TNC Year-end progress report
Barton Creek Habitat Preserve
13 September 2023

Project title: Demography of reintroduced plants at the Lady Bird Johnson Wildflower Center
Applicant: Sean Griffin, Director of Science and Conservation at the Lady Bird Johnson Wildflower Center

Project results:

During the proposed project period of 9/21/2022 – 9/21/2023, we visited the Barton Creek Habitat Preserve three times to collect seeds. Due to our late start in the season and the dry spring/summer in 2022, we were unable to collect the number of seeds we wanted for our full project. Out of our 7 focal species, we were only able to collect seeds from 4 species: *Panicum virgatum* (1,000-5,000 seeds), *Liatris mucronata* (~500 seeds), *Sorghastrum nutans* (~500 seeds), and *Stillingia texana* (~100 seeds).

Following seed collection, we germinated and grew about 100-300 seeds of *Panicum virgatum, Liatris mucronate*, and *Sorghastrum nutans* in our greenhouses at the Lady Bird Johnson Wildflower Center, using potting soil as the growing medium. In the mid spring, we planted individuals of each species into 4 separate test plots at the Lady Bird Johnson Wildflower Center, which we will use as a pilot study for our larger planned Demography Study. We watered these plants regularly for about 2 weeks, after which we let them grow and develop with no ongoing management. This fall, we will impose treatments to each of the plots (drought, drought + burn, burn, and untreated control) to determine plant response to these factors.

Due to insufficient seed collection in 2022/2023, we are hoping to continue seed collection for this project into the upcoming year (2023/2024). As in our original proposal, we are interested in collecting 7 species: *Andropogon gerardii, Asclepias texana, Dalea aurea, Liatris puctata var. mucronoata, Panicum virgatum, Sorghastrum nutans,* and *Stillingia texana*, using standard seed collection procedures and limits recommended by the Center for Plant Conservation.