

### **Gopher Tortoise** (*Gopherus polyphemus*)



#### **Description:**

Gopher tortoises are reptiles that have a gray-brown, oval shell (carapace) with a flat top. The bottom of a male gopher tortoise's shell (plastron) is concave, and the female's plastron is flat. The plastron is yellow for both sexes. Gopher tortoises eat grasses, beans, and fruits from plants like gopher apple, pawpaw, and blackberries. Their forelimbs are flat and shovel shaped, which is great for digging burrows. Gopher tortoises live 40-60 years, with the females maturing around 10 years or older. These tortoises mate from April to May. Female gopher tortoises excavate nests in or near the burrow apron (mound of sand at the entrance of the burrow) into which they lay four to six eggs. Hatchlings are 1 ½ inches long and have a yellow-orange carapace.

#### **Habitat:**

Gopher tortoises live in dry, upland habitats that have well-drained soils for them to dig their burrows. The common habitat in which the gopher tortoise is found in Volusia County includes: pine flatwoods, xeric oak, sand pine, scrub oak, agricultural lands (pastures), disturbed habitats, and coastal dune and scrub. The habitats must also provide plants for food and open, sunny areas for nesting, egg incubation, and basking for thermoregulation.

#### **Burrow:**

Gopher tortoise burrows provide shelter from extreme hot and cold temperatures and are a safe place from predators. These burrows average 6-8 feet deep and 15 feet long. The entrance to the burrow is shaped relatively the same as the tortoise (oval). The width of the burrow entrance is generally the same size as the length of the gopher tortoise. This enables the tortoise to turn around in the burrow. A gopher tortoise will use more than one burrow over time.

#### **Commensals:**

More than 300 different species have been recorded utilizing a single gopher tortoise burrow for food or shelter, including the Florida mouse, indigo snake, burrowing owl, and a large variety of insects. For this reason, the gopher tortoise is called a keystone species. A keystone species has a major influence on the structure of an ecosystem, and its removal can have consequences for the whole ecosystem.

**Status:**

The gopher tortoise is protected by the United States Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission under the Endangered Species Act and Chapter 39 of the Florida Administrative Code. The state of Florida has listed the gopher tortoise as a threatened species because these tortoises are declining in number throughout their range. Many issues contribute to the decline in gopher tortoise numbers. Habitat loss due to land development may be the most serious threat that gopher tortoises face; both gopher tortoises and humans like to live in high and dry areas. Gopher tortoise road mortality also increases as more roads are built to keep up with development. Many of the eggs laid by females do not have a chance to hatch because of predation and/or habitat destruction. Gopher tortoises prefer open sunny areas that have herbaceous ground cover. Fire suppression allows these areas to become very dense with vegetation and therefore decreasing the amount of sunny open areas and herbaceous groundcover. Other factors affecting gopher tortoise survival include: disease transmission from improper relocation, use of pesticides and herbicides, and illegal poaching for food.

**Frequently Asked Questions****What should I do if I find a gopher tortoise?**

Gopher tortoises are legally protected throughout their range. Their presence does not preclude development; however permits are needed for relocation efforts. Permits are also required for possession and/or research purposes. If you come across a gopher tortoise trying to cross the road, the Gopher Tortoise Council recommends that you “simply carry the tortoise across the road in the direction that it was going,” while being aware of traffic and potential hazards to yourself. It is also important to keep dogs away from gopher tortoises, as dogs have been known to injure and kill tortoises.

**Do I need a permit if I have gopher tortoise burrows in my construction area?**

If the construction cannot avoid the gopher tortoise burrow by 25 feet then a permit for relocation is necessary from the Florida Fish and Wildlife Conservation Commission (FWC). Please visit the [FWC website](#) for information regarding the permit process. Volusia County Environmental Management may also be contacted for information.

**Agency Contact information:**

Volusia County Environmental Management  
123 W. Indiana Ave.  
DeLand, FL 32720  
(386) 736-5927

Florida Fish and Wildlife Conservation Commission  
Northeast Region  
1239 S.W. 10th Street  
Ocala, FL 34474-2797  
(352) 732-1225

**To view the available options to address the presence of gopher tortoises on lands slated for development please go to ...**

<http://www.floridaconservation.org/permits/Docs/TortoiseRelocationGuidelines.pdf>

**For more information...**

<http://www.gophertortoisecouncil.org/>  
<http://www.nbbd.com/godo/ef/gtortoise/>  
<http://edis.ifas.ufl.edu/pdf/edpubs/gopher.htm>  
<http://www.ashtonbiodiversity.org/>