

# Conservation *Success Story*

Photo: DeKalb County Forest Preserve



## *A Wetland Once More - South Branch Prairie*

If land floods more often than it grows a crop, why not let it go back to what it wants to be - a wetland. That's what happened on the Hoppe Heritage Farmstead. The Hoppe sisters owned cropland that lies along the Kishwaukee River. About half of the land would flood on a regular basis. After several years, the sisters decided to do something.

"I spoke with the sisters for at least 15 years," said Terry Hannan, Superintendent for the DeKalb County Forest Preserve District (FPD). "They finally agreed to sell the land. We initially purchased the homestead which is five acres." Later, the 55 acres were added creating the South Branch Prairie.

Hannan contacted the USDA Natural Resources Conservation Service (NRCS) about the Wetland Reserve Program (WRP) as a possible opportunity to gain access to the rest of the land. Under the 2014 Farm Bill, WRP is replaced under the Agricultural Conservation Easement Program. NRCS staff followed up with the Hoppe sisters to discuss an easement purchase and restoration of the wetland. The sisters originally



Photo: DeKalb County Forest Preserve

enrolled the 85 acres; however, after further thought, they decided to enroll only 55 acres and leave the remaining 30 acres for a family inheritance.

Paul Searl, NRCS Soil Conservationist said, "This was a three-way deal. NRCS bought the easement from the sisters, and then they sold the land to the Forest Preserve. We started the process in early 2008," he continued. "The site was seeded late 2011. Construction work was done in the winter of 2011 and 2012, and by spring of 2012, we had a very nice wetland project in place."

Before re-establishing the native plants, Al Roloff, Natural Resources Manager for FPD, did some extensive research to be sure what he planted was accurate to pre-settlement conditions. He used several reference books as well as records and observations of plant species that exist in local remnant plant communities. Through the easement program, NRCS provides a plant species list and optional restoration structures and practices.



*Al Roloff searches for spring emerging plants with Ellen Starr - NRCS Area Biologist, Paul Searl, and Terry Hannan.*

"Paul and Lori Younker (NRCS area engineer) had provided us with 6-inch topographic measurements which made planting the gently undulating surface much easier," Roloff said. The map gives elevations of the land, allowing Roloff to select the proper plants for the soil type. The lowest elevation, where the seed drill



*Hoppe land before restoration*



*South Branch Prairie after restoration*

could not be used because of the standing water, was planted with root divisions, mud clumps and plugs. Later, when the area dried, he and volunteers hand scattered (inter-seeded) bulrushes, other sedges and forbs with seed collected from some of their other wetlands. "We inter-seed each season in areas that look like they can benefit from it."

Roloff was excited by the rapid results of their restoration work. "In 2011, we planted seed in the late fall and early winter. I will never plant perennial seed in the spring again," he said. "The first year germination rates far surpassed my expectations." They also held a prescribed burn after the second year, which wasn't possible in previous plantings. The rich, moist soil, combined with the high seeding and

germination rates, resulted in a dense growth of plant material by the end of the second growing season. There was more than enough vegetation to carry a prescribed fire through most of the site earlier in spring.

"Restoration work of two marsh wetlands was relatively easy, consisting of earthwork scrapes and removal of lateral field tiles," said Searl. "The main focus was the vegetation and our concern for invasive species." The main threat is canary reed grass and some cattails. Water from the primary tile that originally drained the field is brought to the surface with a riser. "Now when water flows through the tile, the wetland will stay wet," he continued.

After just two growing seasons, the plantings have grown significantly more than expected. Roloff said in areas where corn or soybeans were previously planted, he drilled the seeds. On non-cropland areas, he sprayed herbicide for two years to make sure competing weeds were mostly removed. "The diversity and density of plants has been amazing," said Roloff. "The marsh, sedge meadow and wet prairie mixes include many bulrushes and sedges, as well as wetland grasses and forbs. Including the prairie buffer, there are more than 100 different species located in this 55-acre plot." Some typical species of the marsh include Great Bulrush, Bur Reed, Wild Iris, Water Plantain, Sweet Flag and Common Lake Sedge.

From 2010 to 2012, a study was conducted on mussel populations in the Kishwaukee River in DeKalb County initially through the Openlands Foundation in Partnership with KREP (Kishwaukee River Ecosystems Partnership). The area includes a stretch of river that runs through South Branch Prairie and the connecting Russell Woods Preserve. Roloff said, "They found 14 live species of mussels, some in numbers larger than anywhere else in the river. This is now the most rich and diverse portion of the south branch of the Kishwaukee River."

The DeKalb County FPD has four full-time employees, five part-time and several seasonal workers. They maintain 17 other Forest Preserve sites in the county. Volunteers make a huge difference when gathering seeds and planting. The FPD supports a group of stewards who meet every week to help preserve and restore the woodlands, wetlands and prairies. Many are retired teachers, Master Naturalist and Gardeners, and others interested in learning more about plants. Students from Northern Illinois University and Kishwaukee College often help with seed collection and planting. Scout troops can earn a badge while assisting with projects too.

With the South Branch Prairie WRP project added to the corridor of other existing forest preserves, wildlife has flourished with sightings of Bald Eagles, Sandhill Cranes, and many different shorebirds. Diversity in plants benefit pollinators, protects the soil, and improves water quality. The partnership with NRCS and the FPD has been a positive experience. "We have discussed the possibility of another joint easement project in the future and, with our history of working with the Forest Preserve, I expect we will get another opportunity to do projects with them," said Searl.

Hannan said he wants to build on the education and historical portion that brings Hopper Heritage Farm, the 1835 Miller Ellwood Cabin, and South Branch Prairie together to showcase environmental benefits and provide enjoyment for visitors. His goal as always is "One planet at a time," he says with a smile.

The South Branch Prairie wetland is an extension of the educational experience. Located next to an historical log cabin, visitors can view the wetland and wildlife and learn about our natural resources and local history.

For more information on the Agricultural Conservation Easement Program, contact your local USDA Service Center, NRCS office or go to [www.il.nrcs.usda.gov](http://www.il.nrcs.usda.gov).