



Letters From Members

Disagrees on no-till

To the Editor:

Regarding the August 29th article on fewer no-till acres by Colleen Schneider of NRCS:

Every year new people are moving to no-till. At the same time even more people who have been into no-till, have decided it just doesn't work for them and they are moving on to other management practices.

Also what many are calling no-till actually includes some forms of tillage. No-till has been around for a considerable amount of time. If it were half as good as its zealots claim it to be, Iowa farmers would have ninety percent of our crop land in no-till by now.

The reality is that ninety percent of the longer term no-till fields give sub-standard results. They are hard with poor soil structure, they do not have satisfactory water infiltration, soil erosion is still a problem, biolife is inadequate, plant health is poorer, insect pressures are greater, and plant diseases are more prevalent.

When looking at the whole soil erosion picture, surface residue plays a somewhat minor role in prevention. Enlightened fertility management practices and building

soil quality are much more important. No-till is chemical-intensive and fertilizer-inefficient. No-till is poor at recycling natural nutrients and poor at fixing carbon into the soil.

For every pound of carbon added to the soil, it can hold another four pounds of water. Soil water erosion starts when the soil can no longer infiltrate water. Exudates of decaying soil microbes provide the glues to give soil its crumb-structure. This combats wind and water erosion. Electromagnetic stability from fertility balance does the same.

One good indicator of a healthy and truly fertile soil, a soil that is more erosion-resistant, is rapid biodegradation of the crop residue. The crop residue is converted into humus, which contains biologically stable carbon and nutrients. (Carbon and natural nutrients are being recycled.)

There is much less biodegradation in a no-till scenario. Instead, far too much of the carbon in the crop residue slowly oxidizes (just like a slow, invisible fire) and is lost into the atmosphere as carbon dioxide.

No-till is often counter-productive. No-till is not environmentally positive.—**Darel D. Hein, Stockton**

Farm Bureau Spokesman 10/1/98