Farming for water
Farmer uses cover crops and no-till to handle wet soils and weeds.

By Jim Ruen

While many farmers rely on spring tillage to dry out wet soils, Jerry Ackerman goes the other way. His cover crop and no-till program helps him handle heavy rains and wet soils better than tillage and drain tiles. In 2013, it even helped him fight waterhemp thanks to the strips of cereal rye he seeded the previous fall in soybeans and corn.

“Spring 2013, I no-tilled drilled soybeans into 18-inch-tall cereal rye,” recalls Ackerman. “There were spots in the field so wet that water was standing in the tracks of my duals. It was so wet I couldn’t kill the rye until after the soybeans were established. The rye just kept sucking water.

“I also planted corn into a strip of rye seeded the fall before. It controlled the waterhemp in that strip and yielded 20 to 25 bushels more per acre than the strips without the cover crop.”

Wet soils are nothing new to Ackerman, who farms 1,200 acres in Jackson County, Minn., just a few townships north of the Iowa border and about 100 miles west of Interstate 35. The county features rich but mucky soils and low elevations, notes Catherine Sereg, a watershed technician with Heron Lake Watershed District. Sereg knows the soils on Ackerman’s farm well, having done water infiltration tests there as
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— Catherine Sereg, watershed technician, Heron Lake Watershed District

Within four days of interseeding cover crops with his young corn, Jerry Ackerman could pick out the emerging clover, rye and brassica seedlings.

Soils handle a lot of rain

“Jerry can get out in fields when normally it’s too wet to do so,” says Sereg. “His soils handle the equivalent of 8 inches of rain an hour. I’ve seen similar soils that are conventionally tilled without cover crops that can’t handle an inch of rain.”

After 15 years of no-till soybeans, strip-till corn and periodic rotation to alfalfa, Ackerman thought his soils were in good shape. Five years of experimenting with cover crops, including planting them on prevented planting acres in 2013, has taken his fields to a new level.

Parts of those trials have included different methods of seeding the cover crops. He has used fixed-wing and helicopter aerial seeding, a spinner spreader, and more.

The difficulty with aerial is conflict with crop spray-
Catherine Sereg, a watershed technician with Heron Lake Watershed District, ran several water infiltration tests on Jerry Ackerman's fields, finding infiltration rates equivalent to absorbing an 8-inch rainfall in an hour. Sereg reports conventionally tilled fields in the area without cover crops are unable to absorb the equivalent of 1 inch of rain falling in an hour.

Sitting in the combine seat this fall, Jerry Ackerman has no problem seeing rye and other cover crops interseeded in June.