Conserving Georgia's Nongame Wildlife

Georgia is rich in wildlife. Yet more than 1,000 native plant and animal species in our state are species of conservation concern. Of those, 318 are protected by federal or state law.

Our mission at the Department of Natural Resources' Nongame Conservation Section is to conserve these and Georgia's other native nongame wildlife, or species not legally fished for or hunted.

We do this through research, surveys, conservation programs, education, land acquisition and habitat management.

The work is critical and wide-ranging. It varies from studying ways to protect American oystercatcher nests on the coast to restoring sandhills habitat with prescribed fire just southwest of Macon and monitoring north Georgia caves where biologists found a disease fatal to bats in early 2013.

Our guide is the <u>State Wildlife Action Plan</u>. This comprehensive strategy is focused on keeping native Georgia wildlife from declining to the point of needing federal protection as threatened or endangered species.

We developed the State Wildlife Action Plan in 2005. Now we're working to update it. This effort includes other agencies, conservation groups, businesses and private landowners. All have a stake.

Our challenge at the Nongame Conservation Section is that we don't receive state appropriations for nongame work. Instead, we depend on direct donations, fundraising initiatives and grants.

That support has taken a significant hit because of funding formula changes associated with the eagle and hummingbird license plates, our No. 1 fundraiser.

You'll learn more in this summary report. It provides highlights of our work with rare species and other nongame, and how, together, we can address key issues facing Georgia wildlife.

This is a conservation mission that affects all of us, from protecting our drinking water to strengthening our economy and providing places where our children – and their children – can experience nature.

Thank you for your interest in conserving nongame wildlife and natural habitats. I welcome your comments at <u>mike.harris@dnr.state.ga.us</u>.

For a more detailed look at 2013, including video, visit <u>www.georgiawildlife.com/conservation/AnnualReport</u>.

Mike Harris, Nongame Conservation Section chief









FISCAL YEAR REPORT

Georgia Department of Natural Resources Wildlife Resources Division Nongame Conservation Section

WE'RE MAKING A DIFFERENCE

Here's one example:

The red-cockaded woodpecker is the only woodpecker in the U.S. that carves its nest cavities out of living pine trees. But these chisel-billed birds with a heart for pine landed on the endangered species list largely because of the loss of mature southern pine forests over the past 200 years.

In 1999, at Georgia DNR we developed the nation's first statewide red-cockaded woodpecker Habitat Conservation Plan to provide management options for private landowners. By 2013, the plan's Safe Harbor program included more than 160,700 acres and 140 family groups of red-cockaded woodpeckers.

Our biologists work closely with Safe Harbor participants to monitor woodpeckers and maintain habitat by installing and replacing nest cavities.

We also use prescribed fire to maintain and restore habitat. Prescribed fire is a safe way to employ a natural process to ensure ecosystem health and reduce the risk of wildfire.

At Silver Lake Wildlife Management Area near Bainbridge, staff with DNR's Nongame and Game Management sections have rejuvenated woodpecker habitat by treating woody encroachment in the understory and conducting thousands of acres of growing-season fires.

Biologists also moved six birds from Fort Stewart, which has a strong population, to Silver Lake. In 2013, we documented the successful fledging of 30 young red-cockaded woodpeckers and a Silver Lake total of 28 family groups, three more than the previous year. More prescribed fire, more recruitment clusters and careful forest management will boost those numbers. So will an agreement last year with the U.S. Army Corps of Engineers to manage red-cockaded woodpeckers and longleaf pine and wiregrass habitat on adjacent Lake Seminole Wildlife Management Area.

Our goal is to more than double the number of family groups at Silver Lake, a key step in the recovery of this rare bird in Georgia.

WE'RE LEARNING MORE



From gopher tortoises to rare plants rooted in granite, we gained a better understanding of the variety and status of our wildlife and natural habitats in 2013.

Along with work to restore south Georgia sandhills, we inventoried populations of gopher tortoises, our state reptile and a candidate for federal listing under the Endangered Species Act. The research revealed where gopher tortoises are going strong – Townsend Wildlife Management Area near Ludowici has nearly 800 – while providing data on other priority creatures such as eastern indigos, North America's longest snake and a frequent user of tortoise burrows.



In north Georgia, mountain streams running high and murky from a wet spring and summer didn't stop us from surveying populations of the continent's largest salamander – the eastern hellbender. We caught 90, confirming this cryptic creature survives in 13 streams where it had been documented before and three stretches where it hadn't.

We also used seines, shocking equipment and snorkels to complete hundreds of surveys for high-priority fishes.

In South Chickamauga Creek near Ringgold, we found federally threatened snail darters for the first time in Georgia since 1980. Searches spurred by petitions to list species also documented broadstripe shiners throughout the middle Chattahoochee River system, but only a limited distribution for holiday darters in the Coosa drainage.

On higher ground, our botanists and agency partners fanned out across the state looking for rare plants. One project focused on Lithonia gneiss outcrops as a baseline for future conservation work. Finds included nine new sites for the federally listed pool sprite and 15 for a newly described granite outcrop endemic – granite hedge-hyssop – known only from South Carolina and Georgia.

These discoveries and complex surveys underscore a simple truth:

Knowing what's there, where and how rare it is – or isn't – is critical to effective conservation.

These four themes defined Georgia wildlife conservation during fiscal year 2013...

WE'RE RAISING AWARENESS



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Great egret (Hal Massie)

The Nongame Conservation Section is informing Georgians so you and your children and grandchildren can enjoy the wildlife and wild places that make our state special.

We're also engaging conservation partners, combining efforts to amplify the impact on critical projects.

Take invasive species. As a threat to Georgia wildlife, nonnative plants and animals such as fire ants rank second only to habitat loss. They also cost our economy millions, particularly in agriculture losses.

The Coastal Georgia Cooperative Invasive Species Management Area spearheaded by Nongame is fighting back. CISMA covers 11 counties and 40-plus agencies, nonprofits and citizen groups. In 2013, members developed a priority list of invasive plants and animals, and focused funding and people on efforts such as mapping invasives.

Around the state, the Wildlife Resources Division operates seven regional education centers in cooperation with local school systems, Regional Educational Service Agencies and other organizations. Those centers taught more than 64,000 students and adults about natural resources – 4 percent more than in 2012. Also in public outreach, our Georgia Wild e-newsletter kept nearly 16,500 subscribers in the know about nongame. Videos we made (such as a <u>dolphin rescue</u> by hukilau) or developed from supporters' clips (including a popular <u>kingsnake</u> <u>meets turtle</u> video) tapped new groups. Wildlife Resources Division social media spread the word further, chalking up 17,213 Facebook likes, 2,800 Twitter followers and 55,202 YouTube views.

We even raised awareness from atop an Atlanta high-rise.

Helped by TERN, the McKenna Long & Aldridge law firm and the Garden Club of Georgia, we live-streamed peregrine falcons nesting outside the firm's offices. Our first try at global streaming drew 110,000 views and provided a forum for online chats between Nongame raptor expert Jim Ozier and viewers.

Included in the audience were two East Coweta sixth-grade classes whose teacher used the cam as a learning tool.

WE'RE FACING A TEST

You already know we don't receive state appropriations for conserving nongame. We depend instead on grants and money we raise.

But you may not know that the State and Tribal Wildlife Grants program is our most important source of federal grants for conserving nongame species that are not federally listed. And over the past three fiscal years, that program budget has been cut by almost a third.

The outlook is challenging on the home front, too.

Sales and renewals of bald eagle and hummingbird license plates provide more than half the Nongame Wildlife Conservation Fund revenue each year. Following 2010 legislative changes that raised tag prices, reduced the share provided to the fund and added annual renewal fees, plate sales plunged. Renewal rates have not reached the levels needed.

At the close of fiscal 2013, less than a third of wildlife tags in circulation before the changes were still on cars.

A new eagle plate has not increased sales significantly. If these trends continue, revenue will not be sufficient to support conservation of Georgia's nongame wildlife.

Also in 2013, revenue from the Wildlife Conservation Fund state income tax checkoff – our No. 2 fundraiser – slumped to a near all-time low.

All of the above limit our ability to conserve wildlife. Yet, you value these creatures. So does our state economy. In 2011, 2.2 million Georgians took part in wildlife watching, ringing up a whopping \$1.8 billion in expenditures!*

What can you do? Buy or renew a nongame tag. Give through the state income tax checkoff or directly to Nongame.

We need your support. Help us conserve wildlife and natural places, for Georgia's future and yours. Details at www.georgiawildlife.com/conservation/support.

* 2011 National Survey of Fishing, Hunting and Wildlifeassociated Recreation





BIRDS

A predator-control project at key **American** oystercatcher nest sites led to the highest productivity we've seen in recent years – nearly 30 chicks – and new insight into how we and project partners UGA, the U.S. Fish and Wildlife Service and Little St. Simons and St. Catherines islands can manage predation of these staterare shorebirds.

Swallow-tailed kites were documented at the edges of their range in southwest and south-central Georgia, from as far west as the Ochlockonee River north to Beaverdam Wildlife Management Area near Dublin, where these elegant raptors likely nested.

AMPHIBIANS AND REPTILES



Loggerhead sea turtles continued their recovery with 2,219 nests, the state's fourth consecutive nesting record and the most mprehensive surveys

in a quarter-century of comprehensive surveys by the Georgia Sea Turtle Cooperative.

A partner-powered effort to reintroduce rare gopher frogs at The Nature Conservancy's Williams Bluffs Preserve in Early County gained ground: **Male gopher frogs** were heard calling and the first egg mass was found, signs that released juveniles are surviving to adulthood.



White-nose syndrome, which has killed some 6 million bats, was confirmed for the first time in Georgia, underscoring the need to continue monitoring caves and informing cavers and the public about this looming threat to our bat populations.

Teaming with other agencies, we documented 19 North Atlantic right whale calves off the Georgia/Florida coast and collected genetic samples from 17, part of DNR work to manage and protect these endangered whales on their only known calving grounds.

PLANTS

We worked with landowners and volunteers to conserve and manage a complex of **privately owned bogs** near Claxton – bogs that contain the only known occurrence of the Coastal Plain purple pitcherplant, as well as eight other tracked plants.



For its innovative efforts to preserve native flora, the Georgia Plant Conservation Alliance received the American Public

Gardens Association's Award for Program Excellence, placing the network we helped charter among the likes of the Smithsonian Institution and Chicago Botanic Garden.



tion Commission/NOAA Permit 15488

Equator" with calf (Fla. Fis

Our staff added 180 new records of fishes, crayfish and freshwater mussels and snails to the NatureServe Biotics database we maintain, a trove of information being used to develop status maps for Georgia's rare aquatic species and inform environmental reviews and conservation plans.

Keeping tabs on **rare mussels** in Spring Creek where flows are being experimentally augmented is easier because we've helped search the stream reach near Colquitt to tag more than 4,000 mussels, including the federally endangered shinyrayed pocketbook and oval pigtoe.

HABITAT RESTORATION

Bachman's sparrows, bobwhites, loggerhead shrikes and southeastern American kestrels are thriving again on Fall Line Sandhills Wildlife Management Area in Taylor County, after years of work such as thinning timber, conducting prescribed burns, planting longleaf pines and planting native grasses.



As part of the Interagency Burn Team restoring fire-dependent ecosystems, we also led or helped on prescribed burns

totaling almost 27,050 acres – including 2,639 acres of growing-season burns that have had a profound impact on plants and animals.

LAND ACQUISITION

The state bought **Boyles Island** in Wayne County, a 5,102-acre tract in the Altamaha River floodplain that supports priority waterfowl species and unique habitats such as the rare southern coastal plain oak dome and hammock community. The Nature Conservancy, U.S. Marine Corps, U.S. Fish and Wildlife Service and Knobloch Family Foundation were key contributors in what will eventually be a nearly 6,300-acre acquisition.

Flat Tub Wildlife Management Area in Jeff Davis County added the 801-acre **Redistripe Tract**, Ocmulgee River property that sports one of the most diverse plant communities in the state, in addition to gopher tortoises and eastern indigo snakes. Partners included The Conservation Fund and the Fish and Wildlife Service.

Redstripe Tract





PRIVATE LANDS

A Nongame-funded biologist, working in cooperation with the DNR Game Management Section's Private Lands Program, helped landowners implement federal National Resources Conservation Service programs aimed at **restoring and managing longleaf pine forests** and related wildlife such as gopher tortoises.

We also provided training about threatened and endangered species to loggers and others at Master Timber Harvester events around the state.

OUTREACH

Our Youth Birding Competition **signed up 128 birders** – second-most since the competition began eight years ago – and the Give Wildlife a Chance Poster Contest attracted **nearly 1,800 entries**, affirming the impact of these popular events sponsored in large part by the Nongame friends group TERN.

With TERN's help, we updated "Calls of the Wild" - a CD featuring profiles and vocalizations of Georgia frogs - and teamed with

from the field



the UGA Cooperative Extension, Georgia Southern University's Center for Wildlife Education, and Southeastern Reptile Rescue to **reprint and distribute "Venomous Snakes of Georgia,"** a popular and informative brochure.

EDUCATION

Regional education center highlights included Charlie Elliott Wildlife Center training 633 teachers in the Project WILD program (compared to 474 the previous year), Smithgall Woods' Sheila Humphrey being named Georgia Project WET Educator of the Year and McDuffie Environmental Education Center playing host to Eco-Meet, an environmental education competition for Central Savannah River Area middle-schoolers.

Nongame staff **taught 300 seventh-graders** in Oconee County how to research natural history and citizen science projects online. We also provided a \$1,000 grant for a Georgia teacher in a TERN-funded effort to **recognize exceptional educators in life sciences**.

FINANCIAL

It bears repeating: The Nongame Conservation Section receives no state appropriations for conserving Georgia's nongame wildlife, rare native plants and natural habitats.



The chart above profiles our main fundraisers:

 Nongame wildlife license plates (sales and renewals of the new bald eagle plate and the ruby-throated hummingbird, plus renewals of the older eagle plate).





- The Give Wildlife a Chance state income tax checkoff.
 - Weekend for Wildlife, held at Sea Island each winter.

Contributions go to the Nongame Wildlife Conservation and Wildlife Habitat Acquisition Fund, created by state law to support wildlife conservation.



The Environmental Resources Network, our friends group, also

provides significant support. <u>TERN</u> funded 20 proposals totaling \$89,002 in 2013.

And, during fiscal 2013 we received \$4.9 million in **federal and other grants**. Matching dollars from the Nongame Wildlife Conservation Fund made these grants possible.

Help us conserve wildlife. Details at georgiawildlife.com/conservation/support.

NONGAME CONSERVATION FUND



FORESIGHT

We're already working on 2014 priorities such as:

- Updating the State Wildlife Action Plan. This comprehensive conservation strategy is scheduled for revision by fall 2014.
- Monitoring for white-nose syndrome impacts on our bats. We're also following up on 2013 sightings that suggest a maternity colony of endangered Indiana bats in Georgia – a state first.
- Surveying wildlife species petitioned for federal listing. To help determine if listing is needed, we've teamed with Florida to assess 23 at-risk species found in both states.
- Reaching across borders to conserve wildlife. We're active in the South Atlantic Landscape Conservation Cooperative, a federal-state-private partnership preserving natural and cultural resources from Alabama to Virginia.

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PHOTO CREDITS FOR COVER:

Seining aquatics on Talking Rock Creek (DNR) / Bat with WNS in Sittons Cave (Pete Pattavina/USFWS) American oystercatcher nest (Tim Keyes/DNR) / First adult gopher frog at Williams Bluffs (Vanessa Kinney Terrell/UGA) Outreach at Metter Elementary (Linda May/DNR) / Swallow-tailed kite (Todd Schneider/DNR)

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WILDLIFE RESOURCES DIVISION

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Comprehensive 2013 report at: www.georgiawildlife.com/conservation/AnnualReport