

CALIFORNIA DESERT / TEXAS TORTOISE CARE SHEET

(*Gopherus agassizi*, *Gopherus berlandieri*) Written by:

SAN DIEGO TURTLE & TORTOISE SOCIETY

P.O. Box 712514. Santee, CA 92072-2514

(619) 593-2123 www.sdturtle.org



GENERAL: This care sheet was prepared to assist you in providing proper care and maintenance of your *Gopherus agassizi* and *Gopherus berlandieri* tortoises.

There are three species of tortoises found in the United States: 1) the California Desert Tortoise (*Gopherus agassizi*), 2) the Texas Tortoise (*Gopherus berlandieri*), and 3) the Florida Tortoise (*Gopherus polyphemus*). Both the California Desert and the Texas Tortoise are now protected by state and federal laws and cannot be removed from their natural habitats. All three *Gopherus* species are banned from sale in the State of California.

For those now in captivity, and those born in captivity, a State registration is required and forms can be obtained from this Society or the California Fish and Game Department. There is no fee to register your tortoise. For marking purposes, use the numbered sticker you receive when you register the tortoise. It should be attached firmly to the underside of the carapace (top shell) above a rear leg.

It is forbidden by law to return captive tortoises to the desert because they may carry diseases to the wild population. Also, after captivity they lose their ability to survive in the wild. If the need arises to find a new home for your tortoise, please contact this Society to arrange for placement.

SAFETY: Tortoises MUST be protected from ALL DOGS. No matter how well trained or friendly or small or old a dog may be, it must never be allowed to be with a tortoise (or any turtle). Raccoons, foxes, and coyotes are also dangers to large tortoises, while ravens and even

blue jays will kill small tortoises, unless they are protected by screening over their outdoor enclosure. Rats have been known to chew on hibernating tortoises.

Tortoises MUST NOT have access to swimming pools, ponds, or spas. As they are unable to swim, they will drown. Tortoises must be able to adjust their body temperature by moving in and out of the sun. Shade must be provided to prevent overheating. Other hazards include: poisonous plants (see our list); pesticides, herbicides, and chemical fertilizers (do not use them); stairs; storage areas; garages; equipment. Desert tortoises are feces eaters. Be vigilant and remove animal feces found in the tortoise yard, especially from meat-eating animals.

NEVER cut the grass with your tortoise loose in the yard. Wire fencing (e.g. chain link) must have a 12" to 18" high border of wood around the inside perimeter to prevent necks and legs from becoming entangled. Gates should have heavy spring closures and a 12" to 18" board across the opening, just in case. Fencing should go into the ground to prevent tortoises from digging out or other animals from digging in. Make sure he cannot climb out of the enclosure.

Climbing in corners or on stairs can cause a tortoise to tip onto his back -- this can be fatal. Handling, especially by young children, can be very stressful. Dropping a tortoise can cause serious injury.

The shell of the tortoise is sensitive to touch and rough treatment. Hammering on or drilling into their shells is painful to the tortoise. Some tortoises enjoy being petted on the shell or on the top of their head. DO NOT use any paint on their shell, as it can cause shell deformity and death.

Because males will fight, almost without exception, they must not be housed together after reaching sexual maturity. A partition or fence must be maintained between them. Otherwise, serious injury or even death may occur.

TORTOISE YARD: Desert tortoises MUST have a yard. They cannot survive in an apartment setting. The tortoise yard must be outside with sun and shade available. It must have grass for the tortoise to eat (Bermuda is recommended). It must also be large enough for the tortoise to roam and graze, but you must be able to find the tortoise each night to put it under cover (either in your house or in its house). It must have trees, bushes, and/or a spacious shade house.

If you have ice plant in the tortoise yard, it should be fenced off so the tortoise cannot disappear. All poisonous plants must be removed or fenced off from the tortoise.

FENCING: It is absolutely necessary to fence tortoises in to prevent them from wandering. It should be a fence that they cannot see through and should be AT LEAST 24 inches high. Chain link is especially bad. They will stick their heads through and think they can go through it, which can cause damage to their necks and legs. Fences should also be buried into the ground at least six inches, in case they decide to dig.

In some cases, an option may be to create a wide border (at least 12 inches) made of bricks, pavers, or rocks along the bottom of the fence to discourage or prevent digging.

SHELTER: As our coast is much damper than the desert, you must bring your tortoise into your home each night before the sun goes down, or, preferably, provide him with his own outdoor house.

The floor of a closet makes a simple indoor house for a tortoise. Place cinder blocks up on end and put boards on top of them. The boards then become your closet floor for shoes or whatever, and the tortoise can sleep under the boards between the space created by the cinder blocks. Be sure to spread sufficient newspaper on the closet floor prior to allowing your tortoise to enter the area.

Alternatively, a shelter must be provided outside. We recommend that you build or buy a doghouse type of enclosure with a floor, and make sure it is waterproof. Over the doorway place several pieces of plastic that have been slit from the bottom to allow the tortoise easy access. Place a 15 or 25 watt red-colored bulb in the top of the house on the inside. The bulb should sit about ten inches from the top of the tortoise's shell. Leave the bulb on at all times, as this will burn out much of the humidity. The plastic will keep the air inside the house warm and dry, and will help keep the damp air from entering.

The house must sit above the ground and should be large enough to allow your tortoise movement to seek a proper temperature. It is very important that you check your yard each night to see that your tortoise is inside its house. Many tortoises contract colds and pneumonia because they are allowed to sleep in damp conditions and/or breathe damp air outside. Remember, these are DESERT animals. It is not wise to let them burrow into the ground in our non-desert climate. It is extremely detrimental to let them get wet in the rain. Although some tortoises enjoy walking under the sprinkler, this should be allowed only when it is hot and sunny.

FEEDING: It is essential for your tortoise to graze in your enclosed yard. Many grasses and weeds are healthful (as long as they are not sprayed with insecticides), and natural sunlight is also necessary. Be sure to read our care sheet: PLANTS THAT POISON, NO. SDTTS-070 in order to be certain that all undesirable plants are either removed or fenced off. To supplement their diet, we recommend natural grown plants such as dandelions, hibiscus leaves and flowers, rose flowers and young leaves, wandering Jew, nasturtium leaves and flowers, grape leaves and the leaves and fruit from zucchini, yellow crookneck, summer, and banana squash. Do not forget cactus and succulents once in a while, especially Aloe Vera and the pads and fruit from the beavertail and prickly pear cactuses. **REMOVE ANY SPINES!** Be certain the above are not sprayed, and do not use systemic insecticides or fertilizers in or around your tortoise yard.

At least 90% of desert tortoise food should consist of grasses, weeds, and flowers, as described above. However, some tortoises that have not been accustomed to grazing may need to be gradually introduced to these as food sources. Fresh grass clippings could be sprinkled over his usual diet, for example. His level of nutrition must be maintained.

If you must purchase some of your tortoise food, the following are recommended: dandelion greens, collard greens, and endive. These may be used occasionally: tomatoes, broccoli, and rappini. Fruits should be given sparingly, or as an occasional treat: strawberries, melons and their leaves (except watermelon), apples (seeds removed - they are poisonous). Do not give bananas. Romaine lettuce can be used as a treat or to mix with other items to encourage variety in the diet. Do not use iceberg lettuce. Avoid the following as they negatively affect the calcium needed by the tortoise: spinach, chard, cabbage, peas, beans, and sprouting seeds. **NEVER** give dog or cat food to a desert tortoise. Alfalfa rabbit pellets soaked in water can be given occasionally.

For tortoises that refuse to eat a variety of foods and insist on eating only lettuce, blend a variety of fruits and vegetables in a blender and spread on the lettuce. You may also try placing thin slices of fruit and vegetables on their lettuce for a sandwich effect, or you may chop up a salad of healthful greens and mix with the lettuce. Over a period of time, slowly cut down on the lettuce content until your tortoise is completely weaned from lettuce and is eating healthy foods.

Tortoises that graze outdoors and have a healthy diet do not require great amounts of vitamin and/or mineral supplementation. They do, however, tend to need more calcium than may be easily obtained in the diet alone. It is recommended that you occasionally sprinkle their food with calcium carbonate and/or offer boiled and crushed chicken eggshells, cuttlebones, and/or calcium blocks. The need for extra calcium is especially high in females and in hatchlings. Ask your veterinarian if further supplementation with appropriate vitamins and/or minerals is indicated.

WATER: Tortoises **MUST** have fresh water available to them at all times. (Filtered water is preferable to tap water.) This should be provided in a dish (such as a flowerpot saucer) that can be sunk into the ground. The dish should be large enough for the tortoise to sit in while he drinks. In addition, desert tortoises should be soaked weekly during their active months to assure adequate hydration. (It is thought that this may help prevent bladder stones.) Use a container he cannot climb out of. Water should come to the edge of the carapace. Use water that is about the same temperature as the tortoise, and soak him for about 30 minutes.

Tortoises seem to love running water, pooling from a hose or from a small sprinkler that attaches to a hose. But they do NOT swim, so do not expose them to deep water.

ANTS: Many times ants getting into the tortoise food creates quite a problem. Ants not only accumulate on and eat fruits and vegetables, but they can also irritate the tortoise. Certain species of ants can even kill tortoises. You must be vigilant and eliminate ants when they are seen around the tortoises and the food dishes. Pouring boiling water on the ant nest is one way. Another method to keep ants out of the tortoise food is to place the plate containing the food into a larger plate that has been filled with water. This way the ants cannot cross the water to get to the food.

HIBERNATION: Usually in October or November, the normal tortoise functions will slow down and it will stay in its house for longer periods of time. When it does not come out for about ten days, and you have checked to ensure it is healthy, you can be relatively sure it is hibernating. We recommend three methods of hibernation, depending on your facilities and the number of tortoises in your possession:

1. Let the animal hibernate in your house, in a cool place such as the closet, as described previously.
2. Place the animal in a newspaper-lined cardboard box, place a sheet of newspaper over the tortoise and place the box in your garage or any cool place, above the floor level to avoid drafts.
3. Purchase or build a thermostat and install it in the line that provides current for the lights in the tortoise house. Change the bulb from 25 watts to 60 watts and adjust the thermostat to a setting that will maintain about 50 - 55 degrees F. in the tortoise house. Stability of temperature is important.

Be sure NEVER to allow your tortoise to hibernate in a hole in the ground. The dampness in the ground and the possibility of drowning are serious in our coastal areas! Also never let a tortoise hibernate if he has been ill at any time during the previous summer. Keep him awake, warm and eating all winter, until he has displayed good health for at least 12 consecutive months.

Be sure to check your tortoise periodically during hibernation. Every week, touch a foot and listen for sounds of congestion when he pulls his head in. It is also recommended that you soak your tortoise monthly during hibernation. You must WATCH HIM CAREFULLY while he soaks so that he does not drown!

If he should wake up, offer food and water and replace him to continue his sleep. About March or April, your tortoise should emerge from his house or become active in his storage box. He should then be placed near water, grass.

BREEDING: After hibernation and all through the summer, the male will attempt mating with the female. This consists of bobbing his head and circling around her, biting at her head and shell edges to make her pull her head in. When the position is right, he will climb onto her back to mate. Do not be alarmed, as this is normal behavior. Once fertilized, the female can lay fertile eggs for up to 5 years!

Be alert to the possibility that a male might "court" a female with such persistence and gusto that she becomes intimidated, stops eating and drinking, and in extreme cases may not leave the tortoise house. Such stress must be prevented. Prevention is easily accomplished by separating them for a period of time.

EGG LAYING: Usually in late spring or early summer, the female will begin pacing, looking for the right spot to lay her eggs. She may decrease or stop eating at this time and may seem quite agitated. Sometimes it is very helpful if you prepare one or more areas in your yard by loosening the soil then softly packing it back down. Do this in areas where she has shown special interest.

(If she does not eventually lay the eggs, you may need to have her checked for egg binding through an x-ray.)

When ready, she will dig a hole with her back legs, deposit her eggs into the hole and cover them up. Do not disturb her while she is doing her maternal duties. After she leaves the area, it may be a good idea to soak her to rehydrate her. Tortoises do not provide care for their young.

If the eggs are left in the ground or incubated, they may hatch. Care of hatchlings is a huge long term commitment. Unless you are experienced in raising hatchlings and have good homes and knowledgeable people lined up in advance, then we recommend that you dig up the eggs immediately and destroy them.

AILMENTS: Tortoises are especially susceptible to respiratory ailments. Some of the signs to watch for are runny nose, loss of appetite, decreased activity, and gasping. These can also be signs of mouth rot, bladder stones, or parasites. These indications are warning signals that something very serious is wrong with your tortoise, and, if left untreated, he may die. Someone experienced in treating tortoises should be consulted promptly. Contact this Society for the name of a veterinarian in your area experienced in treating tortoises. A pre-hibernation checkup with your veterinarian is recommended at least every other year.

KEEPING DESERT TORTOISES WITH OTHER SPECIES: Desert tortoises should only be kept with other desert tortoises and Texas tortoises. They should NEVER be allowed to live with any other species because of the danger of spreading diseases.

TAKING CAPTIVE TORTOISES OUT OF CALIFORNIA: When people have had a desert tortoise for a long time, they begin to think of it as part of the family, and it is natural to include it into the family move to other parts of the country. There are however, several obstacles:

- a. California State law prohibits the removal of California desert from the state.
- b. The weather here on the southern California coast is not ideal for them, but it is better than the weather in most of the rest of the country. We have received many letters from people that did not listen to our advice, took the tortoise and watched it go through a very long illness before dying. Those taken to the East Coast, Midwest and Southeastern United States, suffer the worst. If you have to leave this area, for the tortoise's sake:

**** Please contact this Society for assistance in finding an excellent new home for your tortoise. NEVER release a desert tortoise in the wild as it will not survive and will spread illness to the wild population.**

