



# River Gorge Res

# earch

## *TRGT starting extensive songbird study this summer*

BY SUNNY MONTGOMERY

**I bumped along the narrow dirt road, careful to steer my '95 Camry over the rocky divots and water-filled trenches. My suspension was already shot.** I gripped the steering wheel tighter for every scrape and bang that came from the undercarriage. Down a steep embankment then back up. Where it crested, a gaggle of wild turkeys stomped the weedy roadside. The tree line tightened. Finally, the brake lights flashed on the silver truck which I'd been following. We had arrived.

Well, almost. "We walk from here," said Tennessee River Gorge Trust Executive Director Rick Huffines, stepping out from the driver's side. University of Tennessee at Chattanooga Ornithologist Dr. David Aborn and UTC graduate student Holland Youngman climbed out after him.

"The heavy trucks are already starting to take a toll on the road. And I figured we should stop abusing your car," Rick laughed. The smell of burnt oil hung in the air. We turned and started up the sloping trail where I fell in step behind the three.

This summer, Huffines, Aborn and Youngman will be working together to carry out a multi-year, multi-faceted study of migratory songbirds in the gorge.

"We've been buzzing about

this project since last June. It's just taken awhile to get the money flowing," says Rick. In its beginning stages Huffines knew two things: he wanted to study biodiversity in the southern Appalachian region and he wanted to keep his money local. So he approached Aborn—who shares his lifelong passion for songbirds—to help hash out the details.

The two designed a study that will track and record native Neotropical birds using a couple of different methods.

First, it will rely on point count surveys in which the researcher records every bird call and bird sighting in a given area during a given period of time. Second, it will construct a bird banding laboratory which tracks songbirds, or "neotrops" as Huffines calls them, by catching them in mist nets and fitting them with a small loose band around the foot.

"Imagine a ring around the finger," Rick explains. He compares mist nets to hair nets. There will be ten lanes within 40 acres. Every 40 minutes a researcher checks the nets, collects the birds in individual cotton sacks and records the data: species, sex, age, etc. Then the bird is banded with a tiny aluminum ring imprinted with a 16-digit number. The number is filed with the US Geological Survey and shared worldwide. So, say that same bird is caught next winter in Colombia. Scientists then have data on how the bird has changed, how long it has lived and its migratory pattern. The banding process



PHOTO: KEVIN LIVINGOOD

PHOTO: JENNIFER SCHLICK



**TRGT Executive Director Rick Huffines, researcher Holland Youngman and UTC Ornithologist Dr. David Aborn discuss their upcoming songbird survey.**

PHOTO: SUNNY MONTGOMERY

takes only three to four minutes and then the bird is released back into the forest.

The data will be collected in the Tennessee River Gorge at a modest field research laboratory—a 14-by-16-foot screened-in cabin-like structure, its roofline cleverly designed to look like wings of a bird. The site of the lab is ideal because of its limited access and remoteness—attributes that have kept the tract unstudied until now. “It’s a butt-kicking place to go because it is difficult,” says Rick.

My car had learned that already. We tromped on through the woods toward the projected site, which is officially under construction as TRGT received funding through the Benwood Foundation earlier this year.

The award will be used to purchase supplies and hire assisting undergraduate students, but mostly to provide a stipend to the research student leading the project. This is where Holland Youngman, a student of environmental science, comes in.

“I visited UTC last September and met Dr. Aborn. I was really interested in the project,” says Holland.

“All of the stars just fell into alignment,” says Dr. Aborn. “Rick got in touch with me. Then the money came along. Then Holland was interested in the program.”

## Not JUST Another Gorgeous Evening

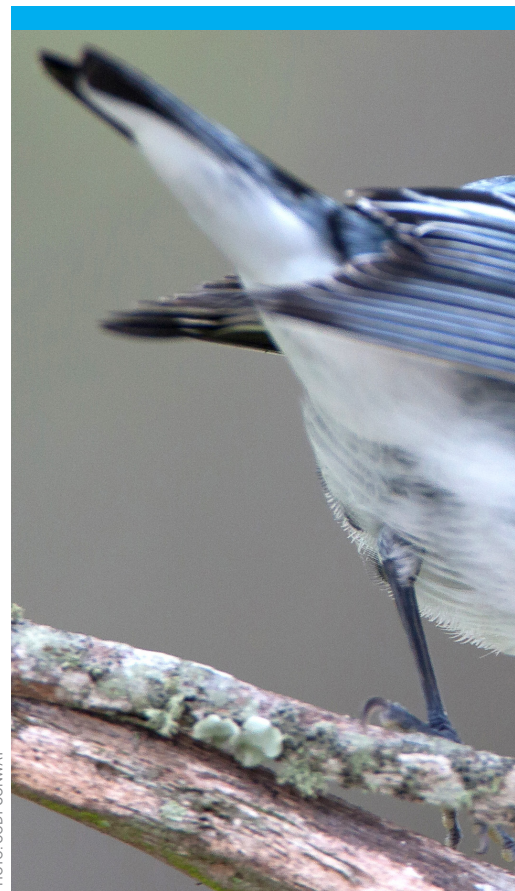
**When:** June 5, 5:30 p.m.

**Where:** 3104 Scenic Waters Lane

**Who:** Landowners, land-lovers, and good stewards of all kinds

**What:** TRGT’s annual fundraiser will feature an open bar cocktail hour with music by the Ben Friberg Trio. Dinner will be catered by Lee Towery and followed with the swinging musical stylings of the 9th Street Stompers. Funds raised will help the Trust continue its vision which is simply “to preserve the Tennessee River Gorge as a natural sanctuary for our community. Forever.” For ticket information visit [trgt.org](http://trgt.org) or call 266-0314.

PHOTO: CODY CONWAY



# Cerulean Search

The three bird enthusiasts are not the only ones with fate on their side. The stars have also aligned over Southeastern Tennessee for one particular species of bird. Though, there was no evidence of its existence that day in the woods. Nor has there been for some time.

Although the project will generate valuable data on all migratory songbirds in the area, its larger focus is on the cerulean warbler. Youngman will spend the bulk of her time in the woods researching the cerulean's post-fledgling foraging habitats. In laymen's terms—finding out what female and young cerulean need to eat after leaving the nest and before migrating south. But first, she must prove the bird still nests in the area.

Over the next two summers Youngman will conduct point

count surveys, hoping to see or hear cerulean. If she does, the next step is to track their high canopy nests, fix the birds with radio transmitters and monitor their range and survival rate over time. At the end of the study, she will use the data as her thesis and hopefully publish the findings.

It may sound like an awful lot of effort for such an unassuming species—white breasted, blue-backed, about four inches in length. What makes the cerulean particularly important is that

it is the fastest disappearing songbird in North America.

“The evidence for the birds decline and the steepness of its decline comes from a Fish and Wildlife Service program. It's an international program called the Breeding Bird Survey and it's our best source for consistent long-term population data,” says Dr. Aborn. For nearly 50 years, the BBS has collected data from thousands of random routes throughout North America and Canada. Since the survey started in 1966, the cerulean population has been declining at about a 4-percent rate per year—or, over time, the population has seen a 70-percent reduction.

The US government has not yet listed the cerulean as threatened or endangered. However, it is under consideration. The National Audubon Society has added it to its watch list and Huffines calls it a species of interest.

It may not sound like fate is on the side of the cerulean. However, its very specific habitat needs are all found in the Tennessee River Gorge: some early successional growth, mature trees and some disturbance.

## So then, why is the cerulean disappearing?

One of the problems is loss of its wintering habitat in the Northern Andes. In order to meet the rising demand for

coffee, farmers have started clear-cutting forests in order to grow the beans in full sunlight, which is both faster and cheaper. Back in the United States, changes to timber harvest and forest management practices have disrupted the “rolling effect of habitat and replaced it with a monolithic forest,” according to Huffines.

However, evidence, albeit scant, shows that cerulean still frequent our forests. In fact, just last summer Huffines claims to have heard one singing across the river.

This does not necessarily prove the bird is nesting here. According to Dr. Aborn it could have just been passing through.

“If all the conditions are here that the cerulean likes and they're still not nesting here, we want to know why,” Dr. Aborn says. If after two years there is no sign of the bird in the Tennessee River Gorge, the crew will not give up.

“There's more area to study outside our view. We're going to keep looking,” says Huffines, naming Sewanee and North Chick Creek as other potential sites. “But what I'd rather find is that we get the nay-sayers in the shins and say, actually, we did find them here.”

The three are optimistic they will find evidence that the cerulean warbler is nesting in the forest. Though, it is possible the population has diminished so vastly, their range no longer extends to our region. The implications of this are startling.

“It's like the canary in the coal mine,” says Dr. Aborn. “The cerulean is an indicator. It tells us there is a problem and eventually it's going to affect the rest of us. It will have an impact on air quality or water quality or lumber supplies.”

Everything is connected to the health of the forest, after all. Until the last high-pitched trill is heard from the high canopies, we are stewards of this land.



## Play a part in protecting the cerulean warbler

You can help support healthy habitat for the cerulean warbler by shopping local this summer. TRGT is working with local Velo coffee roasters to create a special blend that helps raise awareness while providing habitat for the bird. The beans are sourced from the cerulean's wintering grounds in the Northern Andes and grown in the shade so its habitat is not disturbed.



Look for this stamp and the cerulean's story on the back of select Velo coffee bags. For more information visit [trgt.org/birds](http://trgt.org/birds).