



GOT IT COVERED: Steve Berger and his father, Dennis, drill cover crops, mostly cereal rye, on as many acres in the fall as they can, and then terminate them in spring before planting corn or drilling soybeans. They get extra soil protection and soil building from covers on nearly all of their crop acres.

Covers catching on

By LYNN BETTS

WHILE most Iowa farmers don't use cover crops, a growing number of corn and soybean growers are giving them a new look. Conservationists estimate the number of cover crop acres in Iowa has mushroomed from a few thousand acres four years ago to more than 80,000 acres today.

That number is likely to keep increasing, conservationists say, as the soil-saving and soil-building benefits become better known. Steve Berger and father Dennis have watched cover crops both save soil and build it on their rolling hills and bottomlands near Wellman in southeast Iowa for more than 10 years.

The cover crop veterans have been fine-tuning every acre they can get drilled to covers each fall. Most years after harvesting corn and soybeans, they had enough time to plant more than half of their acres to cereal rye. Over the past 10 years, they've increased rye planting on more acreage each year; they now have cover

Key Points

- Cover crops go beyond soil saving to soil building and other benefits.
- Planting of cover crops is increasing each year in Iowa for several reasons.
- Roots belowground are as beneficial as the plant growth aboveground.

crops on nearly all of their 2,000 acres. They spray herbicide in spring and fall.

"It varies from year to year. We want to get as much land protected with cover crops as we can every fall," Steve says. "You have to get out there in the field with the drill the day you harvest. You want as much growth of the cover crop in the fall as you can get to establish roots belowground, as well as plant cover aboveground."

"We have more than 14 miles of terraces on our land, along with grassed waterways and field borders. And we have many years of continuous no-till," Steve says. "Dad was no-tilling before I came

into the operation in 1988. He has one field south of our homeplace that's been continuous no-till for 35 years."

While the Bergers were trying to conserve soil on their sloping land, they weren't getting the complete control desired, and they found the conservation practices weren't improving their soils.

"We have a corn-soybean rotation, and we were losing organic matter in the years we planted soybeans," Steve says. "We don't want to just maintain our soils, we want to build them. We're doing that slowly now with cover crops, no-till, hog manure and tiling."

The combination has resulted in corn yields that are consistently 30 bushels per acre above the average yield in Washington County, on soils with average corn suitability ratings.

Have something growing

"We like to have something growing on the land throughout the year as best we can, and we want it covered at all times," he adds. "We have cereal rye growing about

seven months of the year. The top growth is there to control erosion, but the root mass below holds the soil in place, too."

Rye roots also aid water infiltration. "The rye has a prolific root system that goes as deep as 4 feet," Steve says. "That not only opens the soil for air and water passage, it makes pathways that corn roots will follow deeper into the soil profile. If we can gain an additional 12 inches of root growth on corn, that's 2 more inches of available water in a dry year."

The growing roots of the cover crop also increase microbial action in the soil, he says, which builds organic matter and leads to better soil structure. "There are a lot of options to choose from in planting cover crops," Steve notes. "We chose cereal rye [winter rye] because it adapts well to Iowa, it dramatically reduces soil erosion, and it has an excellent root system. In the future, we'd like to add oats or other covers in a cocktail mixture."

■ The Bergers' cover crop calendar is explained on Pages 6-7.