



KENTUCKY



## Bob & John James

Lexington, Kentucky

400 acres

Crops: tobacco, corn, soybeans, wheat, hemp, cereal rye, and hay

Planting: 100% no-till

Winter cover crops: cereal rye, crimson clover, austrian winter pea, diakon radish

Summer cover crops: pearl millet, proso millet, sudan, cowpea, sunflower, diakon radish

# PROFILES IN soil health

## Healthy Soil - sustaining the family farm for future generations

Bob James grew up farming and he makes his living off the 400 acres he now owns, so making improvements to the way he operates is important for the bottom line. He and his father started practicing no-till in the 1970's, but really became interested in soil health in 2003. Since that time, Bob has implemented the use of cover crops in addition to practicing no-till.

"Healthy soil has amazing water-retention capacity," Bob said. Research shows that every 1% increase in organic matter results in as much as 25,000 gallons of available soil water per acre. "I've increased the organic matter in places from 4% to 6%," he added. This means there will be plenty of water for plants during the dryer seasons.

John James, Bob's son, is farming along side his father. Sustaining the family farm for generations to come is an achievable goal thanks to the benefits of practicing soil health.



"The health of the soil is important because it leads to self-sustainable agriculture on a large scale."

- **Bob James**



## Benefits of No-Till and Cover Crops

- Reduced fuel and labor
- Reduced nutrient inputs
- Improved water holding capacity and utilization
- Reduces soil crusting issues that impair nutrient and water availability