

## **Briefing Statement**

**Date:** March 4, 2003

**Title:** Desert Tortoise Monitoring - Next Steps

**Issue:** The 1994 Recovery Plan calls for monitoring of desert tortoise and its habitat range-wide to determine upward trends in the populations. Because of insufficient resources, range-wide population monitoring is being done on a limited bases in California and habitat monitoring is unknown. Historical plot sampling is also being conducted on a limited basis in California.

### **Background:**

1. **Population Monitoring:** In 1996 the Management Oversight Group agreed to use Line Distance Sampling (LDS) as a method for conducting range-wide desert tortoise population monitoring. Implementation of LDS since 1996 has been conducted in various Recovery Units based on the availability of resources. In fiscal year 2000 the Fish and Wildlife Service hired a full time Desert Tortoise Coordinator to assist in the implementation of range-wide monitoring. Population monitoring using LDS was initiated in California in 2001. Monitoring was also conducted in 2002. Funding of LDS sampling in California is uncertain from year to year, and has been primarily provided by DOD. Recent information presented at the MOG and Desert Tortoise Council by researchers at UNR and University of Redlands suggests that the present implementation of LDS or transect sampling may be flawed and changes need to be made in the collection and analysis of the data.
2. **Plot Sampling:** Historical plot sampling has been funded on a limited basis for the past several years in coordination with the BLM, California Fish and Game, and USGS BRD. Data from these monitoring efforts has provided evidence of possible significant desert tortoise declines over the past 10 years or since listing of the species in 1990.
3. **Habitat Monitoring:** It is unknown what information is available related to desert tortoise habitat monitoring. Research has been conducted in recent years related to the effects of fire on desert tortoise habitat but there has not been, to the best of our knowledge, a collection of known information, or the systematic monitoring of desert tortoise habitat to determine the effects of changes in land use practices.
4. **GAO Report/Monitoring Recommendations:** The recently completed GAO report on the desert tortoise made the point that population monitoring of the desert tortoise only recently began and that an agreement between DOI and DOD for monitoring was needed. They also concluded that there was a need to implement a strategy to link research with land management decisions.

**Status:**

1. Population monitoring using LDS will continue in fiscal year 2003; however, there is insufficient funding to conduct transect monitor in all of the Recovery Units or Desert Wildlife Management Areas (DWMA's) in California. Present funding is sufficient to monitor the entire West Mojave with funding from DOD and National Park Service. Other DWMA's in the Northern Colorado RU and Eastern Colorado RU may be sampled with funds provide by BLM and DOD (Navy and Chocolate Mtn. Gunnery Range).
2. It is unknown what if additional funding is available for plot sampling to be conducted in 2003. In the past, these efforts have not been coordinated through the FWS Desert tortoise coordinator.

**Proposed Next Steps:**

1. Monitoring Workshop: It has been proposed that FWS, in cooperation with the University of Redlands, conduct a workshop to review and make recommendations to the MOG and DMG regarding monitoring. As discussed in the 1994 Recovery Plan and reviewed in the GAO report, there is a critical need to conduct monitoring - not only species monitoring, but also habitat and effectiveness monitoring. Given the limited resources that are available to conduct monitoring, there is a need to review on-going monitoring, and through the workshop come to consensus on the priority monitoring that should be undertaken in California. The monitoring recommendations and funding needs would be presented to the DMG and Regional Managers through the MOG.
2. Transect Monitoring Review: The FWS in working with USGS-BRD and University of Nevada Reno will be implementing changes this fiscal year to try to correct the problems with the methodology as currently identified. Crews this sampling season will be following a modified procedure to improve on the accuracy of the observers, and there will be an attempt to increase the number of focal animals data to improve the non-observed estimate ( $G^{\circ}$ ).
3. MOG Subcommittee: At the February 12, 2003 MOG meeting it was agreed that a small subcommittee comprised of the MOG Regional Managers' representatives would initiate the development of a Memorandum of Agreement between DOI and DOD agencies for the purposes of identifying and committing funding for monitoring and other critical recovery activities identified in the GAO report. The Regional Managers agreed that in order to insure consistent annual monitoring there needed to be a more firm commitment by all parties. The FWS agreed to take the lead in calling the subcommittee together.