

Annual Report for Barton Creek Habitat Preserve 2022
The Nature Conservancy of Texas
October 1st 2021-September 31st 2022

Science / Stewardship

Annual surveys (point count) were completed for the golden-cheeked warblers (GCWA) and black-capped vireos (BCVI) to determine population densities. The GCWA population remains stable. One BCVI male was observed on the property during the 2022 season and a second male was thought to be on the property but it was never completely verified. Brown-headed cowbirds were removed from the property by shooting.

Through a mulching project, 20 acres of juniper were removed in one of the preserves burn units in preparation of a future planned prescribed fire. No prescribed fires were conducted during the reporting period.

Preserve staff and TPWD public lands lottery hunters are helping to control the population of white-tailed deer in an effort to reduce browse and increase recruitment of Texas Oaks. Population is estimated through camera surveys and stand counts. Twelve deer were harvested by 38 hunters.

Ongoing research projects included “KR Bluestem Effects on Grasslands” (The Nature Conservancy / Global Impact Invader Network – GIIN); “Golden-cheeked Warbler Population Viability and Habitat Suitability within the Balcones Canyonlands Preserve” (City of Austin and Balcones Canyonlands Preserve); Community Structure and Composition of Lizards in Texas (University of TX at Arlington); Herpetological Community Assemblages of the Greater Austin Area (St. Edwards University); Using Community Assembly Filters to Guide Invasive Species Management and Grassland Restoration (The Nature Conservancy / University of TX); Demography of Reintroduced Plants at the Lady Bird Johnson Wildflower Center (University of TX); Deploying a Sensing Network at the Barton Creek Habitat Preserve: A Preliminary Proposal for Field Testing (University of TX); Detecting Enigmatic Karst Salamander Species of the Genus *Eurycea* from Central TX using eDNA (University of TX); and Noise Assessment of Barton Creek Habitat Preserve (St. Edwards University).

The preserve was placed under a permanent conservation easement through the City of Austin in November 2021. The easement safeguards a significant portion of the Barton Springs segment of the Edwards Aquifer contributing zone for water quality and protects habitat for the endangered Golden-cheeked Warblers.

Education/Outreach/Volunteers

The preserve hosted approximately 693 visitors, 210 volunteers totaling 571 hours of work, and 82 used the property for educational purposes. Groups included the Boy Scouts of America Troops 25 & Troop 52, Texas Parks and Wildlife, Capital Area Master Naturalists, Balcones Master Naturalists, Audubon Society, St. Edwards University, University of TX, and Texas American Resources Company (company volunteer work day).

Volunteer projects included removing old fencing, invasive species removal (Johnson grass – *Sorghum halepense*, Malta star-thistle – *Centaurea melitensis*, Chinaberry Tree – *Melia azedarach*, and *Ligustrum sp.*), trash pickup, trail maintenance, fire-line preparation, juniper removal, deer surveys, bird surveys, boundary monitoring, infrastructure repair, and one Eagle Scout project (building deer blinds).

Expense Summary

Operations and maintenance cost spent on BCP for FY 2021 was \$10,000.