

*The farming operation consists of 2,300 acres of corn, soybean and wheat that also finishes 25,000 pigs per year. The family also manages the local elevator where they manage and custom blend feed for other growers.*



Grower: Todd Welch (above)  
Location: Lafayette, Indiana  
Retail Facility: Crop Production Services  
Crop Advisor: Nick Sommers  
Retailer Location: Delphi, Indiana

**What Todd says about the 4Rs:** “Our farming operation firmly believes that the proper use of organic and commercial fertilizer is not only vital to our operation, but also economical and environmentally friendly to our natural resources”.

**What Nick says about the 4Rs:** “Along with our customers, all of us at Crop Production Services view our role in fertilizer management to be just as vital as our farmers. A strong and responsible fertilizer recommendation is proactive in providing an environmentally sound future for our rural communities!”

### **CROPPING SYSTEM OBJECTIVES:**

To maintain and grow the farming operation to preserve the history, heritage and promise of the future for the next generation.

# ADVOCATE PROFILE

## BEST MANAGEMENT PRACTICES IMPLEMENTED ON THE FARM:

- Utilize grid soil samples to create management zones
- Use manure nutrients from the hog operation to meet a fraction of fertilizer needs by applying to acres most in need of P and K
- Utilize Phytase in feed rations to improve phosphorus efficiency in the animal diet
- Utilize amendment to increase availability of P and K throughout the crop year
- Account for manure nutrients and adjust levels of commercial fertilizer to meet remainder of plants' needs
- Utilize variable rate technology to apply commercial fertilizer
- Split apply nitrogen in fall and spring to reduce losses
- Incorporate nitrogen stabilizer with fall ammonia application to reduce losses
- Utilize in-season tissue sampling to obtain a snapshot of plant nutrient needs
- Utilize post-season stalk tests to evaluate nitrogen utilization
- Implement minimum tillage to help build and maintain organic residue
- Plant cover crops to generate organic matter, improve soil tilth, reduce compaction and improve nitrogen management
- Enhance water management through utilization of waterways and tile control
- Install a precision planter system for better seed placement and spacing

## FORMS OF NUTRIENTS APPLIED:

Swine manure, N-Serve with fall ammonia, ESN, Potash, Urea, Microessentials (MESZ), Black Label Zn Pop-Up Fertilizer

**NUTRIENT USE EFFICIENCY:** 0.78 lbs N applied / bushels, 123 lbs P applied / bushels

## Average Yield for Each Crop:

Corn Yields = 185 bushels / acre

Soybean Yields = 60 bushels / acre

**Economic Measure of Savings:** By giving an accurate credit for the manure application, we have reduced the commercial fertilizer needs in a building plan by \$94 per acre over a 4-year time period. This allows us to free up cash flow to build the low areas in the fields, making us more accurate and efficient in building the P and K levels in the soils.