



New culverts and a raised roadbed allow water to flow between the wetlands. © Robert Penner/TNC

Road Repairs for Wetland Restoration

Or: Why the Shorebird Crossed the Road

A visit to Cheyenne Bottoms can be interesting any time of year. As long as there is water in the marshes, there are birds to be seen. One thing that makes this vast wetland complex unique is the abundance of public roadways crisscrossing through it. Birdwatchers can stay in their cars while touring more than 26,000 acres of protected wetlands.

So what happens when the roads become impassable? It's not just people in their cars that are impacted. Most of these roads were built in the early 20th century, bisecting marshes and fields that naturally flood and hold water for migrating birds. The result of this division is muddy, obstructed roads and wetlands kept dry. This past winter, The Nature Conservancy partnered with the local South Homestead Township and Ducks Unlimited to repair a

three-quarters-of-a-mile stretch of road running through TNC's Cheyenne Bottoms Preserve. The heavily traveled road was often closed because the small township (population: 322) didn't have funds for repairs. By coming together, the



Cliff swallows feeding in a roadside pool © Beau Rapelye

three organizations were able to contract county crews to make the repairs. Barton County road crews were contracted to remove old culverts that had been filled with sediment, install new culverts and raise the road above the surrounding

land. These changes have reconnected 420 acres, allowing water to flow over the road instead of under it.

“We want the water to pass through and flood the wetland basins,” says Dr. Robert Penner, TNC's Cheyenne Bottoms and avian programs manager. “By holding water, the grasslands transform into pools and mudflats that come alive as important feeding grounds for migrating birds.”

This restoration of surface hydrology through road repair will soon be repeated by TNC in the heart of the preserve, where 80 acres have been disconnected from a larger marsh.

So why did the shorebird cross the road? Come visit Cheyenne Bottoms and see for yourself.



Left: Kristen Sikorsky reviews images on a trail camera at Little Jerusalem Badlands State Park. © Laura Rose Clawson/TNC; Right: Photo of a fledgling ferruginous hawk in its nest captured by a wildlife camera.

The Impact at Little Jerusalem

It's been more than four months since the long-anticipated and highly publicized opening of Little Jerusalem Badlands State Park. The 332-acre park is owned by The Nature Conservancy, which partners with the Kansas Department of Wildlife, Parks and Tourism (KDWPT) to maintain and run Kansas' newest state park. While TNC and KDWPT developed trails, parking and infrastructure, graduate student Kristen Sikorsky gathered data for her master's thesis in park management and conservation at Kansas State University.

Sikorsky used drones to fly over the property to record baselines and help determine what the acceptable levels of visitor impact. She set multiple trail and wildlife cameras throughout the park to look for vegetation loss and visitor-created trails—the kind when people wander off the established trail system. TNC is continuing the monitoring she set up to make decisions that balance public access with the protection of the fragile area.

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Matt Bain, Western Kansas Conservation Manager

Two weeks after the park opened, a park visitor captured a video of two young men throwing rocks at each other and the formations. The video had more than 300 shares on Facebook. According to Steve Seibel, High Plains Regional Supervisor for KDWPT, if a person

is caught destroying property at the site, it falls under Destructive Acts Regulation, carrying hefty fines and court costs. Since the park opened in October, more than 2,600 people have visited the site. Most of those visitors have been respectful.

“I think it is going really well,” says Matt Bain, Western Kansas conservation program manager for TNC. “A lot of people saw that video and said it was unacceptable. It is helpful that people shared that. Our partners and people that care found it unacceptable. At the end of the day, we are inspiring people to conserve what's left of our native prairie out here. I think it's working.”

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About Those Drones

Drones, or unmanned aircraft vehicles, are not allowed at Little Jerusalem Badlands State Park. In addition to the disturbance drones cause to wildlife, Kansas state regulations prohibit their use in state parks except in specified areas at a small number of state parks. TNC and Kansas State University worked with KDWPT to obtain special authorization to fly the research drones at Little Jerusalem.



© Beau Rapelye

Prairie-Chicken Booming

Aerial surveys suggest that anywhere from half to two-thirds of all lesser prairie-chickens in the world are now found in western Kansas, between the Arkansas River and the northern reaches of the Smoky Hill River. This relatively small area is also home to The Nature Conservancy's Smoky Valley Ranch. In an effort to increase appreciation for lesser prairie-chickens, TNC partnered with the Wild West Historical Foundation to offer lesser prairie-chicken viewing trips at Smoky Valley Ranch. Between March 15 and May 15, visitors can observe the unique courtship ritual (called *booming*) of these special grassland birds. Tours are \$80 per person and space is limited.

For more information or to find an open tour date, visit nature.org/ksevents