Conservation

Wetland Hero

Lou Ann Forbes can't always identify the plants or animals on her property, but she far more prefers their secret identities to the alternative she had there nine years ago.

Back when Lou Ann first bought the place, her five-acre parcel of land was one sliver of a larger 190-acre farmstead. The previous owners had built a house, barn, and other structures on the site. Situated in Chicagoland's farthest western reaches, the parcel consisted of a beautifully mowed lawn, a small alfalfa field, and a patch of land that frequently became saturated with water.

Suspecting that the wet patch might be a "prairie pothole" soaking in runoff from higher ground, Lou Ann called in experts to help her create a true wetland. "We basically enhanced what's already there," she says happily.

Today, the retired high-school art teacher isn't so much the owner of the resulting wetland as its benefactor. "Most people want water lilies," she says. "I want this to be for the plants and animals."

After only three years, fauna and flora too numerous to count—among them a number of sedges, blue bottle gentian, cinnamon herb, bullfrogs, great blue herons, killdeer, mud birds, several types of dragonflies, even a wandering coyote—coexist within or near the tiny wetland habitat.

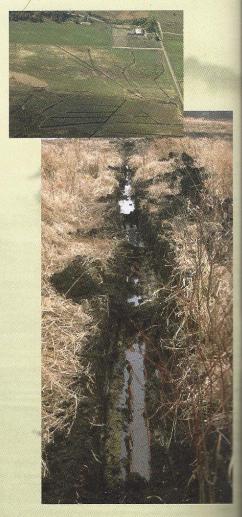
Lou Ann plans to expand her wetland as the opportunity arises—to create something bigger than a prairie pothole. For someone who only recently learned about wetlands, that's a grand ideal.

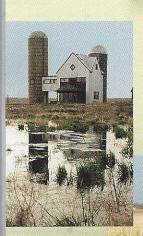
Lou Ann's wetland project is rooted in the belief of coexisting with wildlife, no matter what the size or form. "This project is proof that you can live in harmony in a small space," she says. "I cannot tell you one bad thing about having that wetland here."

Undoing the Damage

When it comes to wetland restoration, Ed Collins thinks big. Ed is a restoration ecologist at the McHenry County Conservation District. It's part of his job to reclaim wetlands that were converted to farmland by managing the removal of drain tiles.

A century and a half ago, farmers began burying drain tiles under the soil, row upon row, to divert natural groundwater to an acceptable outlet, like a distant river. The soil then dried and farmers grew their crops.





Corps

"The Works Progress

Administration discovered in the 1930s that there were enough drain tiles in Illinois alone to circle the globe six times," he says. "Hundreds upon hundreds of millions of acres have had drain tiles laid under them."

It takes four days for a backhoe to clear tiles from a 40-acre field of converted farmland. Considering that the first drain tile was pulled from the ground in 1988 and large-scale removal didn't begin until five years later, Ed has a pretty big job ahead of him.

Compared to the rest of the United States, the work that needs to be done in McHenry County is just a drop in the bog. Ed says the installation of drain tiles in the past 150 years is the largest engineering feat in the country.

"As environmentalists, we tend to look back and shake our fingers at the farmers," he says. "But these people were hardworking, with a work ethic rarely seen today. Drain tiles were a chance for their kids to go to college, or to make improvements on the farm. We're removing part of a very old culture, and it's important to treat it with the respect it deserves."

Ed teaches local classes that demystify how people in decades past regarded the natural world. Acre by soggy acre, Ed is helping to restore the natural landscape; and student by student, he is shedding light on what drives people to change their environment.



Friend of the Fen

In 1979, Steve Byers walked the ground of a fen near Elgin. A fen is a wetland with highly alkaline, constantly moving water—delicately balanced conditions that are home to specialized plants and animals. Steve surveyed the toll of seven years or so of off-road vehicle traffic, trash dumping, and other ravages. He was shocked.

The damage to this unique wetland and an adjacent prairie inspired Steve and a new volunteer group called Friends of the Fen to take action in spring 1980.

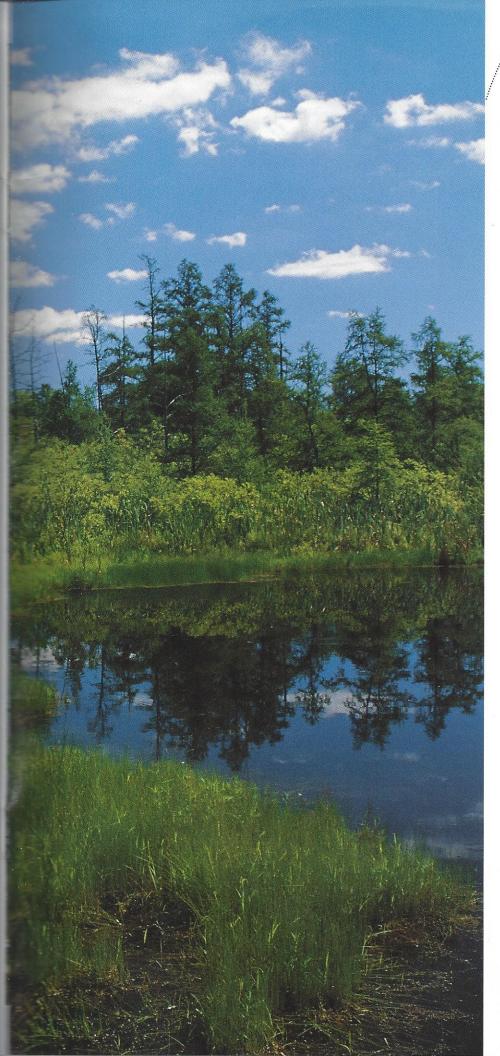
The Friends of the Fen set out to prevent the continued abuse of the wetland and to clean it up. Local students and volunteers piled brush to hamper illegal off-road traffic and removed huge amounts of garbage—including 23 truckloads of shingles. The volunteers reintroduced natural processes, like brush cutting and managed burning.

The strategy worked. In 1987, the Illinois Nature Preserves Commission approved a request by the Metropolitan Water Reclamation District of Greater Chicago to dedicate 70 acres at the site as a nature preserve. A year later, the Commission sanctioned an additional 20 acres owned by the city of Elgin. Bluff Spring Fen was born.

"That volunteer stewards could do this and have those two agencies dedicate that land is a success," Steve says, referring not only to himself but also to his successors and Friends of the Fen.

Today, success lies in the experiences of those who meet by Bluff Spring Fen's kiosk and trek its trails. Today, Steve helps landowners protect high-quality wetlands through his work at the Illinois Nature Preserves Commission, the same organization that sanctioned the fen he fought to protect. Bluff Spring Fen is evidence of the difference one person's vision can make.

You can share in such ventures and adventures by contacting the Chicagoland Environmental Network at (708) 485-0263, ext. 396, to link with volunteer groups in your area. Another excellent source of wetland information can be found in the Summer 1999 issue of Chicago Wilderness Magazine.



Brookfield Zoo's Wetlands

The Chicago Zoological Society would like to thank the following contributors:

Worlds of Water, Nancy Saunders, Brookfield Zoo What is a Wetland?, Nancy Watson and Nancy Saunders, Brookfield Zoo

Dragonflies: Winged Jewels of the Wetland,

Daniel A. Soluk, Ph.D., Lauren M. Pintor, and John D. Hoekstra, Illinois Natural History Survey

Laws of Nature, John Rogner, U.S. Fish and Wildlife Service Biodiversity of Wetlands: The Beauty of Northern Illinois, Greg Melaik, Brookfield Zoo

The Urban Wetland, Amy Bodwell, Brookfield Zoo Recreating Brookfield Zoo's Dragonfly Marsh, Rick Woodford, U.S.D.A. Natural Resources Conservation Service Conservation Corps, Chris Howes, Brookfield Zoo

Photo credits:

All photos reprinted with permission.

Cover: Bluff Spring Fen, A. Murashige, Chicago Zoological Society; frog, M. Greer, Chicago Zoological Society; water lily, H. Greenblatt, Chicago Zoological Society

Inside front cover: Prairie Wolf Slough, P. Mitchell-Buck,

Natural Resources Conservation Service

Page 2: sedge wetland, J. Rogner, U.S. Fish and Wildlife Service Page 3: (top to bottom) Wetland tourists, P. Mitchell-Buck, Natural Resources Conservation Service; rock bass, John G. Shedd Aquarium; bullfrog, P. Crisel, John G. Shedd Aquarium; Canada geese, Chicago Zoological Society

Page 4-5: Rusty Skimmer dragonfly, J. Hoekstra, Illinois Natural History Survey; Hine's Emerald dragonfly, D. Soluk, Illinois Natural

History Survey

Page 6: Dragonfly larvae, D. Soluk, Illinois Natural History Survey Page 7: (t-b) Spiketail dragonfly larvae, D. Soluk, Illinois Natural History Survey; Williamson's Emerald dragonfly, L. Pintor, Illinois Natural History Survey; Four-spotted Skimmer on perch and Canada Darners mating, D. Soluk, Illinois Natural History Survey Page 9: Sedge wetland (Door Co., WI), D. Soluk, Illinois Natural History Survey

Poster: North Park Village, P. Mitchell-Buck, Natural Resources Conservation Service

Page 10: (background) McHenry Co. wetland restoration, L. Forbes; Moraine Hills State Park, A. Murashige, Chicago Zoological Society; scarlet tanager, R. Curtis

Page 12: Prairie Crossing (Libertyville, IL), T. Evans; egret, Illinois Natural History Survey

Page 15: Purple coneflower, J. Kohout, Morton Arboretum; blue flag iris, S. Rowell, Morton Arboretum; Golden alexander, E. Benson, Chicago Zoological Society

Page 18-19: (background) Indian Lake, Chicago Zoological Society; restored wetland, Lou Ann Forbes cutting cattails, L. Forbes; Drain tile and aerial view of large-scale drain tile removal, E. Collins, McHenry County, IL Conservation District; Bluff Springs Fen, A. Murashige, Chicago Zoological Society Page 21: Volo Bog, Illinois Department of Natural Resources Back cover: Winter at Indian Lake, J. Schulz, Chicago Zoological Society

Editor: Nancy Saunders Designer: Andy Murashige Image Librarian: Nancy Pajeau Illustrators: Jeff O'Conner (poster, p. 26), Hannah Jennings (p. 20), Paul E. Niemeyer (p. 22)

©1999 Chicago Zoological Society. Brookfield Zoo is owned by the Forest Preserve District of Cook County and managed by the Chicago Zoological Society.

The mission of the Chicago Zoological Society is to help people develop a sustainable and harmonious relationship with nature. In so doing, the Society shall provide for the recreation and education of the people, the conservation of wildlife, and the discovery of biological knowledge.



This piece is printed on recycled paper with soy-based inks, preserving habitats for wildlife.