

Quarterly Report

Agency/Organization: The Great Basin Institute

Project Name: BCCE Desert Tortoise Telemetry and Health Assessments

Project Number: 2023-GBI-2330A

Reporting Period: July 1, 2024 – Sept 30, 2024

Project Contact Name and Information: Terry Christopher
7250 S Durango Drive Suite 130
PMB #263
Las Vegas, NV 89113
702-433-2600

QUESTION 1: What did you accomplish during this reporting period? How did these accomplishments help you reach the goal of your project? If relevant, what indicators or benchmarks were used to determine your progress?

This quarterly report documents the status of the BCCE Desert Tortoise Telemetry and Health Assessments (Year 1) conducted by the Great Basin Institute (GBI) for the third quarter of project number 2023-GBI-2330A; July 1, 2024 – Sept 30, 2024.

GBI was contracted by the Clark County Desert Conservation Program (DCP) to conduct line-distance sampling (LDS) surveys and telemetry surveys to estimate the population of the Mojave desert tortoise (*Gopherus agassizii*) in experimental translocation and control plots in Clark County, Nevada.

The overarching objectives of BCCE Desert Tortoise Telemetry and Health Assessments (Years 1-5) are to:

- Continue monitoring of resident and translocated desert tortoise started in 2014
- Collect telemetry data on up to 60 adult tortoises
- Acquire information regarding home range size, settling rates, survival, and habitat use for resident and translocated populations of desert tortoise
- Collect health data on all tortoises

Objectives Completed this Quarter:

- Radio telemetry monitoring took place July 1, 2024 – Sept 30, 2024 *
- 36 telemetered tortoises in total were tracked (20 resident and 16 translocated)
 - Of these 36 tortoises, two were reported deceased and 1 tortoise missing by the end of the quarter

QUESTION 2: What, if any, problems were encountered? Briefly describe those problems and the manner in which they were dealt.

No issues were encountered during this quarter.

QUESTION 3: What, if any, proposed activities were not completed? Briefly describe those activities, the reasons they were not completed and your plans for carrying them out.

Project activities are on track at this time.

QUESTION 4: What is the calculated percent of work completed?

It is estimated that 90% of the project has been completed for Year 1 at this time.

QUESTION 5: Do you foresee any upcoming problems with future project activities? If so, how do you propose to overcome those problems?

No future problems are foreseen for upcoming project activities at this time.

QUESTION 6: Is there anything else you want to tell the DCP about this project?

Telemetered tortoises are monitored using a VHF receiver and directional antenna. Location data is collected on each individual at least once monthly November through February, and weekly March through October. As batteries run out, transmitters will be replaced following USFWS protocol, typically during spring and fall when tortoises are most likely to be active above ground.

All data are recorded in the field on paper datasheets and electronically using Apple iPad-mini tablets running ArcGIS Survey123. Data is downloaded into a master database each month and assessed for consistency and errors.

QUESTION 7: What was produced during the reporting period?

From July 1, 2024 – Sept 28, 2024*, 18 resident and 16 translocated tortoises were monitored in the BCCE (Table 1). Telemetry was conducted over 50 days with 437 observations. Individuals were observed 12 to 13 times over the course of the reporting period. Three tortoises were observed only 1-9 times and are listed as follows. Tortoises FW10594 and CC0132 were found dead on July 26, 2024 and August 29, 2024, respectively. One tortoise, FW10624, was reported missing on July 7, 2024 due to a dropped transmitter. It is not included in the total number of tortoises (but is tallied as missing in Table 1 below).

During the reporting period, the master database was updated, reviewed for quality control, corrected when necessary, and submitted to the DCP on a monthly basis along with scanned datasheets. GBI completed the annual presentation for DCP.

Table 1. BCCE observations of tortoises by telemetry from July 1, 2024 – Sept 28, 2024*.

Status	Tortoises Transmitted	Tortoises Deceased	Tortoises Missing	Number of Days	Total Observations	Average Observations per Day
Resident	18	2	1	49	233	4.8
Translocated	16	0	0	47	204	4.3
TOTAL	34	2	1	50	437	8.7

*Data from Sept 29, 2024 onward will be reflected in the subsequent October Monthly Upload

Please report on the status of each Milestone and Deliverable, indicate whether they are not started, in progress, or completed and provide comments on the status as necessary.

Date Due	Deliverable / Milestone #	Deliverable / Milestone Title	Completed
April 1, 2024	M01	Contract Award and Mobilization	Yes
April 12, 2024	M02	Project Kick-off Meeting	Yes
April 12, 2024	M03	Mobilization and Supply Order	Yes
April 15, 2024	D01	Data Management Plan	Yes
April 15, 2024	D02	Quarterly Progress Report (Project Start – April. 10, 2024)	Yes
April 16, 2024	D03	Monthly Data Upload	Yes
April 30, 2024	D04	Monthly Data Upload	Yes
May 15, 2024	D05	Monthly Data Upload	Yes
May 31, 2024	D06	Monthly Data Upload	Yes
June 31, 2024	D07	Monthly Data Upload	Yes
July 5, 2024	D08	Quarterly Progress Report (April 1, 2024 – June 30, 2024)	Yes
July 31, 2024	D09	Monthly Data Upload	Yes
August TBD, 2024	M04	2024 Annual Project Review Presentation (If Requested)	Yes
August 31, 2024	D10	Monthly Data Upload	Yes
September 30, 2024	D11	Monthly Data Upload	Yes
October 5, 2024	D12	Quarterly Progress Report (Jul 1, 2024 – Sept 30, 2024)	Yes
October 31, 2024	D13	Monthly Data Upload	
November 30, 2024	D14	Monthly Data Upload	
December 15, 2024	D15	Monthly Data Upload	
December 20, 2024	D16	Annual Project Data	
December 20, 2024	D17	Annual Project Report	
December 21, 2024	M05	Debriefing Meeting	

December 31, 2024	N/A	Year 1 Close-Out	
----------------------	-----	------------------	--