



## RESEARCH PROJECTS

### Mojave Fringe-Toed Lizard Survey at the Marine Corps Air Ground Combat Center and adjacent BLM Lands

PI: [Mary Cablk](#)

Project Period:  
Oct. 2000 through Sept. 2002

Funded by:  
Department of Defense, U.S. Marine Corps



Right: Mojave Fringe-toed lizard

**Keywords:** Fringe-toed lizard, marine corps, DoD, biodiversity, wildlife habitat relationship, mojave

### Project Approach

The Mojave Fringe-toed lizard (MFTL), *Uma scoparia*, is a California Department of Fish and Game "species of special concern" and a BLM-designated "sensitive species". The MFTL habitat includes sand dunes, sand sheets, and wind dominated transitional sand-vegetation areas in the California Mojave Desert. Within this geographic region the Marine Corps Air Ground Combat Center (MCAGCC) at Twentynine Palms, adjacent US Bureau of Land Management (BLM), and privately owned lands each harbor *U. scoparia* populations. While there have been limited quantitative analyses describing *U. scoparia* life history and status at individual or population levels on these lands, *Uma* populations are thought to be decreasing. The MFTL's closest neighbor, the Coachella Valley fringe-toed lizard (*U. inornata*) is on the brink of extinction due to habitat loss from human development and encroachment. In the wake of *U. inornata* rapid declines and given projected increases in human population for the California Mojave Desert, both MCAGCC and the BLM have expressed concern for the future of *U. scoparia* populations on their lands. These concerns stem from certain land use practices and other anthropogenic factors which may contribute to population declines, range limitations, habitat fragmentation, and/or other factors that make all *Uma* vulnerable to extinction.

The greatest challenge faced by military installations is the threat of encroachment by civilian development. As private lands are developed, suitable habitat for many Mojave Desert species is lost. With the development of private lands in the California Mojave, a greater percentage of undeveloped land is managed by either DOI or DoD. As a result DOI and DoD both bear an increasing burden of stewardship of biological diversity. If habitat for biodiversity is developed on private lands and DOI lands are not managed for biodiversity, *the sole responsibility for stewardship of biodiversity falls on military installations*. The difficulty of having sole stewardship of biodiversity, particularly for TES, is the potential conflict with the military mandate. DoD lands are charged with military readiness for National security and each installation serves a unique purpose in defense preparedness. However, as Federal land managers, DoD must also comply with the Endangered Species Act (ESA), which requires adequate knowledge of the numbers and locales of threatened and endangered species within installation boundaries.

MCAGCC, the BLM, and the Desert Research Institute (DRI), are taking a proactive approach with the MFTL in an effort to build and employ a collaborative effort among federal land managers to maintain population viability and to potentially prevent Federal listing of *U. scoparia*. In working together towards this effort, these three institutions are in the process of: 1) collecting critical baseline information on *U. scoparia* at individual *and* population levels, 2) determining the similarities and differences in distribution of *U. scoparia* on both MCAGCC and adjacent BLM land, and 3) creating an empirical habitat relationship model for *U. scoparia* in designated focal areas. If *U. scoparia* were to be Federally listed as threatened or endangered, aspects of MCAGCC daily operations would face major alterations, potentially resulting in elimination of operations. MCAGCC is taking a proactive stance by collaborating with BLM to better understand the habitat requirements and distributions of *U. scoparia* thus reducing its chances of following the same trajectory as other *Uma* species in the desert Southwest.

## **March Meeting Hilites**

President George Graham conducted the meeting, with the usual committee reports and trip highlights.

The most important business I think we conducted was giving Reid Wackermann the big Bull Bell as a souvenir going away present, in the presence of his Dad, Neil. Reid will be stationed in Atlanta.

New member, Scott Wood, won the 50/50.

GEAR GRINDERS 4WD  
CLUB  
P.O. BOX 32  
RIDGECREST, CA 93556

**PROMOTING PUBLIC LANDS FOR RESPONSIBLE MULTIPLE USE**