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Brown-headed Nuthatch by Doug Pratt

Chapel Hill Bird Club Bulletin

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Next Meeting
Monday, January 23, 2017

Time and location: 7:15 pm refreshments; 7:30 pm meeting. Olin T Binkley Baptist Church, corner of Highway 15-501 Bypass and Willow Drive, behind University Mall, Chapel Hill, NC

Members and guests are welcome to gather for dinner at the K & W Cafeteria (University Mall) at 6 pm before the meeting. Go to the back room of the cafeteria to join the group after making your dinner selection.

January 23, 2017 Program
The American Oystercatcher
Speaker: Ted Simons, Professor in the USGS Cooperative Research Unit at NC State University

Professor Simons will highlight the collaborative achievements of the American Oystercatcher Working Group over the past 15 years. These include the establishment of range-wide surveys, color-banding protocols, mark-resight studies, a revision of the Birds of North America species account, and new mechanisms for sharing information. Ted will show that broad collaborative approaches across state, federal, and private sector scientists and the engagement of the public are key elements of effective species conservation programs.

About the Speaker: Ted Simons earned his BS at the University of Wisconsin, Madison, and his M.S. and Ph.D. at the University of Washington, Seattle. He served as a research biologist with the National Park Service and the Director of the NPS Cooperative Park Studies at the University of Virginia for ten years before coming to NCSU in 1993. His research strives to improve species conservation and monitoring programs, and the management of protected areas, through a better understanding of wildlife habitat relationships and sampling methods. Recent research has been directed toward the conservation of Neotropical migratory landbirds, including studies of the stopover ecology of birds during migration and breeding birds in southern Appalachian forests, and the conservation of marine birds, including the endangered Hawaiian Petrel, Black-capped Petrels in the Dominican Republic, and American Oystercatchers on the Outer Banks of North Carolina. Research is focused in three broad areas: (1) understanding the ecological factors that constrain species diversity and abundance, (2) modeling wildlife habitat relationships at the population and landscape level, and (3) improving wildlife population sampling methods.

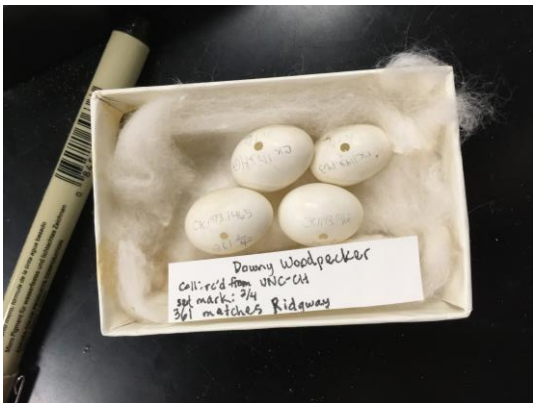
The Evolution of a Young Naturalist

by Olivia Merritt

Editor's Note: When John Gerwin spoke to the CHBC meeting in December, he brought with him twin sisters Olivia and Vanessa Merritt. These sisters are Young Naturalists with Wake Audubon, under John's mentorship. I asked if they would be willing to write articles for our monthly newsletter explaining why they became young naturalists and chronicling some of their adventures along the way. The first article by Olivia follows. Vanessa's article will appear in the next issue.

A young naturalist is that kid that you see outside, curious about the world and the butterflies flying around, the flowers blooming and seed pods growing. A Young Naturalist is an adolescent who is part of a group formed through Wake Audubon. Young Naturalists go outside and are fascinated by the wild world, and I am part of the Young Naturalist sub-club: John's Club.

My participation in the Young Naturalists started when I was fourteen. My mom found a public bird banding event at Prairie Ridge Ecostation in Raleigh one fall day, and my sister and I met John Gerwin there. John Gerwin is the curator of ornithology for the NC Museum of Natural Sciences, and an extremely smart naturalist and wonderful person in general. He is also great with kids, and loved showing me and my sister how to collect data from the birds and put bands on them. So, we asked him if we could continue working and learning from him; be his apprentices of sorts. We began to go to the museum and traveled down to the basement collections, where thousands of bird skins lay, preciously kept in big, white, fire-resistant cabinets. The project wasn't to gaze, awestruck, at the bird skins used by artists and scientists and educators, but to look at thousands of other parts of a bird, if you will: eggs. Egg collecting became illegal as a part of the Migratory Bird Act in 1918, so in the past 25-ish years, sons and daughters have found boxes of eggs in attics or houses. Some of these eggs came with data (a location or date



of when the egg was collected), and some did not. Over the past four years, I, along with my sister and several other friends that are a part of "John's Club," have been tediously going through cardboard boxes full of eggs of various speckling, coloration, size, and other confusing characteristics. We had three things that made life great: a) egg identification books that would give us one image and average measurements of an egg, b) the archives of eggs already in the collections--these have data and provide real-life examples--, and c) two egg checklists. Egg checklists are numeric lists of bird eggs: one number correlates to one bird species. Sometimes eggs have a number penciled onto the its surface. This number may correspond to one of the two checklists we have (the AOU and Peterson checklists).

A couple thousand eggs and hours later, the previously-unidentified eggs are finished. I feel like the ultimate egg expert! This year will be time for organization and distribution of "egg packages" to educators and other museums. Spreading the wealth of learning is the goal of the seemingly interminable, but extremely interesting and rewarding, egg project.

Time to go outside. Learning to band birds (including setting up the mist nets we catch them in), takes a lot of practice. After four years, I still struggle. But the point of being a Young Naturalist is to learn, struggle, and keep doing it. Bird banding at Prairie Ridge Ecostation led to going on a mountain field trip. The Uwharrie National Forest is a beautiful area just south of Asheboro, and the museum had been doing a study on Black-throated Green Warblers there for several years by tracking them via radio telemetry. We went there to do a bird camp: learning more about banding and radio telemetry. We banded and put transmitters on a Carolina Wren and Black-and-white Warbler. Banding was enhanced with practicing waving lightning-rod-looking poles around that detected the frequencies of radio transmitters attached to birds' backs. When I saw the particular bird, I marked the spot on a GPS to create a waypoint. The two bird camps were in the incredibly HOT summers of 2014 and 2015.

Author Olivia Merritt

Young Naturalist continued

By the spring of 2015, I had a huge paper to do called the Extended Essay. It is a key part of the school program I was in Millbrook High School called the International Baccalaureate Programme. Why not try to do my own study? I discussed with John Gerwin, who of course gave me guidance, materials, moral support, and chocolate. I ended up color-banding a pair of breeding Carolina Wrens at Prairie Ridge Ecostation. I color banded and put radio transmitters on each, and spent three weeks tracking them. Along with a lot of exercise, I got 36 waypoints on the male, and 22 on the female. I learned how this pair moved around their territory, how they communicated, the frequency of neighboring male calls, and the fact that the pair did not have a nest. Two days before the study was supposed to end, I found the female injured. John Gerwin thinks it was a mammal who attacked her. We removed the radio transmitter to reduce as much stress as possible, and I never saw her again. The male, two days later, was seen with another female, and began to sing in what had previously been another pair's territory. That is quick adaptability. It was very sad that the female was injured and most likely died, but that is the life of wild animals. It was interesting to see how quickly the male allocated more territory and a new mate. Twenty more pages of this kind of talk, and I am very proud of my first study.

Summer of 2016 was the first summer free of high school, and the time for another bird study. See how love for nature can become a career if you get the luck I had with a great mentor like John Gerwin? This is all about birds, because, as you all already know, birds are awesome. Bird work is always dotted with learning about plants and insects around where we work too.

I am taking a gap year between high school and college in order to do more work and get more experience with ornithology. So, during the summer, John, my friend Edward, my sister, friend Emma, and I color-banded 15 Hermit Thrushes residing on a ridge in the Black Mountains. We put radio transmitters on three individuals and tracked them for about two weeks, until we collected about 35 waypoints on each. John left Edward, my sister, and me to finish the last of the study on our own, and this provided all of us unique knowledge of how to deal with situations without an all-knowing figure. I learned so many plant species, and got really good at identifying several mountain bird calls, like Blackburnian Warbler and Ruby-crowned Kinglet. I also became skilled at putting up mist nets, and tracking birds using telemetry.

Young Naturalist continued

My personal evolution as a Young Naturalist is far from over. I hope to continue doing studies, work at the museum, and start leading other Young Naturalists who are as inspired as I am. As you read this, my sister and I will be in Nicaragua. We will be learning all of the birds to be seen on a coffee farm called Finca Esperanza Verde in the northern mountains, GPS-ing the land so that the coffee farm can have a complete electronic map, and aiding in a Golden-winged Warbler study. There has been an ongoing study on these warblers for ten years by The Golden-winged Warbler Working Group and Golden-winged Warbler Atlas Project, and Audubon NC has contributed by doing surveys at Finca Esperanza Verde, color-banding individuals, and, since last year, putting geolocators on individuals. We are going to attempt to color-band some females, and remove the few remaining geolocators from males. I am going to learn about and see so many new species of birds, butterflies, and plants! That is the beauty of being a young naturalist--I am always excited to learn new things, and through the Young Naturalists' Club, as well as John Gerwin, my desire for knowledge every day is never diminished, rather replenished.

Welcome New Member
Mary Kay Robinson,
Chapel Hill

The Dragonflies and Damselflies (i.e., Odonates) of North Carolina website is now back online!
http://www.dpr.ncparks.gov/odes/a/accounts.php

Jordan Lake State Recreation Area Event

Take an informal tour of the constellations: telescopic views of beautiful objects, including planets, nebulae, star clusters and, of course, the Moon when available. Location: Ebenezer Beach, gates will remain open till the end of the activity. Monthly sky watching sessions are free and open to the public! Check the "News" listing at the home page of www.moreheadplanetarium.org on the day of the sky watching session to be sure weather conditions will permit us to host this outdoor activity. The event is hosted by the staff from Morehead Planetarium.

Date of Event: Saturday, February 4, 2017 - 6:30pm to 8:30pm
Start Location:
Ebenezer Day Use Area

What's That, You Say?

by Norm Budnitz

People often ask me why bird names change, why individual species move around in their field guides from one edition to the next, or why whole groups of birds move. Is it just so that publishers can sell more books? Is it because hard-core birders want to make it difficult for novices to join the 'club?' Well, no and no. There are actually good scientific reasons for these changes.

When I was a kid, I had Baltimore Orioles nesting in my backyard. But as a young adult, when I visited my parents, those orange and black birds were Northern Orioles. And when I went to see the old folks in their dotage, they were Baltimore Orioles again. Same species; different names.

The breeding range of Baltimore Orioles covers most of eastern North America, extending westward into the Great Plains. In western North America there is another species called Bullock's Oriole. Its range extends from the west coast, eastward into the Great Plains. Where the ranges of these two species overlap—central Kansas, Nebraska, the Dakotas—they hybridize (interbreed). A lot! When scientists studied the extent of this hybridization in the 1980s, they presented their recommendation to the American Ornithologists' Union (AOU), the arbiter of such things, that the two species be joined (lumped) into one larger species called Northern Oriole. The AOU agreed and Northern Oriole came into existence.

Female Baltimore Oriole
Photo by Norm Budnitz

When two populations of birds (or any other critters) hybridize, there is often a central zone where almost every individual is a hybrid. But in addition, there is a certain amount of hybridizing that occurs away from the central zone, reaching out into the areas where each single group tends to dominate. This peripheral hybridization is called *introgression*. But that's not what is seen with these orioles. In the central zone there are, indeed, lots of hybrids. But there are also a fair number of birds that appear to be pure Baltimores and pure Bullock's. Also, outside the central zone, there are very few hybrids—i.e., very little introgression. Based on that information, the AOU changed its mind and split Northern Oriole back into Baltimore and Bullock's.

What's That continued

But wait! There's more. Now that scientists have analyzed the DNA, the genetic material, of these species, they have discovered something that seems to 'push' them further apart as separate species. It turns out that Baltimore and Bullock's are not each other's closest relatives. A third species, Streak-backed Oriole, seems to be the closest relative to Bullock's, while Altimira Oriole seems to be a sister species to Baltimore. And a fifth species, Black-backed Oriole, which hybridizes with Bullock's where their ranges meet, is actually closer DNA-wise to Baltimore. Oh dear, oh dear. What's a body to do? At present, all 5 of these species are considered to be separate.

By the way, there is one more point to be made about these New World orioles. *They aren't orioles at all!*

What's that, you say? In Europe, Asia, Africa, and Australia, there is a family of birds known as the Oriolidae, the Old World orioles. Actually, they were just known as orioles before anyone knew there was a New World. But when, suddenly, there *was* a New World (at least in the eyes of Europeans), and when those Europeans saw our black and orange birds, they called their new friends orioles because they looked so much like their old friends in the Old World. In fact, the New World orioles are in a different family known as the Icteridae, the New World blackbirds—Common Grackles, Brown-headed Cowbirds, and Red-winged Blackbirds, for example. The Icteridae are completely different from and unrelated to the Oriolidae.

Photo by Norm Budnitz

And what about these New World blackbirds? They are unrelated to the Old World blackbirds (the kind that got baked in pies in nursery rhymes).

What's that, you say? The bird in England known as a Blackbird is actually a thrush, in the family Turdidae (no giggling, please). And which common species in the New World is in the family Turdidae? The America Robin. Which should really be called the American Thrush, because it is most decidedly *not a robin*!

What's that, you say? Our robin is not a robin? Nope. Early European settlers thought it looked a bit like their Old World friend, their robin redbreast, now officially called European Robin. Those Old World robins are classified in the family Muscicapidae, the Old World flycatchers, which are completely unrelated to our New World flycatchers, family Tyrannidae.

What's that, you say? I'm done saying. You sort it out. I'm too tired.

Future Meetings

Over the summer our Vice Presidents Eddie Owens and Anne Dayer have lined up some stellar speakers for the coming year. The following is a list of speakers and their topics:

February 27, 2017, Kent Fiala
- **Topic**: eBirding 101

March 27, 2017, Ashley Dayer
- **Topic**: Why Conservation Needs Social Science: Understanding Human Behavior

April 24, 2017, Dustin Foote
- **Topic**: Falconry: An Ancient Art in Modern Times

May 22, 2017, David and Judy Smith
- **Topic:** Pantanal: The Wonderful Wetland of Brazil

Officers of the Chapel Hill Bird Club

Elected Officers

President: David Smith (davidjudysmith@frontier.com)

Co-Vice President: Eddie Owens (banjoman_57@yahoo.com)

Co-Vice President: Anne Dayer (annedayer@gmail.com)

Treasurer: Patricia Bailey (pbailey_489@yahoo.com)

Secretaries: Vacant

Appointed Officers

Bird Count Supervisor/compiler: Will Cook (cwcook@duke.edu)

Field Trip Chairman: Bob Rybczynski (rob.rybczy@gmail.com)

Bulletin Editor: Mary George (mcgeorge44@gmail.com)

Webmaster: Will Cook (cwcook@duke.edu)

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Saturday Field Trips

Bob Rybczynski usually leads field trips for the Chapel Hill Bird Club every Saturday. He has sent out a reminder that over the next month, there may not be a Saturday morning birding trip. If there is one, it will be posted on the CHBC Facebook page and on the Carolinabirds listserv.