MINNESOTA TURF SEED COUNCIL NEWSLETTER July 3, 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 2,107 GDD, as of July 3rd (Table 1). Last week averaged 247 GDD (35.3/day). The short term forecast suggests a return to above average temperatures. Projected GDD for the next 10 days at Roseau are 361 (36.1/day) compared to the long term average of 35/day) for the second week of July.

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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 1-3	96							
July		1,147	1,066	1,088	1,230	1,162	1,174	
Total	2,107	3,030	2,843	2,783	3,609	2,984	3,405	
July 4-13 *	361							

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

* Forecasted GDD at Roseau for the next 10 days.

GENERAL CROP CONDITION

Perennial ryegrass is entering the seed filling stage. During this stage, some lodging is to be expected as the ryegrass heads continue to fill. For the most part, ryegrass fields look good and it's important to protect the crop from disease and insects during the last couple of weeks prior to swathing. Lodged ryegrass is a conducive environment for army worms and leaf and stem rust.

When can we expect the 2016 ryegrass crop to be swathed? According to previous year's GDD records, ryegrass swathing will begin at the accumulation of approximately 2,800 GDD, in the Roseau area. As of July 3^{rd} , current year accumulated GDD was 2,107. If we use the long term average of 2,800 GDD for swathing - 2,107 GDD = 698 GDD will need to be accumulated prior to swathing. In July, the long term average GDD accumulation is 35/day. Using these long term averages and the year to date GDD accumulation, look for ryegrass swathing in approximately three weeks.

GENERAL CROP CONDITION, CONTINUED

Heavy rain, in some areas, weekend caused lodging in perennial ryegrass and wheat fields. One of the questions being asked? Will ryegrass seedlings be killed due to smothering of lodged wheat? In years past, unless the wheat is flat on the ground for several weeks, young ryegrass seedlings will survive. Generally, lodged wheat will not stay flat from one heavy rain event, weather conditions between now and wheat harvest will determine the level of lodging observed from the combine.

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. Ryegrass field scouting will determine the level of insect pressure. Continue to monitor fields for insect pressure in ryegrass fields and if treatment is needed consult with your agronomist or fieldman for product/s that have been successfully used in ryegrass in your area.

Rust in ryegrass

Isolated low levels of leaf and stem rust has been observed in area ryegrass fields. As mentioned in last week's newsletter, the length of time fungicide treated ryegrass will be protected from leaf and stem rust is a function of product, rate and disease pressure. It's critical to protect the ryegrass plant from leaf and stem rust during this important seed filling stage.

Late season weed control

Research conducted at the U of MN, Magnusson Research Farm indicate, if needed, a rescue treatment of MCP, 2,4D, or dicamba can be used for broadleaf weed control in ryegrass that is fully headed. Research is currently ongoing to determine ryegrass crop safety from rescue applications of grass control herbicides in ryegrass. Results of this research will be presented at the winter grass seed meetings.

CROP MANAGEMENT

Late summer seeding of perennial ryegrass

Perennial ryegrass can be successfully established in the late summer after spring wheat harvest, prevented plant, or fallow acres. Research conducted at the U of MN Magnusson Research Farm indicates perennial ryegrass should be seeded by mid-to-late August to optimize perennial ryegrass seed yields the following year. Additional information will be included in next week's newsletter.

U of MN Grass Seed Research Reports can be found on Turf Council Website:

http://www.mnturfseed.org/html/progress_reports.html

Next week's newsletter will be released on July 12th, 2016.