

Texas tortoise – *Gopherus berlandieri* (Agassiz 1857*) - Darrell Senneke and Chris Tabaka DVM
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* **ORIGINAL NAME:** *Xerobates berlandieri*, also known as Tortuga de Tamaulipas and Berlandier's Tortoise. Mr. Berlandier was a zealous French naturalist, to whom we are indebted for much of what we know of the natural history of northern Mexico.



This care sheet is intended only to cover the general care of this species. Further research to best develop a maintenance plan for whichever species/subspecies you are caring for is essential.

For many of the older keepers in the United States this was the very first tortoise that they owned. In the late 1950s and early 1960s, they could be found in many of the “five and dimes” of the day such as SS Kresge (now Kmart) and FW Woolworths (now Footlocker) for as little as five dollars apiece. With the knowledge of how to provide for tortoises in those days being virtually non-existent, sadly nearly all of these “first” tortoises died, much like the stores that sold them.

The Texas tortoise (*Gopherus berlandieri*) is found from South-Central Texas in the United States southward into the Mexican States of Coahuila, Nuevo Leon, and Tamaulipas. It is the smallest of the *Gopherus* species growing to only about 8.5 inches (22 cm) SCL. The species is listed internationally as a CITES II species and is federally listed in the United States under the Endangered Species Act. Because of this protected status, it is **illegal** to collect a Texas tortoise from the wild in the United States. The only legal manner in which to acquire a Texas tortoise is by adopting one from a state recognized organization or to be given a hatchling from a breeding captive animal. Again, check with your state wildlife agency BEFORE you consider adopting an animal of this species as United States federal law protects it. Texas tortoises sometimes construct burrows in sandy soil but they are more typically found in shallow pallets or “resting forms”. They are also known to use empty mammal burrows.

If you come upon a Texas tortoise in the wild **DO NOT PICK IT UP**. When stressed, much like California desert tortoises, Texas tortoises will expel the contents of their bladders as a last ditch defense measure. This loss of their water reserves can easily doom the animal to a slow death from dehydration. Texas tortoises are under extreme pressures in the wild.

HOUSING TEXAS TORTOISES INDOORS -

As there is minimal legal trade in this species, it is very rare that one would be held outside its natural range. Because of this there should be almost no reason to have to house one indoors. Occasionally this does become necessary though, especially

Texas Tortoise – *Gopherus berlandieri*



- **Location** - South-Central Texas into Mexico
- **Habitat** - Arid brushland and desert
- **Size** - 22 cm (8.5 inches)
- **Diet** - Grasses, prickly pear cactus and leafy greens
- **Conservation Status** - CITES Appendix II, US Endangered Species List
- **Threats** - Habitat loss, pet trade
- **Alternate Names** - Tortuga de Tamaulipas and Berlandier's Tortoise

with hatchlings. In the event that outdoor accommodations are not practical, predator safe, or are environmentally unsuitable, indoor facilities may become necessary.

The most common form of indoor accommodation for small or medium sized Texas tortoises consists of a "turtle table". To all appearances this looks like a bookshelf unit flipped onto its back. A reasonable size habitat for a hatchling is 2 feet by 3 feet (60 cm by 90 cm); as the animal grows the size of this habitat should be increased. Into the bottom of this "turtle table" holes can be cut to allow for the sinking of food and water containers flush with the surface for easier animal access.

The water area of the habitat should be large enough to allow the tortoise to soak in if it wishes - it must also be shallow enough to protect it from drowning. Photographic developing trays work well for this with larger specimens. While it is very rare that a Texas tortoise would come upon standing water in the wild, our inability to perfectly duplicate the microclimate inside a burrow necessitates the provision of a water source. As a substrate, in the dry portion of the environment grass hay or Orchard grass hay works well. Texas tortoises are sensitive to excess humidity and hay protects against this as it does not "hold" humidity. Grass hay also provides a supplemental food source for this grass eating species. Diligence in removing wet or spoiled hay MUST be practiced. As an alternative to hay and to more closely mimic their natural habitat, a mixture of 50% clean topsoil without herbicides, fertilizers or other additives and 50% play sand may be used. As waste products will be more difficult to detect with such a substrate it is recommended that if using this soil mix that one replace all of it at regularly scheduled intervals (every 4-6 weeks).

In one corner of the environment a 100W spot lamp should be positioned to provide artificial basking facilities. This should be positioned to provide a basking spot of 95 degrees F (35 C) in that section of the habitat. The habitat should also be equipped with a full spectrum fluorescent light to provide for UVB. A UVB source is necessary for Vitamin D3 synthesis (needed in calcium metabolism). If preferred to this lighting arrangement a Mercury vapor bulb may be used that fulfills both heat and UV requirements. While Texas Tortoises can handle cool weather quite well, cold combined with wet conditions will often result in respiratory distress. As they are burrowing animals they should be provided with a dark, dry retreat. There should be a hide box located in the corner away from the basking spot to provide the animal with this retreat.



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OUTDOOR HOUSING -

Predator proof outdoor habitats offer many advantages over indoor accommodations and should be seriously considered as an option during warm weather. Since these tortoises burrow, the perimeter should have sides extending well below the surface of the soil. This species does not do well in areas of high humidity and rainfall. If they are to be kept in such areas, provision must be made to ensure that a large portion of their environment does not

become overly wet through the use of landscaping and proper drainage. Many keepers have found that it is advisable to construct an artificial burrow for their tortoises to mimic their natural environment. Some form of outdoor housing for much of the year is **vastly** preferred and **strongly** recommended over strictly indoor housing.

DIET – In the wild, foodstuffs consist mainly of grass and the pads, flowers, and fruits of the prickly pear although other broad-leafed vegetation is also eaten. A high fiber, low protein, and calcium rich diet will ensure good digestive tract function and smooth growth. Texas Tortoises are prone to pyramiding or “stacking” of the scutes as well as bony imperfections. Over reliance upon 'supermarket' greens should be avoided. In general supermarket greens have been cultivated to appeal to human tastes; this tends to result in a “green” that is both high in sugar and low in fiber which is the opposite of wild foodstuffs.

Diet:

- Cacti (spineless prickly pear/ opuntia pads)
- Grasses (Bermuda grass or Orchard grass)
- Assorted weeds
- Leafy greens (dandelions, endive, grape leaves etc.)

Additional calcium supplementation is essential. Powdered calcium can be sprinkled all foods. It is suggested that one use calcium supplemented with vitamin D3 if the animal is being maintained indoors and calcium without D3 if it is outdoors. Provision of a cuttlefish bone, which can be gnawed if required, is also highly recommended not only for the calcium but also to maintain proper beak growth. Regular supplemental use of vitamins and mineral complexes is encouraged.

MEDICAL – Texas Tortoises are **extremely** susceptible to disease, in particular mycoplasmosis (URTD). Specific tests have been developed at the University of Florida to check for this organism in your animal. If one wishes to maintain a group of Texas Tortoises, each animal should be tested in order to determine its mycoplasma status. Positive and negative animals should **NEVER** be mixed. For further information on mycoplasma, please refer to: <http://www.vetmed.ufl.edu/sacs/wildlife/URTD.html>

This species should **NEVER** be mixed with any other species of turtle or tortoise. If you are maintaining animals with known respiratory disease, be sure to use extreme caution to prevent cross contamination with other chelonia in your collection.

This is a rather obstinate species and males cannot be housed with other males. Combat will ensue and if flipped over in warm temperatures, there is a good chance if this is not caught and remedied early on that the loser of the battle could expire from hyperthermia and dehydration.

This species hibernates in nature, after careful research and provision of a cool dry location this can be reproduced for your Tortoise.

It should be noted that turtle and Tortoise care research is ongoing. As new information becomes available we share this on the World Chelonian Trust web site at www.chelonia.org. Serious keepers find it to be a benefit to have the support of others who keep these species. Care is discussed in our free online email community, which may be joined from the web address above. Please contact us about the many benefits of becoming a member of the World Chelonian Trust.

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