

Iowa CONSERVATION Showcase

Producers Find No-Till Corn-on-Corn Success

With corn prices doubling over the past two years, many producers are expected to expand their corn acreage and plant corn-on-corn this spring.

According to Iowa NRCS State Agronomist Barb Stewart, corn-on-corn planting can be a good thing if done right. "Corn is a high residue crop, when properly managed, can protect the soil from erosion and add carbon and nutrients to the soil for future crops to use," she said.

But, according to Stewart, the key to a successful transition to corn-on-corn rotation is resisting the urge to till.

"There's a myth out there that tilling has to take place when planting corn into corn residue," said Stewart. "Tilling a no-till field releases stored carbon by oxygenating the soil which stimulates microbial activity. It also increases evaporation of crop moisture and burns up resources that can reduce the soil's ability to produce future crops. You don't need to till everything black to go corn-on-corn."

Darrell Stamp, of Walnut, agrees with Stewart. He won't be tilling his corn-on-corn fields this spring. An East Pottawattamie Soil and Water Conservation District commissioner, Stamp has been a 100 percent no-tiller for 20 years.

Stamp's experience on his 1600 acres of row crops has been very positive. As a result, Stamp says to his fellow producers, "Don't be afraid to no-till."



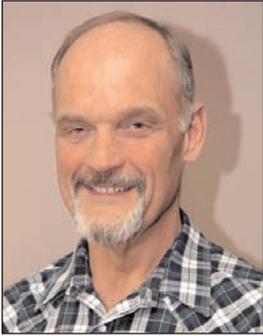
A close-up of no-till corn

Because of high corn prices, Stamp plans to plant more corn this year because he says the return of corn-on-corn is better than soybeans at today's prices. Planting corn-on-corn no-till fields for Stamp simply means he will try to split the rows with his no-till drill.

Stamp says trash whippers will be a must this year. Other than that, Stamp says "no-till is not really hard to do, especially with gas and fuel (prices) as high as they are today and the wear and tear on the tractors. Last year and the year before no-till gave me some of the best results I've ever had. My no-till corn-on-corn fields yielded over 200 bushels per acre."

Thad Bridges, of Elliott, has also had good results with no-till corn-on-corn. Farming 2,300 acres in Pottawattamie,

Iowa
CONSERVATION
Showcase



Darrell Stamp farms 2,000 acres in southwestern Iowa. Farming no-till for over 20 years, Stamp has had very good results with no-till.



Thad Bridges plants no-till and conservation-till on 2,300-acres in Pottawattamie, Cass and Montgomery Counties. Planting no-till allows Bridges to expand his operation and spend more time with his family and on church activities.



NRCS State Agronomist Barb Stewart urges farmers, landlords and tenants to look at all of their tilling options before planting this spring.

Cass and Montgomery counties, Bridges was really surprised with his corn-on-corn no-till results. The last three years, Bridges checked yields on farms in multiple fields within a section. He expected his no-till corn-on-corn yields to stay the same. Instead he saw a 25 bushel an acre yield increase. The fields were across the road from each other and had the same soil quality and moisture. Bridges thinks hybrid selection was responsible for the increase.

On his farms, Bridges plants 85 percent of his acres no-till and uses high residue minimum tillage on the rest. He continues to experiment and try to improve production practices. Over the years he's discovered second year no-till corn-on-corn yields to be much better than second year tilled.

“Contrary to what I thought when I began farming,” Bridges said, “corn-on-corn used to be kind of an evil. Now we've been having excellent success with it. Some of our best corn year in, year out, is continual corn; part of that being no-tilled into residue from the year before.”

While Bridges guesses his wife, Denise, might say he spends too much time working, Bridges says there is an added benefit to no-till. “It frees me up to be involved in family activities. We're active in our church, but I don't want to live in a tractor every minute. There are peak seasons when we need to be there, but there is more to life than driving a tractor. (No-till) allows me time to do other things I'm interested in. Besides, it saves the soil,” he said.

According to Stewart, everyone, landlords and tenants, should look at all of their tillage options before planting. “Tilling can have a negative effect on the soil condition by destroying consolidation and macropore

development. It also increases release of carbon reducing soil organic matter. This can have a negative effect on the soil's ability to hold nutrients and moisture for the crop. And reduced soil condition usually means reduced yields.”

Stewart urges producers and landowners to talk to their technical service providers, crop consultants, ISU Extension or NRCS service center personnel and see what corn-on-corn options are available.

As a 20-year no-tiller, Stamp strongly encourages other producers to give no-till a try. “No-till will work. Work with it,” he said.

*Dick Tremain, Iowa NRCS
March 2007*

Helping People Help the Land

USDA is an equal opportunity provider and employer.