



# PROFILES IN soil health

**Andy Shireman**  
Chapin, Illinois  
Acres: 2,400  
Crops: Corn and Soybeans  
Planting: All Strip-Till  
Covers: Cereal and Annual Ryegrass,  
Red Clover, and Radish



## A Brave, Bold Move

Andy Shireman may be the bravest man in Morgan County, Illinois. He's a true believer. And when Andy believes in something, he completely dives into it. Andy believes in cover crops. Last year he made the big switch on 2,400 acres and went 'all in.' And he couldn't be happier with the results.

Shireman owns and operates farmland in Morgan, Scott, and Brown Counties in Central Illinois. He farms ground for several landlords/ladies and is now part owner in the newly formed cover crop seed dealer, Chapin Cover Crops LLC.

The land he farms lies on a variety of clay and timber soils on both flat and highly erodible ground. But these differences mean little because he's found cover crops do wonderful things to soil health no matter where you plant them.

Andy and his father Charlie Shireman have a long history using good stewardship techniques. They are without a doubt, conservation farmers. Practices on their farms include strip-till planting, water and sediment control basins, grade stabilization structures, several grassed waterways, nutrient management strategies, and controlled traffic techniques. All these practices work in concert with the newest addition: cover crops.

Charlie recalls that historically his father-in-law used more rotations and cover crops but admits he got away from those practices over the years. Not anymore. He compares

recent interest in cover crops to the big switch to no-till back in the late 1980's. "A lot of folks have heard about the benefits and many are getting the practice going, but not everyone is convinced yet. We're totally convinced here."

District Conservationist with the Natural Resources Conservation Service (NRCS), Jill Keeton, has a solid relationship with the family. She enjoys seeing all the natural resource protection on Shireman's acres. "Even with the rain and downpours we've had lately, they didn't have any washouts—all the water found its way deep into their soil," said Keeton.

Why did all Andy's fields soak up rainfall so well? "Because that's what healthy soils do," says Andy.

Andy has only experimented with cover crops for two years. But last year, he went whole hog—planting cover crops on everything. None of his landlords opposed the idea, so last fall, he seeded nearly all his fields with cereal and annual rye, crimson clover, and tillage radish.

Planting this spring—in that narrow April window—Andy quickly saw what a difference one year with cover crops can make.

"If this is what we see after just one year, I can't wait to see what these soils look like in three years." Even Charlie is amazed how good the soil looked at planting. "The corn crop that's coming up is perfect."

Andy is in full throttle learning mode with his newfound passion. He conducts test fields, trials and experiments and



USDA is an equal opportunity provider and employer.

## profiles in soil health

Andy Shireman

use the internet to learn more, communicating with other producers trying new combinations; they all learn from one another.

Andy's primary goal is to get the most out of his ground with fewer inputs. "I want to make this soil better—better than what I started with." His normal average years bring in 200-220 bushel corn. His goal? To bring in 300 bushels with less fertilizer inputs.

Local farmers are watching his fields but Andy welcomes the interest and their curiosity. He even spreads information further, posting photos and observations on Twitter. Andy embraces new technological advances and combines them with science and wisdom from the past. He visits the Midwest Cover Crop Council's website regularly to follow current discoveries and findings. "This is an exciting time to be in production agriculture. There's so much we know, so many new tools to use, and so much more to learn."

Andy is conscience of expenses and environmental consequences fertilizer applications can have on water quality. He manages nutrients and soil closely; paying attention to what his land contributes to the watershed and where his topsoil is—keeping it precisely where he needs it.

As a young farmer, Andy embraces new Ag technology and electronic, digital GIS applications. He loves the new information avenues now available and uses them to research facts, track outcomes, and identify patterns and characteristics he seeks. He combines that information with basics like cover crops as he searches for the perfect, customized prescription for his specific soils. "I know I'll find the perfect solution for my ground. It may be different from what others use, but it will be perfect for my soils."

*It feels like the earth is moving under your feet--it's that alive.*

*- Andy Shireman, landowner*

Andy taps into precision Ag techniques. He is planning a "bio strip" using the latest fad—radishes. "This fall I'll plant radishes right into the exact rows where I strip-till plant my corn. I'll plant annual ryegrass between the radish," he explains.

Upon planting last month, Andy found an average of 4-5 earthworms in every spot he dug into to check on seed depth. He was amazed. "The soils on my farms are healthier than they've been in years. I've seen it. I've felt it. I can even smell it. It just makes you feel good to know you're truly improving that soil," Andy said.

Andy knows he's only scratched the surface but is confident cover crops are the way to go. According to Andy, if you're going to corn, use annual ryegrass. It's the most practical because it's easy to manage and offers more advantages. "When my corn needs nitrogen the most, that's when my



**Andy Shireman** strip till plants his 2013 corn into a healthy radish cover crop in Morgan County, Illinois.

soils will release it," he predicts. For beans, he likes cereal rye because it has a good synergistic effect with the crop.

Andy considers it crucial to determine planting and management strategy at least a year out. "Think about seed availability and get your orders in. Consider chemical application and germination scenarios and carry-over concerns. If you have someone else aerially plant your cover crop, get all that scheduled way in advance," he suggests.

Andy's focus with soil health is to get away from use of commercial fertilizers while increasing productivity and profitability. Ultimately, he wants to triple the amount of soil organic matter in his soils. "With my new system of strip-till and cover crops, I will build back what we took off these soils. It takes more management and more time, but it works. And I'm definitely up to the challenge."

To learn more about building soil health properties in soils or to read about farmers across the nation who are improving their farm's most important asset, visit [www.nrcs.usda.gov](http://www.nrcs.usda.gov) today! To follow Andy Shireman on Twitter, visit [https://twitter.com/ShiremanFarms\\_Cached](https://twitter.com/ShiremanFarms_Cached).

To learn more about cover crops and other ways to improve soil health on your operation, visit [www.il.nrcs.usda.gov](http://www.il.nrcs.usda.gov).

**Want to unlock the secrets in YOUR soil?**

**Go to: [www.nrcs.usda.gov](http://www.nrcs.usda.gov)**

**USDA** **NRCS**  
United States Department of Agriculture  
Natural Resources Conservation Service