

# Channel Spotlight

Corn planted May 10 in Ansley, has accumulated 683 GDUs. 30 year average is 795. (about 5 days behind)

<https://hprcc.unl.edu/gdd.php#>

Estimated corn water usage this week:

0.15"/day

1.05" total.



## Channel Team

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### HIGHLIGHTS FROM YOUR FIELDS:

**Yellow (Chlorotic) Corn and Soybeans:** I have gotten several questions recently about yellowing areas in both corn and soybeans fields. For the most part, the areas of these fields that are showing symptoms are areas that have a history of lighter soil and/or poor drainage. These areas are consistent to previous years. The severity is higher this year due to an environmental effect.

Recent warm temperatures have triggered rapid growth, while earlier cool wet weather hindered root development. Soil conditions such as compaction, excess moisture, low organic matter, pH and nutrient levels all are factors that may contribute to this issue.

In some cases, sidedress N or foliar micro-nutrient applications may be feasible to help the situation. However, in many cases the only feasible management is to wait it out. Continued warm weather will increase microbial activity, breaking down organic matter and making nutrients in the soil available to plants. Plants will also continue to develop roots and reach nutrients that are deeper in the soil.

Tissue samples may help to evaluate corrective actions. Sampling both stressed areas and healthy areas may point out the nutrient imbalance causing these symptoms.

Long term management of compaction, soil drainage, fertility etc. should be considered to reduce this effect in future years. There are many ways to "skin the cat"; evaluating tillage practices and incorporating cover crops would be a good place to start.

**Irrigation:** Root activity of corn is getting close to 24". The probes we've evaluated are showing evidence of roots stretching but none show activity below 2 feet. Roots will continue to develop for about another month.

Depending on recent rains, the top foot is getting dry leaving only 6-12" of actual root zone with water available to the plant. From now until tassel, I would recommend supplying 50-75% of crop usage via irrigation if rainfall does not. For example: this week crop usage will be about 1". If no rainfall is received, applying 0.5"-0.75" will reduce the potential of plant stress, while encouraging roots to continue developing and leave room to hold rainfall.

Questions? Pete or Trey would be happy to help.

## In These Boots.....

Channel TA, Tammy Ott

### Corn Disease Part 2....

As I continue the focus on corn disease identification and management, this week we will look at Goss' Wilt and Northern Corn Leaf Blight.

### Motivational Quotes of the Week

"You don't  
have to be  
great to start,  
but you have to  
start to be  
great."

-Zig Ziglar

"We may  
encounter  
many defeats  
but we must  
not be  
defeated."

-Maya Angelou



Goss' Wilt is a bacterial infection that is capable of causing significant yield loss when paired with susceptible corn hybrids, favorable environmental conditions, and the presence of inoculum in the field. Symptoms of Goss' Wilt are often confused with Northern Corn Leaf Blight, as well as drought/heat stress or nutrient deficiency symptoms. When unsure of the presence of Goss', a plant disease diagnostic clinic can diagnose the absence/presence of disease.

Symptoms of Goss' Wilt usually present themselves after a major weather event that damages leaf tissue allowing bacteria to enter the plant. Systemic Goss' infection happens early in the season, where leaf blight symptoms occur mid to late season. Leaf blight symptoms are long, gray water-soaked lesions that extend along leaf veins. Small, dark spots can be found inside the lesions. When lit from behind, the dark freckles will be luminous, and a bacterial ooze from the infected portions of the leaf will create a sheen on the leaf. Management of Goss' Wilt includes selecting corn hybrids with strong ratings and crop rotation.



Northern Corn Leaf Blight is a fungal infection that also causes significant impact on yield. In addition, it can affect stalk and grain quality. NCLB can be identified by long, cigar-shaped lesions that are gray or tan in color. NCLB can occur at any growth stage, but is more progressive after pollination and is favored in moderate temperatures (65-85°F) and high humidity. Symptoms will appear on lower leaves first and progress up the plant as the disease matures. Management of NCLB includes selecting hybrids that are resistant and crop rotation. Unlike Goss' Wilt, NCLB can be managed with a fungicide application.

Happy 4<sup>th</sup> of July!

