

The Hairy Vetch Option

Walt Townsend, Geff, Illinois

No-Tilling Hairy Vetch into Crop Stubble and CRP Acres

Coordinator: Walt Townsend

Location: Geff, Illinois

SARE Grant: \$3,760

Grant Year: 1993

Project Number: FNC93-028

Walt Townsend was looking for a way to improve soil tilth on land coming out of the Conservation Reserve Program. He settled on no-tilling a hairy vetch cover crop into the CRP land. He also no-tilled hairy vetch into wheat stubble ahead of corn.



Planting hairy vetch on CRP land was so successful that it drew attention from many circles.

Back in 1996, over 25 million acres of Conservation Reserve Program (CRP) land was poised to go back into crop production nationwide—unless the CRP was renewed. In Walt Townsend's county alone, about 90 percent of the 34,000 acres enrolled in the CRP were expected to go back into production. Most of this land was classified as highly erodible, where tillage should be kept to an absolute minimum.

In Southern Illinois, Townsend was looking for a way to improve soil tilth on land coming out of the CRP without disturbing his soil through tillage. After a successful experience with hairy vetch in 1992, he had a hunch that no-tilling this cover crop into the CRP land would work well.

So he decided to find out.

With a SARE grant from the University of Illinois, Townsend experimented with no-tilling hairy vetch into a heavy stand of fescue on CRP land, as well as into wheat stubble ahead of corn and milo. It was a challenge, for fescue was considered difficult to no-till into.

"I wasn't familiar with anyone who had experience with no-tilling hairy vetch into a heavy stand of fescue," says Townsend, who farms in Geff, Illinois, about 50 miles south of Effingham.

Townsend thought that if he mowed the fescue closely, the hairy vetch could compete. So he mowed the fescue to about 4 inches and the vetch grew through and over the grass.

"The vetch smothered the fescue right out," he says. "No burndown was used."

Planting hairy vetch on CRP land was so successful that it drew attention from many circles. *Farm Journal* took pictures of his land for a feature on his system and Townsend spoke in numerous cities about this work.

The only thing that kept Townsend's hairy vetch program from really taking off across the state was the development of Roundup Ready soybeans in 1996. Roundup Ready soybeans allowed farmers to use Roundup to kill fescue and weeds without

harming soybeans. Several years later, Roundup Ready corn provided even more options, so farmers didn't see the need to smother the fescue with a cover crop such as hairy vetch.

"People were more comfortable with using chemicals than a cover crop," Townsend says. "So they jumped on the Roundup bandwagon."

In Townsend's system, no-tilling hairy vetch into wheat stubble ahead of corn also worked well, producing 80 to 100 additional pounds of nitrogen and creating a much looser seedbed for future crops than a straight fescue sod, he says. In addition, broadcasting and disking hairy vetch into wheat stubble ahead of milo satisfied much of the nitrogen needs of the crop.

The only problem Townsend encountered was that the vetch did not tolerate wet soils. In one spot, the field dropped off toward a small creek and all of the vetch there died out. In such situations, it is necessary to add more nitrogen, he says.

The SARE grant provided funds to buy a heavy-duty no-till drill. "Without the grant I would likely have gone to conventional tillage to bring my 280 acres of CRP land back into crop production. But that would have increased my costs and soil erosion."

Much to Townsend's surprise, however, the Conservation Reserve Program continued beyond 1996, and he re-enrolled his land. Today, Townsend still has about 300 acres in CRP with contracts coming up in 2010.

What's more, today he still likes the idea of hairy vetch.

"I like vetch as a cover crop," he says, "and when it becomes adaptable to other situations, I'm going to use it."

By Jason Peterson