

Agency/Organization: US Geological Survey

Project Name: Seed Ecology of Threecorner Milkvetch

Project Number: 2023-USGS-2385A

Reporting Period: October 1, 2025 – December 31, 2025

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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?

For our Seed Longevity Study, we collected buried bags of *Astragalus geyeri* var. *triquetrus* (ASGET) seeds from habitat at our first-year sites at Mud Lake and Mormon Mesa populations in mid-November (originally planned for 15 mo, but exhumed after 16 mo) and began lab incubation of seeds (M32). By mid-December, we completed lab incubations to determine germination (M33) and tested viability of the ungerminated seeds; we found similarly high seed viability for all populations when compared with the initial non-buried seed (M11). Seed germination and viability data are currently being entered and QA/QC'd in preparation for analysis across all burial dates. We will continue to retrieve these bags at annual intervals during 4 years of burial.

For our Field Experiments on Herbivory, Invasive Plant Competition and Pollinator Limitation, we revisited our second-year plots located at California Wash and Muddy River populations, which were postponed last year due to the drought conditions that prevailed throughout the 2024/25 growing season. We confirmed that our plot corner markers were still intact and ready for the 2026 growing season.

These Milestones are instrumental towards Field Experiments 1 (Herbivory, Invasive Plant Competition, and Pollination Limitation) and 2 (Seed Longevity) and developing our final deliverables for this project.

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

None.

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.

None.

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

We are approximately 24% toward project completion.

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

None anticipated.

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

We have nothing additional to note concerning this project.

QUESTION 7: What was produced during the reporting period?

During the reporting period, we produced this Quarterly Progress Report (D14).