



Legacy Resource Management Program 2005 Progress Report

October 06, 2005

Due Date: 10/05/2005
DoD Project Number: 05-243
DoD Coop. Agreement or MIPR Number: DACA87-00-H-0027
Years Funded: 2005
Additional Years to Complete: 3
Funds Received: 07/2005
Funds Obligated: \$149,820
Funds Executed: \$53,000
Bills Paid?: Yes
Fiscally Complete?: No
Funding Returned: No
Amount Returned: \$0
Date Returned:
Reason Funds Returned:

Changes Summary: No changes, other than expanding the original scope to include even more DOD installations than originally proposed (see below).

Current Status:

Burrowing Owl Training Workshops

We held 2 workshops in southern Arizona to train DoD personnel and DoD contractors on methods for how to safely capture, handle, band, and collect feathers from burrowing owls. The workshops were held 7-9 June 2005 and 27-30 June 2005, and were attended by 10 participants from 5 DoD installations (Fort Carson Army Base in CO, Kirtland Air Force Base in NM, Holloman Air Force Base in NM, White Sands Missile Range in NM, and Davis-Monthan Air Force Base in AZ). During the workshop, each participant received one-on-one instruction and ample first-hand practice on how to handle, band, and collect feathers from at least 3-4 owls. Additionally, we trained participants to accurately record data from burrowing owl captures, to store feathers, and to construct burrowing owl traps. We provided burrowing owl traps and banding supplies to those participants who needed them. We also provided participants with a booklet containing protocols for burrowing owl banding and data collection, datasheets for recording data from captured owls, and checklists of items to take in the field when trapping owls. At the end of the workshop, each participant was competent to trap owls on their own. Additionally, we traveled to the Nevada Test Site in NV for an on-site workshop to train DoE personnel on the same methods.

Banding Sub-permits

We helped some DoD personnel who participated in our training workshops to obtain their banding sub-permits from the USGS National Bird Banding Laboratory. We sponsored the applications of 5 DoD personnel from 3 installations who are now sub-permittees under the Master permit of C. Conway. These individuals will now be able to trap and band burrowing owls at their respective installations.

Participating DoD Installations and Other Cooperators

We have been in contact with colleagues from 24 different areas who have agreed to cooperate in the project, including personnel from 19 DoD installations (Table 1). We have already trapped, banded, and sampled feathers from 6 of these installations (see below), and are still securing the necessary federal and state permits to conduct work at the remaining installations that want to participate. We are also working with other cooperators outside of DoD who manage lands adjacent to DoD installations (National Parks, National Wildlife Refuges, DoE lands, and other city, county, state, and federal agencies).

Burrowing Owl Trapping

Despite the late start this season, we trapped 973 burrowing owls and collected feather from each owl following a standard protocol. Owls were individually marked using unique color bands to identify birds that have already been sampled. We obtained feather samples from the following 12 locations- Naval Base Coronado in CA, Seal Beach Naval Weapons Station in CA, Salton Sea National Wildlife Refuge in CA, Kirtland Air Force Base in NM, Holloman Air Force Base in NM, White Sands Missile Range in NM, Fort Carson Army Base in CO, Rocky Mountain Arsenal in CO, Davis-Monthan Air Force Base in AZ, City of Tucson in AZ, Casa Grande National Monument in AZ, and the Nevada Test Site in NV. We intend to collect additional feathers at many of these sites during 2006 and to sample at additional DoD installations once necessary permits are obtained. Below is a breakdown of owls trapped and from whom we collected feathers the 2005 season-

Naval Base Coronado in CA

8 samples- 7 juveniles, 1 adult (female)

Seal Beach Naval Weapons Station in CA

30 samples- 24 juveniles, 6 adults (3 females, 3 males)

Salton Sea National Wildlife Refuge, CA
48 samples- 16 juveniles, 32 adults (30 females, 2 males)

Kirtland Air Force Base in NM
78 samples- 62 juveniles, 16 adults (9 females, 7 males)

Holloman Air Force Base in NM
2 samples- 2 juveniles

White Sands Missile Range in NM
4 samples- 4 juveniles

Davis-Monthan Air Force Base in AZ
229 samples- 199 juveniles, 30 adults (17 females, 13 males)

City of Tucson, AZ
68 samples- 56 juveniles, 12 adults (8 females, 4 males)

Casa Grande National Monument in AZ
326 samples- 244 juveniles, 82 adults (53 females, 29 males)

Fort Carson Army Base in CO
2 samples- 2 juveniles

Rocky Mountain Arsenal in CO
156 samples- 115 juveniles, 41 adults (31 females, 10 males)

Nevada Test Site in NV
22 samples- 21 juveniles, 1 adult (female)

Preparation of feathers

All 973 feathers have been organized and stored in the Biological Sciences East Building at the University of Arizona. This winter, we will begin preparing feathers for stable isotope analysis. Feather preparation includes cleaning and the grinding each individual feather. This will be done by graduate students and work-study students at the University of Arizona.

Analysis of stable isotope ratios in sampled feathers

Stable isotope analysis of prepared feather samples will be conducted at the Stable Isotope Facility in the Department of Geosciences at the University of Arizona. We have met with the lab director and have discussed timing and logistics of feather analysis. Feather samples will be analyzed once collection from the next 2 years of the project are complete.

Table 1. List of Participants in the DoD Legacy funded-project evaluating migratory linkages of Burrowing Owls in western North America.

State	Installation	Contact person	Status
NM	Kirtland AFB	Carol Finley	1
NM	White Sands Missile Range	Trish Griffin	1
NM	Holloman AFB	Carol Finley	1
NM	Cannon AFB	Rick Crow	2
NM/TX	Fort Bliss Army Base	Brian Locke	2
AZ	Davis-Monthan AFB	Mark Ogonowski/Gwen Lisa	1

AZ City of Tucson	Mark Ogonowski	1	
AZ Casa Grande Natl Monument	Mark Ogonowski		1
NV Nevada Test Site	Derek Hall	1	
NV Nellis AFB	Bob Turner	2	
CO Rocky Mountain Arsenal NWR	Noelle Ronan		1
CO Fort Carson Army Base	Mead Klavetter	1	
CO Pinon Canyon Maneuver Site	Mead Klavetter		2
CO Peterson AFB	Mark Mann	2	
CO Schriever AFB	Melissa Trenchik		2
CO Buckley AFB	Floyd Hatch	2	
CA Naval Base Coronado	Tammy Conkle/Tim Burr	1	
CA Edwards AFB	Mark Hagan	2	
CA Camp Pendleton	Jeff Kidd/Pete Bloom		2
CA Fallbrook Naval Weapons Station	Jeff Kidd/Pete Bloom		2
CA Seal Beach Naval Weapons Station	Bob Schallman	1	
CA March AFB	Jeff Lincer	2	
CA Salton Sea NWR	Chris Nadeau	1	
CA 29 Palms	Rhys Evans		3

1=status- 1=currently participating and collection of samples has begun, 2=have agreed participate and will sample in 2006, 3=have owls but request for access was denied none

Disparities:

Cost Savings:

Military Benefit:

This project will provide information to over 15 DOD installations regarding a species of national management concern that occurs on most military installations in the southwestern U.S. This information will help DOD natural resource managers make decisions and implement plans to ensure that conservation and management efforts for this bird do not restrict the military mission on their base.

Project Difficulties:

We have been able to overcome all difficulties thus far.

Future Direction:

We envision continuing to expand this effort to include additional DOD installations throughout the western U.S., as well as other state and federal partners.

Project Partners:

U.S. Department of Energy - in-kind
U.S. Fish and Wildlife Service - monetary and in-kind
U.S. Environmental Protection Agency - monetary
National Park Service - monetary and in-kind
Sonoran Joint Venture - monetary
World Wildlife Fund - monetary
University of Arizona - in-kind
Canadian Wildlife Service - in-kind
University of Alberta - in-kind
National Council of Science and Technology (Mexico) - monetary
T&E, Inc. - monetary
DSCESU - in-kind

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TPOC Signature

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