



Rachel Barlow

Biologist/Project Manager

General Qualifications

Ms. Barlow has worked Central Texas endangered species for over four years. She has extensive experience working with endangered avian species, endangered karst invertebrates, and rare *Eurycea* salamanders. She has conducted karst feature surveys on 200 acres in central Texas since 2009. Ms Barlow also has experience with orienteering/navigating using aerial, topographic maps and GPS. She is proficient in bird calls, as well as plant and animal field identification. She has experience with wetland delineations and Waters of the U.S. determinations as well as map creations utilizing ArcMap 9.3.

Experience

Hicks and Company Environmental Consultants. Ecologist.

Austin, Texas. Duties included Golden-cheeked Warbler (*Dendroica chrysoparia*) and Black-capped Vireo (*Vireo atricapilla*) presence/absence surveys and territory delineations for the City of Austin, TxDOT, and Texas Parks and Wildlife;

Cave Faunal Surveys for Travis County; Wetland Delineations for TxDOT; and preparation of TxDOT Categorical Exclusions, assisted in preparation of City of Austin and TxDOT Environmental Assessments, and Environmental Impact Statements for TxDOT and the Edwards Aquifer Recovery Implementation Program.

Travis County Dept. of Transportation and Natural Resources. Seasonal Natural Resources Technician.

Austin Texas. Duties included territory mapping for the Golden-cheeked Warbler and Black-capped Vireo, brown-headed cowbird trapping, *Croton alabamensis* var. *texensis* surveys, cave invertebrate surveys and cave inspections, Jollyville Plateau salamander (*Eurycea tonkawae*) surveys, cave cricket counts (*Ceuthophilus* sp.), White-tailed deer (*Odocoileus virginianus*) surveys, assisting with preparation of land management plans, and locating and measuring habitat characteristics associated with Black-capped Vireo nests.

Plateau Land and Wildlife Management, Dripping Springs, Texas. Duties included establishing Breeding Bird Census routes, conducting Breeding Bird Censuses, and producing census reports for private land owners in central Texas.

U.S. Fish and Wildlife Service. Wildlife Biologist. Austin, Texas. Duties included data gathering and assessment of the biological status and threats to central and west Texas species, preparation of 90-day petition findings for the Jollyville Plateau salamander and San Felipe gambusia (*Gambusia clarkhubbsi*), preparation of 12-month petition finding for the Jollyville Plateau salamander, preparation of critical habitat designation for the Devils River minnow (*Dionda diaboli*) and Comal Springs invertebrates, Field Supervisor, State Administrator and Regional Director briefings, federal register document drafting, FOIA request processing, and local, state, and federal briefings/coordination regarding conservation issues and the Endangered Species Act.

Years with Zara: <1

Previous Experience: 6

Education

M.S. Wildlife Ecology, Texas State University, 2008

B.S. Biology, University of Southern Mississippi, 1995

Certifications

USFWS Endangered Species Permit # TE 217655-1

TxDOT Pre-certification 2.3.1 Wetland Delineation

Wetlands certification

CPR training

Zara Experience

Southern Edwards Plateau Habitat Conservation Plan. 2010-current. Biologist/Project Manager.

Zara Environmental is currently teamed with Loomis Partners in the development of a regional habitat conservation plan (HCP) for Bexar and other adjacent counties. Responsibilities include working with Bexar County and the City of San Antonio to prepare a Habitat Conservation Plan to support an ESA incidental take permit for the golden-cheeked warbler, black-capped vireo and three of the nine federally listed karst invertebrates.

Pedernales Bird Conservation Agreement. 2011-current. Biologist/Project Manager.

Zara is currently under contract with Riverside Resources to facilitate the establishment of a Golden-cheeked Warbler conservation bird bank on 320 acres in Blanco, County. Responsibilities include providing liaison among the client and the U.S. Fish and Wildlife Service; conducting meetings with relevant stakeholders for advancing the bank agreement and resulting conservation easement; providing assistance in drafting a land management plan; provide input for the draft bank agreement, conservation easement and biological baseline report; and providing assistance in delineating habitat potentially used by the warbler.

TxDOT Environmental Services, Spur 53 Project. 2010-Present. Biologist/Project Manager.

Zara Environmental is currently under contract with TxDOT for technical expertise to perform all necessary work to fully characterize the existing biological resources for the Spur 53 project from I-10 to Babcock Rd. in Bexar County, Texas. Zara is responsible for preparing the biological resources section of the NEPA document for this project, including indirect and cumulative impact analyses.

Jollyville Transmission Main. 2010-current. Biologist.

Zara Environmental is currently teamed with Hicks and Company in the development of an Environmental Assessment (EA) for the Jollyville Transmission Main in northwestern Travis County. Responsibilities include drafting sections of the EA relating to endangered karst invertebrates, surveying for City of Austin Critical Environmental Features (CEFs) at shaft sites, surveying for endangered karst and Jollyville Plateau salamander habitat at shaft sites, monitoring for karst invertebrate habitat during the construction phase, and consulting with the client regarding avoiding and minimizing impacts to endangered karst invertebrates and the Jollyville Plateau salamander during construction.

Camp Bullis Endangered Bird Surveys, San Antonio, Bexar County, Texas, 2011-current.

Biologist/Project Manager.

Zara has an ongoing contract to monitor endangered species of Camp Bullis. Responsibilities for endangered bird surveys include hiring, training and management of seasonal survey technicians, who will perform annual endangered bird surveys.

Comal ISD Endangered Species Habitat Survey, San Antonio, Texas. 2011. Biologist/Project Manager

This project assessed potential endangered species habitat on 16 acres in Bexar County. Responsibilities included the identification of any endangered bird habitat on the tract as well as assessments of previously identified karst features for karst invertebrate habitat.

Population Status of Karst Invertebrates in the Balcones Canyonlands Preserve (BCP), Travis County, Texas, 2010-2011. Biologist/Assistant Project Manager

This project assessed the distribution of karst invertebrates in caves of and in near proximity to the Balcones Canyonlands Preserve (BCP) and BCP acquisition area, with particular emphasis on *Neoleptoneta myopica*, *Tartarocreagris texana*, and *Texamaurops reddelli*. The updates generated during this effort will be used to

increase the information on distributions of endangered karst invertebrates and other troglobitic species of concern. Responsibilities included biological surveys of caves, excavation of new features, identification and cataloguing of collected species, and data compilation.

Selected Publications and Presentations

Barlow, R.E., T.R. Simpson, and J.T. Baccus. 2008. Food Habits of Hunter Collected Northern Bobwhite Quail (*Colinus virginianus*) in South Texas. Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies 62:7-11.

Barlow, Rachel. 2008. Food Habits of Hunter Collected Northern Bobwhite quail (*Colinus virginianus*) at the Chaparral Wildlife Management Area in South Texas. Presented at the Southeastern Association of Fish and Wildlife Agencies Annual Conference, Corpus Christi, TX.

Barlow, R.E. 2008. Fall and Winter Food habits of Hunter Harvested Northern Bobwhites (*Colinus virginianus*) in South Texas. Presented at the Southeastern Natural Resources Graduate Student Symposium, Mississippi State University, Starkville, MS