

# Cover crops calendar

## Key Points

- The time available to seed and terminate cover crops is a limiting factor.
- No-till, cover crops, tiling and manure are a good soil-building combination.
- Rewards can indeed outweigh the risks if cover crops are properly managed.

By LYNN BETTS

**W**HILE many corn and soybean growers are busy at harvest, they can relax afterward. But harvest is just the beginning of the busiest time of year for Steve Berger and father Dennis of Wellman in southeast Iowa.

A big reason for their active schedule is their penchant for cover crops. With more than 1,000 acres of cover crops for 10 years in a row and nearly 2,000 acres in the past two years, the Bergers are among Iowa's most experienced cover crop managers. Their production calendar is framed by what needs to be done to make cover crops successful.

"Our use of cover crops varies some from year to year, depending on the weather," Steve says. "We never know how much time we'll have to seed and spray the covers; those are the limiting factors on how much rye we will have in the operation in any one year."

## September to December busiest

"Our busiest time of the year is September through December," says Steve. "We're harvesting corn and soybeans, and planting cover crops simultaneously, so we can get the cover crops emerged and actively growing before winter arrives. We've planted cereal rye as late as Nov. 1, but you don't get much beneficial growth of the cover after that."

Last year the Bergers aerial-applied rye to 220 acres in early September. They have occasionally used an airplane to seed the rye and may do more of that to get earlier growth and to cut back on labor to drill rye.

In recent years, the Bergers have sprayed all corn and soybean land with 2,4-D in the fall. They've added that treatment to their fall calendar to control winter annuals. Their normal program is to spray generic glyphosate to kill the rye in spring, using a residual herbicide and 2,4-D mixed with glyphosate.

Although they're now applying 2,4-D in the fall, they still apply it in spring in the tankmix. "It's best to control winter annuals in the fall because you can get a much better kill," Steve says, explaining why they added the fall 2,4-D application. "With long-term no-till, we have more winter annual pressure." They make the fall 2,4-D application in October through November before freeze-up.

In November, they spread swine and turkey manure. They get enough manure from their swine finishing operations and purchased turkey manure to meet about two-thirds of their fertilizer needs; the rest is commercial fertilizer. They also apply additional commercial potash in the fall.

They install drainage tile each fall until the ground freezes. Steve, Dennis and one full-time worker do the fieldwork, with



**ROOTING DOWN:** Cereal rye roots are key to holding Steve Berger's soil in place and building organic matter.

additional help from a harvest crew. Dennis at 74 still works full time.

Their spring calendar starts in March. "We try to terminate the rye in the spring, two to three weeks ahead of corn planting," Steve says. "At planting, we apply 60 pounds of nitrogen off to the side of the row in a band, and put pop-up fertilizer and insecticide in the furrow. Both nitrogen management and insect management are a little different with cover crops, and they're very important to our success."

One rule the Bergers follow that affects

their calendar is that the soil surface must be covered at all times over the entire year. The cover crops contribute cover about seven of the 12 months.

## Normal weather a rarity

"A normal weather year makes it easier to get everything done on time, but we seldom have them anymore," Steve says. "So what we do is take advantage of the conditions at the time. If it's dry, we concentrate on drainage work, for instance. When it's wet, we can identify the

areas that need tile more efficiently. We've done a lot of tiling in May and June the last several years before we planted soybeans, while we were having heavy rains."

He adds, "Most people think about tiling to get rid of excess water, but aeration of the soil is equally important. Half the soil matter should be open-pore space — we achieve that through the combination of cover crops, no-till and tiling. Tiling your farm can pull more air into the soil than tillage can."

*Betts writes from Johnston.*