USDA United States Department of Agriculture

Dunn County Success from the Field

Practicing Water Quality Protection While Improving Return on Investment (ROI)

Background

Jeff Lake and his wife Kelley, along with daughter April and son Jake, are the 5th and 6th generation to farm the sandy loam soils on the Hay River in Dunn County, Wisconsin. This conservation-minded corn-soybean operation farms about 1,500 acres of irrigated and dry land near Wheeler. Jeff's interests in wildlife habitat, soil and water lead him to the USDA Natural Resource Conservation Service (NRCS) to get technical assistance to improve his soils and water quality.

Program Successes

In 2015, Jeff came to the NRCS Service Center looking for advice on cover crops to add to his no-till operation. "We looked at several options, including cereal rye after soybeans and red clover interseeded on corn grain," explained John Sippl, NRCS District Conservationist. Jeff was excited to try the red clover to build his biological capacity, while adding a potential nitrogen source to his soil. Four years later, Jeff is now planting corn grain into green living red clover.

As with all businesses, Jeff has to look at the economic side of the operation also. Practicing no-till has saved Jeff a lot of money already, but he wanted to know if there were ways to improve the Return on Investment (ROI). Jeff partnered with NRCS and Pheasants Forever to look at overall farm profitability. "Using a software system to look at overall acre-by-acre profitability, we identified areas of the farm that Jeff could increase his stewardship level and also improve the ROI," explained Sippl. "As a result, we were able to lower Jeff's planting populations on some acres, while maintaining yields and lowering production costs." In areas of very low profitability, NRCS was able to offer land retirement options. Land areas along the Hay River, which frequently flood or deposit sediments during the growing season, were entered into the USDA Farm Service Agency's Conservation Reserve Enhancement Program (CREP). Through CREP, Jeff was able to plant native grasses and forbs along the river banks, improving water quality and wildlife habitat. These plantings were cost-shared with very little out of pocket expense. Through CREP, Jeff is paid an annual rental rate for the land taken out of production, increasing the ROI of the field and farm. "ROI is not just about bushels, but the inputs to get those bushels," says Sippl.

April, Jeff, Kelley, and Jake Lake, Dunn County Wisconsin Conservation farmers. They were a finalist for the Aldo Leopold Conservation Farmers in 2019.

Jeff's interest in water quality doesn't stop at surface water; he knew his irrigation systems were inefficient and needed some improvements. Jeff's impression of the Environmental Quality Incentives Program (EQIP) was positive from the incorporation of cover crops. Next, he asked about improving his irrigation systems and applied for funding. Jeff was able to obtain EQIP assistance to improve the efficiency of his older irrigation systems, helping groundwater quality and quantity.

"Jeff is a leader in water and soil quality. His leadership in the Hay River Farmer-led Watershed group and being a finalist for the Aldo Leopold Conservation Farmer Award demonstrates his families conservation ethic," explained Sippl.

Future Plans

Jeff's conservation ethic paid off in 2019. He was awarded a contract though the Conservation Stewardship Program (CSP) for conservation work on his agricultural lands and forestlands. He is planning on improving his soils with continued use of cover crops and would like to add cattle to increase the biological diversity in the soils.

Wisconsin Natural Resources Conservation Service

wi.nrcs.usda.gov