May 27, 2026

DESERT CONSERVATION PROGRAM PROJECT COMPLETION SUMMARY
**Gila Monster Genetic Sampling**
**2023-AUSTINPEAY-2350A**

The work for the above referenced project has been completed. Below is a summary of project related information.

**The purpose of the above referenced project was:**

Gila monsters have been identified as a species of conservation concern that warrants consideration as a covered species under the proposed amendment to the Multiple Species Habitat Conservation Plan (MSHCP). Significant work has been completed to collect data on demography, to understand home ranges of the species, and to estimate how the species will be impacted by climate changes. However, due to the rarity of the species, there remains gaps in genetic sampling data, which can negatively impact the effectiveness of conservation strategies and management actions. The project will conduct field surveys to obtain genetic samples from Gila monsters to address these gaps in genetic sampling. Samples will be used for landscape-level genetic analysis and improving population estimates across the species' geographic range in Clark County.

**The major accomplishments or findings of this project include:**

Eleven sites were surveyed across Clark County where previous records indicated presence of Gila monsters. The contractors had 14 encounters with live Gila monsters and were able to obtain eight genetic samples. Project was successful in augmenting the available genetic information for Gila monsters. The survey efforts suggest that persistence and repeated sampling at focal sites are necessary for successful observation of individuals active above-ground. It is suggested that coupling local field-survey efforts with predictive GIS models would yield a higher likelihood of success in determining Gila monster site occupancy. The acquired genetic information will help determine how gene flow and genetic connectivity should be considered in future management efforts. An important next step in the adaptive management of Gila monsters will be to develop a survey protocol and monitoring framework that allows the assessment of human impacts on the distribution and abundance of the species. This monitoring framework could be

implemented as a series of species detection and habitat occupancy studies. In the adaptive management context, data from field surveys could be leveraged to inform management activities and future conservation efforts.

For more information about this project and/or for other Project Reports or Symposium Reports, please visit our website.

If you have any questions about this project, please contact Scott Cambrin, at (702) 455-3859.