

***Draft Proposal***  
***(For Internal Review Only)***

**Desert Tortoise Public Attitude and Public Outreach Effectiveness – Phase 1**

*Funding Source:* National Fish and Wildlife Foundation

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*Starting date:* April 1, 2005

*Ending date:* April 1, 2006

**Background**

In 1990, the desert tortoise (*Gopherus agassizii*) was listed as a threatened species under the Endangered Species Act. The U.S. Fish and Wildlife Service designated 6.4 million acres of the desert tortoise's range as critical habitat in 1994. About 75%, or 4.8 million acres of this habitat, is located in California primarily on Bureau of Land Management, National Park Service, and Department of Defense lands. Decreases in the population of the desert tortoise have been attributed to human related impacts (e.g., unauthorized off-road-vehicle use in the desert, collection of tortoises as pets).

The "Desert Tortoise Public Attitude and Public Outreach Effectiveness" study is designed to obtain baseline information that will facilitate the development and implementation of an education program to build public support for and involvement in the desert tortoise recovery effort. This study has two phases. Phase 1 will obtain baseline data on public knowledge, attitudes, and value orientations regarding the desert tortoise and conservation recovery efforts. The information collected in phase 1 can be used by federal and state agencies to develop effective public outreach communication strategies. Phase 2 involves a follow-up survey to evaluate the effectiveness of these communication efforts.

This proposal and requested funding focuses on phase 1 of the overall study.

**Phase 1 Objectives:**

The objectives of phase 1 are to obtain information on different stakeholder groups’:

1. Knowledge regarding the desert tortoise, its habitat, and on-going recovery efforts.
2. Value orientations toward threatened and endangered wildlife (e.g., the desert tortoise) and broader desert conservation issues.
3. Attitudes and norms toward the desert tortoise and agency sponsored recovery efforts.
4. Current behaviors (e.g., Off-High-Vehicle use and collection of desert tortoises).

The information collected in phase 1 will be used to make recommendations for developing effective public outreach messages.

**Study Methods – Phase 1**

Phase 1 of this study will use a mail survey to collect the information. The Colorado State University Human Dimensions in Natural Resources Unit will develop the survey in cooperation with representatives from the Department of Interior and selected stakeholder groups. Approval for conducting the survey will be obtained from the Office of Management and Budget (OMB) and the Colorado State University Office of Sponsored Programs. The questionnaire will be pre-tested before conducting the full mailing. Data collection will involve: an initial mailing of the survey, a post card reminder, and two final survey mailings to non-respondents.

The sample will contain random samples of individuals representing three different strata:

1. California general public
2. California Off Road Vehicle Association (CORVA) members
3. California Conservation Group members

Random samples of the California general public will be purchased from Survey Sampling Inc. A random sample of CORVA members will be requested from that organization. The specific conservation group included in the study will be determined in collaboration with representatives from the Department of Interior. The desired sample size for each of the three strata is 300 respondents, which yields a confidence interval of 90% and a margin of error of  $\pm 5\%$ . Based on previous experience, we anticipate a response rate of about 38% from the general public sample and 54% from each of the two special interest group samples (Table 1). A telephone survey of non-respondents will be conducted to test for non-response bias. If the data from the phone survey indicate differences between respondents and non-respondents, the data will be weighted accordingly.

Table 1. Strata, projected response rate and desired sample size

Strata	Sample	Projected Response Rate	Desired Sample Size
1	California general public	38%	300
2	CORVA members	54%	300
3	Conservation group members	54%	300
Total sample size			900

***Timeframe and Deliverables:***

Task	Date
Survey development and pre-testing	April – June, 2005
Sample selection	April – May, 2005
OMB approval of survey	June, 2005
1 <sup>st</sup> mailing of survey	July 11, 2005
Postcard reminder	July 25, 2005
2 <sup>nd</sup> mailing of survey	August 8, 2005
3 <sup>rd</sup> mailing of survey	August 29, 2005
Data entry	July – September, 2005
Telephone non-response check	September, 2005
Data analyses	October, 2005
Develop draft report	November – December, 2005
DOI review of draft report	January, 2006
Conference call to discuss results	February, 2006
Final report	March, 2006

***Budget:***

Category	Amount
Principal Investigators	
Jerry Vaske	\$8,295.00
Maureen Donnelly	\$6,978.00
Fringe (20.1%)	\$3,069.87
Graduate student salary:	\$4,720.00
Fringe (3.9%)	\$174.64
Salary subtotal	\$23,237.51
Mail survey	
Purchase general public sample	\$187.00
Printing	\$1,880.00
Postage	
Outgoing	\$3,525.00
Incoming	\$2,425.00
Postcard reminder (Printing & postage)	\$788.00
Telephone non-response check	\$2,000.00
Total direct	\$34,042.51
Indirect (17.5%)	\$5,957.44
Total (direct + indirect)	\$39,999.95