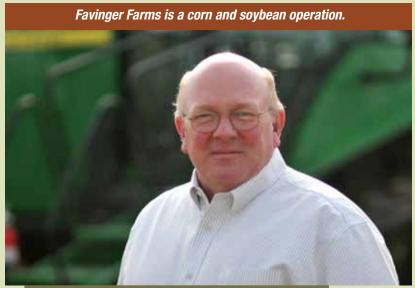


# **ADVOCATE PROFILE**



Grower: Bruce Favinger (above) Location: Minden, Nebraska

Retail Facility: Cooperative Producers, Inc.

Crop Advisor: Ty Fickenscher

Retailer Location: Hastings, Nebraska

What Bruce says about the 4Rs: "The 4Rs program is a great commonsense approach to a complete fertilizer plan. It is the way we should all be looking at our fertilizer, and as an industry, agriculture needs to take a proactive approach to the environmental practices that we use and then tell consumers what we are doing and why it is good for a safe food production system."

What Ty says about the 4Rs: "The 4R Nutrient Stewardship Program promotes placing nutrients using the most efficient methods to maximize crop production while minimizing underutilized product and environmental impact. Growers implementing the 4Rs choose to be better stewards of the land by being critical of the inputs that are used and the methods that are used to apply them."

#### **CROPPING SYSTEM OBJECTIVES:**

Utilize emerging tools and technologies to maintain responsible and sustainable agriculture.

## **ADVOCATE PROFILE**

#### BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- Grid soil samples all acres for variable rate application of nutrients to help determine the right rate and right placement of nutrients
- Account for nutrient credits from the previous year to help determine the right rate
- Utilize split application of nitrogen, pre-season urea applications followed by liquid UAN as either a pre-plant
  or side-dress to assure the right rate is available at critical growth stages for the crop and to minimize N
  loss to volatilization and leaching
- Use GPS technology to avoid skips and prevent over-application
- . Deploy variable rate seeding to maximize yield while controlling input costs
- · Utilize nitrogen stabilizers for liquid and dry fertilizers
- Use phosphate efficiency enhancement additives to maximize benefit of the fertilizer and minimize build up
  of unused nutrients in the soil
- Utilize CPI's technology-driven decision-making tool (CPI-300) for precision agriculture decision making to
  enhance producer profitability and environmental stewardship
- Plant 800 acres of cover crops to help naturally control weeds and to hold moisture and nutrients in the soil
- Auto steer and GPS guidance is used on all field operations and spraying applications
- Use plant tissue testing to evaluate effectiveness of the fertilizer program and as a diagnostic tool when needed
- Use satellite imaging to help with yield potential and fertilizer plans
- Test irrigation water on some fields for nitrogen content and adjust application rates of fertilizer as needed
- Utilize irrigation management to avoid over or under watering

#### FORMS OF NUTRIENTS APPLIED:

No fall applied nutrients

Preplant Variable rate dry fertilizer applied based on of the grid samples
Planting In furrow application of starter fertilizer (usually 5 gallons of 10-34-0)
Preemerge Application of 32% nitrogen with herbicide (usually 10 gallons / acre)

Sidedress Final application of 32% nitrogen is injected into the soil with a coulter / knife combination

Irrigation If needed will apply some product through pivot systems (usually Thiosulfate)

**NUTRIENT USE EFFICIENCY:** We have been using 0.9 pound of N per bushel of expected yield

### **Average Yield for Each Crop:**

Corn yields average between 224 and 260 bushels / acre Soybean yields average between 62 and 81 bushels / acre

**Economic Measure of Savings:** Each field is different; it is difficult to put hard numbers on the economic payback of each method used. We try to choose products that are environmentally sound and application methods that are effective in placing and keeping the product where it is needed.