

**MINNESOTA TURF SEED COUNCIL  
NEWSLETTER  
June 10, 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 976 GDD as of June 8<sup>th</sup> (Table1).

The ten day forecast for the Roseau area projects average high and low temperatures of 69 and 53 F, respectively. Based on this forecast, accumulated GDD for the year will be 1,176 by the weekend. Spring seeded ryegrass fields are jointing stage and will be soon be heading. Look for ryegrass seed head expression, on the most mature ryegrass plants, this week.

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 <sup>^</sup>	80	370	278	476	247	-2
May	654	640	726	639	707	515	+14
June 1-8	244						
June 9-15*	200						
June		975	979	898	911	860	
Total**	1,176	1,695	2,379	1,822	2,231	1,579	

<sup>^</sup> -78 GDD after majority of snow drifts melted

\* - Forecasted GDD at Roseau for the next 7 days

\*\* - Total includes projected GDD to June 15<sup>th</sup>

**SUMMER GRASS SEED FIELD TOUR**

Mark your calendars for June 24. 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.

**GENERAL CROP CONDITION**

Ryegrass fields seeded in the spring of 2013 are jointing and many area ryegrass fields are, or will be, soon taller than the wheat stubble. Ryegrass fields seeded in the late summer of 2013 exhibit more variable growth stage and plant height compared to spring seeded ryegrass. Late summer established ryegrass stands are delayed in growth and development compared to spring seeded ryegrass. The GDD in Table 1 works well for spring seeded, summer and late summer seeding of ryegrass, until approximately the second week of September. Perennial ryegrass growth and developmental stages when seeded at the end of September, or later generally are two-to-three weeks behind compared to ryegrass seeded in the spring or late summer.

## **CROP MANAGEMENT**

In spring seeded ryegrass, the next major growth stage is heading. Ryegrass head expression has been observed in the most mature ryegrass plants in a field. Look for more ryegrass plants to head this week. With ryegrass heading right around the corner, it's time to schedule an application of Apogee growth regulator. To keep ryegrass from lodging, it may take an Apogee rate of 6 to 8 oz. /acre, especially if plant available nitrogen is over 120 pounds/A.

The amount of biomass produced by ryegrass plants can vary from year to year. For example, ryegrass biomass production in 2012 was less than 2011 or 2013. In years of lush ryegrass growth (more biomass) it will take a higher rate of Apogee growth regulator than years of 'thin line' ryegrass growth. In 2012, the dry weather was one of the factors that reduced the amount of ryegrass biomass production. As a result, a lower rate of Apogee was required to regulate ryegrass growth compared to years when ryegrass exhibits lush growth (increased biomass production). It appears ryegrass biomass production in 2014 will be similar to 2013 and more than 2012, and may require an Apogee rate on the higher end of the rate range in order to regulate ryegrass growth.

### **General guidelines for Apogee in perennial ryegrass:**

- The onset of heading (10%) is a good benchmark to begin Apogee application in ryegrass
- Spring planted ryegrass with moderate to high fertility, good stands and deep green color should receive an Apogee rate of 6 to 8 oz./A with the 8 oz. rate a good benchmark
- Fall planted ryegrass generally exhibits less growth compared to spring seeded ryegrass and usually will require 2 to 3 oz./A less Apogee than spring seeded ryegrass
- Always use a nonionic surfactant and nitrogen source with Apogee. No differences in Apogee performance have been observed with 28% or AMS
- The timing of grass herbicides and Apogee may not be ideal as the grass herbicides (Assure II in tolerant ryegrass and Tacoma in non-tolerant) should be applied prior to ryegrass heading. Tank mixes of grass herbicides and Apogee have been successfully used in ryegrass however, separate applications have provides more consistent results
- U of MN research has not detected reduced performance when mixing fungicides with Apogee plant growth regulator.

Next week's newsletter will be released on June 17, 2014.