



KENTUCKY

# PROFILES IN soil health

**Robert Emerson**  
Mayfield, Kentucky

900 acres

Crops: corn, soybeans, and wheat

Planting: 100% no-till

Cover crops: cereal rye, tillage radish,  
Austrian winter pea, and crimson red  
clover.



## Healthy Soil - organic matter makes the difference

Robert Emerson's conservation ethic was passed to him from his father who was using cover crops following their tobacco crop in the early 1950's. They started practicing no-till on soybeans in the 70's and expanded to include corn by the 80's.

Now retired and focusing full attention to the farm, Robert strives to increase organic matter. The combination of using cover crops and practicing no-till means that everything that once lived in the soil becomes beneficial organic matter.

"Organic matter reduces weed and grass pressure saving time and money on applying chemicals," Emerson said. The impact to the bottom line is significant. Emerson has been able to increase the organic matter on his fields from 1.2% to as high as 3.1%. "When you walk on a field that has been no-tilled for 35 years you can feel the difference," he said.



Cover crops such as radishes, have proved themselves a valuable component of Robert's soil health management plan.

## Benefits of No-Till and Cover Crops

- Increases water infiltration rates (reduces runoff)
- Encourages plant root development
- Retains carbon from atmosphere providing an energy source for soil microbes
- Holds soil together (reduces erosion)

