



Department of Defense Strategy to Support a Multi-Agency Bat Conservation Initiative Within the State of Utah

Project # 07-346

Background:

A total of 18 bat species are known from Utah, 6 or 30% are considered state sensitive species. Very little information was known on the distribution or population status of bats in the state, and the information that did exist was widely scattered and often inaccessible. That lack of information made it difficult to identify and address statewide management issues related to the conservation of bats. With five Department of Defense (DoD) facilities in Utah, whose management authority extends over 1.8 million acres, it was crucial to identify distribution, frequency of occurrence and gross-level timing to prevent encroachment and listing issues related to the lack of conservation management of bats in Utah.

Objective:

The DoD, as part of a collaborative partnership of 14 individual public, private, state, federal, and commercial organizations sought to identify the distribution, quantity, and quality of existing data on bats in Utah. That goal was a critical step in achieving the overarching objective of ensuring the conservation and management of bats in Utah. Currently no species of bat is considered threatened or endangered and it is hoped that through sound science and conservation measures federal listing can be precluded. Additionally, a firm understanding of occurrence on DoD lands augments sustainable range initiatives through DoD.



Photo by Kimberly Asmus, State Biologist

State Sensitive Fringed Myotis (*Myotis thysanodes*) caught 12 miles from Dugway Proving Ground.

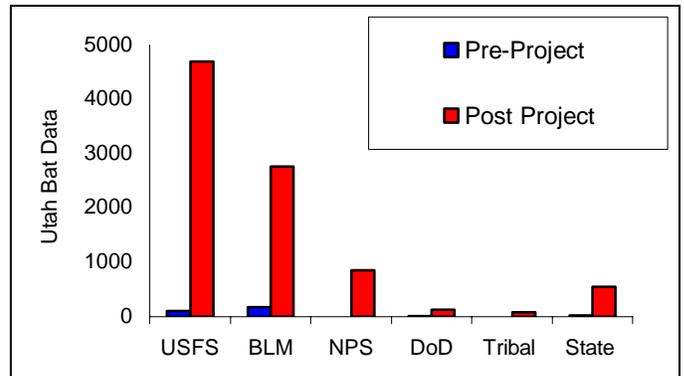
Summary of Approach:

With funding from the Legacy Resource Management Program, a biologist was hired to conduct an exhaustive search for bat data held by federal and state agencies, universities, contractors, and non-profit groups within Utah. A programmer was also contracted to produce a web-compatible database which could store and manage all known bat data. Expert opinion workshops were held

to build a GIS habitat model which was then used to help guide data collection efforts on DoD lands.

Benefit:

Identification and description of state-wide data yielding invaluable trends and patterns throughout DoD training ranges and state and private recreation lands benefited all collaborators. It substantially benefited the military through better understanding of the biological needs of bats, which directly promotes sound stewardship initiatives developed cooperatively between State wildlife and DoD land managers.



Available data for the six largest landowners within Utah before and after data consolidation efforts.

Accomplishments:

A comprehensive, mineable geodatabase was created that is capable of both storing all known historical bat data as well as facilitating the coordination of future data management. To date this database has been populated with data on over 20,000 individual bats. Records of bats captured on or near DoD facilities were identified and further acoustic and mist-netting surveys occurred on military installations. Additionally, with the support of numerous partners, an *Important Bat Habitat* GIS model was created which identifies high-quality bat sites. Together, these steps serve as a foundation for future cooperative bat research and management efforts within Utah targeting DoD testing and training lands.

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