



## U. S. Fish & Wildlife Service

### Nevada Fish and Wildlife Office

*Conserving the Biological Diversity of the Great Basin, Eastern Sierra, and Mojave Desert*

## The Mojave Population of Desert Tortoise Draft Revised Recovery Plan Frequently Asked Questions

### **Q. What is the desert tortoise and where does it occur?**

**A.** The desert tortoise (*Gopherus agassizii*) is a reptile in the land tortoise family, Testudinidae. It has a high-domed shell that is greenish-tan to dark brown in color and elephant-like hind legs. Adults range in size from 8 to 12 inches and they can completely withdraw their heads and limbs into their shells. Desert tortoises reach sexual maturity between 12 and 20 years of age and they may live 50 or more years in the wild.

Their diet consists of wildflowers, grasses, and cacti. They may obtain some of the water they need from the plants they eat, but they rely on available surface water after rains. A common defensive behavior when handled or threatened, is to empty their bladder, leaving them at a considerable disadvantage during dry periods.

The desert tortoise occurs in the Mojave and Sonoran deserts in southern California, southern Nevada, Arizona, and the southwestern tip of Utah in the U.S., as well as Sonora and northern Sinaloa in Mexico. The listed Mojave population of the desert tortoise includes those animals living north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, and southwestern Utah, and in the Sonoran (Colorado) Desert in California.

### **Q. What have been identified as the current threats to the desert tortoise?**

**A.** The vast majority of threats to the desert tortoise and its habitat are associated with human land uses. The threats identified in the 1994 Recovery Plan, the basis for listing the tortoise as a threatened species, continue to affect the species. Habitat loss, degradation, and fragmentation from urbanization, off-highway vehicle use in the desert, linear features such as roads and utility corridors, livestock grazing, mining, and military activities were cited as some of the primary reasons for the decline in desert tortoise populations. Disease and increased incidence of fire in the Mojave Desert have also been implicated in desert tortoise population declines.

### **Q. What is a Recovery Plan?**

**A.** The goal of the Endangered Species Act (Act) is to conserve the ecosystems upon which listed species depend and to recover species to levels where protection under the Act is no longer necessary. Recovery Plans, which are blueprints for actions by Federal

and State agencies and private organizations, do not obligate the expenditure of funds or require that actions be implemented.

The Recovery Plan provides measurable criteria for determining when a species is recovered, site-specific management actions, and estimates of the time required and the costs required to achieve recovery.

Developing a Recovery Plan for a listed species is required under the Act. Although all federal agencies must carry out programs to conserve listed species, implementing the Recovery Plan is voluntary.

Public participation is entirely voluntary, but public support and participation, throughout the Recovery Planning and implementation process is crucial for successful recovery of these species.

**Q. Why has the Recovery Plan for the desert tortoise been revised?**

**A.** The Act requires the Fish and Wildlife Service to periodically review and update Recovery Plans. A 2002 General Accounting Office report and a 2004 assessment of the 1994 Recovery Plan recommended that we develop and implement a coordinated research strategy for linking land management decisions with research results and emphasized the need for a greater appreciation of the implications of multiple, simultaneous threats facing tortoise populations and a better understanding of the relative contribution of multiple threats on demographic factors (*i.e.*, birth rate, survivorship, fecundity, and death rate). The approach of focusing on individual threats may not have produced expected gains toward desert tortoise recovery since 1994 because multiple threats act simultaneously to suppress tortoise populations at any given location within the species' range. In the revised Recovery Plan, we underscore the need to build on our understanding of individual threats, yet place new emphasis on elucidating their multiple and synergistic effects on desert tortoise abundance.

The revision incorporates our current understanding of the species' status and threats still facing the desert tortoise and its habitat. New strategic elements, recovery objectives and criteria designed to measure progress toward recovery and the effectiveness of recovery actions, and a decision support system that bolsters an adaptive management program have been carefully crafted to ensure the revised Recovery Plan is scientifically-based and defensible.

**Q. What are the strategic elements of the Recovery Plan?**

**A.** The strategic elements within the plan include the following: 1) Develop, support, and build partnerships to facilitate recovery; 2) protect existing populations and habitat, instituting habitat restoration where necessary; 3) augment depleted populations in a strategic, experimental manner; 4) monitor progress toward recovery, including population trend and effectiveness monitoring; 5) conduct applied research and modeling in support of recovery efforts within a strategic framework; and 6) implement a formal adaptive management program that integrates new information and utilizes conceptual

models that link management actions to predicted responses by desert tortoise populations or their habitat.

**Q. What are the estimated costs associated with the recovery of the desert tortoise?**

**A.** The costs of recovery implementation estimated to be approximately \$160 million over a 25 year period. Actual budgets will be determined through future planning efforts and as each recovery action is undertaken. Cost estimates are unavailable for several actions, such as research, due to uncertainties in the scope and magnitude of the specific task. Recovery Implementation Teams should guide recovery action priorities and develop updated budget projections within each recovery unit through the use of a decision support system.

**Q. Who will be implementing recovery actions identified in plan?**

**A.** The revised Recovery Plan emphasizes partnerships to direct and maintain focus on implementing recovery actions and a system to track implementation and effectiveness of those actions. Recovery Implementation Teams will be comprised of representatives from the Fish and Wildlife Service's Desert Tortoise Recovery Office and Ecological Services offices, Bureau of Land Management, National Park Service, Native American tribes, state wildlife agencies, military installations, county governments, and stakeholder groups. The success of this revised Recovery Plan will rely heavily upon the involvement of our partners and our commitment to implementing the strategic elements listed above coupled with a functioning adaptive management program.

**Q. Can private land owners help with the recovery of the desert tortoise?**

**A.** Most recovery efforts for the desert tortoise are directed toward federal land contained within "tortoise conservation areas." However, partnerships with private landowners can aid recovery of the species, especially on inholdings within or adjacent to tortoise conservation areas. This plan will help us direct federal funding to landowners for protection and restoration of this species, and enable landowners to protect their own interests with conservation agreements.

**Q. Where can I get a copy of the Draft Revised Recovery Plan for the Mojave Population of Desert Tortoise?**

**A.** Copies of the draft plan are available by contacting the Nevada Fish and Wildlife Office at the address below or by visiting their web site at <http://www.fws.gov/nevada>.

**Q. Can I make comments on the draft plan?**

**A.** Comments are invited on the draft plan until November 3, 2008, and need to be submitted to: Nevada Fish and Wildlife Office Nevada Fish and Wildlife Office, 1340 Financial Boulevard, Suite 234, Reno, NV 89502 or by email to [dtrecovery@fws.gov](mailto:dtrecovery@fws.gov).