Desert Tortoise

The Desert Tortoise

Like the saguaro and the Joshua tree, the slow moving desert tortoise has come to symbolize the American desert. Turtles have roamed this earth since before the time of the dinosaurs. It is thought that individual tortoises, inhabiting the same patch of desert season after season, may live for fifty or even one hundred years.

For many of us, an encounter with a wild desert tortoise is the thrill of a lifetime. Almost everyone loves tortoises, and many people keep them as pets. Yet there are signs that, as southern Arizona’s human population expands, we may be loving tortoises to death. Some populations near urban areas have already disappeared.

Natural History

Desert tortoises occur in scattered populations throughout the southwestern United States and northwestern Mexico. Unlike aquatic turtles, they are strictly land-dwelling and avoid water except for an occasional drink. Like other reptiles, tortoises cannot control their body temperature internally. They avoid extreme temperatures by retreating to underground burrows and only rarely, when conditions are favorable, do they emerge to drink and feed on grasses, flowers and cactus fruits.

Baby tortoises, which hatch from eggs in late summer, are less than two inches long and are vulnerable to predation by coyotes, ravens and other animals. It has been estimated that in the wild only one hatchling from every 15 - 20 nests reaches maturity. Since maturity does not occur until about age 15, tortoises probably depend on longevity to maintain population levels. Due to their secretive lifestyle, many details of their private lives will remain unknown until long-term studies have been conducted.

Tortoise Shells

The female’s carapace (upper shell) is flared in the back, perhaps to allow more room for eggs. The male’s plastron (bottom shell) is concave to fit over the female’s shell while mating, and his carapace has an inward curve at the lower back to facilitate the nearly vertical mating posture. The male uses his longer, more curved gular shield in fights with other males, attempting to knock the rival over on his back. (If a tortoise cannot right itself, it will die.)
Encountering the Desert Tortoise

Unless you were born here or have raised a family in Tucson, chances are that the tortoise you meet at Saguaro National Park has been here longer than you! It knows its home area well — where to go for nutritious spring shoots and summer grasses, or for precious water after a summer rain. From many years of experience, it has discovered the best shelters and the most direct routes to them. A tortoise you see crossing a road is probably not lost, but following a path established long before the pavement was laid.

What should you do if you see a desert tortoise? Unless it is crossing a busy road, the best thing is to leave it alone. However, if a tortoise is in danger of being hit on a busy road, pick it up gently and place it off the road in the direction it was headed. Handling wild tortoises is illegal in Arizona, and for good reason. When a tortoise feels threatened, it may void urine that is distasteful to a predator, but essential for the tortoise to survive a prolonged drought.

Helping Desert Tortoises

There are many things you can do to help desert tortoises. If you can no longer care for your pet tortoise, the Arizona Sonora Desert Museum (520) 883-1380 in Tucson and the Arizona Game and Fish Department (602) 942-3000 in Phoenix have adoption programs for tortoises and will help find it a caring home. If you hear of someone taking a tortoise from the wild, teach them what you know, or share this brochure with them. Perhaps the best way we can assist tortoises is to help save their diminishing habitat by participating in desert preservation efforts.

At Saguaro National Park, biologists are actively working with the University of Arizona, the National Biological Service and the Arizona Sonora Desert Museum to learn more about the desert tortoise. Studies in the park include population surveys and monitoring, dietary studies and determining the effects of wildland fires on tortoises. We have much to learn about what is most important to these ancient and fascinating animals. Our goal is to ensure that our desert tortoises will find a good home here for many, many years to come.