

CONSERVATION *Showcase*



Farmer Finds Cover Crops Essential Conservation Tool

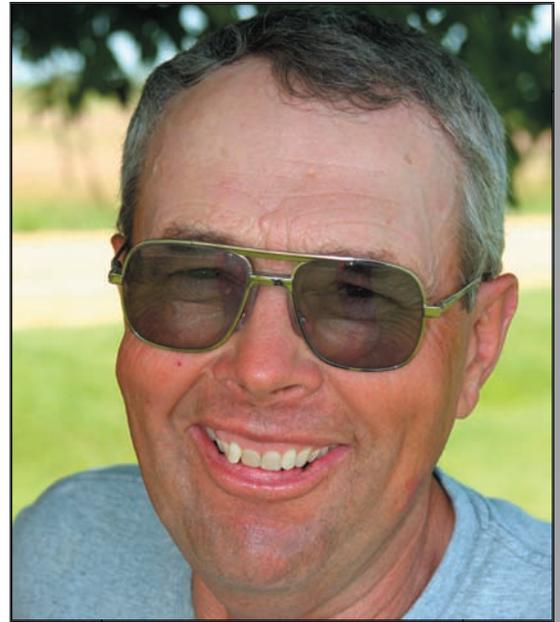
Bedford farmer Paul Ackley says cover crops he planted last fall protected his soil from the ravages of this spring's flooding.

"The cover crops' plant residue reduces the impact of raindrops on the soil, and the fibrous roots hold the soil in place. This year's rains on my fields prove cover crops save soil," says a satisfied Ackley.

"When I plant a cover crop of rye in the fall," said Ackley, "we can turn cows out in the field and they'll have fresh feed when nothing else is green. It's a protein source you can abuse. Cattle can graze it down to nothing and it will grow back to give your fields erosion protection in the spring."

In addition, Ackley says the cover crops offer many benefits besides controlling erosion. He says biologically, cover crops are a third crop in a corn/soybean rotation, which research shows can reduce insect pressure on row crops and perhaps boost yields. They also reduce field compaction, add organic matter to the soil and can be used as cattle feed.

Doug Davenport, district conservationist with U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS), calls Ackley an innovator and a conservationist. "He doesn't toot his own horn. Paul's learning all of the time and he's always involved in locally-led conservation planning. This man is genuinely interested in conservation and preserving what he has. He seems to do it right."



Paul Ackley

Ackley has been farming 40 years in Taylor County. He and his wife, Nancy, own 750 acres of farmland and rent another 350 acres. They plant 500 acres of row crops in a corn and soybean rotation. The couple also operates a 100-head cow and calf herd.

Some of the other conservation practices Ackley uses on his farm include terraces, filter strips, riparian buffers, shallow water wetlands, rotational grazing and erosion control structures. Crops are no-tilled to save soil.

Ackley said he added cover crops to his mix of conservation practices to help address erosion concerns.

After some 20 years of trying, Ackley thinks he has figured out the right corn stubble and

CONSERVATION *Showcase*



cover crop combination. He mixes rye grass seed with phosphorus and potash and broadcasts the mixture right after harvest. The rye grass seed takes root, grows and provides erosion protection for Ackley's fields soon after harvest and into the summer.

"Cover crops need to cheap, cheap, cheap," said Ackley, "and not cause any other problems on its own. For me, rye is part of the solution. I am firmly convinced I get my money back with cover crops."

Ackley estimates he can plant a rye cover crop to his harvested corn fields for \$11 an acre. He applies one bushel of seed to the acre. He mixes rye seed with phosphorus and potash and broadcast applies the mixture.

He says seeding a cover crop into a soybean field is trickier. Ackley notes that cover crop seed has to be applied just before leaf drop, must be the right seed combination and the mix must be cheap. His current combination is a mixture of turnip, sweet clover and oats, which costs just \$24 per acre, including aerial broadcasting.



Ackley shows good soil structure in a sample taken from his corn field. The Bedford farmer uses rye as a cover crop between a rotation of corn and soybeans. Rye grass was planted in this field a year and a half ago. Ackley says he likes the long-lasting ability of rye roots to hold soil in place and improve soil tilth.



Bedford farmer Paul Ackley stands in a recently planted soybean field holding a soil clod which shows the extensive soil holding root structure of rye grass. Ackley says he credits this cover crop with protecting his soil from erosion during the heavy rains this spring.

"All my fields can benefit from cover crops. I plan to seed all of my corn fields and 50 acres of soybeans in cover crop this fall. I want my soil to stay where it belongs -- up on the hill where it can do some good, not down along the fence," Ackley asserts.

"I'd see erosion even with no-till," Ackley notes, and adds, "You begin to figure up how many tons of dirt you're losing and get sick. It's always the good dirt that goes. The stuff beneath you'd wish you could get rid of stays. It's the fertilizer, humus and organic matter that are lost. You lose the good soil and it hurts."

-- 30 --

*Dick Tremain, Public Affairs Specialist
USDA-NRCS, Des Moines
August 2008*

Helping People Help the Land
USDA is an equal opportunity provider and employer.