

# Arroyo Toad (*Bufo californicus*) Symposium

## Natural History and Management Practices

At Marine Corps Air Station, Camp Pendleton, California on  
**THURSDAY OCTOBER 5, 2000**

Hosted by Marine Corps Air Station, Camp Pendleton

Organized under the Department of Navy and U.S. Fish and Wildlife  
Service Partnering in San Diego County

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**Program**

- 8:00 Welcome Aboard  
- Lieutenant Colonel Bruce Doucette, Executive Officer, MCAS Camp Pendleton  
- Scott Thomas, Environmental Department, MCAS Camp Pendleton
- 8:10 Natural History of the Arroyo Toad  
- Brad Hollingsworth, San Diego Natural History Museum
- 8:30 Radio Telemetry and Arroyo Toads in San Mateo Creek, MCB Camp Pendleton  
- Paul Griffin, Wildlife Biology Program, University of Montana and  
- Ted Case, Biology Department, University of California San Diego  
- Presentation facilitated by Gale Bustillos, U.S. Navy, Southwest Division, Natural & Cultural Resources
- 8:50 Activity Cycles and Upland Habitat Use of the Arroyo Toad in San Diego County  
- William E. Haas, Varanus Biological Services
- 9:10 Characterization of Upland Habitat Usage and Activity Patterns of the Arroyo Toad  
- Ruben S. Ramirez, Jr., PCR Services Corporation
- 9:30 Break
- 9:40 Differentiation of Arroyo Toad Populations Based on Nuclear Microsatellite Analysis  
- A. Jill Shanahan and Oliver A. Ryder, Center for Reproduction of Endangered Species
- 10:00 Clarification Of Locality Records for the Arroyo Toad From the Desert Region of San Diego County  
- Ed Ervin, Department of Biology, San Diego State University and ✓  
- Robert N. Fisher, U. S. Geological Survey
- 10:20 Winter Toad Activity in Uplands on Camp Pendleton  
- David King, Ogden Environmental and Energy Services
- 10:40 Proposed Genetic Analysis of the Endangered Arroyo Toad  
- Bradford Hollingsworth, San Diego Natural History Museum and  
- Robert Lovich, Department of Biology, San Diego State University

- 11:00 Upland Survey Techniques: A Discussion of Methods, Suitability for Determining Occupied Habitat and Survey Limitations  
- William E. Haas, Varanus Biological Services
- 11:20 Lunch
- 12:30 Panel Discussion (Presenters; Chris Bandy, AC/S ES, MCB Camp Pendleton; John Stephenson and Grace McLaughlin, US Fish and Wildlife Service.
- Management Issues, to include:
- Non-breeding Season Protocol
  - Appropriate Mitigation Methods
  - Relocation & "Homing Instinct"/Site Specificity
  - Future Research Needs

## **1-Hour Concurrent Sessions from 2:00 until 5:00**

### **Toad ID Workshop**

- William E Haas and Ingri Quon, Varanus Biological Services

The arroyo toad identification workshop will be a 1-hour session with slides, handouts, and instruction on distinguishing features and comparisons with similar species.

### **Field Visit**

The 1-hour field visit will include visits to local known breeding sites, upland habitat, toad exclusion fencing, and experimental "toad crossings."

### **Discussion Period**

The facilitated discussion period will address such issues as Permit Issuance, Protocol Surveys, and Management Issues.

For further questions regarding the Arroyo Toad Symposium, please contact:

Scott Thomas at (760) 725-8492, [ThomasJS@mail.cpp.usmc.mil](mailto:ThomasJS@mail.cpp.usmc.mil) or  
Gale Bustillos at (619) 532-1355, [bustillosag@efdsw.navfac.navy.mil](mailto:bustillosag@efdsw.navfac.navy.mil)

**PLEASE NOTE THAT THE SYMPOSIUM HAS BEEN  
CONDENSED INTO A SINGLE DAY SESSION ON THURSDAY ONLY,  
OCTOBER 5, 2000**