



“Getting a 4 or 5 on a Solvita test is the key indicator where I will be comfortable telling people that they can start cutting back.”

**Ron Snyder, farmer
Wood County, OH**

Winner of the Ohio DNR 2105 Conservation Farm Family Awards

The Challenge

Ron Snyder described his farm soil as a brick, literally! He had been tilling crop residues into his clay soils and after a summer baking in the sun, he found his crop growth to be poor for the past five years.



Soil Structures

Discovery

decided to try cover cropping his soils to improve soil structure, based upon a meeting 5 years ago with Gabe Brown. He planted winter rye for three years to keep a living root growing in his soil. He decided that he needed to monitor changes in his soil’s fertility and structure and used Solvita CO2 respiration as the measure.

WHY RON CHOSE SOLVITA SOIL TESTING

Ron worked with Abby Wensink of the Wood County Soil and Water Conservation District to pull some samples and get his Solvita respiration test results.

Armed with his data including soil temperature and growing season days, he consulted the *Solvita CO2 Calculator* in order to learn how much potential mineralizable nitrogen his soil was capable of producing.

Results

Ron learned that his improved soils and soil biology could produce an estimated 102 lbs of nitrogen a year. He calculated this represents a savings of over \$49 per acre in nitrogen alone.



Corn Residue vs Cover Crop

Ron and his family farm more than 200 acres in Wood County, OH, and their major crops are corn, soybeans and rye. They also raise broiler chickens. Conservation practices include no-till, cover crops and crop rotation. is piloting an effort to promote the use of soil health field testing equipment at the local level so it could be used for educational and data collection. The are working with Seed Farm, Wood County Extension and the Wood SWCD to develop an educational cover crop and soil health plot on the Riker farm.