MINNESOTA TURF SEED COUNCIL
NEWSLETTER
June 7, 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 1,212 GDD, as of June 5th (Table 1). Last week averaged 204 GDD (29.1/day) compared to the long term average of 190 (27.1/day) for the fourth week of May. The short term forecast suggests a continuation of the warmer than average temperatures into the second week of June. Projected GDD for the next 10 days at Roseau are 347 (34.7/day) compared to the long term average for the second week of June of 206 (29.4/day).

Table 1. Growing degree days (GDD), March - May 2010 to March -May 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		941	964	975	979	898	911	
June 1-5	146							
Total	1,212	2,086	1,777	1,695	2,379	1,822	2,231	
June 6-15 *	347							

* Forecasted GDD at Roseau for the next 10 days.

GENERAL CROP CONDITION

The May of 2016 accumulated more GDD's that any month of May since 2010 (Table 1). With the recent rain and the warmer than average May temperatures, crops and weeds will grow at a rapid pace. Many ryegrass fields are heading, and head extension will continue for a couple of weeks. In previous years, ryegrass has pollen shed has been observed after the accumulation of approximately 1,700 GDD.

CROP MANAGEMENT

Isolation Strips for Ryegrass Seed Crops

Now is the time to plan for cutting isolation strips in certified grass seed crops. If you have questions or concerns please talk to your grass seed fieldman, seed conditioner or Kris Folland with MCIA. For certified perennial ryegrass seed, a 165' isolation strip is required when bordering other varieties of ryegrass. Flags can be placed as a method of isolation at harvest time.

PEST MANAGEMENT

Rust in ryegrass

In northern Minnesota environments, crown rust has been observed after approximately 1,500 GDD and leaf and stem rust approximately, 1,900 GDD. Thus far in the 2016 season we have accumulated 1,212 GDD. If we assume 34 GDD/day we have the potential to see crown rust in approximately 8.5 days and leaf and leaf and stem rust in three weeks. If we experience warmer than normal weather conditions, with southerly winds, this timeline will shorten and if we are cooler than normal with northerly winds will lengthen this timeline.

Of the two rust diseases in ryegrass seed production, leaf and stem rust has the potential for more yield losses in ryegrass seed production than crown rust. Crown rust has an orange cast to the disease compared to the red color of leaf and stem rust.

The USDA-ARS tracks rust development and movement north from the Gulf of Mexico to the northern plain states. As of June 2nd, crown rust has been observed on oats in the Matt Moore Buckthorn Nursery at St Paul. Field scouting will continue to monitor and track the progress of rust as it moves northward. For additional information see the link below for The Cereal Rust Bulletin. The link to this site:

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

SUMMER GRASS SEED FIELD TOUR

The annual grass seed field tour has been scheduled for 5:00 pm, Wednesday, June 29th at the U of MN Magnusson Research Farm. Directions to the Magnusson Research Farm.
From the intersection of Hwy 11 and 89 travel 2 miles north on Hwy 310, turn left (west) off Hwy 310 onto Roseau County 16 and continue west for approximately 3 miles. The farm is located on the north side of Hwy 16. Grass seed varieties include: fescue, intermediate wheatgrass, perennial ryegrass and switchgrass. Management projects include: cover crop research, biomass and vegetation composition research, weed control research in ryegrass, fertility rate and timing in ryegrass, ryegrass date of planting trials, ryegrass growth regulators, fungicides and other trials will be included on the tour.

Next week's newsletter will be released on June 14th, 2016.