

# Conserving

## Georgia Wildlife

# 2012

## R E P O R T



More than 1,000 plant and animal species in Georgia are species of conservation concern. Nearly 320 of those, from bald eagles to hellbenders, are protected by state or federal law.

Big numbers.

But for the Nongame Conservation Section, the big issue is what those numbers represent: Georgia's wildlife diversity. It's our job to make sure that rich diversity is conserved for generations to come. This mission covers all of Georgia's native nongame wildlife, or species not legally fished for or hunted.

Yes, it is a challenge.

In the fiscal year ending June 30, 2012, our work took us from prescribed fires in the Piedmont to beach patrols for nesting loggerhead sea turtles, gentle giants showing signs of significant recovery.

We set up a volunteer network to monitor bats, teamed with partners to survey for state-endangered blackbanded sunfish and protect a Turner County pitcherplant bog, and searched mountain streams for the eastern hellbender, a massive salamander proposed for listing under the federal Endangered Species Act.

These are only examples of the work needed to assess Georgia's nongame wildlife populations, restore their habitats and raise awareness about the importance of conserving them.

It is work that is strategic – guided by the **State Wildlife Action Plan** – and far-reaching, benefiting native species and the people who appreciate them. In 2011, wildlife-watching activities in our state involved an estimated 2.2 million Georgians and more than \$1.8 billion in spending.

More big numbers.

Conserving the wildlife that make all of our lives richer is a big job. And it doesn't happen without you.

Although part of the Georgia DNR, the Nongame Conservation Section does not receive state appropriations for nongame work. Instead, we depend on direct donations, fundraising and grants.

That means we need you – to buy nongame wildlife license plates, contribute to the Wildlife Conservation Fund income tax checkoff, attend Weekend for Wildlife or make direct donations to the Wildlife Fund.

This report offers a glimpse of what we do and how you can help. You can find more details here: [www.georgiawildlife.com/conservation/AnnualReport](http://www.georgiawildlife.com/conservation/AnnualReport).

Let me know what you think at [mike.harris@dnr.state.ga.us](mailto:mike.harris@dnr.state.ga.us). And, as always, thank you for your support.

**Mike Harris** | Chief, Nongame Conservation Section

Georgia Department of Natural Resources | Wildlife Resources Division | Nongame Conservation Section



**Mark Dodd**  
*DNR Sea Turtle Program Coordinator*

Nongame Conservation Section biologist Mark Dodd has served as DNR's Sea Turtle Program coordinator since he began work with the agency 14 years ago.

In 2012, Mark made this exciting announcement: For the first time in a quarter-century, loggerhead sea turtle nesting was increasing in Georgia.

From fewer than 400 nests in 2004, the state's primary nesting sea turtles had laid more than 1,700 nests each summer since 2009. They topped 2,210 in 2012.

"This," said Mark, "is the news we've been waiting for."

He credits years of conservation work by agencies and volunteers. "Some volunteers were on turtle beaches before I was born."

But he also stressed that conservation of loggerheads cannot ease up. "One thing we know about working with marine species is that there are continually evolving threats. So you have to be vigilant."

Nor is this only about a federally listed turtle named for its large head.

"That's the whole point of working with a species like loggerheads; they're a great indicator species of the health of the marine ecosystem," Mark explained. "The decline of loggerheads was a warning that human activities were having an effect on the marine ecosystem upon which we all depend for survival."

## Some accomplishments during fiscal 2012, and some of the people who were part of them.

### ■ HABITATS RESTORED



Animals and plants become rare as the places they need to live disappear. Wildlife habitat is disappearing daily in Georgia, lost to development and other land-use changes.

The Nongame Conservation Section slowed that decline in 2012 by:

- Working with Interagency Burn Team partners to apply prescribed fire, the most effective restoration tool for fire-adapted habitats, on more than 16,800 acres.
- Planting longleaf pines on 590 acres and treating invasive hardwoods and sand pines on another 600 acres, part of a multistate sandhills restoration project involving many conservation organizations.
- Teaming with the Georgia Ornithological Society, Georgia Power Co. and DNR's Game Management Section to restore habitat for native grassland birds at Joe Kurz Wildlife Management Area near Woodbury and Panola Mountain State Park near Stockbridge.
- Refining and updating detailed land-cover/vegetation maps for 11 coastal counties, maps used often by local governments and conservation groups as part of a larger initiative to protect the region's natural communities and promote sustainable growth.
- Combating invasive species that threaten our native habitats, from common reed in the Altamaha River delta to Chinese privet on Doerun Pitcherplant Bog Natural Area in Colquitt County.

### ■ LOGGERHEADS REBOUNDING

DNR has worked for more than two decades with agencies, organizations and volunteers to document, protect and manage loggerhead sea turtle nests on Georgia beaches. This 24/7 effort varies from marking and putting screens around nests to enforcing commercial fishing regulations.

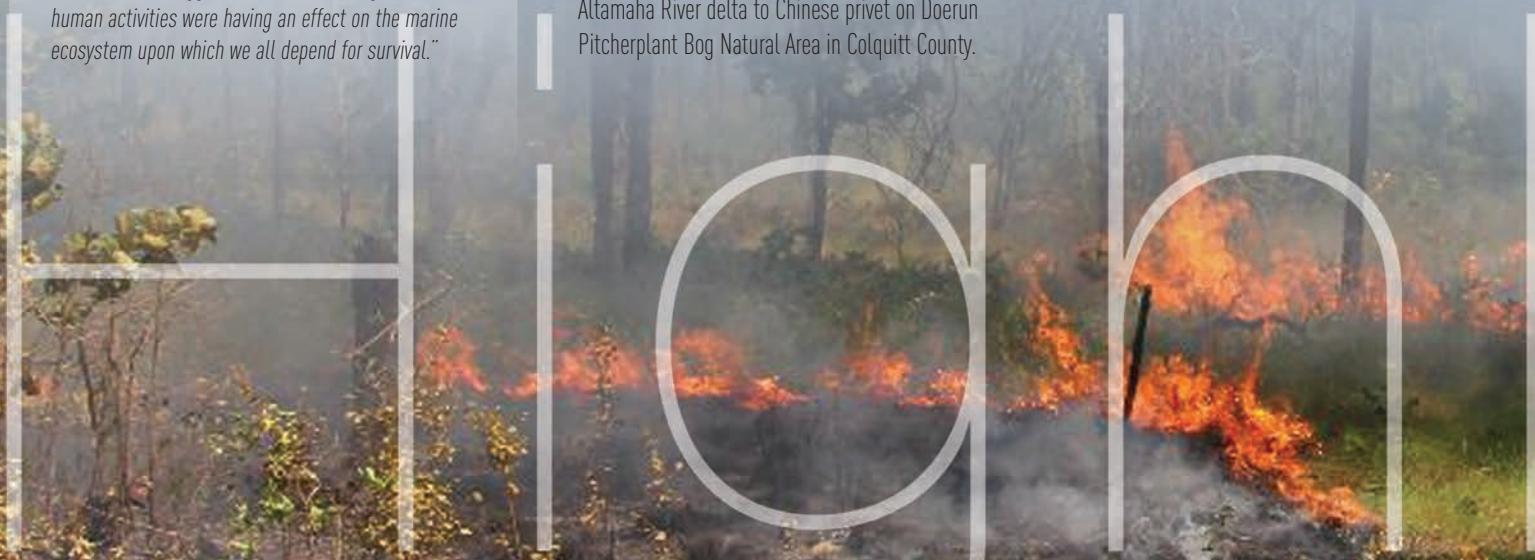
Thanks to these and other conservation measures, the Georgia Sea Turtle Cooperative, now led by Nongame Conservation, saw loggerhead nesting turn the corner in 2012. (See "Mark Dodd," at left.)

The success is a shared one.



Sea Turtle Cooperative partners include Cumberland Island National Seashore, the Georgia Sea Turtle Center, Little Cumberland Island Homeowners Association, St. Simons Island Sea Turtle Project, Sea Island Co., The Lodge on Little St. Simons Island, the U.S. Fish and Wildlife Service at Blackbeard and Wassaw islands, St. Catherines Island Foundation, Caretta Research Project and Tybee Island Marine Science Center.

There's more work ahead. According to the federal recovery plan, loggerheads may be considered recovered if the population shows a 2 percent annual increase for 50 years, resulting in a state total of 2,800 nests annually.



## BATS BETTER UNDERSTOOD



The stereotype of bats as mysterious is partially true: We know too little about their distribution and abundance in Georgia.

The information gap hampers efforts to conserve bats even as white-nose syndrome, a deadly disease plaguing bats, closes in on the state. (See "Trina Morris," at right.)

To help answer the need, the Nongame Conservation Section stepped up bat research in 2012.

A study led by a University of Georgia graduate student and former Nongame Conservation intern tagged and tracked 18 northern yellow bats on Sapelo and Little St. Simons islands, the largest project of its kind across the species' range. Northern yellow bats are a species of concern in several states.

Nongame also launched a volunteer effort to record bat vocalizations across the state. The routes, promoted through an interactive web page and instructional video, were booked within days. The calls will be collected annually and analyzed to chart species and numbers of bats along each route.

Biologists continued to monitor sites for white-nose, while informing the public and the caving community about best practices to help prevent the disease from spreading.

## AQUATIC ADVANCES

Georgia is a leading state in aquatic biodiversity. Unfortunately, it's also a leader in imperiled aquatic species.

More than two-thirds of our freshwater mussels and about 30 percent of our freshwater fishes and crayfishes are extinct, endangered, threatened or species of special concern.



Since 1998, the Nongame Conservation Section's Aquatic Conservation Initiative has focused on documenting the status of aquatic fauna and developing conservation plans for declining species. In 2012:

- Surveys uncovered new populations of Altamaha shiner and Altamaha arcmussel.
- Biologists assessed the status and habitat needs of federally threatened goldline darters, information that will help identify key conservation habitats and create long-term monitoring.
- A search for state-endangered blackbanded sunfish carried out by Valdosta State University recorded Georgia's first new population of the species since 1980.
- Nongame Conservation staff led mussel sampling efforts in drought-sapped southwest Georgia, assessing the fallout from low flows in the Flint River and other streams.
- Nongame paired with the Georgia Museum of Natural History and DNR's Stream Survey Team to increase the NatureServe Biotics data available for environmental review and conservation planning to 2,100 distribution records representing 186 rare aquatic species.



**Trina Morris**

*Nongame Conservation Section biologist*

Trina Morris has been the section's bat biologist for six years, while also coordinating environmental reviews of projects.

Her bat work increased exponentially following the advent in the U.S. of white-nose syndrome, a fast-spreading disease that has killed millions of bats but has not been documented yet in Georgia.

To gauge impacts, scientists need baseline data on Georgia's 16 bat species, information that is lacking. In 2012, that role led Trina from buggy nights netting bats on barrier islands to probing caves for signs of white-nose and shooting video (<http://bit.ly/VnO6w2>) for a survey of bat calls.

"There's a reason there's not a lot of data on bats: It's difficult to get," she said.

More surprising is that in May consultants tracked a female Indiana bat to Rich Mountain Wildlife Management Area, near Blue Ridge (<http://bit.ly/1BDq9k>). The discovery of a possible maternity colony of the federally endangered bats, a Georgia first, may spur more surveys.

All of which will help conserve bats, natural pest control agents and important components of Georgia's ecosystems.

Trina's work has featured more welcomed surprises, including people's reaction on learning she's a bat biologist. "Mostly it's, 'That's so cool!'"

That reception for creatures sometimes feared is also feeding into positive action. "For the majority of calls I get about problem bats" in buildings, Trina said, "most people want to get them out safely."





## Nongame news from the field in 2012 ...

Nongame Conservation moved six red-cockaded woodpeckers from Apalachicola National Forest, Fla., to Silver Lake Wildlife Management Area near Bainbridge, **helping raise the number of family groups** on the WMA to 25. More controlled burns and careful forest management are aimed at doubling Silver Lake's population of the endangered birds.



A new long-term monitoring project captured and released **more than 160 eastern hellbenders**, an indicator species of water quality and a candidate for federal listing. Of the mountain streams sampled, the large salamanders were found in about two-thirds of the streams where they had historically occurred.

Air and ground surveys of southeastern American kestrels showed a slight increase in nests, **a first since the work began** in 2006. While surveys suggest stable numbers statewide, kestrel numbers are declining in the western sandhills area.

Ongoing surveys to determine gopher tortoise population sizes and demographics marked eight sites with **more than 250 tortoises**, most on private land. Also in 2012, Yuchi Wildlife Management Area near Augusta was established as a recipient site for displaced gopher tortoises, Georgia's state reptile and a candidate for federal listing.

Tropical storms and exceptionally high tides ravaged beach-nesting bird nests. But **Waterbird Conservation Initiative monitoring showed the birds' resilience**, with brown pelicans starting a colony of 228 nests behind Little Cumberland Island and St. Catherines Island Bar sporting a super colony of 230 black skimmers, 65 gull-billed terns and more than 40 least terns.

### Reese Thompson Tree Farmer

*With more than 90 percent of Georgia in private ownership, private landowners are critical to conserving wildlife and habitats.*

Enter Reese Thompson of Vidalia, a sixth-generation tree farmer and former state Board of Natural Resources member. A few years ago, Reese decided to stop planting slash pine – a standard in the forest industry – and focus on planting longleaf pine.

Longleaf forests once covered more than 90 million acres from Virginia to Texas, including more than half of Georgia. Now, these habitats forged by regular fire make up less than 4 percent of that range.

Reese has worked with the Nongame Conservation Section and other agencies and nonprofits to restore longleaf and the increasingly rare wildlife found in longleaf ecosystems.

He has enrolled family property in Telfair and Wheeler counties in the Farm Bill's Working Lands for Wildlife program, aimed at improving habitat for gopher tortoises, a keystone species. He has conducted controlled burns with The Orianne Society, which works to conserve eastern indigo and other imperiled snakes, and led growing-season burns to spur wiregrass seed production. In 2013, Reese, a Longleaf Alliance and Gopher Tortoise Council member, will sow native groundcover among newly planted longleaf.

*Conservation is his mission. "I'm trying to be a better steward of (the land), to get it back to the way it was and then pass it off to the next generation."*

**Partners power plant conservation.** Nongame worked with the National Resources Conservation Service to protect endangered Canby's dropwort in Dooly County, the Georgia Plant Conservation Alliance to create a plant safeguarding database, and Abraham Baldwin Agricultural College Foundation, a private landowner and others to preserve a Turner County pitcherplant bog.

More than 2,900 mussels, including the federally listed shinyrayed pocketbook and oval pigtoe, were tagged in Spring Creek near Colquitt. Scientists are **assessing how mussel populations respond** to experimentally increased flows in part of the southwest Georgia stream.

Nongame Conservation helped in acquiring more than **1,000 acres of high-quality wildlife habitat** at Sheffield Forest Wildlife Management Area near Cartersville. The Howell Tract protects Raccoon Creek, which is important for the federally listed Etowah and Cherokee darters, as well as upland habitat containing montane longleaf pine.



Interagency Burn Team partners targeted **a range of fire-dependent habitats** and places, while conducting acres of growing-season burns.

Sites varied from Crooked River State Park near St. Marys to the Chattahoochee National Forest, and from pitcherplant bogs in the Coastal Plain to Table Mountain pine stands at Tallulah Gorge State Park near Clayton.

Nongame biologists working with the University of Georgia's Warnell School of Forestry and Natural Resources and Odum School of Ecology trapped 23 bog turtles, **an estimated third of the bog turtles** known from the wild in Georgia. Researchers are gauging efforts needed to determine the presence of these federally threatened turtles in a wetland.

# Snapshots from the field



**Georgia youth were inspired and engaged** by two popular events sponsored in part by the Nongame friends group

TERN. The Youth Birding Competition and T-shirt Art Contest drew 95 birders and 264 art entries; the 22nd annual Give Wildlife a Chance Poster Contest held with the State Botanical Garden of Georgia fielded more than 1,700 posters.

Berry College welcomed its first bald eagle nest, one of **163 occupied nesting territories** documented through annual Nongame Conservation surveys. As late as 1980, there was only one bald eagle nesting territory in the state.

**An attempt to poach sea turtle eggs** from Sapelo Island was foiled by DNR rangers and a K-9 trained to sniff out wildlife contraband. In a case since turned over to federal authorities, K-9 Gauge “alerted” on the suspect’s duffel bag containing 156 sea turtle eggs during baggage checks on the Sapelo ferry in May 2012.

#### Rare plant searches by Nongame

**Conservation** and other botanists included a new population of monkeyface orchid in Pickens County, sites for federally listed pond spicebush (one on Mayhaw Wildlife Management Area) and new locations for 19 rare plants in globally-rare limestone forest in and around Ocmulgee and Oaky Woods wildlife management areas.



More than 62,000 students and adults visited DNR education centers in 2012, a **14 percent increase** over fiscal 2011. Operated with school systems, Regional Educational Service Agencies and other state and federal agencies, the seven centers provide wildlife-based education such the Project WILD Outdoor Wildlife Leadership School geared to teachers.

Social media and other e-communication avenues grew for Nongame Conservation and the Wildlife Resources Division. The Georgia Wild nongame newsletter reached more than 16,000 subscribers, while the division racked up **nearly 2,000 likes on Facebook**, 1,888 followers on Twitter and 14,600 hits on its blog.

Longtime Nongame Conservation botanist Tom Patrick received The Garden Club of Georgia’s Certificate of Merit in April. The honor, given to Patrick for his work involving native and rare plants and natural area management, is **the highest non-member award** given by the club’s awards committee.



**Bruce Purcell**  
*Evans County Wildlife Club*

*The Claxton Rattlesnake and Wildlife Festival made a simple change with significant impacts in 2012:*

*The Evans County Wildlife Club, which organizes the popular event, decided to stop buying and selling rattlesnakes.*

*The results were impressive. Widespread support from the wildlife conservation community. A record crowd estimated at 18,000. Outreach programs by the Nongame Conservation Section in schools near the south Georgia festival.*

*And more animals on exhibit, including the trademark draw – rattlesnakes, loaned by conservation organizations and individuals.*

*“We had twice as many snakes, and more than 100 rattlesnakes,” said Bruce Purcell, then president of the wildlife club.*

*The combination of more wildlife and educational outreach “hit a home run,” he said.*

*In abandoning the trapping and harvest of wild-caught rattlers – including the negative effects for snakes and other wildlife that use gopher tortoise burrows – the 45-year-old former rattlesnake roundup, one of the last two in the state, drew significant help from Nongame Conservation and others within the DNR Wildlife Resources Division.*

*Staff talked with school children about native wildlife, worked to bolster exhibits and promoted the event. With the increased emphasis on wildlife education and conservation, “Everybody wins now,” Bruce said.*



## ■ FINANCIAL AND ADMINISTRATION

The Nongame Conservation Section receives no state appropriations for conserving nongame wildlife, rare native plants or natural habitats.

### We have three main fundraisers:

- The nongame wildlife license plates.
- The Give Wildlife a Chance state income tax checkoff.
- Weekend for Wildlife, an event held each February.

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

The Environmental Resources Network, Nongame Conservation's friends group, also provides significant support. TERN funded 14 proposals totaling \$62,447 in 2012.

**Changes in the share of license plate fees** that go to Nongame Conservation, coupled with federal budget cuts, pose challenges for the future of this vital conservation mission.

Tag sales and renewals raised \$1.46 million in 2012. While adding an annual renewal fee increased revenue in 2010 and 2011, the higher price and extra fee also slashed the number of wildlife tags in circulation by more than half – from 347,400 plates to about 142,600.

If that trend continues, annual revenue from the plates will soon dip below \$1 million, undermining a standard of support for wildlife conservation in Georgia.

Meanwhile, the State and Tribal Wildlife Grants budget has been reduced by a third. That means less federal funding for states to keep species from declining to the point they need more costly intervention to save.

### We need your help.

If you're supporting wildlife conservation, we appreciate that trust and promise to continue using those resources efficiently and effectively. We gain about \$1 in grants for every 25 cents spent from the wildlife fund.

If you are not supporting conservation, please consider joining this mission.

- Purchase or renew a nongame wildlife license plate (a new design is coming out in 2013!).
- Contribute through the state income tax checkoff – line 26 on Form 500 and line 10 on Form 500-EZ.
- Attend Weekend for Wildlife.
- Donate directly to the Nongame Wildlife Conservation Fund.
- Join TERN, <http://tern.homestead.com>.

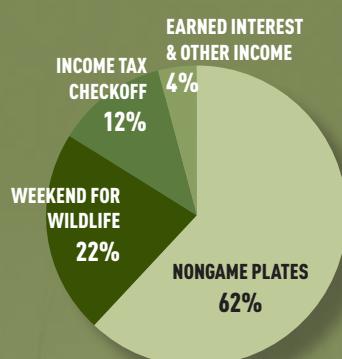
The challenge of conserving the animals, plants and places that help make Georgia special is not going away.

But with your help, it can be met.

Learn more about giving at:

[www.georgiawildlife.com/conservation/support](http://www.georgiawildlife.com/conservation/support)

## FISCAL YEAR 2012 FUNDING



## NONGAME CONSERVATION FUND

Listed in millions per year



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**Comprehensive 2012 report at:**  
[www.georgiawildlife.com/conservation/AnnualReport](http://www.georgiawildlife.com/conservation/AnnualReport)

**Cover:** Cloudless sulphur on rare Radford's mint (*Dicerandra radfordiana*) (James Holland), Swabbing bat (Jerry Wallace), Hellbender survey (Brant Sanderlin/The Atlanta Journal and Constitution), Southeastern American kestrel (Charlie Muise/Georgia Important Bird Areas Program) | **Highlights:** Growing season burn at Moody Forest (Philip Juras), Eastern indigo snake (Joe Abene), Trina Morris in Sitton's Cave (Jerry Wallace) | **Snapshots:** Hellbender (Dirk J. Stevenson) | All other photos by Georgia DNR.