



# Restoring the Driftless Area Landscape

## Good Conservation That Lasts Generations

*Above: Eric Lee, of Coon Prairie Farms LLC, in Vernon County, Wisconsin, views established contour strips on the farm.*

The landscape of southwestern Wisconsin has always posed conservation opportunities for farmers. Unlike the rest of the state, this area, known as the ‘Driftless’, was never covered by the continental glaciers that advanced over most of Canada and the Midwest during the last few million years. The glaciers smoothed out the land as they moved south, filling in valleys and eroding uplands, creating a relatively flat landscape. The Driftless, in contrast to these surrounding areas, is an ancient landscape of stark relief, with high ridges surrounded by steep slopes and drained by spring-fed cold water streams. The soil is relatively shallow, formed in a parent material of loess silt, that was eroded by the last glacial advance and deposited on limestone bedrock by the wind. The Driftless is a fragile landscape, easily disrupted and damaged.

Eric Lee’s father, Virgil, saw value in Driftless area conservation, when he first bought his Vernon County farm back in the 1970s. Taking note of the steep slopes, sometimes exceeding 16 percent on cropland, he thought it wise to install contour strips and utilize a no-till cropping system. The contour strips broke up the slopes, alternating high residue perennial crops with low residue annual crops, preventing water from building up speed and promoting infiltration, thus preventing erosion. No-till cropping systems preserve the integrity of the soil, promoting a diverse soil biota, increasing organic matter content and helping the formation of good soil structure.

As Virgil got older and moved off the farm to an assisted living facility, he was not able to directly and closely monitor the farming activities. The farm operator of the land began to neglect conservation tactics by combining contour strips and not following a diversified crop rotation.

When Eric walked the wooded portion of the property, he noticed a gully had formed. He walked up to the nearest crop field

and realized the entire hillside had been planted in soybeans and a large gully cut across the land in that spot. Surveying 100 more acres, he found the problem to be persistent in vulnerable areas. Eric knew something had to change.

In 2017, after purchasing the farm from his family, Eric, now of Coon Prairie Farms LLC, contacted the USDA Natural Resources Conservation Service (NRCS) and the Land and Water Conservation Department (LWCD) in Vernon County for guidance on how to heal the land. With the assistance of Matt Albright and Ben Wojahn, of the LWCD, and Tom Kreuzer, Jeff Matzke and Sam Skemp of NRCS, Eric went to work developing and implementing a conservation plan that would address the erosion problems that plagued his farm, while allowing him to farm profitably.

“The first step was triage,” said Eric. “We had to get in and stop the bleeding. This land needed to be farmed differently or it wouldn’t be farmed much longer.”

With NRCS and LWCD assistance, Eric developed a new conservation plan to protect his natural resources and add new pollinator habitats to prescribed areas. He developed a more diversified crop rotation consisting of soybeans, corn, and grass-alfalfa hay. This rotation allows him to utilize contour strips like his father had. Between these contour strips, he installed contour buffer strips, which are narrow strips of perennial vegetation that further increase the efficacy of contour strip cropping. In the drainageways, he installed grassed waterways for preventing ephemeral gullies.

Eric also installed headland buffers on the edge of his fields, which are permanent perennial vegetated areas allowing farm equipment to turn around, preventing farming up and down the slope, which can lead to erosion issues. Furthermore, he went back to a pure no-till system. He worked through county



cost share programs and enrolled his land in the NRCS Conservation Stewardship Program, which offers him incentive payments for maintaining good conservation practices on his land.

“With commodity prices as low as they are, the cost share provided by the LWCD and NRCS is invaluable, particularly as I devoted many acres to conservation practices. It would have been difficult to cash-flow while implementing the significant changes I made on this farm without them,” Eric explained.

Eric recognizes it took a team to implement his new conservation plan. “I received a lot of help; the bulldozer operator, agronomist, custom planter, combine harvest crew and my good-hearted neighbors. Everyone, particularly the planter who went out on a bare field with nothing but flags staked by the county and planted according to the new contour strip plan, and the local fertilizer companies who had to adjust to using the headlands to turn their heavy equipment. All of them understood my philosophy and were instrumental in helping me carry it out. I’m so thankful for them!”

Eric has already seen the efficacy of the new system. In the fall of 2018, Vernon county was hit by a major storm dropping 18 inches of rain overnight. Despite emergency conditions, Eric did not see any major erosion issues on his cropland. “I could not imagine the damage that would have occurred if these practices were not installed,” he said.

Eric has also worked with the county forester to manage his forestland for timber production. He recently harvested trees utilizing horses to minimize impact on the woods and continues to work with the county forester to develop a forest management plan.

Coon Prairie Farms, LLC looks to the future with goals to implement more conservation that’s healthy for



the land and profitable for the farm. Eric sees pasture on his property that is not being properly utilized and plans to implement a prescribed grazing plan for steers. He would like to further reduce erosion and improve soil quality by incorporating cover crops into his rotation after soybeans. There will always be new opportunities and new challenges at Coon Prairie Farms and Eric, with the help of NRCS, is up for the challenge.

“This farm required me to become a conservationist,” said Eric. “I’m so fortunate that I pestered the LWCD and NRCS to come out and understand firsthand my concerns and help me install these types of practices. I’m so thankful for their sincere care for the land. I don’t have the luxury of farming 300 acres of flat ground, nor would I want to. I have a diverse, aesthetically pleasing farm that brings me great joy. When I look back at these last two years, I can’t believe the progress that we have made. I went from despair to hope. My farm is now a place of great satisfaction. It was not responsibly managed for profits and sustainability before, but now it is back on that path. I am only here for a short time and I want to do the best that I can for my family and those who come after me, while being generous with what I have today. Now, my children and others after them will have an opportunity to enjoy this great farm when their time comes.”

*Clockwise: Matt Albright, Vernon County LWCD, surveys for a waterway installation.*

*Contour strips installed through conservation cost share programs on the farm.*

*NRCS staff survey erosion concerns on the farm prior to conservation work.*

*A close-up of a gully formed on the farm prior to conservation work.*

