

No-till in the UP - Special Report

The high cost of fuel has stimulated interest in going to more no-till farming. But in the UP, people are concerned about slow soil warm up, yield reductions and new management and equipment needs. There are a few people in the UP who have been using no-till for a number of years and are satisfied with their crop yields and the reduced cost. The UP Ag Connections will do a Special Report Series this summer on one farm in the southern UP. We will track its successes and challenges in the 2007 crop year. This is not a research project but one farm's experience that I hope will provide you with a unique perspective of no-till and how it works in the UP.

We are using this special insert so that we can share some color pictures of what the fields looked like on May 3rd, 2007. We wanted to take some before planting but the farmer had already put in barley that had emerged and corn that was growing but not yet above the ground. We plan to have an update every month so you can compare your crops to these no-till crops. We promise to be un-biased as possible and will show what an "average" spot in the field looks like.

The one overriding message about no-till that will often be repeated is that it is a multi-year effort. It is possible to successfully use no-till on a one time basis but one key factor I kept hearing in the conversation between Christian Kapp, the MSU Crops Technician, and the no-till farmer was the need for a planned crop rotation. What kind of existing crop residue or sod makes a big difference in the success of the next no-till crop. You have to have a multi-year plan.

Do I need special high cost no-till equipment? Yes and no. Some of the fields showed in the pictures were seeded with a conventional drill. The keys are that the seed be placed in the right place in soil, be covered with soil, and have the soil over the seed compacted. Many no-till fields will have enough trash or plant residue that will prevent a conventional planter from accomplishing these three critical elements. In some cases, a conventional corn planter can be modified to work in many no-till situations. When you made the transition from sod or an old hay field, the larger the seed, the better the success. Corn > barley or oats > brassicas > hay seed (Hay seed not recommended to be reseeded into sod).

Can I go 100% no-till? Sure, IF your fields are all smooth and you promise to never rut them up, you are willing to stick to your long term crop rotation, no last minute mind changes, you will not need to work manure into the ground, and you are willing to consistently make the extra management and equipment changes needed to "tune" your no-till system for your crop and livestock needs. When you farm, very few things are 100%! There will always be some exceptions but for many farms, a large majority of their crops could be grown with no-till and the resulting cost savings.

I am not a no-till expert nor am I blindly pushing no-till. Today's \$3.00+ fuel and \$100,000 for tractors is cause for something to change for farmers to remain competitive and maybe no-till is one of those options you should consider. I welcome any feedback and concern on this series. *-Ben*



Alfalfa seeded in '06 into oats stubble with an oats cover crop.



No-till corn seeded into sod that was fall sprayed. Planting date was 4-25-07. Soil temperature on 5-3-07 at about 11:00am was 51.3 F in the sod residue covered portion and 54.4F. in the row where the corn was planted.



Barley seeded with conventional drill on 4-16-07 into corn silage stubble. Note some skips when drill passed over corn stalks.



No-till corn seeded into corn combined for grain. Some grass showing.



Oats seeded with Great Plains no-till drill on 4-24-07 into corn field that was harvested for grain in '06. Barley not yet emerged. Note large amount of residue.

