

# Monroe County Success from the Field

## Upward Trends in Soil Organic Matter Levels Through the Decades: A Family-Operated Grain Farm's Story



### Background

The Kortbein family operates a 550-acre grain farm northwest of Tomah, Wisconsin. The picturesque farm straddles the watershed divide of the Upper La Crosse River Basin and Lemon-weir River Basins, both contributing to the Mississippi River.

### Highlights

The Kortbeins started working with their local conservation office to implement conservation practices back in the 1980s. At that time, they started the conservation tillage practice of No-Till with the help of the Conservation Technical Assistance (CTA) program, which allows farmers to develop a farm conservation plan with the help of their local conservation office. Tim states that they have seen their soil organic matter levels rise over the decades, from a 1980s level of 1.5–2.0% average to current levels of 2.5–3.5% average. Tim has observed over the years that they are seeing better infiltration of water during heavy rain events. He states that over time the family has seen various soil health improvements on the farm. Tim explains, “We see better water holding capacity, better nutrient holding capacity and better crops.”

During this time, the family had also worked with the USDA Natural Resources Conservation Service (NRCS) and the Monroe County Land Conservation Department to implement diverse conservation practices, which include nutrient management, pest management and cover crops, as well as installing grassed waterways and erosion control structures through the Environmental Quality Incentives Program (EQIP). The farm's wildlife habitat has been further enhanced by their choice to leave grain crops standing over winter as a wildlife food source and create woodland wildlife habitat through participation in the Conservation Stewardship Program (CSP).

### Future Plans

With the recent passing of Don, the Kortbein family is planning for the future and the transition of the family farm to the next generation. Future plans involve the construction of additional grassed waterways and earthen dams to manage runoff, as well as an increase in the operation's use of variable rate technologies for more efficient fertilizer use. Mark and Matt have plans to become professional Certified Crop Advisors (CCAs), and to build a business providing



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Tim, Mark and Matt Kortbein on their family farm in Warrens, Wisconsin (above), where soybean residue provides a natural mulch for the subsequent corn crop.

agronomic services, including the development of nutrient management plans as NRCS-registered Technical Service Providers. The future of the family farm looks bright, with soil health, erosion control and improved fertilizer applications contributing to a true vision for the decades ahead.



Don with the 1947 John Deere B he drove home from the dealership for his father William at the age of 12. Mark and Matt are 4th generation owners of Don's favorite family heirloom.

Wisconsin Natural Resources Conservation Service

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