



United States Department of the Interior



BUREAU OF LAND MANAGEMENT

Southern Nevada District Office
4701 N. Torrey Pines Drive
Las Vegas, Nevada 89130-2301

THE THREATENED DESERT TORTOISE

Important Precautions for vehicle operators and those using desert tortoise habitats:

- ◆ Stay on existing roadways and trails, or designated routes.
- ◆ Do not exceed 25 MPH, except during authorized events.
- ◆ Check the ground beneath vehicles for tortoises before the vehicle is moved.
- ◆ Watch for tortoises in the road or trail, particularly on rainy days. If you see a tortoise in the trail, either wait for it to move or carefully drive around it.
- ◆ Stay at least 5 feet away from any tortoise encountered. When tortoises feel threatened, they often empty their bladder, resulting in the loss of body water. It does not rain often in the desert and the tortoise may not be able to replace this water for months.
- ◆ Do not throw out scraps of food. Garbage may attract ravens which prey on young tortoises.

Tortoise Handling

Handle tortoises carefully and only if authorized to do so*! Tortoises can be injured and die from improper handling. Do not approach tortoises unless absolutely necessary, as your presence can induce stress in the animal. When you must approach a tortoise, move slowly and approach from the rear of the animal. Pick up the tortoise gently and keep it level at all times. When handling large tortoises, grasp the animal with both hands, one at each side of the animal. When moving tortoises long distances, a cardboard box should be used. All personnel handling tortoises must wear surgical-type gloves to inhibit the transmission of diseases among tortoises. Not more than one tortoise can

be handled with each pair of gloves. Upper Respiratory Disease Syndrome is not transmissible to humans.

Legal Status and Threats

The Mojave population of desert tortoise (*Gopherus agassizii*) located north and west of the Colorado River is Federally listed as a threatened species under the U.S. Endangered Species Act of 1973. This Act makes it illegal to harass, collect or harm tortoises. Civil penalties of up to \$12,000 and criminal penalties of up to \$25,000 and 6 months in prison may be assessed for each count. Nevada State law also affords protection to the desert tortoise.

The Endangered Species Act allows for individuals of an endangered or threatened species to be taken incidentally to an otherwise lawful activity, as long as conditions of the U.S. Fish and Wildlife Service's Biological Opinion are followed. "Take" includes harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, **picking up** or collecting or attempting to engage in any such conduct. Harm includes significant habitat modification or degradation that impacts a listed species by interfering with breeding, feeding or sheltering behavior.

The tortoise was listed because of direct losses and threats to tortoise populations and habitat. Desert tortoises are impacted by increased raven predation on juveniles, collection by humans, vandalism, losses on roads, off highway vehicle (OHV) activities and Upper Respiratory Disease Syndrome. Tortoise habitat is lost directly to urbanization, agriculture, road construction, military activities and other uses.

Life History

The tortoise occurs in southern Nevada, western California, southwestern Utah, western Arizona, and northwestern Mexico. In Nevada tortoises are found in creosote bush, cactus-shadscale

scrub and Joshua tree woodland habitats below 5000' elevation.

Tortoise populations are patchily distributed and densities range from a few animals per square mile up to 200 per square mile. A tortoise will live in the same general area of less than one square mile during its life span of 50 to 100 years. This slow moving desert reptile ranges in size from 2 to 15 inches long and is soil colored. Tortoises can be very difficult to see because of their color, shape and behavior. Well adapted to their desert environment, tortoises spend up to 98% of their time in burrows they dig. Burrows are crescent shaped and are most often found at the base of bushes or in wash banks. A tortoise may excavate and use many burrows. Some burrows are used for only a short period of time while others may be used for years.

Tortoises usually spend part of each day above ground from March to October. Tortoises are especially active during warm days when it is overcast or raining. At these times, they seek water that collects in puddles. Water often puddles in ruts in roads, trails, and attract thirsty tortoises. Available drinking water is essential to tortoise survival. The diet of tortoises, which are vegetarians, includes a wide variety of plants.

There are several clues that can be used to tell male and female tortoises apart, however, only tortoises greater than seven inches long can be sexed reliably. Males tend to be larger than females, have a longer tail, longer upward curving gular horns, larger chin glands, and have a concave plastron (bottom portion of shell). Sexual maturity for tortoises occurs in March and April, and egg laying is from May to July. Clutches contain 1 to 14 eggs and a mature female may lay up to 3 clutches annually. The eggs are covered with soil and hatch after 80 to 130 days during August or September.

Predators are usually only a problem for young tortoises. Eggs are eaten by Gila monsters, foxes, coyotes, snakes and badgers. Predation is the greatest cause of mortality for hatchlings. The shell of juvenile tortoises does not harden for five or more years and young tortoises may fall prey to ravens, hawks and eagles, coyotes, foxes, bobcats, badgers, skunks, and feral dogs, and cats. While successful predation on adults is rare; coyotes, foxes bobcats, eagles, and feral dogs have been known to prey on tortoises. Habitat quality can affect predation in certain habitats.

