



FEDERAL FISH AND WILDLIFE PERMIT

1. PERMITTEE

RACHEL E. BARLOW

2. AUTHORITY-STATUTES
16 USC 1539(a)

REGULATIONS
50 CFR 17.22

50 CFR 13

3. NUMBER
TE217655-1

AMENDMENT

4. RENEWABLE
 YES
 NO

5. MAY COPY
 YES
 NO

6. EFFECTIVE
01/04/2011

7. EXPIRES
08/07/2012

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

9. TYPE OF PERMIT

NATIVE ENDANGERED SP. RECOVERY - E WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

Within Texas

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. Your permit has been amended as follows. The terms and conditions set forth in the original permit August 6, 2009, and any subsequent amendments or renewals are hereby superseded by this document.

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. **Some terms and conditions within this permit may have changed, either to reflect the most current language available or in response to requests by applicants or requirements by species' lead biologist(s).** Terms and conditions of this permit are inclusive. Any activity not specifically permitted is prohibited. Please read through these conditions carefully as violations of permit terms and conditions could result in your permit being revoked or denial of a new permit when the current one expires. Violations of your permit terms and conditions which contribute to a violation of the Endangered Species Act (ESA) could also subject the Permittee to criminal or civil penalties.

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

See Terms and Conditions

ISSUED BY

TITLE

ASSISTANT REGIONAL DIRECTOR - ECOLOGICAL SERVICES

DATE

01/04/2011

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 U.S. Fish and Wildlife Service (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
Albuquerque, New Mexico 87103
505/248-6665 or 505/248-6920

Arlington Ecological Services Field Office
711 Stadium Drive East, Suite 252
Arlington, Texas 76011
817/277-1100

Austin Ecological Services Field Office
10711 Burnet Road, Suite 200
Compass Bank Building
Austin, Texas 78758
512/490-0057

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

H. *Unless otherwise instructed within the species-specific language below, an **annual report** based on each species and activity conducted under the authority of this permit (including where activities took place, number and location of species collected/captured, and field data forms, if appropriate) must be submitted to the respective **Ecological Services Field Office (ESFO)** listed above, including negative data (i.e., negative survey findings or lack of breeding success). If no activities were conducted under this permit, for one or more species during the calendar year, a report stating such will satisfy the annual reporting requirements. The annual report should also include recovery permit number, species' common and scientific name, date of survey, observer, observer contact information (in case of questions), location (provide GPS or UTM coordinates, or Township and Range and at least quarter Section), number of individuals observed, their sex, age class, and breeding condition, if known or determined in recovery permit report for all surveys conducted. If habitat quality/condition was noted at time of survey, please include that information. Annual reports may also be submitted on a CD. 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.*

Data collected in lat/long, NAD 83 is preferred. If collected in an alternate coordinate system, please report the coordinate system and datum the information was collected in. Optional information that can be included to help further define the precision of the locational information includes: 1) Positional Dilution of Precision (PDOP) level at time of acquisition, and 2) whether the Wide Area Augmentation System (WAAS) was enabled.

I. An annual report transmittal letter is the only document to be submitted to the **Regional Office**, Division of Endangered Species – Section 10 Permits, Albuquerque, NM at the above address (or to the following electronic mailing address: FW2_TE_Permits@fws.gov on or before December 15 of each year (unless date is otherwise stated). The transmittal letter should state the following information: name of field office(s) and name of species where data was forwarded; date report(s) sent to field office; and list of species for which no activities were conducted, if applicable.

*If an amendment or renewal request is also needed at this time, please make sure the annual report transmittal letter and request(s) are submitted under separate cover. **Do not** include permit requests along with annual reports.*

J. Copies of any unpublished or published reports generated by the study and other data that would be useful for the conservation or recovery of the species should also be submitted to the ESFO(s). The reports should include one copy of USGS 7.5 minute quad sheets or larger scale maps, depicting sites where listed species covered by this permit were found or not found. These reports may be disclosed pursuant to the Freedom of Information Act.

K. Should any mortality or physical injury occur to an individual of the species during permitted activities (above the amount that may be specified below for a specific species) all operations must immediately cease and you are required to contact the appropriate ESFO(s) above within 24 hours.

L. Please note that this permit is limited to the activities and species described below, and is functional only when used in combination with a valid state permit.

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

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. You must furnish the USFWS, Division of Endangered Species – Section 10 Permits (address above) with a copy of the permit issued to you by the Indian Tribal Government(s) prior to conducting research and recovery activities on Tribal lands.

Q. You must have a copy of this permit and any other pertinent information in your possession while conducting the authorized activities.

R. A request for **renewal**, if appropriate, must be submitted to the USFWS 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 such person's request for renewal.

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.

BLACK-CAPPED VIREO

S. Rachel E. Barlow (Permittee) is authorized for scientific research and recovery purposes to conduct presence/absence surveys for black-capped vireos (*Vireo atricapilla*) within Texas. The following conditions also apply:

1. The survey season is April 10-July 1. A minimum of 50 percent of the surveys must take place between April 10 and May 31.
2. We recommend survey times start 30 minutes before sunrise. All surveys must be completed by 1:00 pm.
3. A minimum of 5 visits with no more than 1 visit within any 5-day period.
4. Total survey time should be a minimum of 1 hour per 25 acres (or less) of habitat per visit. Habitat is defined in Campbell 2003, which can be accessed at:
<http://www.tpwd.state.tx.us/huntwild/wild/species/endang/index.phtml>.
5. Surveys should not be conducted under the following weather conditions: wind speeds greater than 12 mph, fog, light to heavy precipitation, and temperatures less than 45 degrees or greater than 80 degrees Fahrenheit (Robbins 1981, Verner 1985).
6. Taped or play-back recordings of black-capped vireos or screech owl calls may be used only after the above methodology (5 visits) has been exhausted and no birds have been located. Recordings must be used to verify negative results (absence of black-capped vireo). At each survey point, recordings should be played for only 30 to 60 seconds, followed by a quiet period of at least 15 seconds before repeating this process once. After the second quiet period with no detection, Permittee should move to next survey point. Upon sighting or hearing a black-capped vireo, the recordings must be stopped immediately.
7. Exceptions to this methodology may be allowed only through coordination with, and approval of, the Arlington ESFO. Survey reports will be directed to Arlington ESFO (address above in section G).
8. Reports:
 - a) Presence - Reporting forms can be found at <http://www.fws.gov/southwest/es/AustinTexas> under "Golden-cheeked warbler (GCWA) and black-capped vireo (BCVI) reporting for 10(a)(1)(A) Scientific Research and Recovery Permits." Reports for surveys conducted according to the protocol must be submitted no later than August 1st of that same year. Reports for bird detections or surveys not conducted according to protocol (such as casual observations) must be submitted within 10 business days of completion of the survey.
 - b) Absence - Reports of determinations of "absence" of black-capped vireo where habitat on-site meets the description of breeding habitat as in Campbell (2003) should be submitted within 30 business days of the determination. Each report should include a map delineating the survey area and detailed descriptions of the habitat(s).

c) Annual – It is not necessary to resubmit the data reported under a) above. However, annual reports must include detailed descriptions of all vegetation associations found on all parcels surveyed and submitted under a), above.

Literature cited:

Campbell, L. 2003. Endangered and threatened animals of Texas: their life history and management. Black-capped vireo (*Vireo atricapilla*). Texas Parks and Wildlife Department, Austin, Texas.

Robbins, C.S. 1981. Bird activity levels related to weather. Pp. 301-310. in C.J. Ralph and J.M Scott (eds.). Estimating numbers of terrestrial birds. Studies in Avian Biology No. 6 Cooper Ornithological Society, Lawrence, Kansas.

Verner, J. 1985. Assessment of counting techniques. Pp. 247-302. in R.F. Johnston (ed.). Current Ornithology, Volume 2. Plenum Press, New York.

GOLDEN-CHEEKED WARBLER

T. Rachel E. Barlow (Permittee) is authorized for research and recovery purposes to conduct presence/absence surveys and habitat assessments for the golden-cheeked warbler (*Dendroica chrysoparia*) within Texas. The following conditions apply:

1. Methodology and reporting for golden-cheeked warbler surveys must follow the “**USFWS Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Presence/Absence Surveys and Habitat Assessments for Endangered Golden-cheeked Warblers.**” This document can be found at the following website: <http://www.fws.gov/southwest/es/AustinTexas>. Please refer to this website on or before March 1st each year before initiating golden-cheeked warbler surveys, as this document may be updated annually.

2. Three reporting events are required:

a) *Bird Surveys*: Go to: <http://www.fws.gov/southwest/es/AustinTexas> and scroll down to “Golden-cheeked warbler (GCWA) and black-capped vireo (BCVI) reporting for 10(a)(1)(A) Scientific Research and Recovery Permits” for the reporting forms. Reports for surveys conducted according to the protocol outlined in the “USFWS Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Presence/Absence Surveys and Habitat Assessments for Endangered Golden-cheeked Warblers” must be submitted no later than June 30th of that same year. Reports for bird detections or surveys not conducted according to protocol (such as casual observations) must be submitted within 10 business days of completion of the survey. **Survey reports for this data should be submitted electronically to GCWAreporting@fws.gov and should be titled “GCWA Bird Survey Report.”**

b) *Habitat Assessments*: If any area of any assessed property meets any of the vegetation associations listed under number 2 in the “USFWS Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Presence/Absence Surveys and Habitat Assessments for Endangered Golden-cheeked Warblers” and either: a) those associations are considered suitable GCWA habitat but are not surveyed, or b) a determination of non-GCWA habitat was made, then a report on those areas must be submitted within 5 business days of that determination. **Habitat assessment reports should be submitted electronically to GCWAreporting@fws.gov and should be titled “GCWA Habitat Assessment.”**

Each report should include:

- a. A map with a clear understanding of the location of that property within the county;
- b. an aerial photo with:
 - i. the date the photo was taken (no older than 2006), and

- ii. the property boundary;
- c. detailed descriptions of the habitat on site;
- d. detailed descriptions of what factors were assessed to make the determination (for example, aerial photographs, Landsat imagery, and/or site visits); and
- e. an explanation of why a survey for the GCWA was not performed or why the site was determined to be unsuitable.

Reporting With GIS Data:

If reporting with GIS shapefiles, it is not necessary to include the information requested in numbers 1 and 2 above in the report. Instead, complete the "GCWA Habitat Assessment" form found at <http://www.fws.gov/southwest/es/AustinTexas> and submit it as the attribute table with the shapefile(s).

Habitat Assessment Non-Concurrence:

1. We will do our best to respond in writing within 10 business days if we do not concur with the non-habitat determination.
 2. If we notify you that we do not concur with the non-habitat determination, you must notify the person that hired and/or requested you do the assessment within 10 business days of our non-concurrence.
- c) *Annual:* It is not necessary to resubmit the data reported under a) above. However, annual reports must include detailed descriptions of all habitats found on all parcels surveyed and submitted under a). No further information is necessary in the annual report for the items required under b). **Annual reports should be submitted electronically to GCWAreporting@fws.gov and should be titled "GCWA Annual Report."**

3. Permittee is authorized to conduct song recording according to the proposal included in her October 6, 2010 application package.

KARST INVERTEBRATES

U. Rachel E. Barlow (Permittee) is authorized for scientific research and recovery purposes to conduct presence/absence surveys, document and map locations of, and collect (for positive identification) a combined total of no more than 10 voucher specimens of the following federally-listed species, from Travis, Williamson, and Bexar Counties from locations not previously known to contain them.

The 10 voucher limit is a combined total under this permit, for all Permittees and sub-Permittees annually.

Bexar County

Rhadine exilis (ground beetle, no common name)
Rhadine infernalis (ground beetle, no common name)
Batrisodes venyivi (Helotes mold beetle)
Texella cokendolpheri (Cokendolpher cave harvestman)
Cicurina baronia (Robber Baron Cave meshweaver)
Cicurina madla (Madla Cave meshweaver)
Cicurina venii (Bracken Bat Cave meshweaver)
Cicurina vespera (Government Canyon Bat Cave meshweaver)
Neoleptoneta microps (Government Canyon Bat Cave spider)

Travis & Williamson Counties

Neoleptoneta myopica (Tooth Cave spider)
Tartarocreagris texana (Tooth Cave pseudoscorpion)

Texella reddelli (Bee Creek Cave harvestman)
Texamaurops reddelli (Kretschmarr Cave mold beetle)
Rhadine persephone (Tooth Cave ground beetle)
Texella reyesi (Bone Cave harvestman)
Batrisodes texanus (Coffin Cave mold beetle)

The following conditions also apply:

1. No collection of listed species from known sites is authorized.
2. Methodology and reporting must follow the attached: USFWS Section 10(a)(1)(A) Scientific Permit Requirements for Conducting Presence/Absence Surveys for Endangered Karst Invertebrates in Central Texas (March 8, 2006 version). This document can be found at <http://www.fws.gov/southwest/es/Library>.
3. Permittee is **not** authorized to enter caves known to contain listed species unless a monitoring plan has been approved in writing by the Austin ESFO, CPI Branch.

End Permit TE 217655-1