

Improving Soil Quality

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Improving soil quality is the single most important aspect of improving crop production under a no till farming system. All the important attributes of increasing water holding capacity, improving water infiltration, reducing soil moisture evaporation, improving soil structure, increasing organic matter, provide a food source for soil microorganisms, and increasing nutrient availability to the crop are all directly related to improving the quality of the soil we work with.

In our effort to improve the soil quality on our farm we are planting cover crops on a portion of our farm this year. We are growing these cover crops as forage for cattle, improving all the soil qualities in our soil, and producing nitrogen for the following crop.

We are planting a mixture of hybrid turnips, oil seed radishes, dwarf essex rape, spring and winter lentils. The turnips, radishes, and rape will provide excellent forage for cattle. We are hoping to get around 3 tons of forage per acre. These crops will also improve water infiltration into the soil and improve soil structure with their deep root development.

We are growing the spring and winter lentils to produce nitrogen for the following crop. Our intent is to produce 30 lbs. of nitrogen per acre with these lentils. Hopefully the lentils will reach optimum nitrogen production before a killing frost. With the high cost of nitrogen fertilizer it makes sense to produce some of your own with these cover crops.

We are planting the cover crops into our irrigated winter wheat stubble. We will grow corn the following year behind these cover crops. We also intend to try a mixture of lentils and dwarf essex rape on some dry land wheat stubble acres, but haven't received any moisture to plant the crop into, so we are delaying any planting to see if we can get some rain.

No Till on the Plains has scheduled a field day on our farm on September 3, 2008. This field day will cover all aspects of no till crop production including no till corn, wheat, and edible bean production. This will also be an opportunity to view the cover crop field. No Till on the Plains has always provided top notch speakers who have a wealth of information on all aspects of no till crop production systems. I would encourage everyone to attend this important field day.

We missed out on the rain once again over the weekend. My dad told me that when you're dry it seems like it is raining all around you and that certainly seems to be the case again this year. Our irrigation totals for the year are 7 inches on the corn and 4.5 inches on the edible beans. We had 7.5 inches on the winter wheat, and put an additional inch on the stubble for the cover crop. Our yearly precipitation total is 6.67 inches with .1 of an inch in August. We are about 4.5 inches below normal. Sure wish it would rain!

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