

Farming Smart, Farming Sustainable

Posted on June 28, 2010 at 3:07 PM

[Click here](#) to view [recent posts](#)

I'm more convinced than ever that sustainable farming is not just the latest craze only to be abandoned later on. With global warming and population growth in our future, there's no doubt we have to start farming in a smarter fashion that boosts yields and keeps resources ready for the next generation.

Of course, it's one thing to write about it in a blog or farm magazine. It's another to start seeing it in practice. Just last week I was visiting with farmers on the [Purdue Farm Management Tour](#) who are making sustainability more than just the latest cliché pouring out of the mainstream media. In Brownsburg, Ind., farmers Jack Maloney and Mike Starkey are both using no-till and cover crops to keep soil in place, slash fertilizer costs and – here's the best part – boost yields.

Both of these guys have a long track record as innovators. Maloney's 2,600-acre place is actually organized as Sub-Chapter S corporation. His father was one of the first in the county to grow soybeans, as well as win corn yields by growing one of the first single cross hybrids. They shifted to no-till beans in the mid-80s and have no-tilled both corn and beans the last 10 years.

Jack looks at grain production as a three-part system – part subsurface water management, part fertility and part equipment. He's trying to make his soil more permeable by growing ryegrass and using gypsum.

"We're trying to get the soil profile back to where it was 30 years ago," he says. "We've ignored soil bacteria and organic matter."



Maloney (left) began using cover crops on 500 acres with help from the government's [CSP](#) (Conservation Stewardship Program), which provides financial and technical assistance to promote conservation practices. Last year he had seed flown on to corn fields around mid-September.

"It looked like a golf course beneath the canopy," he says. "Rye grass as a cover crop roots deep, adds organic matter, and makes corn roots more permeable. It pays."

The Maloneys apply flu gas gypsum at a ton per acre every other year based on geo-referenced soil tests. They pay around \$20 per ton with trucking costs.

Paying off All of these sustainable moves are paying off. Maloney says he's seeing better pH levels and improved levels of calcium, and magnesium.

"For production Ag, rye grass is the way to go," he says. "We're getting massive changes in organic matter. It has an 8 to 10-inch root system. We get 50 lb. of N once the rye grass dies and returns the nutrients to the next crop."

He also says his fertilizer costs are lower because he doesn't apply as much P and K as a result.

"The soil fertilizer guys will say you're mining the soil, but our soil fertilizer has balanced out," he says. "We backed off the P and K and our yields have gone up dramatically while costs have gone down dramatically. We used to put over 200 lbs. of N on for 160 bu. corn; now we're putting 150 lbs. of N on to get 200 bu. corn."



Mike Starkey, who farms down the road in a partnership with Dave and Jeff Starkey, is seeing similar results. They also no-till with an annual rye grass cover crop, which has lowered costs and raised yields considerably in the past 10 years.

"We attribute that to our no-till practices by letting our soils release the available nutrients that are needed," says Mike (left). "We don't apply fertilizer based on what the book says, in terms of recommendations based on yield goals. We made the decision to no-till to not only be good stewards of the land, but to also survive financially."

The family's overriding goal is to leave the soil to the next generation in better condition than when they received it.

If 'sustainable' means higher organic matter, lower fertilizer costs, higher yields and 'leaving soil in better condition than when you found it,' what's not to like?

About The Writer



Mike Wilson has spent the last 25 years as a writer, photographer and editor for various U.S. agricultural magazines. He grew up on a grain and livestock farm in Ogle County, Ill., and earned a bachelor's degree in agricultural journalism from the University of Illinois in 1981.

He served as editor of *Prairie Farmer* magazine from 1990 to 2001. He has been executive editor of *Farm Futures* since 2004.