

Share with Wildlife, 2004-2005 Project List

Biological Research

1. Coexistence between Two Species of Gambusia

Daniella Swenton

UNM

\$4000

Investigation of threats to the federally endangered Pecos Gambusia from closely-related, non-native mosquitofish. This study will help determine the best habitat for eventual reintroduction of this rare native fish which currently known from only two New Mexico localities.

2. Winter Ecology of New Mexican Bats

Keith Geluso

UNM

\$6690

Despite previous notions that New Mexican bat species either migrated or hibernated for the winter, several species appear to be active even on cold nights. This study investigates which species are active, whether they are feeding and/or drinking, how amount of fat stored may affect this, and what role temperature and humidity play. Data may improve year-round management of bat populations and their habitats.

3. Survey of historic colony sites for presence or absence of Gunnison's Prairie Dogs

Bob Luce

Private contractor

Sierra Vista AZ

\$5000

Habitat for this keystone species of the sagebrush ecosystem has been reduced to less than 10% of its historical range. The USFWS has been petitioned to list the Gunnison's prairie dog under the federal Endangered Species Act (ESA).

Survey and mapping of remaining colonies will aid a Conservation Assessment now underway and will provide information critical to managing this "at-risk" mammal.

4. Denning Biology of the Prairie Rattlesnake

Andrew Holycross

Arizona State University

\$4000

Prairie rattlers form large aggregations in winter dens, yet due to the inaccessibility of most snake denning sites and technical difficulties in studying wintering snakes, little is known about communal denning and hibernation. Investigators are using implanted PIT (passive integrated transponder) tags to monitor snake movements and are recording den microclimate data.

5. Ten year data synthesis for Greenthroat Darter and Bigscale Logperch

Stephen Davenport

USFWS

\$2000

Both of these small native fish are listed as threatened in New Mexico. This project will review and synthesize data in order to help determine population status for the fishes and to determine changes in distribution and abundance.

6. A key to the rodents of New Mexico

Jennifer Frey

NMSU

\$7,500

Rodents outrank other mammals in terms of abundance and diversity. In the 30 years since the last comprehensive rodent key was published, many new species have been recognized. Dr. Frey will create an updated and improved guide to the state's most numerous mammals.

7. Influence of Habitat Fragmentation and shrub encroachment on bird communities in Chihuahuan Desert Grasslands

Martha Desmond

NMSU

\$8,800

Migratory grassland birds are experiencing dramatic population declines. Understanding how habitat fragmentation and shrub encroachment into grassland patches influences these bird communities is crucial to effective management.

8. Gray Vireo Population Monitoring in Otero County

Mike Stake

Hawks Aloft, Inc.

\$3500

The gray vireo is a species of growing conservation concern. Bark beetle infestations in its piñon-juniper habitat and nest parasitism by cowbirds. Identification of breeding populations and information on nesting success will facilitate conservation of this songbird.

9. Remote Sensing of Prairie Dogs

Kristine Johnson

Natural Heritage New Mexico

UNM

\$12,000

Prairie dogs are a keystone species in that they create habitat and provide food for other species, and help keep the soil and plant communities healthy. The current range of Gunnison's Prairie Dogs in New Mexico has substantially declined since the early 1900's and a petition has been filed with USFWS to list the animal as threatened. The contractor will survey for Gunnison's Prairie Dogs based on available high-resolution imagery and/or ground-truthing of previous digital aerial photography.

10. Food Habits of Chiricahua and Plains Leopard Frogs

Bruce Christman

Private Contractor

\$5000

The Chiricahua Leopard frog is a federally endangered species that is sympatric with the Plains leopard frog in some areas. Data on which invertebrates these two species eat

may give insight on how they partition the habitat and will contribute to proper timing and methodology of aquatic habitat restoration.

11. Bats and Bridges

Keith Geluso

UNM

\$3000

Man-made structures are used by bats for roosting, hibernating and reproductive purposes. Their importance may be increasing as natural habitat features (caves, crevices etc) are destroyed or disturbed. This study will investigate bridge parameters that may invite bat occupation, which species use bridges and for what purpose.

12. Levels and Patterns of Morphological and Molecular Variation in the Zuni Bluehead Sucker

Thomas E. Dowling, Anthony Gill and Paul C. Marsh

Arizona State University

\$22,600 (\$12,600 SwW 2004-2005, \$10,000 Endangered Species Recovery Contract 2005-2006)

Habitat/population restoration

13. Re-establishment of Gunnison's Prairie Dogs to the Sevilleta NWR (\$5000)

Mike Friggens

UNM

\$5000

Using animals from populations in areas that will be destroyed by development, this contractor will restore Gunnison's Prairie Dogs to their historic range on the Sevilleta NWR, evaluate the response of current animal and plant populations to the reintroduction and incorporate these data into the LTER (Long term ecological Research) program at the refuge.

Conservation Education

14. Schoolyard Habitat Education Program

Josephine Graf

Private contractor

\$5000

Urban sprawl and development in New Mexico has resulted in habitat loss and declines in a number of animal populations. Contractor will show teachers and students how to construct/restore natural habitats in their schoolyards and how to use the Project Wild curriculum to integrate habitat activities into the standard learning experience.

15. Schoolyard Habitat Restoration Grant County

Ken Barragan and Patricia Hurley

Randall Davey Audubon Center

\$2500

This project will help teachers and students restore natural habitat at a Silver City school using the activity to highlight the area's rich natural heritage and the need to restore habitats so that wildlife will return and thrive.

16-17. Developing “Wildlife Notes”

Jane Chodosh
Private Contractor
Santa Fe NM
\$1500

and

Audrey Walker
Santa Fe Public Schools
\$1500

New Mexico Game and Fish produces a series of short information sheets covering basic natural history of the state's wildlife species. These are provided to the public in response to queries and used in educational programs. Under these two grants, old accounts will be revised and new species profiles developed.

18. Northeast New Mexico Education Outreach

Ken Barragan and Eileen Everett
Audubon New Mexico
\$6000

These educators will present their “Birds for a Purpose” program to schools in northern New Mexico communities using Maxwell NWR as a field teaching site. Science and literacy components for state educational standards are incorporated into this project which teaches students about bird ecology and conservation.

19. Summer Wildlife Education in State Parks

Steve Cary
Energy, Minerals and Natural Resources Department
State Parks Division
\$4500

Funds will enhance New Mexico State Parks education efforts on wildlife conservation in general and threatened and endangered species in particular.

Rehabilitation

20-21 Wildlife Rehabilitation and Education

Penny Elliston
Wildlife Rescue, Inc
\$3000

and

Pam Everson
The Wildlife Center, Inc
\$2000

These not-for-profit, volunteer organizations care for thousands of injured wildlife species yearly and provide educational programs to the public about human/wildlife coexistence. Funding will be used for animal food, medicine and educational materials.