

**Dean Reynolds
and David Birchmeir**
Maxwell, IA



Dean Reynolds

I farm with my son-in-law, David Birchmeir. We've been concerned about soil compaction for some time, and have switched to tracked Caterpillar Challengers for most of our fieldwork. For several years, we've also used a V-ripper on heavy ground

before planting it to corn, so I was curious about the effect an in-line ripper might have.

I set up my plots on a field that has both some heavier Webster soil and lighter Clarion on the knolls.

On the average, we saw a slight increase in yield from the deep in-line ripping. In the Webster soil, which makes up about 33% of the field, we had a 3.2 bu. increase. In one section of the Clarion, less than 5% of the field, the yield increase was just over 8 bu. an acre.

All of this leaves us with a lot of questions, so we're continuing to participate in the On-Farm Network study. We also purchased an in-line ripper of our own and have done some additional testing to see if there are other places it makes a difference.



David Birchmeir

One of the first things we noticed about the deep ripping trial was the corn in the ripped strips got off to a better start.

The only explanation we could come up with for this was the soil dried faster and warmed up quicker.

We tried ripping corn stalks before no-till planting soybeans and ripping bean stubble before no-tilling corn. What we found is there's little benefit to the beans, but there seems to be in corn.

We didn't see much difference in corn yields in fields where there was a recent history of heavy tillage. Yields were improved more on fields without recent tillage. We saw the biggest yield advantage, 19.9 bu. per acre, on a field that had been no-tilled for several years. The Wadena soils within this plot went 16.6 and 24.1 bu. better than the adjacent unripped strips.

I'm not a die-hard no-tiller, but over the years, I have done a lot of no-tilling on highly erodible soils and other places where it worked for us.

From my experience, I'd have to say that in many cases, there is economic justification for deep ripping. However, it takes studies like this in order to identify those places where there is a benefit.