

Building for birders while reducing flood risk

The Trinity Bird Count finds some of its quarry in Dallas Floodway Extension project's Lower Chain of Wetlands

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Birders headed out in a chill wind for a January outdoor adventure in the back yard of Dallas' historic Joppa Community. At the end of Fellows Lane, they stepped through a kind of looking glass into the Lower Chain of Wetlands built by the U.S. Army Corps of Engineers and City of Dallas that both reduces flood risk and creates new wildlife habitat. Their goal: to participate in the quarterly Trinity Bird Count.



Every three months for the past year, bird-counting teams have moved out into the forest, bushes, prairies, floodway and wetlands along the Trinity River to take stock of the diversity of the avian population and visit some of Dallas' most forgotten public lands.



“Our goals are to learn more about the birds that are in the Trinity River Corridor and to get people out to enjoy nature in the corridor,” said Karen Walz, who manages the count. The effort is sponsored by the Trinity Commons Foundation and funded by a grant from The Boone Family Foundation and others. The Trinity River Audubon Center is an active partner in the bird count.

Bird counts are important for bird conservation because they give researchers critical information about key species, according to the project's website, www.TrinityBirdCount.com. Insights about birds and their habits help researchers examine larger environmental issues such as climate change and habitat conservation.

The bird count divides the Trinity River corridor in Dallas County into seven areas. On Jan. 28 we are at Area 5, the series of wetlands adjacent to the Trinity River. The cold wind has driven a lot of waterfowl into shelter, but the count is still considerable. By the end of the morning 43 different species are spotted according to the official count, bringing the count to 97 for this area across four seasons.

What many of the birders don't realize is the uniqueness of Area 5.

This birding spot was once part bottomland forest, part Sleepy Hollow Golf Course, part dump. It's now a new man-made ecosystem, which also reduces flood risk for Dallas, conceived through years of collaborative planning between the City of Dallas and U.S. Army Corps of Engineers. The result is a new chain of wetlands, surrounded by a collar of prairie, which presents a path through the Great Trinity Forest. That allows for a more efficient conveyance of flood waters and thereby reduces flood elevations along the southern Trinity River corridor between downtown Dallas and Loop 12.

Between 2004 and 2008 this Lower Chain of Wetlands was excavated. Biologists and environmental planners from City of Dallas, Fort Worth District, Texas Parks and Wildlife Department and U.S. Fish and Wildlife Service worked with the Lewisville Aquatic Ecosystem Research Center to execute the re-vegetation plan. The Lewisville unit, a satellite lab of the Corps' Engineer Research and Development Center (ERDC), selected a diverse mix of plants to populate the area and make it a feedlot for wildlife and to foster some degree of water cleansing. More than two dozen varieties of plants were planted including burheads, sedges, spikerushes, pondweed and water lilies. Treated effluent from the nearby Dallas Waste Water Treatment Plant provides a year-round water supply that kept the wetlands thriving through the 2011 drought.

Corps researchers manipulate a system of sluice gates to help new vegetation get established and to accommodate the needs of certain shorebirds which, during migratory season, benefit from lower water levels that create beach zones for feeding. Concurrently, fish and macro-invertebrate communities developed and matured in the cells, an attractive food source for a variety of waterbirds, including ducks, sandpipers, egrets and herons.

ERDC scientists count species, too: several dozen macro-invertebrates, 19 species of fish, five amphibians, seven reptiles and evidence of 8 different mammals in this area adjacent to the Trinity's main channel. Dr. Gary O. Dick, who supervises the wetlands project for ERDC, said monitoring over the past three years has shown steady diversity increases in the plant communities, invertebrates and fisheries – a sign the new ecosystem is working.

“All cells now appear to be holding more birds for longer periods during the winter than they did early on,” Dick said. “This year we have seen more waterfowl on the cells than in previous years, which is most likely a combination of migration patterns and food availability – lots of plants, invertebrates and fish to support lots of waterfowl.” As an example researchers have seen hundreds of pintails in the cells this year but only saw a few in previous years.

On this day the wetlands are temporarily inundated from heavy rains from earlier in the week. The high water at what the Corps calls wetland Cell G draws murmurs from the bird counters who have never seen it like this before. But with binoculars in hand, they strike out into the area where ducks have replaced golfers.

The birders follow an old cart path that blends into the underbrush that provides such good cover for small birds. Darlene Moore homes in on a ruby-crowned kinglet. Her audio device repeats the kinglet's call. In no time it reacts, hopping back and forth through the bushes, giving everyone an eyeful of the petite red-roofed bird.

At the top of a nearby rise we look south across Cell G's watery expanse with Loop 12 in the background. Today only few ducks are seen paddling in the distance. (Corps researchers sometimes see thousands of birds in a single wetland cell.) Twenty northern shovelers have been spotted along with a single ring-necked duck. These are new species that had not been spotted in the Area 5 bird count before. The crew captain carefully notes the discovery in her report.



Darlene Moore captured this photo of a green heron during an earlier outing at the Area 5 wetlands.

Moore, a neonatal nurse practitioner in her day job, was drawn to birding by her father who would take her to the Long Island shore to watch hurricane winds blow in unusual offshore birds. She now totes around a camera with a 400/100 mm telephoto lens. She has photographed 191 Texas birds in less than a year since moving here from Georgia.

Alva Baker had heard about the chain of wetlands but until this day had never seen them. The communications consultant lives

in the South Dallas-Park Row Historic District. That's a few miles from the chain of wetlands and close to the next wetlands phase planned just across the Martin Luther King Jr. Bridge.

"Being out there, walking along, seeing the landscape. It was just gorgeous," Baker said. Shortly after the trip she got to talking about the Trinity again while working with her church group at the MLK Center. She plans to come back to the Trinity River this spring – this time in a canoe.

By the end of the morning, 10 new species had been added bringing to 97 the number spotted for the Trinity Bird Count at this location.

"Bud and I both like this particular area; It's a beautiful place to go," said Annie Melton, a trail – planning consultant with her husband, Bud. Both are regulars. "We wish more people knew more about it and wished there was a gateway instead of having to go over a gate."

The City's project engineer Mary Ayala said the city is expanding South Central Park towards Cell G. The improvements will include off-street parking and trail access to the Cell G property. This will link the park to a new trail network.

Trail builders are partway through building 31 miles of trails. Eight miles are planned under Trinity Trail Phase 3 in this partnership between the Corps and the city. Trinity Trail Phase 3 trails will run beside Cells F and G and connect to existing trailheads to the north and south. Another spur will head east to Elam Road and the planned equestrian facility. One this phase is complete a 9-mile trail loop will be in place for public use. For the moment, the recreational

infrastructure needed to make Cells F and G more accessible are in the late design stage with a construction date unknown.

The Corps of Engineers has just begun plantings of adjacent grasslands surrounding each cell that have been dominated by giant ragweed, a nuisance species. The Corps plans to convert these areas to native prairie grasses and forbs by plantings and managing (by mowing) through 2013. This will provide habitat to a wider array of birds and other animals. These plantings include such Texas natives as big and little bluestems, Maximilian sunflowers, switchgrass and white tridens.

One more census is planned this spring for the Trinity Bird Count. A final report and updated bird checklist of birds you can see along the Trinity River corridor is expected soon after. Walz said the project is working to sustain its mission beyond this last season's count.

With birding teams having taken the field on 27 trips to these seven areas, the Trinity Bird Count has already spread the word about the great outdoors at Dallas' doorstep. It has sparked new interest in good birding spots: the University of Texas Southwestern Medical School campus and McCommas Bluffs among them. Many are identified on its website map. Through its website and other information, the Trinity Bird Count publicizes a unique wildlife-viewing opportunity to the public inside and outside of Dallas, Walz said.

“Having this information on the website makes it easier for people coming to visit to this area, it makes it easier for them to see what's here, so that encourages people,” she said. “This project provides the raw material for additional efforts to attract ecotourism.”