Evaluation of Three Endemic Plants of the Refugio-Goliad Prairies

James E. Pittman III, John Lloyd-Reilley and Timothy E. Fulbright.

The Coastal Prairie Conservation Initiative (CPCI) is a partnership between the Grazing Lands Conservation Initiative (GLCI), the U.S. Fish and Wildlife Service (USFWS), Texas Parks and Wildlife Department (TPWD), the Natural Resources Conservation Service (NRCS) and private landowners formed to restore habitat in the Refugio-Goliad prairies. The efforts of the CPCI are focused on improving habitat for the release of Attwater's prairie chicken. Additional effort is also being generated on understanding two endemic forbs of the Texas coastal prairie, plains gumweed (*Grindelia oolepis*) and threeflower broomweed (*Thurovia triflora*), and one endemic shrub, Texas peach bush (*Prunus texana*). The purpose of this study is to collect data pertaining to the taxonomy, morphology, habitat and reproductive biology of these three plant species in order to aid in the restoration, stabilization and maintenance of their populations.

Populations of plains gumweed, threeflower broomweed and Texas peach bush will be assessed for ecosite characteristics. The soils will be monitored for salinity, moisture and texture. Vegetative structure as well as species composition and diversity will also be characterized at these sites. Seed will be harvested from each population and the seed fill, viability, dormancy and germination will be determined. After assessing and determining site characteristics, randomized replicated plots of both seeded and transplanted material will be established at the appropriate locations. Plant establishment, survival and reproduction will be recorded from these sites.

This study should help determine the necessary requirements for maintaining and restoring suitable sites for these Texas coastal prairie endemic species.

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