

Girl Scouts, Master Naturalists support Floodway ecosystem restoration project

Story by Jim Frisinger, Fort Worth District

Girl Scouts answered the call Nov. 12 to support an ecosystem restoration planting project for the U.S. Army Corps of Engineers and City of Dallas in a 7-acre tract along the Trinity River. Master Naturalist volunteers from their Elm Fork and North Texas chapters helped supervise dozens of youthful volunteers from the Girl Scouts from Frisco, Celina and Prosper, the Young Men's Service League (Highland Park) and the National Charity League Highlander Chapter from Highland Park during a windy Saturday.

The tract is part of the Corps of Engineers Dallas Floodway Extension Project, a partnership with the City of Dallas to lower the risk of flooding for the citizens of Dallas. An adjacent chain of 75 acres of new wetlands is already helping to drain flood water more quickly out of the Dallas Floodway and speeding them through the Great Trinity Forest. The Corps' Lewisville Aquatic Ecosystem Research Facility and Lewisville Lake Environmental Learning Area collaborated to provide the plants for the volunteers, pre-dig 450 holes and supervise the work.

This grassland zone is subject to dry (and sometimes hot) prairie conditions 95 percent of the time yet faces inundation the other 5 percent when the Trinity River floods. Native plants were selected that can thrive in this unique bottomland environment. Lynde Dodd, a University of North Texas research scientist working at LAERF, said this tract needed attention.

"This area along the Trinity River where we are planting is considered poor habitat as it is overwhelmed by non-native species such as Johnsongrass, Bermudagrass and the invasive species giant ragweed," she said. "We are planting native grassland species to change the status of 'poor habitat' to 'valuable habitat'. Predatory species such as hawks will be able to prey upon rodents or rabbits utilizing the shelter and food provided by the native grass species as well as larger animals such as bobcats and coyotes. These are species that are otherwise absent from this area because of current poor habitat conditions."

On Nov. 12, the volunteers laid in some 450 native plants. These included Maximilian sunflower *Helianthus maximiliani*, sawtooth sunflower *Helianthus grosseserratus*, switchgrass



A Master Naturalist from the Elm Fork Chapter guides two Girl Scout Troop 2916 (Frisco) volunteers in planting a Texas native grass. The City of Dallas organizes volunteers several times a year to help the Corps set out wetland and prairie plants. The environmental project helps reduce the flood risk along the Trinity River in Dallas.



A Girl Scout volunteer finishes planting a big bluestem in the Dallas Floodway Extension Project. This Texas native grass does a superior job of erosion control for this Trinity River overbank area compared to existing grasses growing near the Dallas Waste Water Treatment Plant.

Panicum virgatum, Eastern gamagrass *Tripsacum dactyloides*, white tridens *Tridens albenscens*, little bluestem *Schizachyrium scoparium*, big bluestem *Andropogon gerardii* and Indiangrass *Sorghastrum nutans*.

This grassland, where IH-45 crosses the Trinity River, borders the first cell in the new Lower Chain of Wetlands that the Corps of Engineers constructed to lower flood risk. The wetlands serve two purposes: flood risk reduction and habitat for migratory waterfowl, fish and small forest animals.

"Not only is the water fed to the wetland cells by river overbanking but from treated wastewater effluent from the Waste Water Treatment Plant that is polished as it exits out further downstream," said Dodd. "In addition to floodwater conveyance, the cells improve the quality of the water as it moves through the chain of wetlands. Excess nutrients are taken out by the plants and other bacterial processes,



Volunteers get instructions for a planting bee adjacent to the Trinity River at the I-45 overpass in Dallas. Native Texas prairie plants, grown at the Engineer Research and Development Centers' Lewisville Aquatic Ecosystem Research Facility, were planted along the Trinity River bank that is subject to both periodic flooding and hot, dry conditions.

keeping them out of the river."

Regular volunteer opportunities that the City of Dallas organizes for this flood risk reduction and ecosystem restoration project connect it to the community.

"I think that it is important to involve the public in volunteer activities, such as this grassland planting event, to engage them in the actual process of restoration, to educate them about the plants, wildlife and basically, the ecology of the project so that they, themselves, may become stewards of the land," Dodd said. "We hope that this involvement and stewardship will promote further restorative efforts in other areas of Dallas and along the Trinity River."

The planting event also received financial support from FedEx Office through the Trinity Commons Foundation.