

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
June 4, 2013**

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2013 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 calendar date. Thus far in 2013, we have accumulated 757 GDD as of June 2nd (Table1). Last week, accumulated GDD were 191 (27.2/day). The 2013 season has been off to a slow start as we have only accumulated 50% of the mean GDD compared over the last five years. Based on the current 7 day forecast, by the second weekend in June we will have accumulated approximately 942 GDD's for the current calendar year.

Table 1. Growing degree days (GDD) for March 2008 to June 2013 near Roseau MN.

Year	2013	2012	2011	2010	2009	2008	2013 vs. 12
March	0	304	7	137	30	6	-304
April	80	370	278	476	247	202	-594
May	640	726	639	707	515	501	-86
June		979	898	911	860	870	
June 1-2	37						
Total	757	2,379	1,822	2,231	1,652	1,579	
June 3-9*	185*						
Total	942*						

* Forecasted GDD at Roseau for the next 7 days.

LAST WEEKS NEWSLETTER – CLARIFICATION

Last week's newsletter included a data table on seedling ryegrass response to various herbicides when applied to wheat underseeded with perennial ryegrass. Two of the herbicides listed, Callisto and Nortron, were included to determine the effectiveness on volunteer wheat control, NOT to be used for weed control in spring wheat to be harvested for grain. Your local agronomist is a good source for herbicide recommendations that have successfully been used in your production area.

GENERAL CROP CONDITION

Ryegrass fields will be soon be moving from the vegetative and tillering stage to early jointing stage. 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.

Ryegrass Stand Evaluation

For the most part, spring seeded ryegrass stands are looking good and will soon be taller than the wheat stubble. Ryegrass stand evaluation from fields seeded late last summer is more of a challenge. Ryegrass plants in these fields are still small, as very limited growth occurred last fall due to the dry soil conditions. How thin is too thin for a ryegrass stand? The data in Table 2 is from the U of MN

Magnusson Research Farm conducted in 2010. Ryegrass plants were hand thinned to the various densities. The bottom line, ryegrass at 1 plant/square foot (which is very thin) produced over 1,000 pounds of ryegrass seed. One qualifier, these ryegrass stands were uniformly thin as plant stand were removed to the various densities by hand weeding. In field conditions thin areas of the field, most likely, are erratic due to winter injury, ponding of water, ice sheeting or heavy wheat straw. Field observations are necessary to determine what percentage of the field has dead areas compared to thin ryegrass stands.

Table 2. Perennial ryegrass seed yield as influenced by various ryegrass plant populations.

Plants/square ft.	Seed Yield (% of full stand)s	Ryegrass Yield in #/A
>5	100	1186
1.6	94	1118
1.0	85	1010
0.45	71	838
LSD (0.05)	25	299

PEST MANAGEMENT

Ryegrass

Additive choice can make a difference in weed control and crop injury. The data in Table 3 was conducted by the U of MN at the Magnusson Research Farm in 2008.

Table 3. The influence of spray additive with Assure II on 'Arctic Green' 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 3 suggests that Assure II applied with a crop oil additive has the potential to cause injury to ryegrass '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.

SUMMER GRASS SEED FIELD TOUR

The annual grass seed field tour has been scheduled for 5:00 pm on Wednesday, June 26th 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 in ryegrass, growth regulators, fungicides foliar nitrogen and other research will be included on this tour.

Next week's newsletter will be released on June 11, 2013.