

Identification and Cataloging of Herbarium Specimens Collected from the study: FIRE
MANAGEMENT EFFECTS ON NATIVE BEE DIVERSITY AND ABUNDANCE IN
RELATION TO ENDANGERED AND NATIVE PLANT CONSERVATION

FINAL REPORT

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Sponsored Programs

The goal of this project was to identify and catalog herbarium specimens collected from the study “Fire Management Effects on Native Bee Diversity and Abundance in Relation to Endangered and Native Plant Conservation” that had been conducted by Terry Griswold and Harold Ikerd in 2009-2010.

Methodology

The specimens were reviewed under a dissecting microscope and the provisional identifications reviewed. Initial identifications were made shortly after the specimens were received. A more intensive study was completed in October. The majority of the identifications were not altered by this review but it did lead to more precise identification of some and revision of few. The revised information has been sent to Leslie Courtright, the Museum Curator for Zion National Park. There were no new or noteworthy plant records found.

In preparing the budget, we (Mary Barkworth, Principal Investigator and Michael Piep, Assistant Curator) anticipated receiving approximately 100 specimens based on estimates provided by Griswold and Ikerd. In May, 2011, we had received about 30 specimens. These were processed as described in the contract and reports on the identifications and catalog numbers sent to Leslie Courtright, the resource manager for Zion National Park. Being somewhat embarrassed by the cost per specimen this represented, we asked about additional specimens. In early June, Ikerd brought over an additional 32 specimens. These have been processed and the information provided to Courtright, bringing the total number of specimens processed to 62.

Griswold and Ikerd are confident that there are more specimens but have not yet been able to locate them. We have agreed to process any that are found when we receive them but recognize that the termination date for the project has past.

Recommendations

The USDA Bee laboratory is to be commended for collecting plant samples to document the species on which they found their bees and we are delighted to work with them in documenting the association between the bee and plant taxa. It should be easier to complete such work as the region’s herbaria develop the regional website, <http://intermountainbiota.org>, including creation of a morphological database that could be used, in conjunction with the distribution map, to accelerate identification of species from portion of the region.

I apologize for the extreme tardiness of this report. I had made major commitments for July and August that kept me out of the herbarium. This meant that Piep, the Assistant Curator, had an unusually heavy work load over the summer. It would probably be more efficient if, in future, the herbarium hired a qualified individual to assist with the identifications. There was nothing to preclude our doing so this year; I simply had not realized the extent to which my other obligations would impede progress on this contract.