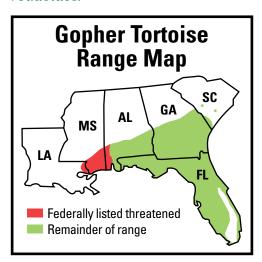
# **Gopher Tortoise** (Gopherus polyphemus)





Foraging gopher tortoise

Gopher tortoises are dry-land turtles that usually live in relatively well-drained, sandy soils generally associated with longleaf pine and dry oak sandhills. They also live in scrub, dry hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, mixed hardwood-pine communities, and a variety of habitats that have been disturbed or altered by man, such as power line rights-of-way, and along roadsides.



Gopher tortoises are currently protected by federal law under the Endangered Species Act (ESA) in the Alabama counties west of the Mobile and Tombigbee Rivers and in Mississippi and Louisiana. The eastern portion of the gopher tortoise's range includes Alabama (east of the Tombigbee and Mobile Rivers), Florida, Georgia, and southern South Carolina. In these areas, the gopher

tortoise is now a candidate species for possible listing later under the ESA. In the western range states, west of the Tombigbee River in Alabama, Mississippi, and Louisiana, it will continue to be listed as threatened under the ESA.

### **Life History**

Gopher tortoises grow to be up to 15 inches long and weigh from eight to 15 pounds. With their strong elephantlike back legs and front feet specialized for digging, they are well-adapted to burrowing. The burrows provide gopher tortoises with protection from predators and from the elements by maintaining a fairly constant environment inside. They are most active in the warmer months but spend most of their lives in their burrows. Each tortoise will dig and use many burrows throughout the active season. The burrows can vary from three to 52 feet long and nine to 23 feet deep.

Their burrows also provide refuge for about 360 other species throughout its range. Some of those species include indigo snakes, black pine snakes, gopher frogs, Florida mice, foxes, skunks, opossums, rabbits, quail, armadillos, burrowing owls, snakes, lizards, frogs, toads, and many invertebrates. Several of the "tenants" are also legally-protected species adding to the burrows' value to the ecosystem.

Gopher tortoises can live up to 80 years in the wild and more than 100 years in captivity. They are slow to reach sexual maturity — at 10 to 20 years old — and

they have a low reproductive rate. Only about three to five percent of the young tortoises typically survive. They lay their eggs at the entrance of their burrows to capture the heat, which makes it easy for predators like opossums and raccoons to

Primarily herbivorous creatures, gopher tortoises eat grasses, mushrooms, saw palmetto berries, and prickly pear cactus pads, fruits and flowers, as well as blackberries, blueberries, gopher apples and other low-growing fruits.

Gopher tortoises spread seeds of many plants in their droppings, filling another important role in the ecosystem. Gopher tortoises need relatively deep, sandy, soils in which to burrow and open sunny sites for nesting. They thrive in longleaf pine forests, and enjoy the same type of habitat as the endangered red-cockaded woodpecker.



Planted longleaf pine seedling still in the grass stage.

# U.S. Fish & Wildlife Service

#### **Threats**

Habitat destruction is a significant threat to gopher tortoises. Threats to the gopher tortoise also include habitat fragmentation and degradation, predation, inadequacy of regulatory mechanisms, and incompatible use of herbicides in forest management and some silvicultural activities.

Gopher tortoises need large parcels of undeveloped land not fragmented by roads, buildings, parking lots, and other structures. Such barriers in natural habitat limit food availability and burrow space for tortoises plus expose them to closer contact with humans and their vehicles. Road kill is one of the major causes of death for adult tortoises. And, although removing gopher tortoises from their homes is against the law, they are so easy to catch that some people continue to kill and eat them or keep them as pets.

# How can anyone help?

No matter where you live, you can help gopher tortoises by working with agencies to manage tortoise habitat. Work with local, county and state elected officials to set aside habitat for wildlife and, when compatible, humans' recreation and enjoyment. Ask for green spaces



Back burning longleaf pines

and corridors and wildlife tunnels in and around developments. Encourage local governments to require listed species surveys and proof of issuance of required wildlife permits before they issue clearing or building permits. Last, but not least, help your friends and neighbors learn about this species and the many other fascinating animals and plants found in your area.



Well managed longleaf pine with good understory

# Landowners can really help!

More than 80 percent of gopher tortoise habitat is in private or corporate hands, and we really need your help identifying the status of gopher tortoises on your land to better assess populations and trends. Fire helps maintain good habitat conditions for tortoises. If your land is primarily in silviculture (pine tree farming), you can help gopher tortoises by prescribed burning and tree thinning to achieve the open habitat that tortoises need.

A densely planted stand is not healthy for gopher tortoises, as too many trees reduces sunlight that reaches the forest floor, which reduces the grassy ground cover needed to survive.



Gopher tortoise calling it a day.

Please be sure to consult your state forestry office to get necessary information and permits. In natural sandhill habitat, prescribed burning is recommended every three to five years. In palmetto flatwoods habitat, more frequent burns may be necessary. If you can't burn to rejuvenate tortoise habitat, regularly mow, clear out woody shrubs, and thin trees.

To learn more about gopher tortoises, and what we are doing to protect please visit us at http://www.fws.gov/southeast.

All photos credit Randy Browning/ USFWS.