

MADISON COUNTY FARMERS DIP THEIR TOES INTO NO-TILL, DIRECT-SEED FARMING AND USE OF COVER CROPS

By Steve Stuebner

Randy Brown farms in the Plano area in Eastern Idaho, eight miles northwest of Rexburg. He raises small grains, alfalfa, potatoes and corn on his family's original homestead, founded in 1887. But there's one thing about farming in Madison County that grates on his nerves -- he hates to see the topsoil blow away on his farm ground during the winter and spring.

"We've got sandy-loam soil, and in the early spring, the wind can really blow, sometimes 45 mph across bare ground," Brown says. "I just figured there's got to be a better way."

So Brown is experimenting with cover crops to stop the wind erosion on his farm. He's planted fall wheat, following potato harvest, and then in the next spring, he'll kill the wheat with Roundup and planted corn with a conventional seed drill. "I had one of the best corn crops I've ever had using that method," he says. "The residue of the fall wheat protects those seedlings as they come up, and also prevents wind erosion."

Brown's farm was one of four farms that the Madison Soil & Water Conservation District visited in a tour of no-till, direct-seed farming and the use of cover crops in the summer of 2015. About 60 people participated in the tour. The Madison district and the Madison County office of the Natural Resources Conservation Service have been pushing Soil Health initiatives in the last few years to educate farmers about the value of increasing organic matter and microbial activity in the soil profile.

"The Madison district is really promoting it," says Robbie Taylor, administrative assistant for the district. "We're trying to change people's thought processes and

raise the possibility of trying something different rather than being in the habit of doing the same thing over and over again every year."

The Madison district applied for and received a \$50,000 grant from the Western SARE program through Utah State University to work on Soil Health issues and experiment with cover crops. The district is testing the soil following various treatments to report back to Utah State on the projects.

Greg Blaser, chairman of the Madison SCD, is a big booster of Soil Health as well. Blaser, who taught agriculture and plant science at BYU-Idaho for 28 years, has concerns about farmers trying to squeeze the most yield from cash crops on their farms, instead of also giving back to the soil with a smart crop rotation.

"We see a lot of potato-wheat rotations around here, but that's not a rotation, it's a monoculture," Blaser says.

Without rotating alfalfa into a wheat-potato rotation, there can be more opportunities for disease issues to move into the soil profile, he says. "You don't want to sacrifice the environment for the almighty dollar. You can still make money and save the soil. I have to stand and applaud these



Merry Christmas & Happy New Year from the Commission!

guys who are giving this a try."

The Soil Health movement has been catching on in southern Idaho for the last several years as the NRCS has made it a national priority. In some pockets of Idaho, such as the wheat country in the Camas Prairie near Grangeville, some farmers have been practicing no-till, direct-seed farming for 25 years. Farmers can get EQIP cost-share funds to dip their toe into no-till, direct-seed farming and also to pay for the application of cover crops. The cost-share arrangement is 75 percent federal dollars, and 25 percent local from the producer.

Ken Beckman, NRCS District Conservation-

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ist in Madison and Fremont counties in Eastern Idaho, said they've signed up 12 farmers to work on Soil Health initiatives in Madison County this year, compared to four last year. "I do see some momentum," Beckman says. "A number of farmers are interested, but they may not be patient enough to make it work."

Typically, it takes at least five years of growing seasons before farmers will begin to see significant results, he said. After that time, farmers should see an increase in moisture-retention in the soil, and with the use of cover crops, a reduction in need for fertilizers, fungicides and pesticides. Plus farmers save a lot of money when they don't have to till the soil prior to planting crops if they're engaged in no-till, direct-seed farming.

"Soil is a living and life-giving substance, without which we would perish," the NRCS soil health web site says. "As world population and food production demands rise, keeping our soil healthy and productive is of paramount importance. So much so that we believe improving the health of our Nation's soil



Cover crop blankets a field in the Plano area.

is one of the most important endeavors of our time."

Some local districts in southern Idaho have purchased no-till seed drills to rent out to producers to help them experiment, but in Madison County, the district hasn't bought a drill because a number of local producers have drills available for rent. "We did think about doing that, but we didn't want to compete with the private sector, our local custom farmers," Taylor says.

Back to Randy Brown's farm, he's been experimenting with the use of cover crops for 18 years. One of the benefits he's seen from growing mustards and radishes as cover crops in

his fields is that he hasn't had to use any chemicals to control nematodes. A number of years ago, nematodes began moving into the spud fields in Madison County, but they're not invading Brown's fields.

"I don't have to do any nematode control, but just about everybody else uses something to control them," he says. "Those radishes and mustards must have good properties to help the soil defend against them."

Cleve Bagley farms in the Salem area, three miles north of Rexburg, along the Teton River. He raises small grains, alfalfa hay, pasture and potatoes. He also has a small dairy and beef cattle. Bagley has been experimenting with no-till, direct-seed farming for the last three years. "I've been tinkering around with it," he says.

Bagley bought a used seed-drill for planting crops without tillage. "I no-tilled into alfalfa last spring, and I no-tilled into barley this spring," he says. "The crop looked pretty good when it was growing, but it didn't turn out that well to be honest with you. But I am seeing a lot of worms."

Bagley has been experimenting with a diverse mix of cover crops on his farm



Cover crop demonstrating robust growth after 60 days.

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ground, and he's been planting cover crops with his seed-drill on some other farms as well, planting 600 acres in the last year. He bought a small herd of heifers to graze on his cover crops. "That's working out real good," he says.

Bagley's cover crop mix for his own land includes 35 percent Austrian winter peas, 34 percent forage oats, 11 percent hairy vetch, 6.5 percent eco-till clover, and smaller percentages of radishes, turnips and kale.

Bagley recently retired from the NRCS so he wanted to experiment with no-till farming to see how it worked locally, but he still farms conventionally to raise potatoes. "I'm just trying it on a limited basis to see how it goes," he says. "I've been watching this for a long time from the sidelines, but I didn't step in and do it myself until three years ago."

Jeff Raybould, who farms on the Egin Bench, isn't using no-till practices, but he is planting cover crops to reduce erosion. Following a crop of early potatoes, har-



Cleve Bagley's no till seed drill.

vested in early August, he'll plant spring barley to prevent wind erosion in the winter and early spring. The barley dies over the winter, and then he'll disk that under and plant spring barley the following spring as a rotational crop between the potatoes.

"It really helps. We can get some bad winds out here, and there's significant amounts of soil blowing around," Raybould says. "Where we planted the cover crops, there's no erosion and the soil is holding in place."

Thresher Artisan Wheat, an agribusiness that has a long history in Eastern Idaho, sees promise in the Soil Health initiative and sus-

tainable farming as well. Bradford Warner, vice president of marketing for Agspring, the parent company of Thresher, said his company has a strong interest in Soil Health and cover crops as more new information comes forth on those topics. Local growers in Madison County see Thresher as an important partner. A local representative for Thresher sits on the district's Soil Health committee.

"We're always interested in increasing yields, and we were founded on a mission of feeding a changing world where food quality and sustainability are very important to consumers," Warner says. "The more we can do to produce crops in the right way with less inputs makes the soil healthier, and that makes things more sustainable as well." □

Steve Stuebner writes about voluntary conservation success stories for the Conservation Commission on a regular basis.



Jeff Parkinson's turnips have deep roots.

Districts pass resolution asking Commission to give loan incentives to young ranchers, farmers

Districts at the November 17th Idaho Association of Soil Conservation Districts (IASCD) annual business meeting passed a resolution calling on the Commission to offer “minimal interest” loans (via the Resource Conservation and Rangeland Development Program - RCRDP) to young farmers and ranchers for conservation equipment and practices.

The resolution was authored by former IASCD president Kevin Koester of the Portneuf Conservation District. Koester said it was motivated by a need to engage younger generations in conservation, and the difficulty for young farmers and

ranchers just starting out in agricultural businesses to obtain funding, particularly for conservation loans.

An earlier draft resolution circulated among districts in October called for “zero percent interest”. After the state’s legal review determined the Commission doesn’t have statutory authority to make zero percent interest loans, Koester revised the resolution to request “minimal interest” instead.

The Commission heard from a number of individuals at the Board’s annual Listening Session who supported the resolution. Commissioners plan to examine feasible incentives for young farmers and ranchers and/or beginning farmers and ranchers at the Commission’s January 25th Board meeting in Boise. □

in FY 2013, volume has increased over the last few years to 12 in FY 2014, and down again to 7 in FY 2015.

Commission staff notes that the number of approved loans however, doesn’t represent the actual program activities.

For example, in FY 2015, 48 loan inquiries were received from potential conservation borrowers. Both successful and unsuccessful applications are fully documented, researched, and considered.

Of 48 inquiries received in FY 2015:

- 20 fully developed loan applications with accompanying conservation plans were received, reviewed, verified, and considered by the loan officer,
- 7 loans were approved either by the Commission or the loan officer (for loans of \$50,000 or less), totaling \$392,517,
- 2 loan application packets were awaiting credit determinations on July 1st (in the amount of \$224,516),
- 3 additional loan application packets were in process, 5 loan application packets were denied,
- 1 application was withdrawn, and
- 2 applications were incomplete (lack of response from applicant to request for further information).

In addition to considering new applications, the loan officer and assistant process payments, disbursements, and track the existing \$3.36 million portfolio balance, market the program around the state, recommend annual loan percentage rates and terms, develop and implement program policies and procedures, conduct surveys, and provide support to the Board loan committee and Commissioners. □

RCRDP Program Stats for FY 2015

Idaho Code Title 22, Chapter 27 provides for the Resource Conservation & Rangeland Development Program, low-interest loans to landowners to install conservation measures on private property. Eligible projects address soil and water issues, like improving riparian areas or enhancing fish and wildlife habitat. Some eligible projects include: Irrigation equipment, No-till drills, Animal feeding operation improvements, Livestock fencing, and Stream bank protection. See more at: <http://www.swc.idaho.gov/what-we-do/conservation-loans>.

The program was funded by legislative appropriations of \$8.2 million in estate taxes between 1987-2000. It relies on the generation of interest to increase available funds for loans and cover administrative costs. There was a cash balance of \$6.6 million on July 1st. Loan activity has been down due to strong agricultural commodity markets and borrower uncertainty. But from a low of 4 loans approved

LOW INTEREST LOANS IDAHO CONSERVATION COMMISSION

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No-Till Drills
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