

HIGH COUNTRY HOOTS

High Country Audubon Society - Serving Alleghany, Ashe, Avery, Watauga, and Wilkes Counties

THE BIRDS OF COSTA RICA

Aaron Simon will present on the "Birds of Costa Rica" during High Country Audubon Society's March Meeting. The meeting will take place at 6:30 p.m. on March 15.

Simon has been birding for seven years and has banded South Texas (Rio Grande Valley), Southern Arizona, South Florida and all over Southern California. He also lived in Costa Rica for a year and a half.

Simon says that he isn't a big bird chaser but does pursue them when it is convenient. He also loves to take photographs of birds.

"I love birds and birding, for it allows me to be outdoors," said Simon. "The

stress of life seems to dissipate when I bird. It's my form of meditation."

He started birding with Curtis Smalling in the High Country many years ago and after living in other areas he now finds himself back in North Carolina.

Some of our HCAS members will actually be on a birding trip in Nicaragua on the night of this presentation and will be seeing many of the very same birds that Simon will talk about.

We hope that everyone who is not in Nicaragua will join us at 6:30 p.m. as we learn about the birds of Costa Rica!



Blue Tanager



Large Macaws



Yellow-throated Euphonia

MARCH FIELD TRIPS

New River State Park

The field trip on Thursday, March 3 is to New River State Park. Attendees will see the American Woodcock's evening display to establish territory and impress females.

A HCAS group has seen the Woodcock's behavior once before while at New River State Park. They were in a picnic area near an open, low-growing grass area just as the sky was growing darker.

"First I heard the twittering," said HCAS President Anita Clemmer. "I didn't see the bird take off or fly around in circles but I did see him on his way back down to the ground."

The woodcock is a curious looking bird that is a relative to sandpipers and

phalaropes. The males will display at dawn and dusk in a field or clearing. He gives repeated "peents" on the ground, often on remaining patches of snow in the early spring. They actually start their display with an explosive takeoff then fly in larger circles rising higher and higher until reaching 200-300 feet, then he starts to descend in smaller circles. That's when the twittering sounds are made by the three outer-wing primary feathers. The bird starts chirping as he descends. He comes down in a zig-zag, diving fashion, chirping as he goes. As he comes near the ground he silently lands, near a female if she is present. Then he starts peenting

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CALENDAR OF EVENTS

March

3	New River State Park Field Trip	6 p.m.
15	Monthly Meeting at Watauga County Ag. Conference Center	6:30 p.m.
31	Meat Camp Environmental Studies Area Field Trip	8:00 a.m.

April

7	Boone Greenway Field Trip	8:00 a.m.
16	Shady Valley, TN Field Trip	TBD
19	Monthly Meeting at Watauga County Ag. Conference Center	6:30 p.m.

May

17	Monthly Meeting at Watauga County Ag. Conference Center	6:30 p.m.
19-22	Audubon NC Annual Meeting at the Blowing Rock Conference Center	

A \$5 donation is requested with field trip attendance.

All events and meeting times are subject to change.

For updated information please visit

<http://highcountryaudubon.org>.

FUN FACTS

Rusty Blackbird



- Rusty Blackbird is one of North America's most rapidly declining species. The population has plunged an estimated 85-99 percent over the past 40 years and scientists are completely puzzled as to what is the cause.
- They are relatively uncommon denizens of wooded swamps, breeding in the boreal forest and wintering in eastern U.S. in winter, they travel in small flocks and are identified by their distinctive rusty featheredges and pallid yellow eyes.
- Like most members of the blackbird family, the Rusty Blackbird undergoes only one molt per year. The change in appearance between winter and summer results from the rust-colored feather tips of "winter plumage" wearing off and leaving behind the smooth black or gray "breeding plumage."

Info and picture found on <http://www.birds.cornell.edu>.

MARCH FIELD TRIPS CONT.

again.

The male American Woodcock gives no parental care, but continues to display long after most females have laid eggs. Some males display at several, widely separated singing grounds and will mate with several females. A female may visit four or more singing grounds before nesting, and she may keep visiting even when she is caring for her young.



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Photo from

<http://www.birds.cornell.edu>

The group going on the field trip will meet at the New Market Cash Points at 4:15 p.m. The group needs to be at New River State Park by 6 p.m. A ranger has told Clemmer that the birds have been displaying around 6:30 p.m. pretty consistently.

Meat Camp Environmental Studies Area

The Meat Camp Environmental Studies Area is the field trip destination on the morning of Thursday, March 31.

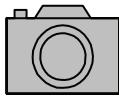
Since 1999, over 170 species have been sighted at MCESA. The site is listed in [The North Carolina Birding Trail Mountain Guide](#).

The area is a 9.5 acre wetland where maintained grass paths with boardwalks over wet areas meander for almost one mile through the dense wetland. Dense cover provides roosting for many nocturnal migrants with most eastern warblers observed here.

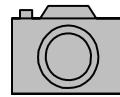
The dense cover makes it especially attractive to birds but notoriously hard for beginning birders. Sightings are often brief so being familiar with vocalizations will help to add to species totals. On the other hand, the dense cover and close access to usually difficult habitats (marsh, beaver ponds, etc.) can yield extraordinarily close views for patient birders.

The paths are grass so wear shoes for dew or frost. The group will be meeting at the New Market Cash Points at 7:45 a.m. and will arrive at MCESA around 8 a.m. Please remember to allow extra time since this is a heavy school traffic area.

Martha Cutler will lead the group on the bird walk. Cutler will be accessible at her home phone number (336-877-4031) in case of rain issues.



HCAS Member Photos



Tundra Swans

By Doris Ratchford



Red-headed Woodpecker

By Monty Combs



American Robin

By Drew Sumrell



Hooded Merganser

By Richard Gray

High Country Audubon Society Board

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High Country Hoots is published six times a year by the High Country Audubon Society, a chapter of National Audubon. Local members receive the newsletter via electronic mail. It is also archived on <http://groups.yahoo.com/group/highcountryaudubon>.

The Blog is the Word

Have you visited Audubon North Carolina's blog?

[www.ncaudubonblog.org](http://ncaudubonblog.org)

Get the latest bird and conservation news!



High Country Audubon Society

PO Box 3746

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WATER QUALITY TALK IN TIME FOR APRIL SHOWERS

Water quality is the topic for the April monthly meeting. Watauga County Extension Agent for Natural Resources and Environmental Education Wendy Pataprsty will lead the discussion.



Photo from
www.highcountrypress.com

Pataprsty received her Bachelor of Science degree in Agricultural Studies from the University of Georgia. She then moved in the High Country and began her work with the extension office in 2001 as a

grant-funded Water Quality Technician. She was hired to be an Extension Agent in 2003. In 2008, Pataprsty was hired as Environmental Extension Agent by NC A&T University and now collaborates with community development projects, storm water projects and community environmental education.

She coordinates the Kids in the Creek Program that involves all 4th graders in Watauga County and the Big Sweep river cleanup which removes tons of trash from our area streams every year.

She is highly involved in our community and HCAS is grateful that she is making time to come speak to us April 19 at 6:30 p.m. about this very important conservation issue.

USING SUPER-SCIENCE TO TRACK THE RUSTY BLACKBIRD

Tina Gheen has summarized an academic article on the Rusty Blackbird for the Smithsonian National Zoological Park (www.nationalzoo.si.edu). The text and graphics provided below can be found at that website.

The original publication is:

Hobson, K. A., R. Greenberg, S. L. Van Wilgenburg, and C. Mettke-Hoffman. 2010. Migratory connectivity in the Rusty Blackbird: isotopic evidence from feathers of historical and contemporary specimens.

The rusty blackbird (*Euphagus carolinus*) is disappearing, and we don't know why. Scientists believe that the birds may be declining because of changes in their habitat. Specifically, the



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APRIL FIELD TRIPS KICK OFF SPRING BIRDING

Boone Greenway

The first field trip of April will be to the Boone Greenway on Thursday, April 7. Martha Cutler will lead the group.

For those who are not sure where the Greenway is, a group will meet at the New Market Cash Points at 7:45 a.m. to be at the Boone Greenway by 8 a.m. The group will bird the new wetlands area and other sections of the extensive Greenway. It is sure to be a fruitful weekday bird walk since the spring migrants are due to be returning by then.

In case of rain issues, Martha's home phone number is 336-877-4031.

Shady Valley, TN

A trip to Shady Valley on Saturday, April 16 will provide folks with the opportunity to do some weekend birding.

Shady Valley is located in the northeastern corner of Tennessee in Johnson County, just outside the Cherokee National Forest.

After the Pleistocene ice ages, species and ecosystems that had shifted southward often survived in local refugia. As a result, cold-adapted ecosystems, such as cranberry bogs, remain in Shady Valley, far south of their usual range. Shady Valley once contained an estimated 10,000 acres of boreal cranberry bogs.

Today most of this area consists of small farms, woodlots and home sites with a pleasant rural feel. The Nature Conservancy owns several tracts in Shady Valley which provide excellent birding opportunities. The best of these are the Orchard Bog, Quarry Bog and Schoolyard Springs preserves.

On the valley floor, thickets along streams have nesting Willow Flycatcher, Yellow Warbler, Common Yellowthroat and Gray Catbird. Grassy fields may have nesting Grasshopper, Savannah or Vesper Sparrows. Yard and field edges host nesting Eastern Bluebird, Chipping and Song Sparrows, House Wren and Tree Swallow. Virginia Rail may be found in Quarry or Orchard Bog year-round, although spring is best. Woodcock call and display at dusk (February-March) at these two sites, also. Migration season brings other warblers, sparrows, etc.; American Bittern, Sora and Northern Harrier are possible in bogs at that season. Wood Ducks occur on ponds and Beaverdam Creek. Wild Turkeys are found throughout. Common Ravens may fly over at any season. Whip-poor-wills and owls may be heard calling at night from adjacent ridges.

Merrill Lynch of the Nature Conservancy or HCAS Past President Jesse Pope will lead the group. HCAS offered a similar field trip to Shady Valley in July 2010. Watch the listserv for more information on the trip. The group will meet in Boone on April 16 to carpool from the New Market Cash Points.

MEMBERSHIP INFORMATION

An annual membership to the High Country Audubon Society is \$10 per person and due June 1 of each year. Membership and support gives you access to the group's listserv and the HCAS e-newsletter High Country Hoots. Mail check and information (name, address, telephone number, e-mail) to:

High Country Audubon Society

Attention: Membership Dues

PO Box 3746

Boone, NC 28607

USING SUPER-SCIENCE CONT.

rusty blackbird is tied very closely to forested wetlands. They depend on them for food and habitat.

These wetlands are disappearing due to man-made changes in the environment, such as:

- Land development
- Acid rain
- Drying of the wetlands from global warming and climate change

However, scientists won't know why the birds are disappearing until they understand more about them.

Part of the problem with managing habitats for migratory birds is that we don't know exactly where the birds go when they migrate or what flight path they use. Generally, we know the rusty blackbird spends its summers in the boreal forests of North America across most of Canada and Alaska. That's a pretty big area for a team of scientists to cover.

In the winter, the blackbirds leave their northern breeding grounds and fly south to a much smaller area in the Southeastern U.S. - the Mississippi Alluvial Valley and the Atlantic Coastal Plain. But with the rusty blackbird, things are even more complicated because they respond differently to changes in the weather every year, and they are very difficult to capture. It's nearly impossible to capture the same bird twice.

A group of researchers from the Smithsonian Migratory Bird Center and Environment Canada had an idea about how to solve this problem. If they could match up the wintering populations in the south with the breeding populations in the north, they'd have a much clearer picture of how the birds live and what they face during and after migration. Once they connected the populations with their habitats, they could examine the condition and quality of the wetlands for each set of birds and discover the reasons for the birds' decline.

Unfortunately, the small team didn't have eyes watching the skies at every moment and nets set up across the country, so how could they track these elusive, wide-ranging birds? The answer in this case is to use a little chemistry, a little biology, a little geography, and a lot of math.

The scientists decided to use analysis of stable hydrogen isotopes found in rusty blackbird feathers to try to discover where the birds had been. Scientists can look at variations of elements, like hydrogen, in bird feathers using mass spectrometry, a technique that analyzes the composition and properties of molecules in the samples. They can match the samples with similar geographic and ecologic data collected from different regions.

Depending on environmental conditions, the composition of elements can vary slightly from area to area. By analyzing these variations in the elements, or isotopes, scientists can track the movement of elements through the environment and the food chain. This technique can help researchers trace all kinds of things like food sources, pollution, and changes in the soil.

Between 2005 and 2009, the team of scientists measured ratios of stable hydrogen isotopes taken from over 500 rusty blackbirds captured in the wintering grounds in the Mississippi Alluvial Valley and the coastal plain of South Carolina and Virginia. The team compared the hydrogen isotopes found in the birds' feathers with the hydrogen isotopes recorded in precipitation in the breeding areas. These calculations allowed the scientists to estimate the location of the wintering birds'

summer breeding grounds - east or west of the Appalachian Mountains.

But the Smithsonian researchers wanted to see the historical picture as well. So not only did they analyze feathers from the live birds in the wild, they also took samples from 190 rusty blackbird specimens located in museum collections, including some that were over 130 years old!



Map showing probable migration paths of rusty blackbirds. Birds follow paths on either side of the Appalachian Mountains.

The final analysis showed something very interesting. Based upon the comparison of isotope ratios, scientists could see clear population differences. There were two distinct subpopulations separated by the Appalachian Mountains. Birds wintering in the Mississippi Alluvial valley spent the breeding season on the western side of the Appalachians from Alaska to Labrador. The birds found on the Eastern Coastal Plain in winter were only found in the eastern parts of the breeding range. They didn't cross the mountains during their migration.

The overall results also showed the change in population density and the extent of the birds' range over time. The scientists were able to map the probable origins of the birds using a GIS-based model to get a better idea of the distribution and density of the breeding bird populations through the years.

Why is this important? Now researchers have established a strong connection between the birds and their respective territories without recapturing the birds. They also have a better idea of the flight path the birds are using to get from the breeding grounds in the north to the wintering grounds in the south.

This makes it easier for wildlife managers to tailor their efforts to the eastern and western subpopulations. Habitats critical to the rusty blackbird's survival can be identified and steps can be taken to preserve them. Perhaps most importantly, the techniques used in this study can be applied to other migratory bird species studies.

Interested in reading more about the Rusty Blackbird? More information can be found through the Smithsonian National Zoo, including these related articles:

- Working Together to Save a Species: the International Rusty Blackbird Working Group
- Day in the Life of a Rusty Blackbird
- Blackbird Behavior