

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
July 14, 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 July 12th, accumulated GDD for 2015 are 2,502 (adjusted GDD = 2,230), see Table 1. Projected forecast for the next week suggests a continuation of the above normal temperatures. The current seven day forecast projects an accumulation of 281 GDD or 40.1/day. Long term average GDD for the second week of July is 238 GDD or 34/day. If this forecast holds this week will be the warmest week, year to date, of the 2015 growing season!

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	941	964	975	979	898	911	-23
July 1-12	416						
July		1,066	1,088	1,230	1,162	1,174	
Total	2,502 [^]	2,843	2,783	3,609	2,984	3,405	
July 13-22*	393						

* 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 = **2,230**

GENERAL CROP CONDITION

Ryegrass plants continues to shed pollen. Most mature plants in ryegrass fields are showing signs of physiological maturity. The next stage in the growth and development of perennial ryegrass is dry down. It's hard to believe, but ryegrass swathing and harvest is right around the corner.

PEST MANAGEMENT

Insects in ryegrass

Army worms and grasshoppers have been found in area ryegrass fields. At this time, insect infestations are not to threshold levels. Ryegrass field scouting will determine the level of insect pressure. Consult with your agronomist or fieldman for product/s that have been successfully used in ryegrass in your area.

Rust in ryegrass

Isolated low levels of rust has been observed in area ryegrass fields. Field scouting will determine the extent of rust in your area.

CROP MANAGEMENT

Spring seeded ryegrass fields are beginning to turning color. Swathers will be rolling in ryegrass fields here before we know it. When to swath ryegrass? (See Table 2) Over the last few years, it has been beneficial to wait a little bit longer than we would like to begin to swath ryegrass. It seems that our eyes are trained to look at the most mature areas of the ryegrass fields. When making a determination on when to cut ryegrass, make sure a **representative sample is taken from the entire field not just the areas that are most mature**. One method to get a representative field sample is to take samples from areas that look mature, from areas that are intermediate and from areas of the field that look green. Note the percentage of the field in each of these categories. This will give you a good overall field estimate of maturity. To maximize ryegrass seed yield and quality, previous field experience suggest the seed moisture should be below 40% moisture before swathing. As the ryegrass plant matures, fields can mature quickly, especially with warm days of late July into August. When ryegrass is close to the 40% moisture level, seed moisture can drop 2% points or more per day! Consult with your field agronomist to help determine the appropriate time for swathing ryegrass as environmental and specific field conditions will influence the actual swathing date for ryegrass.

Table 2. Ryegrass date of swathing research trials, from two locations in 2014 and one location in 2013, near Roseau, MN

	2014		2013	
	Seed Yield [^]	Seed Moisture	Seed Yield [^]	Seed Moisture
Harvest Date*	(%)	(%)	(%)	(%)
1	96.9	45.5	86.1	44
2	92.5	43	93.1	43
3	107.5	40	105.8	44
4	107.5	37.5	108.4	38
5	121.7	34	113.2	36
6	93.9	31	93.6	28
7	88.8	20.5		
LSD (0.05)	6.2		14.6	

*Swathing date in 2014 began on 7/30 and in 2013 on 7/22. Swathing every 2 to 3 days.

[^] Mean clean seed yield in 2013 was 931#/acre and in 2014 was 1,358 #/acre.

Additional details on these swathing trials and other grass seed research can be viewed at the MN Turf Council Website:

http://www.mnturfseed.org/html/progress_reports.html

Next week's newsletter will be released on July 21, 2015.