

City of Austin BCP Projects
BCCP Coordinating Committee Meeting
November 1, 2013-December 31, 2013

Program Administration

Personnel

- The BCP biologist position was advertised and closed in November, and the position should be filled in January 2014.

Annual Permit Reports

- BCP annual reports (avian, outreach, infrastructure) were submitted to Travis County in December 2013 for compilation and submission to U.S. Fish and Wildlife Service. Karst invertebrate report has been drafted and will be finalized in early January 2014.
- Annual scientific permit reports were submitted to U.S. Fish and Wildlife Service and Texas Parks and Wildlife Department.
- City BCP staff received annual reports from 13 individuals with BCP research permits who conducted research on the BCP during 2013. 2013 projects included quantification of soil bacteria and fungi (soil metagenomics), ant diversity and abundance, cave research and restoration, Jollyville Plateau salamander monitoring and research, water quality and quantity monitoring in rural and developed areas of the Bull Creek watershed and for WTP4, surveys of mammals using game cameras, and vegetation surveys.

Biological Monitoring

Karst

- Tawny crazy ants (TCAs) were first observed negatively impacting cave fauna in Whirlpool Cave in June 2013, and it is likely that they have invaded McNeil Bat Cave as well. City and Travis County staff are working with the TCMA/Whirlpool Cave manager on monitoring impacts to cave fauna. Staff conducts cave faunal surveys quarterly and continues to observe thousands of ants in the upper level of the cave; the only other life observed were a few troglomorphic spiders on the ceiling of the cave. TCMA staff and volunteers have agreed to start conducting monthly cave cricket exit counts. We anticipate that this new invader will effectively eradicate most of the cave fauna from this cave and any other cave they invade. City and Travis County BCP staffs are currently working closely with Ed LeBrun (UT Fire Ant Lab) to investigate possible methods of treating TCAs within the cave cricket foraging area. UT, Travis County, and City BCP staff applied for a section 6 grant (UT/ Ed LeBrun as the lead applicant) to help pay for the research. One more note on TCAs: after the recent heavy rains which caused the branch of Williamson Creek/ Whirlpool Cave area to flood, it's highly likely that the flood waters have washed TCAs much further downstream, thus infecting a much larger area of South Austin.
- Conducting cave faunal surveys and cave cricket exit counts.
- Monitoring cave conditions, removing trash, and treating for red-imported fire ants.
- The Watershed Protection Department (WPD)-led Davis Lane Hydrological study is in the final stages and will lead to water quality improvement CIP projects that will directly improve water quality to Maple Run Cave. WPD hydrogeologist Nico Hauwert conducted one last dye trace injection on September 20 during a rain event; the goal was to determine if water was leaking into Maple Run to help determine if any repair work needs to be done to protect the cave. It appears that water infiltrated the cave via the drainage ditch located west of the cave. However, the good news is that it appears that very little or no water entered via the storm water pond. Nico is still waiting on the results of water quality samples submitted to LCRA before making a final determination.
- BCP Staff is continuing to assist Nico Hauwert and the WPD with the Blowing Sink CEF stabilization CIP project. Several major recharge features/caves are unstable, leading to large amounts of sediment washing into the aquifer. The project will stabilize these features, thus improving water quality to Barton Springs.

- In an effort to educate the public about the importance of caves and cave fauna, Nico Hauwert initiated an effort to find local non-BCP caves that would be appropriate for educational purposes. Staff and volunteers are currently excavating several karst features.
- WPD dig team helped excavate 2 BCP caves that were impacted by the October floods. District Park Cave received enough water during the October flood events to flood the lower section of the cave and altered the entrance, making access impossible without major excavation work. It appears that Blowing Sink Cave also received a considerable amount of rain, blocking passageways further inside the cave. WPD dig team is currently working on excavating this feature.
- Following the October floods, BCP staff found that the cave gate to Flintridge cave was blocked with flood debris. Staff was able to remove all debris, thus allowing access for the cave faunal survey.
- Restoration and monitoring efforts have begun at 2 ES caves located in the courtyard at McNeil High. Nico Hauwert is leading the restoration effort along with help from FWS, City and Travis County BCP staff. Travis County and City BCP staffs are currently conducting cave faunal surveys with the goal of including student participation for long term monitoring and potential research projects that will benefit the listed species. Viv Loftin is currently working on a restoration plan. City staff will provide plants for this project.
- Travis County and City BCP and WPD staff met with COA Public Works staff on October 3rd regarding a proposed trail that would be built within the cave cricket foraging area of Stark's North Mine. Staff recommended that Public Works contract out a cave cricket foraging study to determine if Walnut Creek acts as a barrier to cave cricket foraging and if so, then the trail would not impact the cave. Nico Hauwert agreed to resurvey the cave, and to come up with an estimate on the size of the sub-surface drainage catchment area.
- City and Travis County staff met with TXDOT, CTRMA as well as other local stakeholders regarding the proposed construction of SH45, its impacts on Flintridge cave as well as other karst features in the area. The meeting focused primarily on ideas on how to minimize damage to these features.
- Volunteers reported that the Goat Cave fence was breached, thus allowing illegal access. BCP staff responded with a temporary repair and reported the incident to the site owner (Parks and Recreation)

Golden-Cheeked Warbler (GCWA)

- USFS Project: Interlocal Agreement with the US Forest Service (Dr. Frank Thompson, Jennifer Reidy) to provide GCWA Population Viability and Habitat Suitability modeling within the BCP.
 - 5-year study, focuses on four primary questions:
 - What is the absolute abundance of the GCWA on the BCP and on individual macrosites?
 - How do demographics (e.g. density, productivity, survival) vary with landscape and habitat factors?
 - How viable are these populations?
 - How do various management scenarios influence population viability?
 - Completed third year of data collection in collaboration with BCP partners (Audubon, LCRA, Travis County, and Wild Basin) and over 30 volunteers. Summary report for the 2013 field season submitted to Travis County for inclusion in the BCP annual report.
- Vickery Method: During the 2013 field season, volunteers helped conduct surveys to compare the intensive survey methods used in the USFS project with a method that uses a ranking of observed reproductive activity to establish reproductive success (known as the Vickery method) rather than relying on more intensive nest monitoring. Results of the 2013 surveys found the Vickery method provided inaccurate estimates of abundance, pairing, and breeding success of the GCWA. This work will be continued in 2014.
- Accuracy of Density Estimates from Models Fit to Point Counts: BCP staff and partners drafted a report comparing model-derived GCWA density estimates with spot mapping for three different studies conducted on the BCP (Texas State University, U.S. Forest Service, Texas A&M University). The comparisons found that the model-derived estimates tend to overestimate GCWA densities, particularly in areas with low GCWA densities.

Black-capped Vireo (BCVI)

- City BCP staff and volunteers planted 3,600 shin oak acorns on the Sam Hamilton Memorial Reserve West tract in areas that were impacted by the 2011 drought. Acorns were planted under dead Ashe juniper, live Ashe juniper, and open areas in accordance with a study developed by BCP staff to monitor shin oak germination and seedling survival.
- COA BCP staff is continuing to work with volunteers to implement projects to stabilize slopes, restore soils, and promote regeneration of native woody plants on degraded areas of the BCP that are currently not habitat for either the GCWA or BCVI.

Jollyville Plateau Salamander

- COA BCP staff assisted WPD with several JPS surveys.

Preserve Management

Dual-Managed Lands

- AWU and PARD are working with user groups of the Emma Long Motocross Park to develop an official trail map for motorized and mountain bike use.

LCRA T-160 Transmission Line

- LCRA submitted a proposal to upgrade their existing T-160 line which runs thru the Bull creek macrosite. LCRA plans to do the clearing prior to March 1, 2014, however, the actual replacement work will begin September 2014. LCRA is working closely with BCP and WPD staff to avoid impacts to endangered/threatened species and habitats.

Law Enforcement

- Several illegal trails were cut at Emma Long between City Park Road and the eastern boundary, south of Oak Shores Drive. AWU and PARD BCP staffs continue to work on ways to discourage further activity. Volunteers are also patrolling the area.
- River Place Nature Trail (MUD trail).
 - Implementation of the trail decommissioning plan has not yet been initiated
 - A game camera installed along the section of the trail encroaching on City property continues to record trespassers despite notices at trailheads clearly declaring this section of trail closed.
 - Barricades and signs declaring the trail to be closed continue to disappear.
- Vandalism occurred in an old house on the BCP Lanier Tract. The City plans to demolish the house
- Trespass continues to be a problem on the Upper Bull Creek macrosite and in other locations.
- Illegal dumping off of Anderson Mill Road at the Lime Creek property is becoming an issue
- Several large homeless camps have been cleaned up in the Barton Creek greenbelt. AWU and PARD staff continues to monitor these sites and remove camps as they are discovered.
- 3M hog trap was vandalized and feral hogs were released. Cellular cameras will be placed to monitor activity in the area.
- Forest Ridge continues to have illegal trails cut by local running groups. Efforts are being made to contact local running groups to discourage further activities and patrols have increased. Cameras have also been placed at Forest Ridge.

Invasive Species

- See Tawny Crazy Ants, above.
- Work continues to remove non-native plants on COA BCP tracts.

Animal Management

- COA BCP staff is currently re-evaluating its deer management program.

Oak Wilt

- Continued monitoring of all confirmed oak wilt centers.

Fencing Projects

- Fences are currently being installed along the Lime Creek, Park West, and Coldwater boundaries.
- COA BCP staff investigated recent flood damage; luckily most sites were easily repaired by staff. However, 2 water gaps on Beard Trust and one water gap on Vaught Ranch road were seriously damaged; staff plans to contract this work out.

Fire Management

- WCD staff continues to participate in the creation of a Community Wildfire Protection Plan for Travis County. The draft plan was released in August and has been reviewed and commented on by WCD staff. The final plan will be completed this spring.
- BCP staff has continued work on a pilot Wildfire Mitigation Plan for the South Lake Austin Macrosite. This plan will evaluate the potential impacts of a wildfire and suggest appropriate suppression and recovery strategies. The plans are being developed with the WCD fire management and GIS staff.
- WCD staff is working with the Austin Fire Department Wildfire Division on a fuel mitigation project on the Jester BCP tract. The work will meet the specifications in the City of Austin Fuel Treatments in Juniper and Juniper-Oak Woodlands, Best Management Practices within the Balcones Canyonlands Preserve. Vegetation type, size, and density will be recorded before and after the work to better understand the results of performing work to the BMPs. This work will also serve as a demonstration project for proper implementation of fuel mitigation BMPs in habitat.