

# Gopher Tortoise Conservation at Geneva State Forest

By Ray Metzler, AFC Certified Wildlife Biologist/Threatened & Endangered Species Specialist

**G**opher tortoise populations at Geneva State Forest (GSF) have grown in recent years as a result of habitat improvement efforts associated with longleaf pine restoration. While a density of 0.4 tortoises/hectare is needed to be considered a minimum viable population, the latest line transect data at GSF indicates there is a density of 0.27 tortoises/hectare. The staff has increased prescribed fire activities in recent years, making more habitat available to gopher tortoises. Hopefully these and future habitat improvement activities at GSF, and throughout the range, will lead to higher tortoise densities, possibly precluding the need to list the tortoise as a threatened or endangered species.

Ideally, gopher tortoises should be left alone, wherever they may be. However, on rare occasions they must be moved for their safety. Relocation efforts are very costly and are utilized only on a case-by-case basis when necessary. Since gopher tortoises are a protected species, they cannot be relocated without being held in an enclosure for six months to a year. Research has shown that when released outside of an enclosure, tortoises try to travel back to their home and are often victims of highway mortality.

Ericha Nix with the Division of Wildlife and Freshwater Fisheries (WFF) Nongame Wildlife Program approached the Alabama Forestry Commission to gauge our interest in constructing a second enclosure at GSF to act as a holding pen for gopher tortoises confiscated from individuals possessing them illegally. The U.S. Forest Service provided funding for materials to construct a 3.5 acre enclosure in an area with suitable habitat but low tortoise density. Then in February 2018, employees from AFC, WFF, and the Longleaf Alliance all participated in construction of the enclosure.

Two tortoises were released into the enclosure in April 2018, which were confiscated from an individual holding them illegally in Baldwin County. A prescribed burn will be conducted within and around the enclosure during the winter of 2018/2019 to burn through the silt fencing, allowing the tortoises to escape the enclosure and become part of the GSF gopher tortoise population in the spring of 2019. Tortoises enclosed for 6-12 months lose their homing instinct and tend to incorporate into the local population.

When several burrows located immediately outside of the new enclosure site were 'scoped' in February, no tortoises were seen. Five other burrows located in an area adjacent to the GSF headquarters were scoped as well, and three of them were occupied by tortoises. Fresh tracks outside the burrow indicated the tortoises had been active earlier in the day. This particular area is scheduled to be thinned in the near future. A clause inserted into the logging contract prohibits heavy equipment from being oper-

ated within 15 feet of a burrow entrance. Adherence to this clause minimizes the opportunity for causing the burrow to collapse.

Tortoise burrows are known to be utilized by hundreds of species, many of which are imperiled, ranging from crickets and invertebrates to small mammals and birds including bobwhite quail. Additional information regarding gopher tortoise activities in Alabama can be found at Outdoor Alabama. 🐢



*[Above Left]: Alabama Forestry Commission, Wildlife & Freshwater Fisheries, and the Longleaf Alliance combine efforts to insert silt fence into strategically dug trenches.*

*[Right/Top]: A 'scope' camera is inserted into a hole to potentially locate a gopher tortoise.*

*[Right/Bottom]: The camera detects the presence of a burrowed gopher tortoise.*



# How You Can Help!

With approximately 95 percent of gopher tortoise habitat in Alabama in private ownership, the Alabama Tortoise Alliance needs your help with identifying and assessing gopher tortoise populations. Established to help protect the species as well as others living within its ecosystem, the Alabama Tortoise Alliance is a coalition comprised of public agencies and private organizations/companies such as the Alabama Forestry Association, Westervelt, Weyerhaeuser, and Rayonier.

Surveys of tracts with more than 50 tortoise burrows are needed to supplement data obtained from public lands. Private land surveys will be instrumental in demonstrating that populations across Alabama are viable.

A series of landowner engagement meetings will be held during the fall of 2018 to provide private landowners with a gopher tortoise status update and request their assistance in obtaining additional population distribution information. If you are a landowner with more than 50 burrows on your property and would like to attend one of the landowner engagement meetings, please contact Ray Metzler, Wildlife Biologist, Alabama Forestry Commission at telephone: (334) 240-9373 or email: [Ray.Metzler@forestry.alabama.gov](mailto:Ray.Metzler@forestry.alabama.gov)