



### FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

ARIZONA GAME AND FISH DEPARTMENT  
5000 W. CAREFREE HIGHWAY  
PHOENIX, AZ 85086-5000  
U.S.A.

2. AUTHORITY-STATUTES  
16 USC 1539(a)  
16 USC 1533(d)

REGULATIONS  
50 CFR 17.22 & 17.32  
50 CFR 17.62

50 CFR 13

3. NUMBER  
**TE821577-2** AMENDMENT

4. RENEWABLE

YES  
 NO

5. MAY COPY

YES  
 NO

6. EFFECTIVE

01/01/2011

7. EXPIRES

12/31/2011

8. NAME AND TITLE OF PRINCIPAL OFFICER (if #1 is a business)

LARRY D. VOYLES  
DIRECTOR

9. TYPE OF PERMIT

NATIVE ENDANGERED & THREATENED SP. RECOVERY - E & T  
WILDLIFE; E PLANTS

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

Arizona

11. CONDITIONS AND AUTHORIZATIONS:

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

D. Portions of your permit have been amended. The terms and conditions set forth in the previous permit dated July 18, 2007, and any subsequent amendments or renewals are hereby superseded by those sections changed by this amendment. Those portions of the previous permit that are not amended remain the same. Specifically, the bald eagle section has not been amended and the terms and conditions and coverage for that species provided by the original permit still exist until such time as they are superseded when the U.S. Fish and Wildlife Service (USFWS) issues an appropriate Bald and Golden Eagle Act permit or this permit is renewed.

E. Acceptance of this permit serves as evidence that the Permittee agrees to abide by the "General Conditions for Native Endangered and Threatened Wildlife Species Permits" (copy attached).

F. Acceptance of this permit serves as evidence that the Permittee agrees to abide by all conditions stated. Terms and conditions of this permit are inclusive. Any activity not specifically permitted is prohibited. Note: Recommendations are also provided by the USFWS as part of the species terms and conditions below.

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ANNUAL REPORT DUE: 12/15

ISSUED BY

TITLE

ASSISTANT REGIONAL DIRECTOR

DATE

12/30/2010

G. Disposal, transplant, or release of live wildlife/plants or plant parts taken or held under the terms of this permit, unless specifically authorized, requires prior written approval by the species lead USFWS office. You must dispose of dead wildlife/plants or plant parts as specified by the terms of this permit. If terms are not specified, they can be destroyed or transferred to a public institution. A copy of the permit and this letter, along with a cover letter referencing your permit number, must accompany each shipment and must be retained with the specimens. The cover letter must specify who will receive the specimens and the numbers involved. A copy of the letter must be furnished to the following addresses:

U.S. Fish and Wildlife Service  
Regional Office  
Division of Endangered Species - Section 10 Permits  
P.O. Box 1306 / Room 4102  
Albuquerque, New Mexico 87103  
505/248-6654 or 505/248-6920

Arizona Ecological Services Field Office  
2321 W. Royal Palm Road, Suite 103  
Phoenix, Arizona 85021-4951  
602/242-0210

Arizona Fisheries Resource Office - Flagstaff  
323 N. Leroux, Suite 401  
Flagstaff, Arizona 86001  
928/226-1289

A copy should also be retained in your files. Transfers deviating from the above conditions require prior written approval by the USFWS.

H. An annual report of the activities conducted (including field data forms, if appropriate) under authority of this permit must be submitted to the Arizona Ecological Services Field Office (Arizona ESFO) stated above. Reporting shall be accomplished by including the relevant information in the annual Section 6 (Federal Aid Project E-5) Performance Report submitted by the Arizona Game and Fish Department (AGFD) to the USFWS Region 2 Office. An electronic version of the annual report must be submitted to the Division of Endangered Species - Permits to the following electronic mailing address: [FW2\\_TE\\_Permits@fws.gov](mailto:FW2_TE_Permits@fws.gov) on or before December 15 of each year (unless otherwise stated). Failure to submit a report, or failure to submit an adequate report, is a violation of the permit and is cause for suspension or revocation of the permit. A violation may disqualify a person from receiving or exercising the privileges of a permit as long as the deficiency exists.

I. The annual report will include citations of any unpublished or published reports generated by the permitted studies or projects, and other public-accessible data useful for the conservation or recovery of the species. The report must also be submitted to the Arizona ESFO with updates of computerized (Heritage Data Management System; HDMS) locality information annually. These updates shall include status information gathered pursuant to AGFD's Section 6 Annual Work Plans.

***We request if an amendment or renewal request is also needed at the time your report is due, please make sure such requests are submitted under separate cover and not included with your annual reports.***

J. Larry D. Voyles and employees of AGFD, and Designated Agents of the AGFD (Permittees) are granted the same authorities under this permit for any otherwise prohibited activities under the Endangered Species Act (Act) and their implementing regulations, with the exception of the Mohave desert tortoise, see below (Item BB.). Prior to a Designated Agent conducting activities pursuant to this permit, they must possess a copy of a letter which the AGFD submits to the USFWS, Regional Office - Division of Endangered Species, stating official authorization

conveyed to the Designated Agent(s). This letter will include a brief description of the particular species' proposed project/activity, dates, localities, and the name(s) of the Designated Agent(s). In addition, the USFWS recommends the AGFD coordinate with the Arizona ESFO species lead prior to the Designated Agent(s) commencing activities.

K. Should any mortality occur to an individual of the species during permitted activities (above the amount that may be specified below), all operations must immediately cease and you are required to contact the Arizona ESFO above within 24 hours.

L. Please note that this permit is limited to the activities and species listed below and is functional only when used in combination with valid state authority for such activities. When working outside the State of Arizona, or its jurisdictional waters, the Permittees will need to be provided authorization from the appropriate state wildlife agency either through being designated as an agent under that state wildlife agency's Section 6 Cooperative Agreement, any necessary permits, a Memorandum of Understanding (MOU), or other authorizing documents.

M. Activities involving migratory birds and their parts (see 50 CFR Part 10, Migratory Bird Treaty Act (16 USC 703- et seq) and implementing Regulations at §21) or bald and golden eagles (see Bald and Golden Eagle Protection Act (16 USC 668a) and §22), may require additional permits or authorizations. Please contact the respective Regional Migratory Bird Permit Office for additional information at: <http://www.fws.gov>.

N. This permit does not, either directly or by implication, allow or grant right of trespass. Permission to enter lands must be obtained in writing from the landowner or land managing agency.

O. If conducting research on a National Wildlife Refuge, you must obtain a refuge special use permit. The refuge permit will need to be used in conjunction with this permit and a valid state permit in order to meet all applicable laws.

P. The AGFD is requested to furnish the USFWS, Division of Endangered Species - Section 10 Permits (address above) with a copy of the permit, or other authorization, issued to you by the Indian Tribal Government(s) to conduct research and recovery activities on Tribal lands. If this is in the form of a permit, letter, or MOU, a copy of this authorization should be on file with the USFWS Regional Office within 90 days of initiation of the activity.

Q. All Permittees must have a copy of this permit in their possession while conducting the authorized activities.

R. A request for **renewal**, if appropriate, must be submitted to the Division of Endangered Species - Section 10 Permits (at the above address) at least 30 days prior to the expiration date of the current permit. Any person holding a valid, renewable permit who submits a written request (application form 3-200-55) for renewal at least 30 days prior to the expiration date, may continue to conduct those activities under the expired permit while the USFWS takes action on the renewal request.

All requests to renew, amend, or obtain a new permit will require submittal of an application. The application may be obtained by going to the following website: <http://forms.fws.gov/3-200-55.pdf>. Please submit this application and a cover letter describing your request to the attention of the Section 10 Coordinator located in the Regional Office. The address is listed under condition G above. If you wish to confirm your application request was received, please send your application via certified mail or Federal Express, or provide an e-mail address for electronic notification.

S. Permittees, identified pursuant to condition J above, are hereby authorized through December 31, 2011, pursuant to USFWS Endangered Species Permit TE821577-1 and section 10(a)(1)(A) of the Act, to conduct the specific activities listed in this permit.

1. The states have specific authority for management of listed species, in part, manifested through Section 6 Cooperative Agreements, which authorize management activities for listed species pursuant to §§17.21 and 17.31 through the Section 6 Cooperative Agreement (subsection 2, parts b, c, and d, which are repeated below) between the USFWS and the AGFD:

a. **Endangered Species** (§17.21(c)(5)): Any employee or agent of the AGFD who is designated by that agency for such purposes, may, when acting in the course of his official duties, take any federally-listed endangered fish or wildlife for conservation purposes that are consistent with the purposes of the Act and their Section 6 Conservation Agreement, or any project agreement (approved annual work plan), provided that such taking is not reasonably anticipated to result in:

(i) the death or permanent disabling of the specimen;

(ii) the removal of the specimen from the State of Arizona;

(iii) the introduction of the specimen or any of its progeny into an area beyond the historical range of the species; or

(iv) the holding of the specimen in captivity for a period of more than 45 consecutive days.

b. **Threatened Species** (§17.31(b)): Any employee or agent of the AGFD who is designated by that agency for such purposes, may, when acting in the course of his official duties, take any federally-listed threatened fish or wildlife for conservation purposes that are consistent with the purposes of the Act and their Section 6 Conservation Agreement, or any project agreement (approved annual work plan).

c. **Emergency Provisions** (§§17.21(c)(3) and 17.31(a)): Any employee or agent of the AGFD who is designated by that agency for such purposes, may, when acting in the course of his official duties, take federally-listed endangered or threatened fish or wildlife without a permit if such action is necessary to:

(i) aid a sick, injured, or orphaned specimen; or

(ii) dispose of a dead specimen; or

(iii) salvage a dead specimen which may be useful for scientific study; or

(iv) remove specimens which constitute a demonstrable, but non-immediate threat to human safety, provided that the taking is done in a humane manner; the taking may involve killing or injuring only if it has not been reasonably possible to eliminate such threat by live capturing and releasing the specimen unharmed, in a remote area; or

(v) defend his own life or the lives of others.

Note: Any taking pursuant to term and condition S.1.c above, must be reported in writing within 5 days to the appropriate USFWS species lead (attached). The specimen may only be retained, disposed of, or salvaged in accordance with directions from the USFWS.

2. The species and activities authorized pursuant to the Section 6 Conservation Agreement between the USFWS and AGFD are identified in separate annual work plans on file with the USFWS, Albuquerque Regional Office. AGFD's annual work plan (beginning with Project E5 Work Plan, Segment 21, August 20, 2009) provides information on jobs that address conservation needs of threatened, endangered, and candidate species, as well as other species of concern. Activities to be carried out include survey, monitoring, research,

and other site and species management functions, as well as administrative, planning, and evaluation functions.

3. Administrative and planning functions for AGFD's annual work plan will proceed in full compliance with the National Environmental Policy Act (NEPA), and where appropriate, the Act. Documentation under NEPA, and consultation under the Act, will be completed for each planned action, where appropriate, prior to implementation.
4. Jobs that lack sufficient funding directly pursuant to the E5 project will be carried out as funding from other sources permit. Other known and potential sources of funding for work under the E5 work plan include, but are not limited to: Game and Fish license revenues; voluntary Nongame Wildlife Checkoff contributions; Arizona Heritage Funds (State Lottery revenues); Federal Aid in Sportfish and Wildlife Restoration funds (primarily Federal Aid Projects F-7-M, F-W-11, W-53-M, W-78-R, W-95-M); State Wildlife Grants, Wildlife Conservation Fund, Partnerships for Wildlife Program; contracts and other agreements with state agencies, federal agencies, and private partners (e.g., conservation organizations, private industry); and voluntary private donations.
5. Take is authorized under the circumstances set forth in §17.21(c)(5)(i-iv) for endangered species listed under the Species Specific Terms and Conditions below and within the scope of a USFWS-approved project description and the AGFD's Section 6 Cooperative Agreement. Take authorized under this permit is in addition to take authorized under the §§ 17.21(c)(3) and (5) through the AGFD's Section 6 Cooperative Agreement.
6. Pursuant to Section 10(a)(1)(A) of the Act and in addition to activities that fall within those identified in the Section 6 agreement, you and your employees or other agents under their direct supervision are authorized to conduct the following specific activities annually:

## **SPECIES SPECIFIC CONDITIONS**

### **AQUATIC SPECIES**

All aquatic field work shall conform to amphibian disease prevention protocols as described in the Recovery Plans for the Sonoran tiger salamander and Chiricahua leopard frog, as appropriate. Equipment would either be disinfected between uses at different sites, or air dried. Procedures shall also be implemented to avoid transfer of non-native invasive aquatic species, as appropriate.

### **INVERTEBRATES**

T. Kanab ambersnail (*Oxyloma haydeni kanabensis*). The Permittees are authorized for scientific research and recovery purposes to take no more than 25 voucher specimens from any wild or translocated populations and any newly discovered population and to collect, during otherwise authorized activities, and retain unlimited numbers of dead specimens for future scientific research.

The Permittees are further authorized to hold, for recovery and on-site refugia purposes, and maintain, for future scientific research and/or recovery actions, unlimited numbers of the above listed invertebrate species. AGFD may designate other facilities to hold, for recovery and on-site refugia purposes, and maintain, for future scientific research and/or recovery actions, unlimited numbers of the above listed invertebrate species. Administrative files on each such refugium population and all pertinent specimen disposal or stocking records will be maintained by AGFD and reported in the Section 6 project performance reports.

## FISH

U. The Permittees are authorized during annual scientific research and recovery activities (e.g., routine sampling and monitoring programs) to unintentionally cause mortality, up to the number of wild caught specimens listed within the brackets [ ] below. Coordination with USFWS species leads will be made to ensure that unintentional mortality from small wild populations will not exceed greater than 10% of the estimated number of individuals within those populations. If unintentional mortality is expected to exceed the limits below or is greater than 10% of the estimated number of individuals within those populations, contact the USFWS species lead as soon as possible.

A population is a reproductively isolated group of animals that interbreed within a discrete aquatic habitat.

Bonytail chub (*Gila elegans*) [ 5 ]  
Humpback chub (*G. cypha*) [ 200 ]  
Gila chub (*G. intermedia*) [ 500 ]  
Yaqui chub (*G. purpurea*) [ 100 ]  
Virgin River chub (*G. seminuda*) [ 20 ]  
Razorback sucker (*Xyrauchen texanus*) [ 100 ]  
Desert pupfish (*Cyprinodon macularius*) [ 5000 ]  
Quitobaquito pupfish (*C. [macularius] eremus*) [ 500 ]  
Colorado pikeminnow (*Ptychocheilus lucius*) [ 200 ]  
Gila topminnow (incl. Yaqui) (*Poeciliopsis occidentalis*) [ 10000 ]  
Woundfin (*Plagopterus argentissimus*) [ 125 ]

Any intentional take of humpback chub for otolith research shall be coordinated ahead of time with AZFRO and the University of Florida to prevent oversampling.

V. In addition, the Permittees are authorized to use unlimited numbers of captively-raised endangered fish for future scientific research, recovery purposes, and for implementation of approved Safe Harbor Agreements and Habitat Conservation Plans.

The Permittees are further authorized to hold, for recovery and on-site refugia purposes, and maintain, for future scientific research and/or recovery actions, unlimited numbers of the above listed captively-raised fish species per USFWS reviewed Section 6 plans. In cooperation with the USFWS, the AGFD may designate other facilities to hold, for recovery and on-site refugia purposes, and maintain, for future scientific research and/or recovery actions, unlimited numbers of the above listed fish species. Administrative files on each such refugium population and all pertinent specimen disposal or stocking records will be maintained by AGFD and reported to the USFWS in the section 6 project performance reports.

## EXEMPT FISHES

W. In accordance with the provisions of §§17.31 and 17.44 Special Rules--fishes, the following fish species are listed as threatened with special rules and do not need to be covered under a USFWS permit; however, individuals taking these species must possess a valid state permit and must adhere to all applicable state fish and wildlife conservation laws and regulations:

Apache trout (*Oncorhynchus apache*)  
Gila trout (*Oncorhynchus gilae*)  
Beautiful shiner (*Cyprinella formosa*)  
Spikedace (*Meda fulgida*)  
Loach minnow (*Tiaroga cobitis*)

Little Colorado spinedace (*Lepidomeda vittata*)  
Yaqui catfish (*Ictalurus pricei*)  
Sonora chub (*Gila ditaenia*)

The USFWS requests that you contact the USFWS species lead if incidental take occurs or if fishes are removed for recovery purposes (e.g., stocking approved sites, refugia), and send the USFWS copies of all permits issued and annual permit reports submitted on the above species. This information is needed by the USFWS to conduct section 7 consultations and five-year status reviews.

## AMPHIBIANS

X. **Sonoran tiger salamander** (*Ambystoma mavortium stebbinsi*). The Permittees are authorized for scientific research and recovery purposes to survey and take no more than 10 voucher specimen from the wild to document newly discovered populations, and to take no more than 30 specimens/egg masses for contaminants and/or disease analyses and necropsy purposes, and/or genetic analysis.

Y. **Chiricahua leopard frog** (*Lithobates* [Rana] *chiricahuensis*). Completion of a Chiricahua leopard frog survey training seminar or 40 hours of fieldwork under the mentorship of a qualified individual is required of Designated Agents conducting scientific research, surveys, and recovery activities for Chiricahua leopard frog. These surveys shall be conducted in accordance with the "Chiricahua leopard frog survey protocol" developed by AGFD, New Mexico Department of Game and Fish, and USFWS.

1. The Permittees are authorized for scientific research and recovery purposes to take no more than 2 voucher specimens from the wild to document newly discovered populations; to take no more than 10 specimens per population for genetics, contaminants, and/or disease analyses and necropsy purposes (20 specimens per population for populations containing >100 adult frogs); and to take unlimited moribund frogs for scientific research purposes.
2. The Permittees are further authorized to hold, for recovery (i.e., stocking or re-stocking approved sites) and on-site refugium purposes, and maintain, for future scientific research and/or recovery actions, unlimited numbers of frogs, tadpoles/larval forms, and eggs. The AGFD may designate other facilities to hold, for recovery (i.e., stocking or re-stocking approved sites) and on-site refugium purposes, and maintain, for future scientific research and/or recovery actions, unlimited numbers of frogs, tadpoles/larval forms, or eggs. Administrative files on each such refugium population and all pertinent specimen disposal or stocking records will be maintained by AGFD and reported in the section 6 project performance reports.

Z. To prevent inadvertent movement of disease or parasitic organisms among sites when conducting surveys for amphibians, research and management activities shall conform to the Declining Amphibians Population Task Force Fieldwork Code of Practice ([www.npwrc.usgs.gov/narcam/techinfo/daptf.htm](http://www.npwrc.usgs.gov/narcam/techinfo/daptf.htm)), with the exception that 10% bleach solution or quaternary ammonia (Quat 128) should be used to clean equipment rather than 70% ethanol.

## REPTILES

AA. **New Mexican Ridge-nosed Rattlesnake** (*Crotalus willardi obscurus*). The Permittees are authorized for scientific research and recovery purposes to take no more than one voucher specimen from the wild to document a newly discovered population.

BB. **Desert tortoise** (*Gopherus agassizii*), Mohave population. The Permittees are authorized for take of no more than 50 wild specimens collectively, on an annual basis, for contaminants, disease, and/or genetic analyses; provided that the Designated Agents qualify as Authorized Biologists or a Biological Monitor. Any Designated Agent is authorized to remove/salvage unlimited numbers of carcasses from the wild for necropsy and retention

purposes and report to the Arizona ESFO. AGFD personnel who anticipate involvement in the taking of Mohave desert tortoise over the term of this permit must contact the Arizona ESFO for individual approval as either an Authorized Biologist or a Biological Monitor.

## **BIRDS**

CC. **Bald Eagle** (*Haliaeetus leucocephalus*). The Permittees are authorized to collect unlimited numbers of feathers, eggshells, addled eggs, and dead nestlings for contaminants analyses and necropsy purposes in collaboration with the Arizona ESFO. Feathers and eggshell fragments may be collected as encountered. Intact eggs and dead nestlings may be collected only after a nest has been determined to be inactive (i.e., the nest has been abandoned or young have fledged with the addled egg(s) and/or dead nestling(s) remaining in the nest). All feathers, eggshells, intact eggs, and dead nestlings will be analyzed and disposed of in accordance with guidance from the Arizona ESFO.

DD. **Southwestern Willow Flycatcher** (*Empidonax traillii extimus*). The Permittees are authorized to collect no more than 60 willow flycatcher nests per year to study abundance and effects of ectoparasites on flycatcher nestlings. Nests may only be taken after the clutch has failed or the young have fledged. It is understood that these nests will be destroyed in the process of this study. However, if any remain sufficiently intact after extracting study materials, you must offer them to appropriate public museums before destroying them. The Permittees are also authorized to collect unlimited numbers of feathers, eggshells, addled eggs, dead nestlings for use in contaminants studies being conducted in collaboration with the Arizona ESFO. Eggshell fragments may be collected as encountered. Intact eggs and dead nestlings may be collected only after a nest has been determined to be inactive (i.e., the nest has been abandoned or young have fledged with the addled egg(s) and/or dead nestling(s) remaining in the nest). All feathers, eggshells, intact eggs, and dead nestlings will be analyzed and disposed of in accordance with the contaminants project study plan approved by the Arizona ESFO and AGFD.

## **MAMMALS**

EE. **Mexican long-nosed bat** (*Leptonycteris nivalis*). The Permittees are authorized for scientific research and recovery purposes to take no more than 10 voucher specimens from each newly or recently discovered population or subpopulation for documentation purposes and to conduct genetic analyses. Individuals not needed as vouchers will be marked and released at the point of capture. These authorizations are contingent on the following conditions being implemented to prevent the spread of White Nose Syndrome (WNS):

1. To prevent the spread of WNS, disinfect bat processing equipment between **capture sites** (i.e., wipe down calipers/ruler, processing table, scales, light box, and other surfaces that will come in contact with bats), always use clean holding bags for each individual bat on a survey night and wash bags between use. Use quaternary disinfectant with a minimum of 0.3% quaternary ammonium compound - 1:128 dilution or 1oz:1 gallon water (e.g. Lysol IC Quaternary Disinfectant Cleaner). Disposable gloves should be worn and disposed of properly after the handling of each individual bat.
2. For surveillance, we request that AGFD and its designated agents be familiar with the wing damage index used for characterizing WNS. Wing damage characteristic of WNS is described as "de-pigmentation in the shape of bull's eye-like markings" on bat wings. Please use digital photos to document any suspicious lesions or other abnormalities on bats and send to the AGFD Bat Management Coordinator ([amcintire@azgfd.gov](mailto:amcintire@azgfd.gov)).
3. If you travel from the west to visit eastern roost sites, particularly caves and mines, take disposable clothing, footwear, and gear that you can discard in the east before returning west to avoid potential transportation of contaminants. Also, avoid contamination of your vehicle by changing out of clothes used in eastern sites and disposing of or sealing them prior to getting in your vehicle.

4. Do not enter caves or mines with gear or clothing from a WNS affected area. When entering sites that are used or have the potential to be used as hibernacula: to facilitate footwear decontamination, use rubber boots; remove all soil and organic material from boots, clothing and equipment; wash all clothing in hot cycle and dry in dryer; and rinse and disinfect footwear using quaternary ammonium compound and air dry.
5. If entering more than one roost per day, please use disposable coveralls (preferably Tyvex® coveralls) and dispose of properly after each roost, or change clothes and wash contaminated clothing, as described above, prior to wearing in another roost. Disinfect, as described above, all headlamps, gas meters, cameras, nets, etc. used when entering a roost prior to entering another roost.

FF. **Hualapai Mexican vole** (*Microtus montanus* [=mexicanus] *hualpaiensis*). The Permittees are authorized for scientific research and recovery purposes to take no more than 10 voucher specimens from each population or subpopulation (including those in the Hualapai Mountains) for documentation purposes and to conduct genetic analyses. Individuals not needed as vouchers will be marked and released at the point of capture. These authorities are contingent upon the following condition:

1. The number of lethal traps used at a population or subpopulation site shall not exceed the number of voucher specimens that is authorized from that site. If there are 10 voucher specimens that can be taken, only 10 snap traps or museum specials may be used. If four (4) voucher specimens have been collected, a maximum number of six (6) lethal traps can be used at the site. All other traps need to be non-lethal to minimize the potential to exceed authorized take limits.

#### **ENVIRONMENTAL EDUCATION AND OUTREACH**

GG. For the purposes of science education and the promotion of natural resource awareness, you are encouraged to seek out collaborative project opportunities with the public sector in order to instill awareness and appreciation for threatened and endangered wildlife. Projects should state a conservation message and identify species as threatened or endangered under the Act. Projects should also state the habitat, ecological role, and conservation needs of the affected species, such as threats and human caused changes to the environment. The USFWS recommends that you discuss and/or coordinate such activities with the Arizona ESFO.

#### **June 2010 - AMENDMENT**

#### **HH. Jaguar** (*Panthera onca*).

1. The Permittees are authorized to intentionally take jaguars by the Emergency Provisions set forth at §17.21(c) (3) (see term and condition S.1.c, above) and, contingent upon the following terms and conditions, by this permit in conjunction with section 6 of the Act and §17.21(c)(5) (see term and condition S.1.a, above):
  - a. USFWS approval of a project description within the scope of the AGFD's Section 6 Cooperative Agreement that provides: (i) the specific jaguar conservation purpose(s) to be achieved through capture, release, and post-release monitoring and any other study approaches included in the project description, including identification of the data to be derived from each aspect of the study and specific and/or overall conservation benefits to be gained by application of that information; (e.g. identification of habitats used or potentially valuable as movement corridors or landscape linkages); and (ii) a detailed description of relevant biological and logistical considerations for the proposed project, including but not limited to: methods of capture; environmental and logistical conditions under which capture would and would not be attempted; procedures for monitoring open capture-sets; pre- and post-release handling and treatment procedures; information on drugs and drug dosages to be used on any captured jaguar; monitoring of pre- and post-release animal recovery from capture and handling; veterinary support pre- and post-release; intra- and inter-agency coordination procedures for capture efforts, pre-release handling, release, and post-release monitoring; and an assessment of the potential benefits of capture-release-monitoring (e.g. radio

and/or GPS-collared tracking) and other methods of studying free-ranging jaguars (e.g. remote trail cameras, hair-snares, scat studies) versus any risk of harm to the jaguar from alternative methods of capture-release-monitoring (said risk assessment should include a full evaluation of all information available on captures and attempted captures of jaguars in Mexico [Sonora and/or Chihuahua] and the United States [Arizona] since 2000.

- b. If such project description is developed, prior to submittal for approval by USFWS the AGFD shall have the draft document(s) reviewed by the USFWS Jaguar Recovery Team, the AZ-NM Jaguar Conservation Team (JAGCT; including its Scientific Advisory Group), the Taxon Advisory Group overseeing the Jaguar Species Survival Plan, and (as appropriate) other wildlife and veterinary professionals. The USFWS may, as appropriate, elect to coordinate further peer-review of the project description by appropriate wildlife and veterinary professionals to better inform its approval decision. If such project description is approved by USFWS, the AGFD and USFWS shall incorporate the project into the AGFD's Section 6 Annual Work Plan as necessary to authorize all aspects of planned intentional capture and study of jaguar.
2. The Permittees are authorized to collect genetic or biological samples from jaguars through use of noninvasive techniques, such as use of hair snares (note: collection of scat from free-ranging jaguars is not prohibited under the Act and does not require federal authorization; however, use of scat to take, including but not limited to "harass," a jaguar does require federal authorization, as is addressed in term and condition HH.3, below). In the event of a jaguar being handled pursuant to §17.21(c)(3)(see term and condition S.1.c, above), or as a result of unintentional capture or authorized intentional capture, the Permittees are authorized to collect urine, scat, hair, oral and rectal swabs, and other noninvasive samples that may be useful in furthering recovery of the species.
  3. The Permittees are authorized to use jaguar-derived scents, lures, or baits (i.e., substances containing hormones, pheromones, scat, urine, or other parts from or products of a jaguar) as attractants on or near hair snares and remote (trail) cameras to detect presence of a jaguar, including efforts to confirm a reported sighting of a jaguar. The following term and condition applies: to minimize the potential for unintentional capture of a jaguar, these scents, lures, or baits shall be used consistent with term and condition HH.4.b, below.
  4. The Permittees, during the normal course of their duties, may unintentionally capture a jaguar. If unintended capture occurs, the Permittees are authorized, for the well-being of the jaguar, to use chemical and physical restraints, remove the animal from the capture device, and release the animal on-site as soon as it is deemed safe for the animal. The following terms and conditions apply to the AGFD's efforts to minimize the likelihood and the impact of unintended capture in an area defined to include all confirmed occurrences of the species since 1971, referenced herein known as the Area of Capture Concern (AOCC):
    - a. The AOCC is the portion of Arizona that is south of I-10 from the Arizona/New Mexico border to its junction with I-8 and east of the eastern boundary of the Tohono O'odham Indian Reservation and (at its northerly end) BIA Roadway 15 north to I-8 (Attachment A.).
    - b. The Permittees shall not use jaguar-derived scents, lures, or baits (i.e. substances containing hormones, pheromones, scat, urine, or other parts from or products of a jaguar) as attractants in conjunction with any method of wildlife capture (i.e. any capture device) employed anywhere in Arizona unless prior approval is secured from USFWS pursuant to term and condition HH.1.b; above.
    - c. Within 24 hrs of AGFD confirmation of a jaguar occurrence within Arizona or AGFD acceptance of an occurrence confirmed by another entity, the AGFD shall report the occurrence to the appropriate AGFD Phoenix and Regional staff, the USFWS Arizona ESFO Supervisor, the USDA-APHIS Wildlife Services State Director, the appropriate BLM District Manager, and the appropriate USFS Forest Supervisor.
    - d. Within the AOCC, when the Permittees are using traps, snares, or other capture devices that are of sufficient size to capture a jaguar: (i) the sets shall be placed, shaded and monitored as necessary to provide reasonable protection against hypo and hyperthermia of a captured jaguar; and (ii) at least one person who

is monitoring the capture device must be AGFD-certified in the handling procedures referenced in term and condition HH.5, below.

- e. Snares set by the Permittees within the AOCC for lions, bears, or wolves shall be set to minimize the likelihood of catching a jaguar and to minimize the risk of entanglement if a jaguar is captured unintentionally.
  - f. Prior to conducting activities within the AOCC that could accidentally capture a jaguar, the AGFD shall submit to USFWS for approval a capture and handling protocol to further reduce the risk of harm to a jaguar that is captured accidentally. The revised protocol shall, at a minimum, address: (i) the methods and means of restraint, sedation, estimating age, weight, reproductive status, and overall physical condition; (ii) methods and means of taking biological samples for off-site analysis (e.g. hair, blood, and swab samples); (iii) procedures for post-sedation recovery, release, and post-release monitoring for sufficient time to ascertain whether the animal has fully recovered from handling prior to release; and (iv) guidelines for emplacing a radio telemetry, satellite tracking, or GPS collar. Prior to submitting the protocol to USFWS for approval, the AGFD shall solicit review by the USFWS Jaguar Recovery Team (if established within this timeframe), the JAGCT; including its Scientific Advisory Group, and the Taxon Advisory Group overseeing the Jaguar Species Survival Plan (and other wildlife and veterinary professionals, as appropriate). The USFWS may, as appropriate, elect to coordinate further peer-review of the revised protocol by appropriate wildlife and veterinary professionals to better inform its approval decision. If a revised protocol is approved by USFWS, the new protocol will supersede any existing handling protocol incorporated by reference into this permit (see term and condition HH.5.d, below).
5. The Permittees are authorized to immobilize and release at the site of capture any jaguar that is captured pursuant to §17.21(c)(5) or the Section 6 Cooperative Agreement, §17.21(c)(3), or under this permit. The following terms and conditions apply to AGFD's efforts to minimize the effects that immobilization and release might have on a captured jaguar:
- a. Once all public safety and all immediate safety and health needs for the animal have been addressed, the Permittee in charge at the capture site shall attempt to notify the AGFD's 24-hr Radio Room.
  - b. The AGFD shall notify the USFWS Arizona ESFO Supervisor within 24 hours of the capture and release of a jaguar.
  - c. The Permittee in charge at the capture site shall proceed with handling and releasing the jaguar in accordance with applicable handling procedures as described below.
  - d. Unless superseded by a later version, as stipulated at term and condition HH.4.f above, the approved handling protocols for any captured jaguar shall be those approved in 2007 by the JAGCT.
  - e. If a captured jaguar is sedated for release from a restraining device, while it is under sedation data may be recorded on estimated age, sex, reproductive status, and weight, unless collecting such information would put the health and well being of the animal at risk. A discrete ear tag may be affixed. A radio telemetry, satellite tracking, or GPS collar may also be placed on the sedated animal but the collar shall not exceed 5% of the animal's estimated body weight. The decision to place a collar shall be based on the health and age of the animal. Photographs of all sides of the animal (including forehead, tail, left side, right side, and spine area) shall, if possible, be taken to aid in future field identification based on color and pelt patterning.
  - f. The AGFD shall maintain a list of veterinarians qualified to provide field support (at least via telephone) in the event a jaguar is captured. The Permittees shall contact one of the listed veterinarians, if veterinary support proves necessary and time and logistics allow such support to be used. Given the limited number of veterinarians in Arizona with jaguar experience, the list should also include veterinarians who have experience treating (handling) African lions, tigers, or (less preferably) mountain lions or black or brown bears. The list of consulting veterinarians shall be updated at least annually and a copy shall be available through the AGFD's 24-hr Radio Room. A copy of the list shall be carried in the field by Permittees who do not have access to the 24-hr Radio Room if they are using traps, snares, or other implements in the AOCC that are of sufficient size to capture a jaguar.
  - g. Release of a captured jaguar may be delayed only if one or both of the following conditions exist: (i) delay is necessary to provide veterinary care for life-threatening or significantly debilitating injuries or disease that are noted during pre-release assessment of the animal's condition; and (ii) prevailing environmental

conditions make delayed release a lower threat to survival of the jaguar than would be posed by immediate release on site.

Note: Terms and conditions HH.5.a-g above are intended to minimize the effects of immobilization and release and should, to the maximum extent practicable, be applied to any jaguar capture and release activities conducted pursuant to term and condition S.1.c above (i.e. Emergency Provisions set forth at §17.21(c)(3)).

6. In accordance with §17.21(c)(3) and the AGFD's Section 6 Cooperative Agreement, the Permittees are authorized to hold and transport individual jaguars that require prolonged veterinary assistance related to apparent health issues. Treatment of such animals shall be provided or supervised by licensed veterinarians or certified veterinary staff unless exigent circumstances require a wildlife professional to provide treatment to restrain or stabilize the animal while seeking veterinary care or support.
7. The Permittees are authorized to take jaguars as follows:
  - a. Unlimited take, in the form of harass, resulting from activities authorized in this permit or approved in the AGFD's Section 6 Annual Work Plan is authorized in §17.21(c)(5) through the AGFD's Section 6 Cooperative Agreement; this includes noninvasive sampling techniques (as discussed in terms and conditions HH.2 and HH.3 of this Permit), surveys, and monitoring.
  - b. Incidental take, in the form of mortality and harm (injury), is authorized under this permit not to exceed one jaguar: (i) through an unintended capture, immobilization, and release; or (ii) through a planned capture pursuant to term and condition HH.1, above.
8. Take of jaguar consistent with §17.21(c)(5) (see term and condition S.1.a, above) or pursuant to the Emergency Provisions in §17.21(c)(3) and the AGFD's Section 6 Cooperative Agreement is in addition to take that is authorized by this permit.

## II. Ocelot (*Leopardus pardalis*)

1. The Permittees are authorized to intentionally take ocelots by the Emergency Provisions set forth at §17.21(c)(3) (see term and condition S.1.c, above) and, contingent upon the following terms and conditions, by this permit in conjunction with section 6 of the Act and §17.21(c)(5) (see term and condition S.1.a, above):
  - a. USFWS approval of a project description within the scope of the AGFD's Section 6 Cooperative Agreement that provides: (i) the specific ocelot conservation purpose(s) to be achieved through capture, release, and post-release monitoring and any other study approaches included in the project description, including identification of the data to be derived from each aspect of the study and specific and/or overall conservation benefits to be gained by application of that information (e.g. identification of habitats used or potentially valuable as movement corridors or landscape linkages) to be gained by application of that information; and (ii) a detailed description of relevant biological and logistical considerations for the proposed project, including but not limited to: methods of capture; environmental and logistical conditions under which capture would and would not be attempted; procedures for monitoring open capture-sets; pre- and post-release handling and treatment procedures; information on drugs and drug dosages to be used on any captured ocelot; monitoring of pre- and post-release animal recovery from capture and handling; veterinary support pre- and post-release; methods of and funding sources for post-release monitoring; intra- and inter-agency coordination procedures for capture efforts, pre-release handling, release, and post-release monitoring; and an assessment of the potential benefits of capture-release-monitoring (e.g. radio and/or GPS-collared tracking) and other methods of studying free-ranging ocelots (e.g. remote trail cameras, hair-snares, scat studies) versus the risks of harm to the ocelot that are inherent to alternative methods of capture-release-monitoring.
  - b. If such project description is developed, prior to submittal for approval by USFWS the AGFD shall have the draft document(s) reviewed by the USFWS Ocelot Recovery Team, the Taxon Advisory Group overseeing the Ocelot Species Survival Plan, and (as appropriate) other wildlife and veterinary

professionals. The USFWS may, as appropriate, elect to coordinate further peer-review of the project description by appropriate wildlife and veterinary professionals to better inform its approval decision. If such project description is approved by USFWS, the AGFD and USFWS shall incorporate the project into the AGFD's Section 6 Work Plan as necessary to authorize all aspects of planned intentional capture and study of ocelot.

2. The Permittees are authorized to collect genetic or biological samples from ocelots through use of noninvasive techniques, such as use of hair snares (note: collection of scat from free-ranging ocelots is not prohibited under the Act and does not require federal authorization; however, use of scat to take, including but not limited to "harass," an ocelot does require federal authorization, as is addressed in term and condition II.3, below). In the event of an ocelot being handled pursuant to §17.21(c)(3) (see term and condition S.1.c, above), or as a result of unintentional capture or authorized intentional capture, the Permittees are authorized to collect urine, scat, hair, oral and rectal swabs, and other noninvasive samples that may be useful in furthering recovery of the species.
3. The Permittees are authorized to use ocelot-derived scents, lures, or baits (i.e. substances containing hormones, pheromones, scat, urine, or other parts from or products of an ocelot) as attractants on or near hair snares and remote (trail) cameras to detect presence of an ocelot, including efforts to confirm a reported sighting of an ocelot. The following term and condition applies: to minimize the potential for unintentional capture of an ocelot, these scents, lures, or baits shall be used consistent with term and condition II.4.b below.
4. The Permittees, during the normal course of their duties, may unintentionally capture an ocelot. If unintended capture occurs, the Permittees are authorized, for the well-being of the ocelot, to use chemical and physical restraints, remove the animal from the capture device, and release the animal on-site as soon as it is deemed safe for the animal. The following terms and conditions apply to the AGFD's efforts to minimize the likelihood and the impact of unintended capture in an area defined to include all confirmed occurrences of the species since 1964, referenced herein known as the Area of Capture Concern (AOCC):
  - a. The AOCC is those portions of Game Management Units (GMUs) within the San Pedro Watershed ( 30B, 31, 32, 33, 34B, 35A, 35B) plus the following GMUs outside of the San Pedro Watershed (24A, 24B, and 37B) (Attachment B.).
  - b. The Permittees shall not use ocelot-derived scents, lures, or baits (i.e. substances containing hormones, pheromones, scat, urine, or other parts from or products of an ocelot, including Obsession® and Weaver Lure®) as attractants in conjunction with any method of wildlife capture (i.e. any capture device) employed anywhere in Arizona unless prior approval is secured from USFWS pursuant to term and condition II.1.b above.
  - c. Within 24 hrs of AGFD confirmation of an ocelot occurrence within Arizona or AGFD acceptance of an occurrence confirmed by another entity, the AGFD shall report the occurrence to the appropriate AGFD Phoenix and Regional staff, the USFWS Arizona ESFO Supervisor, the USDA-APHIS Wildlife Services State Director, the appropriate BLM District Manager, and the appropriate USFS Forest Supervisor.
  - d. Within the AOCC, when the Permittees are using traps, snares, or other capture devices that are of sufficient size to capture an ocelot: (i) the sets shall be placed, shaded and monitored as necessary to provide reasonable protection against hypo and hyperthermia of a captured ocelot; and (ii) at least one person who is monitoring the capture device must be AGFD-certified in the handling procedures referenced in term and condition II.5 below.
  - e. Snares set by the Permittees within the AOCC for non-ocelot felids or for canids shall be set to minimize the likelihood of catching an ocelot and to minimize the risk of entanglement if an ocelot is captured unintentionally. If, within the last 3 months, an ocelot has been confirmed within the mountain range or within 30 map-miles of a location at which trapping is occurring, any snare used shall not be able to be tripped by an ocelot or only box-style live traps shall be used if a trap is of a size that could unintentionally capture an ocelot.
  - f. Within 120 days of this permit being issued, the AGFD shall submit to USFWS for approval a revised handling protocol to further reduce the risk of harm to an ocelot that is captured unintentionally. The

revised protocol shall, at a minimum, address: (i) the methods and means of restraint, sedation, estimating age, weight, reproductive status, and overall physical condition; (ii) methods and means of taking biological samples for off-site analysis (e.g. hair, blood, and swab samples); (iii) procedures for post-sedation recovery, release, and post-release monitoring for sufficient time to ascertain whether the animal has fully recovered from handling prior to release; and (iv) guidelines for emplacing a radio telemetry, satellite tracking, or GPS collar. Prior to submitting the protocol to USFWS for approval, the AGFD shall solicit review by the USFWS Ocelot Recovery Team and the Taxon Advisory Group overseeing the Ocelot Species Survival Plan (and other wildlife and veterinary professionals, as appropriate). The USFWS may, as appropriate, elect to coordinate further peer-review of the revised protocol by appropriate wildlife and veterinary professionals to better inform its approval decision. If a revised protocol is approved by USFWS, the new protocol shall supersede any existing handling protocol incorporated by reference into this permit (see term and condition II.5.d below).

5. The Permittees are authorized to immobilize and release at the site of capture any ocelot that is captured pursuant to §17.21(c)(5) or the AGFD's Section 6 Cooperative Agreement, §17.21(c)(3), or under this permit. The following terms and conditions apply to AGFD's efforts to minimize the effects that immobilization and release might have on a captured ocelot:
  - a. Once all public safety and all immediate safety and health needs for the animal have been addressed, the Permittee in charge at the capture site shall attempt to notify, the AGFD's 24-hr Radio Room.
  - b. The AGFD shall notify the USFWS Arizona ESFO Supervisor within 24 hours of the capture and release of an ocelot.
  - c. The Permittee in charge at the capture site shall proceed with handling and releasing the ocelot in accordance with applicable handling procedures as described below.
  - d. Until superseded by a later version, as stipulated in term and condition II.4.f, above, the Permittees shall handle and release a captured ocelot in accordance with the handling protocol established by Shindle and Tewes (*Journal of Wildlife Diseases* 36(3), 2000, pp. 546-550).
  - e. If a captured ocelot is sedated for release from a restraining device, while it is under sedation data may be recorded on estimated age, sex, reproductive status, and weight, unless collecting such information would put the health and well being of the animal at risk. The following activities may also occur to further recovery: (i) a discrete ear tag may be affixed; (ii) unless the animal is too young, or is otherwise not suited for such a device, a Passive Integrated Transponder (PIT) tag may be inserted under the loose skin between the shoulder blades; (iii) a radio telemetry, satellite tracking, or GPS collar may be placed on the sedated animal. Total weight of the collar and any other materials placed on the animal shall not exceed 3% of the animal's body weight. Collars shall only be placed on animals that appear to be healthy and of full-grown adult size. Any collar that is affixed to a sub-adult shall be attached in a temporary manner, not with bolts or plastic cable ties; and (iv) photographs of all sides of the animal (including forehead, tail, left side, right side, and spine area) should, if possible, be taken to aid in future field identification based on color and pelt patterning.
  - f. The AGFD shall maintain a list of veterinarians qualified to provide field support (or at least telephonic support) in the event an ocelot is captured. The Permittees shall contact one of the listed veterinarians, if veterinary support proves necessary and time and logistics allow such support to be used. Given the limited number of veterinarians in Arizona with ocelot experience, the list should also include veterinarians who have experience treating (handling) bobcats, mountain lions, or exotic felids comparable in size to the ocelot. The list of consulting veterinarians shall be updated at least annually and a copy shall be available through the AGFD's 24-hr Radio Room. A copy of the list shall be carried in the field by Permittees who do not have access to the 24-hr Radio Room if they are using traps, snares, or other capture devices in the AOCC that are of sufficient size to capture an ocelot.
  - g. Release of a captured ocelot may be delayed only if one or both of the following conditions exist: (i) delay is necessary to provide veterinary care for life-threatening or significantly debilitating injuries or disease that are noted during pre-release assessment of the animal's condition; and (ii) prevailing environmental conditions make delayed release a lower threat to survival of the ocelot than would be posed by immediate release on site.

Note: Terms and conditions II.5.a-g, above are intended to minimize the effects of immobilization and release and should, to the maximum extent practicable, be applied to any ocelot capture and release activities conducted pursuant to term and condition S.1.c above (i.e. Emergency Provisions set forth at §17.21(c)(3)).

6. In accordance with §17.21(c)(3) and the AGFD's Section 6 Cooperative Agreement, the Permittees are authorized to hold and transport individual ocelots that require prolonged veterinary assistance related to apparent health issues. Treatment of such animals shall be provided or supervised by licensed veterinarians or certified veterinary staff unless exigent circumstances require a wildlife professional to provide treatment to restrain or stabilize the animal while seeking veterinary care or support.
7. The Permittees are authorized to take ocelots as follows:
  - a. Unlimited take, in the form of harass, resulting from activities authorized in this permit or approved in the AGFD's Section 6 Annual Work Plan is authorized in §17.21(c)(5) through the AGFD's Section 6 Cooperative Agreement; this includes noninvasive sampling techniques (as discussed in terms and conditions II.2 and II.3 of this permit), surveys, and monitoring.
  - b. Incidental take, in the form of mortality, harm (injury), is authorized under this Permit not to exceed one ocelot: (i) through unintended capture, immobilization, and release; or (ii) through a planned capture pursuant to term and condition II.1, above.
8. Take of ocelot consistent with §17.21(c)(5) (see term and condition S.1.a, above) or pursuant to the Emergency Provisions in §17.21(c)(3) and the AGFD's Section 6 Cooperative Agreement is in addition to take that is authorized by this permit.

**JJ. California condor (*Gymnogyps californianus*)**

1. The Permittees are authorized to conduct those activities identified in regulation at §17.84(j) special rule for the non-essential experimental population of California condors in Arizona and vicinity, consistent with the AGFD's Section 6 Cooperative Agreement.
2. As experimental, nonessential populations, condors are treated as threatened species inside the designated area, in accordance with section 10(j)(2)(C) of the Act. Activities identified in §17.84(j) are those that are in furtherance of the Act and are authorized through AGFD's Section 6 Cooperative Agreement.
  - a. All sampling effort, techniques, captures, recaptures, and take of these species shall be reported consistent with §17.84(j)(5) and documented in the annual section 6 performance reports.
  - b. Section 17.84(j)(8)(ii) says that "All released condors and their progeny are expected to remain in the experimental area due to the geographic extent of the designation." Therefore, the Permittees are authorized to capture any condor(s) found outside of the 10(j) area so that it may be returned to the 10(j) area or placed in a captive rearing facility in coordination with USFWS Coordinators and landowners or appropriate management agencies (§17.84(j)(3)(iii)).
3. Intentional and incidental take of California condors in the form of harass, harm, and mortality is authorized for activities identified in §17.84(j) through the AGFD's Section 6 Cooperative Agreement.

**KK. Masked bobwhite (*Colinus virginianus ridgwayi*)**

1. Any transport of masked bobwhite across the international border shall to be coordinated with Arizona ESFO and Buenos Aires National Wildlife Refuge (BANWR); and the AGFD must secure any necessary permit needed to transport masked bobwhite across the international border.

2. The Permittees are authorized, for research and recovery purposes, to survey for masked bobwhite in Arizona using standard survey techniques to include but not limited to the use of dogs, and may assist the BANWR with implementation of recovery activities on the BANWR or elsewhere in Arizona. These authorized activities include monitoring known and potential breeding sites, reproductive success, presence of disease or epidemic, and to determine habitat characteristics for successful breeding and maturation. When working on the BANWR, the following conditions apply:
  - a. Call count surveys will be conducted in coordination with the Arizona ESFO and the BANWR.
  - b. The use of dogs to find and flush coveys is authorized when these activities are coordinated with the Arizona ESFO and the BANWR.
  - c. The use of telemetry to track birds is not authorized without prior submittal and approval of a research proposal to the Arizona ESFO. Approval by the Arizona ESFO of research proposals will be provided by email or written letter. If approval is granted the AGFD should review its authorities provided in this permit and in regulations through the AGFD's Section 6 Cooperative Agreement to determine if an amendment to this permit would be appropriate.
3. Intentional take of masked bobwhite, in the form of mortality and harm (injury), is not authorized. Intentional take of masked bobwhite in the form of harass is authorized in §17.21(c)(5) through the AGFD's Section 6 Cooperative Agreement. Incidental take, in the form of mortality and harm (injury), is authorized under this permit up to two adult masked bobwhite or one clutch (eggs or juveniles) through survey, capture, or research activities coordinated with Arizona ESFO and BANWR, as applicable. Take of masked bobwhite consistent with §17.21(c)(5) (see term and condition S.1)(b) above) and as provided for by Emergency Provisions in § 17.21(c)(3) (restated in term and condition S.1.(c) above) is in addition to take that is authorized by this permit.

**LL. Thick-billed parrot (*Rhynchopsitta pachyrhyncha*)**

1. Habitat, population and any non-capture survey work, such as ocular surveys, may be conducted in Arizona without a federal permit. The AGFD must coordinate with the Arizona ESFO species recovery lead for importation permits and reestablishment authorization prior to the importation, release and management of thick-billed parrots within Arizona.
2. Although there are no known thick-billed parrots in the wild within the United States, populations occur in northern Mexico and may cross the international border. Therefore, take in the form of harass in unlimited numbers is authorized from investigating sightings, surveying and monitoring activities, and;
3. Collection of feathers, egg shells, addled eggs or dead animals may be collected to verify the presence of thick-billed parrots.

**MM. Black-footed ferret (*Mustela nigripes*)**

1. Black-footed ferrets are only known to exist in the state as a result of reintroductions at two sites (Aubrey Valley [Yavapai and Coconino Counties] and Espee Ranch [Coconino County]). The AGFD's management and take authority for the two sites derive from separate sources.

Aubrey Valley Experimental Population Area:

- a. Within the Aubrey Experimental Population Area black-footed ferrets are designated as experimental, nonessential populations per §17.84(g). The Permittees are authorized to conduct research and recovery activities, provided intentional and incidental take is consistent with those identified in §17.84(g) through the AGFD Section 6 Cooperative Agreement.

Espee Reintroduction Site:

- b. The AGFD's authority to take black-footed ferrets and to conduct research and recovery activities in conjunction with the Espee Ranch reintroduction is vested in a separate section 10(a)(1)(A) research and recovery permit, TE163125-0 (as issued by USFWS Region 6 and as amended January 20, 2010).
2. The Permittees are authorized to capture, and collect necessary genetic samples from any black-footed ferret found outside of the Aubrey Valley and Espee Ranch designated management areas, as described by the § 17.84(g) and research and recovery permit TE-163125, so that a ferret's origin can be determined through genetic testing or evidence of an identification tag. If genetic testing indicates the black-footed ferret is of wild origin and not from one of the two designated management areas, the Permittees are authorized to release the ferret(s) at its original capture location, or to transfer it to a USFWS-approved holding facility, unless otherwise directed by the USFWS.
3. Take of black-footed ferrets in the Aubrey Valley Experimental Population Area in the form of harass, harm, and mortality is authorized for activities identified in §17.84(g) through the AGFD's Section 6 Cooperative Agreement, §§17.31(b) and 17.84(g). Take of black-footed ferrets in the Espee Reintroduction Site in the form of harass, harm, and mortality is authorized through research and recovery permit TE163125-0. Incidental take of black-footed ferret, in the form of mortality and harm, is authorized up to two black-footed ferrets under this permit from management and research activities.
4. Incidental take of black-footed ferrets under this permit covers individuals found outside either establishment site, as subsequently determined to not be from one of either establishment site through genetic testing or identification tag. Take of a black-footed ferret consistent with §17.21(c)(5) (see term and condition S.(1)(b) above) and as provided by Emergency Provisions in §17.21(c)(3) (see term and condition S.1.(c) above) is in addition to take that is authorized by this permit.

\*\*\*End Permit TE821577-2\*\*\*