

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
August 1, 2018**

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2018 growing season with comparisons to the previous six 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.

- Year to date, GDD = 3,032 (Table 1)
- Average temperatures for the first week of August, high of 77 F and low 51 F
- Average GDD accumulation for first week of August = 229 (32.7/day)
- Current 10 day forecast projects daily highs in the mid 80's and lows in the low 60's
- Projected 10 day GDD = 392 (39.2/day)
- Current 10 day forecast projects warmer than average temperatures (+6.5 GDD/day)

Table 1. Growing degree days (GDD), March - July 2012 to March - July 2018 near Roseau MN.

Year	2018	2017	2016	2015	2014	2013	2012	2018 vs. 17
March	0	90	38	119	0	0	304	-90
April	184	258	263	367	159	80	370	-74
May	815	679	765	659	654	640	726	+136
June	1,007	917	945	941	964	975	979	+90
July		1,095	1,123	1,147	1,066	1,088	1,230	
July 1-29	1,026							
Total	3,032	3,066	3,134	3,030	2,843	2,783	3,609	
*July 30 - Aug 8	392							

* Forecasted GDD at Roseau for the next 10 days.

GENERAL CROP CONDITION

The ten day forecast suggests warmer than average temperatures with below normal precipitation. This has been a common theme in 2018 since early May. Last week was a busy one for ryegrass swathing with the combines out in several fields. If the current forecast holds true, the remaining ryegrass fields will be swathed this week.

Wheat is turning fast and harvest will be right around the corner. Late summer seeding of perennial ryegrass is one method of stand establishment. If planning for a late summer seeding of perennial ryegrass, a pre-harvest application of Roundup is a good option for weed control. In addition, Roundup applied pre-harvest allows for a better straw distribution out the back of the combine.

PEST MANAGEMENT

Leaf and stem rust is showing up on seedling ryegrass under wheat (2019 harvest). Previous research has NOT shown a benefit from a fungicide application to control rust control in seedling ryegrass. Fungicides applied in the late summer and early fall are effective in rust control. However, no yield advantage or difference in rust infections have been observed the summer following late summer, or fall treated ryegrass compared to untreated plots. The most likely explanation. Leaf and stem rust, that infects ryegrass, has not been detected to overwinter in the climate of northern Minnesota. As a result, rust spores that cause infections in perennial ryegrass must blow up from the southern regions of the United States each season.

CROP MANAGEMENT

Straw management

Spring wheat is beginning to turn color which means harvest is not too far off. In ryegrass underseeded to wheat, straw management is a critical step for a profitable 2019 ryegrass seed crop. A little extra time taken to adjust the straw distribution pattern out the back of the combine will pay dividends in a more uniform ryegrass crop in 2019. Pay attention to both wheat straw and fines, as both can act like a blanket to smother the young ryegrass plants. Be sure to adjust both the straw chopper and chaff spreaders that will spread hulls and other “fines”. Again, a uniform spread of the wheat straw is the first step in successful ryegrass crop.

A light harrowing operation, when the straw is dry, will help distribute the wheat straw which tends to reduce the smothering effects of straw and will generally result in a more uniform ryegrass stand. If the straw is damp, it tends to bunch or clump which can smother the young ryegrass plants. Another benefit of a light harrowing operation, it will help incorporate the P and K applied after wheat harvest and will make these nutrients more available to the ryegrass root system. P and K are required for root and crown development which improves plant vigor and helps with winter survivability.

Next week's newsletter will be released on August 8th, 2018.