

Presentation for the Declining Amphibians Task Force (DAPTF) Meeting –January 18 & 19, Las Vegas, NV

Title: Arroyo Toads (*Bufo californicus*) in Southern California; Findings and Trends from 3 to 10 years of Population Monitoring.

Proposed Abstract:

In 2003, we implemented a new monitoring program for the endangered arroyo toad (*Bufo californicus*) on Marine Corps Base Camp Pendleton (MCBCP). To address the problems associated with large variations in adult toad activity, we employed a spatial and temporal monitoring approach that tracks the presence of arroyo toad breeding populations by documenting presence of eggs and larvae. Sites are surveyed up to four times per year to calculate and account for imperfect detection probabilities. We also continued to conduct nighttime counts of adult toads from the monitoring program implemented by Dan Holland in 1996. In this presentation, we review the major trends and findings of the first three years of the spatial monitoring program and a decade of adult count transects. These include the findings that 1) toad activity has been highly variable among years, but relatively stable over the last decade, 2) associations between activity and rainfall are dependant upon hydroperiod, 3) proportion of wet area occupied appears to be the most stable monitoring metric, and 4) both proportion area occupied (PAO) and probability of detecting arroyo toads are negatively associated with the presence of non-native aquatic species.