

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
August 4, 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 August 2nd, accumulated GDD for 2015 are 3,302 (adjusted GDD = 3,030), see Table 1. The most recent ten day forecast suggest temperatures very close to the long term average. Projected GDD for the ten day period ending August 12th is 338 or 33.8/day.

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	1,147	1,066	1,088	1,230	1,162	1,174	+81
Aug 1-2	69						
Total	3,302 [^]	2,843	2,783	3,609	2,984	3,405	
Aug 3 -12 *	338						

* 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 = **3,030**

GENERAL CROP CONDITION

After a couple days of below normal temperatures, early in the week, the short term forecast suggests several days of daily temps in the mid 70's and lows in the mid 50's. The remainder of the week points to dry weather with a chance of scattered thunderstorms. This week will be a busy one for ryegrass swathing. To maximize ryegrass seed yield and quality, previous field experience suggest the seed moisture should be below 40% moisture before swathing. As always, environmental and specific field conditions will influence the actual swathing date for ryegrass.

CROP MANAGEMENT

Ryegrass

Wheat harvest is just beginning in the area. This is a reminder that ryegrass can successfully be established, in the late summer, after wheat harvest. If ryegrass is to be seeded into wheat stubble, it is important to get a **uniform spread of the wheat straw and chaff**. Chaff spreaders will spread hulls and other "fines". A uniform spread of the wheat straw is the first step in successful ryegrass stand establishment.

CROP MANAGEMENT

Late summer seeding of ryegrass into wheat stubble has been a successful method used to establish ryegrass. With spring wheat harvest right around the corner, the 2015 season would provide an opportunity for seeding ryegrass into wheat stubble after harvest. When should ryegrass be seeded in the late summer? The data in Table 2 are results from research conducted at the Magnusson Research Farm near Roseau, MN.

An application of Roundup to control weed growth is a good management practice prior to seeding ryegrass into wheat stubble. This is especially important for perennial grass (e.g. Quackgrass) and perennial broadleaf weeds.

Table 2: Arctic Green perennial ryegrass seeded at various dates in tilled and no-till ground in 2008 and a two year average (2008 & 2009) at the Magnusson Research Farm near Roseau, MN.

Seeding Date	-----2009-----				-----2008 & 2009^-----	
	Tilled Ground*		Wheat Stubble**		Average of Tilled & No-till	
	Yield	Dry Matter	Yield	Dry Matter	Yield	Dry Matter
	(#/acre)	(tons/acre)	(#/acre)	(tons/acre)	(#/acre)	(tons/acre)
8/25/08	736	1.81	1405	2.96	1314	2.70
9/1/08	599	1.61	1135	2.71	1281	2.76
9/9/08	545	1.07	714	2.05	953	2.00
9/17/08	173	0.71	466	1.27	665	1.43
9/22/08	67	0.92	377	1.08	365	0.95
LSD @5%	444	1.10	444	1.10	320	0.78

^ Averages of tilled and no-till seeding of perennial ryegrass seeded in 2007 and 2008 (harvested in 2008 and 2009). The seeding dates for 2007 are similar to those of 2008 (harvested in 2009).

* Perennial ryegrass seeded into bare ground without a cover

** Perennial ryegrass seeded into wheat stubble

Several conclusions can be gleaned from the data in Table 2.

- In 2009, ryegrass dry matter and seed yields were better if seeded into stubble than bare ground
- For ryegrass seed yields over 1,000 pounds, ryegrass should be seeded in late August or the first week of September
- Dry matter yields had a similar decline as seed yield as seeding date was later in the fall
- Data would suggest not seeding ryegrass if seeding is delayed until mid-September as yield potential is 50% of late August seeding

Grass Seed Research Reports

Several years of research reports are available on the web and 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 August 11, 2015.