



December 28, 2023

DESERT CONSERVATION PROGRAM PROJECT COMPLETION SUMMARY Rare Plant Propagation Research 2019-USGS-1990A

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:

The purpose of this project is to increase the knowledge of many southern Nevada rare and protected plant species including the Las Vegas bearpoppy (*Arctomecon californica*), white-margined penstemon (*Penstemon albomarginatus*), Blue Diamond cholla (*Cylindropuntia multigeniculata*), three-corner milkvetch (*Astragalus geyeri* var. *triquestrus*), and sticky buckwheat (*Eriogonum viscidulum*). The plants' seed ecology and the feasibility of establishing a nursery stock are to be investigated, to help assist conservation practitioners to re-introduce them into protected habitats and help understand the habitat needs of these species.

The major accomplishments or findings of this project include:

This project resulted in the publication of a status-of-knowledge article on *Arctomecon californica* discussing the propagation and reintroduction information for conservation related to the species. A research article was published on experimental propagation of *Cylindropuntia multigeniculata* that determined optimal plant rooting and establishment through experimental trials. Propagation trails were done on *E. viscidulum* with successful propagations occurring in a greenhouse, followed by successful seed collections from greenhouse-grown stock. Pollination experiments were completed that identify the mating system of *E. viscidulum* (able to self-pollinate) and *P. albomarginatus* (requires a pollinator for outcrossing).

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

If you have any questions about this project, please contact DCP Project Manager Stefanie





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