

**City of Austin's BCCP Activities
Quarter 4 Update: 1 July – 30 September 2018**

BCCP Administration	
Infrastructure Projects	Five Infrastructure Habitat Assessment Applications were processed, and Determination Letters were issued from July - September 2018.
Land Acquisition	AW BCP is examining a potential 30-acre acquisition that has been offered on Champions tract along FM2222 and City Park Road.
Reports and Events	AW BCP staff acquired comments from the County BCP and incorporated them into the update to the 1999 Tier II-1 Public Access Management chapter
Personnel	No update
Administrative	Submitted comments on proposed regulatory revisions to Endangered Species Act implementation (public comment period closed 9/24/2018).
Rare and Endangered Resources Management	
Golden-cheeked Warbler (GCWA) and Black-capped Vireo (BCVI)	BCVI surveys continued into July. Avian data entry and quality control are still in progress. Annual report writing will begin when all data is entered and reviewed.
	Preliminary analyses of the 2018 data show declines in GCWA abundance on most of the study plots and >50% on two plots (Emma Long 100-acre and Vireo/Wild Basin).
	Extracted DNA from blood samples collected from 30 GCWAs during the 2018 breeding season; collaborating with Dr. Giri Athrey/Texas A&M University on analyses.
	Submitted information to BirdLife International for consideration in the proposed reclassification of the GCWA on the IUCN Red List. Final determination should be published in November.
Bracted Twistflower	Data from spring surveys were compiled and sent to Texas Natural Diversity Database. Staff reviewed all recent survey data for analysis of short-term trends and compared data to climatic variables (temperature and rainfall). Staff met with members of the Bracted Twistflower Working Group to discuss population trends and threats to the plant for ranking assessment.
Jollyville Plateau Salamander	BCP continues to locate and conduct flow measurement, aquatic life surveys, and water-quality sampling of springs across the BCP on a periodic basis in hopes of locating new salamander locations. Staff completed survey of salamanders in Testudo Tube stream passage, photographing all individuals captured for photographic "capture-mark-recapture" study. A new Jollyville salamander spring location was located on Kent Butler preserve and subterranean crustacean Stygobromus was found by contractor Crystal Datri with assistance from staff Colin Strickland.
Karst invertebrates/ karst work	BCP staff have received comments and suggested additions to the Environmental Criteria Manual regarding cave restoration from engineer Tom Franke of Watershed Protection Dept. These additions to the ECM will bring City Code more compliant with federal permit requirements and provide greater protection for sensitive preserves.
	A contract with Zara Environmental was approved that will provide support for the Flint Ridge Cave drip analysis and hydrogeological study report. Cave drip data was downloaded on July 14 and compiled. New equipment for installation (flow gauge for a comparison sinkhole, autosamplers for Flint Ridge Entrance and three drips will be ordered in October 2018.
	Conducted cave faunal surveys and cave cricket exit counts (ongoing)

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	<p>Conducted cave excavation and restoration work at several sites. Locating and assessing undocumented karst features (ongoing), currently focusing on Rollingwood and Balcones National Wildlife Refuge Karst Faunal Regions, where staff have excavated a feature discovered by FWS staff, the new feature has been excavated down to a stream passage and rare troglobitic and stygobitic species have been observed and collected for species identification. Documenting flow rates at springs (ongoing). In August and September 2018 major sediment removal was conducted at Another Cave in the Slaughter Creek Greenbelt. Both Another Cave and nearby permit cave Slaughter Creek Cave were filled with rocks and sediment during construction of Mopac South in the early 1990's, and both caves require additional restoration to enhance the ecosystem and potentially even connect the two caves whose entrances are about 300 feet apart. BCP is seeking authorization from PARD (managing department) and ECM revisions described above to allow fairly extensive restoration of BCP permit Blowing Sink Cave that is required by the BCCP permit compliance.</p>
Plant and Animal Control	
Mammals	10 hogs were removed by contractors and City staff this quarter.
Red-imported fire ants and Tawny crazy ants	Tawny crazy ants continue to be monitored per established protocol from Section 6 grant.
Soft ticks/ Relapsing Fever	<p>Soft tick collection continues, including all publicly accessible guided caves. Our new standard is to survey public access caves annually. Specimens captured are delivered to Texas State researchers. BCP is collaborating with the Austin Health Dept and CDC on evaluating the extent of soft ticks that transmit relapsing fever in the Austin area. Their report published in June: http://www.tcms.com/uploadedFiles/Travis_County_Medical_Society/Communications/Journal/2018-May-June.pdf. On May 15, KVUE aired a report on relapsing fever based on the CDC patient survey that was corrected based on best available information on soft tick locations from faunal surveys by BCP biologists: https://www.kvue.com/article/news/local/austin-sees-jump-in-rare-tick-borne-infection/269-552420585</p>
Invasive Plants	BCP staff and volunteers are continuing efforts to remove non-native plants on COA BCP tracts.
Land Stewardship	
Habitat Restoration	<p>Staff and volunteers continue to implement demonstration projects at the Vireo Preserve to promote water retention, slope stabilization, soil restoration, and regeneration of native plants on degraded areas that are currently not habitat for either the GCWA or BCVI. Since Vireo Preserve supports many of the habitat types observed throughout the BCP, lessons learned from restoration work at this site are applicable to other areas within the BCP.</p>
	<p>Collaborating with international scientists to research effects of shade, herbivory, and mycorrhizal fungi on oak germination, survival, and growth.</p>
	<p>Collaborating with the University of Texas at Austin to sample endophytic fungi from Ashe juniper and screen these for antibacterial and antifungal properties.</p>

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Fencing	Down fencing around Live Oak Cave in recently acquired Village of Western Oaks Karst Preserve and Watershed Management Area was repaired on August 23, 2018. The fence protects the public from soft ticks bearing relapsing fever that were discovered in the cave.
Wildfire Preparedness	BCP provided access to Travis Country HOA to allow them to create a shaded fuel break on their property adjacent to Barton Creek Wilderness BCP preserve.
Law Enforcement	
Trespass and Criminal Mischief	No law enforcement occurred this quarter.
Outreach/Volunteers	
<i>See BCP Partners Education Summary July - September 2018</i>	