



# PROFILES IN soil health

**Adam Dahmer**  
Marion, Illinois  
Crops: Corn and Soybeans  
Planting: All No-till  
Covers: Cereal Ryegrass



## Starting Out Smart

Dahmer Farms, LLC has been no-till farming since 1983. Adam Dahmer, his father, Terry, and younger brother John, farm 1,300 acres in Williamson County, Illinois. They all raise corn and beans. Adam has also started farming some acreage on his own in addition to working with his dad and brother. This year, they planted cover crops on 75% of their farms. Next year? They will plant 100% of their farms in cover crops. Why? Because it works.

Adam, Terry, and John started their cover crop experience in the late 1990's through use of cereal rye; they have since added many more species to their cover crop toolbox. Although they had several goals in mind, their primary goal is to increase the organic matter levels in the soil.

According to Adam, cereal rye is also great nitrogen scavenger. They aerially seed it into standing corn every other year so it can hold onto and bind up any leftover nitrogen that may be left in the soil. In the spring, they let cereal rye reach its full growth (4-5 feet) before drilling soybeans into its thick residue mat.

Besides organic matter improvements and nitrogen retention, Adam sees weed and disease suppression and improved water infiltration. "Marestail and SDS used to be a problem. I don't see it out here anymore," he said.

With the drought in 2012, Adam said their crops maintained a healthy state and were able to make it through the drought with excellent plant health. "Consecutively year in and year out, when hot, dry, conditions hit us in mid-summer, our corn can go 10 days to two weeks before showing signs of stress.

This is due to the improved growing conditions that result from a cover cropping system and no-till," Adam explains. With deeper root systems, healthier soils, and a nice blanket of residue covering the ground, he's seen these benefits:

- Soil temperatures stay down
- Earthworm activity increases
- Compaction is reduced; weeds are suppressed
- Microorganisms work year round now
- Soil water-holding capacity & infiltration increase



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Adam admits that the more he and his family work with cover crops, the more experiments they try, they realize how much there is still to learn.

Adam works regularly with the Natural Resources Conservation Service (NRCS) to resolve resource-related issues on his operation.

District Conservationist Mindy Scott offers technical and financial assistance with cover crops and other conservation practices and management techniques on his operation.

"Adam is great to work with. He's on top of the issues on his ground and he's open to new ideas and options," Scott said. Adam is a beginning farmer currently enrolled in the Conservation Stewardship Program (CSP).

He recently received funding through an EQIP Greenhouse Gas- Conservation Innovation Grant to implement cover crops and nutrient management on the land that he is farming on his own.

The end result of Dahmer's proactive style? Organic matter content in fields increased 1.5 to 3.5 percent and is still on the rise. Erosion and runoff are reduced. Microbe populations within soil get healthier.

When that happens, microbes eat more. Then they need more to eat. It's a cycle--a cycle farmers have to learn to carefully manage.

*The more we learn, the less we know when it comes to all the benefits associated with using cover crops.*

*- Adam Dahmer, landowner*

Another benefit they associate with cover crop use is that fungicides show no positive response on the farm. Cover crops build up the soil's immune system with biological processes of soil and plants.

According to Adam, "When our soils are healthy, it is much easier for our plants to be healthier and fight off certain things on their own. Things are now 'naturally' under control."

Adam's long-term view is that modern agriculture has abused and worked Illinois soils for years. He fears it's only a matter of time before ag production is regulated to be more ecologically sound and sustainable.

Adam Dahmer



**Adam Dahmer**, a Southern Illinois farmer sees high quality soils since using cover crops to replenish and feed the soil.

"Let's get ahead of that issue and stop the problem right now using cover crops," he said.

Adam says his father Terry always had a vision for the farm. "He never liked leaving the land without cover. He taught me that and it was a good lesson to learn." Dahmer Farms, LLC has been a fixture in Williamson County agriculture since 1882.

Both his grandfather and great grandfather would plant wheat and clover before they planted corn. They knew the formula back then. But somehow we all got away from it. It's time to tap into a system that really has benefits to offer—for now and for our future."

To learn more about cover crops and ways to improve soil health, visit [www.il.nrcs.usda.gov](http://www.il.nrcs.usda.gov) or visit your local NRCS team today.