



The Yellowthroat

Voice of the

Oconee Rivers Audubon Society

November 2015

Vol. 26, No. 9

Next Meeting:

**Thursday, November 5, 7:00 p.m.
Sandy Creek Nature Center**

For the 7:00 p.m. presentation:

The Last Penguin: How Extinction is Changing Humanity

Georgia professor Mark Farmer, director of UGA's Division of Biological Sciences, will give a talk on "The Last Penguin: How Extinction Is Changing Humanity." Farmer's presentation will touch on how land use and other human activities are affecting the composition of the atmosphere and the chemistry of the oceans, perhaps contributing to the current wave of plant and animal extinctions.

Farmer will discuss the growing evidence that humans are helping to bring about a sixth mass extinction event, why so many extinctions are changing our relationship to the natural world, and how this wave of die-offs compares to past great extinctions like the meteor strike that many scientists believe doomed most of the dinosaurs on Earth.

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 ENSAT building is a short way down the road on your right.

Little St. Simons Island Trip *by Manita Dean*

For the inexperienced birder, one of the joys on Little Saint Simons Island (LSSI) is having skilled naturalists on hand.

In September, a Georgia Conservancy weekend led my spouse O. C. and me to LSSI. Whether bouncing about in a pick-up on padded plank seats, peddling bikes along a pristine beach, crouching in a remote bird blind, or kayaking in a marshy stream, we saw birds everywhere!

Egrets (Snowy, Cattle, and Great) and ibises fished in saltmarsh ponds. Common Gallinule, American Coot, Tricolored Heron, Wood Stork—all delighted the eye.

Perhaps the biggest delights were flocks of Roseate Spoonbills. Our guide informed us that they are unusually plentiful in Georgia this year. She suspects that their usual habitats in Florida have been affected by too much human development, resulting in a "pink rush" northward.

Privately owned, LSSI seeks to preserve, and make available to the public, a natural habitat for all manner of flora and fauna. In spite of some rain and "preserved" mosquitoes, our coastal adventure was exceptional and thrilling.



Photo of Roseate Spoonbill by Manita Dean on Little St. Simons Island—September 17, 2015

Ecology and Conservation of Bird Populations at Southern Range Margins

summary of October meeting by Liz Conroy

Thanks to Richard Chandler for his Oct.1 presentation. He noted that bird populations near the southern range margins are most likely to be vulnerable to climate change.

In the southern Appalachians—the hotspot of marginal populations—most species occur in “mountaintop islands” which are areas above 2500 feet in elevation. Meanwhile, the bulk of these species’ ranges occur in the northeastern U.S. and southeastern Canada.

Chandler asked why anyone should care about marginal populations, particularly when conservation dollars are limited. Is it really worth studying bird population at the edge? After all, these populations represent only a small percent of the total population, and they often have lower genetic diversity than populations near the center of the range. The Canada and Blackburnian Warblers are just two examples of these trailing edge populations.

Two reasons were put forward for why these populations deserve extra attention from conservation organizations. First, many of these populations are declining rapidly. Second, evidence exists that some southern populations were diverging from northern populations prior to recent environmental change; the loss of these populations could therefore eliminate unique traits and reduce evolutionary potential. To address these threats, researchers hope to learn how climate change will cause trailing edge populations to decline. There could be many ecological processes involved: competition, predation, phenological mismatch, direct physiological effects, Allee effects.

As an example, Chandler discussed the possibility of nest predators such as snake species moving into mountain areas as the climate warms. Phenological mismatch refers to food peaking before the migrants arrive to their breeding grounds. Several warblers, such as the Canada Warbler, are long distance migrants. They use photoperiod as a cue for migration. But the caterpillars—a critical source of food for nestlings—may have already peaked before the warblers arrive.

As peak hot days increase with climate change, the heat will stress the birds at different life stages, particularly the eggs and nestlings. Then as the population declines it grows at a slower rate due to the Allee effect. For example, it becomes harder for individual birds to find a mate. Also, birds use social cues to select habitat, and those cues may be lessened if fewer birds are in an area.

Chandler noted that his main study area is the Coweeta Basin in N.C. where different methods are used to document the decline and the rate of decline of these birds. Methods used are mostly observational ones: point count, mist netting for banding purposes, and mark-resight.

His current focus is on a competition hypothesis: warm-adapted competitors will move upslope reducing fitness of cool-adapted species. He listed potential competitors:

| Cool-adapted | Potential Warm-adapted Competitor |
|---------------------|-----------------------------------|
| Black-throated Blue | Hooded Warbler |
| Canada Warbler | Hooded Warbler |
| Veery | Wood Thrush |
| Dark-eyed Junco | Ovenbird |

(The Canada Warbler is even more restricted to higher elevations than the Black-throated Blue Warbler).

Chandler pointed out that while only two years of data have been collected so far, there is already evidence of the cool-adapted populations becoming more restricted. They are either having to move farther up the slope or to move northward. To track the northward movement, genetic studies are used. Dr. Joe Nairn, population geneticist at Warnell, is comparing the genetic structure of the Coweeta, N.C. warblers to those in Canaan, N.H.*

Nairn is seeking evidence of the divergence in genetics. In N.C. researchers are seeing very different allele frequencies. The two populations appear to be genetically distinct. Warblers return to their same breeding areas each year, and site fidelity means limited gene flow.

Chandler concluded by emphasizing that the southern Appalachians host a tremendous diversity of trailing edge populations. This is where scientists expect the changes to be the most rapid. Climate change is likely to cause range shifts in trailing edge populations. But what is not known are the mechanisms by which this will occur.

*Chandler added, “We are currently processing feather samples from a third population in Northwest Territory.”



Photo of Canada Warbler by Richard Hall in his backyard in Athens—May 5, 2014

Birdology by Sy Montgomery. Reviewed by Maura Mandyck

“Birds are the only wild animals most people see every day,” says Sy Montgomery, author of *Birdology*. Oh sure, we see squirrels or possums maybe, but those are mammals like us, not domesticated, but not truly wild either, not like birds. “A bird is as distant from us as a dinosaur,” Montgomery says, and yet all around us too.

As I read *Birdology*, I started a list in the back of the book of Things That Appeal to Us about Birds. Song, of course, in its infinite variety. Beauty, the beauty of their feathers, and the strange wonder of their beaks and grasping feet. I love birds for their nest-building, the endearing bundles of twigs and grass and bits and pieces that they tuck into tree branches or, in my case, the rungs of a ladder hanging in my garage, and then the steadfast feathery warmth they bestow on their eggs. And of course we love them for their flight.

Ask almost anyone what superhero talent they would want, and they say flight. To witness even a turkey vulture in the air, wheeling over a city dump, is to partake of a miracle. Montgomery’s book is organized around similar miracles, or as she describes it, “birdiness.” The seven chapters of *Birdology* each takes up an essential quality of a bird, “Birds Are Made of Air,” for example, “Birds Can Talk,” or “Birds Find Their Way Home,” and then discusses in detail the bird that best illustrates that quality (hummingbirds, parrots, and pigeons, respectively).

Montgomery is not a scientist, but she has been writing about animals for decades, and the extent of her knowledge is evident in almost every word of *Birdology*. For example, she informs us in “Birds Are Dinosaurs” that the cassowary—a six-foot tall, 150 pound bird that can eviscerate its prey (including human beings who threaten it) with the dagger on its clawed foot—is “a single dad.” The female lays the eggs, but the male takes it from there, incubating the eggs and raising the chicks.

Crows form such strong family ties that “adult crows sometimes visit their siblings living elsewhere, as we do.” And while crows are the smartest birds, even the humble chicken can “remember the past and anticipate the future.” Montgomery invites us to celebrate the sheer amazingness of birds by piling up the fascinating facts.

The facts are less the point, though, than the language of the book, which is beautiful, and the obvious passion Montgomery has for birds. In the chapter “Birds Are Fierce,” that passion is strongest, as Montgomery works with a falconer and her Harris’s hawk named Jazz, whom Montgomery loves at first sight. “Why do I love her so immediately?” she wonders. “I love that she is big; I love that she is fierce; and I love, too, that she might be unpredictable. She is essence of hawk...and here she is on my arm.” Which neatly captures what is so irresistible about birds: here they are, at our feeders, in our backyard chicken coops, maybe in a cage or on a perch in our homes,

completely other, completely wild, and all ours, so long as we are able to look.

And how long will that be? Any discussion of animals or nature begs the question of what we humans are doing to our environment and to what the great writer and conservationist Gerald Durrell called the “intrinsicly precious co-denizens of our planet.” The dodo and the passenger pigeon are both famously extinct, but of more immediate concern is the fact that in the last forty years, “the populations of twenty of our most beloved common birds have more than halved in number.”

Montgomery writes, “We claim to cherish birds...but we rob their food, usurp their nests, murder their young, and render their already arduous, miraculous migrations impossible.” Read *Birdology*, and share it with anyone who might take for granted the beautiful singing, flying dinosaurs in our midst.

New York: Free Press, 2010. 242 pp.

Message from the Vice-President

by Katy Manley

If I’m going to be your new Vice President, you should know a bit more about me; I live in Winterville with my husband, David, and our Georgia Black Dog, Samantha.

Here’s how my “birdiness” started: I spent the fall of 2012 living in Carlton, Georgia where there was nothing to do but stare out windows. One day, I saw a black and white woodpecker. It seemed too small to actually be a woodpecker so I found myself Googling and stumbled upon WhatBird.com and Cornell’s AllAboutBirds.org. Suddenly, a whole new world was available to me!

I discovered it was a Downy Woodpecker and thought that was cool, but a few weeks later we were greeted by a pair of Red-Tailed Hawks and that trumped Mr. Downy. That same day I saw a Pileated Woodpecker flying in our wooded yard. Later when I was in my car, it did a territorial display against my driver’s side window. That terrifying moment sparked a need to know more! I sought out the resident birder from my office, Ed Maioriello, and asked him where to learn about birds. Ed introduced me to *The Sibley Guide to Birds*, and invited me to an ORAS walk at Whitehall Forest. It was the first time I saw an American Goldfinch and a Black-and-white Warbler; the rest is history!

I spent that spring and summer trying to learn as much as I could. I listened to *The Peterson Guide to Birding by Ear* and asked questions. I followed around our local “greats” and still learn so much from them.

I love the built-in entertainment birding affords me everywhere I go. I’d love to hear about how you got started birding. Email me at vp@oconeeriversaudubon.org to share your story. Thanks for encouraging a new birder! I look forward to learning more through my involvement at ORAS.

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How It Came To Be *The Yellowthroat*

by Eugenia Thompson

When Mark Komoroski founded Oconee Audubon Society in April 1991, he called the newsletter *Chirp*. When I became the first elected president in June 1992, I thought the newsletter needed a more dignified name.

Birds of Georgia, Publication No. 2 of the Georgia Ornithological Society (1945), listed the Athens Yellowthroat: "*Geothlypis trichas typhicola* Burleigh. This well marked subspecies, which was described by Burleigh in 1934 with Athens as the type locality ..., breeds from central Georgia southward throughout the State, and is resident and usually common in suitable habitat. Specimens from this area were previously referred to *G.t. ignota*, a race largely confined to peninsular Florida if *G. t. typhicola* is accepted by the [American Ornithologists' Union] AOU Committee which now has the matter under consideration."

As it turns out, AOU did not accept it, but for one brief golden moment, a common summer resident was our very own. I thought that was a good enough reason to christen our newsletter *The Yellowthroat*, and the OAS Board agreed. In September, 1993, the first issue of *The Yellowthroat* was published.

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