MINNESOTA TURF SEED COUNCIL
NEWSLETTER
May 28, 2024

PERENNIAL RYEGRASS GROWING DEGREE DAYS (GDD)

Perennial ryegrass GDD's will be tracked in the 2024 growing season with comparisons to the previous seven years. The accumulation of GDD's will begin after the snow has melted from the perennial ryegrass fields and continue through swathing. A base temperature of 32 degrees F is used for perennial ryegrass (T-Base = 32 F).

- Year to date GDD = 820 (Table 1)
- GDD last week (May 20 - 26) = 130; Long term average = 175
- GDD projected in next 10 days = 302 or 30.2/day (Table 1)
- Average GDD for the first week of June = 177 or 25/day
- The ten-day forecast suggests warmer than average temperatures for the first week of June. Projected GDD is 30.2/day compared to the long-term average of 25.3/day.

Table 1. Growing Degree Days (GDD), March - May 2017 to March - May 2024 near Roseau MN.

Year	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2024 vs. 2023**
March	0	0	0	131	30	0	0	90	0
April	296	93	95	236	183	211	184	458	+203
May 1-26	524								
May		959	649	640	600	548	815	679	
Total		1,052	744	1,007	813	759	999	1,137	
*May 27-June 5	302								

* Forecasted GDD at Roseau for the next 10 days.

GENERAL CROP CONDITION

The temperatures last week were cooler than average which tends to promote ryegrass tillering. The first couple days this week will be on the cool side before a significant warm up mid-week into the weekend. Look for ryegrass with healthy crowns this spring begin heading by the weekend. Perennial ryegrass plants that experienced crown injury this spring range from dead areas in the field to plants that are tillering and are a couple of weeks behind plants that had a healthy crown this spring. With the recent rains and forecasted warmer than average temperatures, look for perennial ryegrass plants to enter a rapid growth phase by the end of the week. The weed will also be growing well with the recent moisture and improved temperatures.

SUMMER GRASS SEED FIELD TOUR – June 27

The annual grass seed summer tour is scheduled for the late afternoon of June 27th and will be held at the U of MN Magnusson Research Farm. Additional details will follow in future newsletters.

HYBRID RYE FIELD TOUR – June 27

A hybrid rye field tour is scheduled for the morning of June 27th at the U of MN Magnusson Research Farm. More details will follow in future newsletters.

CROP MANAGEMENT

If plant nutrition was applied before the recent rains, it should be in the perennial ryegrass root zone. If perennial ryegrass plants are yellow, stunted and just not growing like they should, a lack of crop fertility could be a potential cause. Remember sulfur deficiency can look much like nitrogen. If the soil applied fertilizer was not effective, for whatever reason, a postemergence liquid rescue treatment can supply supplemental nitrogen.

Previous research at the U of MN Magnusson Research Farm suggests that perennial ryegrass is tolerant to foliar applications of liquid nitrogen. The results in Table 2 were a trial conducted on ryegrass that had no applied spring nitrogen until mid-June which would be considered a 'worse case' scenario. Results indicate that ryegrass responded well to liquid nitrogen.

Table 2. Perennial Ryegrass Liquid Fertilizer Demonstration at the U of MN Magnusson Research Farm in 2016 - 2017.

Fertility	Seed Yield (#/acre)	Plant Height (inches)	Harvest Lodging
*None	485	18	1
**60#N/acre	601	19	1.5
**90#N/acre	872	21	2

*None was background only with 30# N applied in fall

** 28% UAN applied at 20 GPA for 60 #N rate and 30 GPA for 90#N rate with flat fan nozzles delivering 13.5 gpa/acre

Additional grass seed research data can be found at the web address below.

Seed Production Research - Progress Reports | Turfgrass Science (umn.edu)

PEST MANAGEMENT

Lilacs are beginning to bloom and that is a good reminder that if the bluegrass burns were incomplete last fall now would be a good time to apply an insecticide to control capsis bug in bluegrass seed production fields.

Last week the armyworm moth trapping project collected a total of 115 (average of 19.1 moths/trap) last week. The range was a low of 14 to a high of 24 moths/trap. This is the second week in a row with over 100 moths collected in the six traps. Additional information on armyworm feeding and instar stages will be included in next week's newsletter.

Now is the time to monitor perennial ryegrass fields for broadleaf weeds. We are now in the window for postemergence broadleaf weed control. Field scouting will determine if a broadleaf treatment is warranted in perennial ryegrass seed production fields.

Next week's newsletter will be released on June 4th .