



# CARETAKER OF WILDLIFE

**LOCAL ECOLOGIST  
TYLER CHRISTENSEN IS DEDICATED  
TO PROTECTING NEW JERSEY'S  
MOST SENSITIVE SPECIES**

**BY TAYLOR SMITH**

Photograph courtesy of Piedmont Ecological Services, LLC

**G**rowing up in Central New Jersey, Tyler Christensen became interested in the lives and habits of regional wildlife at a very young age.

Admittedly, his father was an amateur herpetologist (someone who specializes in the study of reptiles and amphibians). In fact, most family vacations were chosen on the basis of access to wildlife and environmental exploration. Christensen has particularly fond memories of the kids and family programming at The Watershed Institute in Pennington, as well as volunteer opportunities with the Washington Crossing Audubon Society.

“My initial love was birds,” he recalls.

A graduate of Hopewell Valley Central High School, Christensen is currently completing his Ph.D. in the Department of Ecology, Evolution, and Natural Resources at Rutgers University – New Brunswick. Surprisingly, for someone as naturally curious as Christensen, he is quick to admit that he wasn’t a very dedicated student in high school, and initially shied away from the thought of attending a four-year college. Post-high school, he took courses at Mercer County Community College and began working for the Mercer County Park Commission. He also served as a land steward for Friends of Hopewell Valley Open Space and director of the Nicoya Peninsula Avian Research Station in northwestern Costa Rica. This informative period solidified Christensen’s commitment to the study of wildlife research, particularly as it relates to some of New Jersey’s shyest species. “The goal is to find out what sensitive species need and how to give it to them,” he says.

## “My initial love was birds.”

After completing extensive fieldwork in Costa Rica and co-founding the Wild Bird Research Group ([www.wildbirdresearch.org](http://www.wildbirdresearch.org)), Christensen enrolled at Rutgers University – New Brunswick and completed his undergraduate degree in ecology.

His current studies involve fieldwork and research pertaining to the northern saw-whet owl, bobcats, and copperheads (one of two venomous snakes found in New Jersey). For Christensen, the fact that these differing species are all very reclusive, and frequently misunderstood, makes them even more compelling.

In the case of New Jersey’s bobcats, Christensen hopes to play an influential role in both the conservation of land resources and public education. “Public perception about bobcats in particular, and predators in general, is often misunderstood,” he says.

Historically, bobcats could be found in all of New Jersey’s counties. Subsisting primarily on mice, squirrels, and rabbits, the 18-35 pound felines have excellent vision and hearing (heightening their hunting skills), “tabby” stripes, tufted ears, and a short, bobbed tail. Unfortunately, human population growth, erosion of forestland, and high-speed roads and highways have threatened New Jersey’s bobcats to such an extent that they have been classified as endangered since 1991 on a state level.

Christensen becomes noticeably animated when he describes the recent discovery of a lone female bobcat in the Sourland Mountain Preserve in Somerset County. He was initially contacted by the Sourland Conservancy when the organization received a few phone calls from area residents claiming that they had



Photograph courtesy of Sean Graesser.

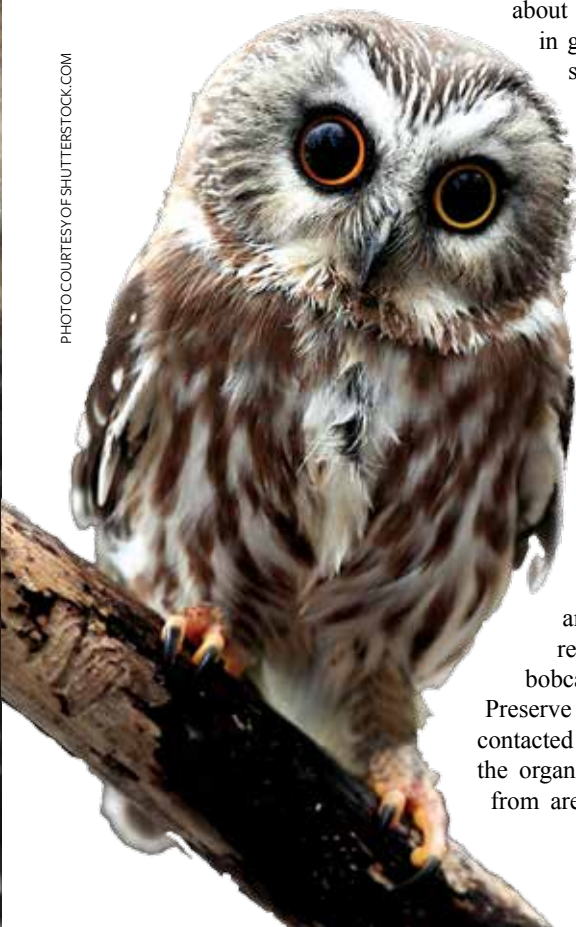
seen a bobcat. Atypical for this region of New Jersey, most of the state’s bobcats reside in protected land, including the Nature Conservancy of New Jersey’s Bobcat Alley in northern New Jersey. Regardless, Christensen pursued the information and eventually confirmed that a female bobcat had indeed taken up residence in the Sourlands.

This type of wildlife tracking and research for improved public and scientific knowledge is at the core of Christensen’s passion and motivation. For him, the relationships with the animals he studies are very real. “They really are individuals [these animals] — they have distinct personalities, habits, and preferences,” he says.

Another aspect of Christensen’s scholarly research centers around the northern saw-whet owl. The name “saw-whet,” is said to derive from the repeated series of whistles — all at the same pitch — that brings to mind the “back and forth sound made while filing a saw” ([www.owlresearchinstitute.org](http://www.owlresearchinstitute.org)). One of the smallest species of owls in North America, about the size of a robin, saw-whets are nocturnal, shy, and furtive. “They’re really good at hiding,” says Christensen.

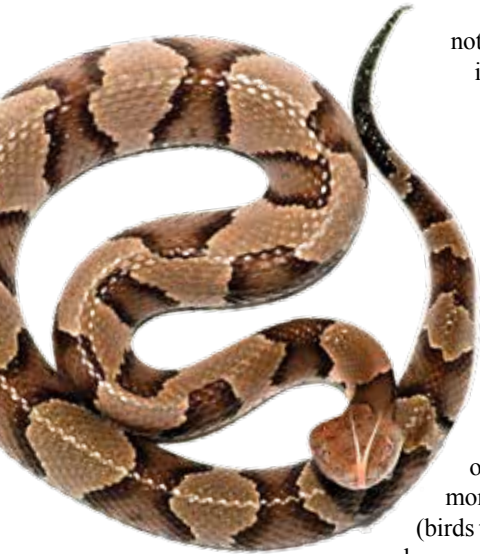
Christensen’s nonprofit Wild Bird Research Group (WBRG) studies the migration and winter ecology of saw-whets at multiple sites throughout New Jersey and Bucks County during the fall migration period. In the winter months, WBRG fits saw-whets with temporary radio transmitters to “track their movements and identify critical roosting habitat characteristics.” One of these fall migration sites is at The Historic Hunt House and the surrounding Lawrence Hopewell Trail system. Christensen hopes that his research improves knowledge of the saw-whet’s preferred habitat, migration patterns, and life cycle. “The environment could look like a backdrop to some people, but it’s obviously much more than that,” says Christensen.

The northern copperhead is “another species of special concern,” according to Christensen. Their population has declined due to habitat loss, and they also suffer from public fear and animosity due to their visual similarities to rattlesnakes. According to Conserve Wildlife Foundation of New Jersey, “Although copperheads are venomous, no one has ever died from a copperhead in New Jersey. They will





Photograph courtesy of Pam Podger of The Watershed Institute.



not chase people, but they will defend themselves if they are in danger.”

Christensen is also the owner of Piedmont Ecological Services, LLC, a wildlife photography company that brings studio-quality equipment into the field to help capture high-quality and up-close photographs of rare wildlife. With a focus on birds and rare wildlife like copperheads, Christensen uses motion-activated “camera traps” to photograph striking images of rarely-seen wildlife.

Christensen says that a large portion of his 2019-20 fieldwork pertains to research on migratory songbirds in Costa Rica — he monitors populations of neotropical migrants (birds that breed in North America during the summer and overwinter in the tropics) within the country’s

mangroves and tropical forests. He aims to conduct research on age-related plumage changes in these tropical songbirds and hummingbirds.

His 2019-20 fundraising projects include GPS tracking to monitor the migrations of long-eared owls, a threatened species. A medium-sized owl found in New Jersey during the winter months, very little is actually known on where long-eared owls come from or how they get here.

“GPS tracking is the most effective way of identifying the movements of birds over a large distance, but the technology has only recently become available in units small and light enough to deploy on larger owls, such as snowy owls,” Christensen says. Long-eared owls are currently listed as a threatened species in New Jersey and are thought to be declining.

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**“This area has an impressive array of biodiversity, which is attributed to conservationist tendencies.”**

movements of long-eared owls for the first time ever, gathering detailed information about their habitat use and migration routes that will allow land managers to better understand and provide for the needs of this threatened species,” he says.

WGRB is actively seeking donations to provide a modest stipend for its interns.

“Each year WBRG takes on a small number of interns and volunteers to assist with the research. These include positions at our Nicoya Peninsula Avian Research Station, a migratory bird monitoring program in Costa Rica; the Owl Project (taking place in New Jersey); and our Southern Appalachian bird banding station at the North Carolina Arboretum, which monitors breeding populations of vulnerable songbirds in the Blue Ridge Mountains.”

The tracking research will also utilize ultraviolet light technology to deduce and record molt patterns in the owls. “These patterns allow us to roughly determine their ages,” says Christensen.

Those interested in donating can visit [www.wildbirdresearch.org](http://www.wildbirdresearch.org) for more information.

“Ecology is complicated — all of the inter-relationships are subtle. There are wins and losses occurring all the time,” Christensen says of the general state of New Jersey’s wildlife and conservation efforts. “This area has an impressive array of biodiversity, which is attributed to conservationist tendencies.”

Wherever his research takes him, Christensen intends to increase popular and scientific understanding of the natural world around us. “Sharing the findings of ecologists serves the public interest.”

*Fly on.* ■

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