

#FridaysOnTheFarm: Enhancing an Operation with Cover Crops

Each Friday, visit local farms, ranches, forests, and resource areas through our [#FridaysOnTheFarm](#) stories. Meet farmers, producers, and landowners who are working to improve their operations with USDA programs.

This Friday meet Bo Fox, of Monona County, Iowa, who is working with USDA to efficiently graze his 100-head cow and calf herd and help improve soil health on his farm. Bo farms with his son, Jake, in western Iowa's Loess Hills.

A long-time no-tiller, he has expanded his crop management from no-tilling corn and soybeans to including crop rotations with small grains, cover crops, and livestock grazing of cover crops.

Ryegrass Cover Crop

While Bo has experimented with cover crops in the past, he recently worked with USDA's [Natural Resources Conservation Service](#) to obtain planning and financial assistance to grow a diverse cover crop mix suitable for spring livestock grazing.

Bo aerial seeded a cover crop mix of ryegrass and radishes into 60 acres of standing corn and soybeans. He says establishing it early enough – in late summer or early fall – is important for overwintering. Bo uses ryegrass because of the low cost and high amount of biomass production.

Last spring, Bo grew his cover crop to about waist high before grazing it for three weeks to about a four-inch height. After removing the cattle, he let it grow back to about 18 inches, sprayed it, and then no-till planted corn into it.

When fall came, Bo chopped corn for silage to allow him time to drill in his diverse mix of cover crop. "We had severe weather issues in 2017 and 2018 where we very much relied on the ryegrass for grazing the cattle," said Bo.

Benefits of Cover Crops

Not only does Bo's livestock get an additional grazing source, the cover crops benefit his soils, too – improving soil moisture levels, weed management, and soil fertility.

Using no-till and cover crops, Bo has noticed better soil moisture conditions in the hot, dry summer months compared to fields with only no-till. He has also noticed that if you use cover crops for weed management, it is critical to allow the cover crop to grow and develop before termination. And by using cover crops, Bo is increasing the amount of biological activity and organic matter in the soil faster than no-till alone, which helps improve his soil's fertility.

Bo's late father's land stewardship activities play a key role in his decisions today. "He was very much about taking care of the soil. We've always been believers in no-till and erosion control practices like terraces and different things," he said.



To further restore the condition of his soil, Bo has taken some crop fields out of traditional corn-soybean production and planted oats with radishes, rape, and turnips, and then grazed it periodically throughout the summer. “After a year of doing that, I no-till corn into that ground and have seen a huge yield bump,” he said.

Grazing System

To reduce erosion, improve water quality, and provide better water access to livestock, Bo is making better use of his entire pasture by adding and relocating livestock watering tanks. He has 175 acres of rough terrain pasture that requires livestock to walk a long way for water access. Currently, the cattle use one tank and a creek for watering.

He is using the NRCS [Environmental Quality Incentives Program](#) to offset the cost of water pipelines, a shallow drilled well, a pump, and watering tanks. This will help keep the cattle out of the creek, which will reduce erosion, give them a cleaner water source, and prevent them from getting stuck in the mud and picking up diseases.

More Information

USDA offers a variety of risk management, disaster assistance, loan, and conservation programs to help agricultural producers in the United States. [Learn about additional programs.](#)

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