NORTH PLATTE
Natural Resources District

100547 Airport Rd, PO Box 280 Scottsbluff, NE 69363-0280
PH: 308-632-2749 FAX: 308-632-4346 www.npnrd.org

Press Release

No Till Notes

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No Till Notes: What If?

By Mark Watson, Panhandle No Till Educator

What if our water allocations were cut in half tomorrow? How would it affect your farming operation? Would you have to make significant changes in your management in order to survive? Change in farming practices and in water use is inevitable. As agriculture moves into an era of less water being available to produce crops, farm managers will adjust with changes in farming practices, equipment, and maybe even crops they produce to allow their operations to remain profitable.

My purpose for working as a no till education coordinator is to help with this transition to production agriculture with less available water for crop production. No till crop production systems are the most water efficient crop productions systems we have available that allow us to remain profitable with less water. Without no till practices being implemented, yields and therefore profits will decline as less and less water is available for crop production. I have tried to show over the last several years with articles, bus tours, winter educational meetings, and field days that implementing no till crop production practices on our farms is beneficial to our soils and encourages good management of our water resource. No till farming crop production systems can also be profitable if managed correctly.

Equipment adaptations for no till farming will vary with individual farms. Most row crop producers won't have to make drastic changes to their planters to make them work in a no till farming system. Grain producers will need to look at grain drills which will plant through large

amounts of residue. Generally speaking the disc type grain drills seem to handle the residue pretty well and still seed the crop at the proper seeding depth with good seed to soil contact.

Producers may also look at owning their own spraying equipment if they don't already. Owning and operating spraying equipment to apply herbicides in a timely fashion will become more important as no till production practices are adopted.

The biggest challenge to switching a farm over to no till crop production systems is residue management. For generations we have managed residue will tillage equipment. If there was too much residue on the soil surface for our needs, we simple used tillage to get rid of it. Unfortunately, we didn't realize all the benefits the residue provided.

We now know that residue can provide numerous benefits in crop production by leaving the residue on the soil surface. The residue reduces soil moisture evaporation, improves water infiltration, suppresses weed populations, and drastically reduces wind and water erosion of our soils. Residue also improves the organic matter content of the soil, feeds the soil microorganisms, and supplies nutrients for the following crop.

Our biggest challenge when switching to no till farming practices is to learn to plant into large amounts of residue. Once we have figured this out, leaving the residue on the soil surface provides many benefits.

In upcoming articles I would like to look at some of the crops produced in our area that are high water users and how lowered allocations may affect their place in our farming operations. Is it possible to no till crops such as sugar beets or potatoes? How do we manage alfalfa in our operations and the protein it provides to our cattle feeding industry? These are important crops to our area and we need to address cropping systems to meet these needs. I'll explore some ideas in upcoming articles.