

Patience and Persistence

Kim Burkhart, Ogle County, Illinois

Cover Crop Management in the Upper Midwest

Coordinator: Kim Burkhart

Location: Leaf River, Illinois

SARE Grant: \$2,332

Grant Year: 1995

Project Number: FNC95-117

Kim Burkhart's first try with cover crops did not take hold because planting was delayed. But his next attempt produced better results, boosting his soil's fertility with "green manure."

Kim Burkhart knew precisely what he was getting into when he started planting cover crops. He knew it would take patience and a willingness to experiment.

"You have to go into cover crops with an open mind if you want them to work," says Burkhart, who operates a 230-acre farm in Ogle County, Illinois. Ten years after his first experience with cover crops, Burkhart stuck to his word and has patiently tried it again, this time with greater success.

The first attempt came in 1995, when he obtained a SARE grant to use cover crops to put fertilizers back in the ground, rather than relying on synthetic chemicals.

"I believe in a more natural, non-traditional type of farming. I try to let things evolve the way God intended them," says Burkhart. But as he discovered, complications can arise—and they did. That first year, most of the cover crops planted on his 20-acre plots did not survive the winter.

"Most things you try for the first time happen that way," says Burkhart. "There are a lot more ways to do something wrong than right."

Burkhart had to plant his cover crops—clover and rye—through aerial seeding. But



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his helicopter pilot was not able to plant until early fall, due to an increasing need for pesticide spraying that year.

Because Burkhart's cover crops were seeded so late, his clover was not able to establish itself before winter, and all of it was winter-killed. However, his rye still came up in the spring and improved his soil.

According to Burkhart, the rye increased organic matter and boosted the soil's nutrient-holding capacity. "When you get a good stand of rye, it also chokes out the weeds really well," he says.

This was not the first time that Burkhart has seen benefits from his conservation-minded methods. During a heavy rain in 2008, he says he watched fields on certain nearby farms suffer severe erosion. But Burkhart's land was fine because he no-tills his ground. He also uses minimal amounts of pesticides and no residual herbicides. He says it keeps his soil healthy and has not hurt him economically.

After the initial year with clover and rye, Burkhart was not able to put cover crops to the test again anytime soon. He says he was just too busy and had to deal with a serious soil compaction problem. But just a couple of years ago, Burkhart was inspired at a

no-till conference in Cincinnati to try cover cropping again.

At this conference, he learned how each species has unique strengths, so he decided to change his game plan a little bit. To maximize his yields, Burkhart chose to use a mixture. The mixture included oilseed radish, hairy vetch, red clover, and grass rye.

He used the mixture for the first time in 2007 but was not able to plant it early enough again, and the cover crops did not become well-established. Burkhart was determined to get his cover crops down in time in 2008, so he planted them in corn during the summer.

This time: success.

"I've learned from my failures that a lot of times there just isn't enough time to do everything in the fall," he says. "I've learned that timing is very critical."

Burkhart is continuing to make changes and adapt as he goes along.

"You just have to have patience," he says. "You have to go in with the attitude that it's going to work."

By Jason Peterson