

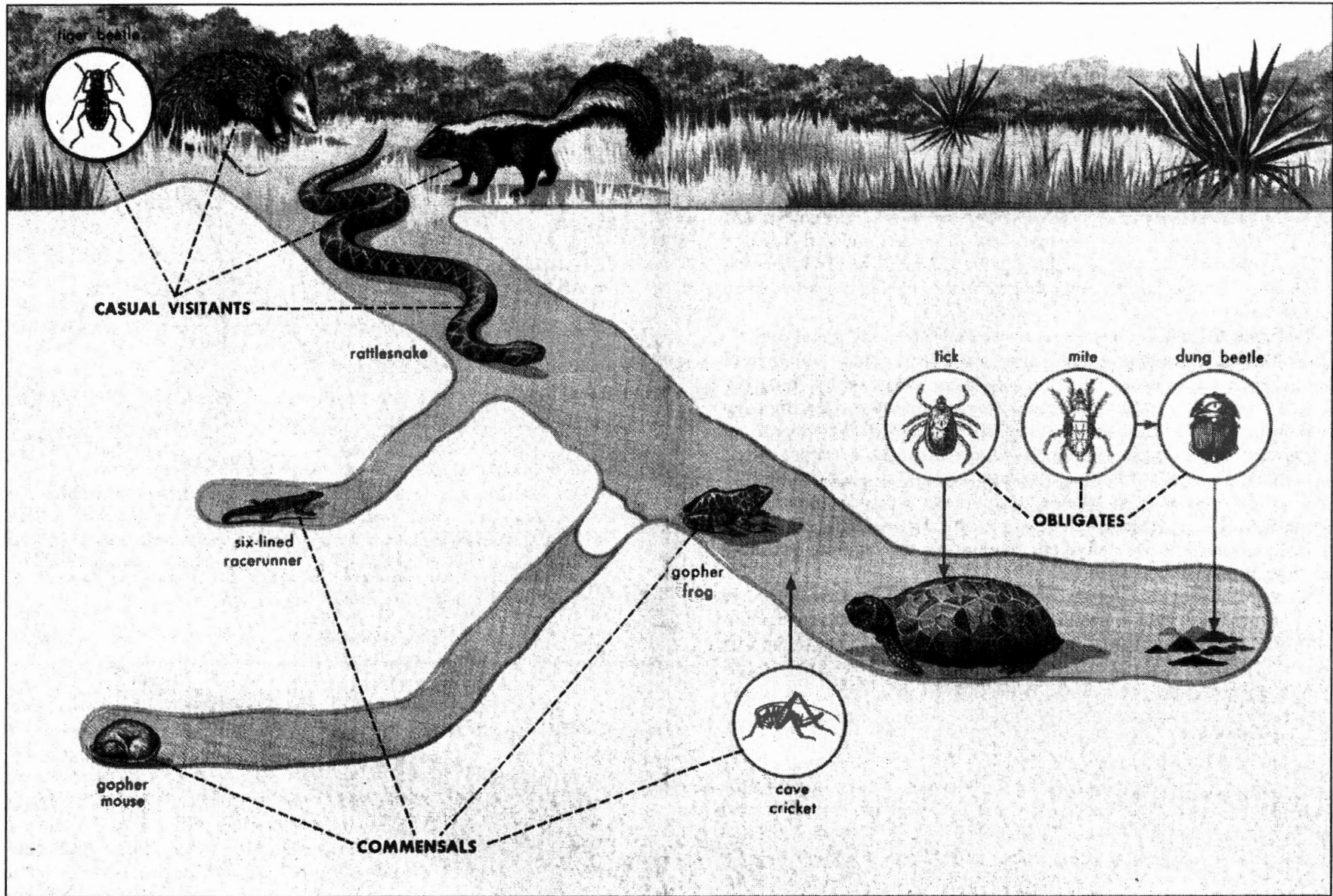
## A Keystone Species

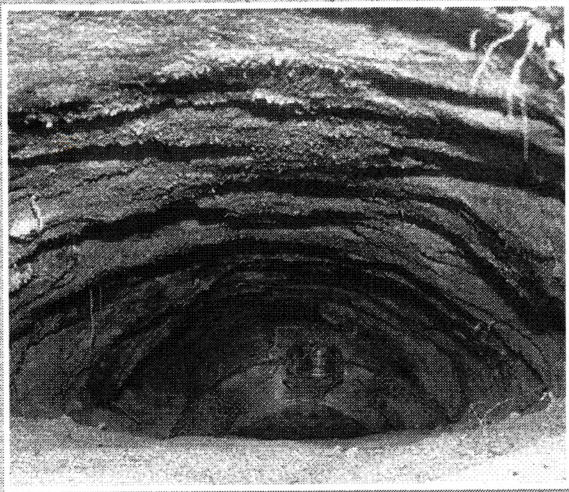
The gopher tortoise is often referred to as a **keystone** species because of its impact on the environment. To be named a keystone species, the animal must keep the environment it lives in stable. The word keystone comes from an architectural term dealing with the construction of a building, meaning that if one key part were removed the whole building would tumble down. The gopher tortoise is called a keystone species because of its burrow. The gopher tortoise burrow offers shelter and nesting grounds to many other species. The species that live in the gopher tortoise burrows are not capable of digging their own underground shelters. Without the shelter dug by the tortoises, small rodents and some snake species would die off. Other species use the burrows as hiding places from predators. Some species live in the burrow with the tortoise and some occupy vacant burrows. The gopher tortoise's presence directly affects the well being of the other animals in its ecosystem. The tortoise provides sustainability to its community.

A tortoise will dig many burrows. Gopher tortoises that live in hot areas will use the burrow to escape the sun. The burrow is cool in the summer and warm in the winter. The gopher tortoise will make its burrow just wide enough to allow it to turn around inside the hole. There is only one entrance to the burrow. Burrows can be as deep as 10 feet below the surface, and it will gently slope downward. A burrow can be as short as 6 to 10 feet. Others are as long as 40 feet.

*Research one of the hundreds of species that a gopher tortoise burrow shelters.*

# Burrow Associates





## GET INVOLVED

- ◆ Support conservation land acquisition programs by non-profit groups and government agencies.
- ◆ If your area does not have a land conservation program, work with others to get one started! Links to land acquisition programs can be found on the Gopher Tortoise Council website.
- ◆ Become a volunteer for organizations that manage uplands. Many are underfunded and understaffed.

***Most importantly,  
educate yourself  
so you are equipped  
to educate others!***

***Tortoises are a "keystone species,"  
providing habitat for hundreds  
of other animals that use their  
burrows for finding food, shelter  
from fire and predators, and  
protection from the elements.***



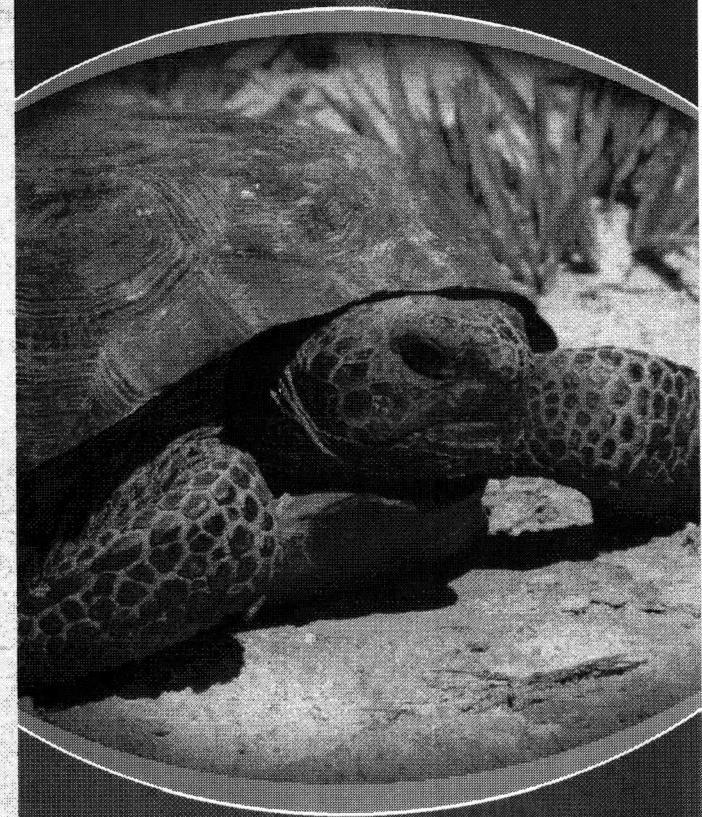
**Gopher Tortoise Council**  
c/o Florida Museum of Natural History  
P.O. Box 117800  
University of Florida  
Gainesville, FL 32611  
[www.gophertortoisecouncil.org](http://www.gophertortoisecouncil.org)

The Gopher Tortoise Council was formed in 1978 by a group of biologists and others concerned about the range-wide decline of the gopher tortoise (*Gopherus polyphemus*).

*Members of the GTC provided photographs and assisted with the development of this brochure.*

# LIVING WITH GOPHER TORTOISES

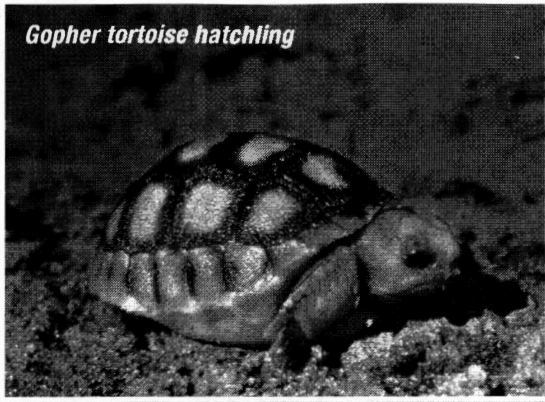
How **YOU** can help  
this declining species



***Working to conserve the gopher tortoise  
and the fascinating world in which it lives.***

*An educational brochure created  
by the Gopher Tortoise Council*

*Gopher tortoise hatchling*



## ***Gopher tortoises are protected in every state and cannot be harmed.***

By understanding gopher tortoise natural history you may be able to help conserve these increasingly rare animals.

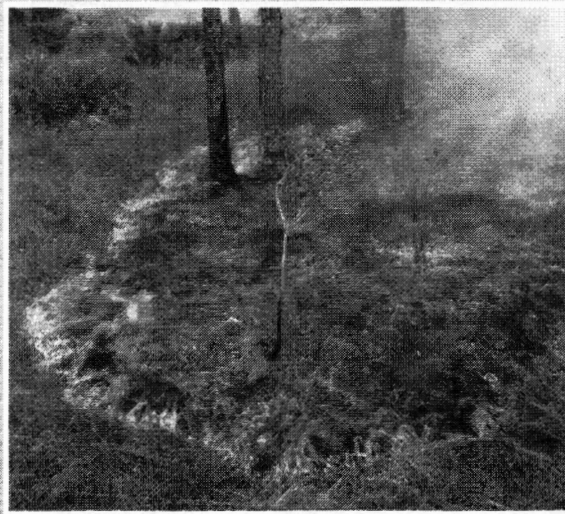
Gopher tortoise burrows are an extremely important component of the landscape for tortoises and other animals... more than 360 different animals use tortoise burrows!

## **BE ALERT**

- ◆ When mowing your lawn, use caution to avoid collapsing burrows.
- ◆ Mark behind burrows with a small pin flag to alert pedestrians/mowers, etc. of their presence.
- ◆ When walking your dog in a tortoise's habitat, keep it on a leash.
- ◆ Keep cats indoors where they cannot harm young tortoises or other wildlife.

## **HELP THEIR HABITAT**

- ◆ Tortoises love sunny areas! Don't allow trees and shrubs to create too much shade in your yard. Provide as much open grassy areas as possible.
- ◆ Support land managers' efforts to improve habitat for gopher tortoises through seasonally appropriate prescribed burning, exotic plant removal, tree thinning, etc.
- ◆ Seek out assistance from your state forestry office to conduct seasonally appropriate prescribed burns on your property.
- ◆ If burning isn't possible, use mowing, roller chopping, etc., to mimic fire effects. Mark out burrow locations if possible, and only use heavy equipment in the colder months when tortoises are less likely to be active.



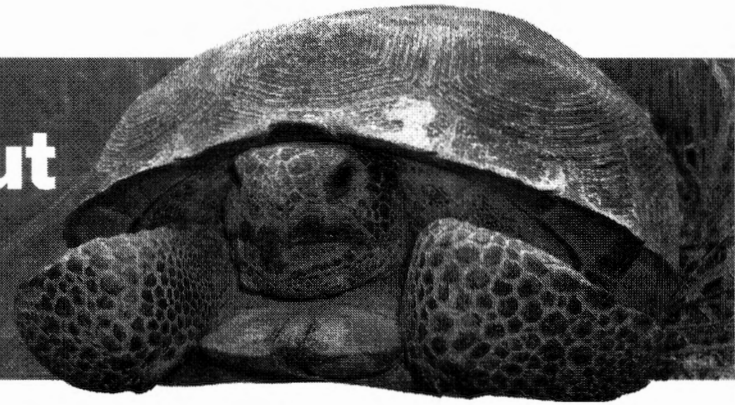
*A seasonally appropriate prescribed burn improves the gopher tortoise's habitat.*



## **CONTACT AND DIET**

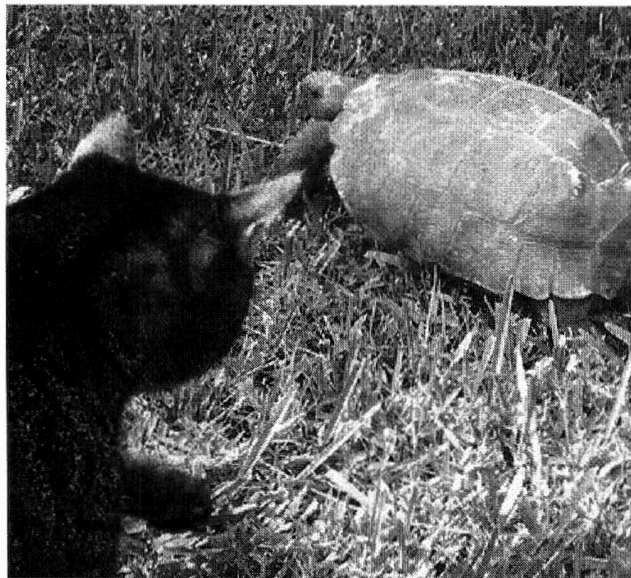
- ◆ Tortoises are keenly aware of their neighborhood and will try to return if moved.
- ◆ Do not take them out of the wild. If you find one in an urban setting, contact your local wildlife agency.
- ◆ If you find an injured tortoise, make detailed notes of where the tortoise is located and contact your local wildlife rehabilitator.
- ◆ If you help a tortoise cross a road, try to move it in the same direction it is already heading. Be very careful of traffic!
- ◆ Tortoises have a varied diet including grasses, bean family plants, flowering weeds and low-growing fruits.
- ◆ Plant a variety of low-growing native plants in your yard. Remove invasive exotics plants.
- ◆ Consult the Gopher Tortoise Council website (or your local native plant society) for plant suggestions.

# Get The Facts About Gopher Tortoises: Urban Areas



Gopher tortoises prefer to live in dry, sandy environments, however, this is also where people build homes. As a result, habitat loss has caused tortoise populations to decline. Residents can still provide habitat for tortoises in the open, grassy areas of their neighborhoods. The following suggestions can help homeowners and gopher tortoises safely coexist:

- Tortoise burrows can be identified by the half-moon shape of the burrow entrance. Avoid disturbing the area around the burrow.
- An active burrow has a mound of soil extending outward from the entrance, created when a tortoise digs its burrow.
- Do not put a tortoise in water. They are terrestrial animals that do not swim well.
- Do not attempt to handle or feed a tortoise.
- If you see a tortoise in the roadway, you can move it across the road in the direction it was headed. **Do not put your life in danger to move a tortoise.**
- Take an injured tortoise to the nearest licensed wildlife rehabilitator or call the FWC.



Jason Emmett

## Gopher tortoises and pets

Gopher tortoises have coexisted with native animals in Florida for centuries, but many tortoises have been injured or killed by domestic pets, particularly dogs. These encounters can be avoided by:

- Training pets to avoid tortoises and their burrows.
- Creating a barrier or changing existing fences to separate pets from tortoises. Tortoises should still move freely around your property.
- Never leaving pets unsupervised near tortoise burrows.
- Contacting your county animal control office for assistance if a pet enters a burrow.

## Legal protection

The gopher tortoise is a threatened species. It is illegal to damage, destroy, harass, or kill gopher tortoises, their burrows or their eggs. To report a violation call the FWC's toll free Wildlife Alert Hotline at 1-888-404-3922 or report it online at: [MyFWC.com/contact/wildlife-alert/](http://MyFWC.com/contact/wildlife-alert/)

## Relocation

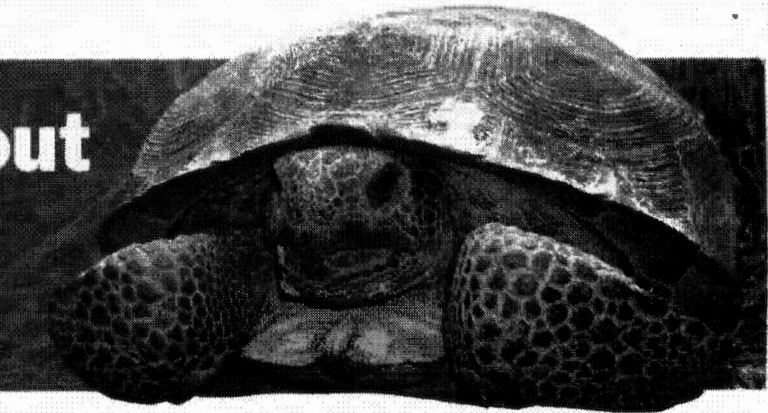
Gopher tortoise relocation is only appropriate where development is proposed within 25 feet of a tortoise burrow. Landowners must obtain permits from the FWC before relocating a gopher tortoise. For concerns regarding a burrow under an existing structure, contact the gopher tortoise conservation biologist in your region: [MyFWC.com/license/wildlife/gopher-tortoise-permits/contacts/](http://MyFWC.com/license/wildlife/gopher-tortoise-permits/contacts/).

Learn more about living with gopher tortoises in urban areas, landscaping with tortoise-friendly plants, and ways to get involved by contacting the gopher tortoise office at **850-921-1030** or visit [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise).



Florida Fish and Wildlife  
Conservation Commission  
[MyFWC.com](http://MyFWC.com)

# Get The Facts About Gopher Tortoises: Best Management Practices



Wildlife Best Management Practices (BMPs) can prevent or minimize impacts on gopher tortoises and their burrows. The BMPs were developed by the Florida Fish and Wildlife Conservation Commission (FWC) and Florida Department of Agriculture and Consumer Sciences (DACS), using input from farmers and foresters. Throughout Florida, gopher tortoises dig large burrows with distinct half-moon shaped entrances. Tortoise burrows are found in habitats with dry, sandy soils, particularly with ample herbaceous ground cover. Gopher tortoises often live in areas with on-going agriculture or silviculture (forestry) practices. Gopher tortoises, their eggs and burrows are all protected under state law.

## Best Management Practices

- Maintain habitat integrity by implementing habitat management activities on forest lands or associated uplands.
- Locate heavy equipment and supplemental feeding areas away from active gopher tortoise burrows. If heavy equipment must be located in such areas: a) identify and mark burrows, b) avoid damage to the burrow opening and c) avoid damage to the burrow apron during nesting season (May to September).
- Avoid direct contact with all visible gopher tortoise burrows and burrow aprons from May to September.
- When practical, minimize heavy equipment use during September and October, when gopher tortoise hatchlings are most numerous.

## Ways to Avoid Disturbance

Ground disturbance should be avoided May to September and extended into October when hatchlings are most prevalent. When avoidance is not an option:

- Mark burrows with a stake or flagging tape so they are visible.
- During and after logging operations, clear debris off of the ground and prevent clogging of burrows.
- Set mower blades at least 18 inches above the ground to avoid injuring tortoises.
- From May to October, avoid operating heavy machinery during cooler part of the day (early morning); from November to April, avoid operating during warmer parts of the day (midday). Gopher tortoises are most active at these times.



FWC

## Suggested Habitat Maintenance

- Tree farmers should plant the minimum amount of profitable trees (454 trees per acre), which allows sunlight to reach the forest floor promoting herbaceous ground cover.
- Large stands of trees should be split into multiple stands of different ages.
- Use prescribed burning when appropriate. If prescribed burning is not feasible, control ground cover and mid-story hardwoods using herbicides.
- Apply herbicides that will significantly affect hardwood species and not herbaceous vegetation; banded application of herbicides is preferred over broadcast application.
- Establish ground cover prior to planting pine trees when restoring habitat on degraded sites. Create a border of herbaceous vegetation around the property boundaries for areas adjacent to agriculture.

## Are Permits Needed?

Agriculture, silviculture or other activities intended to improve native wildlife habitat do not require a permit.

An FWC permit is required for any site-clearing activity conducted as a precursor to development, or for any development activity on lands within 25 feet of a gopher tortoise burrow.

Find out more about gopher tortoises, including habitat management and permitting, at:

[MyFWC.com/gophertortoise](http://MyFWC.com/gophertortoise)

Learn more about Wildlife BMPs:

Agriculture: [Freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy](http://Freshfromflorida.com/Divisions-Offices/Agricultural-Water-Policy)

Forestry: [Freshfromflorida.com/Divisions-Offices/Florida-Forest-Service](http://Freshfromflorida.com/Divisions-Offices/Florida-Forest-Service)



Florida Fish and Wildlife  
Conservation Commission  
[MyFWC.com](http://MyFWC.com)



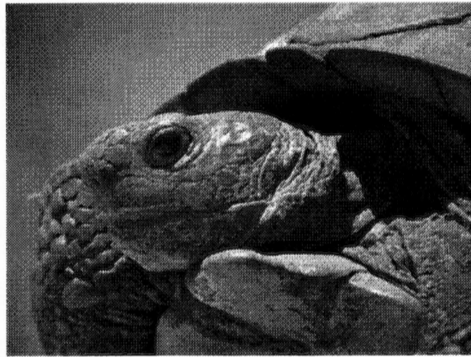
Chill Lesperac

### Gopher tortoise fast facts

- Gopher tortoise burrows average seven feet deep and 15 feet long but may be more than 40 feet long.
- A tortoise may have multiple burrows within the area it spends most of its time.
- Burrow openings are half-moon shaped with the curve at the top, and its size is a fair representation of the size of the tortoise. Burrows with round openings have generally been taken over by an armadillo.
- Adult tortoises are generally 9-11 inches long and weigh 7-9 pounds.
- Females begin to reproduce when they are 9-21 years old (age depends on local conditions); males begin slightly younger.
- They breed March-October but generally dig nests in May and June. One clutch is laid per year with an average of six eggs. Many eggs never hatch because they are eaten by mammals, birds and snakes.
- The biggest threat to the gopher tortoises' long-term survival is loss of habitat.

### Wildlife Alert Reward Program

It is against the law to kill, harass or destroy gopher tortoises, their burrows or eggs. If you suspect illegal activity, you can report it anonymously to FWC's Wildlife Alert Hotline at 888-404-3922, 24 hours a day or online at [MyFWC.com/law/Alert](http://MyFWC.com/law/Alert). You could be eligible for a reward if your information leads to an arrest.



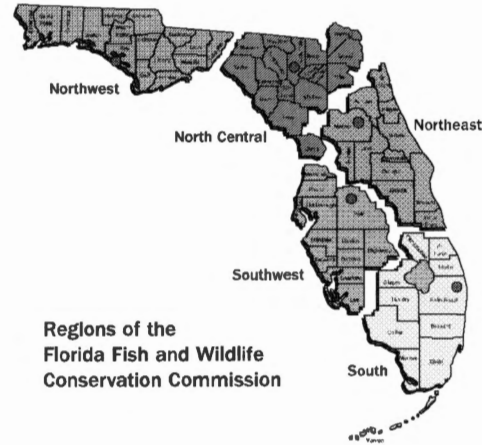
Robert La Follette

### Before you bulldoze

Before you clear land, learn the law. Visit [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise) or call the gopher tortoise conservation biologist in your region. Request a permitting fact sheet and remember gopher tortoises must be relocated before any land clearing or development takes place. Property owners must obtain permits from the FWC before tortoises can be moved. Depending on the type of permit, you may be permitted to move the tortoises yourself or you may need to contact an authorized agent.

### Tips for horse owners

Gopher tortoises often dig their burrows in pastures, which can be a challenge to horse farm owners who are concerned their horses may step into the burrows and be injured. For tips on how to avoid potential horse-tortoise conflicts, visit [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise) or call the gopher tortoise conservation biologist in your region.



**Northwest Region**  
3911 Highway 2321  
Panama City, FL 32409-1658  
850-265-3676

**North Central Region**  
3377 East U.S. Highway 90  
Lake City, FL 32055-8795  
386-758-0525

**Northeast Region**  
1239 S.W. 10th Street  
Ocala, FL 34471-0323  
352-732-1225

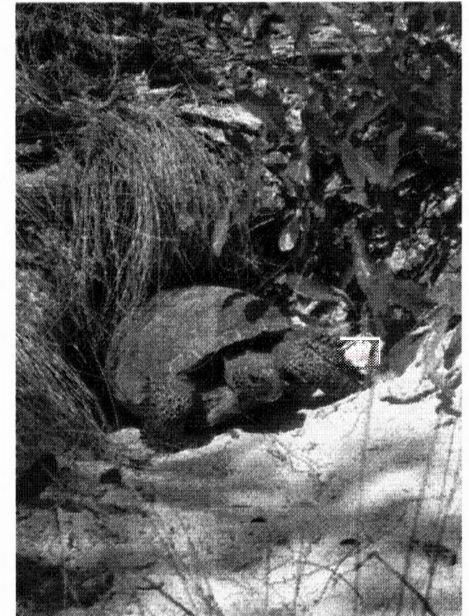
**Southwest Region**  
3900 Drane Field Road  
Lakeland, FL 33811-1299  
863-648-3200

**South Region**  
8535 Northlake Boulevard  
West Palm Beach, FL 33412  
561-625-5122

For more on any information in this brochure, or for Gopher Tortoise Management Plan or permitting information, please call the gopher tortoise conservation biologist in your region listed above, or call 850-488-3831, or visit [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise).

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# A guide to living with gopher tortoises



David Moynahan



Florida Fish and Wildlife  
Conservation Commission  
[MyFWC.com](http://MyFWC.com)



DHR LEBORG

## The gopher tortoise in Florida

### Where they live: high and dry

The gopher tortoise (*Gopherus polyphemus*) is a medium size land turtle with large, stumpy hind legs and flattened, shovel-like front legs it uses to dig burrows in sandy soil. These burrows provide a home and refuge for the tortoise and more than 350 species of wild animals and insects that share the same habitat.

Gopher tortoises occur in parts of all 67 counties in Florida, but prefer high, dry, sandy places such as longleaf pine and oak sandhills. They also live in scrub, dry hammocks, pine flatwoods, dry prairies, coastal grasslands and dunes, mixed hardwood-pine communities and a variety of disturbed habitats, such as pasture lands.

### What they eat

Gopher tortoises graze naturally on a wide variety of plant types, including broadleaf grasses, wiregrass, prickly pear cactus, wild grape, blackberry, blueberry, beautyberry and many more. They generally feed within about 160 feet of their burrows, but have been known to travel more than twice that distance to meet their foraging and nutritional needs.

### A keystone species

Wildlife experts call the gopher tortoise a “keystone species” because it is the backbone of the plant and wildlife community in which it lives. Without the tortoise, the populations of more than 350 wildlife species that seek refuge or live in the burrows would be greatly reduced, if not eliminated. The species that depend upon tortoise burrows are called commensals and include the indigo snake, pine snake, gopher frog, opossum, burrowing owl, Florida mouse, gopher cricket and scarab beetle.

### Protecting and managing

Gopher tortoises have lived for millions of years, but biologists who study these ancient reptiles are concerned we may lose them entirely unless we do more to protect and conserve them and their rapidly disappearing habitat.

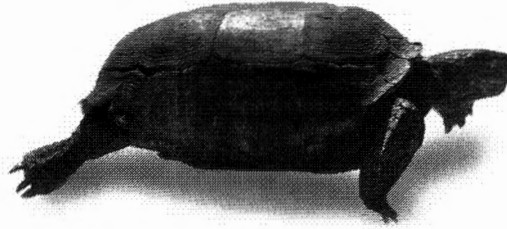
In 2007, the Florida Fish and Wildlife Conservation Commission (FWC) listed the gopher tortoise as a threatened species and created a plan to manage and protect these unique reptiles. The plan is a blueprint of conservation objectives and actions which includes guidelines for landowners whose property contains gopher tortoises, habitat acquisition plans and permitting guidelines all designed to ensure the tortoises’ habitat needs are met now and in the future.

### Legal protection

It is against the law to damage, destroy, harass or kill gopher tortoises, their burrows or their eggs. Gopher tortoises must be moved out of harm’s way before any land clearing or development takes place. Permits are required from the FWC before handling or moving tortoises.



Robert La Follette



### Living in your yard

If a gopher tortoise is living in your yard, embrace the opportunity to learn about a threatened species and help the conservation efforts. Here are a few tips:

- Leave the tortoise alone and keep dogs and small children away from it and its burrow.

- Use tortoise-friendly plants to landscape your yard. In addition to providing excellent food for the tortoise, the plants will require very little watering once established. For a list of suitable plants visit [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise).

- Allow the tortoise to come and go freely from your yard. Fencing it in or restricting its movements in any way is against the law.

- It is acceptable to trim tall grass around the burrow if necessary but leave the burrow and mound alone.

- If possible, avoid mowing, digging, driving over or otherwise disturbing the area right around the burrow, which includes the entrance apron and 25 feet beyond the burrow opening.

- Never block the entrance to the burrow, it could harm the tortoise or prevent its exit.

- A burrow should not compromise the integrity of a foundation or mound septic system, but the gopher tortoise conservation biologist in your region can offer you options.

### Crossing the road

- Do not take the tortoise with you.

- If it is in the roadway you can move it across the road in the direction in which it was headed. **Do not put your life in danger to move the tortoise.**

- Do not put the tortoise in the water. Gopher tortoises are terrestrial turtles which means they live on land.

### Living in your neighborhood

Gopher tortoises and their burrows are often found on undeveloped lots in neighborhoods that were built in gopher tortoise habitat. The last remaining tortoises in a community sometimes take refuge on these habitat islands scattered among home sites. If your neighborhood has some of these reptilian residents, keep the following in mind:

- Before a lot can be developed, any gopher tortoises present must, by law, be moved out of harm’s way before land clearing begins. Property owners must obtain permits from the FWC before moving gopher tortoises.

- If a lot is about to be developed, you can search the online gopher tortoise permitting database at [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise) to see if a permit to move the tortoise(s) has been issued. You can also call the gopher tortoise conservation biologist in your region.

- If there is no land clearing or construction activity on the lot, leave the tortoises alone.

- If you suspect a violation has occurred or is about to occur, call the FWC’s toll free Wildlife Alert Hotline at 888-404-3922 or report it online at [MyFWC.com/law/Alert](http://MyFWC.com/law/Alert).

### Sick or injured

- Sometimes it’s better to just leave a sick or injured gopher tortoise alone and let it return to its burrow to heal.

- You may pick up an injured tortoise to transport it for treatment if necessary.

- Call the nearest FWC regional office to find a wildlife rehabilitator in the area or take it to a veterinarian.

- If you think the injury is the result of a violation and you can provide information, call the FWC’s Wildlife Alert Hotline.

### Help their future

- Become tortoise-wise: Learn about gopher tortoises and their habitat needs online at [MyFWC.com/GopherTortoise](http://MyFWC.com/GopherTortoise) and share the information with family, friends and neighbors.

- Support “green spaces” in and around developments – there is still time to save gopher tortoise habitat before it’s gone.



Mr. Mayor, Members of the City Council –

My name is Merry Lucas. I live at 325 Bocelli Drive in the Aria Subdivision in North Venice.

Unfortunately, Ken Baron is unable to be here today. However, he asked me to read the following.

My name is Ken Baron. I reside at 209 Corelli Drive, in the Aria Subdivision. I am writing on my own behalf and also at the request of some of my fellow Aria homeowners to request you deny Ordinance 2-24-06, Petition 23-63RZ, GCCF PUD amendment which would increase the density of the Vistera Subdivision from 4.3 to 5.0 dwelling units per acre. If approved, this would permit a 25% increase in residences over what was initially approved for the GCCF Binding Master Plan and would add more pressure to a region already being devastated by development.

Pivotal in allowing this increase in density to become mathematically possible per the city's land development regulations is the result of Ordinance Number 2022-20, which swapped 24.1 acres from the Milano PUD (Tract 604) to the GCCF PUD, presently known as Vistera.

While this land swap was blessed by the Venice Planning Commission and the Venice City Council, tract 604 of Aria Phase III remains a part of Aria in the Sarasota County Property Appraiser site and the Sarasota County Land Records.

The residents of Aria have been told by the property management company, Castle Management, that tract 604 is still deeded to Aria and will remain this way until the property is turned over to the residents, at a future date to be determined. In the meantime, the back security gate for Aria, which is on Tract 604, remains our HOA's responsibility, even though this land has now, under questionable terms, been assigned to Vistera. This gate has been inoperative for months. It represents a potential security breach in our so-called "gated community" and the developer, who will make millions more if this is amendment is approved, has done nothing to rectify the problem except provide a \$25.00 piece of chain and Master lock. Most of the time, the gate is left wide open.

It is our further understanding that the 24.1 acres is unbuildable and will be used to replace 24.1 acres of buildable open-area land in Vistera. We believe that it presently is primarily a 70-foot electric utility easement containing giant



concrete high-voltage electric transmission poles along with a second lower voltage electric distribution line, as well as a shell road used by large utility service equipment. We do not think it is serviceable as required open area.

We are against the increased density for not only the obvious reasons of increased traffic and the inner-city feel which Northeast Venice will soon boast, but for the simple reason that you would be approving a major change to density for property that isn't even deeded to the correct subdivision. We would ask you to have the developer wait until this land is deeded appropriately before considering a change in density...because once it happens, you can't get it **back**.

Thank you for your consideration.

Ken Baron

While Ken discussed the legality of the proposed change, I would like to point out a few items. The Visterra Subdivision will, as it stands right now, bring thousands of new residents to the area. I don't have to tell you the needed infrastructure isn't there now nor will be there for years. Have you driven down Laurel Road towards Jacaranda lately? There are hundreds of apartments and townhomes under construction or finished. Visterra runs from Laurel Road to Border Road – both two lane roads. In addition to Visterra, we have Legacy Groves and other developments in Border/Edmonson and Albee Farm area. Many of the people moving here are coming for our beaches and our town of Venice. On numerous occasions this past season, when I've been traveling to the Island, traffic on Venice Ave has been backed up beyond 41. It's getting as bad as traffic on Stickney Point headed towards Siesta Kay. If there is a function going on the Island, there is literally no parking available. What Venice doesn't need is another 300 homes with at least 600 more cars. At some point this over development has to stop. Please consider doing that now. Thank you.



concrete high-voltage electric transmission poles along with a second tower  
voltage electric distribution lines as well as a shield road, and by large amount  
service equipment. We do not think it is serviceable as a road and a

We are against the increased density for not only the obvious reasons of  
increased traffic and the noise city feel which Norfolk Veterans will soon  
bear, but for the simple reason that you would be removing a major change  
to density for property that isn't even needed in the first place. We  
would ask you to have the developer wait until the road is changed  
and immediately before considering a change in density. It is a very  
important you can't get it back.

Thank you for your consideration  
The Applicant

While you discuss the legality of the proposed change, I would like to point  
out a few items. The Virginia subdivision will be a state highway being  
thousands of new residents to the area. I don't have to tell you the need for  
infrastructure isn't there now, but will be there for years. This will mean  
I need Road towards Jaccard and lately. This is the future of apartments  
and townhomes under construction or planned. Veterans town from Road to Road  
to Border Road - both will be roads in addition to Veterans. We have legacy  
Groves and other developments in Border Road area and the future of  
Many of the people moving here are coming for job, schools and our town  
vision. On numerous occasions this past season, we did have people traveling to  
the island. Traffic on Venice Ave has been backed up beyond 11. It's getting  
as bad as traffic on Blakeney Point headed towards Great Key. If there is a  
junction going on the island, there is literally no parking available. What  
we do need is another 300 homes with at least 500 more cars. At  
some point the over development has to stop. Price is a concern being that

now. Thank you  
The Applicant