

## A Texas Tortoise can live 70 years

by Jim Seeden

If you enjoy hiking through our Tamaulipan thorn scrub in the morning before it gets hot or later in the day when it's cooler, you may encounter a Texas tortoise. They're very special.

Let's begin with some terminology. The top shell of a tortoise, which is highly domed, is called the **carapace**. The bottom shell is the **plastron**. The entire shell is composed of pieces called **scutes**, which are like pieces of a jig-saw puzzle. Let's also note a projection of the plastron, beneath a tortoise's neck, called a **gular**.

With those terms in mind, we'll examine the remarkable life of a Texas tortoise.



If you're lucky enough to see a tortoise, it will be easy to recognize. It won't be near water, they're strictly terrestrial and can't swim. It may be up to 9 inches long and will have a very high domed carapace; turtles are flatter. The carapace will be medium brown with the scutes having lighter, creamy colored centers. On older tortoises, I've noticed that the cream color tends to be tinted turquoise. The scutes have concentric edges that

resemble a tree's growth rings. Some believe they reveal a tortoise's age but that's far from accurate.

Its head, legs and tail will be covered with rough brownish scales and the tortoise will, of course, draw them into the protection of the shell if disturbed.

**Do not pick it up! Please don't!** Picking it up usually results in it emptying its bladder. That bit of fluid is crucial to survival! It may die of dehydration if the water can't be quickly replaced.

During the hottest part of the day, they usually relax in what's called a pallet. It's a clear, slightly depressed area in the shade. They may clear several pallets and will return to them regularly.

A tortoise's diet consists of succulent grasses and small herbs. They also enjoy bits of cacti and especially the fruits (tunas) of prickly pear. Apparently, on rare occasions, they may eat a snail or small insect so they're actually omnivores, and not strictly herbivores.



Females may lay up to three eggs, twice a year. The eggs are slightly over an inch long, hard, white and capsule shaped. They're just scattered in the leaf litter. The hatchlings, on their own from birth, can live 50 to 60 years. An occasional 70 year-old has been recorded.

We noted the presence of a **gular**. That anterior plastron projection, which is bluntly Y shaped, is used by males when a male intruder enters its

territory. During an ensuing battle, the object is to slip the gular under an opponent's shell and tip him upside-down. Once on its back a tortoise is helpless.

It can flail its legs in the air but to no avail and it's doomed.

One other characteristic of males is worth noting. The plastron (bottom shell) of females is flat but the posterior portion of a male's plastron is concave. That's apparently a feature making intercourse easier.

Texas tortoises, *Gopherus berlandieri*, are found in the southern third of Texas and in northern Mexico. Their numbers have

declined due to habitat loss and road-kill so that, in Texas, they're listed as threatened and are protected by law. They were once a big item in the "pet" trade. Thankfully, no more!

The slow moving, long lived tortoises do no harm and add interest to our environment. Protect them when you can and do enjoy seeing them.

