ADVOCATE PROFILE



nutrient stewardship

Stoneman Farms is a 3,200-acre fourth generation farm growing row crops and vegetables; 2012 crops included corn, soybeans, wheat, sugar beets and machine harvest cucumbers.

Grower: Justin Stoneman (left) Location: Breckenridge, Michigan Retail Facility: Wilbur Ellis Crop Advisor: Steve Wendzel (right) Retailer Location: Edmore, Michigan

What Justin says about the 4Rs: "Any program that advocates best-use agricultural practices is a step in the right direction. There is a lot of value to 4R practices. If producers would consider implementing the 4R's into their current practices, they would find it beneficial to their long-term goals of sustainability and good stewardship of the land." What Steve says about the 4Rs: "Stoneman Farms won a 4R award, not because they set out to strictly follow the 4Rs, but because the concept has always been their business philosophy for financial stability and environmental stewardship. Their use of manure and cover crops to enhance soil health are key focal areas. As the old saying goes, 'Take care of the land and the land will take care of you.'"

CROPPING SYSTEM OBJECTIVES:

Be profitable and utilize management practices such as the 4Rs that protect and maintain the quality of the soil while protecting their natural resources for future generations.

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BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- Soil test every three years in 2.5-acre grids
- Veris machine map fields to more precisely identify soil type changes for more accurate soil sampling and to help identify productivity levels for variable rate seeding and N application maps
- · Nutrients are variable rate applied according to existing soil nutrient levels
- · Weekly or bi-weekly tissue analysis during growing season to monitor crop nutrient needs
- · Foliar apply during growing season dependent on plant analysis needs
- Soybeans are grown one of three ways based upon the previous crop, conventional, no-till or with a single pass vertical tillage tool
- Corn, wheat, sugar beets and cucumbers are worked one time in the fall and one time in the spring with a field cultivator or a vertical tillage tool
- Manure is added back to the soil when available as a form of nutrition and to help maintain soil health; manure nutrients are accounted for in the nutrient plan
- · Annual rye and oil seed radishes are used as a cover crop to lock up nutrients and prevent wind erosion
- Use nitrogen fertilizer with nitrogen inhibitors (Super U) to reduce surface volatilization and leaching losses

FORMS OF NUTRIENTS APPLIED:

For beets and corn 44/55 mix of urea and Super U to minimize N losses. In addition to the Nitrogen mix, AMS and Potassium are added to the blend pre plant

- . Try to apply a manure source of some kind to all ground rotating to beets
- · Row starter is applied to Corn, Sugar Beets and Cucumbers 2 x 2
- Phosphate (MAP), Potassium (Potash), Calcium (Gypsum), Sulfur (Ammonium sulfate) according to the crops needs and soil test levels
- Foliar apply Nitrogen, Manganese, Magnesium Sulfate, Boron, and Potassium Sulfate, according to the plant analysis results nhydrous ammonia stabilized with N-serve, diammonium phosphate (DAP), muriate of potash

NUTRIENT USE EFFICIENCY: 0.8 lbs N/bushel of corn, with 0.6 actual being achieved in good growing conditions.

Average Yield for Each Crop:

Corn 135-235 bushels/acre Soybean 40-72 bushels/acre Sugar beets 28-40 ton/acre

Economic Measure of Savings: We do not focus on savings as a means to profitability. We do believe in only applying nutrition according to the soil's potential productivity, maximizing yield by soil type/EC level. In that way, we are saving money. It is not necessarily fair to compare one farmer's whole field average to another. However, it is a good idea to do some benchmarking for comparison purposes with other growers that are willing to share accurate information. One example is the profit potential of sugar beets in our program. With today's values, increasing our yields by three to five tons of sugar beets creates additional revenue between \$195 and \$325 per acre. Increases like that are keys for our continued sustainability.