Simplot SmartFarm™ helps sugarbeet grower reach the top 10%.

SmartFarm precision agricultural solutions help this North Dakota grower stay in the top 10 percent of their district for sugarbeet yields year after year.

The DeMars family are hardly newcomers to farming. Their farm was started around 1880, built on land purchased by the great, great, grandfather of brothers Mark and Troy DeMars. Together with their father Richard, they continue to manage the family farm in the 21st century.

If great, great grandfather were alive today, he would be astonished at the yields his fields produce year in and year out. And he would probably be even more astonished at the farming methods used to achieve those yields.

Working with Simplot SmartFarm, Mark and Troy are using computer imaging, remote sensors, and GPS-controlled equipment to maximize the health and prosperity of the family farm.

“IT’s not just about lower fertilizer or chemical costs. The value goes beyond that. It’s the knowledge, the resources, and the know-how they give us. We can call them any time and say, “Hey, what do I do in this situation? What’s been proven to work?” and they have the knowledge, the resources, and the know-how to give us something that works for us, for our farm, and that maintains our profitability here.”

Troy DeMars, co-owner 
DeMars Farms
**THE PROBLEM:** Every year, the DeMars had to delay planting because of mudholes scattered across their fields. Poor drainage resulted in low-yield areas that affected overall profitability.

**THE SOLUTION:** Precision agriculture manager Shawn Kasprick worked with the DeMars to analyze their drainage issues and address them using targeted, precision treatments.

- **SmartImage:** Using multi-year satellite imaging and ground-based remote sensing, Kasprick identified variability in crop health.

- **SmartSoil:** Electrical conductivity, topographical mapping, and lab-based soil analysis were used to determine drainage patterns and areas where nitrogen was being leached out of the soil.

- **SmartZone:** By compiling and analyzing diagnostic data, Kasprick created a highly accurate zoned map of the field, which identified high- and low-nitrogen zones.

- **SmartRx:** Kasprick prescribed a variable-rate application of nitrogen to specific areas of the field at critical points in the crop development cycle.

**THE RESULT:** Poor drainage has been corrected, mudholes have disappeared, and nitrogen levels are consistent across the fields. The DeMars report that their fields are easier to farm, incur lower fertilizer and chemical costs, and have enjoyed consistently high yields for the past four years. In fact, DeMars Farms achieved its goal of reaching the top 10 percent for sugarbeet yields in the district.

*Technology Enabled. Decision Focused.*

[www.simplotsmartfarm.com](http://www.simplotsmartfarm.com)

Simplot SmartFarm is the North American leader in precision agriculture. Our solutions combine advanced technologies, proven science, and 20+ years of practical, hands-on experience to deliver higher yields, healthier crops, and a better return on your investment. Contact us at agtech@simplot.com to learn more, or visit [www.simplotsmartfarm.com](http://www.simplotsmartfarm.com).