

THE DECISION NOT TO LIST THE GOPHER TORTOISE WAS NO COINCIDENCE

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Forest owners in Florida, Georgia, South Carolina, and eastern Alabama breathed a sigh of relief on Tuesday, October 11, when the U.S. Fish and Wildlife Service (FWS) [ruled](#) that the eastern population segment of the gopher tortoise did not warrant listing as Threatened or Endangered under the Federal Endangered Species Act (ESA). Had a listing occurred, forest owners would have likely been subject to regulations that impact forest management and harvest.

The decision not to list was no coincidence. It was due in large part to collaborations that clarified the number and distribution of tortoises in the eastern population and that took a leadership role in implementing conservation practices to benefit

tortoises and their habitats. Many entities, including the FWS, deserve credit for this positive outcome. Forest owners were essential members of many of these collaborations.



Gopher Tortoise

An Iconic Species

The football-sized gopher tortoise inhabits dry, upland habitats such as longleaf pine sandhills and pine flatwoods. They use shovel-like feet to excavate burrows in well-drained, sandy soils. Burrows can be 40' long and 10' deep and provide habitat for more than 300 other species. Tortoises may live to be 60 years old. Periodic fire, such as prescribed burns, is necessary to maintain open, sunny spots where tortoise nest and to maintain their preferred plant foods. Gopher tortoises are declining throughout their range due to development, habitat alteration, and other factors.



Longleaf habitat

Authorities recognize two distinct population segments of gopher tortoises. The western segment --Louisiana, Mississippi, and western Alabama -- was listed as Federally Threatened in 1987 and remains so today. In 2006 the FWS received a petition requesting that the eastern segment – South Carolina, Georgia, Florida, and Eastern Alabama -- be listed. The eastern population was subsequently placed on the “candidate” list, meaning that FWS had sufficient information on the species’ biological status and threats to propose them as Endangered or Threatened under the ESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities. It is important to note that some states provide legal protection to tortoises.

Tortoises and Forestry

The gopher tortoise’s range overlaps with some of the most productive forest lands in the U.S. Certain types of active forest management are not only compatible with gopher tortoise management – they are necessary to help maintain the reptile’s desired habitat conditions. For example, forest thinning enhances

tortoise habitat and prescribed fire is essential in maintaining it. Some practices, such as densely stocked forests that limit sunlight on the ground, and intensive site prep that disrupts native plant growth, are detrimental. But, with compromises, gopher tortoises and forestry can and do co-exist.

Stewardship of gopher tortoises and their habitats is a badge of honor for many forest owners. For example, the [Sustainable Forestry Initiative, Inc. website](#), highlights how well-managed forests can benefit gopher tortoises and other wildlife. A story on [Ray-onier's website](#) describes how their foresters build plans around tortoise conservation. The USDA Natural Resources Conservation Service (NRCS) [Working Lands for Wildlife](#) initiative features the gopher tortoise as an example of a “win-win” for agricultural and forest productivity that enhances wildlife on working lands and offers landowners cost-share programs to restore and maintain tortoise habitat.

Gopher Tortoise Economics

Federally endangered tortoises on private forests, ranches, and farms could impact revenue and property value. For fast-growing southern states eager to attract new business, avoiding new federal regulations was a strong incentive for proactive conservation on behalf of tortoises and their habitat.

Then there is the military connection. For example, some of Georgia's military bases provide habitat for gopher tortoises. Ft. Benning, for instance, estimates up to 3,000 tortoises on their 182,000-acre installation. Endangered species can impact military readiness by impeding testing and training. One recent study calculated a \$28 billion annual economic impact from military activities in Georgia and noted that the military is the State's largest employer at 150,000 jobs. The Department of Defense also had a strong incentive to conserve tortoises.

Forest Owners Helped Clarify Tortoise Status

The FWS decision not to list the eastern population was partially the result of better understanding tortoise numbers and distribution. The Agency's press

release noted that “Through efforts by conservation partners, we are now aware of more gopher tortoise populations beyond those known when the species was initially placed on the candidate list.” Forest owners contributed to this new awareness. For example, through the National Alliance of Forest Owner's [Wildlife Conservation Initiative](#), member companies provided access to millions of acres of private working forests throughout the range of the gopher tortoise for research and population inventories. The [Forest Landowner's Association](#) credits the FWS for seeking broader inclusion of private landowners, including multi-generational forest owners, in assessing the tortoise's status. [Conservation Without Conflict](#) continuously promoted the merits of science-based, data-driven decisions and the merits of voluntary, rather than regulatory, approaches.

Conservation in Action

The FWS decision also depended on measurable, permanent outcomes for tortoise conservation. One collaboration that formed to meet this challenge was the [Georgia Gopher Tortoise Conservation Initiative](#). Faced with the specter of an ESA listing, some 30 partners began working in 2015 to proactively protect tortoises and their habitats in Georgia.

Scientists determined that a Minimum Viable Population—one that is demographically stable -- is 250 adults with a density of no less than .4 tortoises/hectare on a site no less than 100 hectares in size and of superb quality. GGTCI members set a goal to protect at least 65 viable populations and 100,000 acres in Georgia by 2020. In 2017, there were 122 viable populations in the state, of which 36 were already conserved. Twenty-nine additional populations needed protection. The estimated price tag to reach the 2020 objectives? A cool \$150 million for land conservation and forest management.

Undaunted by this lofty goal, the GGTCI, with strong leadership from the [Georgia Department of Natural Resources \(DNR\)](#), dug in. DNR staff undertook extensive surveys to locate and quantify tortoise populations. Private foundations contributed tens of mil-

lions of dollars to buy land from willing sellers. The Department of Defense funded habitat conservation and developed strategies encouraging private landowners to be good tortoise stewards. The U.S. Endowment played a modest role, partnering with the USDA NRCS to secure more than \$15 million from their Regional Conservation Partnership Program (RCPP) for voluntary conservation easements from interested landowners, negotiated by DNR.

The GGTCL is working. To date, more than 105,000 acres of land has been conserved; 80,000 acres are newly open to the public for recreation. The forests on these properties are permanently protected from conversion to other uses. These forests will be actively managed, providing wood and fiber for local mills. Forest owners are benefitting through voluntary conservation easements. Through 2022, more than \$180 million has been raised from public and private sources.

What's Next?

We think the decision not to list the eastern population of gopher tortoises is a win. Others, such as the Center for Biological Diversity, [disagree](#). There is no question that continued diligence and conservation is needed to address the many challenges that tortoise's face. Population growth pressures tortoise habitat. Continued habitat frag-

mentation is inevitable. While the gopher tortoise enjoys state-level protection throughout its range, there are still more than 50 viable tortoise populations in Georgia in need of conservation and more range wide—we can't afford to be complacent about this need. Convincing an increasingly urban populous that prescribed burns and active forest management are needed to ensure a future for the gopher tortoise and the myriad other species that coexist in open pine forests isn't easy. Many hurdles remain.

Ultimately, conservation biology is about species and their habitats. Individual gopher tortoises will be lost, but implementation of inclusive, science- and data-driven plans such as the GGTCL mean that the eastern population of gopher tortoises is secure, at least for now.

The collaborations described above have created trust among diverse partners that will endure. Having tasted success with the gopher tortoise, individual organizations will be more willing to collaborate on future challenges. Not every natural resource issue will have the science, financing, and leadership necessary to achieve the positive outcomes that the gopher tortoise collaborations have. When these factors align, however, collaborations can achieve desirable outcomes for natural resources and people.



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