

Jim and Susie Aber know a thing or two about kites. But these aren't the kites you'd pick up for a family picnic. Twenty years ago, the Abers developed a new technique to monitor wetland habitats using kites to fly cameras and get an actual bird's-eye view.

It all started when the Abers received a grant from the National Aeronautics and Space Administration while teaching at Emporia State University. They were researching aerial photography methods for environmental monitoring.

"This was before drones were common. Our method provided images that were clearer and with higher resolution than traditional remote sensing," explains Jim.

Their technique and the pictures they provided quickly became useful for managing Cheyenne Bottoms Preserve.

"Their photos are invaluable," says Robert Penner, avian conservation manager at The Nature Conservancy. "You can only see so much from the ground. But the Abers' photos

have shifted the way we manage the marshes at Cheyenne Bottoms. We can see exactly what's working and where."

When the research project ended, the Abers volunteered to continue monitoring the preserve multiple times each year.

"A graduate thesis is usually one to two years, and then they move on. The same is true of university faculty," says Jim. "It's rare for anything of this nature to go more than two years."

Thanks to the Abers, TNC now has twenty years of images documenting Cheyenne Bottoms, something unheard of for many ecological sites.

"We can see how the marshes are responding to things, both short and long-term," says Susie. "You can't hide anything from the aerial photography, but the kites are completely invisible to wildlife."

Cheyenne Bottoms is a 41,000-acre wetland complex in central Kansas, and it's known

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# Bird's-Eye Views



**Bird's Eye Views continued**

worldwide for its importance to migrating birds. Geography and tradition lead migrating birds to this spot. Some fly thousands of miles without rest, fueled by a few tablespoons of body fat. When the fat reserves burn low, the birds stop to feed and rest at the marshy basins that have fed and sheltered their kind for thousands of generations.

TNC owns and manages the nearly 8,000-acre Cheyenne Bottoms Preserve adjacent to the 19,857-acre Cheyenne Bottoms Wildlife Area maintained by the Kansas Department of Wildlife & Parks. Ducks Unlimited is also a critical partner that is protecting the waterfowl

and shorebird habitat at Cheyenne Bottoms. TNC's approach is to keep the wetlands as they were before the area was settled. Management techniques like mowing and grazing emulate what would happen if bison herds were passing through the area.

“That’s the beauty of TNC,” says Susie. “You’re protecting and keeping the area as natural as possible, and it allows the wildlife to do what they need to do. Our photography is the best way we can give back to TNC. We hope that sharing this story will encourage other people to support TNC and understand the importance of protecting wetlands.” •



- 1 Jim and Susie Aber on a sunny day at Cheyenne Bottoms Preserve.
- 2 A tractor appears miniscule as it mows thick vegetation to create the sparse, open space preferred by shorebirds in preparation for spring rains.
- 3 Plains garter snake catching a small bullfrog.
- 4 Repeated summer rains in 2018 filled the marshes.



Page 16-17: View of Cheyenne Bottoms to the northeast. Deception Creek enters from the left. All Photos © Jim & Susie Aber

## MULTI-STATE PARTNERSHIP BETWEEN TNC & USDA

The Nature Conservancy and USDA's Natural Resources Conservation Service (NRCS) entered into a five-year cooperative agreement to increase private land conservation in Kansas, Missouri, Nebraska, Oklahoma, and South Dakota. The two organizations have a mutual interest in implementing the conservation programs authorized by federal legislation known as the Farm Bill, which is updated about every five years. The most recent Farm Bill passed with strong bipartisan support and was signed into law in late 2018.

NRCS is a federal agency that provides planning, technical and financial assistance to landowners to conserve the natural resources on their land through programs like the Environmental Quality Incentives Program (EQIP), Agricultural Conservation Easement Program (ACEP), and Conservation Reserve Program (CRP).

“This agreement opens more opportunity for collaboration that crosses state lines much in the way geo-political boundaries do not confine nature,” says Rob Manes, Kansas state director for TNC. “We’re looking forward to leveraging the staff and expertise of both organizations and ultimately getting more conservation directly on the ground.”

Kansas farmers and ranchers use NRCS programs in places like the Flint Hills where voluntary conservation easements on private land protect some of the last tallgrass prairie in the world and in western Kansas where land enrolled in CRP provides critical nesting habitat for grassland birds.