

# Biologists Review Karst Habitat Protection Areas

*U.S. Fish and Wildlife Service, Region 2*



*Biologists from the U.S. Fish and Wildlife Service and City of Austin review karst habitat.*  
FWS Photograph



*Typical high-quality salamander habitat.*  
FWS Photograph

## Karst Species Tour

Two members of the Implementation Team for Strategic Habitat Conservation (ITSHC) conducted a survey of endangered species karst-associated habitat in Texas during late October.

Brian Hanson, the co-chairman of the ITSHC for Region 2 of the Fish and Wildlife Service, committee member Alisa Shull, accompanied by Paige Najvar and Cyndee Watson, biologists in the Austin Ecological Services Field Office, toured karst habitat in Austin, Texas on Oct 19. Karst habitat is home to seven invertebrate species that are listed as endangered under the Endangered Species Act. An additional three species (salamanders), two candidate species and one petitioned species, are also dependent on springs issuing from karst aquifers. These species are only found in the karst habitat located in central Texas, many are found only in one county.

The Jollyville plateau salamander was observed up close in excellent spring habitat. This species remains entirely aquatic throughout its life cycle in small streams originating from karst springs. Development pressures can degrade their habitat, by impacting flows from karst springs and/or degrading water quality.

The Austin Ecological Services Field Office has submitted a request for funds that would address these and other species and specifically targets two at-risk salamanders—Jollyville Plateau salamander and Georgetown salamander and eight karst invertebrates (seven endangered and one candidate)—Bee Creek Cave harvestman, Bone Cave harvestman, Tooth Cave pseudoscorpion, Tooth Cave spider, Tooth Cave ground beetle, Kretschmarr Cave mold beetle, Coffin Cave mold beetle and Warton cave meshweaver. They are proposing a Strategic Habitat Conservation approach with the following partners: City of Austin; Travis County; Williamson County; and the Williamson County Karst Foundation.

The four elements of SHC are addressed in their proposal:

- Biological Planning—determine how to obtain population status and habitat associations;
- Conservation Design—delineate areas to be protected;
- Conservation Delivery—set up preserves and manage them; and
- Monitoring and Research—establish protocols and conduct monitoring and research

The Implementation Team for Strategic Habitat Conservation Team for Region 2 of the U.S. Fish and Wildlife Service oversees the adoption and execution of SHC in the Southwest United States which includes the states of Texas, Oklahoma, New Mexico and Arizona.

## For Further Information

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*Jollyville plateau salamander.*  
FWS Photograph

