Iowa Farmer Finds Profit in Wheat

For the last four years Oakland farmer Dwight “Pete” Hobson has experimented with a new cash crop—wheat. He grows it on field borders or headlands; farmland not usually known for producing income. He used the wheat to increase income, slow erosion and improve soil tilth.

He says it works well enough to expand the practice on his 1,300 acre operation.

Hobson grows no-till corn and soybeans on rented land in eastern Pottawattamie County. He says the soil he farms is often the easily erodible, wind-blown loess.

“I am continually trying to improve soil retention on land I farm,” said the 56-year-old farmer. “I hate erosion. Oftentimes no-till and terraces are not enough to keep the soil in place so I started experimenting with growing wheat to reduce erosion and improve soil quality.”

The amount of land set aside for headlands can be substantial. Hobson says a 160-acre field could have 8 to 10 acres of headlands planted to grass to accommodate a 33-foot combine’s turning radius. “Depending on the rental agreement, those are acres of lost income to both the landlord and to the renter,” said Hobson. “I have found growing wheat allows additional income on some of my headlands.”

Hobson says he uses a two-year soybean/corn/wheat rotation. After harvesting corn, he applies a herbicide to kill the grass headlands. If the headlands need maintenance he lightly discs the land to soften and smooth the compacted soil. In the spring, he plants soybeans on the entire field and into the former headlands. He harvests the soybeans in the fall, quickly drills wheat on the headlands and lets it grow to protect the soil. In the spring, he plants corn and drives on the wheat headlands as he would if they were grass. In July, Hobson harvests wheat from his headlands spreading straw as residue.
“My combine can’t harvest all of the seed from the wheat crop so I end up reseeding my headlands,” Hobson said. “The growth of volunteer wheat after harvest gives the headlands additional erosion protection until it is planted to soybeans the next spring.”

Hobson says the wheat cover crop is usually effective at stopping erosion, especially ephemeral gully erosion, but not always. “I have a couple of areas where the amount of water runoff going over the area is too much for wheat to handle. Some headlands have soil which is too poor to disturb or take too much traffic. If wheat can’t stop erosion better than grass, the headlands stay grass,” he said.

Hobson currently plants 45 of his 70 acres of headlands to wheat and soybeans.

Greg Mathis, district conservationist with USDA’s Natural Resources Conservation Service (NRCS) in Oakland said, “Pete is very conservation-minded. He has been no-tilling his fields for nearly 15 years and he experimented with no-till years before that. He’s built miles of terraces and he’s installed grassed waterways. He has a complete conservation plan and he follows it,” Mathis said. “When he wants to make improvements to his conservation plan, we talk about it, run the numbers, see that it works on paper and off he goes.”

Mathis says the headlands experiment with wheat is a good one. “It meets the Revised Universal Soil Loss Equation 2 (RUSLE2) standards and it adds organic matter to the soil. Planting wheat cuts erosion and he’s adding a third crop in a two-year rotation. This is a winner,” he said.

The addition of organic matter can reduce headland soil compaction, says Mathis. “Higher organic content usually attracts more earthworms and their beneficial actions. Earthworm activity fights soil compaction and improves water infiltration. This in turn reduces rainwater runoff and field erosion. This can improve soil productivity and soil tilth which should improve crop yields,” he says.

Hobson says he gets 30 bushels an acre of wheat on ground he uses as a turnaround and 60 bushels an acre on the undriven headlands.

Dick Tremain, Public Affairs Specialist
USDA-NRCS, Des Moines
May 2009