

April 14, 2017

SPRING GRAZING OF COVER CROPS

Cover crops and spring pastures are growing fast and early. The high on April 13th was 75 degrees. I looked at the soil temperatures at the UNL automated weather station east of Plymouth and the last five days since April 13 we have averaged 54.4 degrees, 4 inches deep in the soil. Last year, during those same days (before a cold wet May), it was 54.5 degrees. No different thus far from last year and early planted corn has been planted at a quick pace in our area.

On Thursday, I asked to be invited to a modern cattle drive between Clatonia and Wilber. Little did I know I would become part of the crew! The farmer, instead of planting dryland corn early, was finishing spring grazing another large field with 170 head of cows. He was utilizing cereal ryegrass cover crop seeded last October with a drill after row crop harvest.

I was one of a four person crew. The producer baited the cows with wet distillers grain on his truck and the smell of it was tantalizing to the cows. That was like a child coming to candy and it moved the entire herd forward consistently. I was in a gator bringing up the rear and two others helping using ATV's from the sides, no horses needed. The move was only 1 ½ miles up the county road to the next cover crop field. I was amazed at how easy the move was. There was a few cows stopping at times munching on lush brome along the road, but the cattle immediately came to the buffet of the new, knee high cereal ryegrass, an amazing site. In a previous move that demanded the cattle to cross Highway 41, two flaggers cautioned traffic and a young boy looking on said, "Look at that, a cattle stampede!"

Even though it is not as common in Southeast Nebraska because our cow-calf numbers have dropped, our Animal Science Department at UNL reminds us how grazing corn stalks is of major importance to Nebraska's beef cattle industry and can be compatible with no-till crop production in the winter months. A research study at Mead is often cited where on average, yield of the following soybean crop was increased by about 2 bu/ac with fall-winter grazing, and 1.3 bu/ac with spring grazing, compared with no grazing of corn stalks. Yield of corn as the second crop after grazing was not significantly affected. With wet soil conditions in the spring, consider removing cattle from the field or taking other management steps to minimize the effect of any compaction.

Because these fields have been in continuous no-till, the producer has not found compaction or hoof prints to be any kind of obstacle with his crop yields. A UNL research group led by Humberto Blanco is studying how grazing cover crops affects soil properties and crop yields. He is looking at four research sites in Nebraska. In a small corner of the field I was in, I flagged off the worst area of the 80 acre field with the deepest hoof prints. The force of cattle hooves can cause "pugging" or localized compaction if the soil is wet when grazed. I plan to document stand count with corn to be planted in a couple weeks in that area compared to the majority of the field. The fields are kept on no-till and you do not see any henbit or marestail in these fields, not because of grazing, but the cover crop effect for weed control.



By grazing cover crops, this farmer makes use of grazing winter and spring and does not have enough summer pasture for the 240 head cow-calf herd. When summer pasture runs out, which is early, cover crop silage is available from the previous year where he has double cropped. He alleviates grazing stress on existing pastures, allowing them to become more productive. Other potential benefits of grazing cover crops include reducing feed expenses. In addition to the potential for economic gains of grazing cover crops, the soil and ecosystem also benefit from having a living cover when the soil would otherwise be fallow. Capturing energy from the sun over a longer time enhances soils. Cover crops leave abundant root biomass even when grazed, which improves soil properties. Manure from the grazing livestock can add and diversify biological activity and help close the on-farm nutrient cycle.

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