MINNESOTA TURF SEED COUNCIL
NEWSLETTER
June 30, 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 June 28th, accumulated GDD for 2015 are 2,018 (adjusted GDD = 1,746), 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 260 GDD or 37.1/day. Long term average GDD for the first week of July is 231 GDD or 33/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 1-28	873						
June		964	975	979	898	911	
Total	2,018^	1,777	1,695	2,379	1,822	2,231	
June 29-July 8*	359						

* 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 = **1746**

GENERAL CROP CONDITION

Ryegrass

Area ryegrass fields are in the heading stage and the most mature plants are shedding pollen. Ryegrass typically sheds pollen in mid-morning and ryegrass pollen clouds look similar to the dust from vehicles when driving on gravel roads. Ryegrass sheds pollen generally after the dew lifts for the day and will continue for a couple of hours in the mid-morning.

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. As would be expected, the most likely areas to find armyworms are in lodged areas and grasshoppers in field edges of ryegrass fields. 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.

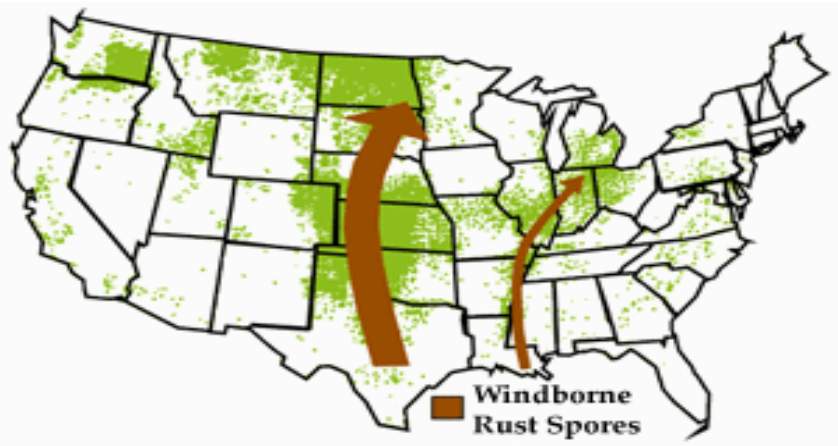
Rust in ryegrass

Leaf and stem rust (very low levels) have been observed in area ryegrass fields. One of the first places to look for ryegrass rust is lodged areas of the fields. In addition, other "hot" spots for rust development are areas of the field adjacent to tree lines, wood lots etc., which air movement is reduced and the plants remain wet for an extended period of time. Leaf and stem rust develops rapidly when rain or dew is present on plant tissue and the temperatures are above 50 F. A rust infestation can explode in just a few days. Data from the west coast indicates that rust will complete a cycle in 13 to 17 days in 50F and 8 to 9 days if the temps are 65F. Field scouting will determine the presence of rust and the level of infestation. At this point in the growing season, a full rate of a fungicide should protect the ryegrass plant until swathing.

Leaf and stem rust that infects ryegrass is carried into our area on southerly winds. Rust infection and spread is most likely with daily high temperatures in the mid-70's and lows in the 60's. Rust also requires free water on the leaf surface. We usually have dew on the grass until mid-morning in the summer and many days have temperatures that fit into the ideal range for rust development.

The USDA-ARS tracks rust development and movement north from the Gulf of Mexico to the northern plain states. The graphic below was in last week's newsletter and is inserted again this week to highlight the movement of rust spores into the ryegrass growing regions of MN from the southern U.S. This movement of rust has been termed the Puccinia Pathway. For additional information see the link below for The Cereal Rust Bulletin. The link to this site:

(*http://www.ars.usda.gov/mwa/cdl*)



Next week's newsletter will be released on July 7, 2015.