

No Till Notes

Date: For the week of June 21, 2009

Erosion

By Mark Watson, Panhandle No Till Educator

The rains continue to fall in the majority of the Panhandle. We've went from drought to deluge in one short year. Parts of the Panhandle have had severe damage from these storms with large hail, high winds, and torrential rain.

I have noticed there is more residue left on the soil surface this year than in the past. This residue on the soil surface helps reduce the effects of these storms concerning wind and water erosion. The residue protects the soil surface from the pounding rain and improves the water infiltration into the soil. There is a limit to how much infiltration can take place before runoff occurs, but at least by leaving the residue on the soil surface we've done all we can to reduce the damage from water erosion.

I have also noticed on some highly erodible fields where conventional tillage was done this spring the water erosion has been severe. Fields which had been terraced in the past still had water erosion where the water cut through the terraces. Proper residue management leaving the previous crop's residue on the soil surface and attached would greatly reduce the water erosion on these highly erodible soils.

Fields where conventional tillage was used this spring are also vulnerable to wind erosion after these harsh storms. The soil surface has been exposed to the pounding rain and the soil aggregates have been destroyed, leaving fine clay and sand particles exposed to the elements. High winds will cause large amounts of this soil to erode causing more damage to these soils. The value of residue on the soil surface and attached truly is immeasurable!

Thus far in June our farm has received 4.45 inches of rain which brings our yearly total to 9.85 inches. This puts us 1.25 inches above normal for the year with the remainder of June to add to this total. With all the rain we have not irrigated, so our total irrigation for the year is 2.25 inches on the winter wheat and none on the corn or edible beans.

While this weather has been hard on the late spring planted crops, the winter wheat and peas are doing well in this wet and cool environment. John Rickertson with South Dakota State University extension has been researching field peas in western South Dakota for several years. John told me that for every day the peas are in bloom he estimates 3 bushels per acre in yield. For those of you growing field peas you can see if this estimate works for our area. Thus far our peas have been in bloom for over a week now.

We will be having another field day on our farm sponsored by the Upper Niobrara White Natural Resource District. This field day will be on June 24, 2009 beginning at 8:30 am. The following day on June 25th there will be a field day at Curt Roth's farm near Clinton. Lunch will be provided after the field tours. These meetings will be informal discussions on a wide range of no till crop production topics. There will be numerous crops to look at including corn, edible beans, winter wheat, sugar beets, field peas, spring wheat, sunflowers and forage crops. All these crops are produced using no till crop production practices. Please contact the UNWNRD at 308-432-6190 to register for these events.

