



2016.067  
United States Department of the Interior  
U.S. Fish and Wildlife Service

Idaho Fish and Wildlife Office

1387 S. Vinnell Way, Room 368

Boise, Idaho 83709

Telephone (208) 378-5243

<http://www.fws.gov/idaho>



Attention: Bryan McLean  
Division of Mammals  
Museum of Southwestern Biology  
CERIA Building 83 Room 204  
302 Yale Blvd NE  
University of New Mexico  
Albuquerque, NM 87131

MAY 19 2016

Subject: Northern Idaho Ground Squirrel – letter of support for specimen transfer

Dear Mr. McLean:

Under the authority of the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.), this letter from the U.S. Fish and Wildlife Service (Service) supports the transfer of one dead northern Idaho ground squirrel (*Urocitellus bruenneus*; NIDGS) to the University of New Mexico's Museum of Southwestern Biology. This NIDGS is a trapping mortality collected in 2013 under Dr. Courtney Conway's recovery permit TE 94776A-1. A portion of this mortality (tissue sample) will be utilized for a study on the taxonomy and systematics of *Urocitellus* ground squirrels. The remaining specimen (i.e., skin, skeleton, and tissue) samples will be archived at the Museum of Southwestern Biology in Albuquerque, New Mexico, in perpetuity.

Coverage under this Letter of Support is provisional under the following restrictions:

1. This letter does not relieve you of responsibilities to comply with all other applicable federal, state, tribal, and local regulations regarding possession of this specimen.
2. At the completion of the project the specimen or parts thereof will be archived at the Museum of Southwestern Biology, Albuquerque, New Mexico. This Letter of Support must be kept with the specimen(s).
3. The NIDGS specimen may not be sold or bartered, offered for sale or barter, or removed or transferred from the University of New Mexico or the Museum of Southwestern Biology, or used for any purposes other than that described by this Letter of Support without our written approval.
4. Upon completion of any research from utilization of this specimen, any reports or published results shall be sent to the Service's Idaho Fish and Wildlife Office.

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NK 286961



Bryan McLean  
University of New Mexico

We appreciate your interest and support of the recovery of threatened and endangered species. If you have any questions regarding this Letter of Support, please contact Greg Burak at (208) 378-5654.

Sincerely,



Dennis Mackey  
Acting State Supervisor

cc: Colleen Henson, USFWS, Portland OR

3019-001

for Bryan McLean

2016-067

Uroctylus brunneus



DEPARTMENT OF THE INTERIOR  
U.S. FISH AND WILDLIFE SERVICE

# FEDERAL FISH AND WILDLIFE PERMIT

**I. PERMITTEE**

IDAHO COOPERATIVE FISH AND WILDLIFE RESEARCH UNIT  
875 PERIMETER DR. MS 1141  
MOSCOW, ID 83844-1141

2. AUTHORITY-STATUTES  
16 USC 1533(d)

REGULATIONS  
50 CFR 17.32

50 CFR 13

3. NUMBER  
**TE94776A-0**

4. RENEWABLE  
 YES  
 NO

5. MAY COPY  
 YES  
 NO

6. EFFECTIVE  
04/16/2013

7. EXPIRES  
04/15/2017

8. NAME AND TITLE OF PRINCIPAL OFFICER *(If #1 is a business)*  
COURTNEY J CONWAY  
UNIT LEADER

9. TYPE OF PERMIT  
NATIVE THREATENED SP. RECOVERY - T WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED  
ON LANDS SPECIFIED WITHIN THE ATTACHED SPECIAL TERMS AND CONDITIONS

**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, TRIBAL, OR OTHER FEDERAL LAW.
- C. VALID FOR USE BY PERMITTEE NAMED ABOVE.
- D. Further conditions of authorization are contained in the attached Special Terms and Conditions.

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS  
ANNUAL REPORT DUE: 01/31

ISSUED BY  
*Shawna J. Zable*

TITLE  
ENDANGERED SPECIES PROGRAM MANAGER

DATE  
04/16/2013



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
911 NE 11<sup>th</sup> Avenue  
Portland, Oregon 97232-4181

In Reply Refer To:  
FWS/R1/AES/Recovery/TE-94776A-0

APR 16 2013

Dr. Courtney Conway  
Idaho Cooperative Fish and Wildlife Research Unit  
College of Natural Resources  
875 Perimeter Drive, MS 1141  
Moscow, Idaho 83844-1141

Dear Dr. Conway:

This responds to your January 13, 2013, request for a section 10(a)(1)(A) Endangered Species Act (ESA) (16 U.S.C. 1531 *et seq.*) recovery permit. You requested to conduct research on the northern Idaho ground squirrel (*Spermophilus brunneus brunneus*). Enclosed is your recovery permit (TE-94776A-0).

Please refer to the permit number in all correspondence and reports concerning permit activities. Engagement in any activity pursuant to this permit constitutes understanding and acceptance of the Special Terms and Conditions attached to your permit.

By accepting this permit and conducting activities authorized by it, you are agreeing to adhere to the attached Special Terms and Conditions. Failure to meet permit Special Terms and Conditions could result in ESA section 9 take violations, or suspension/revocation of this permit.

Please be aware that some species named in your recovery permit may also be listed under various State Endangered Species Acts or otherwise be of special concern to the States. As such, activities affecting those species may not be conducted without first obtaining the appropriate State permits. Possession of a Federal permit does not obviate the need for State authorization.

We have carefully reviewed your application and discussed it with staff in our Idaho Fish and Wildlife Office. We have decided to deny your request to experimentally assess effects of plague on the northern Idaho ground squirrel by dusting occupied sites with deltamethrin dust. This partial denial is in accordance with regulations at 50 CFR 17.22(a)(2)(ii) and (iv), and 50 CFR 13.21(b)(4) (enclosed).

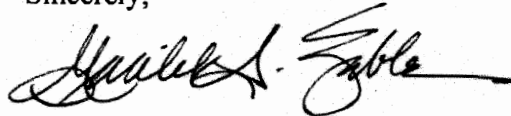
While you have the necessary expertise to conduct these activities, we cannot include it in your permit unless there is a clear recovery benefit. Under the above regulations, we are required to determine if an activity will benefit the recovery of the species. We understand that at present there is no clear evidence that plague is present in northern Idaho ground squirrel populations. Additionally, adverse effects of ground squirrel exposure to deltamethrin dust cannot be fully ruled out. Consequently, we are unable to determine a clear recovery benefit of the deltamethrin

treatments at this time. However, if your studies of flea populations associated with northern Idaho ground squirrels subsequently indicate that plague is present within the system at enzootic or epizootic scales, such information may support a recovery benefit for deltamethrin treatments more clearly; in that case it may be appropriate for you to apply for a permit amendment to reinclude that portion of your project.

As provided in 50 CFR 13.29, you may request reconsideration of this partial denial of your application. Such a request must be submitted in writing to this office within 45 calendar days of the date of this letter. Your letter requesting reconsideration must contain statements on the following: (1) why you are objecting to the partial denial; (2) presentation of any new information or facts pertinent to the issue(s) that could overturn the denial; and (3) a certification statement as provided at 50 CFR 13.12(a)(5) (enclosed).

If you have any questions regarding this matter, please contact Grant Canterbury, Fish and Wildlife Biologist, at (503) 231-6844.

Sincerely,

A handwritten signature in black ink, appearing to read "Grant Canterbury", written in a cursive style.

Endangered Species Program Manager

Enclosures

SPECIAL TERMS AND CONDITIONS  
Idaho Cooperative Fish and Wildlife Research Unit

1. Acceptance of this permit serves as evidence that the permittee understands and agrees to abide by the "General Conditions for Native Endangered and Threatened Wildlife Species Permits," 50 CFR Part 13 (general permit regulations), and/or 50 CFR 17.32 (threatened wildlife) (copies attached), as applicable. In addition, the permittee must have any other applicable State and Federal permits prior to the commencement of activities authorized by this permit.
2. The permittee is authorized to take (survey, monitor, capture (by live-trapping), attach radio-collar transmitters, anesthetize, process for flea loading, and release) the northern Idaho ground squirrel (*Spermophilus brunneus brunneus*). This take may occur while conducting research for the purpose of enhancing the species' survival, as specified in the permittee's January 13, 2013 application request, in accordance with the Special Terms and Conditions stated below.
3. Permitted activities are restricted to the following geographic areas in Idaho:  
  
Adams and Valley Counties.
4. Authorized individuals:

Only individuals on the attached List of Authorized Individuals (List) are authorized to conduct activities pursuant to this permit. The List, printed on U.S. Fish and Wildlife Service (Service) letterhead, may identify special conditions or circumstances under which individuals are authorized to conduct activities. The List must be retained with these Special Terms and Conditions. Each named individual shall be responsible for compliance with the Special Terms and Conditions of this permit.

To request changes to the List, the permittee shall submit written requests to the Recovery Permit Coordinator at the Service's Idaho Fish and Wildlife Office (IFWO), 1387 S Vinnell Way, Room 368, Boise, Idaho 83709 (telephone: 208-378-5243; fax: 208-378-5262). The request shall be submitted at least 30 days prior to the requested effective date. The request shall be signed and dated by the permittee and include:

- a. The name of each individual to be appended to the List;
- b. The resume/qualifications statement of each person to be appended to the List, detailing their experience with each species and type of activity for which authorization is requested;
- c. The names and phone numbers of a minimum of two references for persons to be appended to the List; and
- d. The names of any individuals to be deleted from the List.



Note: This procedure is for changes to the List only. For requests to renew/amend this permit, a complete application must be submitted to the Endangered Species Program Manager at the Service's Pacific Regional Office (PRO), Ecological Services, 911 NE 11th Avenue, Portland, Oregon 97232-4181 (telephone: 503-231-6131; fax: 503-231-6243). An application may be obtained at [www.fws.gov/forms/3-200-55.pdf](http://www.fws.gov/forms/3-200-55.pdf).

5. Taking of northern Idaho ground squirrel:

The permittee is authorized to take (survey, monitor, capture (by live-trapping), attach radio-collar transmitters, anesthetize, process for flea loading, and release) the northern Idaho ground squirrel. This take may occur within the geographic boundaries specified above, and the time limitation specified in the permit, provided the following Special Terms and Conditions are met:

- a. Limit invasive monitoring/data collection procedures to those individuals most likely to survive the rigors of capture and handling.
  - i. Do not subject pregnant or lactating females to anesthesia (isoflurane treatments) until young have emerged from the burrows.
  - ii. Do not fit juvenile squirrels with radio-collars, or subject them to isoflurane treatments.
  - iii. Follow the procedures outlined in the January 13, 2013, recovery permit application pertaining to northern Idaho ground squirrel trapping, handling, and injecting PIT tags, as found in Evans Mack (2011)<sup>1</sup>.
  - iv. For squirrels that will undergo radio-collaring and the assessment of flea loading, all procedures (inclusive of sexing, aging, weighing, etc.) should be accomplished while the individual is sedated. This sedation is intended to minimize harassment level effects during handling. For squirrels that will only undergo routine data collection procedures and receive a radio-collar, no isoflurane will be used.
- b. Limit the potential for mortality of northern Idaho ground squirrels during the anesthetization process.
  - i. Start isoflurane treatments at the minimum dosage proposed (0.3 mL), and increase dosage amounts incrementally by 10 percent (maximum dosage of 1.3 mL) to achieve desired results.
  - ii. Dosage amounts should be calibrated to minimize the necessary treatment time for processing animals, inclusive of radio-collaring, combing

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<sup>1</sup> Evans Mack, D. 2011. Field protocols for northern Idaho ground squirrel population monitoring. Unpublished document, revised January 2011. Idaho Department of Fish and Game, Boise, Idaho.

squirrels, and collecting fleas.

- iii. Separate individuals should be present to monitor squirrel response to isoflurane treatments (*e.g.*, time of immobilization by isoflurane, characteristics of squirrel breathing and other behavioral responses while immobilized, length of time for squirrels to return to normal function after anesthesia wears off and squirrels are released, etc.) and to implement the combing and flea collection procedures.

6. The number of northern Idaho ground squirrels allowed to be incidentally injured or killed during permitted activities in any calendar year is:

- No more than two individuals seriously injured or killed due to capturing, processing, and PIT tagging.
- No more than three individuals fitted with radio-collars dying between the fitting and the first telemetry observation. Mortality during this period is likely to be a result of the radio-collar rather than natural mortality.
- No more than four individuals dying during anesthesia procedures. This figure is based on the 3 percent mortality rate that has been observed during isoflurane treatment of southern Idaho ground squirrels (*Spermophilus brunneus endemicus*).

In the event that the number of individuals allowed to be incidentally injured or killed is exceeded during the performance of permitted activities, the permittee must:

- a. Immediately cease the activity resulting in injury or death until reauthorized by the PRO. The PRO may, after analysis of the circumstances of the injury or mortality, revoke or amend this permit.
- b. Immediately notify the PRO (telephone: 503-231-6131; fax 503-231-6243) and IFWO (telephone: 208-378-5243; fax: 208-378-5262) by telephone or fax. Such notification must be followed up in writing to both the PRO and IFWO within 3 working days. The written notification must describe the circumstances that led to the injury or mortality; date, time, and precise location of the injured animal or carcass; disposition of the injured animal or suggested disposition of the dead specimen; and a description of the changes in activity protocols that will be implemented to reduce the likelihood of such injury or mortality from reoccurring, if appropriate. The incident should also be discussed in the annual report that is subsequently submitted.
- c. All incidentally killed specimens shall be preserved in accordance with standard museum practices while still providing maximum scientific information. Before expiration of this permit, all preserved specimens shall be properly labeled and deposited with the designated depository (see Special Term and Condition 7 below). The permittee shall supply the depository with a copy of this permit.

7. Designated depository:

The Orma J. Smith Museum of Natural History, College of Idaho, Caldwell, Idaho (telephone: 208-459-5331).

8. Annual Reports:

- a. An annual report of activities conducted under this permit shall be submitted to the Recovery Permit Coordinators at the PRO and IFWO by January 31, following each year this permit is in effect. If no activities occurred over the course of a year, indication of such shall be submitted as an annual report. The report shall be in the following format:
  - i. An introduction section addressing reasons and objectives for taking the species, as appropriate;
  - ii. A methodology section addressing data collection and analysis procedures, personnel working on the project, and effectiveness of the Special Terms and Conditions in minimizing take of the northern Idaho ground squirrel;
  - iii. A results section that summarizes the data collected, including information on any other federally listed species detected while conducting activities authorized under this permit; and
  - iv. A conclusion section that specifically provides, at a minimum, application of the results to recommendations for the recovery of the northern Idaho ground squirrel.
- b. The annual report must include, but need not be limited to, the following information:
  - i. Summary presentation and brief discussion of significant research results and their importance with regards to recovery of the northern Idaho ground squirrel;
  - ii. Maps and/or descriptions of locations (including GPS/GIS data, as appropriate) where permitted activities occurred;
  - iii. The results of all survey or sampling efforts of the northern Idaho ground squirrel that were handled;
  - iv. Quantification of take for the northern Idaho ground squirrel, including numbers of individuals incidentally killed (including dates, locations, and

circumstances of lethal take), and an estimate of the numbers of individuals otherwise harmed or harassed;

- v. The disposition of any injured or dead individuals;
- vi. Other pertinent observations made during permitted activities regarding the status or ecology of the northern Idaho ground squirrel;
- vii. Reports or other documents that include information gathered under the authority of this permit; and
- viii. Planned future activities, if any, authorized under this permit.

c. Electronic submission of annual reports:

- i. Copies of annual reports to the PRO and IFWO may be submitted electronically to the following email addresses:

PRO: [permitsRIES@fws.gov](mailto:permitsRIES@fws.gov)

IFWO: [greg\\_burak@fws.gov](mailto:greg_burak@fws.gov)

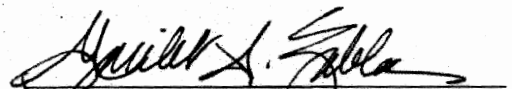
Add the following subject line to the email: Annual report for recovery permit number TE-94776A-0.

- ii. All email file attachments combined are limited to 25 megabytes in size. If electronic files exceed this size limitation, please copy them onto a DVD or CD (preferred submission) or send them as a printed document(s).

- 9. Failure to comply with reporting requirements may result in non-renewal or suspension/revocation of this permit.

APR 16 2013

Date

  
Endangered Species Program Manager



United States Department of the Interior  
FISH AND WILDLIFE SERVICE

Idaho Fish and Wildlife Office  
1387 S. Vinnell Way, Room 368  
Boise, Idaho 83709  
Telephone (208) 378-5243  
<http://www.fws.gov/idaho>



LIST OF AUTHORIZED INDIVIDUALS  
for TE-94776A-0  
Idaho Cooperative Fish and Wildlife Research Unit

1. Individuals authorized to independently conduct all activities pursuant to this permit:

Amber Burleson, Marinda Cokeley, Courtney Conway, Amanda Goldberg,  
Kelsey Lorberau, Brianna Williams, Mica C. Rumbach, Jennifer Moran, and Eric  
Yensen.

Other individuals may conduct activities pursuant to this permit only under the direct, on-site supervision of an independently authorized individual listed above.

June 17, 2013  
Date

  
State Supervisor, Idaho Fish and Wildlife Office

This List is valid only if it is dated on or after the permit issuance date.

