

**MINNESOTA TURF SEED COUNCIL
NEWSLETTER
July 17, 2016**

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2016 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 year to the current calendar date. Thus far in 2016, we have accumulated 2,600 GDD, as of July 17th (Table 1). Last week averaged 241 GDD (34.4/day). Projected GDD for the next week at Roseau are 280 (40/day) compared to the long term average of 35/day for the third week of July.

Table 1. Growing degree days (GDD), March - July 2010 to March - June 2016 near Roseau MN.

Year	2016	2015	2014	2013	2012	2011	2010	2016 vs. 15
March	38	119	0	0	304	7	137	-81
April	263	367	159	80	370	278	476	-104
May	765	659	654	640	726	639	707	+106
June	945	941	964	975	979	898	911	+4
July 1-17	589							
July		1,147	1,066	1,088	1,230	1,162	1,174	
Total	2,600	3,030	2,843	2,783	3,609	2,984	3,405	
July 18-27 *	399							

* Forecasted GDD at Roseau for the next 10 days.

GENERAL CROP CONDITION

The most recent 10 day forecast suggests warmer than average temperatures, 39.9 GDD/day compared to the long term average of 35 GDD/day. Short term forecast indicates temperatures in the high 80's and low 90's for this week with moderation of high daily temperatures to the mid to high 70's by the weekend. With dry windy weather, ryegrass maturity will proceed at a rapid pace. Ryegrass swathing is 'right around the corner'. As the ryegrass plant matures, fields can mature quickly. To maximize ryegrass seed yield and quality, previous field experience suggest the seed moisture should be below 40% moisture before swathing. Specific field conditions coupled with environmental factors will influence the actual swathing date for ryegrass. 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.

PEST MANAGEMENT

Leaf and stem rust is showing up on seedling ryegrass under wheat (2017 harvest). Previous research has NOT shown a benefit from a fungicide application for rust control, on seedling ryegrass, in late summer or early fall. Fungicide applications 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 and harvest will be upon us before know it! One of the primary methods of ryegrass stand establishment is to seed ryegrass with spring wheat. Straw management is a critical step in the management of a profitable 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 2017. 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 July 26th, 2016.