

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
May 26, 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. Thus far in 2015, accumulated GDD are 965 (adjusted GDD = 693) as of May 24th (Table1). Projected forecast for the next ten days suggests above normal temperatures. The current ten day forecast projects an accumulation of 312 GDD or 31.2/day. On average, the accumulated GDD for the last week on May is 175 or 25 GDD/day. With the projected elevated GDD, dew points in the low 50's and the recent soil moisture look for perennial ryegrass growth rate (and other plants) to be enter a rapid growth phase this week.

Table 1. Growing degree days (GDD) for March 2010 to May 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		654	640	726	639	707	
May1-24	479						
Total	965 [^]	813	720	1,400	924	1,320	
May 25-June 3*	312						

* 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 = **693**

GENERAL CROP CONDITION

Ryegrass fields seeded in the spring of 2014 are in the late tillering and will soon enter the jointing stage. Once jointing begins, ryegrass plants will extend over the top of the wheat stubble. Ryegrass fields seeded in the late summer of 2014 exhibit more variable growth stage and plant height compared to spring seeded ryegrass. Late summer established ryegrass stands are more variable in growth and development compared to spring seeded ryegrass. Regardless of time of establishment of perennial ryegrass, the ryegrass stands in the spring of 2015 are showing a high degree of variability. This variability in ryegrass stands will be quantified and these observations reported in next week's newsletter.

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 1,183 (adjusted GDD of 911) by the end of May. As we get into June, look for the most mature ryegrass plants in spring seeded ryegrass fields to begin to joint. The next critical stage of growth in ryegrass after jointing is heading.

CROP MANAGEMENT

Barnyardgrass is a grassy weed that appears to be increasing in prevalence in many perennial ryegrass fields, especially in low areas of fields. Field observations suggest this weed has an extended germination period that seems to be tied to rainfall events in the spring and summer. Field scouting will determine the level of barnyardgrass.

PEST MANAGEMENT

Ryegrass

Additive choice can make a difference in weed control and crop injury. The following data was taken from research conducted in 2008 at the Magnusson Research Farm.

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

Herbicide*	Additive	Plant Height inches	Ryegrass Yield in #/A
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 ryegrass. Assure II applied with a crop oil additive resulted ryegrass seed yield of 360 pounds less than Assure II applied with a surfactant.

SUMMER GRASS SEED FIELD TOUR

The annual grass seed field tour has been scheduled for 5:00 pm on Wednesday, June 24th 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 Hwy 16. Grass seed varieties include: bluegrass, fescue, intermediate wheatgrass, perennial ryegrass and switchgrass. Management projects include: cover crop research, biomass and vegetation composition research, weed control research in ryegrass, fertility rate and timing in ryegrass, ryegrass date of planting, ryegrass growth regulators and fungicides and other research will be included on this tour.

Next week's newsletter will be released on June 2, 2015.