subject line and I will add you to the list. My email is jcurtis618@bellsouth.net

Fanning the Flames by Dale Hoyt

The Flame Azalea is found in the north Georgia mountains where its vibrant orange to red flowers are seen from spring to early summer. One curious feature of the flower is the dramatic forward projection of the stamens and pistil. These sex organs are much longer than the petals, so the anthers (the part of the stamens that produce pollen) and the stigma (the part of the pistil that receives pollen) are far away from the nectaries which are located at the base of the flower.

Most of the bees that visit these flowers searching for nectar never come in contact with either anthers or stigma. If bees aren't effective pollinators, who pollinates the Flame Azalea and other native azaleas with a similar flower structure?

A recent study by Mary Jane Epps and co-workers (Epps, MJ *et al.* 2015. *American Naturalist* 186(2): 294-301) solved this mystery. They found that large butterflies, especially the Eastern Tiger Swallowtail, do the job. But how the swallowtail accomplishes this task is surprising; it transfers pollen on its wings! Worldwide, only two other plants are known to be pollinated by butterflies carrying pollen on their wings.

Most butterflies keep their wings in a fixed position, held together above their backs, while they are feeding. But swallowtails flutter their wings as they imbibe nectar. Epps *et al.* noticed that the wings of Tiger Swallowtails contacted both stamens and pistils when they visited an azalea flower. After a floral visit, their wings had azalea pollen stuck to them.

To see if swallowtails were effective pollinators, the scientists enclosed flowers in a chicken wire cage, excluding swallowtails but not bees. The caged flowers produced many fewer fruits than uncaged flowers, suggesting that butterflies were the normal pollinators. Next, the scientists forced azalea branches to bloom in the laboratory and then placed these virgin flowers next to an azalea being visited by a swallowtail. After the butterfly left the lab blossoms, they examined those pistils and found azalea pollen and scales from the butterfly's wings. It was direct confirmation that swallowtails can transfer pollen with their wings.

Other species of azaleas have sex organs that also extend far in front of the flower. It seems likely that they, too, can be pollinated by the wings of large, fluttering butterflies. Hummingbirds are also possible pollinator candidates, but Epps *et al.* observed only one Ruby-throated Hummingbird visit during their study. If you have azaleas in your yard, observe who visits the most—hummingbirds or swallowtails?

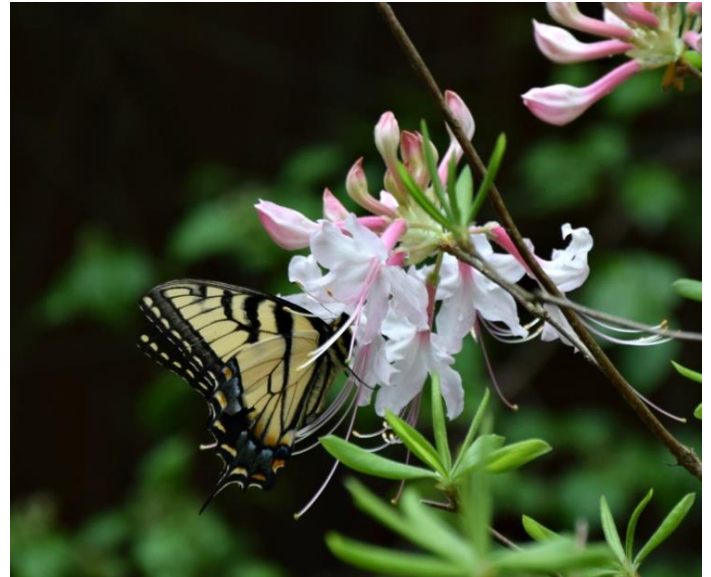


Photo of Tiger Swallowtail visiting a native azalea (note stamens and pistil next to the wing), by Ellen Honeycutt (used with permission)

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