

**MINNESOTA TURF SEED COUNCIL  
NEWSLETTER  
June 3, 2014**

**RYEGRASS GROWING DEGREE DAYS (GDD)**

Ryegrass GDD will be tracked for the 2014 growing season with comparisons to the previous five years. A base temperature of 32 degrees F will be used for ryegrass (T-Base =32 F). Reported GDD are based on the total accumulation from the beginning of the year to the current calendar date. Thus far in 2014, we have accumulated 732 GDD as of May 31(Table1).

The last week of May was the warmest of the season. Accumulated GDD for the last week of May averaged 36.7/day! GDD's in the mid 30's/day, in northern MN, usually are not recorded, on average until, late June and early July. The average GDD for the last week of May is 25.3/day. This year accumulated GDD's for the last week of May were approximately 10 GDD/day higher than average. In addition to the unseasonable high GDD, we also experienced average dew points in the mid 50's! With high dew points, high GDD and adequate soil moisture ryegrass growth rate (and other plants) was very rapid last week.

The ten day forecast has daily high temperatures in the mid 70's with projected low temps in the mid-50's. Based on this forecast, accumulated GDD for the year will be 975 by the end of the week. Look for ryegrass plants to begin jointing and ryegrass fields in wheat stubble will soon be taller than wheat straw.

Table 1. Growing degree days (GDD) for March to June, near Roseau, MN in 2009-2014.

<b>Year</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2014 vs. 13</b>
March	0	0	304	7	137	30	0
April	159^	80	370	278	476	247	-2
May	654	640	726	639	707	515	+14
June 1-8*	243						
June		975	979	898	911	860	
Total**	975	1,695	2,379	1,822	2,231	1,579	

^ -78 GDD after majority of snow drifts melted

\* - Forecasted GDD at Roseau for the next 8 days

\*\* - Total includes projected GDD to June 8th

**SUMMER GRASS SEED FIELD TOUR**

The annual summer grass seed field tour sponsored by the U of MN and MN Turf Council has been scheduled for 5:00 pm on Tuesday, June 24<sup>th</sup> at the U of MN Magnusson Research Farm. Directions to the Magnusson Research Farm: from the intersection of Hwy 11 and 89 travel approximately 2 miles north on Hwy 310, turn left (west) off Hwy 310 onto Roseau County 16 and for approximately 3 miles. The farm is located on the north side of Roseau County highway #16. Bluegrass, ryegrass, and fescue variety trials will be included on the tour. In addition to grass seed variety trial research, various management trials in perennial ryegrass including; fertility rate and timing, growth regulators, fungicides, foliar nitrogen and other research will be included on this tour.

## **GENERAL CROP CONDITION**

With the warm temperatures last week, ryegrass plants exhibited a period of very rapid growth. Many area ryegrass fields progressed from late vegetative into tillering in just a few days! Spring seeded ryegrass will soon be in the jointing stage. At the onset of jointing, ryegrass plants will begin to “stretch” out and will soon be taller than the wheat stubble. Apogee, growth regulator, timing is right around the corner, more on this next week.

Last week was a busy week for application of fertilizer in ryegrass. Ryegrass plants are a deep green color when available applied fertilizer is in the root zone. Now is the time to scout ryegrass fields for weeds. If broadleaf herbicides were not applied last fall, herbicides should be applied or scheduled soon as these broadleaf weeds can be very competitive with ryegrass. Weed competition in grass seed fields can reduce plant vigor by decreased light interception and reduced nutrient uptake which can lower ryegrass seed yields. Weeds grow fast, especially when temperatures raise into the high 70’s to low 80’s. Field scouting is essential to determine the best weed control program for your situation based on weed species and infectivity level.

## **CROP MANAGEMENT**

Northland Community and Technical College (NCTC) recently received notification from the Federal Aviation Administration (FAA) that a Certificate of Authorization (COA) has been approved to conduct mini-Unmanned Aerial Vehicle (UAV) flights in Roseau County. These UAV flights will be conducted by authorized personnel from NCTC. Specific purpose of the COA is to collect information from agricultural crops raised in Roseau County. Landowner approval is one of the requirements needed for NCTC to fly mini-UAV’s and collect agricultural information and crop data. Perennial ryegrass will be a primary target crop to be monitored by UAV. Additional information will follow in future newsletters.

## **PEST MANAGEMENT**

Additive choice can make a difference in weed control and crop injury. The data in Table 2 was conducted by the U of MN at the Magnusson Research Farm in 2008.

Table 2. The influence of spray additive with Assure II on ‘Arctic Green’ perennial ryegrass height and seed yield.

<b>Herbicide*</b>	<b>Additive</b>	<b>Plant Height inches</b>	<b>Ryegrass Yield in #/A</b>
Assure II 10oz/A	Surfactant 0.25%	25	1100
Assure II 10oz/A	Crop Oil 1.0%	23	740

\*Banvel + 2, 4-D (3/4 +3/4 pint/A) was applied as a separate application.

The data in Table 2 suggests that Assure II applied with a crop oil additive has the potential to cause injury to the ryegrass variety ‘Arctic Green’. Assure II applied with a crop oil additive resulted ryegrass seed yield of 360 pounds less than Assure II applied with a surfactant.

## **U of MN Grass Seed Research Reports**

Research reports from 1967 to the present are available at the web address below.

[http://www.mnturfseed.org/html/progress\\_reports.html](http://www.mnturfseed.org/html/progress_reports.html)

Next week’s newsletter will be released on June 10, 2014.