

U.S. ARMY CORPS OF ENGINEERS

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BUILDING STRONG.

Corps-built ecosystem in urban Dallas attracts wildlife: Trinity Bird Count reaches 125 species near downtown

By Jim Frisinger Fort Worth District U.S. Army Corps of Engineers

DALLAS – Where's a new hot birding spot a half dozen miles from downtown Dallas? It's the Lower Chain of Wetlands, a new man-made ecosystem, built by the U.S. Army Corps of Engineers Fort Worth District in partnership with the city of Dallas.

Back in the 1990s, planners devised an innovative way to lower flood risk for Dallas. Build a new pathway to help flood waters pass through the Trinity River System – but have it also transform an area, which was once a golf course and a dump, into quality habitat.

They built it and the wildlife came.

It's been nine years since the first dirt was turned, but the Trinity Bird Count has tallied 125 species from this spot – among the highest of seven places volunteers check every three months in Dallas County. There's also 14 species of mammals here (beaver, bobcats, mink and river otters among them), 13 species of reptiles and six of amphibians, according to t he Corps' count. There's 18 species of fish in one wetland pond alone.

Tania Homayoun, senior conservation biologist for Audubon Texas who runs the bird count, attributes the success rate to the varied landscape in the Lower Chain: woodlands, thickets, grasslands and wetlands.



Photo: Jim Frisinger/Fort Worth District

Lynde Dodd, who works for the U.S. Army Corps of Engineers Lewisville Aquatic Ecosystem Research Facility, leads a planting crew in June. University of North Texas students set out two species of sunflowers, sawtooth and Maximillian, in the ecosystem.

"There is a lot of natural cover there, compared to some of the more managed areas, like parks, we visit," she said.

This diversity is by design.

Research scientist Lynde L. Dodd has been planting, monitoring and developing techniques to create the wetlands and grasslands since 2005. The aquatic ecosystem restoration specialist works with a team from the Corps' Lewisville Aquatic Ecosystem Research Facility.

Dodd said seeds and tubers produced by certain aquatic plants were intentionally planted to attract birds. Delta arrowhead – also known as duck potato – feeds migratory dabbling ducks. Invertebrates

U.S. ARMY CORPS OF ENGINEERS – FORT WORTH DISTRICT 819 TAYLOR ST., FORT WORTH, TEXAS 76102 WWW.SWF.USACE.ARMY.MIL associated with these plants (such as dragonflies and damsel flies) begin their life cycle in the water, providing another food source for birds. Aquatic plant communities are habitat for aquatic insects and small fish fry, which in turn feed larger predators such as bluegill and largemouth bass. These fish, in turn, are common prey for wading birds such as the great blue heron.

Wetland managers lower water levels during the spring and fall to expose mudflats, attracting visiting shorebirds such as lesser yellowlegs and other sandpipers, and allow vegetation to grow.

Water levels are raised in the winter to inundate vegetation to attract northern pintails and other duck species.

A diverse community of native Texas was grassland species planted around each wetland. Selected plantings, such as Eastern gamagrass and switchgrass, benefit sparrows, dickcissels and doves. A diverse plant community supports a diverse insect community, which supports an additional



Photo: Jim Frisinger/Fort Worth District

This yellow-crowned night heron was spotted at the Lower Chain of Wetlands in June. About 125 species have been recorded at the Corps-built habitat in Dallas by Texas Audubon's Trinity Bird Count. suite of birds, such as American kestrels and loggerhead shrikes.

Many birds stop while traveling one of the great migratory superhighways: the Central Flyway, which can lure great numbers at one time. In late December more than 6,500 waterfowl were observed here, primarily pintails, Northern shovelers, gadwalls and ring-billed ducks, the Corps reports.

Dodd has a front-row seat, and has seen her own work rewarded.

"It was exciting to observe a mother wood duck and her ducklings in the Wood Duck Pond this year," she said. "We planted it with species that we thought would be beneficial to wood ducks."

"There's always an opportunity to see really great birds, especially at a place like the Lower Chain of Wetlands. By the nature of the habitat, you don't know what you'll see from one minute to the next," Homayoun said.

The wetlands are open to the public. The Trinity Bird Count welcomes newcomers, who

can accompany volunteers as they walk through the habitat. Information is available at www.TrinityBirdCount.com.

"There a lot of interest in the Trinity River Corridor, with a lot of plans for new and exciting recreation opportunities. The Trinity Bird Count gets new people involved," Homayoun said.

"It also is building a body of information that shows the value of the Trinity River Corridor for breeding and migrating birds," she said. "We want to have base line of data to track relative to coming development long term. It helps us to keep an eye on how all of the change impacts the natural world."