

ADVOCATE PROFILE



Madison Farms is a 3,300-acre corn and soybean operation with 28 acres of CRP as filter strips and wildlife habitat areas.

Grower: Alan Madison (right)
Location: Walnut, Illinois
Retail Facility: Ag View FS
Crop Advisor: Mark Orr (left)
Retailer Location: Princeton, Illinois

What Alan says about the 4Rs: “In concept, a lot of producers are using the 4Rs because they make sense and provide an economical advantage. As an industry, we need to better tell our story to show consumers and other producers how it works. We are being the best nutrient stewards we can be while protecting the environment for future generations.”

What Mark says about the 4Rs: “Our role is to partner with growers to establish best management practices. We are involved with On Farm Discovery projects that produce “Predictable Performers” relative to tweaking existing programs. A grower’s willingness to push the envelope is only tempered by our requirements to increase yield, do it profitably for the grower and have an environmentally neutral impact. This expands well beyond product-related decisions.”

CROPPING SYSTEM OBJECTIVES:

We strive to farm every acre within tolerable soil loss capabilities and to be recognized as a leader in soil and water conservation practices. We want to do this as economically and efficiently as possible. Because of our belief in God, we want to treat all people respectfully and fairly.

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BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- Use conservation tillage with two-thirds of the acres in no-till or strip till to reduce run-off, reduce erosion losses and reduce energy costs
- Soil test every three to four years on 2.5-acre grids
- Variable rate apply nutrients where practical
- Utilize yield monitor to help evaluate results of each years' recommendations
- Map planting variety and population, sidedress rates, in-season nitrate tests and variable rate applications
- Use GPS planter row shut-offs to avoid overlaps and save extra seed costs
- Use GPS shut offs on sprayer boom sections to avoid over application and save chemical costs
- Use starter fertilizer with N, P and Zinc
- Sidedress remaining N needs to protect the environment and prevent N loss before the plant has a chance to use it; including applying N at V10 stage with high clearance sprayer
- Usually apply 15 – 20% of N as starter and remainder as sidedress
- Use a chlorophyll meter (when applying at the V10 stage) to evaluate need for additional N
- On-farm N-rate plots to maximize yield without using excess N beyond what the plant can utilize
- Field scout to assess pest and weed problems before they become a problem
- Use seed treatments to protect seed and enhance early growth
- Leave residue over the winter for wildlife as cover and food supply
- Use cover crops such as tillage radishes and ryegrass to take up excess nutrients for use in the following growing season and to protect the soil
- Use micronutrients in season to increase crop production potential
- Develop and implement nutrient management plans through local Soil and Water Conservation District

FORMS OF NUTRIENTS APPLIED:

| | |
|---------------------|--|
| Fall Applied | Variable rate dry fertilizer based on 2.5-acre grid sampling for corn and soybeans |
| Planting | Starter fertilizer 14 gallons/acre 2" X 2" (30-20-0 1qt Zinc) Mix 10-34-0 and 28% add Zinc |
| Sidedress | Inject 32% with capabilities of using variable rate technology if nitrate tests call for it, usually 120-140 units per acre depending on previous crop |
| Post | Apply fungicide, insecticides and micronutrients as needed for corn and soybeans |
| V10 Stage | Use chlorophyll meter to determine additional nitrogen needs apply with high clearance sprayer with drop nozzles |

NUTRIENT USE EFFICIENCY: 0.8 lbs N/bushel, we apply dry fertilizer every year for each crop based on expected yields using soil tests and yield history

Average Yield for Each Crop: Corn yields: 180-220 bushels/acre
Soybeans yields: 55-75 bushels/acre

Economic Measure of Savings: Compared to past use of fall N application, our savings are usually \$20-\$30/acre, and we believe variable rate dry fertilizer saves us \$10-\$20/acre.