

# Tail Gate Talk



**PRAIRIE  
LAKES**

## Nutrient Management

By Weston Wander—Account Advisor

It's safe to say that this year has not had the optimum growing conditions that a person would like to see. Rain, rain, and a little more rain may have created some nitrogen loss.

So what's next? [TISSUE SAMPLING](#), coupled with a [SOIL NITRATE TEST](#) can give a look into what is going on in your soil. Figuring out what your greatest yield-limiting nutrient is and correcting it before it's too late is the best way to protect your investment.

If you happen to be lacking nitrogen, there are a few options available to you. Topdressing of Ammonium Sulfate, or Urea coated with [AGROTAIN](#) can add nitrogen while minimizing the loss of volatilization. Side dressing of Anhydrous Ammonia mixed with [N-SERVE](#) is another great way to add nitrogen.

Contact your local agronomist today.

Enjoy your summer!!



**Join us for the CHS Prairie Lakes plot day on Thursday, August 7th in Westport, MN. In addition to plot tours, we will hear from industry experts and receive growing season updates. Registration will begin at 8:30AM with a meal to follow the program. Contact your agronomist for further details!**



### TRIVIA

Danny Dekalb planted his DKC46-20 corn hybrid on April 20<sup>th</sup>. Danny's farm received a lot of rain and he was not able to finish planting until May 20<sup>th</sup>. In the seed guide DKC46-20 needs 2400 heat units to reach black layer. Approximately how many **less** heat units will the DKC46-20 planted on May 20<sup>th</sup> need to reach black layer when compared to the same hybrid planted on April 20<sup>th</sup>?

- A. The same, corn hybrids do not compensate for planting date.
- B. 100 Less
- C. 200 Less
- D. It's getting late, plant soybeans.

Answer is on page 4

## Premium Fertilizer Products

### [MicroEssentials 12-40-0+10S](#)



Sometimes referred to as the “grape nuts” of the fertilizer world, MicroEssentials has changed the way we utilize phosphate fertilizers. For the past 5+ years, CHS Prairie Lakes has utilized this product to increase crop yields. There are two major advantages over typical phosphates. 1. By using the Fusion technology every MicroEssentials fertilizer granule is able to provide three vital nutrients to a crop. 2. The sulfur component creates a stable PH zone around the granule which increases phosphate uptake, especially in high PH soils. MESZ outperforms DAP and MAP. Period.

### [Aspire 0-0-58+.5B](#)



Aspire delivers potash and boron in one granule. Created using Nutri Form technology, Aspire is a game changer for Boron management. Early data is showing significant yield increases when compared to traditional potash and boron fertilizer blends.

### [K-Mag 0-0-21.5+21S+10.5MG](#)



K-Mag provides a 100% water soluble potash, sulfur and magnesium product that does not affect PH and increases crop yields.

### [Pegasus 0-0-62](#)



Not all potash products are created equal. Pegasus white potash provides 3.3% more nutrient value per ton than red potash. It also contains less impurities and insoluble compounds.

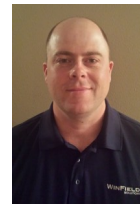
### [ESN 44-0-0](#)



Otherwise known as “Smart Nitrogen”, ESN is a controlled release nitrogen product. Each polymer coated granule releases the nitrogen based on temperature and soil moisture. The popularity of ESN’s use in corn has skyrocketed over the last 2-3 years.

Farmer—owned with  
global connections

## Croplan Corner with Ryan Halvorson— Seed & Agronomy Advisor



With another challenging spring closing, several questions arise, including what are things I can do to help the crop I have? With the excessive rain we have seen this season, side-dressing nitrogen and sulfur are excellent ideas and provide good return on investment. Consider also giving your crop a foliar application of zinc.

To ensure an accurate reading of the current crop nutrient level, take



applications are targeting exactly what your crop needs. Last year,

advantage of tissue sampling. Tissue sampling your field can serve as a valuable tool to implement in your operation to ensure your in-season nutrient

80% of tissue samples came back deficient.

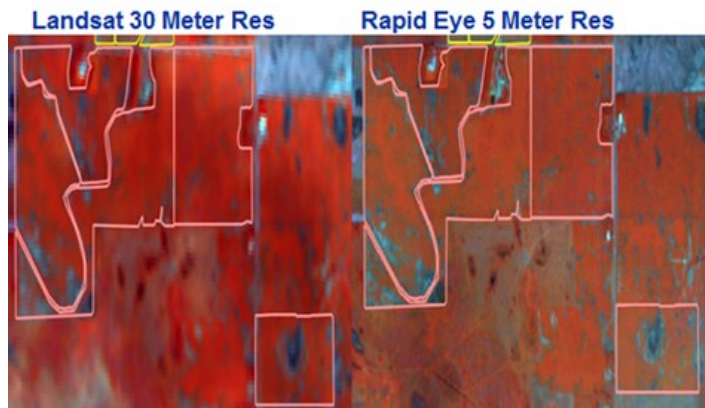
Late planting forages are not ideal, but it may need to be considered due to this year's wet spring weather. Forage sorghum is an excellent short season crop that may be a potential option for this season's planting. A key point is to plant at one inch deep at 20 pounds an acre with one pound of nitrogen per day that you hope to have the crop growing.

## Precision Imagery for Accurate In-Field Applications

In season imagery plays a key role in precision. From influencing variable rate application to helping precisely scout problem areas in fields, this technology shows great potential for the future. By examining these images we can identify areas of high and low vegetation. Looking at images throughout the season gives us the ability to catch those problem spots in the field sooner and fix the problem before much yield loss can occur. We can also look through multiple years of imagery to identify consistently good and poor producing areas. Using the patterns found in these images as our basis, we can then build variable rate seeding and fertilizer prescriptions to satisfy the specific needs throughout the field.

We have access to many different sources and qualities of in season imagery. Landsat imagery is taken by satellites approximately every 16 days in 30 meter resolution. Aster data has a little better resolution at 15 meters and is also taken around every 16 days. Rapid Eye satellites take 5 meter resolution images once per month. Once the whole constellations of CubeSat satellites are in orbit, they will take 1 meter resolution images once every week. We also have access to multiple sources of aerial and UAV imagery that range from 1 meter to .25 meter resolution.

To the right is an example of the differences between resolutions. These images were taken on the exact same date. You can still make out patterns in the 30 meter Landsat image, however the details in the Rapid Eye 5 meter image are clearer and crisper making this image more accurate and precise.



### Facts from the Field

Corn acres with the potential to produce 300 bushels/acre consume an incredible amount of crop nutrients per day. From V12 to VT a corn plant is able to consume more than 15 pounds of potassium and 11 pounds of nitrogen per acre, per day. The fertility needs of this growth period have fueled the increase in top dress and side dress applications in recent years. In addition to nitrogen and sulfur, in crop potassium applications are becoming more commonplace.

# Are You Going to Have Enough Feed?

By Nick Smeby, Account Advisor

Depending on your location, the question of having enough feed can have varying significance. The weather this season has been less than friendly to a lot of the growers in many areas, and if a grower has livestock, this weather problem compounds. The small windows we get for planting are few and far between, and it is probably too late for any corn, even that for silage, to be planted. To a grower in this predicament, it may seem that there are no options left for forage for this year.



Thankfully, there are other products available for feed and forage use. Sorghum, Sorghum X Sudan, Sudan Grass, and Millet are all options for late planting, as they are fast growth forages. There is also still plenty of time to seed down alfalfa, and some grain seed may be available for a quick cover where washouts have been a common occurrence this year. Contact your CHS Prairie Lakes account advisor for information and ideas on what might work best for your situation and needs.

## Local Trial Pictures



Corn plants on left were treated with Ascend and fertilizer, compared to grower standard on right.

Note increase in root development and plant height in treated plants.



Plants on the left were treated with 6 gallons of 10-34-0 and 1 quart Zinc 10%. Plants on the right were treated with 5 gallons of 10-34-0, 1 quart Zinc 10%, and 5 ounces Ascend.

Note the increase in plant size in the second treatment.



Left side of both pictures treated with 3.2 oz Ascend, 16 oz Max-In Boron, 6 oz Headline EC, and 4 oz Masterlock at 4" regrowth, compared to untreated (right side).

Tailgate Tech

<http://www.aganytime.com/Pages/default.aspx>  
<http://www.climate.com/>  
<http://www.teejet.com/english/home/products/spray-products/sprayselect-tip-selection-app.aspx>  
<http://www.extension.umn.edu/agriculture/>  
<http://www.chsinc.com/>  
<http://www.extension.iastate.edu/topic/agriculture>

<http://www.winfield.com/>  
<http://www.cdms.net/LabelsMsds/LMDefault.aspx?i>  
<http://www.mycogen.com/sitepages/default.aspx>  
<http://www.syngenta.com/country/us/en/agriculture/seeds/corn/nk/Pages/nk-corn-new.aspx>  
<http://www.dnr.state.mn.us/lakefind/index.html>  
<http://www.basf.com/group/corporate/us/en/>

**TRIVIA Answer: 200 less**