

A progress report for the project:
“A flora of the McGee Creek Watershed, Mono County, California”

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Abstract for the funded project:

While there has been significant botanical exploration of the eastern Sierra Nevada in the past two decades, major collection gaps still exist. Gaps in the knowledge of the distribution of Sierra Nevada plants limit our ability to understand the biogeographical history of this remarkable mountain range and hamper conservation efforts. As global warming threatens ecosystems at California’s highest elevations, we risk losing biodiversity without knowing it without more botanical exploration. Thus, for my master’s thesis, I am conducting a collections-based floristic inventory of the McGee Creek watershed in Inyo National Forest, Mono County, California. This poorly documented, high elevation site is particularly important to study because its plant life is thought to be threatened by climate change and because its geologic diversity may allow it to host rare and/or unusual plants. In addition, this study provides a more complete picture of current plant distributions north and south along the Sierra Nevada, facilitating large-scale studies of how mountain ranges could act as a corridor for Southern California plants to shift north and upslope as temperatures rise. Over the course of two years, I will collect plant specimens from the watershed with the aim of producing a complete checklist of the area’s plants. Through this study, I will produce a baseline dataset to understand the impacts of climate change in high elevation ecosystems, provide data on the distributions of rare and invasive plants for immediate conservation action, test hypotheses about how geology impacts plant distributions, and produce herbarium specimens which are invaluable for future botanical research.

Summary of 2024 Progress:

I spent a total of 70 days in the field collecting specimens for this project, including 30 days of backpacking. In total, I made 1,518 specimen collections (1240 vascular plants, 278 non-vascular) representing at least 623 species and infraspecific taxa (many collections have not yet been identified). These collections include at least 33 rare taxa and 6 county records. Some notable finds include *Erythranthe laciniata* and *Potamogeton amplifolius* (county records) and *Botrychium minganense*, *Botrychium crenulatum*, *Botrychium ascendens*, and *Utricularia minor* (rare taxa). iNaturalist observations of most of the plants collected for this project can be found [here](#).

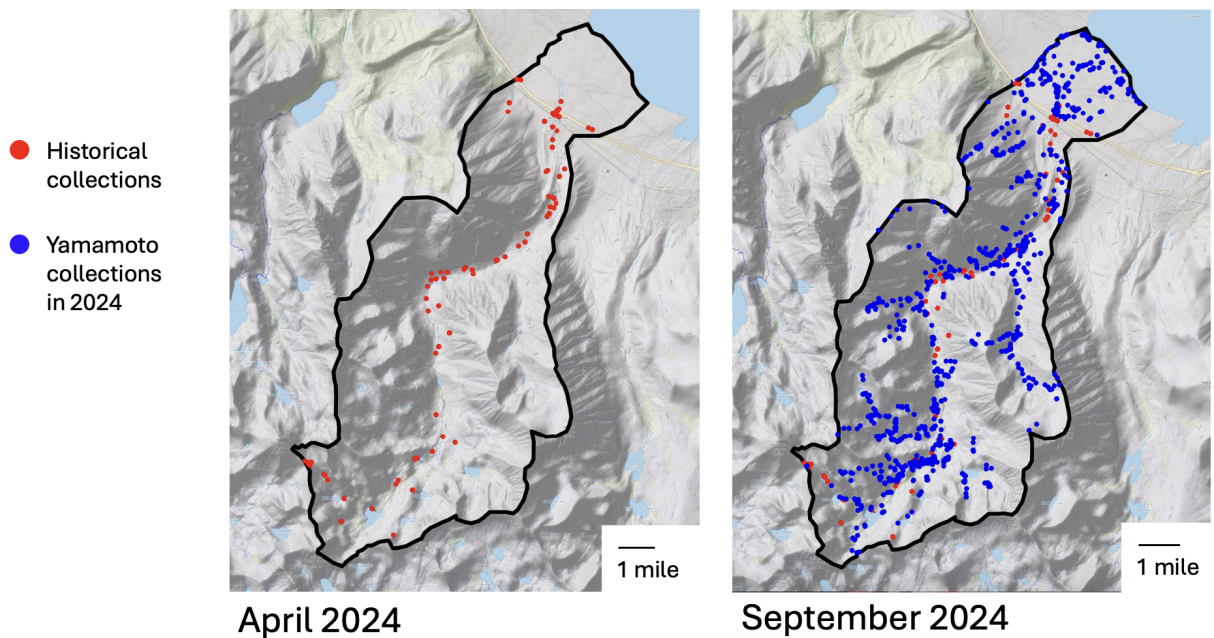


Figure 1. Map of collections made in the McGee Creek watershed in the 2024 field season.

Funds generously awarded by the CNPS Bristlecone Chapter were used for the following expenses in 2024:

Gas for 5 trips from California Botanic Garden to McGee Creek:	\$945.00
Wilderness camping permits:	\$55.00
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Total:	\$1,000.00