



**FARM DESCRIPTION:** 2,500 acres with a corn and soybean rotation and small cow-calf operation.

**GROWER:**  
Thomas Connors  
*(right)*

**LOCATION:**  
Shipman, Illinois

**RETAIL FACILITY:**  
CHS Shipman

**CROP ADVISOR:**  
Regan Wear *(left)*

**RETAILER LOCATION:**  
Shipman, Illinois

#### WHAT THOMAS SAYS ABOUT THE 4Rs:

"I've used the 4Rs since the '90s. I look for ways to be proactive in my operation and to behave responsibly for the environment and social good. Increased efficiency creates the economics and profitability. As improvements have been made, the amount of nutrients leaving my fields is minimal to none. I'm proactive to stay ahead of regulations, be socially responsive to the public good and provide a sustainable operation that my family can farm for generations to come."

#### WHAT REGAN SAYS ABOUT THE 4Rs:

"Tom is very innovative and uses many tools to better manage his nutrient applications to maximize crop production, yet be environmentally and economically sound. It's not about a one-year gain in profitability. He looks at the long-term picture. He looks at overall sustainability by taking care of his soils while being sensitive to nutrient loss. With tiled fields, he uses 4R Nutrient Stewardship Principles to protect the watershed. He takes extra precautions with nitrate leaching and subsurface drainage. He has kept tremendous records and works diligently with our CHS Yield Point Staff to put the data to work for decision making to contribute to his farm's long-term sustainability."

# ADVOCATE PROFILE 2016

## ECONOMIC MEASURE OF SAVINGS:

Corn and soybean yields have steadily increased 5 percent annually. Corn N usage has decreased from 1.2 lb/bu in 1995 to 0.9 lb now. Variable rate application helps save \$10 to \$12/acre. Reduced P and K on soybeans hasn't hurt yields.

## BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- One of the first area farmers to incorporate the 4R Nutrient Stewardship Management Strategy in the late 1990s. A local advocate for precision agriculture and the 4R framework.
- Utilizes a systematic approach by soil grid sampling every field, overlaying soil fertility maps with yield maps on a multi-year scenario. Based on multi-years analysis, evaluates crop removal rates with necessary nutrients required for each crop year.
- Fertility management is based off his 30-year field history
- Buffer strips at the field edge or adjacent to creeks that run in and around his fields, and dry dams and grass waterways reduce runoff and soil erosion
- Cover crops build organic matter in high sodium soils
- Corn is minimal and vertical tilled to reduce soil erosion, while soybeans are no-tilled
- Soil conservation applies to all fields
- Controlled drainage system on a 164-acre field
- Still using 2000 Ag Leader Pro with target filing and John Deere RTK
- 18 acres in Conservation Reserve Program (CRP)
- Completed second year with the Conservation Stewardship Program
- All farm field decisions are made with data from precision technology (i.e. yield maps and soil fertility maps)

## FORMS OF NUTRIENTS APPLIED

MicroEssentials® SZTM, potash and anhydrous ammonia. N is applied by a flat rate of anhydrous ammonia in the fall followed by an in-crop variable rate application of 32 percent liquid nitrogen in the spring. He participates in an intensively managed Winfield Answer Plot, which evaluates the latest technology and systems before adopting them commercially. The treatments include N, P, K, crop protection and plant health treatments.