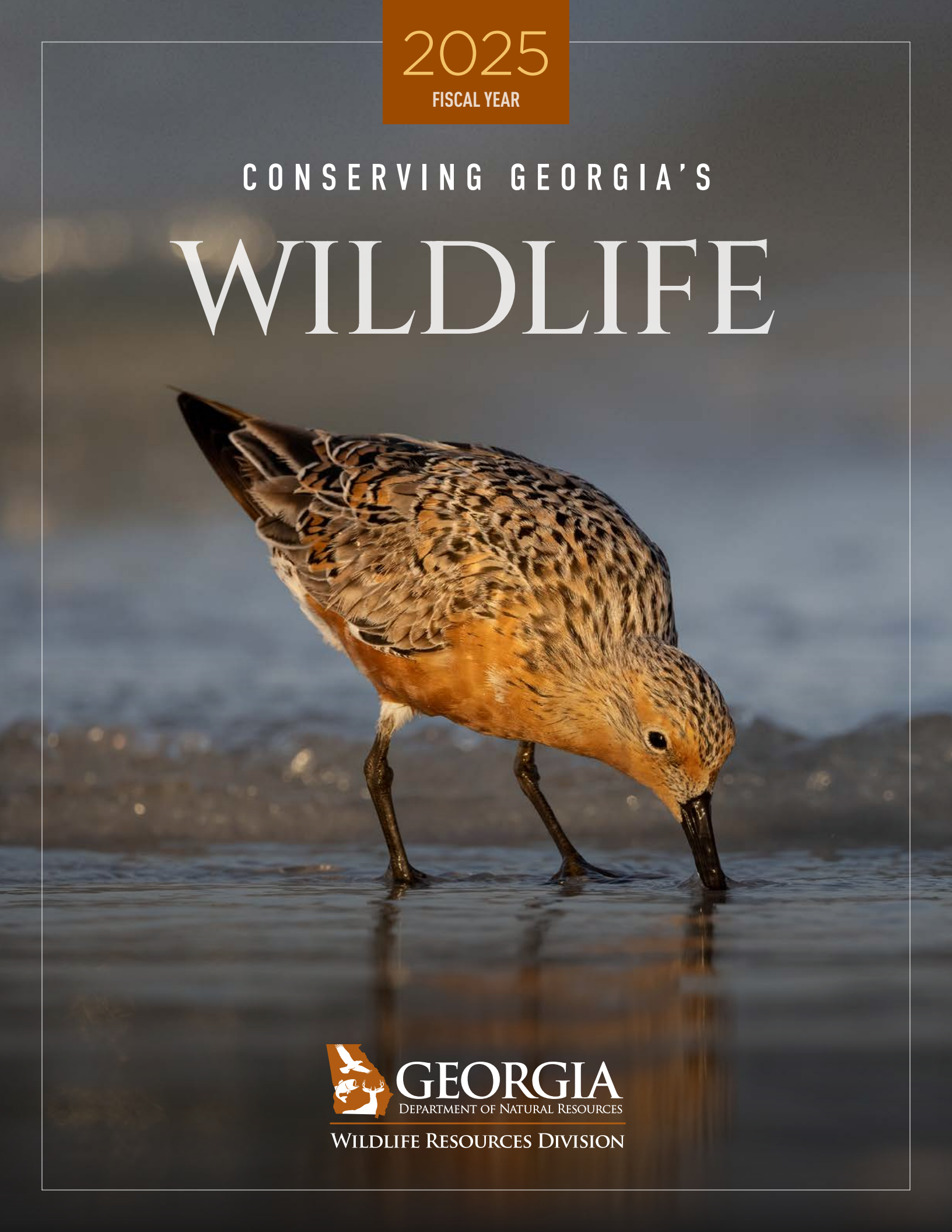
2025
FISCAL YEAR

CONSERVING GEORGIA'S WILDLIFE



GEORGIA
DEPARTMENT OF NATURAL RESOURCES
WILDLIFE RESOURCES DIVISION

Call me biased. But from the Blue Ridge Mountains to Georgia's barrier islands, the work that DNR's Wildlife Conservation Section does each year to research and restore native wildlife and natural habitats is simply amazing.

These are the animals, plants and places we all treasure. And highlights from this year's work are numerous.

They include helping reach a gopher tortoise milestone – 65 populations permanently protected! – completing the 10-year State Wildlife Action Plan, rallying on public and private lands to recover Hurricane Helene-ravaged habitats and monitoring rare mammals, from massive North Atlantic right whales to fluff-and-ears Appalachian cottontails. We also added Upatoi Ravines Natural Area and Treat Mountain Wildlife Management Area with support from Georgia DOT, the first fruits of a precedent-setting agreement that is benefiting wildlife, expanding outdoors recreation and improving transportation.

At the Wildlife Conservation Section, our focus was both targeted and wide-ranging. We sampled north Georgia streams for eDNA to better understand threatened trispot darters. We teamed with South Carolina and other partners to document coastal sites that are critical to red knot migrations that span hemispheres.

All are part of a big picture: How do we conserve Georgia's wild species and places now and for future generations.

Big picture, big mission. But none of it happens without you.

How so?

If you have an eagle, monarch or hummingbird tag on your car or truck. If you donate through the Georgia Wildlife Conservation Fund tax checkoff or round up a license purchase at GoOutdoorsGeorgia.com. If you attend our Weekend for Wildlife fundraiser, volunteer with DNR or provide support in any other fashion, you continue this work.

We depend on fundraisers, donations and grants. That makes your support not only important but vital. And were are extremely grateful for it.

I could go on. But there's no need. Just leaf through the pages that follow. They explore a year of conserving Georgia's wildlife. I hope you enjoy the journey.

Got questions or comments? Please email me at matt.elliott@dnr.ga.gov. It would be great to hear from you.

Matt Elliott
Chief, DNR Wildlife Conservation Section

Gopher tortoise eating (Matthew Moore/DNR)

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BIRDS

Waterbirds

Georgia's barrier island beaches, salt marshes and coastal freshwater wetlands support 86 species of seabirds, shorebirds and wading birds. These species, collectively known as waterbirds, are the focus of DNR's Waterbird Conservation Initiative. This effort involves research, monitoring, management and education efforts within the Wildlife Conservation Section and working with a variety of partners.

Seabirds

As part of this initiative, the Wildlife Conservation Section works to protect important seabird nesting colonies by posting and roping off colonies, working with "stewards" to educate beachgoers about the birds on public beaches, and coordinating with DNR's Law Enforcement officers to enforce what's called the Bird Island Rule, which limits access at listed sites to protect nesting birds. Staff also team with partners to educate the public, including ecotourism guides and

Royal tern colony on Brunswick Bird Island (Tim Keyes/DNR)

Flock of red knots flies toward a volunteer surveying the shorebirds (Fletcher Smith/DNR)

boaters, through training classes, signage, brochures and booklets. Surveys to document the number of nesting pairs of priority species and estimate the number of chicks fledged also are conducted each year.

Given the changing nature of natural seabird habitats (offshore bars) and the creation of suitable island habitat through the use of dredge spoil, staff began working in fiscal year 2025 to update the Bird Island Rule. Proposed changes would include critical nesting areas that were not listed in the 1998 rule because they did not exist or were not used.

The Brunswick Harbor Bird Island was the largest colony again in fiscal year 2026, with a total of 9,576 nests. Species nest totals included 7,080 nests for royal terns, 593 nests for sandwich terns, 963 for laughing gulls, 279 for black skimmers, 614 for brown pelicans and 47 for gull-billed terns. Royal tern, laughing gull and brown pelican numbers were up from 2024, while black skimmer, sandwich tern and gull-billed tern totals were stable. All species had high levels of productivity.

A newly completed dredge spoil island in Camden County supported 334 nesting least terns, gull-billed terns and black skimmers, although a great horned owl limited the productivity by preying on chicks throughout the season. Little St. Simons Island also hosted a productive seabird colony in 2025, including nesting least terns, black skimmers and gull-billed terns. In Chatham County, Ogeechee Bar continued as an important colony site, supporting 325 black skimmer nests and 16 gull-billed tern, four least tern and 260 royal tern nests. DNR also continued to document dog-related deaths of chicks in the colony, despite posting the colony and working to inform boaters who use the site.

In 2025, staff also coordinated the banding of 750 royal tern chicks in one day on Brunswick Bird Island. Thirty-four volunteers from coastal organizations made the large-scale project possible. This effort marked the agency's fourth year banding chicks in the colony. The work has resulted in sightings of birds banded at the island from as far away as New Jersey and Peru.

Shorebirds

The red knot is a federally listed migratory shorebird that makes extensive annual migrations, with a significant proportion of the population using the Georgia and South Carolina coasts in spring. This region is a terminal staging area for direct flights to Arctic breeding grounds. For instance, 12 of 13 knots satellite-tagged on Georgia's Little Tybee Natural Area in spring 2024 bypassed the widely known Delaware Bay red-knot stopover and flew directly from Georgia to James Bay and Hudson Bay in Canada.

The red knots' diet in spring consists of bivalves and horseshoe crab eggs, a high-fat food source that allows knots to nearly double their weight during migration. After breeding concludes in the high Arctic, red knots migrate in the fall to wintering grounds that span a broad area, ranging from the Atlantic and Gulf coasts in the U.S. through the Caribbean and northern South America to as far south as Tierra del Fuego, South America.

In collaboration with the South Carolina Department of Natural Resources and others, the Wildlife Conservation Section conducts studies aimed at understanding red knot movements – including breeding sites, fall migration routes and wintering locations – and addressing conservation challenges. Satellite and radio tracking, surveys by helicopter, and monitoring the density and distribution of horseshoe crab spawning are used to assess the role of coastal Georgia stopovers for red knots.

Red knots (Linda Nong/DNR)

Other work in the region by staff includes a long-term resighting project that banks on traditional mark-recapture methods to estimate the population of knots using the Southeast in migration. One notable knot (known as *H7 for the bird's individually coded leg flag) was tracked via satellite transmitter from Little Tybee Natural Area to Arctic breeding grounds in spring 2024, then southbound on fall migration through Hurricane Ernesto and on to wintering grounds in French Guiana. This bird was subsequently resighted in spring 2025 at Little Tybee, having completed an annual cycle. With content provided by Wildlife Conservation and project partners, a social media story by DNR's Wildlife Resources Division on *H7 reached more than 50,000 people, showing the power of conservation stories involving these birds to connect with the public.

The tracking project encourages individuals and school programs to follow the knots in real-time online. Outreach is a critical component of the research and conservation work being done in Georgia. The data gathered also allow land managers and scientists to determine effective strategies to conserve shorebirds here and throughout the flyway and to inform the public about those findings.

Red knots face numerous threats across the Western Hemisphere. At stopover sites in Georgia they are affected by disturbances from people and dogs, limited or cyclical food resources, and habitat changes. Feral hogs are a new shorebird conservation problem in the state. The hogs depredate horseshoe crab adults and nests by rooting up and eating the eggs, reducing a critical food resource for red knots. Ongoing control measures including trapping and aerial removal by Wildlife Conservation and the U.S. Department of Agriculture staff are critical to mitigating the impact on horseshoe crabs and shorebird habitat.

Wildlife Conservation and coastal partners monitored about 130 pairs of nesting American oystercatchers in 2025. Nests were found for just over 80 pairs. The other pairs likely nested, but those nests weren't documented due to the high rate of nest failures and many sites being frequently washed over. Some pairs were documented making multiple attempts to nest, some up to four times. Slightly more than 110 nests were found throughout the season. The higher number of overall nests for this subset of oystercatcher pairs shows the level of failure and difficulties these pairs experienced during the breeding season.

Staff documented 20 oystercatcher chicks fledging. This total included nine on Little St. Simons Island and another nine from enhanced shell rake platforms on Stafford and Satilla Marsh islands. The experimental shell rake enhancements have proven highly effective at boosting productivity on remote marsh islands that suffer from regular overwash.

DNR staff band an American oystercatcher (Tim Keyes/DNR)

Red-cockaded Woodpeckers

The red-cockaded woodpecker is the only woodpecker in the U.S. that excavates cavities in living pines. The drastic loss of mature pine forests over the past 200 years has been the primary cause of this species' decline. Suitable habitat now occurs primarily on some military bases, national forests and other public lands, although red-cockaded woodpeckers are still found on many private properties.

The birds were listed as endangered under the Endangered Species Act of 1969 and protected with the same status in passage of the Endangered Species Act in 1973. However, in October 2024 the U.S. Fish and Wildlife Service marked the red-cockaded woodpecker's progress toward recovery by reclassifying the species as threatened.

As part of that recovery effort, in 1999 DNR developed the nation's first statewide red-cockaded woodpecker Habitat Conservation Plan, providing management options for private landowners. The plan includes options for mitigated incidental take and for Safe Harbor. Safe Harbor focuses on landowners in southwest Georgia, where properties managed for northern bobwhites also support a significant population of red-cockaded woodpeckers. Safe Harbor involves a landowner's commitment to manage habitat beneficially for a site's "baseline" number of woodpecker families – those on the site when the agreement is made. A family group refers to the red-cockaded woodpeckers that occupy a cluster of cavity trees and adjacent territory. In exchange for maintaining the baseline number of family groups, the landowner's responsibility does not increase if the woodpecker population increases.

2025 proved busy both for Safe Harbor and red-cockaded woodpeckers in Georgia. Statewide, 196,120 acres are enrolled in Safe Harbor agreements, covering a combined 112 baseline groups and 110 surplus groups (surplus groups are additions to baseline populations). Most of these properties are in the Red Hills region near Thomasville. The Red Hills supports the largest population of red-cockaded woodpeckers on private lands. Since the start

Red-cockaded woodpecker at Sprewell Bluff WMA (Hal Massie/DNR)

of Safe Harbor in 2000, the Red Hills population has increased to approximately 260 groups, and it continues to grow.

The Wildlife Conservation Section worked with Safe Harbor participants and conservation partners in fiscal year 2025 to conduct outreach and monitor woodpecker nesting and populations on cooperating properties. Staff built more than 80 artificial cavity inserts to help manage and grow populations. Many of the inserts were used to refurbish recruitment clusters on three Safe Harbor properties.

Wildlife Conservation and partners surveyed clusters and updated the cavity tree inventory on multiple Safe Harbor sites. Dozens of new cavity trees were found and mapped for monitoring and to ensure they are protected during land management activities. New family groups and territories also were discovered, the result of birds in the Red Hills moving into unoccupied habitat and using previously installed recruitment clusters.

In partnership with Tall Timbers and The Jones Center at Ichauway, staff banded 134 nestlings on Safe Harbor properties. The agency and conservation partners also completed the third year of a research project aimed at improving genetic diversity in small red-cockaded woodpecker populations by cross-fostering nestlings. Cross-fostering involves the transfer of nestlings between populations and placing them in the nests of unrelated adult birds.

In spring 2025, staff and Tall Timbers biologists cross-fostered eight nestlings between six properties in the Red Hills, including River Creek, the Rolf and Alexandra Kauka Wildlife Management Area near Thomasville. All of the nestlings thrived in their new homes. The birds will be monitored to determine their role in the foster population and evaluate the potential of this practice for improving genetics in small populations. With 28 nestlings cross-fostered so far, staff plan to continue the project in spring 2026.

Wildlife Conservation also worked with The Jones Center at Ichauway to restore the red-cockaded woodpecker population at the center. The 29,000 acres in Baker County supported a single male in 1999. Largely through translocating 75 young birds and installing recruitment clusters in suitable but unoccupied habitat, Ichauway now has 60 family groups.

In 2008, DNR acquired 8,400 acres near Bainbridge to create Silver Lake Wildlife Management Area, the first state-owned property with red-cockaded woodpeckers. Silver Lake features extensive stands of mature longleaf pine habitat with intact native groundcover. Although ravaged by Hurricane Michael in 2018, Silver Lake's red-cockaded woodpecker population has rebounded and is still the largest on state-owned land. As of fiscal 2025, there were 45 family groups, 44 potential breeding groups and one single-bird "group." That count grew by two potential breeding groups since 2024, underscoring the impact of habitat work, including regular prescribed fire, cavity management and adding recruitment clusters.

In 2025, Wildlife Conservation installed two recruitment clusters at Silver Lake to try to expand the population into vacant but suitable habitat. In recent years, staff expanded the population onto adjacent U.S. Army Corps of Engineers properties managed by DNR as Lake Seminole Wildlife Management Area. Yet the work holds even more promise. In one exciting discovery, staff found a new "budded" cluster at Silver Lake in 2025. A budded cluster occurs when an existing group or cluster splits into two, forming a new breeding group.

Wildlife Conservation monitored nesting in 44 clusters at Silver Lake and banded 51 young. Despite the habitat loss and management challenges caused by Hurricane Michael, the population at Silver Lake is growing. Through careful management, it will likely one day sustain more than 45 family groups.

At Moody Forest Wildlife Management Area, Wildlife Conservation continued working with The Nature Conservancy to manage red-cockaded woodpeckers. In September 2024, Hurricane Helene decimated timber stands and destroyed 44 percent of the red-cockaded woodpecker cavity trees at Moody Forest. The Nature Conservancy and DNR staff responded quickly, clearing roads to access clusters and replacing more than 20 cavity inserts soon after the storm. This prompt action was vital to mitigate the storm's damage. Amazingly, in spring 2025, the WMA near Baxley had 11 potential breeding groups, the same number as before Helene. Moody Forest has exceeded its property goal of 10 groups, a testament to years of work by The Nature Conservancy and DNR. Partners monitored 10 nests there in fiscal 2025.

Better habitat – from management and restoration, including timber thins and frequent prescribed fire – combined with translocations and artificial cavity and recruitment cluster installations have resulted in rapid population growth on the WMA. Though Helene diminished habitat for the birds, some younger pine stands will provide suitable habitat in the future, creating more opportunities for more birds. Staff will add cavity inserts in fiscal 2026 to ensure an adequate number of suitable cavities.

In 2017, DNR reintroduced red-cockaded woodpeckers to River Creek, the Rolf and Alexandra Kauka WMA by translocating woodpeckers from Apalachicola National Forest in Florida. In fiscal 2025, staff added or refurbished numerous cavity inserts to ensure that each of the WMA's eight cluster sites had at least four suitable cavities. Since 2018, River Creek's woodpecker population increased from two single birds to seven family groups – six potential breeding groups and one single-bird group.

River Creek had a successful nesting season in spring 2025, with a record-high six nests producing eight fledglings. The birds were also busy creating natural cavities and refreshing old, relict cavities. Staff spotted six new natural cavities this year, and two of this season's nests were in a recently finished natural cavity. With habitat management and prescribed fire, River Creek's red-cockaded woodpecker population is expected to increase to as many as 10 family groups.

After years of habitat restoration and planning, Sprewell Bluff Wildlife Management Area received its first red-cockaded woodpeckers in December 2023. Wildlife Conservation followed that successful translocation with six more birds in December 2024. Staff also installed five additional recruitment clusters at the WMA near Thomaston. On Dec. 13, six birds were captured

at Fort Stewart Army base near Hinesville and transported through the night to Sprewell Bluff. Placed into their new homes under bright starlight, the birds were released on the western side of the WMA at dawn.

Again beating the averages for translocations, four of the six birds remained into the nesting season. The reintroduction on the WMA continues to progress rapidly, with four breeding groups and a single bird group in 2025. Staff banded seven nestlings from four nests this year, indicating successful reproduction and a naturally increasing population. More translocations are planned for fiscal 2026. Sprewell Bluff is the fourth state-owned property with red-cockaded woodpeckers. Staff also have developed red-cockaded woodpecker reintroduction plans for other state lands, potentially as early as fiscal 2026.

Surveys and Habitat Restoration

Grassland Birds

Nest box totals for southeastern American kestrel were solid in 2025, with 65 active nests. Twenty of these were in boxes high on major powerlines, and because of those locations, their chick output is unknown. The 45 "low" boxes monitored by the Wildlife Conservation Section fledged 82 chicks. Overall, the number of active nests was up significantly but chick production was down about a third compared to 2024. However, kestrel populations remained at increasing levels, a trend expected to continue in the near future primarily because of partnerships with power distribution companies that cooperate with Wildlife Conservation biologists to install boxes high on major powerlines.

A survey of these high boxes in 2025 documented several new populations of kestrels using boxes installed in the last five years. These included birds near Lyons, Smithville, Chula and Metter. Spreading kestrel populations across a wider geographic area will help ensure the small falcons remain a vibrant part of Georgia's avifauna.

Bachman's Sparrows

From 2006-2008, the Wildlife Conservation Section initiated surveys for Bachman's sparrows on several wildlife management areas and a national wildlife refuge. The systematic survey effort was the first for this rare pine savanna bird on state lands in Georgia. Surveys were done in forest stands and other areas that either had suitable habitat or were going to be managed in ways that could create or restore habitat (through forest thinning, prescribed fire and restoring native groundcover). In 2018, these surveys were re-initiated at many of the WMAs to determine the success of long-term restoration efforts and what else might be done to improve the quality and quantity of habitat for this species.

Identical survey methodologies were used in 2006-2008 and from 2018 to present. Each six-minute count has a two-minute passive listening period followed by two minutes of call playback and ending with two minutes of passive listening. The 2025 surveys were conducted at over 200 points on Silver Lake, River Creek, Doerun, Chickasawhatchee, Sandhills East and West, Di-Lane, and Yuchi wildlife management areas.

Prothonotary Warblers

The Wildlife Conservation Section continued surveying for prothonotary warblers in fiscal year 2025. Striking in looks, this bird is declining in numbers and is a State Wildlife Action Plan species of greatest conservation need. Prothonotary warblers are found in flooded swamps and hardwood bottomlands along rivers and streams. They nest in cavities – the only warbler in the Southeast to do so – and often over water.

As part of a study exploring the bird's use of nesting habitat in riparian corridors in the region, staff placed 45 nest boxes along the Ochlockonee and Alapaha rivers on Alapaha River Wildlife Management Area and River Creek, the Rolf and Alexandra Kauka WMA. Alapaha River WMA is near Ocilla; River Creek is near Thomasville. To better work with researchers across the warbler's range, Wildlife Conservation is also part of the Prothonotary Warbler Working Group. This collaboration enhances projects aimed at better understanding the species' status in Georgia.

In 2025, five artificial nesting boxes were installed to replace the oldest boxes in both areas. At Alapaha River WMA, 36 prothonotary chicks and adults were color-banded. Due to flooding that inundated nest boxes for a second straight year,

Banding American kestrels (Hal Massie/DNR)

no nests were documented at River Creek in 2025. Prothonotary warblers infrequently use nest boxes at this WMA, despite the birds being prevalent during point counts and staff seeing several adult pairs exhibiting nesting behaviors.

Point count surveys at 21 locations along the Ochlocknee and Alapaha rivers also were conducted in the 2025 breeding season. Banding and monitoring prothonotary warblers at these sites allow biologists to better understand the birds' site fidelity, nesting productivity, survival and habitat use in south Georgia.

Wading Birds

Wood storks were federally listed as endangered in 1984 following dramatic declines in breeding colonies in southern Florida. Wood stork nests were first documented in Georgia in 1965. By the 1980s, those numbers were surging. Georgia now supports more than 20 percent of wood storks nesting in the U.S., a population that is approaching 10,000 breeding pairs.

Following the Wildlife Conservation Section's survey of the Coastal Plain for all wading birds in 2024, staff returned to the regular wood stork survey in 2025. The timing proved excellent. The agency documented a record count of 2,988 nests across 29 colonies, topping the previous high of 2,950 nests in 2014. Staff spotted many other wading bird species during flights but did not conduct systematic counts. The 2024 wading bird survey found new colonies, which helped boost the wood stork nest total. However, 2025 also featured high numbers of wood storks at some of the state's largest colonies.

Wildlife Conservation continues to work with private landowners to help ensure the protection of this species and collaborate with researchers conducting genetic analysis across the wood stork's range. The recovery plan in Georgia includes monitoring the reproductive success of wood stork nesting colonies, identifying potential threats and collaborating with landowners and site managers to promote colony survival and longevity. The species was downlisted from endangered to threatened in 2014. In 2023, the U.S. Fish and Wildlife Service proposed removing wood storks from the Endangered Species List, based on the bird's recovery and dramatic expansion of its range. Presuming careful ongoing monitoring, DNR supported the proposal, based on meeting recovery goals for the species. The final determination had not been announced as of the close of fiscal year 2025.

Roseate spoonbill with white ibis and wood storks (Tim Keyes/DNR)

Swallow-tailed Kites

The swallow-tailed kite has suffered a significant range reduction since the 1880s when the species bred in 21 states. These elegant raptors are now found in seven southeastern states, where they nest in bottomland forests along large rivers. Most nests in Georgia are on private land, specifically industrial timberlands. Data from years of late-summer communal roost sites in Florida seem to indicate a gradual population increase since the late 1980s in the southeastern U.S.

The Wildlife Conservation Section's work includes finding and monitoring nests, advising the public about reporting sightings, protecting nests from predators where possible, working with landowners to ensure habitat viability, supporting habitat management on protected lands where kites nest and searching for previously radio-tagged kites.

An estimated 150-200 pairs of swallow-tailed kites nest in Georgia each year. Most nests are on the lower stretches of the Satilla and Altamaha rivers, but nests are also scattered across other south Georgia river drainages that feed into the Atlantic – such as the Savannah, Ogeechee and St. Marys – and almost all rivers that drain into the Gulf of Mexico, including the Suwannee, Alapaha, Aucilla, Little, Ochlockonee and Withlacoochee. While densities are highest in the lower stretches of these rivers, kites nest into the upper Coastal Plain on the Ocmulgee and Oconee rivers. Staff are working closely with partners to raise funds for the protection of several large tracts on the Satilla that provide important nesting habitat for kites.

During the 2025 nesting season, Wildlife Conservation confirmed 16 active swallow-tailed kite nests. Nesting was considered probable at another eight sites and possible at 12 more. Most of the nests were on timber company lands, though kites continued to nest on some wildlife management areas and national wildlife refuges in the coastal region. Staff also coordinated with the Avian Research Conservation Institute to find, trap and satellite-tag kites. Data from the tracked birds provide insights into kite behavior and migration. Also, a large roosting site in Wayne County found in fiscal year 2023 was monitored, revealing up to 300 kites using the roost this year.

Bald Eagles

Once common in Georgia, the bald eagle declined in abundance during the mid-20th century and was not nesting in the state by the early 1970s. However, populations have rebounded here and elsewhere, helped by a 1972 ban on DDT in the U.S., habitat improvements after enactment of the federal Clean Water and Clean Air acts, recovery of forest resources following extensive logging of old-growth trees during the late 19th and early 20th centuries, protection through the Endangered Species Act, increased public awareness, and restoration of local populations through release programs known as hacking.

In the wake of federal delisting of the species in 2007, primary legal protection for eagles comes from the Bald and Golden Eagle Protection Act. Nest trees and associated primary and secondary buffer zones are conserved via recommendations of federally established bald eagle management guidelines. Georgia's ongoing conservation efforts include monitoring known eagle nests in January-February and March-April, collaborating with landowners and other agencies to protect nest sites, providing public education programs about eagle conservation and ecology, and rehabilitating injured eagles.

The Wildlife Conservation Section's 2022 survey, the most recent statewide assessment of eagle nests, documented 229 nest territories. That exceeded the previous high of 218 in 2017. Returning to the approach of checking nesting in most areas only every other year, the 2025 survey included the six coastal counties and barrier islands, and a swath of southwest Georgia from Interstate 20 west of Atlanta south to the Georgia/Florida line and from the Alabama/Georgia line east to scattered nests within about 30 miles of the eastern edge of Interstate 75. The results also included 16 nests monitored by volunteers or biologists with partner agencies.

Nest success rates in 2025 ranged from slightly below average in southwest Georgia (68 percent) to average on the coast (73 percent). The difference wasn't surprising, as nest success rates on the coast often run higher than elsewhere in Georgia, likely reflecting the more abundant food resources in estuaries. The 190 eaglets fledged equates to 1.5 per successful nest, which is in line with the state's long-term average. But there were notable differences between this year's data and in 2023, the last time both areas were surveyed in the same year. Then, the southwestern region had 92 territories, 69 successful nests (a 75 percent success rate) and 113 eaglets fledged. In 2025, those numbers slipped to 79 territories, 54 successful nests (68 percent success) and 86 fledglings.

The decline in nests territories in southwest Georgia likely resulted from storm damage, which would not be unusual, particularly with hurricanes Helene and Milton sweeping through Georgia in fall 2024. During the January 2025 survey of that area, DNR staff saw a few more falling and fallen nests than usual. However, the dip in the number of successful nests and fledglings could also point to avian influenza, which ravaged bald eagles on the coast in 2022. DNR recorded more empty nests than expected along the lower Chattahoochee River and some southwest Georgia reservoirs this winter. It is possible the area's eagle population took a delayed hit from avian influenza. Mortalities and nest failures from the initial

Bald eagle pair at Lake Allatoona (Ron Goldfarb)

outbreak of the disease were confined to the coastal counties. But necropsy reports in winter 2024-2025 showed that it had spread to inland eagles, especially among birds in the Chattahoochee watershed.

Accounting for eagle nests not monitored, the 2025 survey totals suggest Georgia has maintained over 200 nest territories a year since 2015, while the number of eagles nesting in the state has continued to increase. That rise has noticeably slowed over the past 10 years as compared to the rapid growth in the early years of the new century. Only 25 years ago, the state had no more than about 55 nest territories.

As in previous years, Wildlife Conservation worked with landowners to conserve nesting habitats, minimize disturbances near nest trees during the nesting season, help explain federal permitting processes regarding development projects, capture injured eagles and deliver them to veterinary and rehabilitation facilities, and return rehabilitated eagles to the wild.

Peregrine Falcons

For the seventh consecutive year, peregrine falcons apparently did not nest on the cliff face at Tallulah Gorge State Park, the state's only known peregrine nest in a natural setting. Prior to the discovery of nesting peregrines at the gorge in 2015, the state's only other confirmed nest outside an urban area was at Cloudland Canyon in the 1940s. Although at least one adult falcon was seen at Tallulah Gorge during the 2025 breeding season, no nest was found, despite extensive inspections on foot.

In Atlanta, staff visited the Four Seasons Hotel, neighboring high-rise buildings, Piedmont Park, the Truist Building Plaza and most other locations where evidence of nesting falcons had been observed in recent years. The Four Seasons Hotel area has been the most consistent place in the city to see peregrine nesting activity since the early 2000s. DNR also spoke to managers of some of these buildings, as well as longtime falcon watchers in nearby high-rises. There was no indication that falcons nested at any of these places in 2025, although a few sightings of birds were reported in early spring. Staff at the Four Seasons Hotel and Wildlife Conservation Section biologists installed a falcon nest box on the hotel's 50th floor in 2022. Peregrines have inspected the box each year but have not nested in it.

The absence of documented nesting activity – as well as the sparse number of falcon sightings – in the Four Seasons area could be the result of the death of one or more of the adult pair. This loss would not be unusual. Biologists in several other states including New Jersey and Virginia have reported significant declines in breeding pairs of peregrines during the last two nesting seasons, especially in coastal areas. These declines likely were caused by avian influenza mortalities. DNR has not documented avian influenza as a cause of death of peregrines in Georgia but remains on the lookout.

As usual, peregrine falcon sightings were reported along the Georgia coast during fall migration in September and October. Most of those birds originated from Canada and Greenland.

In fiscal year 2026, biologists will continue to explore opportunities to install more nest boxes on high-rise buildings in Atlanta and conduct foot searches of some north Georgia cliffs that served as hacking sites for young falcons in the late 1980s and early 1990s, part of DNR's efforts to recover the population.

Common Ravens

While searching Tallulah Gorge for peregrine falcon activity in March 2024, DNR discovered the nest of another species that is rare in Georgia: common raven. Staff had photographed a recently fledged raven at the gorge in April 2021 but did not see a nest. One or two ravens had been seen in the gorge on several occasions in the previous six or seven years, but the juvenile in 2021 was the first indication the birds might be nesting at the state park. The 2024 sighting confirmed that, and the nest fledged two young that May.

In 2025, ravens returned to the same nest at Tallulah Gorge and fledged two more chicks in May. That was just one highlight in what turned out to be a record year for documented raven nests in Georgia. In early April, DNR staff hiked into a remote location along the Chattooga River north of Tallulah Gorge and spotted a raven nest stuffed to the brim with four chicks. However, it turned out this nest was across the state line in South Carolina. Two weeks later and thanks to reports from the public, a DNR biologist documented a raven nest on overflow structures of the dams at Lake Nottely (one chick) and Lake Blue Ridge (three chicks). Although the biologist also followed up on a report of ravens seen at a cliff face in Blackrock Mountain State Park but did not confirm nesting there, in early June, DNR received confirmation from a birder that raven adults were seen feeding young at the park. This sighting capped a remarkable – and welcomed – nesting year in Georgia for the big, black, baritone-voiced birds.

In the eastern U.S., the common raven's range shrank over the past 100-150 years because of clearing of the birds' preferred forested habitats and from ravens being shot, trapped, poisoned and their nest sites disturbed. The population declined substantially. By the early to mid-1900s, the species was considered extirpated, endangered or threatened in several eastern and southeastern states.

In Georgia, the common raven is not common: It is considered a rare bird of wildlands and high elevations, nesting (if sparsely) above 3,000 feet. During DNR's Breeding Bird Atlas project from 1994-2001, the species was documented as a possible breeder in north Georgia's Lumpkin, Rabun, Union and Towns counties, but was confirmed breeding only at Brasstown Bald. In 2021, a falconer discovered a raven nest on the Nottely dam near Blairsville. This sighting was unusual, not just because few raven nests have been found in Georgia, but also because it was the first time a raven nest had been found on anything other than a cliff ledge in the state. Ravens also nested at Nottely dam in 2022 and 2023.

Common ravens are large members of the crow family. Like others in that family, they are very intelligent. Ravens work together to solve problems and exhibit a variety of play behaviors, such as sliding down slopes on their bellies. They are graceful flyers known for acrobatic stunts, including rolls, somersaults and even flying upside down. In the South, common ravens generally build

large nests (up to 5 feet wide and 2 feet deep) made mostly of sticks in early winter. Nests may be in trees but more often are built in recesses on rock ledges.

Breeding Bird Survey trend data show that from 1966-2019 raven populations increased substantially, rising 2.5 percent annually in the U.S. and 4 percent in the Appalachian Mountain region. These increases likely resulted from greater protection from shooting and other forms of persecution, regrowth of eastern forests, and the species' ability to adapt to human-caused habitat changes – including using artificial nesting substrates like the Nottely dam – and take advantage of roadside carrion and human-provided food sources. Still, DNR categorizes the common raven as a rare species and its conservation as a high priority. Protecting nest sites from human disturbance is probably the most practical and effective way to conserve Georgia's especially small breeding population.

Marshbirds

The saltmarsh sparrow is one of the most rapidly declining bird species and has experienced a 9 percent population decline annually for the past decade (equating to a roughly 80 percent population loss during that period). Most previous conservation actions for this species have focused on the birds' breeding season, but the wintering period is increasingly being recognized as critical for adult survival. Georgia hosts a substantial portion of the wintering population of saltmarsh sparrows.

Threats to these birds in Georgia range from sea-level rise to extreme tidal flooding due to storms. The species resides entirely within the borders of the U.S. Other key species within Georgia's abundant saltmarsh habitat include the seaside sparrow and Nelson's sparrow. The three marsh sparrows are all listed as species of conservation concern in Georgia's State Wildlife Action Plan.

To address these and other concerns, a survey was conducted in Georgia during the winters of 2023-24 and 2024-25 to identify key habitat components influencing the birds' abundance during the season. The survey methodology was two-fold: Conduct surveys through smooth cordgrass (Sporobolus alterniflora) marshes along with bird captures that reveal species composition (saltmarsh and Nelson's sparrows are visually very similar when flushed and must be captured for identification). Staff completed 245 surveys across 122 transects. Each survey was dominated either by creek drainage habitat or low and medium smooth cordgrass habitat.

During winter 2024-25, a total of 815 marsh birds were captured, including 454 seaside, 177 saltmarsh and 168 Nelson's sparrows. These captures spanned the entire Georgia coast. Data gathered in the two-year study will be used to inform habitat management at federal, state and privately owned marsh habitats. Staff are already using this data to map out critical high-tide roost habitat along the coast.

DNR's Linda Nong drags a rope to flush marsh sparrows during a survey (Fletcher Smith/DNR)

Sea Turtles

Loggerhead sea turtles are found in Georgia's coastal waters year-round and nest on all barrier island beaches. In accordance with the National Oceanic and Atmospheric Administration/U.S. Fish and Wildlife Service recovery plan for this species, DNR management efforts focus on surveying and protecting loggerhead nests and managing nesting beach habitat. The Wildlife Conservation Section coordinates the Georgia Sea Turtle Cooperative, a group of volunteers, researchers and government employees who conduct nest protection and management activities on Georgia beaches.

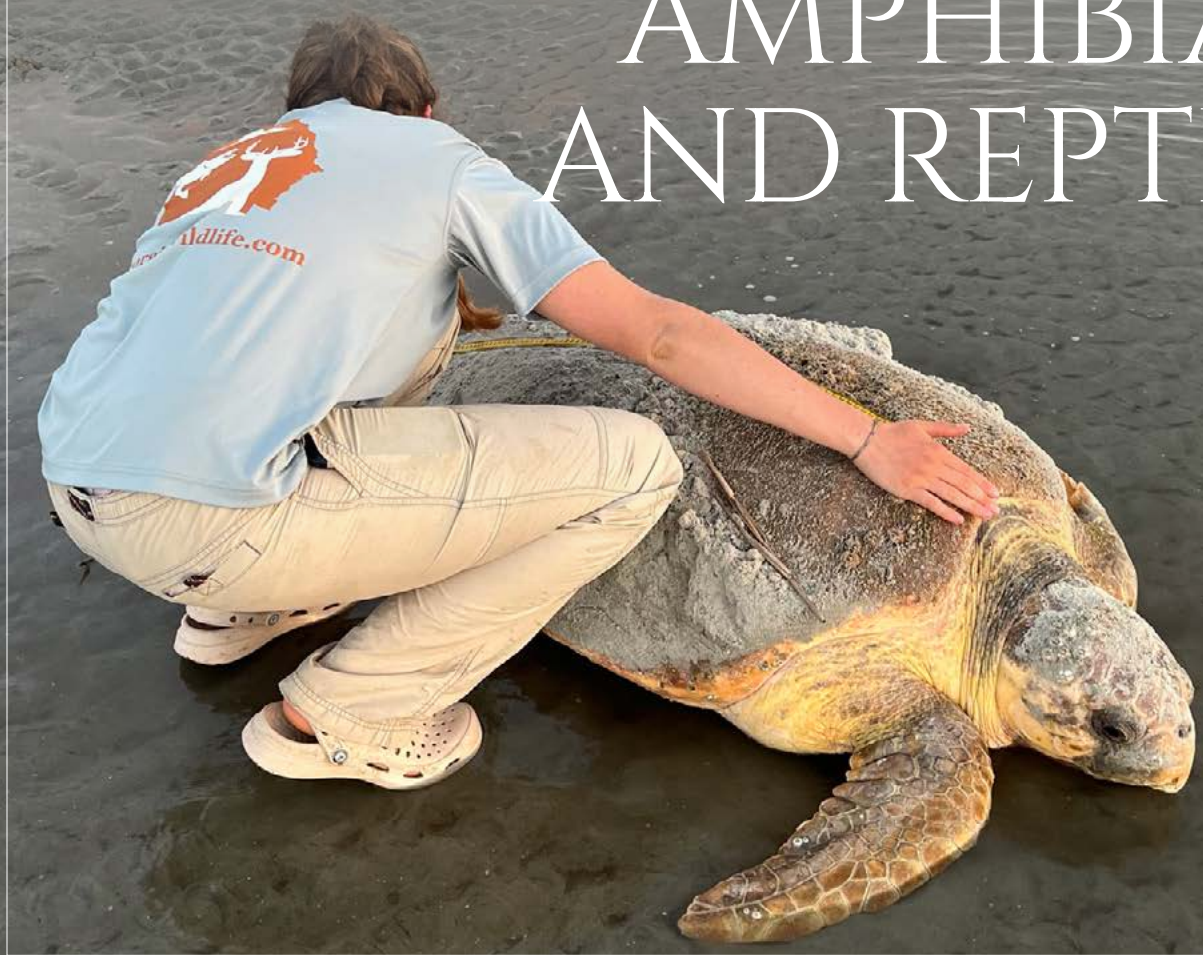
Wildlife Conservation also manages the nesting projects on the state-owned islands of Sapelo and Ossabaw, including hiring and supervising seasonal technicians. Management activities designed to improve reproductive success include relocating nests to protect them from tidal inundation, installing predator screening and predator control.

Since comprehensive surveys were established in 1989, loggerhead nesting has been highly variable, with an average of 1,673 nests per year. In 2025, more than 1,911 loggerhead nests were documented on Georgia beaches. Nesting was slightly higher than the 35-year average, yet below the recovery goal of 2,800 nests a year, the target set in the National Marine Fisheries Service/U.S. Fish and Wildlife Service recovery plan of 2008. Overall, loggerheads have shown a 4 percent annual increase in nesting since 1989. Nesting data indicate that the loggerhead sea turtle population in Georgia is making slow but steady progress toward recovery yet is still short of all recovery goals for the species.

Other conservation activities conducted by Wildlife Conservation during the fiscal year included assisting with training and compliance checks involving turtle excluder devices (TEDs), conducting lighting surveys and assessing the effects of artificial lighting from coastal development projects on hatchling orientation and monitoring the effects of harbor dredging projects on sea turtles. In addition, staff continued a study to assess the effects of nest management practices (nest relocation, predator screening and predator control) on reproductive success.

To develop a comprehensive understanding of the number and relatedness of loggerheads nesting on Georgia beaches, DNR and the University of Georgia created a catalog of unique genetic profiles for Georgia's nesting female turtles. Dr. Brian Shamblin, working with DNR staff, identified an average of 680 loggerhead females using the Georgia coast annually from 2008-2024, with a range of 337 to 1,093 turtles per year. A genetic sample was collected from every known nest deposited in Georgia in 2025. The ongoing project is providing a better understanding of loggerhead nesting ecology and interpretation of nesting trends.

AMPHIBIANS AND REPTILES



DNR's Emma Watson checks a down-nesting loggerhead on Ossabaw Island (Mark Dodd/DNR)

LOGGERHEAD NESTING IN GEORGIA Annual nest totals since comprehensive surveys began in 1989

**Total expected to increase slightly, with nest analysis continuing after fiscal year 2025*

DNR's Sonja Brandt with a loggerhead hatchling on Little St. Simons Island (Mark Dodd/DNR)

Sea Turtle Stranding and Salvage Network

The Wildlife Conservation Section monitors sea turtle mortality through the Sea Turtle Stranding and Salvage Network. Systematic patrols of barrier island beaches provide information on the number and species of dead turtles that wash up on the Georgia coast. When possible, necropsies of stranded turtles are done to evaluate causes of mortality. Sea turtle strandings are the primary index of threats to sea turtles in the state's coastal waters.

In fiscal year 2025, 89 dead or injured turtles were documented on Georgia beaches. That total is below the 30-year average of 164 strandings per year. Strandings have declined overall by approximately 2 percent annually over the last 40 years during a period of increasing sea turtle abundance. The use of TEDs in the shrimp trawl fishery is partially responsible for the decline. Results from necropsy examinations indicate that boat collisions and commercial fishery mortality are the leading sources of mortality, accounting for 36 and 12 percent of strandings respectively in fiscal 2025.

Jekyll Island's Will Hicks, right, and Bailey Yarborough celebrate Georgia's first nest in 2025 (Jekyll Island Authority)

Adult gopher tortoise at a starter burrow (Jacob Wilson/DNR)

An additional 19 sea turtles were incidentally captured by anglers during the reporting period. Nine more were killed during hopper dredging activities. All of the turtles hooked by anglers were released alive. The incidental capture of sea turtles by recreational anglers is thought to be significantly underestimated. There are no reporting requirements and many captures go unreported.

The public is encouraged to report stranded sea turtles in Georgia by contacting DNR at 800-2-SAVE-ME (800-272-8363). Stranding updates are available at seaturtle.org/strand/summary (choose Georgia from "Select a Program").

Gopher Tortoises and Eastern Indigo Snakes

The gopher tortoise is federally listed as threatened in Louisiana, Mississippi and western Alabama. Throughout the rest of its range, the tortoise is protected by state law. Ecologically, the gopher tortoise is a keystone species. The tortoises dig deep, long burrows that are used by more than 300 different animal species. One of those species, the eastern indigo snake, uses the burrows as overwintering refuge. Both the gopher tortoise and the eastern indigo, which is federally listed as threatened, are listed as species of greatest conservation need in Georgia's State Wildlife Action Plan.

The Georgia Gopher Tortoise Conservation Initiative started in 2015 to conserve 65 large populations of gopher tortoises in the state and help prevent Endangered Species Act listing of Georgia's state reptile in the eastern part of the species' range. The progress made in conserving gopher tortoises has been achieved through a combination of fee-simple land acquisitions and conservation easements, and is supported by rangewide surveys, extensive coordination with landowners and nonprofits, strategic planning, and deep support, varying from foundations and federal grants to the U.S. Defense Department and the Georgia Outdoor Stewardship Program. Additionally, the initiative has dedicated technical assistance for development projects on private lands that may impact gopher tortoises. Biologists work with those involved to consult on the most responsible outcomes for gopher tortoises and burrows specific to each project.

At the close of fiscal year 2025, the number of conserved populations was 64, up from just 36 when the initiative began. Yet shortly after the fiscal year closed, in August 2025, the initiative reached its goal, closing on a conservation easement just south of Cordele that protected the 65th viable population. Projects already in the works are expected to surpass that benchmark in fiscal year 2026.

Wildlife Conservation started line-transect distance sampling for gopher tortoises in 2007. As of fiscal year 2025, surveys had been completed on 124 sites statewide, including public and private lands. Nineteen sites have been resurveyed: All but one showed the tortoise population increasing or stable. The increases are likely because of improved habitat management or additions to the population by translocations, along with head-starting juvenile tortoises at the sites.

Supported by a State Wildlife Grant, the gopher tortoise survey crew continued a resurvey of Altama Plantation Wildlife Management Area near Brunswick, and marked gopher tortoise burrows on Sansavilla, Sandhills, Alapaha River and Bullard Creek WMAs, as well as Paradise Public Fishing Area near Enigma, ahead of timber and habitat projects. Marking burrows helps workers using heavy equipment avoid them, sparing or minimizing damage.

Lanahassee Creek WMA near Preston has served as the focal area for the release of head-started juvenile gopher tortoises. Federal partners at the Warm Springs National Fish Hatchery in Warm Springs hatch and rear tortoises until they are 2 years old. This practice produces larger juveniles for release in protected habitat, with higher survival rates than have been observed in the wild. During spring 2025, DNR and the U.S. Fish and Wildlife Service released another 28 head-started gopher tortoises at Lanahassee, where a recent line transect survey suggested sufficient site fidelity and survival.

In another study funded and supported by Wildlife Conservation, The Orianne Society continued occupancy monitoring of habitat for eastern indigo snakes to determine the overall prevalence of indigo populations across suitable habitat in south-central and southeastern Georgia. The 2024–2025 survey season marked the 18th consecutive year of monitoring.

In this region, indigos overwinter in xeric sandhill habitats, where they shelter in gopher tortoise burrows to escape potentially lethal temperatures. The study focuses on assessing site occupancy on suitable sandhill sites in the Altamaha, Alapaha and Satilla River drainages. Each survey season, a subset of sites is checked, with a total of approximately 60 sites surveyed over three years. During that season, sites are visited three times and suitable habitats are walked by one or more observers looking for indigos.

This season, 19 sites were sampled in late fall and winter for occupancy by indigo snakes and eastern diamond-backed rattlesnakes. A total of 23 indigo snakes, 17 indigo snake shed skins and nine eastern diamondbacks were documented. Observations included confirming the occupancy of indigos at 10 sites and of eastern diamondbacks at seven. Overall, the number of occupied sites and occupancy estimates were lower from 2022-2025 than during previous survey rotations.

Concurrent with The Orianne Society's work, Wildlife Conservation conducted an eighth year of a mark-recapture study of indigos on other lands. In fiscal 2025, staff tagged 41 "new" indigos with passive integrated transponder tags – called PIT tags – and recaptured 11 indigos that had been tagged in previous seasons. The agency crew also found two Florida pine snakes and 39 eastern diamondbacks during the surveys.

Mark-recapture data are used to uniquely identify individual snakes and help assess population numbers and trends. Some individual indigo snakes have now been recaptured multiple times over periods as long as eight years. Preliminary population estimates from some mark-recapture sites suggest relatively low but stable numbers.

Dwarf Waterdogs

The dwarf waterdog is a gilled, fully aquatic salamander native to streams of the Atlantic Slope in the southeastern U.S. In Georgia, this species is known from the Ogeechee, Ocmulgee and Savannah River basins, where it inhabits small and medium-sized blackwater streams. But records of dwarf waterdogs in the state are scarce, in spite of these salamanders being relatively common in other southeastern states. For example, there are no records in most of the species' predicted range in Georgia. Waterdogs are most active during winter months and are typically found in slow-moving Coastal Plain streams. The timing means surveys for other amphibians and reptiles seldom document them.

In fiscal year 2025, the Wildlife Conservation Section conducted a dip-netting survey for dwarf waterdogs at bridge crossings on 96 unique streams. In all, 137 sites were checked, including places where waterdogs had been reported before and sites with no records or no prior survey work targeting waterdogs.

Staff caught dwarf waterdogs at three sites on two streams (the salamanders had been documented at both streams before). While further surveys are needed – possibly including trapping or electrofishing to increase the likelihood of detection – it is also possible these salamanders are not as common or widespread in Georgia as suspected.

Gopher Frogs

State-listed as rare, gopher frogs depend on intact sandhill and longleaf pine habitats, where adults survive within the burrows of their namesake host, the gopher tortoise, as well as burned out stump holes and rodent burrows. These frogs also require nearby fishless, temporary wetlands to breed in, where their tadpoles can develop in an environment with fewer predators. Widespread upland and wetland habitat alteration throughout the species' range has greatly reduced populations. Gopher frogs are known at fewer than 10 sites in Georgia, with some populations 90 miles or more apart.

In 2007, the Wildlife Conservation Section began a project that involved collecting gopher frog eggs from healthy populations, rearing them to late-stage tadpoles or post-metamorphic froglets and releasing them at an unoccupied, potential habitat within the species' historical range. Partners including the University of Georgia, Warm Springs National Fish Hatchery, the Amphibian Foundation, Gaskins Forest Education Center, Abraham Baldwin Agricultural College and

Gopher frog in a tortoise burrow (Erin Cork/DNR)

Chehaw Park & Zoo operate the project's rearing facilities.

Three reintroduction or augmentation sites collectively received over 2,500 head-started frogs in fiscal year 2025: two wetlands at Alapaha River Wildlife Management Area near Ocilla, a wetland at Chickasawhatchee Wildlife Management Area near Leary and another at Alligator Creek Wildlife Management Area near Lumber City. Wildlife Conservation also released approximately 200 head-started frogs at the egg collection site in Sandhills Wildlife Management Area in Taylor County. Most Georgia gopher frog populations are small and isolated, making them prone to genetic bottlenecks and loss of genetic diversity. To address this issue at one site, staff also released 200 frogs at Alligator Creek WMA to bolster diversity in that population.

Eastern Hellbenders

The eastern hellbender, North America's largest salamander, lives in clear, cold streams in the north Georgia mountains. The species is state-protected and in 2024 was proposed for listing as endangered under the U.S. Endangered Species Act.

The Wildlife Conservation Section surveys for hellbenders in mountain streams each year. A subset of streams is sampled every three years. This cycle is building a long-term dataset with which hellbender numbers can be estimated, populations monitored and habitat conditions checked. During sampling, hellbenders caught are assessed, marked with a passive integrated transponder (PIT) tag for future identification – if they don't already have a tag – and released. In summer 2025, 16 stretches in 15 different streams were surveyed and data collected from 104 hellbenders.

Flatwoods Salamanders and Striped Newts

Fiscal year 2025 updates regarding flatwoods salamanders and striped newts include:

- The Jones Center at Ichauway in southwest Georgia's Baker County received 120 captive-bred striped newt larvae reared at Atlanta Botanical Garden for repatriation to wetlands on-site. The larvae were released into restored wetlands at Ichauway, where the species hasn't been seen in the wild since 2006. Future releases are planned in the hope of restoring this species to a small portion of its former range in Georgia.
- The Wildlife Conservation Section and partners at The Jones Center at Ichauway in Baker County and the University of Georgia completed a multistate, multiyear project studying the life history of striped newts, propagation, translocation and reintroduction practices, and management implications. Data from this project will be important for management to recover striped newts.
- The Amphibian Foundation, an Atlanta nonprofit focused on conserving amphibians, maintained a captive population of striped newts, all of which are thriving and reproductively active. The breeding colony consists of adult newts from the state's sandhills habitats and a pair from south-central Georgia. The progeny are being released in constructed ponds at Apalachicola National Forest in Florida.
- Wildlife Conservation treated three breeding wetlands for reticulated flatwoods salamanders with hack-and-squirt herbicide applications and prescribed fire at Mayhaw Wildlife Management Area in Miller County. The federally endangered salamanders require grassy vegetation and other herbaceous plants in and around shallow, fishless wetlands to provide cover and nesting sites, as well as fuel for burns to help maintain the wetlands. At Mayhaw, the targeted herbicide work controlled hardwood trees and shrubs that had invaded the wetlands, shading out the grassy groundcover needed for the salamanders survival. The hope is that well-timed prescribed fires can keep further hardwood encroachment at bay.
- In continuing work started in 2023, The Amphibian and Reptile Conservancy partnered with the Fish and Wildlife Branch at Fort Stewart Hunter Army Airfield to monitor frosted flatwood salamanders and restore ponds the endangered amphibians breed in. Using eggs from breeding ponds and larvae at a more recently discovered breeding site on the base, Amphibian and Reptile Conservancy biologists head-started larvae that were released back at the wetlands on the base. Head-starting increases their chances of survival in the wild.

North Atlantic Right Whales

North Atlantic right whales are a critically endangered species whose population is estimated at about 370 individuals. These whales were nearly driven to extinction by centuries of hunting. Recovery has been slow because of reduced numbers of reproductive females in the population, natural variability in food resources and high rates of mortality and injury from vessel collisions and entanglement in commercial fishing rope.

Right whales forage on zooplankton along the coast of New England and Canada. Each November through January, pregnant females migrate more than 1,000 miles to the coasts between North Carolina and northeast Florida, the species' only known calving grounds. The waters off southeast Georgia and northeast Florida are recognized as the core calving area and part of the whales' critical habitat. This area is where most pregnant and nursing females spend the majority of their time in the southeastern U.S. Moms and calves stay here for one to two months, until the calves are strong enough to migrate north during February and March. A variable number of non-calving right whales also migrate to the Southeast each winter. The prey of these whales is not present in these waters so they do not feed here, instead relying on energy stored in their thick blubber.

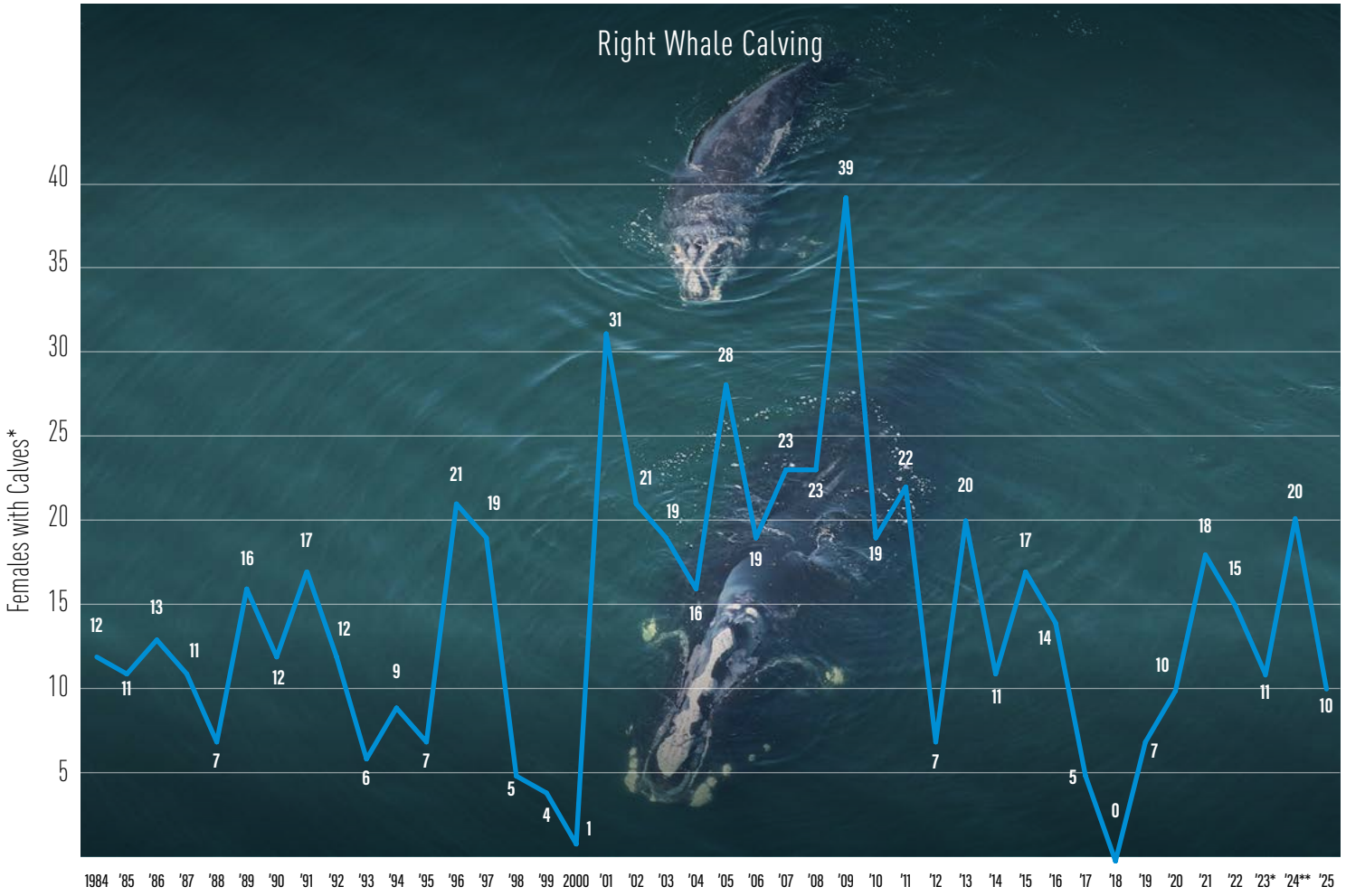
The North Atlantic right whale population increased by more than 40 percent during the 2000s, suggesting the species was starting to recover. However, in 2010 calving rates began declining in response to changes in zooplankton distribution in New England and Canada – changes apparently driven by warming ocean temperatures and associated shifts in ocean currents. At the same time, right whales began suffering unprecedented levels of death and injury. An estimated 133 whales died from 2010-2017. Necropsies attributed almost all of the mortalities to ship strikes and entanglement in commercial fishing gear. More than 80 percent of surviving whales bear scars from fishing rope entanglements. DNR works with entities from Canada to Florida on innovative, technological and data-driven management solutions to reduce harmful impacts from these human-caused interactions.

Another significant issue is that females are having fewer calves and are dying at faster rates than males, probably because of the added energy that calving demands. As a result of all of these factors, the species is not recovering and its future is uncertain. Data from the North Atlantic Right Whale Consortium placed the population at 336 whales as of 2020, down from a peak of 480 in 2011. The last time there were fewer whales was in 2001.

MAMMALS

The National Oceanic and Atmospheric Administration estimates that 50 calves are needed each year for the species to recover at the current high levels of mortality. That total is impossible given that interbirth intervals that historically were every three years are now 7-10 years and there are approximately 70 breeding females left. The same population models predict that the species could stabilize if vessel strikes and rope entanglement – the two leading threats – were curtailed sharply. Solutions to reducing vessel strikes are being pursued and implemented through public and private partnerships.

Right whale Cashew (No. 3292) belly up with her calf off Nassau Sound, Fla. (Clearwater Marine Aquarium Research Institute/NOAA permit 26919)



Right whale catalog No. 4540 and calf off Cumberland Island in February 2025 (Clearwater Marine Aquarium Research Institute/NOAA permit 26919)

This chart includes females with calves documented in and outside the southeastern U.S.

**A 12th newborn found dead was not seen with a mother. **1 calf died from a vessel strike in the southeast; 4 are presumed dead after their mothers died or were seen without them.*

DNR collaborates with scientists and managers from NOAA, the Florida Fish and Wildlife Conservation Commission, Clearwater Marine Aquarium Research Institute and other North Atlantic Right Whale Consortium members to conserve right whales in the southeastern U.S. Each December through March, aerial and boat surveys are conducted to monitor the presence of whales on the calving grounds. Biologists use modified crossbows to collect genetic samples from calves, as well as digital cameras and unmanned aircraft – commonly called drones – to photo-identify juvenile and adult whales by their callosity and scar patterns. Although biopsies are being used for a variety of environmental and health analyses, the primary purpose is for genetic testing to connect adults to calves biopsied in the Southeast, determine the sex of whales and assess when the animals reach their first reproductive age, or sexual maturity. These data are used to estimate population size, growth rates, survival, fecundity and mortality.

Due to confidence levels in the effort and quality of data collected in the Southeast, the population model began incorporating calving data into the population estimate in 2024, instead of waiting until calves could be reliably identified as juveniles or adults. DNR's Wildlife Conservation Section also documents entangled whales and removes the fishing rope when possible.

DNR management and policy activities focus on reducing human-related mortality and protecting right whale habitat. Wildlife Conservation staff serve on the Right Whale Recovery and the Atlantic Large Whale Take Reduction teams. Support also is provided by DNR's Coastal Resources and Law Enforcement divisions via education and outreach, policy efforts, and enforcement of federal right whale protections. Most funding for DNR right whale conservation efforts is provided by grants from NOAA.

Aerial survey teams and boat-based field teams in the Southeast calving grounds collaborate daily during the calving season. During the 2025 season, teams operating under DNR's federal permit documented 81 adult and juvenile North Atlantic right whales. The count included 31 females, 44 males and five whales of unknown sex. Ten calves were reported, with nine females seen with calves in the Southeast. (One female, right whale catalog number 4150 – nicknamed Accordion – was seen multiple times in the Southeast but was not spotted with a calf until she had returned to Cape Cod Bay in April.) Off the coast of Georgia, one adult female without a calf, four males and an adult whale of unknown sex were also documented.

For two females, Accordion and Caterpillar (No. 3503), the 2025 calves were their first. Both moms also were survivors of vessel strikes. Each is named after their scars from propeller wounds. These two mom-calf pairs, as well as the others, successfully migrated north and were seen in the foraging grounds during spring and summer 2025.

Marine Mammal Stranding Network

The Georgia Marine Mammal Stranding Network was created in 1989 to lead marine mammal stranding responses in the state. The Wildlife Conservation Section coordinates the Georgia network with permitting and funding from the National Oceanic and Atmospheric Administration for cetacean strandings and from the U.S. Fish and Wildlife Service for manatee strandings. Network goals include investigating human impacts on marine mammals, monitoring population health, providing rapid and humane response to live stranded marine mammals, contributing to marine mammal research, and educating the public about marine mammal conservation.

Since 2005, the network has documented an average of 34 stranded dolphins and whales per year. Bottlenose dolphins have been the most commonly stranded species, making up 80 percent of strandings, followed by pygmy and dwarf sperm whales (9 percent combined). Other species documented stranding in Georgia include Atlantic spotted dolphins, Atlantic white-sided dolphins, rough-toothed dolphins, Risso's dolphins, pygmy killer whales, false killer whales, short-finned pilot whales, humpback whales, North Atlantic right whales and multiple species of beaked whales.

Wildlife Conservation documented 34 marine mammal strandings on the Georgia coast in calendar year 2024. Those included 10 species representing five unique taxonomic families. As in the past, bottlenose dolphins were the most common species observed, accounting for 44 percent of strandings.

Three species had not been recorded stranding before in Georgia: common minke whale, Clymene dolphin and melon-headed whale. Similarly, a stranded striped dolphin was the first recorded in the state since 1998. Other stranded species in 2024 included humpback whale, Atlantic spotted dolphin, North Atlantic right whale, pygmy sperm whale and Florida manatee. The species of one stranding could not be identified: It was listed as the genus kogia.

The most notable stranding in 2024 was the calf of right whale Juno (No. 1612). The calf died from injuries sustained in a vessel strike. After being seen unharmed in December 2023, the calf was reported with injuries in South Carolina waters on Jan. 3, 2024. DNR saw the calf alive in late February, yet on March 3 it was found stranded dead on Cumberland Island. Genetic analysis revealed the calf was a female. The skull was recovered and plans are to make it available for outreach and education. More details on the case are available at the NOAA website tracking an ongoing Unusual Mortality Event for right whales.

Concurrent to the injury of Juno's calf, the commercial vessel Romandie reported a dead juvenile right whale floating near the Savannah shipping channel on Feb. 13, 2024. DNR's contracted aerial survey team from the Clearwater Marine Aquarium Research Institute relocated the whale and helped guide a DNR vessel team, which towed the carcass to shore for examination. The animal was identified as the 2023 calf of right whale No. 4340, last seen by Blue World Research Institute 10 days alive and uninjured earlier near Cape Canaveral, Fla. The necropsy of the carcass on Tybee Island was a multi-agency effort supported by Tybee Public Works and Georgia Marine Mammal Stranding Network members, including the Tybee Marine Science Center and Savannah State University Dolphin Sciences Lab.

The public is encouraged to report stranded marine mammals in Georgia by contacting DNR at 800-2-SAVE-ME (800-272-8363).

Florida Manatees

Florida manatees inhabit tidal rivers, estuaries and near-shore ocean waters throughout coastal Georgia during the warm months of the year. The Florida manatee population numbers fewer than 8,000, with about half of the population found along Florida's Gulf Coast and the remainder along the Atlantic Coast and the St. Johns River. Each spring and summer an unknown and variable number of manatees migrate into Georgia, returning to Florida in fall as water temperatures cool.

Formerly listed as endangered under the Endangered Species Act, manatees were downlisted in 2017 to threatened thanks to sustained population growth throughout their U.S. range. But a die-off, classified as an unusual mortality event, along Florida's Atlantic Coast from 2020-2024 has threatened that recovery. A collapse in seagrass resources in Brevard and nearby Florida counties led to 1,255 manatees dying from a combination of starvation and cold stress during the winters of 2020-2022.

Ongoing satellite tagging and photo-ID research conducted by DNR's Wildlife Conservation Section and partners shows that most of Georgia's manatees overwinter in the same areas affected by the seagrass collapse. Analysis of data collected before and during the unusual mortality event continues. DNR staff and partners hope these data will provide insights into manatee habitat use, supporting effective management tools to help the population recover. Wildlife Conservation works with the Florida Fish and Wildlife Conservation, the U.S. Fish and Wildlife Service and others to monitor manatees.

Manatee management in Georgia focuses on reducing human-related mortality and protecting habitat. Recovery tasks include documenting causes of mortality and injury, rescuing injured and out-of-habitat manatees, monitoring their distribution and habitat use, educating boaters about watercraft impacts, and reviewing permits and policies that might affect manatees and their habitat.

Wildlife Conservation have documented an average of five manatee deaths a year in Georgia waters since 2005, ranging from two to 11 carcasses annually. The leading causes of death are watercraft collisions (27 percent) and cold stress/hypothermia (16 percent). Less common causes include drowning in commercial fishing gear, entrapment and even gunshot, as with one case in 2005. Four manatee carcasses were found in Georgia during calendar year 2024. Two had injuries pointing to trauma from a boat strike as the probable cause of death. One examined on Little Cumberland Island on Dec. 24, 2024, died from cold stress. Earlier that month, the animal had been seen at a warm-water outfall in South Carolina.

Small Mammals

Bats

The Wildlife Conservation Section is continuing to work with the U.S. Fish and Wildlife Service and the Georgia Department of Transportation to conduct statewide surveys of transportation structures for bats. Environmental surveys done by DOT ecologists and consultants for DOT maintenance and improvement projects provide most of the data collected on bats' use of transportation structures in the state. These data are tracked through the Georgia Bats in Bridges Survey123 application. The database, hosted through Esri's ArcGIS Online, is easily shared with partner agencies for coordination on DOT or research projects.

As of the close of fiscal year 2025, over 3,900 bat surveys of transportation structures had been done, including more than 500 surveys in 2025. In addition to managing survey documentation, Wildlife Conservation staff visited bridges and culverts with DOT to assess the status of bat colonies, confirm species identification and help in project planning.

Every year, Wildlife Conservation holds field training for DOT and consultant ecologists, as well as other government agency staff, focused on techniques for surveying transportation structures. Since 2019, nearly 300 people have attended. The agency held three courses in April and May 2025, training 55 people. Staff added an optional emergence count in which participants helped count bats as the animals left their roost on a bridge.

Colony of big brown bats under a bridge (Sam Holst/DNR)

The training ensures more effective surveys and is highly valued by partners. It also provides an avenue for agencies' staff, ecologists and consultants to work with Wildlife Conservation in addressing problems and brainstorming solutions to streamline surveys targeting the large number of transportation improvement projects in the works in the U.S. Partners across the country are using the Bats and Transportation Structures tools developed by Wildlife Conservation. These aids include the Survey123 application, training materials and a relatively new bat programmatic agreement.

In 2024, Georgia DOT and DNR signed a bat conservation funding agreement. This agreement complements a programmatic consultation agreement developed with DOT, the U.S. Fish and Wildlife Service, the Federal Highway Administration, and the U.S. Army Corps of Engineers to streamline consultation for transportation projects required under the Endangered Species Act. Both agreements are considered firsts in the U.S. in their joint approach to conserving bats and bat habitat. The funding pact allows the transfer of funding from DOT to DNR to protect high-quality bat habitat, offsetting the loss of forested habitats along transportation rights of ways. This document was made possible by agency staff collaborating to conserve native Georgia wildlife and support critical transportation improvements. In fiscal 2025, DNR acquired the first tracts using these funds (also see: Land Acquisitions and Conservation Easements).

Wildlife Conservation also continued coordination of the statewide Anabat surveys. Project volunteers drove 16 DNR mobile acoustic routes and seven North American Bat Monitoring Program route transects across the state to collect bat calls. DNR and U.S. Forest Service partners drove another 16 routes. Most (detailed at georgiawildlife.com/AnabatProject) were run once or twice. Staff used software to analyze acoustic survey calls collected in calendar year 2024 and supplied the data to the North American Bat Monitoring Program to feed into rangewide monitoring for at-risk species.

Through additional analysis, biologists can determine most bat species and their numbers per route. The routes have been run over multiple years to build a long-term set of call data. That data will help determine bat population trends in the state. Understanding changes in populations as white-nose syndrome – a disease deadly to bats – spreads and measuring the magnitude of declines to assess the impacts of white-nose are crucial for informing management decisions.

In fiscal 2025, staff also deployed three long-term acoustic detectors in Georgia. The goal is to document bat activity year-round, leading to a better understanding of the trends of migratory species. Preliminary data have already helped biologists determine when to target certain migratory bats on the coast in fall.

A citizen-science program started in 2014 to monitor summer bat maternity roosts in the state continued in 2025. This outreach encourages the public to count bats at bat houses, barns and other roosts twice each summer. The effort mirrors programs in Pennsylvania and Wisconsin and allows the public to contribute to long-term monitoring of wildlife populations. Thirty-five surveys totaling nearly 2,000 bats were reported through an online survey. Wildlife Conservation also connected with volunteers who completed project counts on public lands. Information and annual reports can be found at georgiawildlife.com/bat-roost-monitoring.

As of winter 2025, Wildlife Conservation had confirmed white-nose syndrome in 15 north Georgia counties and detected Pseudogymnoascus destructans, or Pd, the causative agent for the disease, in eight more counties. Biologists have documented an 87 percent decline in bat populations at known hibernacula in north Georgia. White-nose, or WNS, has killed millions of bats in North America. According to the Fish and Wildlife Service, at the close of fiscal 2025 the disease had been documented in 40 states and nine Canadian provinces. Wildlife Conservation monitors sites in winter to document the spread of WNS and track mortality rates. Staff also expanded monitoring to south Georgia. During surveys, bats are swabbed to check for Pd. No new counties tested positive for Pd this winter.

Setting up mist nets on a coastal pond to survey bats (Trina Morris/DNR)

Staff surveyed four caves and checked culvert sites considered significant hibernacula for state-tracked species such as tricolored bat and southeastern myotis. One culvert in Carroll County had 217 tricolored bats. Staff swabbed bats and substrates to compare Pd fungal loads to samples taken in previous years. Continued monitoring is important both for conservation decisions and DOT project consultation.

In December 2024, Wildlife Conservation hosted a "culvert blitz" with the Georgia Bat Working Group, a partnership of private and non-private organizations working to ensure the health of the state's bat populations. The event at the U.S. Army's Fort Benning near Columbus drew over 40 people, including biologists, managers, professors and students. The blitz focused on surveying and documenting bats using culverts at Fort Benning, providing biologists there a clearer understanding of winter bat populations on the base. In one afternoon, the group surveyed 37 culverts, documenting 75 bats and three species – big brown, southeastern myotis and tricolored.

Wildlife Conservation also continued working with the public and the caving community to promote awareness of WNS and support for bat conservation. Staff conducted over 20 bat education and outreach programs statewide in fiscal 2025. Those audiences varied from students and master gardeners to volunteer groups and visitors at state parks and nature centers.

In a project focused on bats and birds, the agency partnered with the American Bird Conservancy to increase the Motus station network in Georgia. The Motus Wildlife Tracking System uses automated radiotelemetry to track the movements of migratory species like birds, bats and insects through a network of stations. An agreement with the Georgia Forestry Commission allowed staff to build stations on existing fire towers across the state, creating a detection "fence" that will record any tagged individuals that migrate near a tower. To date, 15 Motus stations have been installed and three towers have been upgraded. This network will provide biologists a better understanding of migration routes used by bats and other species across Georgia. More information, including maps and detection records, can be found at motus.org.

Appalachian Cottontails

In spring 2025, Wildlife Conservation Section staff joined Forest Service biologists to trap for Appalachian cottontails in the Chattahoochee National Forest. The Appalachian cottontail is a species of greatest conservation need in the Southeast. These rabbits live in high elevations and are considered rare because of habitat loss, disease and competition with the more common eastern cottontail.

Trapping was done over three nights and totaled 116 trap nights. Although weather conditions were not ideal with rain and a dusting of snow, biologists caught one rabbit on the final trap night. DNA samples confirmed it was an Appalachian cottontail, adding a new record. Efforts to document Appalachian cottontail populations and their abundance will continue in fiscal year 2026.

Red Squirrels

The Wildlife Conservation Section expanded survey efforts for red squirrels in Georgia through a collaboration with the U.S. Forest Service and the University of West Georgia. Together, staff and partners developed and distributed ¨Have You Seen Me?¨ posters aimed at raising public awareness and encouraging public reports of red squirrel sightings through a new iNaturalist page. The posters were placed this year at Forest Service and state park kiosks and added to a new DNR Wildlife Resources Division webpage on reporting species sightings. The outreach effort is aimed at enhancing data collection and bolstering the understanding of red squirrel distribution in the state.

Camera Traps and Collaboration

Also in spring 2025, Wildlife Conservation Section staff used the Adapted Hunt Drift Fence Technique to begin surveying for cryptic small mammals in the Chattahoochee National Forest. This method uses a standard drift fence with a camera trap at each end. The array allows biologists to survey small mammals with less effort and without harming or having to handle any animals. Wildlife Conservation has three arrays deployed, and biologists check the cameras monthly.

Various Georgia State Wildlife Action Plan species were documented in fiscal 2025 using the system, including Appalachian woodrats, long-tailed weasels and a number of shrew species. The list of non-Wildlife Action Plan animals recorded varied from timber rattlesnakes and skinks to salamanders, eastern cottontails and many mice species.

Staff worked, as well, to update the mammal segments of Georgia's Wildlife Action Plan and continue growing the Georgia Small Mammal Working Group. The latter, made up of researchers and students, will help Wildlife Conservation with planning and conducting monitoring statewide for small mammals that aren't bats but are listed as species of greatest conservation need in the plan. The success of the Georgia Bat Working Group prompted the creation of this counterpart effort.

DNR's Sam Holst with the lone Appalachian cottontail caught in spring 2025 (DNR)

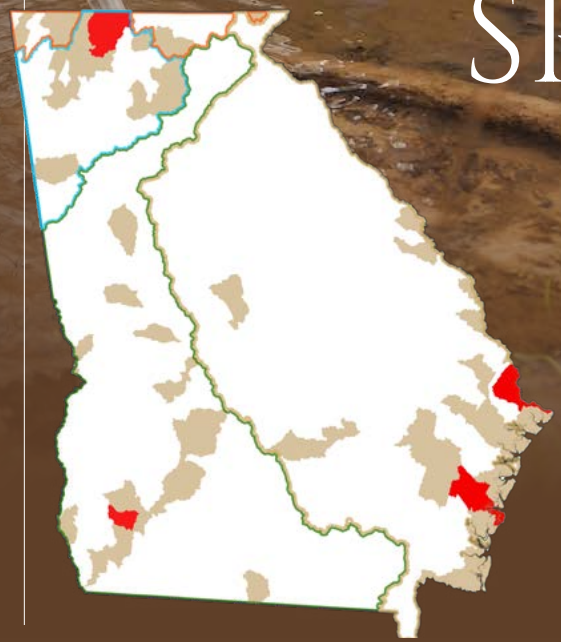
FRESHWATER SPECIES

The southeastern U.S. is a recognized hotspot globally for freshwater biological diversity and one of the temperate world's richest areas for crayfishes, fishes, mussels, snails and other aquatic groups. Georgia exemplifies this pattern, ranking among the top four states nationwide in native species of mussels (130), fishes (267), crayfishes (73) and aquatic snails (84).

Unfortunately, Georgia is also among the top states in imperiled freshwater species. The state's 2025 State Wildlife Action Plan recognizes 244 freshwater species of greatest conservation need, with over half of them ranked as highest or high conservation concern and at risk from being lost in the state without dedicated conservation efforts. The remaining species are categorized as moderate conservation concern or as data deficient, emphasizing the importance of working to conserve them now. Data from long-term monitoring and surveys will help assess their status. By group, approximately 25 percent of Georgia's freshwater fishes, 31 percent of mollusks and 29 percent of crayfishes are rated as imperiled or critically imperiled in the state. Yet even these numbers understate the problem because they don't include dozens of species, most of them mollusks, considered historic or extirpated from Georgia.

Important populations of rare aquatic species are distributed throughout the state. However, certain areas support exceptional numbers and are listed as high-priority watersheds in the State Wildlife Action Plan. Priority watersheds span the entire state, from the Conasauga and Toccoa rivers in north Georgia to Spring Creek in southwest Georgia and large rivers along the coast that support freshwater and marine species. As part of the Wildlife Action Plan, experts prioritized watersheds based on the number of freshwater, marine and wetland species of greatest conservation need documented within their boundaries and the conservation priority level of each species.

The map at right shows Georgia's river drainages and the highest priority watersheds within each according to the State Wildlife Action Plan. (Visit the plan's priority watershed viewer for information on all priority watersheds in the state.)



River Basins and Priority Watersheds

River Basins

- Atlantic Slope
- Coosa-Tallapoosa
- Gulf Coast
- Tennessee

Priority Watersheds

- Highest
- High

DNR staff and partners sample for eDNA from trispot darters (Alan Cressler)

Joining with partners around the state, the Wildlife Conservation Section coordinates and carries out work to monitor and conserve Georgia's freshwater diversity. The effort, started with a single biologist covering the state in 1998, features a team of biologists, technicians and seasonal staff focused on priority watersheds and species identified in the Wildlife Action Plan. Formally organized into the section's Freshwater Biodiversity Program in 2021, the team conducts surveys and long-term monitoring projects, participates in collaborative conservation partnerships and promotes freshwater species conservation through educational outreach and environmental review. In fiscal year 2024, DNR's Stream Survey Team joined with Wildlife Conservation, expanding the Freshwater Biodiversity Program. Projects and other highlights are explored in the regional summaries that follow.

Data from surveys and monitoring, including data submitted through the agency's scientific collecting permit program, are entered into the NatureServe Biotics database, a national inventory of rare species. Partnerships also are maintained with the Georgia Museum of Natural History, increasing the amount of data available for environmental review and conservation planning. Range maps, photographs and species profiles are available to the public on the Georgia Biodiversity Data Portal (georgiabiodiversity.org).

Coosa-Tallapoosa River Drainage

The Wildlife Conservation Section continued work with the University of Georgia's River Basin Center in fiscal year 2025 to monitor fishes and mussels annually in Holly Creek, a major tributary to the Conasauga River. Nine sites were surveyed, detecting rare fish and mussel species such as blue shiner, trispot darter, bridled darter, finelined pocketbook, southern pocketbook, Alabama creekmussel, Coosa creekshell, Etowah heelsplitter and Alabama rainbow.

The yearly surveys complement a larger suite of conservation actions implemented in the Holly Creek watershed by partners, including The Nature Conservancy, River Basin Center, Limestone Valley Resource Conservation and Development Council, and the U.S. Fish and Wildlife Service. The work is supported by a grant from the National Fish and Wildlife Foundation's Southeast Aquatics Fund, with additional funding from Fish and Wildlife and the U.S. Forest Service.

Wildlife Conservation also contracts with UGA for long-term monitoring of fish in the Etowah and Conasauga rivers. These river systems are among the most diverse and imperiled in the southeastern U.S. Monitoring has been ongoing since 1998. Information from these studies is important for conservation planning, species status assessments and documenting relationships between fish populations and environmental stressors. A video highlighting mussel conservation in the Coosa basin, using the Coosa moccasinshell as an example, was produced as part of the project and is available for viewing on the DNR Wildlife Resources Division's YouTube channel.

Staff coordinated with the Tennessee Wildlife Resources Agency and the Alabama Aquatic Biodiversity Center to design a project aimed at addressing recovery objectives for the Coosa moccasinshell. Partners from each agency searched for brood stock in the Tennessee portion of the Conasauga and in February 2025 collected females holding larvae. These mussels were taken to the Alabama Aquatic Biodiversity Center near Marion, Alabama, where the larvae transformed into juveniles on the gills of bronze darters. (Parasitism on fish is a necessary stage of a freshwater mussel's life cycle, adding an extra layer of complexity for propagating these rare animals.) The juveniles propagated in 2024 are the third-year class for the project, which began in 2021. The center also raised groups from fiscal 2021 and 2022.

Trispot darter (Doug Strickland/Tennessee Aquarium)

Wildlife Conservation's Freshwater Biodiversity Program, along with partners from The Nature Conservancy and the Limestone Valley Resource Conservation and Development Council, was awarded an America the Beautiful Challenge Grant in fiscal 2024 for work focused on the federally threatened trispot darter. This small fish makes a winter migratory spawning run into small channels filled with seasonal groundwater. The program and partners have been collecting environmental DNA samples from 14 sites through Mill Creek in December and January, and they have started ground-truthing the results through fish sampling by backpack electroshocking. Fin clips for DNA analysis were taken from 20 trispots captured and released in fiscal 2025. Habitat data and water quality are also monitored at the sites to document any seasonal changes within the estimated spawning season (January-March).

Habitat fragmentation from impassable road crossings poses a significant threat to this species. The project is aimed at helping recover trispot darters by removing barriers to reconnect spawning habitats. Program staff and partners trained interns from Dalton State College and the University of North Georgia to assess road-stream crossings using the Southeastern Aquatic Resource Partnership's barrier assessment protocol. In fiscal 2025, assessments included four high priority watersheds: Coahulla Creek, which includes Mill Creek (322 sites); the lower Coosawattee (221 sites); Salacoa Creek (237 sites); and Pine Log Creek (249 sites). Data gathered from the culvert assessments are being used to target removing barriers that offer the most positive long-term impact on fish passage and hydrology.

Wildlife Conservation also joined a project led by the Fish and Wildlife Service and the Tennessee Aquarium Conservation Institute to conduct occupancy sampling in potential breeding habitats. Survey teams sampled 33 sites twice each, detecting trispot darters at four sites. Plans are to continue sampling in fiscal 2026.

Interns check a culvert in the Coosa basin (Kaylee Clayton Blackburn/DNR)

Tennessee River Drainage

Despite its large size and unique dorsal fin shape, the sicklefin redhorse was not recognized as a distinct species until 1991. The fish has a limited range in the Little Tennessee and Hiwassee River systems in North Carolina and Georgia. The only Georgia population occurs in Brasstown Creek, yet this population is considered critical for conserving the species. Throughout the year, sicklefin redhorse use a variety of habitats in large creeks and rivers, varying from overwintering in pools and runs near Hiwassee Reservoir in North Carolina to spawning in the rocky upper reaches of Brasstown Creek in Georgia.

In 2016, DNR entered into a Candidate Conservation Agreement for sicklefin redhorse with the U.S. Fish and Wildlife Service, North Carolina Wildlife Resources Commission, Duke Energy, Tennessee Valley Authority, and the Eastern Band of Cherokee Indians. (The Cherokee valued sicklefin redhorse as a food source long before modern ichthyologists recognized it as a species. The Cherokee name for the species is ᎤᏃᏁᏟ, pronounced *U-gi-dátli* and translated as "it has a feather.") Through the agreement, partners cooperate on actions that conserve, manage and improve sicklefin redhorse populations, with the goal of precluding the need to list the species under the Endangered Species Act. Based in part on this effort, the Fish and Wildlife Service decided in 2016 that listing sicklefin redhorse was not warranted. 2025 saw the publication of the sicklefin redhorse's formal description and official scientific name of *Moxostoma ugidatli*.

The spawning population in Brasstown Creek has been monitored annually since 2014. Seines and fyke nets, which use side nets to funnel migrating fish into a central chamber (watch), are used to collect sicklefin redhorse during their spring migration. The fish are weighed, measured, their health and reproductive condition assessed, and then released in their direction of travel. All are also injected with a passive integrated transponder (PIT) tag, which is used to track fish when they are recaptured or detected swimming over a PIT antenna system in Brasstown Creek near the North Carolina border. The system consists of a loop of wire buried in stream gravel and connected to a tag reader on the bank.

DNR and TVA staff seine net Brasstown Creek for sicklefin redhorse (TVA)

As of June 2025, the study has tagged 428 adult sicklefin redhorse in Brasstown Creek. The Georgia Cooperative Wildlife Research Unit uses data to estimate annual survival, recruitment and population size. The current model estimates that sicklefin redhorse exhibit high annual survival in the stream, with hundreds of adults migrating to upper Brasstown Creek each year.

2025 proved a challenging year with high rainfall and water levels. Crews captured and released only 15 adult sicklefin redhorse. The PIT antenna system detected 95 different sicklefin redhorse swimming over the antenna from April 9-June 11.

Atlantic Slope Drainage

Like sicklefin redhorse, the robust redhorse is managed through a cooperative agreement between state agencies, hydropower companies and stakeholders. The Robust Redhorse Conservation Committee has directed research and recovery work since the early 1990s. Those efforts include rearing and stocking, monitoring, enhancing spawning habitat, and research. Despite the continued efforts, the robust redhorse remains an at-risk species.

A determination by the U.S. Fish and Wildlife Service on whether to list robust redhorse under the Endangered Species Act was expected in late 2024 but has – as of the completion of this report – yet to be announced. Wildlife Conservation Section staff helped the Fish and Wildlife Service in developing the Species Status Assessment in fiscal year 2024. The risk assessment is used to inform policy decisions under the act. In fiscal 2025, Wildlife Conservation continued working with partners to meet objectives outlined by the Robust Redhorse Conservation Committee and the Robust Redhorse Competitive State Wildlife Grant. As the resource agency tasked with monitoring and management, Wildlife Conservation provides critical data and knowledge through research and partnerships.

In Georgia, the robust redhorse is known to occur in the Altamaha, Ocmulgee, Oconee, Ogeechee, Broad and Savannah rivers. Adults overwinter in the lower sections of rivers and migrate upstream to spawn in shoal and gravel-bar habitat. Weighing almost 20 pounds and known to live nearly 30 years, the robust redhorse is the largest and longest-lived sucker in the Southeast.

In 2025, partners continued conducting a life history study of the robust redhorse's Savannah population. Section staff created a movement graphic using telemetry data collected from the 26 acoustic transmitters deployed in 2024. Acoustic transmitters emit sonic pings that can be detected by receiver arrays stretching from the estuary to Augusta Shoals, the known range of the robust redhorse's Savannah population. A review of this data revealed a detection by a receiver above the New Savannah Bluff Lock and Dam. Yet all acoustic tags had been deployed in the free-flowing section below this barrier. It was inferred, however, that fish could potentially bypass this structure at flood stage.

After a 20-year data gap, section staff decided to return to Augusta Shoals to conduct surveys. From May 28-29, six robust redhorse were observed, three of which were captured, confirming the persistence of populations above the dam. The findings of this life history study provide insight into the efficacy of a pending fish passage at New Savannah Bluff Lock and Dam and further highlight areas of the river to prioritize for conservation.

As part of the collaborative robust redhorse conservation effort, Wildlife Conservation is tasked with developing an estimate of the Altamaha, Ocmulgee, Oconee and Broad River populations. In 2025, Wildlife Conservation staff continued collecting data using electrofishing to conduct a capture-mark-recapture study. In the Broad River, 28 fish were captured, 18 of which were recaptures. Four robust redhorse collected in 2025 measured less than 530 millimeters, or about 21 inches, long, potentially indicating that some level of natural recruitment may be occurring in the system. In the Ocmulgee River, 10 robust redhorse were captured in 2025, five of them for the first time. Though four surveys were conducted in the Oconee River, no robust redhorse were observed.

The data collected in fiscal 2025 will prove vital in developing population estimates for these basins and provide the Robust Redhorse

Young robust redhorse (Percy Knight/DNR)

Committee the necessary insight to make effective management decisions. In 2026, Wildlife Conservation staff will begin working with partners to develop population models to help fulfill agency objectives.

In addition to robust redhorse, the Altamaha River basin is also well-known for its diversity of freshwater mussel species, including endemic forms such as the federally endangered Altamaha spinymussel. In 2017, DNR entered into a Candidate Conservation Agreement with Georgia Power and the Fish and Wildlife Service for the basin's freshwater mollusks. The purpose: Implement conservation actions for mussels and snails occurring within or near Georgia Power's project areas in the Oconee, Ocmulgee and Altamaha rivers. The agreement provides a mechanism for funding critical surveys, monitoring and research, and will be a major focus of Wildlife Conservation mussel biologists for years.

In fiscal 2025, staff conducted surveys in the Altamaha basin to identify the distribution and abundance of four freshwater mussel species that could be federally listed. Parts of the Altamaha River and Lake Juliette were surveyed at different depths by snorkeling and scuba. Species distribution and demographic data were collected. This effort marked the second year of repeat sampling at one of the survey sites. In all, 45 sites were sampled in the Altamaha basin; 21 were resampled sites on Lake Juliette.

While only paper pondshell mussels were detected in Juliette in 2020, four species of mussels were identified this year. The age of the mussels indicates that they were present during the past surveys, but low densities made detection difficult. Twenty-four additional sites were sampled in the Ocmulgee River between Juliette Dam and the confluence with the Oconee River. In all, over 1,200 mussels were collected. These included eight rare Altamaha arcmussels and a number of Savannah lilliput mussels collected for a host trial study at the University of Georgia, which will be conducted in fiscal year 2026.

Wildlife Conservation also managed contracted research involving federally endangered shortnose and Atlantic sturgeon. The work is done by researchers at UGA's Warnell School of Forestry and Natural Resources and funded by the National Marine Fisheries Service. The current project focuses on monitoring juvenile recruitment of sturgeon in the lower Altamaha and estimating the number of adult Atlantic sturgeon migrating into Altamaha tributaries – the Oconee and Ocmulgee rivers – for spawning. The Altamaha and Savannah River populations of both species are among the largest known within their ranges and significant for the species' recovery.

Gulf Coast Drainage

The Gulf Coast drainages of the Southeast also contain some of the most diverse and unique freshwater mussel faunas in the world. In Georgia, the Apalachicola-Chattahoochee-Flint system and the headwaters of the Ochlockonee and Suwannee rivers are rich areas for mussel diversity. For example, the Apalachicola-Chattahoochee-Flint drains a large portion of western Georgia, crossing the Piedmont and Coastal Plain physiographic provinces. This system is home to 33 species of mussels, five of them endemic to the basin.

The Wildlife Conservation Section has been monitoring important populations of freshwater mussels in southwest Georgia since the early 2000s. These populations face significant threats from low stream flows associated with extreme droughts and agricultural water withdrawals. In fiscal year 2025, biologists completed surveys of all five long-term monitoring sites in the lower Flint River and observed how prevailing conditions affected mussel assemblages.

Populations in several of the streams continued a positive trend first documented in 2020, with high numbers of federally listed mussels and strong evidence of recruitment. The assumption is the increase resulted from several years without a significant drought.

Snorkeling Chokee Creek in the lower Flint River drainage for a mark/recapture mussel survey (DNR)

The five sites continue to provide habitat for common and rare species and remain a priority for monitoring and conservation. Over 4,500 mussels were collected in the annual surveys, and more than 1,200 were tagged for long-term monitoring.

Three sites in the lower Flint River also were sampled between Newton and Cheehaw Dam to determine the extent of fat threeridge mussels in the Flint. While none of the mussels were detected in these few surveys, the effort is scheduled to continue in fiscal 2026.

This year, a staff biologist taught the annual Apalachicola-Chattahoochee-Flint Freshwater Mussel Identification Workshop at The Jones Center at Ichauway near Newton. The three-day classroom and field workshop is attended by students, state and federal natural resources agency staff, and private sector consultants to learn about freshwater mussel natural history, conservation, biology and identification in the basin. Staff also provided technical support for the Georgia Flow Incentive Trust. This stakeholder-led group is implementing creative strategies to minimize the impact of future droughts on stream flows and mussel populations in the lower Flint River Basin.

Wildlife Conservation biologists took part in the second year of the new Lower Flint River Mussel Habitat Conservation Plan planning group, with a primary goal of developing a habitat conservation plan for conserving freshwater mussel populations while also ensuring adequate water supply for agriculture. The draft plan was submitted to the U.S. Fish and Wildlife Service for review in April 2025. Edits and revisions were still being done by the close of the fiscal year. In addition to the substantial amount of work in the development of the plan draft, long-term monitoring data about the mussels was compiled and submitted to the University of Georgia's River Basin Center to develop a new population model that will be used to help guide planning.

Tagged shinyrayed pocketbook mussle displaying its lure to attract host fish (DNR)

Stream Survey Team

As noted, in fiscal year 2024 the Stream Survey Team was moved to the Wildlife Conservation Section, expanding the Freshwater Biodiversity Program. The Stream Team monitors the health of Georgia's wadeable streams – those shallow enough to be adequately sampled without a boat. Data are used by DNR's Environmental Protection Division to complete pollutant standards (called total maximum daily loadings) for assessing water quality in streams and lakes.

Yet the Stream Team's work ranges even further. Staff help EPD with federal Environmental Protection Agency's National Rivers and Streams Assessment surveys throughout the state. The team also conducts native black bass surveys to identify essential habitats and assess the status of native black bass throughout their ranges. Results have expanded what's known about each species by filling information gaps and providing the background needed to make informed conservation and management decisions. Genetics is used as a molecular tool to document the genetic integrity of the fragmented populations and understand where the threat of hybridization with invasive Alabama bass occurs.

The Stream Team supports statewide aquatic nuisance species surveys, while providing help with other projects as needed. Staff also conduct outreach, organizing and working events each year focused on children and young adults.

Since its creation, the Stream Team has conducted 1,854 aquatic community surveys at 1,570 sites across the state and developed the Georgia Fish Index of Biotic Integrity for four of Georgia's five primary ecoregions. This index allows relevant and consistent evaluation of stream health while providing a much-needed database of fish distribution records. Staff have also conducted 423 black bass genetic surveys since 2016 and have assisted with National Rivers and Streams Assessment sampling since 2008.

In fiscal year 2025, the team conducted 52 black bass surveys and 31 biotic integrity samples across the upper Coosa River basin. River and stream assessments were completed at 19 sites that could be sampled by boat. Twenty aquatic nuisance species surveys were completed, 10 in metro Atlanta and 10 near Savannah. Invasive red shiners were found at three sites.

Stream Team members helped with other Wildlife Conservation projects, as well as with partners. These included surveys and sampling for trispot darters, sicklefin redhorse, robust redhorse, invasive mystery snails and eastern hellbenders. Nongame fishes were collected for educational displays at the Go Fish Education Center in Perry. The Stream Team collaborated with the U.S. Army Corp of Engineers in resampling a Flat Creek restoration site, and worked with Hutton Scholars of the American Fisheries Society, teaching future fisheries professionals about seining and shocking techniques while showing off some of Georgia's native fishes.

Staff joined the South Carolina Department of Natural Resources and DNR's Region 2 Fisheries Management Section near the North Carolina/South Carolina state line to sample the Chattooga River in the wilderness area near Burrell's Ford. The annual sampling is a partnership between the state agencies, the U.S. Forest Service and Trout Unlimited. Many volunteers assist, too. For two decades, one of three Chattooga River sections has been sampled each year to assess the fish community.

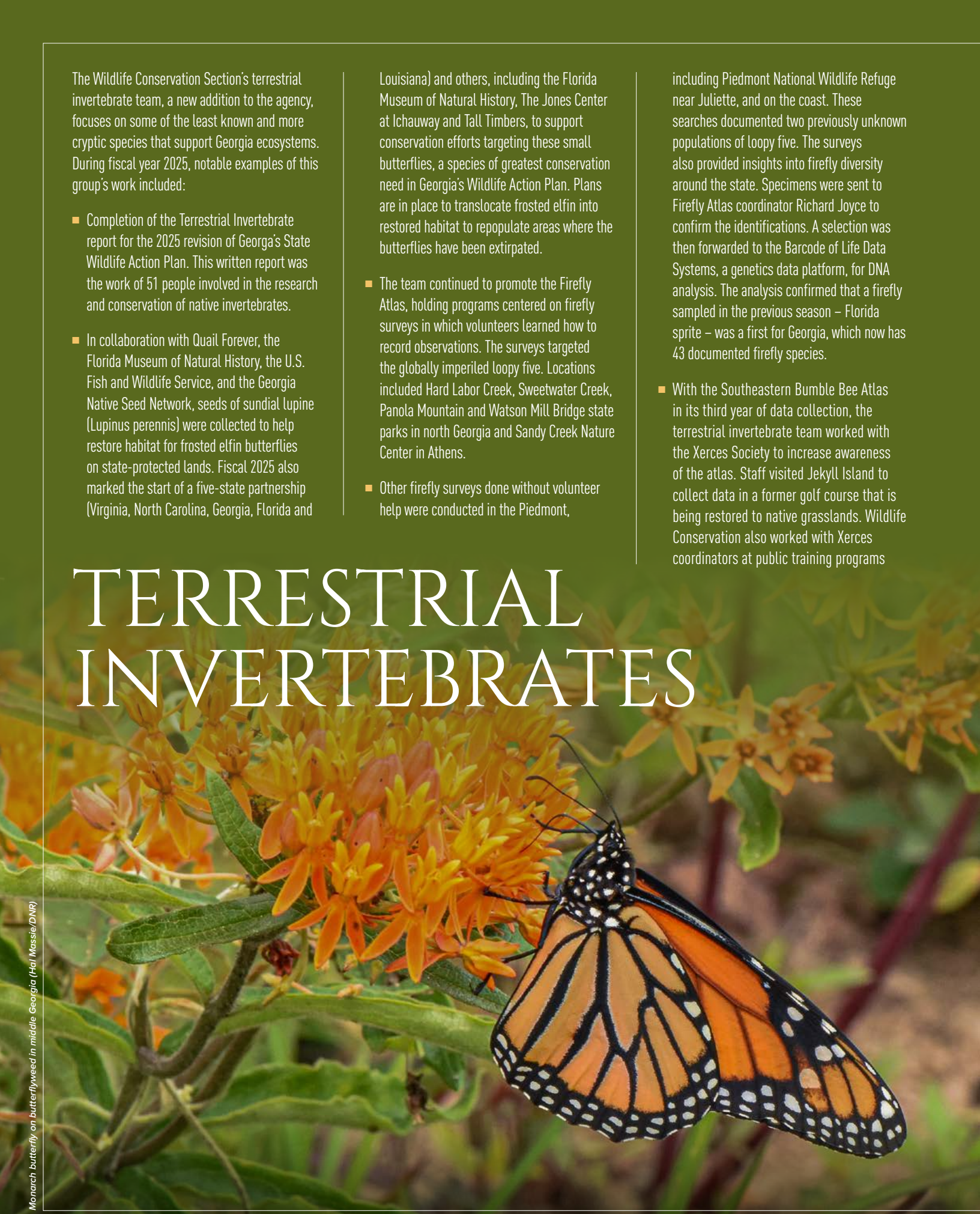
Also in 2025, the Stream Team worked with multiple universities, helping with outdoor labs, discussing careers in natural resources and taking part in genetic research. For example, staff taught Oglethorpe University students about backpack electrofishing and the importance of native stream fishes and Oxford College students about stream fish sampling methods and the significance and use of biotic integrity indexes. The team also helped with field components of the University of Georgia's Maymester ichthyology course and collected weather loaches for Mississippi State University, which is analyzing genetics to gain insight into the invasion of this non-native species in Georgia.

DNR's Jess Rath shows Hutton Junior Fisheries Biology Program scholars a mosquitofish (Peter Turcik/AFS)

TERRESTRIAL INVERTEBRATES

The Wildlife Conservation Section's terrestrial invertebrate team, a new addition to the agency, focuses on some of the least known and more cryptic species that support Georgia ecosystems. During fiscal year 2025, notable examples of this group's work included:

- Completion of the Terrestrial Invertebrate report for the 2025 revision of Georga's State Wildlife Action Plan. This written report was the work of 51 people involved in the research and conservation of native invertebrates.
- In collaboration with Quail Forever, the Florida Museum of Natural History, the U.S. Fish and Wildlife Service, and the Georgia Native Seed Network, seeds of sundial lupine (Lupinus perennis) were collected to help restore habitat for frosted elfin butterflies on state-protected lands. Fiscal 2025 also marked the start of a five-state partnership (Virginia, North Carolina, Georgia, Florida and Louisiana) and others, including the Florida Museum of Natural History, The Jones Center at Ichauway and Tall Timbers, to support conservation efforts targeting these small butterflies, a species of greatest conservation need in Georgia's Wildlife Action Plan. Plans are in place to translocate frosted elfin into restored habitat to repopulate areas where the butterflies have been extirpated.
- The team continued to promote the Firefly Atlas, holding programs centered on firefly surveys in which volunteers learned how to record observations. The surveys targeted the globally imperiled loopy five. Locations included Hard Labor Creek, Sweetwater Creek, Panola Mountain and Watson Mill Bridge state parks in north Georgia and Sandy Creek Nature Center in Athens.
- Other firefly surveys done without volunteer help were conducted in the Piedmont, including Piedmont National Wildlife Refuge near Juliette, and on the coast. These searches documented two previously unknown populations of loopy five. The surveys also provided insights into firefly diversity around the state. Specimens were sent to Firefly Atlas coordinator Richard Joyce to confirm the identifications. A selection was then forwarded to the Barcode of Life Data Systems, a genetics data platform, for DNA analysis. The analysis confirmed that a firefly sampled in the previous season – Florida sprite – was a first for Georgia, which now has 43 documented firefly species.
- With the Southeastern Bumble Bee Atlas in its third year of data collection, the terrestrial invertebrate team worked with the Xerces Society to increase awareness of the atlas. Staff visited Jekyll Island to collect data in a former golf course that is being restored to native grasslands. Wildlife Conservation also worked with Xerces coordinators at public training programs



Monarch butterfly on butterflyweed in middle Georgia (Hal Massie/DNR)

DNR's Anna Yellin and Reagan Montalvo prep for a firefly survey (Linda May/DNR)

at Panola Mountain, Sweetwater Creek and Chattahoochee Bend state parks.

- As part of a group composed of the University of Georgia's Project Monarch Health (Dr. Sonia Altizer's research lab), Monarchs Across Georgia and Journey North, Wildlife Conservation has helped the last few years with news releases that encourage the public to report winter monarch sightings. These requests have identified areas in southwest Georgia to survey. The larger group, dubbed MOVERS, also invited leading monarch researchers, most from the Southeast but also including Monarch Watch coordinators from other regions, to a series of meetings that showcased the research. For the 2025 winter survey season, the DNR-issued news release was picked up by online and print media. Georgia Public Broadcasting, WABE-FM (Atlanta) and National Public Radio also interviewed Wildlife Conservation and other MOVERS members about monarch migration.

- When DNR receives reports of monarchs seen in winter, the invertebrate team works to follow up with a survey. Surveys have been conducted in Georgia along the coast and in the Coastal Plain. Winter 2024-2025 had historically low temperatures and snow, which caused nectar sources to die back and led to a noticeable lack of insects – in stark contrast to findings in previous, warmer winters (including at two wildlife management areas).

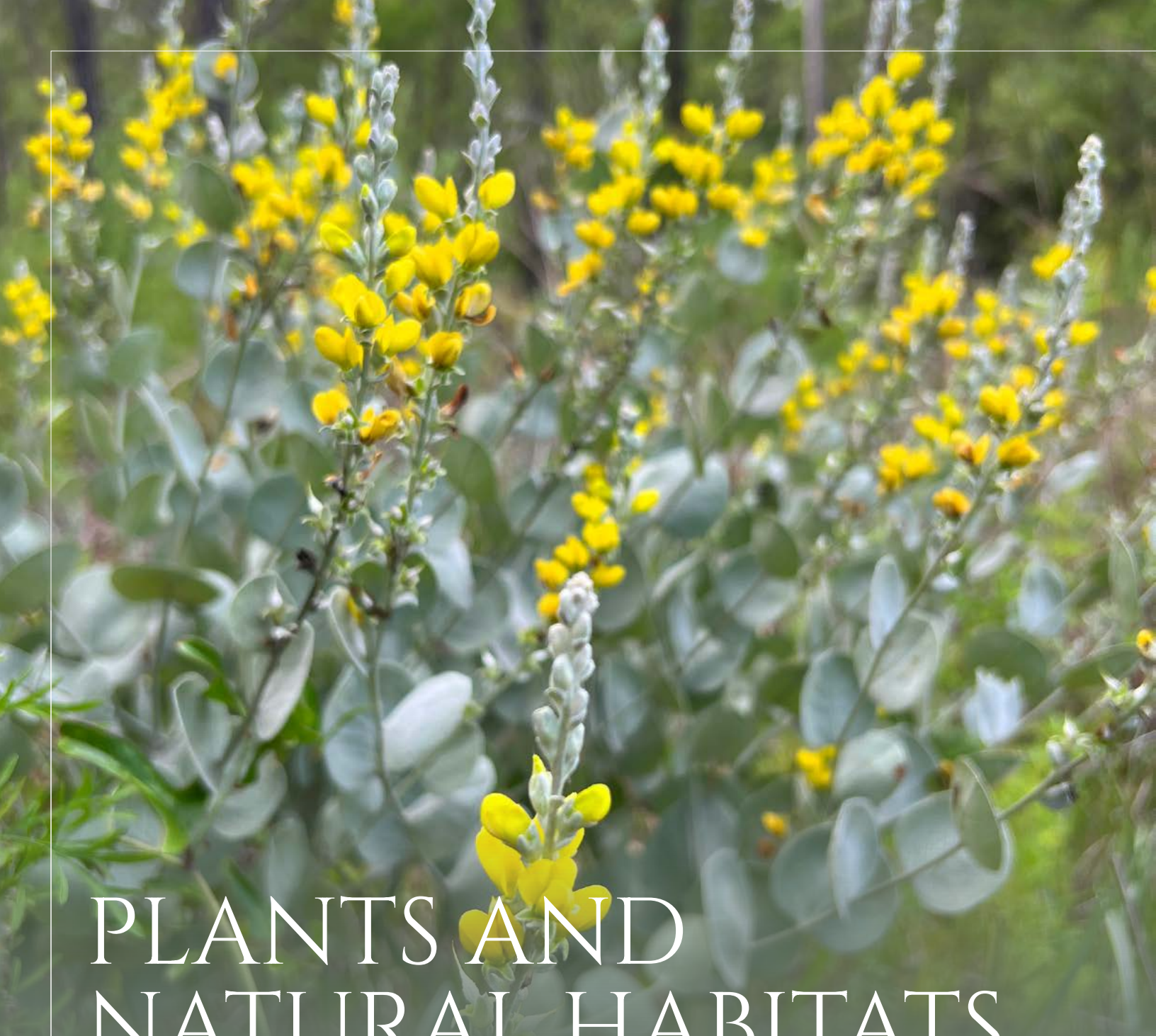
- The invertebrate team took part in annual butterfly counts at sites across north and middle Georgia, including Panola Mountain State Park, Sweetwater Creek State Park, White County, Oaky Woods Wildlife Management Area, and Bond Swamp and Piedmont national wildlife refuges. The counts have been going on for several years and are essential for tracking butterfly populations. Research data, some from the counts, reveal declines in butterfly numbers and species diversity. For example, golden-banded skippers were once found at Panola Mountain near Stockbridge and Bells roadside skippers at Pine Log Park in Conyers. Yet neither has been documented in this part of Georgia in recent years.

- The first in-person meeting of the Georgia Insect Conservation Alliance was held at Panola Mountain State Park in October. The U.S. Fish and Wildlife Service and Wildlife Conservation organized the group to focus on invertebrates, with the primary goal of promoting communication about insect conservation throughout Georgia.

- The team also promoted use of iNaturalist for reporting invertebrates through programs (such as a butterfly walk where participants added sightings using the phone app), presentations (including to the UGA Naturalist Club) and a spring 2025 article in DNR's Georgia Wild e-newsletter explaining how iNaturalist contributes to conservation.

- Other outreach varied from taking part in Bear Creek Nature Center's pollinator party in Chattahoochee Hills to helping Charlie Elliott Wildlife Center camp attendees build mason bee houses, presenting a poster at the Georgia Entomological Society meeting in Young Harris and giving talks at the Monarchs Across Georgia Pollinator Symposium in Athens.

- The invertebrates team also worked to strengthen the Georgia Pollinator Partnership – signs have been placed at some parks in the Piedmont and coastal region – and spread the word about projects volunteers can join. Community science projects were promoted, too, via a link to volunteer on DNR's Georgia Biodiversity Portal.



PLANTS AND NATURAL HABITATS

Rare Plant Conservation

Rare plant conservation in the Wildlife Conservation Section is led by the botany team. The public looks to DNR as a primary source of information on rare plants and their conservation, and the agency has a leadership role in plant conservation in the state and the Southeast, alongside primary partners of the Georgia Plant Conservation Alliance. The botany team is pursuing the following long-term topical goals.

- **Natural heritage:** Serve as the go-to source for conservation status information on Georgia flora.
- **Adaptive management:** Monitor priority plants and habitats to inform conservation actions and management plans.
- **Stewardship:** Maintain safeguarding and habitat restoration at priority rare-plant sites.
- **Networking:** Support and use the Georgia Plant Conservation Alliance to share data, expertise and resources.
- **Promote plants:** Raise awareness of plant conservation, foster young botanists and build connections with landowners.

In fiscal year 2025, the botany team completed the Plants Technical Team Report for the 2025 revision of Georgia's State Wildlife Action Plan. This report compiles Georgia's list of plant species of greatest conservation need and the highest priority conservation actions for conserving plants in Georgia.

Endangered hairy rattleweed (Marylou Horan/DNR)

The primary challenge to creating a robust plan for plant conservation in Georgia is the sheer number of rare plants in the state. Georgia has 3,484 native plant species as described on the North Carolina Botanical Garden's Flora of the Southeastern United States website. For effective conservation, these taxa must be prioritized and conservation actions defined. Using the tracked species list, Wildlife Conservation followed the standardized method developed by a State Wildlife Action Plan working group under the direction of the Southeastern Association of Fish and Wildlife Agencies' Wildlife Diversity Committee to draft the plant list of species of greatest conservation need. The botany team then used input from species experts to refine the list. The final includes 482 taxa: 127 rated as highest conservation concern, 321 as high concern and 34 as moderate concern.

In addition, the botany team hosted meetings with plant conservation professionals statewide to identify the most significant challenges to plant conservation in Georgia for the coming decade and the most effective actions to address those challenges. Through this process, the group discerned 24 comprehensive actions for plant conservation. Themes illustrated by these conservation actions are: strengthening and diversifying partnerships, improving data collection, improving land management and stewardship of rare plant populations and habitats, increasing resources for in-situ and ex-situ conservation, reducing negative impacts of land development, and increasing research, outreach and education.

Plant conservation is an essential part of any plan for overall wildlife conservation. Plants represent a large proportion of Georgia's species and biodiversity and are the fundamental building blocks of almost all terrestrial ecosystems. Rare plants provide important genetic, morphological and functional diversity to habitats, and as such are vital to maintaining healthy, functioning ecosystems. Plant habitat diversity contributes to animal diversity. Conserving both rare plants and plant habitats sustains important ecosystem services and economic benefits that contribute to the health and well-being of Georgians.

Guided by Georgia's 2025 State Wildlife Action Plan, implementing agency goals to protect plant biodiversity requires a multipronged approach. Surveys and monitoring, managing rare species (Natural Heritage) data, safeguarding genetic material, restoring populations and habitat, and fostering partnerships are all important parts of this effort.

Surveys and Monitoring

Periodic surveys and monitoring are key to determining trends in priority plant populations and detecting declines before they are extirpated locally. Results provide vital data to the U.S. Fish and Wildlife Service for formal species status assessments and update Georgia's rare species database – called Biotics – in partnership with NatureServe.

Consistent and strong support from Fish and Wildlife Service Endangered Species Act grants is critical to botanical surveys in Georgia and underscores why surveys often target plants that are either federally listed or petitioned for listing. A State Wildlife Grant supports surveys for high-priority plants on state conservation lands to inform management planning. Rare plants are also often found during environmental surveys for timber management proposals.

Surveys for federally listed or petitioned plants in fiscal year 2025 included sandplain agalinis *(Agalinis decemloba)*, Georgia rockcress *(Arabis georgiana)*, hairy rattleweed *(Baptisia arachnifera)*, Morefield's leatherflower *(Clematis morefieldii)*, Alabama leatherflower *(Clematis socialis)*, ciliate-leaf tickseed *(Coreopsis integrifolia)*, pool-sprite *(Gratiola amphiantha)*, whorled sunflower *(Helianthus verticillatus)*, black-spored quillwort *(Isoetes melanospora)*, mat-forming quillwort *(Isoetes tegetiformans)*, small whorled pogonia *(Isotria medeoloides)*, bog spicebush *(Lindera subcoriacea)*, narrowleaf naiad *(Najas filifolia)*, harperella *(Ptilimnium nodosum)*, Kral's water-plantain *(Sagittaria secundifolia)*, green pitcherplant *(Sarracenia oreophila)*, Georgia sweet pitcherplant *(Sarracenia rubra ssp. viatorum)*, large-flowered skullcap *(Scutellaria montana)*, Ocmulgee skullcap *(Scutellaria ocmulgee)*, fringed campion *(Silene catesbyi)*, Virginia spiraea *(Spiraea virginiana)*, persistent trillium *(Trillium persistens)* and Tennessee yellow-eyed-grass *(Xyris tennesseensis)*.

Canby's dropwort: Botanists monitored three Canby's dropwort populations at private properties in Dooly and Lee counties as part of a federal Recovery Challenge grant. Staff collected seed and completed a rough population status assessment at each site. Plans to revisit Big Dukes Pond were dashed by Hurricane Helene,

DNR's Emma Horne surveying for Kral's water-plantain and finding one flowering (Adrienne Ernst)

which swept through Georgia at the prime time for collecting Canby's dropwort fruit.

At The Nature Conservancy's Oakbin Pond Preserve near Unadilla, Canby's dropwort had reappeared in 2020 after not being documented on the Dooly County property since 2008. Habitat restoration from 2016-2018 improved conditions for the plants, and the population has remained at about 200 stems since 2020. In 2025, a notable increase in flowering plants occurred as over 400 flowering stems were detected. The Lee County population at Neyami Savanna, jointly owned by the state and a private landowner, did not fare as well. Increasing shade and periodic drought have caused a population decline. The Wildlife Conservation Section will be working with the landowner and the USDA Natural Resources Conservation Service to improve habitat at the site.

Dwarf sumac: Monitoring endangered dwarf sumac typically involves counting stems as an indicator of population stability or growth. Long-term monitoring has indicated that most populations, including those introduced or augmented, are thriving. In 2025, population counts were conducted at Panola Mountain State Park near Stockbridge and Lower Broad River Wildlife Management Area near Elberton. The population at Panola is thriving. At Lower Broad River, the number of stems was lower than in previous years, and competition from sweetgums and other woody vegetation is increasing. Staff determined that a growing-season prescribed fire will help improve conditions. A burn was planned for fall 2025.

Hairy rattleweed: Federally endangered hairy rattleweed grows in only two counties in southeast Georgia. During calendar year 2024, botany staff helped the U.S. Fish and Wildlife Service with a five-year status review of the endangered plant. Of the historic occurrences, 14 were resampled for the first time in years. The population data were used to help determine the species' overall status and total abundance. All historic occurrences sampled showed a decline in the number of plants compared to previous surveys.

Leaf samples were collected from 135 plants at eight occurrences for use in genetic analyses to help determine the amount and distribution of genetic variation. Also, 1,134 seeds were collected from seven occurrences for safeguarding. Some of seeds were sent to the U.S. Department of Agriculture's Seed Laboratory in Macon to test for viability.

Seeds collected from four plants at Sansavilla Wildlife Management Area's "Baptisia tract" near Hortense in 2023 have been propagated, and they are being grown in the native plant nursery at Altama Plantation Wildlife Management Area in Glynn County.

Kral's water-plantain: A federally listed species, Kral's water-plantain is known only from one site in northwest Georgia and three in Alabama. This aquatic river plant with short, quill-like leaves remains submerged throughout the growing season except for a long flower stalk that extends out of the water during the summer months. The Georgia population of Kral's water-plantain is under a highway bridge built between 2018 and 2023. Georgia Department of Transportation measures to reduce impacts on the species included a monitoring plan to assess population changes before and after construction.

In 2025, Wildlife Conservation botanists monitored the population and counted over 100 clumps of plants, more than what was found before construction of the bridge. The finding underscored the importance of collaboration between DNR and other land-owning agencies such as DOT. Surveys were also conducted along the river system in which the plants are found, resulting in the discovery of three new subpopulations. Studies to learn more about Kral's water-plantain's life history and how to propagate the plant are planned. The aim is to eventually introduce more populations of the species on protected lands.

Narrowleaf naiad: This submerged aquatic plant is found in tannin-soaked ponds and lakes with sandy bottoms. In Georgia, narrowleaf naiad has been documented in three sites in the southwest part of the state, close to the Florida line. But only one of those populations has been confirmed since 1948. The plant has thin, spiny leaves with distinct, crescent-shaped fruits. Little is known about the species, and it is difficult to survey for given the turbidity of water it's found in. In 2024, Wildlife Conservation botanists surveyed for narrowleaf naiad in two of the three historic populations, finding floating sections of the plant in one of the ponds. In fiscal 2026, botanists plan to test a new survey method using environmental DNA – the trace amounts of DNA left from living things in water, soil and even in the air near where the organisms occur. Also called eDNA, the method is commonly used to survey for fish species, but recent studies have shown it to be effective for aquatic plant surveys. If this approach is successful, it would provide a clearer picture of where narrowleaf naiad is found and whether it is actually extirpated from the ponds where it hasn't been seen in over 75 years, data that can inform federal listing decisions for the species.

Pool-sprite: From 2022-2025, University of Georgia graduate student Anna Wyngaarden conducted federally funded surveys for pool-sprite at 15 sites in the state. The results were provided to DNR for entry into the Biotics database in support of a Fish and Wildlife Service five-year review of the federally listed plant. During a temporary closure of the Summit Skyride lift at Stone Mountain Park in early 2024, Wildlife Conservation teamed with Wyngaarden and the Fish and Wildlife Service at the park near Atlanta to search for new species locations, finding 12 more pool-sprite sites. In fiscal 2025, botanists also added to Biotics the findings from surveys at Georgia International Horse Park in Conyers (10 additional sites) and reviewed the updated dataset with the Fish and Wildlife Service, underscoring DNR's central role in maintaining conservation records for the species.

Tennessee yellow-eyed-grass: In 2023, Wildlife Conservation and the Southeastern Grasslands Institute discovered the first new *Xyris tennesseensis* population in over 15 years. Found at Coosa Valley Prairie, a Weyerhaeuser easement in Floyd County managed by The Nature Conservancy, the population of the endangered grass is only Georgia's second population on protected land. While the site had about 140 flowering spikes in 2023, an extreme drought in calendar 2025 affected the plants (none were relocated, although an herbarium voucher was preserved). The state's other protected site, state DOT property called Interstate Hypericum Springs, had declined to 14 spikes due to issues with invasive plants and

DNR staff monitor state-endangered Radford's mint (Erin Cork/DNR)

stream channelization. However, that population has rebounded to more than 50 spikes thanks to biannual DOT and DNR workdays started in 2021. Work includes removing invasives, solarization and seed dispersal.

Wildlife Conservation also assisted the State Botanical Garden of Georgia in collecting genetic samples of yellow-eyed grass from Georgia, Alabama and Tennessee populations. Analysis has shown little genetic diversity between sites in Georgia, data that help prioritize conservation efforts. Also, in fiscal year 2025 ownership of the largest Georgia population changed. Wildlife Conservation is working with the new private owners to safeguard the wetland and the *Xyris* population while accommodating plans for a home construction.

Radford's mint: Wildlife Conservation also continued annual population monitoring of Radford's mint, a state-endangered species known to exist in only two locations along the north side of the Altamaha River in Georgia. This year's totals at Townsend Wildlife Management Area in Long and McIntosh counties, which has natural and outplanted populations, revealed a decrease from 2,556 plants last year to 1,661 this year. A small population at Fort Barrington Hunt Club in McIntosh County was surveyed for the first time since 2010. Forty-three plants were found.

Quillworts: Black-spored quillwort and mat-forming quillwort are diminutive plants that superficially resemble grass and grow only in ephemeral spring pools on granite outcrops. Both federally listed species are targeted as part of a Fish and Wildlife Service Recovery Challenge grant project started in 2021. In spring 2025, Wildlife Conservation and Atlanta Botanical Garden checked three populations of each species and collected plants for analysis and conserving genetic material. Quillworts reproduce by tiny spores and the long-term banking of spores is not well-studied. As part of the grant work, Atlanta Botanical Garden is researching how to optimally store quillworts to produce new plants.

Natural Heritage Data

Field work is critical for understanding natural heritage data. Wildlife Conservation Section botanist Hannah Umstead partnered with Ron Lance, botanist with the North American Land Trust and author of "Haws: A Guide to Hawthorns of the Southeastern United States," to study rare and unusual tree species at Ocmulgee and Oaky Woods wildlife management areas in middle Georgia. Their goal was to revisit historical specimens of hawthorns and oaks and collect new samples for the University of Georgia Herbarium and DNR's reference collection.

During the survey, they documented a hawthorn that may represent a form never before recorded in Georgia – or possibly anywhere. These plants are even more distinctive than related species previously known only from the Midwest, raising the exciting possibility that they could represent a new species. Remarkably, they were found in three different sites in one day. The survey also confirmed that Oaky Woods supports one of the state's largest populations of Durand oak *(Quercus durandii)*, particularly around Big Grocery Creek. These discoveries show how field work is expanding the understanding of Georgia's natural heritage and highlighting the importance of conserving these unique landscapes.

Reports of new species locations are an important part of natural heritage data, but they must be carefully verified before being added to Biotics. Wildlife Conservation botanists often follow up on leads from partners, land managers and, increasingly, the public. For example, in winter 2024-2025, Umstead and Wildlife Conservation's Suzi Mersmann and Nate Thomas traveled to the Chattahoochee National Forest in Rabun County to confirm an iNaturalist observation of Fraser's sedge *(Cymophyllus fraserianus)*. This rare mountain plant is known from only a handful of sites in Georgia. Because iNaturalist records

are often obscured for sensitive species, the team coordinated directly with the observer – a botanist in the agency's conservation network – to get precise coordinates.

The survey verified that the sighting matched an existing population first reported by Thomas in 2021. Only 18 plants were documented then. During the latest visit, the team discovered several additional clumps growing on an uprooted tree. As a bonus, they also spotted a population of native climbing fern (Lygodium palmatum), another rare species in the state.

While public observations can point staff toward rare species, professional field verification is essential for ensuring accuracy. By learning how to integrate these tools, the Wildlife Conservation botany program continues to strengthen Georgia's rare species data and improve conservation outcomes.

Maintaining accurate, reliable natural heritage data are critical not only for Georgia's conservation efforts but also for advancing plant science on a national scale. In fiscal year 2025, Umstead joined world-renowned botanist Rob Naczi and his doctoral student, Luke Sparreo, from the New York Botanical Garden on field trips to study pitcherplants. Their research examines the evolutionary relationships among southeastern pitcherplant species and the unique organisms that live inside the pitchers. The success of the trips was based on the rare plant data curated by DNR's Natural Heritage Program. Using these records, the group visited four sites – Doerun Pitcherplant Bog in Colquitt County, Alligator Creek and Moody Forest wildlife management areas near Baxley and Lumber City, respectively, and the Okefenokee Swamp – where they confirmed pitcherplant populations and gained insights into the species' varied habitats. Without reliable occurrence records, this research would not have been possible.

Beyond fieldwork, the collaboration fostered valuable discussions about taxonomy and systematics in conservation. Questions remain about whether certain pitcherplant forms represent distinct species. The forthcoming results of this phylogenetic work will help clarify classification and guide conservation strategies.

Safeguarding

For the most imperiled rare plants, safeguarding genetic material ex-situ (out of a species' natural habitat) and augmenting populations and introducing populations in-situ (in the plant's natural habitat) are critical conservation actions. Safeguarding involves propagation using cuttings, seed or roots to ensure that Georgia-native genotypes are available to enhance natural populations or establish new ones in appropriate habitat in a species' historic range. Much of this work involves the Georgia Plant Conservation Alliance, or GPCA, a vital conservation network.

In fiscal year 2022, a Wildlife Conservation Section-led partnership was awarded nearly $780,000 to safeguard 14 imperiled plant species in Georgia. The U.S. Fish and Wildlife Service Recovery Challenge grant has boosted capacity for plant conservation at the State Botanical Garden of Georgia in Athens, Atlanta Botanical Garden and the Chattahoochee Nature Center in Roswell, while also supporting the spread of horticultural expertise and support to GPCA members. The overarching goal for the five years of grant-funded work is to develop genetically sound, living and seed-banked plant collections in botanical gardens and in the wild, and to increase the GPCA's safeguarding capacity to better conserve these and other priority plants identified in Georgia's State Wildlife Action Plan.

As for safeguarding specific species, the goal for hairy rattleweed *(Baptisia arachnifera)* – found globally in only two counties in coastal Georgia – is to gather and grow seeds from each of the plant's known occurrences. In past years, DNR, the State Botanical Garden and volunteers collected seed from three sites, including an at-risk population on industrial timberland. Seeds were added to long-term seed banks at the Atlanta and state botanical gardens. As the number of plants grown from this effort increase, plants will be shared for safekeeping with the Coastal Georgia Botanical Gardens, which is part of the University of Georgia in Savannah, and Georgia Southern University's Botanic Garden. Eventually, the plants will be planted on state conservation lands.

In fiscal year 2025, DNR received 61 plants from Atlanta Botanical Garden. These were planted in beds at the native plant nursery at Altama Plantation Wildlife Management Area near Brunswick for long-term safeguarding. Additional plants were grown by DNR from seeds collected on the Baptisia Tract at Sandhills Wildlife Management Area near Hortense. The propagations will be outplanted at the tract to bolster that population in fall 2025.

The three known populations of Coosa Barbara's buttons *(Marshallia mohrii)* in Georgia are at Coosa Valley Prairie in Floyd County, private properties northwest of Coosa Valley and Berry College campus. Seed was collected in August 2023, yielding 209 maternal lines for safeguarding. Atlanta Botanical Garden kept 80 for the long-term seedbank. The remainder went to Chattahoochee Nature Center for a living collection. That collection has plants from Berry College and the private property, populations more threatened than at Coosa Valley Prairie. By the end of April 2024, seed from 67 maternal lines had germinated and will be cultivated until ready for outplanting, likely in fiscal 2026.

Wildlife Conservation and Atlanta Botanical Garden botanists visited six sites with federally endangered black-spored and mat-forming quillworts. These long-lived, spore-reproducing perennials are specialized organisms that have adapted to extremely harsh environments. Living in pools on exposed granite outcrops, the plants are submerged through winter and early spring but by May desiccate to a crisp on the dry, frying-pan-hot rock. At each occurrence, plants were collected to keep live plants in safeguarding at Atlanta Botanical Garden and analyze the genetic and morphologic diversity of the genus *Isoetes*' pool-dwelling members in Georgia (via DNR collections). *Isoetes* reaches the height of its diversity here, with copious hybridization, and the taxonomy is far from settled. This work will help inform scientists about which quillworts live in the state, where, their status and how to tell them apart.

The Recovery Challenge grant has also helped partner efforts to boost populations of federally listed smooth coneflower (*Echinacea laevigata*). The State Botanical Garden collected thousands of seed from five populations in 2021, 2022 and 2023. A portion representing 154 maternal lines is part of the long-term seedbank at Atlanta Botanical Garden. The State Botanical Garden in Athens used the others to grow plants.

From these plants, 300 were used for a milestone introduction within the species' range on national forestland in winter 2024. A formal agreement between the U.S. Forest Service and U.S. Fish and Wildlife Service was required to introduce a federally listed plant onto federal lands. Plants were watered by hand to stave off effects of drought in summer 2024. Monitoring in summer 2025 showed about 50 percent of the plants survived, a welcomed result given the tough conditions.

Nestled in the mountains of northwest Georgia, federally listed Virginia spirea (*Spiraea virginiana*) is known from only two locations in the state. This species, considered critically imperiled in the state and globally imperiled, relies on river scour to minimize competition, with a root system that is able to reach deep into gravel bars and cracks within rock beds to hold tight during high, fast-moving waters that wash away most other plant species. Because Virginia spirea occurs in such an unstable environment and has not been documented reproducing by seed in Georgia, collecting material from both populations for safeguarding in ex-situ gardens is critical.

Endangered Canby's dropwort *(Oxypolis canbyi)* does not grow well in artificial collections, and GPCA partners have been unable to keep this plant alive in botanical gardens. To safeguard genetic material, Wildlife Conservation is collecting seed from wild populations in the species' cypress savanna habitat for the seed bank at Atlanta Botanical Garden. In fiscal 2025, staff added seed from two populations.

Safeguarding is also important for high-priority species that are not federally protected. Because DNR has no stable funding source for this work, the effort relies on GPCA members. Examples include the following work.

Sweet pitcherplant (*Sarracenia rubra*) seeds were collected as part of a rare plant habitat restoration and safeguarding project centered at Ohoopee Dunes Wildlife Management Area near Swainsboro. Staff at the Atlanta Botanical Garden propagated many plants from the collections in Emanuel County and transferred 150 of them to DNR for safeguarding at the native plant nursery at Altama Plantation Wildlife Management Area in Glynn County.

Wildlife Conservation continued work, as well, with the Georgia Department of Transportation and the U.S. Fish and Wildlife Service to mitigate potential impacts to Florida corkwood *(Leitnaria floridana)* in the footprint of roadwork on Ga. 40 in Camden County. Wildlife Conservation staff investigated methods to safely move plants and establish populations outside of the roadwork area. Dormant suckers are moved to suitable habitat the same day. Others have been outplanted from suckers grown in pots. Comparing the success of these outplantings will help inform mitigation plans for other plant populations facing direct impacts from the construction.

In a similar situation in Chatham County, the agency teamed with the same agencies to mitigate roadwork effects on coastal bishopweed *(Ptilimnium ahlessii)* along Ga. 25. Seeds were collected from the site in 2022 and 2023. Staff are safeguarding the material until construction is completed and the plants or seeds can be returned to the site, hopefully by late-summer 2025. In spring 2024 and 2025, plants were introduced to protected areas on Altama Plantation and Ceylon Wildlife Management Area – the latter near Woodbine – as well as a site near Darien.

DNR and Chattahoochee Nature Center staff check Alabama leatherflower at the center (Lisa Kruse/DNR)

Plant Habitat Restoration

To achieve recovery needs, imperiled rare-plant populations often require stewardship that goes beyond broad-scale prescribed fire or timber management programs. These targeted approaches include localized control of woody or invasive vegetation, excluding herbivores and small-scale controlled burns and hydrologic repairs. In fiscal year 2025, the Wildlife Conservation Section used this approach to help restore habitat for federally endangered Alabama leatherflower, dwarf sumac and pineland (or sandhills) lily, and for herbaceous pitcherplant bogs.

Georgia's only known natural population of Alabama leatherflower *(Clematis socialis)* thrives on a state-owned site in Floyd County jointly managed by DNR and the Georgia Department of Transportation. For more than a decade, this delicate vine produced no fruit, its blooms devoured by deer and trees and shrubs steadily crowding into the once open woodland. In 2023, a breakthrough occurred when DNR and DOT partnered to install protective fencing around the site. The results were dramatic: By spring 2024, the population had tripled and dozens of flowers promised the first seed-bank collection in years.

Unfortunately, in May 2025 a severe thunderstorm swept through Rome and toppled a tree onto the fence. Deer exploited the breach and – unknown to staff – for over two weeks the plants were left vulnerable. When GPCA members returned, they found the leatherflowers eaten to the ground. The team quickly repaired the fence and carried out other urgent habitat work, despite temperatures topping 104 degrees Fahrenheit. Hope is strong that the fruit of this work will yield the long-awaited safeguarding collection.

Pineland lily *(Lilium pyrophilum)* is a priority plant for the GPCA and rare in Georgia, with only three known populations in the state. The lily grows along the ecotones of fire-maintained uplands and blackwater stream floodplains. Wildlife Conservation staff and volunteers have installed cages around the lilies at the state's largest population, which is on The Nature Conservancy's Broxton Rocks Preserve in Coffee County. The cages protect the plants from deer browsing, in hopes they survive to flower and produce seed. DNR, The Nature Conservancy and volunteers have been caging the lilies at Broxton Rocks for more than six years. Coupled with prescribed fire management in the adjacent uplands, the work has helped the population grow. Ironically, Hurricane Helene did, too.

Pineland lily (Marylou Horan/DNR)

The massive storm swept through the area in September 2024. Although the winds knocked many trees down in the ecotone where the lilies grow, a record number of plants were found there afterward. The lilies appear to be benefiting from the additional sunlight in an area that fire reaches. Downed trees need to be moved away from the site, but that work is planned for winter 2025-2026, when the plants are dormant.

Wildlife Conservation also plans to add signage at a roadside population of pineland lily in fiscal 2026 to help shield it from mowing and herbicide use.

Pitcherplant bogs are a focus for plant habitat stewardship. Georgia's herbaceous bogs are small but rare jewels, providing critical habitat for many imperiled species. Yet these bogs are threatened by issues such as hydrologic disturbance, fire suppression and land development. Many bog plants, including pitcherplant and orchid species, are safeguarded by GPCA partners. Wildlife Conservation works in mountain and Coastal Plain bogs, habitats that are different in origin and ecology.

Mountain bogs are one of the Southern Appalachians' most critically imperiled habitats. These wetlands support a variety of unique flora and fauna, including the federally threatened bog turtle – possibly the state's rarest reptile – and swamp pink, which when the GPCA began this work had declined in Georgia to one small population. Federally endangered green pitcherplants also occupy wet meadows in the seeps. Poaching, rutting by feral hogs and encroachment by woody plants are the leading threats to these plants.

Work to restore and maintain mountain bogs is spearheaded by Atlanta Botanical Garden, on behalf of the GPCA. Target sites include eight mountain bogs in northeast Georgia and one upper-Piedmont prairie/woodland site in north-central Georgia. Wildlife Conservation's botany team leads efforts at one site, an ultramafic seep near Rabun Bald. In fiscal 2025, staff coordinated

a workday to reduce the encroachment of woody shrubs and trees limiting the herbaceous community and, potentially, bog turtles.

Georgia's Coastal Plain features remnants of wide expanses of seepage slopes and savannas that once spanned the landscape. Here, prescribed fire is a critical tool for restoring bogs. Fire helps keep woody species out while maintaining the low-nutrient soils and germination conditions needed for pitcherplants, orchids and other rare plants. The Interagency Burn Team is an essential resource. The team's flexibility and expertise have been crucial for the technical burns required at these small but significant sites.

As part of this work, a flagship long-term project is conserving the state's only known site for Coastal Plain purple pitcherplant, a bog complex in southeast Georgia. These bogs are home to five other protected plant species. They also feature gopher tortoises, Georgia's state reptile. The bogs are in adjacent drains owned by five landowners. The Wildlife Conservation Section coordinates with each landowner to monitor and restore the bogs along a powerline right of way.

Work at the site began in 2006. The positive results demonstrate the effectiveness of partnerships and consistent landowner outreach in concert with the Interagency Burn Team, GPCA, Atlanta Botanical Garden, Georgia Power Co., Georgia Botanical Society and the Georgia Native Plant Society. In fiscal year 2025, Wildlife Conservation coordinated an experimental removal of shrubs in seepage habitat. The goal is to open up areas for fire and pitcherplant restoration. The shrubs were so large that nearly 20 years of prescribed fires had not made significant change. While not formally protected, the property is conserved by an agreement with the landowners.

In November 2024, Wildlife Conservation entered into agreement with Homerville about the city's airport in Clinch County. The memorandum of understanding provided the framework for planning and relocating yellow flytrap *(Sarracenia flava)* and hooded *(Sarracenia minor var. minor)* pitcherplants. The plants needed to be moved because of an adjacent road widening project. Homerville Airport is home to several hundred pitcherplants of both species. Coastal Wildlife Conservation staff met with Homerville representatives and state Department of Transportation staff to determine the best way to relocate them on site with minimal disturbance, as well as future management concerns and approaches. Overall, 65 yellow flytrap and 150 hooded pitcherplants were moved. Seasonal mowing restrictions also were enacted and other harmful activities such as herbicide application, alteration of existing hydrology and removing plants were restricted.

On the other end of the state, Tallulah Gorge in northeast Georgia harbors some of the largest stretches of state-owned eastern hemlock cove forest, home to State Wildlife Action Plan priority species such as persistent trillium, Carolina hemlock, green salamander and eastern spotted skunk. Eastern hemlock *(Tsuga canadensis)*, a keystone tree of these cove forests, can live up to 800 years. They form dense, cooling canopies that support at least 57 at-risk Georgia species. Across its range, however, the species is in steep decline due to the invasive hemlock woolly adelgid, first detected in Georgia in 2003. Infestations kill hemlocks and change habitats from moist to dry, threatening both biodiversity and watershed health.

Using State Wildlife Grant and Pittman-Robertson Act funds, Wildlife Conservation assessed hemlock health across Tallulah Gorge on state, federal and Georgia Power lands. The survey found recruitment and the health of hemlocks in decline, yet many trees remained salvageable. From 2023-2025, all eastern hemlocks on Tallulah Gorge Wildlife Management Area and Georgia Power property were treated with long-lasting insecticides, expected to protect them for seven to 10 years, which hopefully provides time for the forest ecosystem to recover.

Prescribed fire clearing way for state's only known Coastal Plain purple pitcherplants (Lisa Kruse/DNR)

Partnerships for Protection

Georgia Plant Conservation Alliance

The Georgia Plant Conservation Alliance, or GPCA, is an innovative network of public gardens, government agencies, academic institutions, utility companies and environmental organizations committed to preserving Georgia's endangered flora. Formed in 1995, with what is now the Wildlife Conservation Section as a charter member, GPCA's work started with a single species (*Sarracenia purpurea* var. *montana*) and now involves over 100, plus more than 75 partner organizations and 120 active members.

The GPCA's mission is to:

- Study and conserve the state's flora through multidisciplinary research, education and advocacy.
- Facilitate the recovery of rare, threatened and endangered plants of Georgia and the southeastern U.S. through collaborative efforts in the state.
- Support the development and implementation of the Georgia State Wildlife Action Plan, as well as other plant, wildlife and habitat conservation plans by member agencies and organizations.
- Communicate the importance of preserving biodiversity worldwide.

Marking its 30th anniversary in 2025, GPCA has earned national recognition, garnering awards, including the 2013 Program Excellence Award (American Public Gardens Association), the 2016 Special Recognition Award (Association of Fish and Wildlife Agencies) and two 2019 honors for project excellence and environmental achievement. GPCA is widely lauded as "synonymous with plant conservation in Georgia" and serves as a model that has inspired conservationists nationwide.

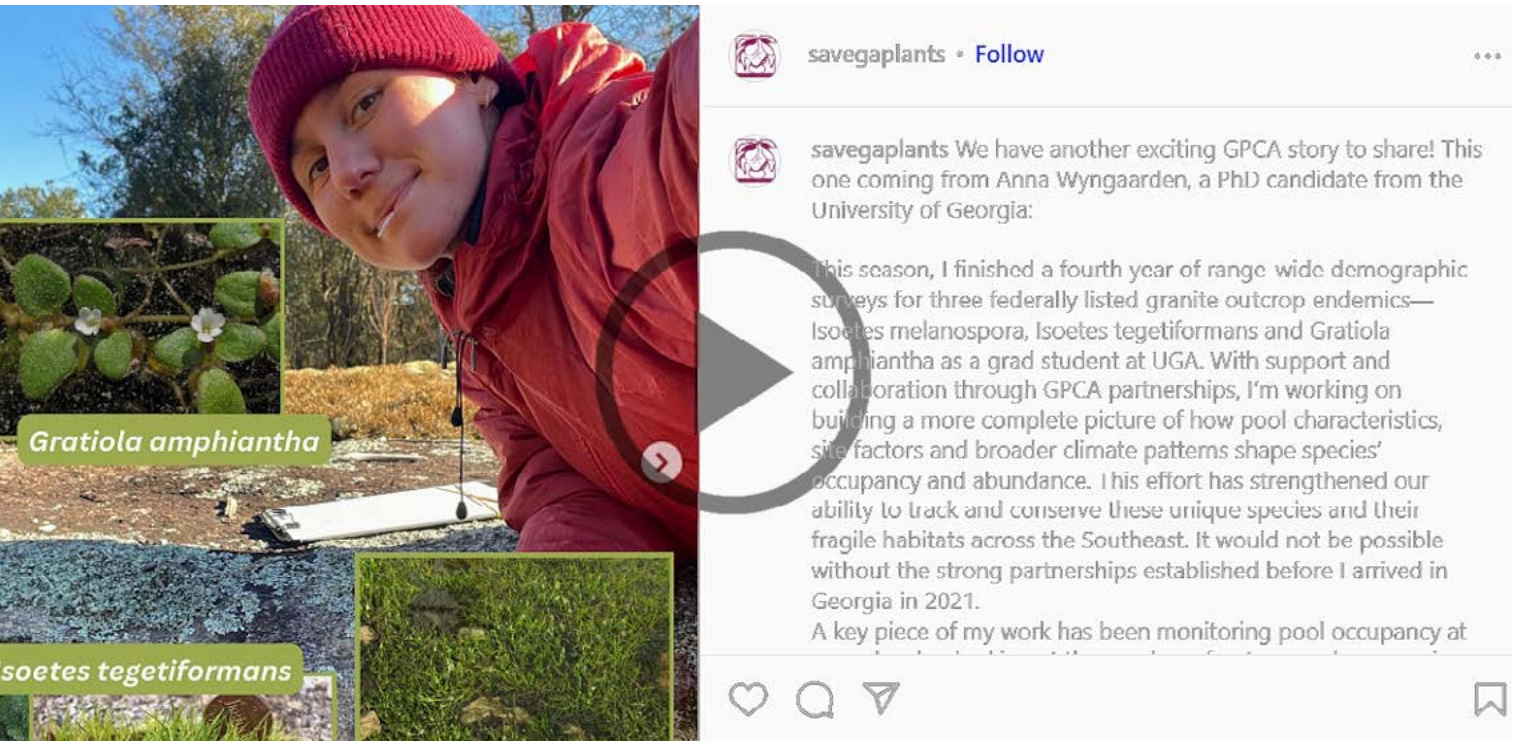
Supported by the multiyear Recovery Challenge grant project, GPCA is helping increase the conservation horticulture capacity statewide. Historically, the major partners in curating living collections of Georgia's critically imperiled plants have been in the Piedmont; namely, Atlanta Botanical Garden, Chattahoochee Nature Center in Roswell and the State Botanical Garden of Georgia in Athens. These partners are coordinating collections with 11 organizations throughout Georgia, tripling the number of organizations in the state with expertise in horticulture conservation science.

Agency Partnerships

Public-private partnerships are vital to plant conservation, and particularly in Georgia, where most land is privately owned and the entire population of an imperiled plant may be on private land. The Wildlife Conservation Section works with landowners who have high-quality and critically imperiled plant communities. Through federal Endangered Species Act grants, the agency provides crucial support and outreach to these landowners.

Another partnership focus is utility and highway rights of way, where remnant rare habitats persist in the opened areas. Communication with partners such as Georgia Power Co. and the Georgia Department of Transportation is key to protecting these sites.

Wildlife Conservation also led in the stewardship of high-priority conservation properties owned by DOT. Botanists have long collaborated with DOT about habitat restoration on the transportation agency's lands for Tennessee yellow-eyed grass *(Xyris tennesseensis)*, Canby's dropwort *(Oxypolis canbyi)* and Alabama leatherflower *(Clematis socialis)*. DOT also coordinates with DNR when protected plants will be affected by construction projects. Staff help determine plant relocation methods and frequently works at sites with



GPCA 30th anniversary Instagram post highlighting work with granite outcrop endemics (GPCA)

DNR, Berry College and U.S. Fish and Wildlife Service staff survey for Georgia rockcress (Carlee Steppe/DNR)

DOT ecologists and contractors to help ensure relocation protocols are understood, which can be complicated for sensitive species.

DNR and DOT work together during construction projects to minimize impacts to rare plant populations. In spring 2024, nearly 300 hooded pitcherplants were tucked into new homes at Alapaha River Wildlife Management Area near Ocilla after being rescued from a DOT construction site near Valdosta. DNR and DOT coordinated with the Coastal Plain Chapter of the Georgia Native Plant Society to plan the relocation. Monitoring of the plants in 2025 documented about an 80 percent survival rate.

DNR's formal partnership with the U.S. Fish and Wildlife Service, initiated in 1985, has enabled Wildlife Conservation to receive federal grants to conserve federally listed and at-risk species. The grants provide critical funding for plant conservation.

In the realm of conservation on private lands, the federal Natural Resources Conservation Service is an important partner. Wildlife Conservation botanists are teaming with the federal agency to protect the wetland habitats of endangered Canby's dropwort. In fiscal 2025, a milestone was reached for two significant wetland projects with NRCS. At Big Dukes Pond Wildlife Management Area near Millen, all adjacent landowners in the watershed of the nearly 1,700-acre WMA are now in a permanent conservation easement, something each entered into voluntarily. Also, nearly 500 acres of privately owned wetlands around the state's Neyami Canby's dropwort tract are now protected. DNR will be working with NRCS to implement restoration plans across these new conservation lands.

Ginseng Management

The export of American ginseng is regulated under the Convention on International Trade in Endangered Species of Wild Fauna and Flora, an international agreement administered in America by the U.S. Fish and Wildlife Service. In Georgia, ginseng exports are authorized by that agency in concert with the Georgia Ginseng Protection Act of 1979.

In order to have a legal ginseng trade in Georgia, the Fish and Wildlife Service requires the state to maintain a ginseng management program that ensures compliance with federal and state regulations. The objective is to prevent this perennial forest herb from becoming endangered because of trade. Demand for ginseng is high in natural medicinal markets and in Asian medicine. The Wildlife Conservation Section administers the Georgia Ginseng Management Program, which monitors the harvest and sale of ginseng. Staff work with ginseng dealers, growers, the DNR Wildlife Resources Division's Game Management Section and DNR's Law Enforcement Division to make ginseng regulations, and meeting those regulations, transparent and simple.

In calendar year 2024, the dealer-reported wild ginseng harvest in Georgia totaled slightly more than 182 pounds dry weight. This marked a 15 percent increase over 2023, when 158 pounds were harvested. Dealers paid $683 a pound on average for Georgia-harvested ginseng in 2024, down nearly 18 percent from the previous year.

Populations of wild ginseng face pressures such as legal harvest, poaching, consumption by deer and habitat degradation. Knowing how these populations

are faring will help determine the sustainability of Georgia's ginseng trade. Results indicate that ginseng is likely declining in the state.

Due to declining American ginseng populations across the Southeast, since 2023 the U.S. Forest Service has banned harvest of American ginseng on Forest Service lands in the Southeast. However, Native American tribes are still allowed to request a collection permit on national forests.

The cultivated ginseng trade is not significant in Georgia overall, but cultivated ginseng is encouraged in the state as one strategy to relieve pressure on wild populations. Most of the ginseng harvested in the U.S. is exported to China, although local interest in Georgia ginseng for personal use has increased. Georgia is at the southern edge of the plant's distribution. The trade is much smaller here than in states such as North Carolina and Kentucky, where annual ginseng exports total millions of dollars.

Habitat Monitoring

Wildlife Conservation Section botanists play a critical role in habitat conservation through habitat monitoring and mapping for land protection and management planning. The agency often provides guidance in prioritizing areas for conservation and establishing habitat management guidelines. Staff also monitor vegetation to track changes resulting from DNR habitat restoration projects. Monitoring is key to gauging impacts on habitats and measuring biological diversity and habitat suitability for rare wildlife species. Quantifying the changes resulting from DNR's rare species and habitat restoration efforts helps measure their efficacy and guide future management.

Ongoing long-term monitoring conducted by the botany team includes fire photo monitoring since 2008, sandhills restoration monitoring since 2009 and isolated wetlands monitoring since 2019. However, the staff position that leads these projects was vacant in fiscal 2025, so work was temporarily paused. As of fiscal year 2024, the fire photo monitoring project included 383 monitoring points on 46 conservation properties – state-owned and private.

Strategies for restoring a natural community with prescribed fire vary based on the desired habitat, length of degradation and the long-term maintenance required following the restoration process. But strategies for restoring habitats at a landscape scale can overlook small, embedded communities. These communities often have different, more intense restoration needs than the surrounding landscape and can suffer further during the larger restoration process.

These projects help inform managers about the best methods to restore vegetation structure and maximize floristic diversity, a critical combo in establishing a stable community as well as a robust diversity in fauna. Monitoring can also be a long-term objective and power an adaptive management approach to land management. Long-term monitoring helps tailor management decisions based on how individual properties respond and the speed of recovery.

Native Groundcover Restoration

While benefiting all wildlife, restoring native groundcover can be vital to recovering rare species and the habitats they require. However, access to locally adapted seed is a limiting factor. For several years, the Wildlife Conservation Section has been building capacity in-house to support producing the seed required for restoration projects. Staff identified areas on state conservation lands to grow substantial acres of wiregrass and associated fall-producing groundcover species as a source of seed. Also, a 5-acre native plant nursery at Altama Plantation Wildlife Management Area is producing other native groundcover species that complement wiregrass production at the WMA near Brunswick.

In fiscal year 2025, Wildlife Conservation managed wiregrass donor sites totaling about 35 acres, including Altama's former airstrip, old agricultural fields and a managed pine stand at Sansavilla Wildlife Management Area in Wayne County. Staff continued targeted treatments of weedy species such as Bahiagrass at Altama and prioritized growing-season burns to maximize seed production. Ceylon Wildlife Management Area in Camden County also has about 130 acres of high-quality, wiregrass-dominated groundcover. Those sites at Ceylon and about 27 acres at Altama were burned in the spring and provided viable seed for harvest in fall 2024. In spring 2025, wiregrass seed harvested from the sites was distributed at Ceylon (112 pounds total) and Altama (83 pounds).

A part-time hourly was hired in fiscal 2025 to help manage the Altama nursery. Over 50 different native forbs, legumes and grasses collected locally are being grown. The mix of species flowers throughout the growing season and offers cover and food for northern bobwhites and gopher tortoises, as well as nectar and host material for pollinators. Once plants are established, seeds will be harvested and provided to DNR and partners for use on conservation lands in the Altamaha River conservation corridor, where the diversity of groundcover is low.

A Wildlife Conservation biologist working with DNR Wildlife Resources Division GIS staff started developing a restoration site selection and prioritization tool that combines timber stand, burn history, groundcover quality and rare species data. This tool will help identify locations considered good candidates for groundcover restoration. Onsite evaluations will then be done to develop management prescriptions for restoration at each stand.

Fall seed harvest at Altama (Eamonn Leonard/DNR)

Prescribed Fire

Prescribed fire is one of the best, most cost-effective tools for conserving and restoring fire-adapted habitats. Burns mimic lightning-set fires and help numerous species of conservation concern. Prescribed fire is used with other land-management techniques – such as removing invasive species, planting native ones and thinning timber – to improve natural habitats on public and private lands. It is a safe way to apply a natural process, ensure ecosystem health and reduce the risk of wildfire. Prescribed fire also is key to managing wildlife diversity, building resilient ecosystems and even promoting cleaner air.

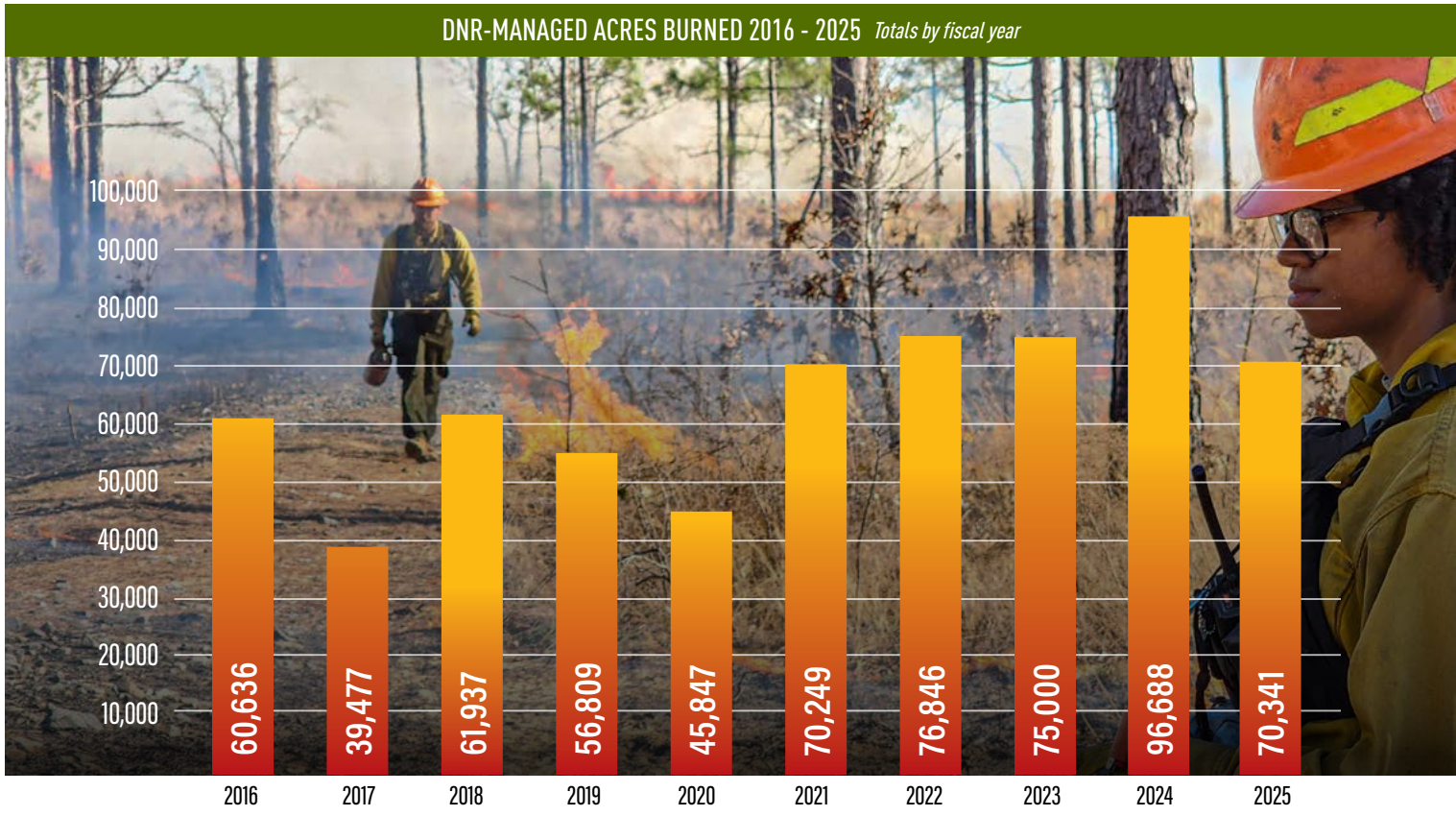
Overview

In February 2024, the U.S. Environmental Protection Agency lowered the National Ambient Air Quality Standard for small particulate matter to PM2.5 for an annual average. This change potentially threatened prescribed burning because several areas in the state could have been classified as non-attainment, triggering limits on prescribed fire. "Exceptional events" were identified as the solution. States can ask EPA to exclude data from these natural or unusual events that cause temporary spikes in PM2.5 levels in air quality assessments. Five Georgia prescribed fire tabletop taskforces were formed to tackle the issue. Wildlife Conservation Section staff were involved, working with Georgia Forestry Commission, DNR Environmental Protection Division and other stakeholders in each group: Area and State Planning, Prescribed Fire/Air Quality Best Practices, Exceptional Events, Public Communication and Burner Outreach, and National Rx Fire Conversation. Wildlife Conservation led the Area and State Planning taskforce.

Results included action items developed for stakeholders based on a fire and smoke survey. Georgia's 2025 State Wildlife Action Plan also included a strong prescribed fire component, one that served as a model for other states and was integrated into the plan's story maps. The plan contains key elements to support "Exceptional Event Demonstrations," most notably burn purpose, natural fire return intervals, wildfire mitigation and the importance of fire to the plan's species of greatest conservation need. Staff also worked with two Southeast Regional Partnership for Planning and Sustainability committees focused on prescribed fire and smoke.

In other areas, staff spoke at a number of regional and national meetings, including the Southeastern Association of Fish and Wildlife Agencies conference, the national Coalition for Prescribed Fire Councils, The Longleaf Alliance's Biennial Conference, the Georgia Department of Public Health and the American Lung Association. Staff also worked with Tall Timbers to expand the Georgia Winds and Air Quality tool. The new product, Smoke Conditions in the Southeast, enhances the ability of practitioners to choose a burn day that minimizes smoke impacts. Wildlife Conservation supported the creation of the online training course Be Smoke Savvy: Training Guide of Best Management Practices for Prescribed Fire Smoke, and teamed with DNR Game Management's Private Lands staff and the Southern Fire Exchange to develop a best smoke management practices pocket guide that is used widely, including by Georgia Forestry Commission in its permitting process. Wildlife Conservation staff also worked on outreach to practitioners and the public and helped update Georgia's Smoke Management Plan.

In all, these efforts not only supported the successful use of exceptional events



Prescribed fire on Sandhills WMA West (Hal Massie/DNR)

demonstrations but made prescribed fire practitioners more adept at and aware of smoke management.

The agency's Fire Management Officer Shan Cammack also stepped in as interim chair for the Georgia Prescribed Fire Council. She and other Wildlife Conservation employees helped organize the council's two annual meetings, recorded presentations for posting online and presented on smoke management. Cammack garnered support from many council partners, as well, for the tabletop taskforce accomplishments described above.

Burning

DNR's Wildlife Resources Division – which includes the Wildlife Conservation, Game Management and Fisheries Management sections – burned 70,341 acres in fiscal 2025. The total is less than the record 96,688 acres burned in 2024, but on par with 2023. The weather was challenging, varying from unusually wet to too-dry parameters out of sync for a productive burn. Dealing with high fuel loads and access issues from the damage wreaked by Hurricane Helene, which swept into south-central Georgia and angled northeast through the state in September 2024, was another big challenge. Prepping units and firebreaks and clearing roads took a lot of time and effort.

Prescribed fire at Silver Lake WMA (Joe Burnam/DNR)

Wildlife Conservation also supports the prescribed fire efforts of DNR's Georgia State Parks and Historic Sites Division, having helped develop that agency's burn program over the past two decades. In all, 2,616 acres were burned on 17 state parks over 31 burn days. Parks staff also helped with fires covering 1,600 acres on partner lands. A number of State Wildlife Action Plan species of greatest conservation need benefitted from the burns. And State Parks volunteers from Chattahoochee Bend State Park received the Georgia Prescribed Fire Council's Mark Melvin Burner of the Year award for their work in fire preparation, burns and restoration efforts. Parks also again proved a significant contributor to the Interagency Burn Team, providing meeting and fire training venues and lodging.

The Interagency Burn Team had another strong year, too. The group's memorandum of understanding was renewed for another five years and two partners were added, Birds Georgia and Quail Forever. Both organizations have done critical habitat restoration work for rare wildlife. Unfortunately, due to policy changes, two partners – the U.S. Forest Service and the Prescribed Fire Training Center – had to drop out. The Nature Conservancy and The Orianne Society continue to be Wildlife Resources Division's strongest partners on the team. Their seasonal fire crews helped burn on priority wildlife management areas in southeast Georgia.

Hurricane Helene caused significant damage in this part of the state, requiring extensive work to assess the destruction and begin cleaning up roads, firebreaks and hiking trails. At Moody Forest Wildlife Management Area near Baxley, nesting clusters for red-cockaded woodpecker were significantly affected. Early efforts focused on getting access to the clusters so new nest inserts could be installed to replace the cavities lost. Hours were also spent opening firebreaks of units scheduled for burns in 2025. Despite these challenges, The Nature Conservancy helped burn almost 5,000 acres on Alapaha River, Alligator Creek and Moody Forest WMAs. Orianne Society assisted with or led burns totaling just over

DNR's Ashley Lafayette with a juvenile gopher tortoise (Jacob Wilson/DNR)

2,000 acres on seven south Georgia WMAs – Alapaha River, Alligator Creek, Canoochee Sandhills, Di-Lane, Flat Tub, Moody Forest and Ohoopee Dunes.

Seasonal Fire Crews

Since 2009, seasonal fire crews have conducted the bulk of the Wildlife Conservation Section's prescribed fires. In fiscal year 2025, the agency again had four crews.

- The southeast Georgia crew worked out of Altama Plantation Wildlife Management Area near Brunswick. The team was funded by Pittman-Robertson Wildlife Restoration funds.
- The west-central Georgia crew, based at Sandhills Wildlife Management Area East near Butler, was also funded by Pittman-Robertson Wildlife Restoration funds.
- The Gopher Tortoise Conservation Initiative fire crew, supported by Wildlife Conservation's gopher tortoise State Wildlife Grant, was based at Alapaha River Wildlife Management Area near Tifton.
- The Ceylon Wildlife Management Area burn crew was based at Altama Plantation Wildlife Management Area near Brunswick. A U.S. Navy Readiness and Environmental Protection Integration Program grant funded the team.

These crews typically worked independently of each other, with the west-central crew focusing on the Fall Line sandhills and Pine Mountain regions, the southeast Georgia crew on the Fort Stewart and lower Altamaha River area and high-priority state parks in the region, the tortoise crew on properties across Georgia's Coastal Plain, and the Ceylon crew on the same-named WMA.

In fiscal 2025, the southeast Georgia crew conducted 32 burn operations on 3,690 acres. The total included 2,343 acres on wildlife management areas, 15 acres on state parks and historic sites, and 1,332 acres on private lands rated a high priority for conservation. The crew helped conduct burns on WMAs across the region and at high-priority state parks in the Coastal Plain. Sites included Alligator Creek, Altama Plantation, Canoochee Sandhills, Ceylon, Moody Forest, Ohoopee Dunes, Sansavilla and Di-Lane WMAs, along with Wormsloe State Historic Site. Staff also took part in prescribed fires on key private lands such as The Nature Conservancy's Broxton Rocks Preserve in Coffee County and the Orianne Society's Longleaf Stewardship Center near McRae.

The southeast Georgia crew helped with training and, when weather was not conducive for prescribed fire, did other management activities, taking part in rare-species monitoring surveys, outreach events, outplanting rare plants and invasive species removal.

As mentioned, the fire weather in 2025 was difficult, with long stretches of weather that rated too wet early and late in the season and an extremely dry period in between. Despite weather challenges, the west-central Georgia crew burned 7,193 acres in 20 burn days, which was only about a 30 percent decrease in acres and burn days compared to 2024. Most of these units are burned on a two-year rotation, with other habitat management such as timber thins and hardwood control also opening the forest floor to more sunlight. As a result, many stands are becoming more open and grassier, and increases in rare species such as Bachman's sparrows, southeastern American kestrels, gopher tortoises and red-cockaded woodpeckers have been documented.

A unique aspect of the west-central Georgia crew is the pursuit of many other ecological restoration activities besides prescribed fire. For

DNR's Johnny Johnson and Paige Dykstra burning at Sandhills WMA (Hal Massie/DNR)

example, members logged seven days removing invasive species at Sprewell Bluff and Sandhills East and West wildlife management areas in middle Georgia. They also spent seven days raking deep fuels, or duff, away from hundreds of old-growth longleaf pine on a recently acquired portion of Sprewell Bluff. The grueling work helped ensure these ancient giants can better survive fires. Staff completed trail work on Montezuma Bluffs Wildlife Management Area in Macon County, marked a habitat restoration timber sale and exotics for an eradication project at Oaky Woods Wildlife Management Area near Perry, installed six purple martin houses at state parks, and helped with red-cockaded woodpecker monitoring.

In fiscal 2025, The Gopher Tortoise Conservation Initiative fire crew completed 39 operations to burn 5,671 acres total across 20 properties in the Coastal Plain. Sites included wildlife management areas (Alapaha River, Alligator Creek, Ohoopee Dunes, Moody Forest, Chattahoochee Fall Line's Hilliard and Juniper tracts, Canoochee Sandhills and Doerun Pitcherplant Bog), George L. Smith and Reed Bingham state parks, The Orianne Society's Longleaf Stewardship Center near McRae, Broxton Rocks Preserve in Coffee County and several other easements or properties managed by either The Nature Conservancy or Orianne Society. The burns included 3,771 acres on WMAs and Voluntary Public Access lands, 195 acres on state parks, and 1,705 on private lands managed by partners. Many of the areas included high-priority gopher tortoise habitat or potential habitats.

Crew members also helped with DNR's Basic Wildland Firefighter Academy and wildland chainsaw training. They took part, too, in native groundcover restoration efforts on Alapaha River WMA and a prescribed fire demonstration at A Day in the Woods, an annual outreach event at Gaskins Forest Education Center in Alapaha.

During its third year, the Ceylon fire crew burned 2,677 acres on Ceylon alone. The total was down slightly from last year, but still came close to the goal of burning 30 percent of the WMA uplands annually. (Surpassing that goal last year also provided room for this year's decline.) An additional 1,302 acres were burned on other properties, accounting for half of the crew's 48 burn days this year. Members helped with fires on Penholoway, Sansavilla, Altama and Ohoopee Dunes WMAs and at Crooked River State Park near St. Marys. Notably, a site prep burn was done on the Sansavilla's Baptisia tract before planting longleaf there. Some 1- to 2-year-old longleaf pine stands were also burned. These fires proved effective in killing small sand pines growing in the stands and threatening to outcompete the young longleaf and herbaceous groundcover. The Baptisia tract is important for federally endangered hairy rattleweed, eastern indigo snakes and gopher tortoises.

Wildlife Conservation hired a smaller fire crew this year to help burn Ceylon, which covers 27,000 acres. The crew included two seasonal fire technicians in addition to Ceylon's two full-time techs and a biologist. A workshop with bunk housing is planned on the WMA to house a larger team. However, for the fiscal 2026 burn season, the plan is to again house the Ceylon fire crew at Altama Plantation Wildlife Management Area near Brunswick.

Training and Outreach

The Wildlife Conservation Section continues to lead in fire training for the Interagency Burn Team. Staff developed training materials, revitalized traditional materials and set up training across the state. These efforts included training staff from DNR Wildlife Resources Division's Wildlife Conservation and Game Management sections, DNR's State Parks and Historic Sites Division, and other Interagency Burn Team partners and volunteers.

Wildlife Conservation coordinated groups and venues and led eight RT-130 Annual Fire Safety refreshers for the Interagency Burn Team, training 256 people in person and 18 virtually. Staff also led training for 71 students in two Firefighter Type 2 academies. The academies included seasonal fire crews for Wildlife Conservation, Game Management, The Nature Conservancy, Orianne Society and state parks, as well as students from Ogeechee Technical and Abraham Baldwin Agricultural colleges. Wildlife Conservation helped Tall Timbers in Firefighter Type 2 training for Berry College, training over 30 students and two professors. Staff also ran 10 pack tests for wildland firefighters with the Interagency Team, testing 143 people. Topics covered included lessons learned from the fireline in Georgia and nationally, unmanned aerial ignition and chainsaw safety.

Wildlife Conservation joined with the Wildlife Resources Division's Private Lands Program, Tall Timbers and The Longleaf Alliance to help with several Learn and Burns across the state, reaching about 70 people total. Learn and Burns were held at Charlie Elliott Wildlife Education Center near Mansfield, McDuffie Public Fishing Area near Dearing, a women-only program at Red Oaks Plantation in Meriwether County, one for Heywood College at Di-Lane Wildlife Management Area near Waynesboro and a Savannah River Prescribed Burn Association-led event at Moody Forest Wildlife Management Area near Baxley.

Staff helped with burn demonstrations for the public, including one at Day in the Woods at Gaskins Forest Education Center near Alapaha that drew about 300 people. Another at The Orianne Society's Landowner/Cooperator Field Day had about 25 attendees. The agency helped The Nature Conservancy host State University of New York College of Environmental Science and Forestry students. A fire ecology class spent a week at Chattahoochee Fall Line Wildlife Management Area complex near Columbus studying pyric ecosystems and regional species of greatest conservation need, as well as learning fire management techniques while helping on several burns. Prescribed fire outreach also varied from presentations and webinars to virtual meetings, college lectures and environmental education, including sand-table exercises at the DNR Career Academy and the Environmental Education Alliance Conference.

Longleaf Partnership Council Chair Jomelle Ellis at a Moody Forest Learn & Burn (Shan Cammack/DNR)

Wildlife Conservation continues to produce short films promoting fire. Last year's film "Longleaf Forever" won a Sylvia Award at the 2024 Rome International Film Festival in November for best conservation documentary and has been viewed more than 11,000 times on The Longleaf Alliance's YouTube channel. "Longleaf Forever" is available on the nonprofit streaming service Ecoflix. In fall 2024, the film was shown to about 300 people at the alliance's biennial conference in Sandestin, Florida.

In 2025, Wildlife Conservation's friends group, The Environmental Resources Network, funded two new conservation films which The Longleaf Alliance made publicly available. "Devouring Beauties," which focuses on native pitcherplants, and "A Tortoise Named Pumpkin Spice" (trailer), the story of a young gopher tortoise used for outreach by DNR's Charlie Elliott Wildlife Center, will be featured on the Wildlife Resources Division's website on the teacher resources page. Both films were shown at a long and varied list of film festivals. (For more details on the videos, see "Other Outreach" in the Education and Outreach report chapter.)

Work also continues on "Young Fires," a film exploring the future of wildland burns and the importance of training and involving young people and engaging the public. The extended trailer was a regional Suncoast Emmy nominee in fall 2024. Funding has been secured to expand it to a full-length film for possible use on public service broadcasting.

INVASIVE SPECIES

Georgia's State Wildlife Action Plan emphasizes increasing efforts to detect, monitor and control invasive species to conserve native wildlife and their habitats. Invasive species are non-native animals and plants that cause environmental or economic harm after being introduced – intentionally or accidentally – into areas outside their natural ranges. Invasives have negative impacts on native wildlife and represent one of the greatest threats to biodiversity. Controlling and treating these species can yield positive, cascading effects for native wildlife and for the benefits that people derive from ecosystems.

Following completion of the Georgia Invasive Species Strategy in 2009, the Wildlife Conservation Section sought State Wildlife Grants to implement invasive species assessment and management programs, with a focus on the coastal region. The current project is aimed at enhancing methods for assessing and controlling invasive non-native species on public and other conservation lands. Objectives also include providing land managers with better technical and informational resources to help control invasives, along with promoting the appropriate use of native plant species by public and private land managers.

In addition to this and the following work, during fiscal year 2025 staff gave talks to groups varying from garden clubs and native plant groups to forestry experts and colleges about identifying invasive species, emerging threats and native plant alternatives. Staff also updated the invasive species section of the 2025 Georgia State Wildlife Action Plan's Habitat Restoration Team Technical report.

Coastal Georgia

During fiscal year 2025 in coastal Georgia, Wildlife Conservation Section staff:

- Continued a multiyear project to eradicate common reed in the Altamaha River delta, at a roadside site in Camden County and near DNR's Coastal Regional Headquarters in Brunswick. Annual post-treatment assessment via drone is helping track progress and determine if other management is needed.
- Led the Coastal Georgia Cooperative Invasive Species Management Area, as in years past. This alliance of federal, state, nonprofit and private groups formed in 2012 is focused on managing invasive species in the 11-county coastal area. The steering committee includes representatives from Wildlife Conservation, DNR's Fisheries Management Section and Coastal Resources and State

Invasive common reed

Parks and Historic Sites divisions, The Nature Conservancy, U.S. Fish and Wildlife Service, National Park Service, Sapelo Island National Estuarine Research Reserve, Georgia Power, Georgia Department of Transportation, Georgia Ports Authority, Little St. Simons Island, Jekyll Island Authority, Georgia Forestry Commission, and the University of Georgia's Cooperative and Marine extensions.

- Coordinated a four-person Student Conservation Association crew in treating invasive species on state conservation lands. The crew, shared with staff in middle Georgia (details below), focused on a wide range of non-native invasive species management and habitat improvement projects. Targets included Japanese climbing fern, Chinese tallow, Asian wisteria, big-leaf lantana, sand pine, vaseygrass, periwinkle vine, Cherokee rose, common reed and flathead catfish. The crew also helped DNR reach invasive species management goals not possible with current staffing. The capacity to revisit and re-treat infestations is key to achieving management goals and improving habitat.
- Continued a multiyear effort to manage habitat for one of the world's two known populations of Radford's mint through management of invasive sand pine. Wildlife Conservation staff and volunteers removed sand pine seedlings invading the site.
- During the 2025 National Invasive Species Awareness week, staff created daily educational content posted to the Coastal Cooperative Invasive Species Management Area Facebook page.
- Further improved a native plant pollinator garden in a restored 1930s-era formal garden at Altama WMA. The garden is treasured by many locals and helps promote native plants as alternatives to invasive species.
- Worked with the Cannon's Point Conservation Task Force to manage invasive species according to the management plan for the St. Simons Island preserve.
- Continued participating in the Coastal Georgia Pest Risk Committee, the Georgia Invasive Species Council and the Georgia Invasive Species Task Force.
- Coordinated with the First Coast Invasive Working Group in northeast Florida to stay abreast of novel invasive species in the north Florida and south Georgia coastal region.

Argentine Black and White Tegus

Argentine black and white tegus are an invasive species that poses threats to native Georgia wildlife, including gopher tortoises, Georgia's state reptile. Native to Brazil, Paraguay, Argentina and Uruguay, this largest of all tegu species has been documented eating young gopher tortoises and the eggs of alligators. The eggs of gopher tortoises and ground-nesting birds, including northern bobwhites and wild turkeys, are particularly susceptible to predation. Tegus also eat fruit, vegetables, plants, pet food and chicken eggs. An additional concern is that tegus could cause bacterial contamination of crops and spread exotic parasites to native wildlife.

Since summer 2018, the Wildlife Resources Division has been working to assess and eradicate Argentine black and white tegus in the wild in eastern Toombs and western Tattnall counties. A partnership with the U.S. Geological Survey and Georgia Southern University resulted in the capture of nearly 20 adult tegus from the area, and the investigation or capture of numerous reported presumed escaped or released pet tegus across the state. As of late summer 2025, five Argentine black and white tegus had been killed or found dead and a handful more seen in Toombs and Tattnall counties that year. Although no young have been found since the eradication effort began, the analysis of animals caught or carcasses provided and the number and distribution of credible reports point to a reproducing population of tegus in this rural area.

The tegu response grew from a Game Management wildlife technician supervisor trapping tegus in spring 2019 to the Geological Survey's Invasive Species Task Force teaming with DNR and Georgia Southern on a large-scale trapping effort using contracted students from the university in 2020 and 2021. Wildlife Conservation outreach promoted the effort.

Weather Channel program anchors interview DNR's Daniel Sollenberger about Argentine black and white tegus

Funding changes in 2022 spurred coordinators to focus on engaging landowners to help with trapping following verified sightings and via loaner traps. The region's wildlife tech supervisor is the primary local contact, with Wildlife Conservation's senior herpetologist providing coordination as needed and Georgia Southern continuing to offer support.

Wildlife Conservation has raised awareness of tegus with residents by email, direct mail, flyers, news releases, social media and advertising campaigns. In fiscal 2025, outreach included:

- Conducting an annual email and Facebook ad campaign in late April and early May to inform residents about tegus and encourage them to report sightings. Almost 10,400 people in the area saw the Facebook ad at least once. Also in April, 57 percent of some 35,600 area hunting/fishing license holders and boat registrants who received a DNR email blast about tegus opened the message at least once and over 150 clicked a link to the agency's tegu webpage.
- Supplying tegu flyers and cards to project partners and local outlets, including University of Georgia Extension offices. (A Lyons radio station also repeated a public service announcement.)
- Emailing an online survey invitation to about 17,500 residents in 15 ZIP codes in the Tattnall/Toombs area. Of the survey's 288 responses, nine-in-10 respondents who had seen DNR communications or news coverage about tegus said they were extremely to somewhat likely to contact DNR if they saw a tegu. Also, 90-95 percent said that after those communications and coverage, they were more likely to agree that tegus pose a threat to native wildlife, that DNR should work to eradicate or control tegus in the wild and that reporting tegus is crucial.
- Coordinating media responses to the tegu situation, including Wildlife Conservation senior wildlife biologist Daniel Sollenberger appearing on The Weather Channel set in Atlanta with an Argentine black and white tegu for a morning show segment.
- Developing with DNR GIS specialist Liz Morata and adding to georgiawildlife.com/tegus an interactive map showing confirmed or credible reports of tegus sightings in the state by year and source – DNR or EDDMapS, the University of Georgia's Early Detection and Distribution Mapping System. Sightings include brief details and can be searched by year.

Invasive mystery snail (Jim Page/DNR)

Year-round, staff and project partners monitor and respond to sightings reported via gainvasives@dnr.ga.gov and gainvasives.org/argentine-black-and-white-tegu, the EDDMapS system managed by UGA's Center for Invasive Species and Ecosystem Health.

Across the State

In summer 2024, a reproducing population of Chinese or Japanese mystery snails was confirmed in north Georgia's Lake Lanier, the latest advance in the state for the invasive snails from Asia. Although popular for aquariums and in some food markets, live mystery snails are illegal in Georgia. DNR asked anglers and boaters to help prevent their spread.

Invasive aquatic species can cause significant ecological and economic impacts, from damaging boats to disrupting ecosystems by displacing native wildlife. Mystery snails also can host internal parasites and present possible health risks if eaten raw or undercooked. A member of the genus *Cipangopaludina*, these snails have been found in some other waterbodies in Georgia. Their presence in some food markets in the U.S. and popularity as aquarium pets are possible sources.

In deep south Georgia, Wildlife Conservation Section staff worked to control and eradicate sweet tanglehead, a non-native grass invasive in the Southeast, on River Creek, the Rolf and Alexandra Kauka Wildlife Management Area near Thomasville. Sweet tanglehead grows 6-8 feet tall and can take over forest stands and fields. It bears seeds with barbs and sharp bristles that can burrow into the skin and even the nasal passages of animals.

Wildlife Conservation and DNR Private Lands Program staff have partnered with Tall Timbers Research Station to begin preliminary research into the most effective herbicide treatments to control sweet tanglehead grass. This invasive plant is causing significant ecological changes to thousands of acres of private and public lands in the region.

Farther east in the region, DNR is encouraging anglers on the Satilla River to report catches of tagged blue catfish, part of an agency study assessing the impact of these big, non-native predators in a river already coping with invasive flathead cats. The agency is also asking anglers to harvest and report these heavyweight catfish on the Ogeechee River, where – as in the Satilla – they pose threats to the river's redbreast and other native fishes.

Wildlife Conservation's Georgia Wild e-newsletter helped spread the word about spotted lanternfly. First reported in Fulton County in fall 2024, the invasive, sooty mold-spreading planthopper poses a threat to crops, forests and yards. One preferred host for the spotted lanternfly is tree of heaven (*Ailanthus altissima*), which also is an invasive species. The newsletter repeated the University of Georgia Extension's advice for Georgians who find a spotted lanternfly: Take a clear photo, kill it and report it.

Spotted lanternfly (UGA Center for Invasive Species and Ecosystem Health)

Sapling in longleaf pine stand (Linda May/DNR)

PRIVATE LANDS

With more than 90 percent of Georgia lands in private ownership, conservation on private land is crucial to wildlife and natural communities in the state. The Wildlife Conservation Section collaborated with landowners throughout Georgia in fiscal year 2025 (also see: Land Acquisitions and Conservation Easements).

Staff answered landowner questions and visited sites to share management advice, conduct surveys for high-priority species and help with other elements of conservation planning. Landowners were advised of cost-share, technical assistance and grant opportunities and guided through procedures for using programs such as the Natural Resources Conservation Service's Environmental Quality Incentives Program, Working Lands for Wildlife, Conservation Stewardship Program and Wetlands Reserve Easements Program. Landowners also received information about technical and financial assistance programs available through Georgia Forestry Commission, The Longleaf Alliance, the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife, Regional Conservation Partnership and other programs.

Staff partnered with the Sustainable Forestry Initiative to develop training programs and products for Master Timber Harvesters and independent forestry companies. Staff also represented Georgia in the NatureServe Network Forestry Working Group, a network of data managers and ecologists from eight states collaborating on developing tools, products and training to improve the forestry sector's access to and familiarity with states' natural heritage data. All of these programs and tools will inform loggers and foresters about many of Georgia's high-priority wildlife species and communities and provide guidance about protecting or enhancing habitat for rare and vulnerable species during timber harvests.

Wildlife Conservation also represented Georgia in the Association of Fish and Wildlife Agencies' Solar Wildlife Working Group, a collaborative effort by six state fish and wildlife agencies and the solar industry to

create national-scale guidelines to assess, address and manage the impacts of solar energy development on wildlife and habitats.

The agency took part, as well, in several regional conservation planning efforts, including the newly established Georgia Native Seed Network, which aims to provide opportunities and markets for producers across Georgia while developing a source of local ecotype seeds for use in restoration projects. In southeast Georgia, staff helped with strategic plan development for the Fort Stewart/Altamaha Longleaf Restoration Partnership and served on the Frosted Flatwoods Salamanders Working Group. In southwest Georgia, Wildlife Conservation worked with the Florida Fish and Wildlife Conservation Commission, Tall Timbers Research Station and the Fish and Wildlife Service to implement a new conservation program for private landowners in southwest Georgia and the Florida Panhandle. The Quail Country Candidate Conservation with Assurances Agreement, a voluntary agreement, provides incentives for private landowners to use management practices benefiting one or more of 12 at-risk focal species in the region.

Staff coordinated with The Longleaf Alliance, Georgia Conservancy and Wildlife Resource Division's Game Management Section to host landowner workshops, fire festivals and field days throughout the state, promoting prescribed fire and habitat management to private landowners. Biologists also gave presentations on rare species and ecosystems, sustainable forestry, and habitat management at a field day hosted by International Paper. Highlights included a growing collection of burn trailers available for private landowners to rent through the Georgia Forestry Commission or their area Resource Conservation and Development Council (find a burn trailer near you).

Even at the close of fiscal 2025, many private landowners were still recovering from the devastating storm season of 2024, particularly from damage caused by Hurricane Helene. Wildlife Conservation helped forestland owners throughout, directing them to storm recovery assistance programs, marking gopher tortoise burrows ahead of salvage forestry operations and providing recommendations to restore wildlife habitat in hard-hit stands.

Forestry for Wildlife Partnership

The Wildlife Conservation Section plays a strong role in the DNR Wildlife Resources Division's Forestry for Wildlife Partnership. This program has been a standard of excellence in combining forest management and wildlife conservation since 1996. Wildlife Resources strengthened the partnership in fiscal year 2022, making it project-focused and open to more landowners.

Forestry for Wildlife Partnership is a voluntary, flexible, non-competitive and participant-driven effort that:

- Enhances wildlife conservation on the holdings of large landowners.
- Helps deliver wildlife technical assistance, training and outreach.
- Recognizes partners for their wildlife conservation achievements.

Coordinated by Game Management and Wildlife Conservation biologists, this public-private partnership provides opportunities to enhance wildlife conservation on private lands. Companies are recognized for their achievements. Conservation targets include red-cockaded woodpecker habitat, bald eagle and swallow-tailed kite nests, isolated wetlands critical to protected reptiles and amphibians, and remnant Coosa Valley prairies, home to endangered plants. The partnership also provides the public with outdoor recreation opportunities such as wildlife viewing, hunting and fishing. Partners are committed to Sustainable Forestry Initiative goals.

While the program began as a way to recognize corporate Georgia landowners that exceeded Sustainable Forestry Initiative requirements, the number of companies with large forest landholdings in the state has

Gov. Brian and First Lady Marty Kemp with the 2025 Forestry for Wildlife Partners and DNR leaders (Governor's Office)

Georgia Power staff mark a tortoise burrow (Erin Cork/DNR)

declined, and the expansion of Sustainable Forestry Initiative conservation standards duplicated many Forestry for Wildlife measures. In response, DNR revamped the partnership. The revised requirements center on projects between potential partners and the agency. The focus is making wildlife improvements that sync with DNR's Bobwhite Quail Initiative and Georgia's State Wildlife Action Plan, two guiding strategies created with stakeholders.

The minimum property size for participating in Forestry for Wildlife also was lowered from 20,000 to 10,000 acres, increasing eligibility for more landowners, from individuals to organizations. Significant accomplishments are highlighted on social media and in DNR's hunting and fishing regulation guide. Partners that complete projects are recognized in an annual news release and photos with the governor.

PotlatchDeltic, Georgia Power, Weyerhaeuser and Forest Investment Associates were the Forestry for Wildlife Partners for calendar year 2025. These corporations are among the largest landowners and managers of private lands in Georgia, directly affecting wildlife habitat on nearly 1 million acres. (Note: The merger of Rayonier and PotlatchDeltic was announced in October 2025, after the fiscal year closed.) In 2025, DNR also continued to collaborate on conservation projects with another forestry company that may be brought on as a new partner in the coming year.

Highlights of partner conservation efforts in 2025 include the following:

In 2022, former longtime Forestry for Wildlife Partner CatchMark Timber merged with **PotlatchDeltic**, a forest products company based in Spokane, Washington, that owns 1.5 million forestland acres in the South. In 2023, Wildlife Conservation began collaborating with PotlatchDeltic on conservation activities on several of their Georgia tracts and welcomed the company as a Forestry for Wildlife Partner in 2024.

PotlatchDeltic supports a conservation easement on its property near Townsend, protecting natural areas in the easement and making the 4,000 acres available for recreation and research within the 32,000-acre Townsend Wildlife Management Area. Another easement on a company site in Long County protects high-priority habitats identified by Georgia's State Wildlife Action Plan and maintains open spaces adjacent to Fort Stewart Army base near Hinesville as part of the Army Compatible Use Buffer Program.

The company has worked with the U.S. Fish and Wildlife Service to protect habitat for endangered fringed campion on PotlatchDeltic lands in Talbot County and supported surveys for the plant by DNR botanists and others. In fiscal 2025, PotlatchDeltic sold 2,239 acres of these lands to DNR, ensuring the permanent protection of a significant population of fringed campion and numerous other species that occur in the botanically rich ravines on the tract known as Upatoi Ravines.

Staff also updated the Natural Heritage data to ensure known locations of significant populations of threatened plant and animal species are protected and monitored on PotlatchDeltic lands.

The company continued to integrate a harvest planning system that considers landscape-level diversity, including robust thinning of pine plantations that improves wildlife habitat and forest health. Prescribed fire is also used in site preparation and mid-rotation applications to the benefit of wildlife. About 1,010 acres were burned in 2025.

PotlatchDeltic sponsors and hosts hunting events with youth groups and organizations for the disabled to provide opportunities to learn about hunting and enjoy the outdoors. DNR bird surveys are also hosted, as well as ongoing studies investigating the response of grassland birds to different chemical and mechanical site-preparation prescriptions.

DNR has access to company lands in Long, Brantley and McIntosh counties to conduct annual surveys of swallow-tailed kite nests. In fiscal 2023, scientists with the Avian Research and Conservation Institute, in coordination with American Bird Conservancy, captured two swallow-tailed kites on PotlatchDeltic properties to study the birds' migratory movements and habitat use. Equipped with GPS transmitters, these kites have provided valuable data for the past three seasons and even led to the discovery of the largest swallow-tailed kite roost ever documented in Georgia. The birds have continued to return to that roost site since its discovery in 2023, and in fiscal 2025 another kite was trapped on a PotlatchDeltic property. Monitoring the movement of these swallow-tailed kites will help researchers better understand kite ecology and inform conservation planning for the species.

Georgia Power is one of the largest private landowners in the state and manages its undeveloped land for benefits including public recreation, timber production, water quality protection and rare species conservation. Prescribed fire is applied to more than 5,000 acres annually. More than 20,000 acres are open for public recreation as part of DNR wildlife management areas, including Blanton Creek, Rum Creek and Oconee WMAs in middle Georgia. A key conservation acquisition this past year was the 20-acre Blue Hole Tract near Plant Bowen. This tract serves as the primary water source for Drummond Swamp, which is also mostly owned by Georgia Power and provides the only known natural habitat for Georgia alder, a subspecies of high conservation concern.

Georgia Power is committed to restoring longleaf pine habitat in support of conservation partner landscape goals and participates in DNR's Safe Harbor Program for red-cockaded woodpeckers at plants Hatch and Vogtle. Forty acres of mature longleaf at Plant Hatch in Appling County were heavily damaged by Hurricane Helene but will be replanted. Approximately 5,000 acres are managed annually across the state using prescribed fire. Georgia Power also supports longleaf pine system restoration through a National Fish and Wildlife Foundation grant program. Via these grants, the company also supports research and management directed at high-priority shorebirds, aquatic systems and bat species affected by white-nose syndrome. Georgia Power participates in the Georgia Bat Working Group and provides direct support for improvements to impaired streams through the Georgia Power Foundation's Waters for Georgia grant program.

More than 20 bald eagle nests were monitored and protected on company lands and lakes this past year. Results are communicated to DNR to complement the agency's monitoring efforts.

Georgia Power transmission rights of way are typically managed with an integrated vegetation management approach. This method includes a six- to seven-year mowing cycle interspersed with two cycles of backpack herbicide application targeting specific woody invasive plants. Developed to promote and establish a stable and diverse low-growing plant community on rights of way, this approach often provides significant benefits to wildlife communities adapted to open grass-and-forb-dominated landscapes. Georgia Power-managed lands and rights of way provide habitat for more than 30 species of rare plants, including 11 federally listed as threatened or endangered.

In fiscal 2025, Georgia Power staff met with representatives from DNR, the U.S. Fish and Wildlife Service, the Georgia Department of Transportation and Georgia Transmission Corp. to collaborate on transportation and utility right-of-way management for federally endangered hairy rattleweed. The distribution of this plant is limited to two counties in the state. Georgia Power also monitored federally threatened Georgia rockcress within designated critical habitat at Goat Rock Lake near Columbus and federally endangered persistent trillium at Tallulah Gorge in northeast Georgia. October 2024 marked the close of a commitment to

Snowy orchids, a State Wildlife Action Plan species, under a powerline on PotlatchDeltic lands (Erin Cork/DNR)

monitor Georgia aster on several right-of-way sites and on forested land at Goat Rock under a 10-year Candidate Conservation Agreement.

With assistance from biologists representing The Jones Center at Ichauway, Georgia Power conducted monitoring and management at a new Florida willow site on a right of way in Early County. During that work, the group discovered a new occurrence of Alabama milkvine, a high-priority species for conservation in the state.

The company is also protecting Coosa Prairie habitat, including occurrences of federally listed Mohr's Barbara's buttons and Tennessee yellow-eyed grass, during maintenance work on a Floyd County transmission right of way. Smooth purple coneflower is also being protected at a work site in Stephens County.

As an original member of Forestry for Wildlife Partnership, **Weyerhaeuser** is committed to Sustainable Forestry Initiative standards and integrates conservation into its forests. A key initiative for the company in recent years is conserving gopher tortoises. Weyerhaeuser focuses management for this iconic species on preferred soils with viable populations and helps Wildlife Conservation survey tortoises. The company also has worked with DNR, the University of Georgia, the Fish and Wildlife Service and others to better understand how tortoises respond to the changing mosaic of stand conditions in working pine forestlands, all in a larger effort to research tortoise ecology across company-managed lands in the Southeast.

Weyerhaeuser supports rare plant surveys, monitoring and conservation activities by Wildlife Conservation and Georgia Plant Conservation Alliance partners on company lands. In fiscal 2025, researchers from The Jones Center at Ichauway searched for the rare Alabama milkvine on Weyerhaeuser tracts in southwest Georgia. They found milkvines but none of the plants were in flower, leaving the species unconfirmed. In northwest Georgia at the Coosa Valley Prairie, a site managed by Weyerhaeuser and protected with a conservation easement, Wildlife Conservation coordinated with Weyerhaeuser's forestry staff to conduct visits to assess drought response and habitat management needs for a suite of rare species on the property, including federally endangered Tennessee yellow-eyed grass. In southeast Georgia, the company also allowed Wildlife Conservation to collect genetic samples and seed from federally endangered hairy rattleweed, a species known to occur in just two counties in Georgia.

Along Georgia's Fall Line, Weyerhaeuser manages 84 acres for federally endangered fringed campion. This plant persists along moist slopes of mature hardwood forest and will be sheltered from adjacent forestry activities. In the lower Coastal Plain, efforts with Wildlife Conservation included conserving wood stork rookeries and isolated wetlands and supporting DNR surveys for protected species, such as swallow-tailed kites and federally threatened indigo snakes.

Forest Investment Associates, often simply called FIA, began working with Wildlife Conservation in 2021 and was first recognized as a Forestry for Wildlife partner in 2023. FIA supports surveys and management benefiting two populations of Chapman's fringed orchid on a large tract the company manages in Camden County. In Georgia, Chapman's fringed orchid is known from only a few small roadside populations in Camden and two other counties in the southeastern part of the state. This rare and beautiful orchid, a species of greatest conservation need in the State Wildlife Action Plan, is associated with pine flatwoods wetlands, many of which have been converted for forestry in the region. Like many similar orchids, the plant requires moist soils and open sunny conditions to thrive.

In 2013, a small population of Chapman's fringed orchid was discovered underneath a power line right of way along a boundary road of the company's property. This population persisted beside a planted pine stand, producing just one to four flowers each year under the growing shade of the pines. In early 2023, FIA harvested the pines, consulting with Wildlife Conservation to protect the roadside orchids during the operation. The company's forestry staff provided a buffer for the orchids, excluding them from the next rotation of planted loblolly and ensuring that the area would receive more sunlight even as the pines grew. While the harvest was expected to improve conditions for the orchids, no flowering individuals were observed during 2024 surveys.

In 2023, Wildlife Conservation staff partnered with Jacksonville Zoo and Garden's horticultural staff and Atlanta Botanical Garden to collect seed for maternal line tracking and seed-banking of a second Chapman's fringed orchid population, which was discovered on the FIA-managed tract in 2021.Wildlife Conservation shared habitat management recommendations with the company and their forestry staff, and this population has doubled in size as a result of their efforts to protect and encourage the roadside orchids.

In early 2025, FIA also implemented DNR's mowing recommendations at two sites to address increasing competition and improve growing conditions for the orchids. Surveys for Chapman's fringed orchids will be conducted in August 2025, with staff eager to assess the plants' response to the mowing.

Swallow-tailed kite roost (Andy Day/DNR)

LAW ENFORCEMENT

During fiscal year 2025, the DNR Law Enforcement Division enforced laws and regulations and conducted investigations involving rare and other native nongame species. That work included teaming with the National Oceanic and Atmospheric Administration to enforce federal measures – such as checking commercial trawlers for compliance with turtle excluder device, or TED, regulations – and raising awareness of marine mammals and the laws that protect them.

The division's Region 6, based in Brunswick, logged 602 personnel hours devoted to these priorities, including 227 doing boat patrols, with the majority of those involving sea turtles and marine mammals. Game wardens recorded 107 hours on TED inspections and 66 targeting North Atlantic right whale enforcement. Overall, vessel patrol hours focused on:

- Shrimp trawler checks for TED compliance.
- Intercepts of recreational and commercial fishing vessels returning to Georgia seaports from fishing trips in federal waters.
- Offshore patrols to Special Management Zones and Gray's Reef National Marine Sanctuary.
- Concentrations of fishing vessels wherever they occurred in the Exclusive Economic Zone adjacent to the state.
- Offshore and nearshore patrols for compliance with the Atlantic Whale Take Reduction Plan.

Game wardens documented and forwarded six federal violations to NOAA for prosecution.

Law Enforcement's Aviation Unit flew about 526 hours supporting game wardens and the division's core mission of protecting natural resources. The flights included Wildlife Resources Division surveys of bald eagles, southeastern American kestrels, wood storks, wild turkeys, sandhill cranes, waterfowl, shorebirds, sea turtles, dolphins, manatees and bears. The unit also flew missions in support of local and state emergency management missions for storm damage and flooding events and continued to fly missions and remain on standby for any federal, state law enforcement and emergency management requests as well. Along with enforcement of state wildlife laws, DNR Aviation also assisted local agencies as requested in search and rescue on land and water, while providing fire suppression support as well.

The agency took part in rescue training with SR3 Rescue Concepts and the U.S. Coast Guard while remaining on standby for rescue extraction missions at Tallulah Gorge State Park in Tallulah Falls. Regional search and rescue training was completed with emergency management agency teams in Habersham, White and Rabun counties to maintain proficiency and team relationships. During the fiscal year, 12 long-line rescues were completed for medical emergencies at Tallulah Gorge and nearby Panther Creek Recreation Area, as well as recovery extractions from Dade County and Ossabaw Island.

Region 4 staff, based in Metter, continued to help spread the word about Argentine black and white tegus, encouraging area residents to report sightings. DNR's Wildlife Conservation Section worked this year with game wardens, the DNR Game Management Section and Georgia Southern University to assess and try to eradicate a wild population of these large, invasive South American lizards in southeast Georgia's Tattnall and Toombs counties.

In other law enforcement updates:

- Game Warden 1st Class Hunter Rush was named DNR's 2025 Game Warden of the Year. Rush is assigned to Murray County and Fort Mountain State Park. Corp. Zach Griffis from Glynn County received the James R. Darnell Award as Warden of the Year runner-up.
- Other 2025 honors included Capt. Derek Dillard being named Supervisor of the Year, Cpl. Shawn Elmore as Investigative Game Warden of the Year (presented by the Georgia Chapter of the Safari Club International), Game Warden Drew Weathersby as National Wild Turkey Federation Officer of the Year, Game Warden Ben Hawkins as Georgia Boating Officer of the Year (as well as the 2025 Operation Dry Water National Officer of the Year), Cpl. Ryan Locke as Operation Dry Water Officer of the Year, Cpl. Jason Bennett as recipient of the Rocky Wainwright Waterfowl Award, Game Warden Noah Osborne as Hunter Education Instructor of the Year, Game Warden Lucas Barnard as South Atlantic Fisheries Council Law Enforcement Officer of the Year, and Game Warden Thomas Ledford as recipient of the 2025 Level Torch Award, which recognizes the work of recently appointed wardens.
- Also, Capt. Mitch Oliver from the division's Training Unit graduated as a member of the 295th session of the FBI National Academy, Game Warden Matthew Thompson was recognized by the Glynn County Exchange Club as DNR's Officer of the Year and Gov. Brian Kemp presented the state Acts of Heroism Award to Game Warden Matt Tsiklistas for his and State Trooper Ty Brooks' rescue of a truck driver after his crashed dump truck caught fire in Glynn County. Tsiklistas had earlier received the Peace Officers Association of Georgia's 2023 Valor Award.

For more, see Law Enforcement's annual reports at gadnrle.org. Report poaching and the violation of protected species laws and regulations by calling the Ranger Hotline at (800) 241-4113 (or *DNR for AT&T mobility customers), emailing rangerhotline@dnr.ga.gov or contacting a local game warden (search by county at gadnrle.org/find-ranger). ■

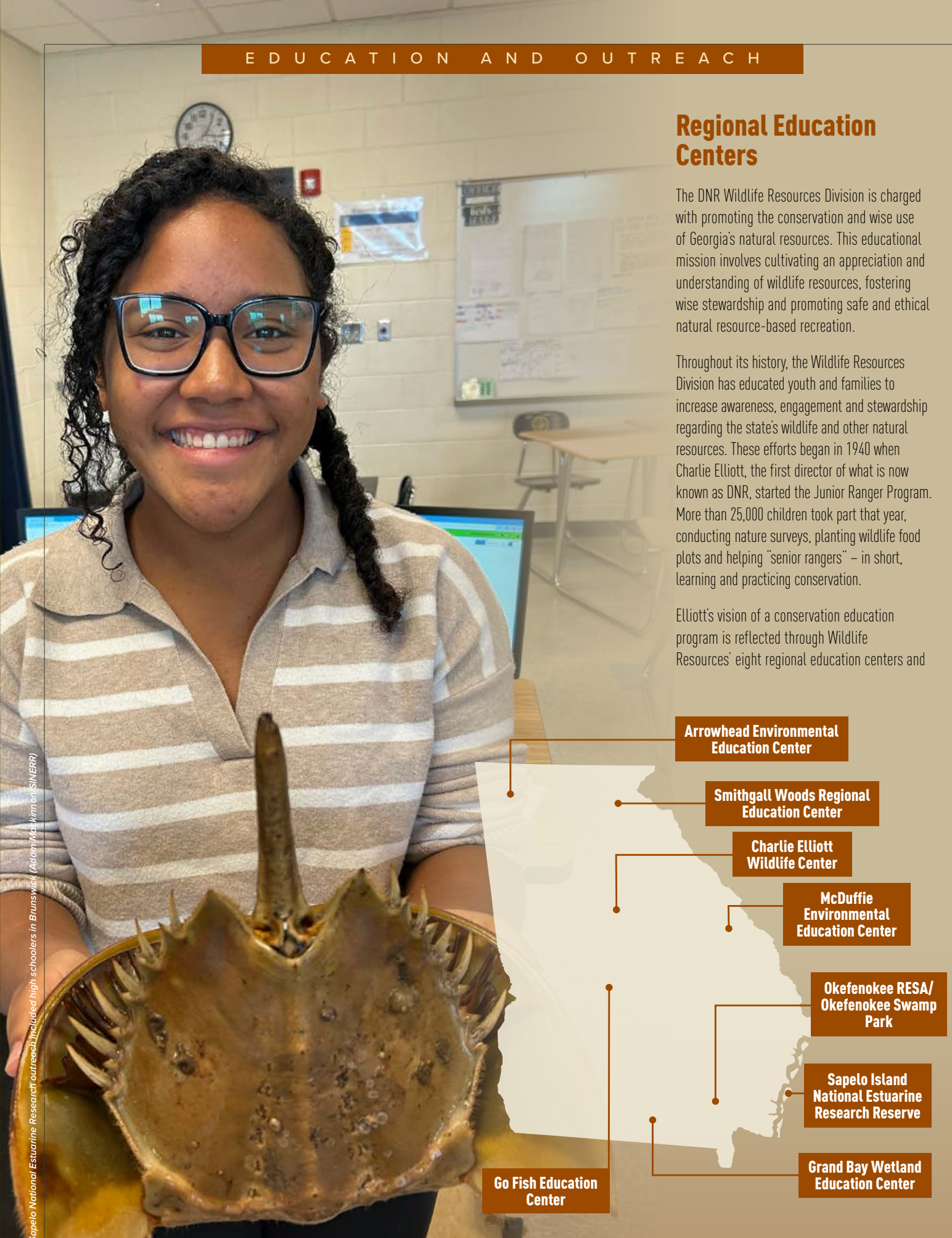
Surveying wood stork nesting by DNR Law Enforcement helicopter (Tim Keyes/DNR)

Regional Education Centers

The DNR Wildlife Resources Division is charged with promoting the conservation and wise use of Georgia's natural resources. This educational mission involves cultivating an appreciation and understanding of wildlife resources, fostering wise stewardship and promoting safe and ethical natural resource-based recreation.

Throughout its history, the Wildlife Resources Division has educated youth and families to increase awareness, engagement and stewardship regarding the state's wildlife and other natural resources. These efforts began in 1940 when Charlie Elliott, the first director of what is now known as DNR, started the Junior Ranger Program. More than 25,000 children took part that year, conducting nature surveys, planting wildlife food plots and helping "senior rangers" – in short, learning and practicing conservation.

Elliott's vision of a conservation education program is reflected through Wildlife Resources' eight regional education centers and



Sapelo National Estuarine Research outreach included high schoolers in Brunswick (Adam Maskinn on SINERR)

continuation of the Junior Ranger Program in the DNR State Parks and Historic Sites Division.

The centers are Charlie Elliott Wildlife Center near Mansfield, Go Fish Education Center in Perry, Smithgall Woods Regional Education Center near Helen, Arrowhead Environmental Education Center near Armuchee, McDuffie Environmental Education Center in Dearing, Grand Bay Wetland Education Center near Valdosta, the Okefenokee Regional Education Service Agency at Okefenokee Swamp Park near Waycross and Sapelo Island National Estuarine Research Reserve on Sapelo. In fiscal 2025, the centers provided programming in person and virtually for over 105,000 youth and adults.

Charlie Elliott Wildlife Center

Since Charlie Elliott Wildlife Center opened more than 25 years ago, the focus has been creating opportunities for all audiences to explore the outdoors and instructing Georgians about wildlife and natural resources, helping equip them as environmentally literate natural resource stewards. The center near Mansfield achieves these goals through engaging, hands-on programming that allows participants to experience the subjects covered.

During the 2025 Keeping Georgia Wild Festival, over 1,150 people visited Charlie Elliott to take part in activities such as tree climbing, fishing, archery, shooting sports, arts and crafts. Participants enjoyed live animal presentations by the DNR Law Enforcement Division's K-9 team, the Georgia Falconry Association and Charlie Elliott staff. Exhibitors from 19 nature-based organizations shared information and activities to engage people in the outdoors. Festival partners included the Georgia Wildlife Federation, Fellowship of Christian Athletes and the Georgia Wild Turkey Federation.

Georgia's Becoming an Outdoors Woman program, or BOW, continued to grow in fiscal 2025. The 13th annual BOW weekend drew 95 women with a variety of outdoor skill-building workshops such as introductory classes on fly fishing, archery, tree climbing and land navigation. The event fostered a sense of empowerment in participants as they learned skills, formed connections and gained greater confidence in their outdoor abilities.

Volunteer Ken May helps Becoming an Outdoors Woman participants build bird boxes (Linda May/DNR)

Charlie Elliott Wildlife Center reached approximately 26,600 youth and adults through 90 K-12 school programs and outreach events including schools, libraries, festivals and summer camps in 22 counties. The team also worked events statewide with the center's animal ambassadors, taking part in CoastFest in Brunswick, the Claxton Rattlesnake and Wildlife Festival, Conyers Cherry Blossom Festival and DNR's annual Weekend for Wildlife fundraiser on the coast.

The center is host, as well, to Project WILD, a K-12 interdisciplinary conservation and environmental education program that emphasizes terrestrial and aquatic wildlife resources. Georgia Project WILD offers training workshops for pre-kindergarten, K-12 and environmental educators across the state. In fiscal 2025, a total of 357 educators took part in 23 workshops.

Each summer, Project WILD also holds Advanced WILD workshops. These trainings are designed to explore a single topic through immersive experiences. In fiscal year 2025, Charlie Elliott offered two weeklong versions: a Teacher Conservation Workshop on forestry and natural resources management and an Outdoor Wildlife Leadership School that examined flora and fauna

in the north Georgia mountains. In the latter, participants learned about the Piedmont and upper Coastal Plain ecoregions, plus wildlife forensics though activities and field experiences.

Charlie Elliott held seven weeklong summer camps this fiscal year for a total of 127 campers. Two camps focused on shooting sports and hunting skills for 12- to 16-year-olds. The other five camps were geared to ages 6-13 and included Charlie's Trackers (in which campers explore their love of nature as Junior Rangers), Gone Fishin' (where youth test their angling skills), Wildlife Rangers (which develops knowledge of the outdoors and related skills) and the popular Outdoor Team Challenge camp.

The center also hosts an Adventures in Conservation Education Camp annually. Sponsored by The Environmental Resources Network, or TERN, friends group of DNR's Wildlife Conservation Section, this summer camp is for middle-schoolers interested in wildlife conservation. During the 2025 session, youth spent five days exploring the Piedmont and upper Coastal Plain ecoregions and wildlife forensics.

Charlie Elliott continued to provide opportunities for youth and adults to add to their hunting knowledge and skills. Hunt and Learn programs allow people to try dove, deer, rabbit and turkey hunting. In addition to these traditional programs led by staff at Clybel Wildlife Management Area, six hunters with mobility impairments participated in an adaptive hunting program. The Safe Harvest and Responsible Practices series also grew to 68 participants this year, 10 more than in 2024. All learned about turkey, deer, falconry, trapping and small game.

In April 2025, Charlie Elliott Wildlife Center celebrated the opening of the Joe Tanner Discovery Center. The new education center named for former Georgia DNR Commissioner Joe Tanner features an exhibit area that walks students and visitors through Georgia's main physiographic regions. Each section includes habitats and live animals native to that region. An expansive classroom allows for indoor teaching while providing quick access to the outdoors for further instruction. The center also includes an animal care area that houses Charlie Elliott's ambassador animal collection.

Arrowhead Environmental Education Center

Following a temporary closure in August 2024 to address animal care needs and hire staff, Arrowhead Environmental Education Center in Armuchee resumed educational programming in September 2024. Arrowhead staff have focused on updating enclosures and providing new enrichment opportunities for the facility's animal ambassadors, implementing a new animal care plan and improving community outreach and education opportunities, including new public programming.

The restructuring at the start of fiscal year 2025 affected the number of programs the center provided. However, Arrowhead still hosted 37 programs and reached approximately 2,850 students and adults. Those numbers are expected to grow as the public learns more about programs and events at Arrowhead. The center, which is on Arrowhead Wildlife Management Area, is part of the Region 1 office for the DNR Wildlife Resources Division's Game Management Section. Outreach has changed to include more game-oriented education and outreach held on the region's wildlife management areas. Examples include programs on prescribed fire and managing habitats on WMAs for game species.

Arrowhead outreach and programming in the 2024-2025 school year reached seven counties. In the coming year, the hope is to expand to more counties, while also increasing the number of schools and groups served in the current range. Groups reached in fiscal 2025 varied from homeschoolers to college students and from Scouts to groups at public libraries and people with disabilities.

In addition to educational programs, Arrowhead coordinated with staff from James H. Sloppy Floyd State Park in Summerville to help with wildlife outreach and education for the park's Junior Ranger Camps. The center renewed partnerships with Berry College, hosting four student volunteers and one intern. The students helped update animal enclosures, develop program ideas, plan a native plant garden and upgrade the education center.

For fiscal 2026, Arrowhead's goals include offering new programs, expanding outreach to underrepresented counties and districts, raising awareness of programming online and through print, partnering with other colleges

Homeschoolers learn fish ID at the Go Fish Education Center (Chrystal Sherwood/DNR)

and local groups, and focusing more on education that showcases Region 1 WMAs to align with the Game Management Section's R3 (recruitment, retention and reactivation) goals regarding hunters and sport shooters.

Go Fish Education Center

Almost 20,000 people visited the Go Fish Education Center during fiscal year 2025, a total that encompassed general admissions visitors and education participants. Visitation included self-guided tours (some involving more than 100 youth), birthday parties and over 200 people taking part in private meetings. As a bonus, visitors during October and March could catch and keep fish from the casting pond.

The center's education staff provided quality environmental education programs focused on fishing and aquatic resource conservation for over 6,000 youths and adults. Information and education efforts emphasized recruiting, retaining and reactivating anglers in Georgia. Guided field trips and tours offered to schools, youth groups, day care centers, churches and others contributed heavily to program participation. Field trips included an introduction to fishing (plus time to fish), an aquarium tour and an educational program.

Four sessions of summer fishing day camps were held for ages 7-15. Participants learned about fishing basics, regulations, fish identification and knot tying. Fish habitats and the need for clean water were discussed. Campers tried casting, baiting hooks and handling and measuring fish. Other programs included bass fishing workshops, fishing seminars, kids fishing events, hatchery tours and programs for homeschoolers and toddlers.

The 2025 Georgia Fish Art Contest received 128 submissions from K-12 students statewide. Georgia's winning entries, along with the Go Fish Georgia Award winners, were displayed for visitors to see.

Grand Bay Wetland Education Center

Grand Bay Wetland Education Center, a partnership between DNR and the Coastal Plains Regional Educational Services Agency, served approximately 1,200 students in day classes at the center before Hurricane Helene rolled through south Georgia in late September 2024. Attendees included local public schools during school months and Valdosta State University summer classes in June and July.

However, the extensive damage caused by Helene closed Grand Bay Wildlife Management Area and the education center for months. Although students were not allowed on-site afterward, the center's community outreach programs reached an estimated 3,000 students. Participants in these mobile field trips included local public school systems and private learning institutions. Programs for primary and secondary education students focused on native wildlife and natural resources in south Georgia. All activities adhered to Georgia Standards of Excellence.

With significant support from DNR, Grand Bay recovered from Helene. The hurricane almost obliterated the remote classroom and facilities and heavily damaged the boardwalk. Most wooded areas were hit hard. But the facilities have been refurbished and even expanded, and the boardwalk repaired. In August 2025, Grand Bay Wetland Education Center began taking reservations for the school year and operating at normal levels.

As it has from the start of the center, The Harley Langdale Jr. Foundation provided consistent and critical support. This foundation, which sees Grand Bay Wetlands as a community asset, has made many improvements at the center possible, starting with the Kinderlou Observatory Tower in 1993 and providing lumber to build the boardwalk in 1994. In fiscal 2025, that assistance helped extend a partnership with Valdosta State University's Biology Department for a sixth year and will aid with more grants over the next three years.

The last month of fiscal 2024 (June) and the first month of fiscal 2025 (July) were reserved for Valdosta State's Herpetology class. These students used the WMA's extensive Carolina Bay ecosystem as a classroom for examining Georgia's wide range of biodiversity.

Before Helene, visiting primary students were engaged with hands-on exercises in and out of the classroom. Children observed and learned about a variety of wildlife, from apex carnivores such as American alligators to unusual plants such as hooded pitcherplants, along with how these animals and plants interact within Grand Bay's unique ecosystem. Visits usually ended with hiking on the boardwalk and climbing the observation tower.

Secondary education students performed exercises involving water quality and wildlife identification and collection. The students were provided lab equipment and supplies for performing scientific methodology. Experiments included a turbidity test, pH readings, dissolved oxygen and nitrate level testing, along with nomenclature usage. Identifying common as well as threatened or endangered wildlife is always a bonus for students, who spent most of their day at Grand Bay on the boardwalk doing field tests and making observations.

For the 2024-2025 school year before Helene, program attendance initially followed a normal routine. Mobile field trips were periodic. Local behavioral health and long-term care facilities for adults visited the center. In public programming outreach, the center's largest participant is Lowndes Advocacy Resource Center. These opportunities allow the Wetland Education Center to serve the community beyond public school systems. Other visitors included area homeschool groups, the two largest being Vines and Classical Conversations.

McDuffie Environmental Education Center

In fiscal year 2025, McDuffie Environmental Education Center near Dearing continued to offer a variety of programs designed to immerse students, parents and teachers in the natural world and help foster a lifelong awareness of nature and conservation. Attendance at the center, part of McDuffie Public Fishing Area and McDuffie Warm Water Fish Hatchery, totaled 8,766 people – 5,951 children and 2,815 adults – through 149 school field trips and public outreach events. The center's fishing program, part of an R3

initiative started at McDuffie in 2022, drew 961 participants, 242 of them first-time anglers. (R3 is a nationwide effort to increase participation in hunting, fishing, shooting sports and related outdoor recreation through recruitment, retention and reactivation.)

McDuffie hosted the first of DNR's Outdoor Beyond Barriers adaptive fishing events in March. The center was scheduled to host Eco-Meet, an environmental science competition for middle school students in the central Savannah River area, in November 2024. However, a three-month closure for repairs following Hurricane Helene – which hit in late September – postponed the competition at the center until November 2025.

Helene destroyed the site's boardwalk, which was used by the public and served as an integral part of school field trips. Staff have adapted by developing new lesson plans focused on prescribed fire and featuring a hike in longleaf pine habitat, replacing the wetlands lesson plans based on the boardwalk.

Staffing changes also affected operations. The fiscal year began with one full-time and one part-time staff member. A second part-time staff member was added in December; however, one of the part-time positions became vacant in May and will not be filled. With two staff members, McDuffie can accommodate school groups of up to 50 students four days a week. Many schools require multiple dates for an entire grade to visit or they cannot arrange transportation for multiple trips. As a result, the center's fiscal 2025 calendar was nearly full by the end of the previous fiscal year.

During this last year, the full-time staff member completed and received the Advanced Training for Environmental Education in Georgia, a nationally accredited professional certification program. Goals for fiscal 2026 include continuing to provide high-quality programming for field trip students; completing an ongoing audit of all grade-level activities to ensure alignment with current state standards; expanding homeschool drop-in days from one to possibly two a month; and strengthening R3 fisheries programming by offering more educational family-fishing events.

Okefenokee RESA/ Okefenokee Swamp Park

The Okefenokee Regional Education Service Agency (RESA) supports local school systems in building the capacity of teachers, leaders and staff through professional learning and technical services that help increase student achievement and college- and career-ready graduates. Okefenokee RESA has a long-standing partnership with Okefenokee Swamp Park Inc. in Waycross. The private nonprofit park is focused on fostering a deep connection with nature and conserving ecological health through stewardship, education and outdoor recreation in and around the Okefenokee.

Through a partnership between RESA and the park, the RESA science specialist serves as the park's education director. This role is dedicated to offering free and reduced educational programming that is based on Georgia Science Standards and provided through outreach programs in the RESA's school districts and field trips and summer camps at the park. The education director also manages grant-funded projects that provide improved visitor access to the Okefenokee and help restore the swamp's ecology.

During the 2024-2025 school year, the education director taught over 4,600 students and 1,200 adults in outreach programs and field trips for RESA districts. Another 200 people were reached during public events, including Okefenokee Day at the Georgia State Capitol and the Georgia Science Teachers Association annual conference.

In fall 2024, Georgia Public Broadcasting and the Georgia Department of Education's Science Team visited the park and in collaboration with Okefenokee RESA filmed a series of short videos. The footage will feature interviews with the education director and other staff answering questions about topics related to high school biology standards. The videos will be part of an online educational series for high school biology planned for release in 2026.

The park also has partnered with Post Pigeon EDU, a nonprofit organization focused on connecting students with national public lands. The partnership includes teachers and students from across the U.S. learning about the Okefenokee Swamp, then submitting one to three questions per class to the education director. The director will create a video for each classroom answering their questions.

In November 2024, Okefenokee Swamp Park received a $20,050 Two for the Trails Grant from Athletic Brewing Company LLC to create a walking trail through the park's upland areas. The education director is managing this project. The 0.6-mile trail, called the Flatwoods Fire Trail, will be used by the public and for field trips, special programs and summer camps. The education director is designing educational signage about native flora and fauna, prescribed fires and the park's partnership with the Georgia Forestry Commission that will be placed along the trail in fall 2025.

Also in November 2024, the park received a $2,500 grant from the Weyerhaeuser Giving Fund to support Teachers in the Okefenokee. A trial run of the professional learning project was conducted later that month. (Two elementary schoolteachers and one environmental educator took part, camping overnight at Cedar Hammock in the Okefenokee National Wildlife Refuge.) The initiative continued in May 2025, with seven Okefenokee RESA district science teachers participating in the first day of the four-day program. In fall 2025, these teachers will camp overnight on the refuge for an in-depth, environmental education experience they can then use to create standards-based science lesson plans.

Under the guidance of the education director and a designer, the park created a master interpretive plan to align with the park's conservation mission. The plan's overarching theme – "The Okefenokee Swamp is a vast wilderness rich with natural and cultural wonders to discover and protect" – will be used for leading naturalists and guides in creating environmental education and interpretive programs.

In February 2025, the park's education director attended Okefenokee Day at the

State Capitol. Two American alligators used for the event proved a big attraction – including on the Senate floor – underscoring messaging about the United Nations cultural agency UNESCO's bid to designate the Okefenokee a World Heritage Site, the park's capital campaign to build a new nature center and opportunities to experience the Okefenokee.

Also in fiscal 2025, the park's Camp OSCAR proved another success. (OSCAR is short for Okefenokee Sustainability, Conservation, Advocacy and Respect.) Over 140 children from pre-K through high school attended, with a $700 donation from Coastal WildScapes providing opportunities for multiple children who might not have been able to take part. Guest speakers from DNR, Quail Unlimited, University of Georgia, Satilla Riverkeeper and Gaskins Forest Education Center in Alapaha told campers about their careers, showed some of the equipment and techniques they use at work, and taught about Georgia's native and invasive species.

Sapelo Island National Estuarine Research Reserve

Sapelo Island National Estuarine Research Reserve offered a range of environmental education programming during the 2024-2025 school year. The reserve hosted 38 school groups totaling 983 students, from elementary-school to college ages. Staff also conducted educational programs for 11 Road Scholar groups (316 participants) and six programs (153 people total) for special interest groups such as Sierra Club, The Georgia Trust, Darien Chamber of Commerce, Stanford University alumni and the Garden Club of Savannah. The reserve's education coordinator also held a TED-style talk for the public in downtown Darien, drawing 58 people.

Significant challenges affected participant numbers in fiscal year 2025. First was the tragic dock gangway collapse during the island's annual Culture Day in October 2024 that resulted in the death of seven people. All operations were temporarily put on hold. Also this year, the island's nature trail remained closed by a saltmarsh restoration project. A 155-foot earthen causeway spanning the tidal marsh is being removed, enabling the natural flow of water across the marsh. A new elevated boardwalk will be installed.

During fiscal 2025, the Sapelo education program conducted nine professional development workshops for a total of 144 educators. Three of the workshops met the criteria to be included in the National Estuarine Research Reserves' Teachers on the Estuary program. The reserve also partnered with Gray's Reef National Marine Sanctuary and Georgia Aquarium to hold a Rivers to Reefs teacher workshop on Sapelo. The reserve held two workshops for teachers from Savannah Country Day and Glynn County Schools, as well. Staff helped train seasonal staff for local environmental education centers, including Burton 4-H Center on Tybee Island and Camp Jekyll.

Sapelo's mainland visitor center reported 11,283 walk-in guests not associated with state education programs during the fiscal year. The public also was educated through the reserve's public tour program, held each Wednesday and Saturday. The 50 public tours involved 620 participants. The reserve took part in four outdoor education events – Sapelo's Culture Day, Darien's Blessing of the Fleet, the College of Coastal Georgia's Coastal Science Symposium and St. Simons Island Beach Week.

To expand the impact of Sapelo's education programs, staff served on committees and advisory groups, including the Georgia Association of Marine Educators (as a board member), Georgia Coastal Educator, Cannon's Point Education Task Force (as the group's chair), Golden Isles Career Academy Steering Committee, Georgia Sea Turtle Cooperative, Georgia Shorebird Alliance education advisory group and several National Estuarine Research Reserve working groups.

The reserve maintained an active social media presence in fiscal 2025, posting on Facebook, YouTube and Instagram. The assistant education and coastal training program coordinators continued the coastal science Sapelo NERRds podcast.

Smithgall Woods Regional Education Center

Smithgall Woods Regional Education Center is located on the second largest park in Georgia, which covers nearly 6,000 acres in the Appalachian foothills near Helen. The center provides high-quality and engaging environmental education to visitors and through off-site programming. This work syncs with the vision of Smithgall Woods' previous owner, the late Charles Smithgall, who saw the property as being open to all and focused on natural resources conservation and education in the Blue Ridge Mountains.

As always, the primary focus of the Smithgall center is providing first-rate wildlife-based education to northeast Georgia. However, the focus this year shifted slightly to incorporate professional development and inter- and intra-agency assistance, while also updating and improving current programs and creating new ones. The programming coordinator completed both a master husbandry and master herpetologist class. Staff also helped DNR's Wildlife Resources Division with breeding bird surveys in the spring and bear scent lines in the summer. Staffers also completed two acoustic bat routes during the summer for the U.S. Forest Service. All the while, the park naturalist completed state-mandated learning opportunities. This professional development helped the center provide the public with the most up-to-date environmental education possible.

Fiscal year 2025 featured 1,042 programs presented to 32,101 constituents throughout northeast Georgia, plus some students from western North Carolina who visited the center. While these numbers were slightly lower than 2024 – a record-high year – they were within the center's programming average.

In fiscal 2026, the center will work to maintain a mix of programming for the public and professional improvement for staff. These successful outcomes are only possible with generous help from the park's naturalist, a dedicated set of park volunteers and the support of the Wildlife Resources Division's regional staff and educational providers.

DNR's Bob Sargent presents binoculars as prizes to a winning YBC team (Tasha Messer)

Youth Birding Competition

The Youth Birding Competition marked its 19th year in 2025. Held April 4-12, teams of kindergarteners through high-schoolers picked a 24-hour stretch during that time and competed by age group to find the most bird species. This year's competition registered 37 teams and drew a large and excited group to the awards banquet at Charlie Elliott Wildlife Center in Mansfield.

The Amazing Anhingas, a high school team from Glynn County, finished as the overall winner with 121 species. Ten other teams listed 70 bird species or more, with two of those teams logging over 100 species.

Two teams from Madison voluntarily chose to raise funds for The Environmental Resources Network (TERN). The elementary team Bird Dawgs pledged $100 and the middle school team Singing Sparrows raised $50. Mentor Award recipient Tasha Messer spent over 196 hours prepping and mentoring two teams – the Birding Crew (Primary Division) and American Eagles (Elementary Division). Messer conducted bird walks for the youth and encouraged them to enter artwork in the Youth Birding T-shirt Art Contest. Her efforts paid off as both teams won awards in 2025.

The related Youth Birding T-shirt Art Contest received artwork featuring native birds from 163 pre-K through 12th graders from 57 public, private and home schools statewide. Walton High School freshman Erin Moore from Marietta won the grand prize for her red-breasted merganser artwork. Moore received a $100 Amazon gift card and the honor of having her entry featured on the 2025 Youth Birding Competition T-shirt.

The Youth Birding Competition is aimed at cultivating an interest in birds and conservation. Sponsors include The Environmental Resources Network, Georgia Ornithological Society and Birds Georgia. Volunteers also are vital, helping with the art contest and awards banquet.

Camp TALON

The Wildlife Conservation Section's 15th annual Camp TALON took place May 31-June 5 in 2025. TALON, short for Teen Adventures Learning Ornithology and Nature, is an offshoot of the Youth Birding Competition. (The original goal of the camp was to provide a weeklong ornithology class for recruits from the competition.) TALON is designed to teach teens how to identify birds, but it has evolved into an ecology-rich education for teens from Georgia and across the nation. It is not unusual for 30-40 percent of participants each year to attend from other states, from Washington to Florida.

Among other subjects, students learn about habitats and their management, threatened and endangered species, bird survey methods and data collection, coastal plants, island geology, conducting avian research, beach invertebrates, and outdoor career opportunities. While birds are the star attractions, the conversations campers

have with teachers and the insider's look provided by TALON into the work of biologists are invaluable. This impact is evidenced by the return of many teens to the camp in subsequent years and the numerous participants who have gone on to study wildlife, ornithology and biology in college.

Epworth by the Sea on St. Simons Island served as the camp base this year. Campers traveled by bus or boat to birding and outdoor classroom destinations. Sites included Andrews, Jekyll, St. Simons and Little St. Simons islands, Crooked River State Park near St. Marys, and Fort Stewart Army base near Richmond Hill.

Camp leaders included a dozen teachers from state, federal and nonprofit agencies, as well as retired university faculty and professional naturalists. The 18 students and two interns came from six states, a sign of TALON's national visibility. Students counted and learned about the biology of 125 bird species seen during camp. They also learned how tides work; how birds fly, sing and migrate; how shorebirds find food on beaches; how invasive species compete with natives; how habitats are managed; and how biologists are working to recover sensitive species.

During the visit to Little St. Simons, campers learned from researchers banding painted buntings. Students also talked with biologists concerning research and management involving red-cockaded woodpeckers, least terns, Wilson's plovers and wood storks. A gopher tortoise spotted at Crooked River State Park allowed for close observation of this Coastal Plain keystone species. Students also learned about prescribed fire, invasive species control and managing aquatic habitats for wading bird colonies.

In addition to the support of volunteers and biologists, the camp was made possible by a grant from The Environmental Resources Network (TERN) and donations from DNR Weekend for Wildlife supporters, Georgia Ornithological Society and Birds Georgia. TERN is the friends group of the Wildlife Conservation Section.

Give Wildlife a Chance Poster Contest

Over 1,800 kindergarten through fifth grade students took part in the 2024-25 Give Wildlife a Chance Poster Contest. This annual program has encouraged students to explore the wonders of Georgia's native plants and animals through art for 35 years.

Students from 21 public schools, private schools and homeschool groups participated in fiscal year 2025, creating artwork based on that year's contest theme: Colors of the Wild: Blend in or Stand Out? Entries were judged based on aspects such as adherence to the theme, originality, quality and impact.

Winners were showcased on the DNR Wildlife Resources Division's SmugMug site and Facebook page, and the State Botanical Garden of Georgia's Facebook and Instagram pages. Each state winner received an award ribbon, a bandana featuring the 2024-25 artwork and other prizes. As in years past, parents and

Camp TALON youth point out a bird (Linda May/DNR)

teachers of state winners were offered free DNR wildlife license plates.

The contest is organized and sponsored by DNR, the State Botanical Garden and The Environmental Resources Network.

Wildlife Viewing

From 1999-2008, the DNR Wildlife Resources Division awarded grants for projects that provided public opportunities to see and learn about native animals and plants. Recession-era spending cuts canceled the program in 2009. But the Wildlife Conservation Section resurrected it in 2018, again engaging conservation partners to help meet a wildlife viewing interest in Georgia that involved about 4.8 million people and billions in expenditures in 2022, according to survey findings by the U.S. Fish and Wildlife Service and NORC (National Opinion Research Center) at the University of Chicago.

Award-winning poster contest entry by Sophia Ortega of Clayton County's Kay R. Pace School of the Arts

This aspect of outdoor recreation has been growing nationwide since the mid-1990s. According to the Fish and Wildlife Service, an estimated 148 million U.S. residents – 57 percent of Americans 16 or older – took part in wildlife viewing in 2022.

Other than a Georgia Natural Resources Foundation startup grant in 2018, funding for the Wildlife Viewing Grants Program has come from the Georgia Nongame Wildlife Conservation Fund. The grants program also emphasizes projects that reflect Georgia's State Wildlife Action Plan, raising awareness of species of greatest conservation need, habitats and conservation actions. Along with other work, the grants in 2024 helped install an ADA-compliant canoe and kayak launch at Big Haynes Creek Nature Center in Conyers, build wildlife viewing blinds at Talking Rock Nature Park in Talking Rock, create a pollinator garden open to the public at The Learning Tree Academy in Toccoa and develop informational signage about wildlife and habitats at Nesmith Preserve in Fayetteville.

The 2025 cycle opened for proposals in fall 2024 and announced the recipients in spring 2025. Nine eligible proposals were received; six were funded for a total of $25,283 in grants. The proposals and recipients included:

- Developing public viewing aspects for a new "head start" and education program focused on state-rare gopher frogs. Recipient: Chehaw Park & Zoo in Albany; grant award, $5,000.

- Printing and distributing beach-bird guides for use with steward programs to raise awareness of priority species. Recipient: Manomet's Georgia Bight Shorebird Conservation Initiative; $4,935 grant.

- Holding prescribed-fire field days in Tattnall, Taylor and Pulaski counties targeting landowners and bird watchers as part of a Burning for Birds Collaborative. Recipient: Georgia Conservancy; $4,500 grant.

- Refurbishing and reopening the wildlife viewing tower near a historic dairy barn on part of DNR's Altamaha Wildlife Management Area managed by the city of Darien. Recipient: Birds Georgia; $4,998 grant.

- Creating and installing interpretive signage for chimney swift habitat conservation at swift nesting and roosting towers on city trails. Recipient: Athens-Clarke County Leisure Services Department; $2,680 grant.

- Provide spotting scopes, binoculars and related gear for wildlife viewing and education programs led by the group at the Carroll County park. Recipient: Friends of McIntosh Reserve Park; $3,170 grant.

The projects also involve work and spending by partners that will significantly amplify the grant funding provided. Final reports for fiscal year 2025 projects are due in December 2025. Considering the importance of wildlife viewing in Georgia, the Wildlife Conservation Section offered the grants again in 2025 for the 2026 cycle.

Underscoring the importance of wildlife viewing in Georgia and DNR's role in engaging wildlife viewers, in 2021 the Wildlife Conservation Section contracted with Virginia Tech to survey 1,000 Georgians to better inform the agency about wildlife viewers, including their perceptions of DNR and how best to serve them. The survey and findings, a spinoff from a national and regional survey of wildlife viewers led by Virginia Tech and the Association of Fish and Wildlife Agencies' Wildlife Viewing and Nature Tourism Working Group, are posted in a flip-page format, explored in a webinar and available for download under the Research heading at georgiawildlife.com/wildlifeviewing. The webpage also includes the report, webinar and literature review for the national and regional survey.

Pearl crescent butterfly lights on DNR's Linda May (DNR)

Social Media

The reach of the DNR Wildlife Resources Division's social media sites – Facebook, Instagram, YouTube and a blog – continued to expand in 2025, engaging constituents and raising awareness of conservation efforts. The Facebook page recorded 199,111 followers through the fiscal year's end in June 2024, up three percent from the previous year. Instagram had 31,869 followers and Wildlife Resources' YouTube channel fielded 1.8 million views, increases of 21 and 64 percent, respectively, compared to fiscal 2024. (Although the division has an account on X, formerly Twitter, this platform is seldom used.)

The top performing post for fiscal 2025 on both Facebook and Instagram involved nongame wildlife. A "wanted" post profiling invasive Argentine black and white tegus in the wild in Georgia's Tattnall and Toombs counties – and the need to report sightings – led on Facebook with 1,293 likes and other reactions. On Instagram, it was a "bird … plane … sandhill crane" snapshot in March 2025 that spurred a 15-percent-plus engagement rate.

The 53 Wildlife Conservation Section-related posts on the division's blog logged just over 21,450 views during fiscal 2025, a nearly 16 percent increase in views powered by a 160 percent increase in the number of posts. "Georgia's Rare Black Witches," which linked to an "Out My Backdoor" column by former DNR Program Manager Terry W. Johnson about these big, unusual moths, drew the most views at more than 4,100. An update on invasive Argentine black and white tegus in July 2024 had 3,300 views. The number of Wildlife Conservation blog posts about plants, aquatics and invertebrates rose from seven in fiscal 2024 to 16 this year, an intentional effort to turn more attention to the agency's work with lesser-known but important species and topics. Public Affair's switch to posting at least once a week underscored the overall surge in content focused on nongame wildlife and natural habitats.

As in previous years, the Georgia Wild e-newsletter, which documents Wildlife Conservation's work, added readers for a slightly wider reach in fiscal 2025. Circulation

increased by 1 percent to nearly 147,000 subscribers. Unique open rates averaged 40 percent (56,562 readers per issue), a healthy rate for government agency emails and over 2 percent more than the previous year. The annual reader survey provided insights on the value of the content and the newsletter format. According to the survey:

- Fifty-nine percent of respondents did not know before receiving the newsletter that the Wildlife Conservation Section depends primarily on fundraising, grants and direct contributions for conserving Georgia's rare and other native animals, plants and habitats.
- Ninety-seven percent agreed that Georgia Wild informs them about conservation in an easy-to-understand way.
- Eighty-four percent had told someone at least once about an item they read in the newsletter.
- Eight out of 10 were spurred to learn more about a wildlife species or issue, and 20 percent to financially support wildlife conservation in Georgia.

The 18-year-old newsletter features a variety of contributors, from staff and TERN Executive Director Terry W. Johnson – who writes the popular Out My Backdoor column – to the Georgia Nature Photographers Association, many of whose members generously provide photos for use. Also in 2025, Public Affairs began sharing Johnson's monthly column – after it is published in Georgia Wild – for reprinting in the state Agriculture Department's Farmers and Consumers Market Bulletin. With Johnson's approval, this use provides the interesting and informative wildlife insights of Out My Backdoor to an even larger audience. As of 2024, the bulletin had a paid circulation of about 35,000 subscribers plus a distribution to about 3,000 farmers who qualify for a state agricultural tax exemption program, according to reports.

Social media, the e-newsletter and other Public Affairs efforts are not only essential to broadening the reach of DNR communications, they are critical for interactivity, engagement and customer service for agency constituents.

Other Outreach

Beyond youth contests and social media, the Wildlife Conservation Section promotes awareness of Georgia wildlife and conservation by providing educational displays at festivals, speaking to civic, technical and special-interest groups, informing lawmakers about rare species, explaining research to journalists, and partnering with other conservation organizations.

Staff worked many events in fiscal year 2025, including both of Georgia's rattlesnake festivals – in Claxton and Whigham – the Etowah Wildlife Expo in Canton, the 2025 CoastFest in Brunswick and the Georgia Association of Tax Officials annual conference in Athens. Biologists and others did scores of media interviews. Outreach is mentioned throughout this report. However, other notable examples in 2025 included:

- In winter 2024-2025, the dire state of North Atlantic right whales migrating to the Southeast again garnered strong interest. Coverage varied from state-based

DNR's Jacob Wilson shows a gopher tortoise to visitors at the Amphibian Foundation (Linda May/DNR)

Wild Georgia Hub: gateway to the 2025 State Wildlife Action Plan

outlets such as The Current to national and international media. Senior wildlife biologist Jessica Thompson, who leads Wildlife Conservation's marine mammal team, and her staff also worked with Public Affairs' Rick Lavender to produce regular Wildlife Resources Division blog posts and videos focused on right whale conservation in the core of the endangered species' only known calving grounds.

- Dr. Bob Sargent, a Wildlife Conservation program manager, provided interviews about the spring 2025 discovery of two new common raven nests in the state, along with observing a pair nesting and fledging a chick at the same Tallulah Gorge nest site first reported last year.

- As leader of DNR's bald eagle nesting surveys, Sargent also released the 2025 results showing eagles nesting and fledging at healthy rates, although some evidence suggested that avian influenza coupled with damage to nest trees caused by storms in 2024 undercut the number of nest territories in southwest Georgia.

- The close of fiscal 2025 included the public premiere of "Devouring Beauties," a short documentary about carnivorous pitcherplants in fire-dependent longleaf pine ecosystems. The film is the work of Magic Kumquat Productions and The Longleaf Alliance, with Wildlife Conservation Fire Safety Officer Shan Cammack and senior botanist Lisa Kruse helping produce it. Support came in part from DNR's Wildlife Resources Division and The Environmental Resources Network, or TERN, friends group of Wildlife Conservation. "Devouring Beauties" was screened at five film festivals and a symposium, earning an award for excellence in the Nature Without Borders Film Festival in Rehoboth Beach, Delaware.

- Other films in the works by Magic Kumquat Productions and supported by TERN, DNR and The Longleaf Alliance included "A Tortoise Named Pumpkin Spice" – the rescue-to-outreach tale of a gopher tortoise at DNR's Charlie Elliott Wildlife Center – and "Young Fires: the Future of Firelighting," which focused on the next generation of prescribed fire practitioners. "Pumpkin Spice" made the rounds at film festivals and was scheduled for release in fall 2025. A "Young Fires" trailer earned an Emmy nominee in the Suncoast (Florida) regional awards.

- Fisheries technician Kaylee Blackburn and partners held their first free showing of "Hidden Rivers," with a crowd of about 40 people enjoying the video and information tables at Dalton State College. Filmed as part of an America the Beautiful Challenge National Fish and Wildlife Foundation Grant focused on conserving trispot darters, "Hidden Rivers" (extended preview) highlights the amazing biodiversity found in the southeastern U.S.

- Videos involving staff also included wildlife biologist Thomas Floyd surveying for eastern hellbenders and Wildlife Conservation Assistant Chief Dr. Brett Albanese and Game Management Section Chief Lee Taylor doing dockside "dad" jokes.

- Albanese worked with GIS specialist Liz Morata and others, including Public Affairs' Sara Califf and Natalie Andes, to develop and promote webpages for the 2025 Georgia State Wildlife Action Plan, videos explaining the plan and planning effort, a data-rich Wild Georgia Conservation Hub, and extensive story maps that examined the plan by physiographic regions and major watersheds. News releases and social media posts announced how to access, explore and provide comments on the revised Wildlife Action Plan. Multiple outlets, including Georgia Recorder and The Augusta Chronicle, reported on the process.

- News releases by Public Affairs also varied from encouraging the public to give beach birds their space to keeping bird feeders clean and how best to respond when they see a snake.

*Red knot *H7 at Little Tybee Island in spring 2025 (Baxter Beamer/DNR)*

- The Wildlife Resources Division blog served a similar role in raising awareness. Examples include a post and fact sheet by Brianna Jamison urging Georgians to report sightings of flame flower, a state-threatened plant native to the Coastal Plain. Senior wildlife biologist Fletcher Smith, along with colleagues at South Carolina Department of Natural Resources, coordinated a post about the migration of red knot *H7 and how the bird's long-distance, satellite-tracked flights – including through Hurricane Ernesto over the Atlantic Ocean – and related research highlight the importance of stopover habitats in Georgia and South Carolina.

- Wildlife Conservation Outreach Coordinator Linda May and wildlife biologist Anna Yellin organized and awarded a $1,000 grant to third-grade teacher Lyndsay Goeckeritz of Colham Ferry Elementary in Watkinsville. The annual Conservation Teacher of the Year grant from TERN recognizes exceptional Georgia K-5 teachers in life sciences.

- May also conducted outreach for various audiences including Master Gardeners, Master Naturalists, Georgia 4-H, Georgia Power, Cherokee County Animal Control, civic groups and the public at businesses, libraries and nature centers. Topics included aquatic ecology, backyard wildlife habitats, bats, birding, herpetology, plant identification and succession, and Georgia's State Wildlife Action Plan.

- Freshwater Biodiversity Program staff took part in Career Day at Park Creek Elementary School in Dalton, held a show-and-tell seining and tank set-up tutorial for summer campers through the Tennessee Aquarium and Hammond Creek Middle School in Dalton, and connected landowners in the Conasauga River basin to USDA Natural Resources Conservation Service funding and local representatives.

- Wildlife Conservation staff on the coast continued their annual involvement in the Master Birder class, a multi-week evening program with Saturday field trips for adults interested in birds, and the Coastal Awareness and Responsible Ecotourism (CARE) class, a certification course for ecotourism operators. Staff partner with Coastal Audubon, Manomet and 100 Miles to help organize and teach these classes. Both efforts have been highly successful over the last decade in building support for coastal bird conservation.

- In publications by staff, Bob Sargent co-authored a paper on outbreaks of avian influenza in black vultures for the Journal of Wildlife Diseases. He also published papers in the Georgia Ornithological Society journal The Oriole on raven nesting (co-authored with Liz Morata), the state's annual bald eagle nest survey (with Rick Lavender) and an unusual location for the nest of a brown-headed nuthatch. Brett Albanese was co-author with the late Dr. Robert Jenkins, Jonathan Armbruster, Dr. Bud Freeman and Scott Favrot of a description of sicklefin redhorse published in Ichthyology & Herpetology and officially naming the species. A study by senior wildlife biologist Nathan Klaus and Kirk Stodola of the University of Illinois Urbana-Champaign published in Georgia Journal of Science explored the breeding-season use of food plots by birds in the southern Appalachian mountains and the role food plots play in spreading non-native plants. Anna Yellin teamed with Dr. Lance Durden of Georgia Southern University in Statesboro to publish an article on moth diversity in a pitcherplant bog in the December 2024 Southern Lepidopterists' News.

LAND ACQUISITION AND CONSERVATION EASEMENTS

Through its Real Estate Office, DNR acquired fee ownership of a number of properties for public recreation and wildlife conservation in fiscal year 2025. These acquisitions totaled over 13,000 acres, added to five wildlife management areas, created a natural area and included additions that enhanced the ecological value of a state park. All tracts were identified as priorities in Georgia's State Wildlife Action Plan to increase public recreation opportunities and expand conservation within key corridors across the state. No conservation easements were completed by the Real Estate Office during this fiscal year.

Acquisitions

Here are more details about each land purchase.

Black Rock Mountain State Park: Grizzard Tract

In September 2023 and January 2024, DNR expanded Black Rock Mountain State Park in Rabun County by acquiring 15.6 acres in two phases. Acquisition of what is known as the Grizzard Tract protected an inholding at the park, preserved a scenic viewshed, improved management and enhanced opportunities for public recreation.

The purchase was made possible through funding from the Knobloch Family Foundation.

Conasauga River WMA: Springbank Tract

DNR acquired 177 acres of the Springbank Tract to add to Conasauga Wildlife Management Area in Murray County. The October 2024 acquisition permanently protects riparian areas along the mainstem of the Conasauga River, helping maintain the water quality needed by native fish and mussel species in the watershed.

The tract was acquired with funding and support from the Georgia Outdoor Stewardship Program, Knobloch Family Foundation and The Nature Conservancy.

Stream in the Dugdown Corridor (Brent Womack/DNR)

Crockford-Pigeon Mountain WMA: McCloud Phase 2 Tract

In December 2024, DNR added the second phase of the McCloud Tract to Crockford-Pigeon Mountain Wildlife Management Area in Walker County. The 94 acres provide more access points to the northwest Georgia WMA and will help improve management and expand recreation opportunities.

The tract was acquired with funding from a U.S. Fish and Wildlife Service Pittman-Robertson Wildlife Restoration grant, the Open Space Institute's Appalachian Landscapes Protection Fund and the Knobloch Family Foundation.

Paulding Forest WMA: White, Strickland and Morrison Tracts

DNR added 203 acres to Paulding Forest Wildlife Management Area through the acquisition of the Strickland, Morrison and White tracts in July 2024. The WMA in Paulding and Polk counties is popular for hunting, hiking, biking and nature studies. This acquisition will permanently protect habitat for rare montane longleaf pine and improve both management and public access to Paulding Forest.

The tracts were acquired with funding from a U.S. Fish and Wildlife Service Pittman-Robertson Wildlife Restoration grant, National Wild Turkey Federation, and the Knobloch Family Foundation.

Treat Mountain WMA: PIJ LLC Tract

In December 2024, DNR acquired 1,800 acres in Polk County known as the PIJ LLC Tract to protect remnant montane longleaf pine and the upper sections of Devils Darning Needle Hollow. The property on Treat Mountain Wildlife Management Area harbors state-tracked plant species and features steep topography within the corridor's bluff region.

The tract was acquired with funding from the U.S. Forest Service Forest Legacy Program, Georgia Department of Transportation Bat Funds, the Georgia Outdoor Stewardship Program and The Nature Conservancy's Stone Mountain Industrial Park grant.

Treat Mountain WMA: Timbersouth Tract

DNR added 373 acres to Treat Mountain Wildlife Management Area in November 2024. The tract contains the headwaters of Little Terrapin Creek, a tributary of Terrapin Creek in Alabama. Terrapin Creek is a high conservation priority for Alabama, and protecting the stream's headwaters in Georgia will help maintain the health of the entire system.

The tract was acquired with funding from the Georgia Department of Transportation Bat Mitigation Fund.

Treat Mountain and Tallapoosa River WMAs: Stateline Tracts

In February 2025, DNR added 8,396 acres to Treat Mountain and Tallapoosa River wildlife management areas. The Stateline Tracts that helped grow the neighboring WMAs in northwest Georgia's Dugdown Corridor contain remnant montane longleaf pine and offer opportunities to restore this habitat at a landscape scale. Protection of the property will also safeguard water quality in the Tallapoosa River and Terrapin Creek watersheds, conservation priorities in Georgia and Alabama.

The property was acquired with funding from the U.S. Forest Service Forest Legacy Program and the Georgia Outdoor Stewardship Program.

Young montane longleaf (Bill Harbin)

Tricolored bat (Sam Holst/DNR)

Upatoi Ravines Natural Area: Timberlands II LLC Tract

In February 2025, DNR acquired 2,239 acres for the new Upatoi Ravines Natural Area. Less than three miles from the U.S. Army's Fort Benning, the tract lies within the Chattahoochee Fall Line Conservation Partnership area in a key corridor of unfragmented wildlife habitat. Acquisition of the property supports the recovery of federally endangered fringed campion and provides habitat for high-priority species, including the tricolored bat, goldstripe darter, bluestripe shiner, broadstripe shiner and alligator snapping turtle. A second phase of the acquisition is planned for fiscal year 2026.

The tract was acquired with funding from the U.S. Fish and Wildlife Service Pittman-Robertson Wildlife Restoration and Land Recovery Grant, the U.S. Forest Service Forest Legacy Program, the Georgia Department of Transportation Bat Funds, The Nature Conservancy's Stone Mountain Industrial Park grant and the Knobloch Family Foundation.

Georgia Conservation Tax Credit Program

The Wildlife Conservation Section administers the Georgia Conservation Tax Credit Program in conjunction with the State Properties Commission. This program provides a tax credit for Georgia taxpayers who place conservation easements on their land or make fee-simple donations to qualified organizations. The original program expired in December 2021. However, state lawmakers extended the program in early 2022 to continue through Dec. 31, 2026.

Three applications were processed in fiscal year 2025. They were approved by the State Properties Commission and received the tax credit. These certifications protected 890 acres using conservation easements donated to qualified organizations.

Suwannee alligator snapping turtle, a plan species of greatest conservation need (Daniel Sollenberger/DNR)

State Wildlife Action Plan

Georgia's State Wildlife Action Plan – a 10-year roadmap for conservation – focuses on species of greatest conservation need (known in conservation agency circles as SGCN) and the conservation actions that will protect and restore their populations and habitats. DNR must develop, revise and implement the plan to receive State Wildlife Grants. Georgia's apportionment of State Wildlife Grant funds for federal fiscal year 2025 was $1,598,173. Georgia's first State Wildlife Action Plan was completed in 2005 and revised in 2015 and 2025.

The Wildlife Conservation Section began preparing for the 2025 revision in 2022. Aided by a competitive State Wildlife Action Plan enhancement grant from the U.S. Fish and Wildlife Service, staff developed a database and a consistent framework for identifying the conservation status, threats and priority level for each species of greatest conservation need. Over 1,400 species were assessed by technical teams during fiscal years 2023 and 2024. Those teams recommended 1,062 species for the final list of SGCN and identified over 3,500 actions to conserve them. Other technical teams delved into conservation topics such as habitat management, climate change, education and outreach, and landscape-scale conservation, developing comprehensive recommendations that would benefit multiple species of greatest conservation need and their habitats. An advisory committee made up of decision makers from over 30 conservation organizations and stakeholder groups met periodically throughout the process to provide oversight and input.

Work in fiscal 2025 focused on developing a draft 2025 State Wildlife Action Plan for public review. Story maps summarizing key information on SGCN, threats, conservation actions and partnerships were created for Georgia's ecoregions and major river basins. Interactive tools were built so users could explore information on priority conservation areas and actions. Technical team reports for major species groups and conservation issues were finalized and uploaded to the web. Over 180 official comments on the draft plan were received

during a 52-day public comment period and used to finalize the plan.

Georgia submitted the plan to the Fish and Wildlife Service in June 2025 and received noticed that November it had been approved. The Wild Georgia Conservation Hub is the plan's primary website. As of fiscal 2026, actions identified in the new strategy were eligible for State Wildlife Grant funding. Yet even shortly after the 2025 plan was submitted for review, it was already being used to guide the Georgia Outdoor Stewardship Program and work carried out using other funding sources.

Regional Partnerships

Since 2010, the U.S. Fish and Wildlife Service has received three mega-petitions to list more than 500 species under the Endangered Species Act. The Fish and Wildlife Service's Southeast Region is responsible for roughly 60 percent of the workload to evaluate these species. More than 100 of the species are found in Georgia, amplifying the need for up-to-date status information to help inform the service's 90-day and 12-month findings to determine whether a listing is warranted. Current information on the status of petitioned species can be found on the Fish and Wildlife Service's at-risk species finder.

Tackling emerging issues such as mega-petitions to federally list species requires innovative approaches. One has been creating regional conservation partnerships to achieve goals that could not be accomplished by individual states. For example, the Southeast At-risk Species Initiative is an effort led by the Southeastern Association of Fish and Wildlife Agencies in cooperation with the Fish and Wildlife Service. The objective is for states to work together to preclude the need to federally list species. A similar effort is underway in the northeastern U.S.

State agencies and the Fish and Wildlife Service have prioritized numerous and wide-ranging at-risk species for collaborative conservation efforts. One example is the gopher tortoise, which until October 2022 was considered a candidate for listing across its eastern range in parts of Alabama, Georgia, Florida and South Carolina. While Fish and Wildlife coordinated with states to provide federal Section 6 funding for surveys and to develop conservation agreements, DNR worked with the agency and other partners in Georgia's Gopher Tortoise Conservation Initiative to preserve the species and its

Bronwyn Williams from the North Carolina Museum of Natural Sciences digs for crayfish during a survey (Tiffany Penland/DNR)

habitats. All of these efforts factored into the service's determination that federal listing was not needed for gopher tortoises west of the Mobile and Tombigbee rivers in Alabama.

The focus on regional collaboration includes the Southeast Conservation Adaptation Strategy, called SECAS, an initiative of the Southeastern Association of Fish and Wildlife Agencies and other state, federal and private conservation organizations. The strategy's primary product is the Southeast Conservation Blueprint, which compiles smaller, subregional conservation plans into a single map identifying important areas for protection and restoration. The Conservation Blueprint is updated regularly based on new data and partner feedback. A revised version was released in October 2024. Georgia's Conservation Opportunity Areas identified in the 2025 Wildlife Action Plan are modeled on the Blueprint.

Dramatic landscape-scale changes such as urbanization, competition for water resources, extreme weather events, sea-level rise and climate change pose unprecedented challenges for sustaining natural and cultural resources in the Southeast. Through the Southeastern Conservation Adaptation Strategy, partners are working together to design and develop a connected network of lands and waters that can support thriving wildlife populations and improved quality of life for people throughout the region.

In support of regional conservation, state members of the Southeastern Association of Fish and Wildlife Agencies also worked together to develop a regional species of greatest conservation need list. State Wildlife Action Plans in 15 southeastern states collectively identified nearly 6,700 species of conservation concern. The project was aimed at identifying a core set of species that represent highest conservation priorities in the region. The priority-setting process involved more than 100 scientific experts. Species were evaluated and ranked based on criteria that included the level of conservation concern, regional stewardship responsibility and biological or ecological significance. The regional assessment focused on mammals, birds, reptiles, amphibians and fishes, as well as better-known invertebrate groups (freshwater mussels, crayfish and bumblebees).

Overall, 960 species were identified for this regional list. Three groups of aquatic organisms – freshwater fishes, mussels and crayfishes – comprise almost two-thirds of the lineup, highlighting both the Southeast's impressive aquatic biodiversity and the imperiled status of many aquatic species in the region. The final report and tables are posted on the Georgia Biodiversity Portal.

In 2021, Wildlife Conservation Section staff worked with members of the Southeastern Association of Fish and Wildlife Agencies' Wildlife Diversity Committee, Atlanta Botanical Garden and NatureServe to develop a proposal to the Fish and Wildlife Service for funding a similar regional species of greatest conservation need project focused on plants in the Southeast. The proposal was approved for funding in 2022. Project partners, including Atlanta Botanical Garden, the Southeastern Plant Conservation Alliance and NatureServe, joined with experts throughout the region to produce the report in May 2023. It was the nation's first regional species of greatest conservation need report specifically for plants. Visit the Georgia Biodiversity Portal for the final report and species list.

Data from the plant and animal regional species of conservation need assessments are being used to develop projects addressing conservation needs across state lines. Both lists also were used to help prioritize species for Georgia's 2025 State Wildlife Action Plan.

Biotics Database

The Wildlife Conservation Section manages the NatureServe Biotics database, the state's most comprehensive database of occurrences of rare species and natural communities. Data in Biotics are used for many purposes, including environmental site reviews, conservation planning, scientific research, habitat restoration and management plan development. About 1,620 rare species and natural communities are tracked in the database, species represented by 34,980 mapped locations.

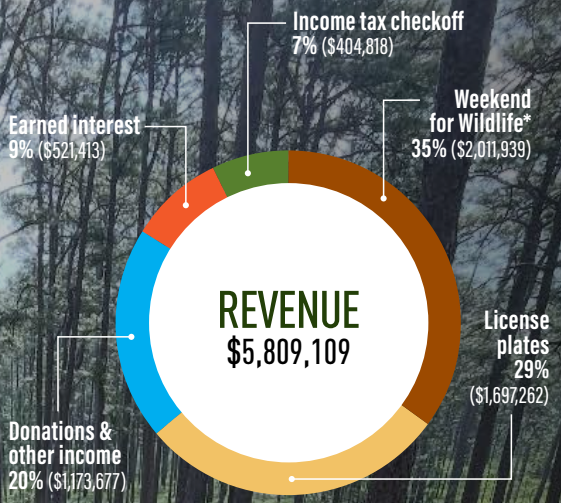
During fiscal year 2025, Wildlife Conservation updated 12,002 rare species or natural community location records and added another 625 records. Users visited the agency's Biodiversity Portal, which houses more than 1,600 species profiles plus additional data on tracked species and habitats, about half a million times during the year.

Significant efforts were made to update information on species proposed for listing under the Endangered Species Act. Many are under federal review, and updating database records allows for a more accurate species-review process. Funded in part by an agreement with the Georgia Department of Transportation, staff also reviewed ecological reports and responded to 1,171 formal requests for site-specific data.

Bee fly on state-protected Pickering's dawnflower (Hal Massie/DNR)

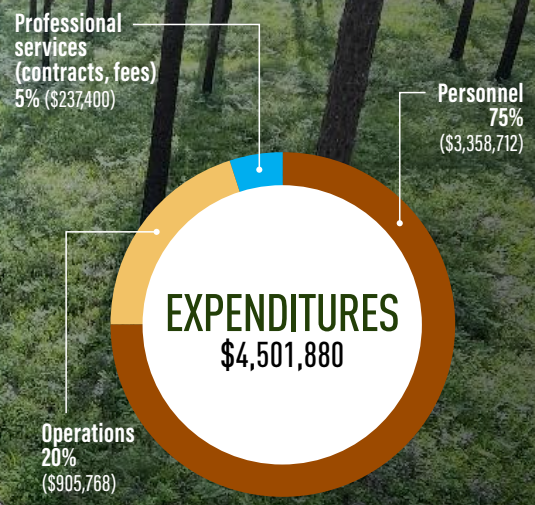
Taxonomic Group	Tracked*	All	Records
Amphibians	33	96	965
Birds	52	393	1,321
Fishes	106	400	3,319
Invertebrates	393	2,165	2,939
Mammals	36	114	914
Natural Communities	200	348	1,462
Plants	806	6,301	8,739
Reptiles	39	107	1,742
Totals	1,665	9,924	21,401

*Species and habitats. Also tracked: Other (includes caves and wading bird colonies), 474 records.



Does not include grants or state appropriations.

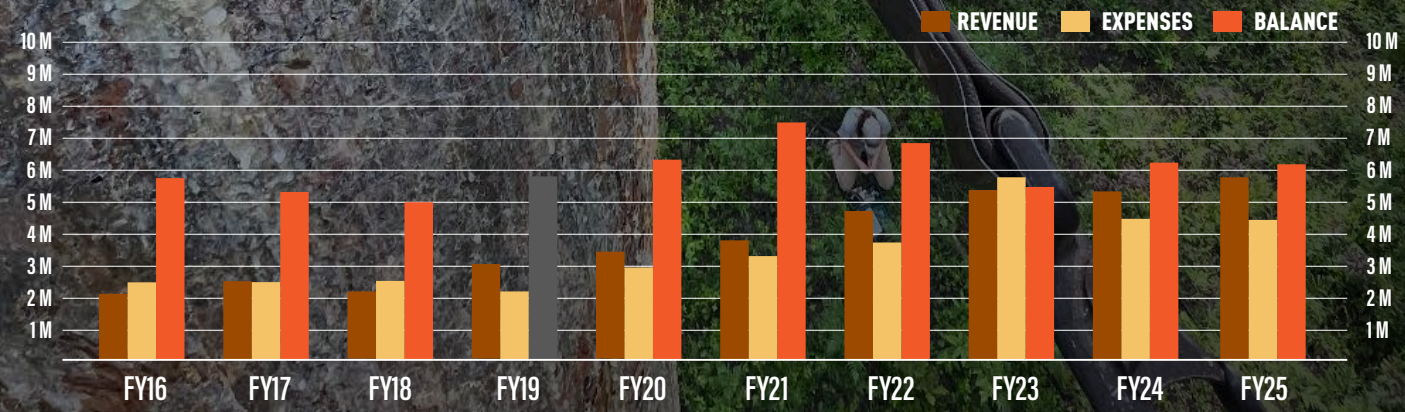
**2025 Weekend for Wildlife revenue disbursed by the Georgia Natural Resources Foundation in fiscal 2026.*



Expenditures paid through the Nongame Fund.

NONGAME WILDLIFE CONSERVATION FUND

Listed in millions per year



The view from a red-cockaded woodpecker cavity nest (Joe Burnam/DNR)

Nongame Wildlife Conservation Fund

Fundraising remained a priority for the Wildlife Conservation Section in fiscal year 2025. Although the section received only minimal state appropriations in previous years, that share decreased further in 2025 as Charlie Elliott Wildlife Center and most of its $864,540 in state funds were moved during the fiscal year to the DNR Wildlife Resources Division's Communications, Education and Outreach Section. The agency continued to depend largely on four fundraisers: "nongame" specialty license plates, Weekend for Wildlife, the Wildlife Conservation Fund state income tax checkoff and direct donations and other income.

Donations and contributions go to the Nongame Wildlife Conservation and Wildlife Habitat Acquisitions Fund, often referred to as the Nongame or Georgia Wildlife Conservation Fund. Created in 1989, this fund is dedicated by state law to support nongame wildlife conservation, wildlife habitat acquisition and related educational and promotional projects. The Environmental Resources Network, better known as TERN, also provides significant financial support.

Estimated revenue for the Nongame Wildlife Conservation Fund in fiscal 2025 was $5,809,109. This amount included:

- $2,011,939 from the 2025 Weekend for Wildlife.
- $1,697,262 in license plate sales and renewals.
- $1,173,677 in donations and other income.
- $521,413 in earned interest.
- $404,818 through the state income tax checkoff.

Total revenue increased 8 percent, or $436,999, from 2024. The 2025 Weekend for Wildlife revenue was distributed to the Wildlife Conservation Fund in fiscal 2026. Fund revenues do not include federal and other grants or state appropriations.

Expenses totaling $4,501,880 were paid from the fund. Personnel accounted for 75 percent, or $3,358,712. Twenty percent ($905,768) went to operations. Professional services, a category that includes contracts and fees, accounted for the remaining 5 percent ($237,400). Fund expenditures were down 1.2 percent, or $56,391, compared to 2024. Most of the difference involved professional services that were moved to either Georgia Outdoor Stewardship Program or federal funds. Annual fund expenditures have averaged $4.4 million over the last five years.

The closing fund balance was nearly $6.2 million in fiscal 2025, down less than a half-percent from 2024. The annual balance since fiscal 2016 has averaged just over $6 million.

Nongame License Plates

Specialty license plates have been a standard of support for the Nongame Wildlife Conservation Fund for more than two decades. In fiscal year 2025, reported sales of the agency's popular bald eagle plate and the monarch butterfly-Georgia aster plate, along with renewals of those, the ruby-throated hummingbird and older tag designs, remained stable compared to 2024. The fund recorded nearly $1.7 million in tag revenue, almost exactly the same as the previous years.

The Wildlife Conservation Section tracks license plate revenue two ways: by sales and renewals during the fiscal year and by tag revenue the nongame fund receives that year from the Department of Revenue. Those totals – transactions reported and revenue received – often differ, in large part because some revenue from license plate sales and renewals may not be reflected in the fund until the next fiscal year. Also, 25 percent of net revenue from Jekyll Island's Georgia Sea Turtle Center plate goes to DNR for conserving nongame and is reported as tag revenue. The fund received $83,540 from the Jekyll plate in fiscal 2025.

Because of changes in tag data provided to DNR, a breakdown of plate sales versus renewals was not immediately available. Yet based on plates issued and renewed in fiscal 2025, there were 75,196 eagle, monarch and hummingbird tags on the road at the end of the year, according to Department of Revenue reports. That's about 1,000 more than in 2024, when the total declined to just over 74,000. The number of nongame plates in circulation had increased slightly for three consecutive years prior to 2024.

Weekend for Wildlife overtook license plates as the top revenue sources for the Nongame

Conservation Fund for the first time in fiscal 2025, comprising 35 percent of the fund's total revenue. License plates made up 29 percent of revenue in 2025. The continuing significance of the plates is largely due to state lawmakers' decision in 2014 to lower the cost of buying and renewing all DNR wildlife tags to only $25 more than a standard plate and dedicate up to 80 percent of fees to programs the plates benefit. Since that change, $19 for each nongame tag bought and $20 for each renewed has gone to conserve wildlife and natural habitats.

Sales and renewals had spiraled downward after legislation in 2010 upped the price for most specialty plates, reduced sponsor groups' share to $10 a tag and added an annual renewal fee. While the changes initially increased nongame revenue – peaking at $1.88 million in 2011 – the higher price, reduced benefit and extra fee soon sapped sales and renewals. Revenue bottomed out at $841,160 in fiscal 2014.

The challenge has been stemming the decline in renewals while increasing sales. DNR moves that helped included releasing a redesigned eagle and U.S. flag plate in 2016 and the vibrant-colored pollinator – or butterfly – plate in 2019. The latter design featuring a monarch on a Georgia aster replaced the hummingbird tag. In fiscal 2025, pollinator plates topped $280,000 in reported sales and renewals. The eagle tags continued as one of the state's most popular specialty plates, raising more than $1 million. The hummingbird design, which has been retired but can still be renewed by owners, totaled over $116,000.

2010 proved the highpoint for nongame tags, with 347,401 eagle and hummingbird plates in circulation. Since then, the number and variety of specialty plate designs offered in Georgia has surged, increasing competition, while the 2010 change in tag fees cut sales and support. On a positive note, license plate revenue has exceeded $1.4 million a year for the Nongame Conservation Fund since at least 2015.

Weekend for Wildlife

Weekend for Wildlife is one of the country's most successful fundraisers for conserving rare and other native wildlife, raising millions since its start in 1989. Held each winter at the prestigious Cloister at Sea Island, the event draws 200-400 guests for a weekend of outdoor trips, auctions and dining.

After the Georgia Natural Resources Foundation returned the fundraiser to an in-person event in 2022, following a virtual version during the COVID-19 pandemic, Weekend for Wildlife has continued to grow in sponsors, popularity and money raised. Starting in 2022, each consecutive event has raised a record amount for the Nongame Wildlife Conservation Fund. The trend started with $1.1 million in 2022, exceeded $1.3 million in 2023, reached nearly $1.7 million in 2024 and raised over $2 million in 2025. The totals noted exclude expenses, fees, directed giving for programs and money raised by TERN.

The 2026 Weekend for Wildlife will again be held at The Cloister.

Georgia Wildlife Conservation Fund Checkoff

Created in 1989, the state income tax checkoff offers Georgians a convenient way to donate to the Nongame Wildlife Conservation Fund. Contributions to what is commonly called the Give Wildlife a Chance checkoff decreased to $404,818 in 2025, following a near all-time-high in 2024.

Over the last 10 years, checkoff contributions – collected by calendar year – averaged $287,000. Since revenue bottomed out at $113,606 in 2017, the direction has been largely positive. Support reached $505,802 in 2024 – the most since 1991 when donations totaled a record $510,910 – before dropping this year, although still far above average. The Wildlife Conservation Section's promotion of the checkoff is fairly consistent year-to-year. It's not clear why the annual revenue varies.

Labeled the Georgia Wildlife Conservation Fund checkoff by the Department of Revenue, the checkoff is line 30 on the state's long income tax form (Form 500) and line 10 of the short form (Form 500-EZ).

Online Donations

In 2018, the Wildlife Resources Division's License and Boat Registration Unit supervisor worked with division Public Affairs staff to create options for donating to the Nongame Wildlife Conservation Fund through gooutdoorsgeorgia.com, the agency's license and permit portal.

The additions allowed users to make a set donation or round up license purchases and renewals with the extra going to conservation. A promotion bundling a $10 donation with a $5 one-day hunting/fishing license is also available. Hunting and fishing license sales and renewals return to wildlife work in Georgia the license fees plus as much as $45 in federal excise taxes on guns, fishing rods and other hunting and fishing gear.

Donations online – and in smaller amounts from other license venues such as DNR offices, private vendors and the Brandt Information Service help desk – grew annually from fiscal year 2018 ($36,332, with the option added that March) until 2022, with $236,351 donated. Giving declined to $209,621 in fiscal 2023 but rebounded to a record $244,611 in fiscal 2024.

Giving in fiscal year 2025 slipped 7 percent to $227,001. The roundup remained by far the most popular option, with 65,479 users giving a total of $190,816. Another 1,781 people gave $5 each ($8,905 total), 908 gave $10 apiece ($9,080), 240 donated $25 ($6,000), 66 contributed $50 ($3,300) and there were 89 donations of $100 ($8,900).

Donors new to gooutdoorsgeorgia.com select "Licenses and Permits" and create a customer account. Or they can click "Go Outdoors Georgia Shop," where the opening panel of available items showcases wildlife photographs linked to five donation options – $5, $10, $25, $50 and $100 – for the Georgia (Nongame) Wildlife Conservation Fund. The shop option allows people to donate by only providing their contact and payment information (creating a customer account requires more details because the system is geared to license sales). Public Affairs will begin promoting

this way to give, which was moved to the top of the store page and upgraded with eye-catching imagery, in fiscal 2026.

The Environmental Resources Network

The Environmental Resources Network, or TERN, is a nonprofit organization founded in 1992 to support Wildlife Conservation Section activities. TERN, online at tern.homestead.com, raises most of its funds through membership dues as well as silent auction, raffle and sale items at Weekend for Wildlife.

In fiscal year 2025, TERN funded 10 Wildlife Conservation proposals totaling $39,185. They included:

- **Give Wildlife a Chance poster contest** – $900
- **ACE (Adventures in Conservation) Camp** – $8,700
- **OWLS (Outdoor Wildlife Leadership School)** – $6,608
- **Camp TALON (Teen Adventures Learning Ornithology and Nature)** – $4,780
- **Skyglow and Sea Turtles** – $7,890
- **Mudpuppy and hellbender signs** – $550
- **Rare plant species tagging** – $1,277
- **Plant propagation for species of greatest conservation need** – $5,206
- **Pollinator Partners** – $1,974
- **TERN Outstanding Conservation Teacher of the Year award** – $1,300

Since 1992, the nonprofit has paid or obligated nearly $2 million to Wildlife Conservation. TERN officers in 2025 included President Jim Ozier, Vice President Patty Deveau, Secretary Kim Kilgore, Treasurer Jerry Booker, Executive Director Terry W. Johnson and Executive Secretary Wanda Granitz.

Federal and Other Funding

The Wildlife Conservation Section received $10.8 million in federal and other grants during the fiscal year. Land acquisition expenditures covered through federal and other funds totaled more than $15.9 million. Federal funds accounted for $947,387 of the total.

Grant sources varied from the State and Tribal Wildlife Grants Program, the Cooperative Endangered Species Conservation Fund and the National Coastal Wetlands Conservation Grant Program – all administered by the U.S. Fish and Wildlife Service – to the National Oceanic and Atmospheric Administration, National Fish and Wildlife Foundation, the U.S. Department of Defense, the Georgia Outdoor Stewardship Program and Southern Co. Use of the grants, usually matched with funds from the Nongame Wildlife Conservation Fund, included acquiring habitat for conservation and research, conducting surveys, and collecting data on occurrences of at-risk species.

State Wildlife Grants

Georgia's fiscal year 2025 apportionment of federal State Wildlife Grants was $1,496,687, down 6 percent ($101,486) from 2024, and down more than 20 percent from the program's funding high-point in 2010. The State and Tribal Wildlife Grants program is one in a suite of federal conservation programs cut since 2010.

While there is bipartisan support for State Wildlife Grants in Congress, the funding is not sufficient for states to meet the conservation needs outlined in their State Wildlife Action Plans. Each state needs on average $26 million a year to effectively implement those plans, according to a national survey.

State Wildlife Grants is the only federal program designed to prevent wildlife from becoming endangered through voluntary, proactive conservation. Via the Wildlife Conservation Section, DNR's Wildlife Resources Division uses the funding to research and monitor species of greatest conservation need, restore habitat, acquire land and accomplish other

Prothonotary warbler (Todd Schneider/DNR)

work identified in Georgia's State Wildlife Action Plan. This comprehensive wildlife conservation strategy is required to receive the grants.

Work spurred by the Wildlife Action Plan contributes to local and state economies. One way is through wildlife viewing. The nation's 148 million wildlife viewers generated an estimated $250 billion a year in related expenditures in 2022, according to the U.S. Fish and Wildlife Service. A version of the survey estimated the number of wildlife viewers in Georgia at 4.8 million, with 57 percent of residents 16 or older taking part in 2022. State Wildlife Grants are critical to helping conserve Georgia wildlife and natural habitats, the species and places valued by wildlife viewers and other outdoor recreationists.

Dedicated Funding for Wildlife Action Plans

With federal State Wildlife Grants funding insufficient to meet the conservation needs in state Wildlife Action Plans, the push to secure dedicated funding to prevent more than 12,000 species from becoming endangered has been ongoing for years. That effort coalesced into the Alliance for America's Fish and Wildlife in 2017. The alliance grew out of the partnership developed by the Blue Ribbon Panel on Sustaining America's Diverse Fish and Wildlife Resources.

Organized by the Association of Fish and Wildlife Agencies, the 26-member panel of national leaders representing outdoor recreation retail and manufacturing, energy and automotive industries, private landowners, schools, conservation organizations, sportsmen's groups, and state agencies worked to identify funding to support state conservation efforts to ensure the sustainability of wildlife. DNR helped shape the effort, with former Wildlife Resource Division directors Dan Forster and David Waller taking part in the Blue Ribbon Panel's first meeting.

Legislation in 2017 was followed by later revisions of what was called Recovering America's Wildlife Act. Powered by bipartisan and public support – a 2022 survey found that 70 percent of adult Americans favored the legislation – the bills outlined a funding model aimed at conserving the more than one-third of animal and plant species in the U.S. that face an elevated risk of extinction. From a Georgia perspective, the state's General Assembly unanimously approved a resolution in 2021 urging Congress to pass the act.

However, although congressional lawmakers produced House and Senate bills in 2022, the Senate bill was not brought to a vote and the legislation was not included in a larger spending package, in part because of questions about funding. Since 2022, similar legislation has been reintroduced but, lacking a consensus on funding, has not passed. Bipartisan support remains strong to determine a funding mechanism that can be dedicated to fully implementing states' wildlife action plans.

Georgia Outdoor Stewardship Program

The Georgia General Assembly passed legislation establishing the Georgia Outdoor Stewardship Act in 2018. Later that year, more than 80 percent of voters approved amending the state's constitution to suit, a change that became effective in July 2019.

The Conserve Georgia grants and loans program provides a dedicated funding mechanism – at an estimated $20 million a year from the Georgia Outdoor Stewardship Trust Fund – to support lands and outdoor projects critical for wildlife, clean water and outdoor recreation. In March 2025, a sixth round of projects were chosen for the final part of the application process. If all 12 projects are approved, they will provide $24.6 million to benefit local parks and trail systems and state-owned lands. The grantees would leverage another $36.5 million in matching funds from project partners.

The 2024-2025 projects include:

- Macon-Bibb County, $1 million to develop and improve about 1.5-miles of pedestrian and multi-use trails as a Rose Hill Cemetery Connection on the Ocmulgee Heritage Trail.
- City of Chattahoochee Hills, nearly $1.92 million to acquire and preserve about 77 acres – including over a half-mile of Chattahoochee River frontage – to expand Campbellton Park.
- City of Madison, $1.27 million to acquire and conserve 80 acres as a natural greenspace and the lion's share of the planned 100-acre One Mile Branch Preserve.
- Polk County, over $1.58 million to acquire and preserve 1,272 acres called the Santa Claus Mountain Tract and including seven miles of Pinhoti Trail, a 335-mile hiking trail through the southern Appalachians in Georgia and Alabama.
- City of Thomasville, $3 million to develop and improve 24-acre Paradise Park in the Red Hills Region, including restoring old-growth longleaf pine forest.
- Georgia DNR, $3 million to acquire three contiguous tracts covering 1,575 acres in Richmond County known as Thompson Farm and incorporate the land – including almost 5 miles of Savannah River frontage – as part of Phinizy Swamp Wildlife Management Area.
- DNR Wildlife Resources Division, $5 million to acquire over 9,000 acres of forested conservation land in Talbot County in the headwaters of Upatoi Creek, property that will become a state-managed natural area.
- DNR Wildlife Resources, $993,651 for the fourth phase of large-scale habitat and restoration work on multiple state-owned properties to help high-priority wildlife species in habitats varying from longleaf pine savannas to hardwood swamps.
- DNR State Parks & Historic Sites Division, $1.76 million to acquire the 180-acre Benton Trust property to expand Panola Mountain State Park, creating a protected riparian corridor and supporting endemic and threatened wildlife species.
- DNR State Parks & Historic Sites, $808,500 to acquire the 15.5-acre Grizzard Tract in Black Rock Mountain State Park, protecting the site from development and safeguarding critical habitats.
- DNR State Parks & Historic Sites, nearly $1.26 million to make waterway trail improvements at Stephen C. Foster State Park, a main entrance to the Okefenokee National Wildlife Refuge.
- North Georgia Mountains Authority, $3 million to renovate the day-use area at Amicalola Falls State Park, including improving pathways, buildings and the playground, while also protecting the stream buffer along Little Amicalola Creek.

The pre-application period for the 2025-2026 funding cycle was open Aug. 1-Oct. 17, 2025. The Georgia Outdoor Stewardship Program is managed by an 11-member board of trustees.

Administration and Personnel

Staffing remained relatively consistent for the Wildlife Conservation Section in fiscal year 2025. Exceptions included coastal Program Manager Jason Lee leaving to became deputy executive director of conservation for The Nature Conservancy in Georgia. Senior wildlife biologist **Tim Keyes**, a 25-year employee who had long coordinated the agency's work with birds in the coastal region, was promoted to program manager. Senior biologist **Fletcher Smith** became the Brunswick office's lead ornithologist.

In other changes, **Sam Holst** was promoted from senior technician to wildlife biologist directing Wildlife Conservation's work with small mammals. DNR's Game Management Section named two new regional supervisors, promoting **IB Parnell** to lead Region 3 in central Georgia and **David Gregory** to shepherd Region 1 in northwest Georgia.

On the division front and following the close of the fiscal year, **Ted Will** retired as Wildlife Resources Division director in November 2025 and **Chris Harper** was named the new director. Will served the agency for 25 years. Harper, an employee since 1999, previously worked as assistant chief of the Fisheries Management Section. DNR Commissioner **Walter Rabon** said Harper "brings a wealth of experience, leadership and dedication. ... His extensive knowledge and steadfast commitment to conservation make him exceptionally qualified to lead the division."

Wildlife Conservation named wildlife biologist James Hunt, Program Manager Dr. **Bob Sargent** and assistant chiefs Dr. **Brett Albanese** and **Kevin Lowrey** as section champions in fiscal 2025. Biologists **Erin Cork** and **Carlee Steppe** were chosen by colleagues as We Are DNR recipients. Through the We Are DNR program, staff recognize fellow agency employees for their standout efforts.

Sargent also was honored by the Atlantic Flyway Nongame Migratory Bird Technical Section for his almost decade-long dedication and leadership, including as chair, involving the group, which inform the Atlantic Flyway Council on conserving and managing migratory birds that aren't legally hunted. Wildlife biologist **Tony Kroeger** of the Wildlife Resources Division's Private Lands Program was named the Southeastern Association of Fish and Wildlife Agencies' Regional Wildlife Biologist of the Year, in part for helping lead the Forest Protection and Habitat Partnership with the Georgia Forestry Commission.

Of note, as well, the section's monthly Georgia Wild e-newsletter edited by **Rick Lavender** placed third in the external newsletter category at the 2025 Association for Conservation Information conference. Wildlife biologist **Todd Schneider** marked his 32nd year with the agency in July 2025. Schneider, an ornithologist, started with DNR as an hourly employee in May 1993, went full-time that July and has worked as a biologist in Wildlife Conservation's Forsyth office since. During the Georgia Prescribed Fire Council's 2025 statewide meeting in Valdosta, Game Management's **Region 5 staff** took home the Mark Melvin Prescribed Burner of the Year Award. The Albany-based staff were praised for setting prescribed fire acreage records, promoting more growing-season burns and advancing their craft by using drones for aerial burning.

DNR's Todd Schneider releases a Henslow's sparrow during a survey (Rick Lavender/DNR)

Retirees in fiscal 2025 included **Greg Krakow**, longtime Natural Heritage database manager for Wildlife Conservation, Wildlife Resources Division Game Management Assistant Chief **Walter Lane**,

DNR's Tim Keyes with an eastern indigo snake during a survey in Candler County (Matt Elliott/DNR)

and **Matt Payne**, the division's Forest Management Unit program manager.

Early in the fiscal year, Dr. **J. David Allen**, founding chair of the Georgia Natural Resources Foundation, died at age 79. An oral and maxillofacial surgeon, Allen was also a leader in a wide range of Atlanta-area organizations, from Emory University and the Georgia Chamber of Commerce to Zoo Atlanta and the Georgia Historical Society. In December 2024, services were held at Charlie Elliott Wildlife Center near Mansfield and Liberty Plaza in Atlanta in remembrance of DNR's first commissioner, **Joe D. Tanner**. Noted as a visionary leader committed to conserving the state's natural resources, Tanner, who died in November, consolidated 38 state agencies into DNR during his first term as commissioner under then-Gov. Jimmy Carter. Tanner also led the agency from 1990-1995.

Among other accomplishments, the Georgia native was the state's lead negotiator during the tri-state "water wars," saw passage of the Georgia Heritage Trust (1975) and Shore Protection (1979) acts and – among other accomplishments – successfully led the Preservation 2000 initiative aimed at protecting 100,000 acres of environmentally sensitive lands. The Georgia Board of Natural Resources named him as the 2024 recipient of the Rock Howard Conservation Achievement Award for environmental conservation. (As noted in "Education and Outreach," Charlie Elliott Wildlife Center celebrated the opening of the Joe Tanner Discovery Center in April 2025.) DNR Commissioner **Walter Rabon** said the agency was "proud to celebrate the legacy of Joe Tanner and honor his memory by teaching students, families and more about our incredible environment and how to be good stewards."

DNR's Bob Sargent (right), honored for his work with the Atlantic Flyway Nongame Migratory Bird Technical Section

Celebrating the Joe Tanner Discovery Center at Charlie Elliott Wildlife Center (DNR)

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WILDLIFE RESOURCES DIVISION
WILDLIFE CONSERVATION SECTION

2067 U.S. Highway 278 SE, Social Circle, GA 30025
(770) 557-3213

OFFICES ALSO AT:
116 Rum Creek Drive, Forsyth, GA 31029
(478) 994-1438
2065 U.S. Highway 278 SE, Social Circle, GA 30025
(770) 557-3213
One Conservation Way, Suite 310, Brunswick, GA 31520
(912) 264-7218

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DNR's Audra Futch with flowering American chaffseed at Doerun Pitchplant Bog WMA (Phil Spivey/DNR)