MINNESOTA TURF SEED COUNCIL
NEWSLETTER
June 9, 2015

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2015 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 calendar year to the current date. As of June 7th, accumulated GDD for 2015 are 1,350 (adjusted GDD = 1078), see Table 1. Projected forecast for the next ten days suggests above normal temperatures. The current ten day forecast projects an accumulation of 354 GDD or 35.4/day. Long term average GDD for the second week of June is 196 GDD or 28/day. With the recent rainfall and above normal temperatures perennial ryegrass and other plants will grow at a rapid growth pace.

Table 1. Growing degree days (GDD) for March 2010 to June 2015 near Roseau MN.

Year	2015	2014	2013	2012	2011	2010	2015 vs. 14
March	119	0	0	304	7	137	+119
April	367	159	80	370	278	476	+208
May	659	654	640	726	639	707	+5
June 1-7	205						
June		964	975	979	898	911	
Total	1,350^	1,777	1,695	2,379	1,822	2,231	
June 8-17*	354						

* Forecasted GDD at Roseau for the next 10 days.
^ Total GDD for 2015.
^Adjusted GDD (-272 GDD) due to extensive ryegrass leaf desiccation in April 2015 = **1078**

SUMMER GRASS SEED FIELD TOUR

The annual Grass Seed Field tour sponsored by the U of MN and MN Turf Council has been scheduled for 5:00 pm on Wednesday, June 24th at the U of MN Magnusson Research Farm. Directions to the U of MN Magnusson Research Farm: from the intersection of Hwy 11 and 89 travel 2 miles north on Hwy 310, turn left off Hwy 310 onto Roseau County 16 and proceed west 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

Several ryegrass fields, and areas within fields, now have ryegrass plants above the wheat stubble. This is an indication that ryegrass plants are moving from a vegetative stage into the jointing stage of growth. After jointing, heading is the next major growth stage in ryegrass. Ryegrass heading begins with the main stem (mother shoot) and transitions to the tillers (daughter shoots). Ryegrass heading typically is completed within a couple of weeks with a full ryegrass stand. This year, with the variability in ryegrass stands, tillering most likely, will be extend and due the open spaces between plants. This increased tillering potential may result in an extended ryegrass heading and pollen shed.

CROP MANAGEMENT

Ryegrass head expression has been observed in several fields and in the most mature ryegrass plants in a field. With ryegrass head expression visible, it's time to schedule an application of Apogee growth regulator. To reduce ryegrass lodging potential an application of 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, 2013 or 2014. 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). Thus far it appears ryegrass biomass production in 2015 will be similar to that of 2012.

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 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.

PEST MANAGEMENT

The U of MN Grass Seed Research Reports are now available on the Web. The MN Turf Seed web site was down for a couple of weeks, but is now up and running. The U of MN Research Reports from 1967 to the present can be viewed at the web address below.
http://www.mnturfseed.org/html/progress_reports.html

Next week's newsletter will be released on June 16, 2015.