



Photo: Great Basin
Institute 2009

2010 DESERT TORTOISE MONITORING HANDBOOK



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INTRODUCTION

The overall goal of the USFWS recovery plan for the desert tortoise is the recovery and delisting of the tortoise. This monitoring project contributes annual population density estimates of the Mojave population of the desert tortoise - information that the USFWS will use to assess the status of the tortoise at various stages during recovery.

The original recovery plan (U.S. Fish and Wildlife Service. 1994. Desert tortoise (Mojave population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon. 73 pages plus appendices.) requires for delisting that “As determined by a scientifically credible monitoring plan, the population within a recovery unit must exhibit a statistically significant upward trend or remain stationary for at least 25 years....” The recovery plan is currently under revision; however the current version includes a similar recovery criterion.

The USFWS coordinates this monitoring program to

- 1) Collect data range-wide that are scientifically credible, and
- 2) Use these data to develop accurate and precise estimates of population densities in each recovery unit, and then
- 3) Update the design and annual implementation of this project to allow detection of meaningful population recovery after 25 years.

The training outlined in this manual addresses the specialized skills that are required to collect credible data. Desert tortoise population monitoring relies on distance sampling to estimate each year the number of tortoises in managed areas of the Mojave Desert. Distance sampling has been implemented in a variety of settings; this project trains crews in the general approach to distance sampling as well as the specifics of how this is implemented for desert tortoises. Each of the chapters in this Handbook addresses a focal issue, stating the training objectives and standards, and providing written reference material. The following definitions apply:

Objective: statement of aim or purpose to be pursued; a priority, or an end, towards which significant effort is directed.

Standard: Statement of the necessary activities required to meet specific training objectives. By the end of training, each crew member should feel confident in their performance of these standards.

Metric: Quantitative or qualitative means used to gauge success or failure in performance. By the end of training, instructors will have evaluated all trainees using these metrics.

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