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Cover Crop Club Learning to Manage Practice Together

By Laura Greiner, January 2012

Trying something new and innovative is always easier when you can learn from someone else's experience. For a small group of innovative Pottawattamie County farmers experimenting with cover crops, that someone else is Pete Hobson.

This rye grass was aerial seeded at the end of August at 25 pounds per acre.

Hobson, a 20-year no-till veteran, said he turned to cover crops as a tool to build more organic matter after test results showed his organic matter had plateaued. "Ideally I would like to increase organic matter one percent every 10 years. I went with rye grass because it will root much deeper than wheat or cereal rye and is a better organic matter builder," he said.

He aerial seeded his rye at the end of this August at a rate of 25 pounds per acre. "I was surprised with how little rain we had in September that it even germed," Hobson said.

Looking at a mat of green under his corn stalk residue he asked, "If we can do this well in a dry year, how well can we do in a normal year?"

With the smaller, lighter-weight rye grass seed, the biggest issue with aerial seeding is getting an even distribution. "Mixing in cereal rye or going with a helicopter might be the way to go, so you can get closer and a get a better pattern," said Hobson.

Pete Hobson, who farms in eastern Pottawattamie County, mentors several producers in his neighborhood about cover crops.

It's Hobson's willingness to adapt and experiment with new ideas that makes him such a great cover

crops resource for local farmers, like Lowell Forristall and Jim Andersen.

"Pete is a wealth of information. He's even better than going to the Internet when it comes to learning about cover crops in this area," said fellow farmer and cover crop experimenter Forristall. "He makes it work and he also has landowners that will work with him and are willing to be progressive."

Forristall, a neighbor and fellow East Pottawattamie Soil and Water Conservation District Commissioner, got serious about cover crops this year and is trying to lead by example. "If I am not using some of these practices on my land that I control, how can I say someone else should or at least should consider it?" he asked.

District Conservationist Greg Mathis and farmer Lowell Forristall discuss the healthy growth of his cover crops planted in August.

This year Forristall has 37 acres of rye grass in his operation near Macedonia. His cover crops are part of his five-year Conservation Stewardship Program (CSP) contract. CSP is a voluntary Farm Bill program administered by the USDA Natural Resources Conservation Service (NRCS). Under CSP, participants are paid for conservation performance: the higher the operational performance, the higher their payment.

Forristall drilled his rye grass around Oct. 15 at a rate of 56 pounds per acre. "I picked the fields that needed more organic matter and that were harvested by mid-October," he said.

His cover crop experiment also includes 15 acres of radishes planted in the areas enrolled in his Environmental Quality Incentives Program (EQIP) summer construction contract. He built 6,000 feet of terraces under the initiative, which requires a cover crop to protect unplanted soil from erosion. He planted the radishes with a 15-foot no-till drill along with an oat companion crop.

"The biggest challenge with the radishes is the planting time. They need to be planted by mid-August," said Forristall. "So if you don't have bare ground, like I did because of the terrace construction, the radish seed would have to be aerial seeded."

His seed vendor from Nebraska recommended an oat companion crop for weed suppression. His seeding rates were 3 pounds per acre for the radishes and 36 pounds per acre for the oats.

Forristall, who is in partnership with his son Brad and custom farms with a group of other producers, said he's really pleased with what he's seen so far.

"If you can get the root to grow out, then you make a natural water passage that is more effective than my ripping," he said, pulling a radish out of the soil. The radish had at least an 8-inch, slender root growing from the bottom of a 6-inch, two-inch diameter radish. It's these roots that help go deep and break up compaction.

He also hopes to build more organic matter in his soil through his cover crop experiment. "I've heard

for every one percent increase in organic matter, you add 30 pounds of nitrogen in the soil. Building more organic matter, means more bugs in the soil and increasing the microbial activity. We're building a better neighborhood for bugs," he said.

A third benefit is the "free" nitrogen the cover crops will provide. "This is a learning curve for me. I didn't realize that the nitrogen used by the crop, if you don't harvest it, is still all there," he said.

So some of the nitrogen he might have lost after harvest and during the winter is tied up in the growing cover crop, which acts like a nitrogen savings account for the crops to follow.

Jim Andersen first got the idea to try cover crops at an Integrated Crop Management conference at Iowa State University. "I looked at the data and came home and told Harold Hoffmann (his tenant) we are going to try this," he said.

Andersen, a retired regional agronomist for DeKalb, lives in Council Bluffs, but owns 160 acres that his father used to farm near Hancock.

In addition to ISU, Andersen relies on Hobson for advice. "Pete Hobson is my mentor," he said.

Unlike Forristall and Hobson, Andersen's main motivator for trying cover crops is erosion control. He's been concerned about the rills and small gullies that have been forming on his hillsides.

He drilled 150 acres of rye grass after the soybean harvest using a 15-foot drill. He estimated it cost $15 per acre for the seed and drill rental.

All three men don't anticipate any changes in their spring management, with the exception of adding Roundup to their pre-emergence herbicide treatment. "I won't have to change my workload, just my chemicals," said Forristall. "Man hours are the key. I have to avoid adding man-hours. The only extra time is the drilling of the rye."

Lowell Forristall planted radishes this summer to help with compaction on his Pottawattamie County farm.

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