MINNESOTA TURF SEED COUNCIL NEWSLETTER May 7, 2013

INTRODUCTION

Welcome to the first edition of the Northern Minnesota Grass Seed Growers Newsletter for 2013. The primary objective of this newsletter is to report on growing conditions, crop development and progress of perennial ryegrass and bluegrass crops. The newsletter is scheduled for weekly distribution from the beginning of ryegrass green-up to harvest. Special alerts will be sent as pest infestations dictate or production problems arise.

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RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2013 growing season with comparisons to the last 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 calendar date. Thus far in 2013, we have accumulated only 110 GDD as of May 5th (Table1). The spring of 2013 was one of the coldest in recorded history. In fact, according to data collected at the Grand Forks weather station, April of 2013 broke an all-time record for the latest calendar date to reach 50 degrees (April 26). In addition, 2013 was the latest snow melt in recorded history with the rapid snow melt occurring the weekend of April 26-28. However, the short term forecast indicates an improvement in temperatures. The projected GDD for next week at Roseau is 138 (19.7/day). If the current forecast holds, we will accumulate more GDD's in one week than the entire year to date!

Table 1.	Growing degree d	lays (GDL) for March 2008 to Ma	iy 2013 near Roseau MN.

Year	2013	2012	2011	2010	2009	2008	2013 vs. 12
March	0	304	7	137	30	6	-304
April	80	370	278	476	247	202	-594
May		726	639	707	515	501	
May 1-5	30						
May 6-12*	138*						
Total	248*	1,400	924	1,320	792	709	

^{*} Forecasted GDD at Roseau for the next 7 days.

Due to the extended snow cover and cold spring, perennial ryegrass is just beginning to break dormancy. Perennial ryegrass breaks winter dormancy in more of a gradual than rapid process (e.g. flipping a switch). Perennial ryegrass variety, time of seeding (spring vs. fall), size of the crown going into winter, residue on the soil surface and soil moisture are all factors that influence the speed in which ryegrass breaks dormancy.

GENERAL CROP CONDITION

Ryegrass

Perennial ryegrass is just beginning to break out of winter dormancy. Frost depths in fields near Roseau ranged from 12-16 inches in bluegrass to 20-26 inches deep in tilled ground. The projected elevated temperatures this week should bring the frost out of the ground and will allow a better assessment of ryegrass winter survivability.

PEST MANAGEMENT

Ryegrass

With an accelerated rapid accumulation of GDD's, weed emergence and growth will proceed at a rapid pace. With above average temperature patterns, herbicide applications for broadleaf weeds will be right around the corner. Winter annuals (dandelion, shepardspurse, and cockle) are beginning to grow. Annual weeds (volunteer canola, mustard, and smartweed) are first to emerge in the spring. Weeds grow fast and regular scouting is essential to determine the best weed control program for your situation.

CROP MANAGEMENT

Ryegrass

As the temperatures warm up and the frost comes out of the ground, ryegrass fertility applications will be here before we know it. Now would be a good time to talk to your grass seed fieldman and agronomists to determine a timeline for plant food applications in ryegrass. Research has indicated nitrogen must be in the ryegrass root zone prior to the rapid uptake phase (late tillering to heading). If all nitrogen is to be applied in the spring, fertilizer application should be earlier (250-450 GDD) than if the nitrogen is applied in a split application program (fall and spring) program (up to 800 GDD). If a portion of the nitrogen is a coated product, fertilizer applications could be made earlier than stated in the guidelines above.

Spring vs. fall seeding of ryegrass

Perennial ryegrass can be successfully established in the spring or fall (late summer). However, results of U of MN research has indicated spring seeded ryegrass provides a more consistent stands with higher yield potential compared to fall seeded ryegrass. Mid-May planting of spring wheat will, more than likely, result in late August wheat harvest. This timeline will create a very narrow window for fall seeding of perennial ryegrass as seeding should be completed by Labor Day. If perennial ryegrass is a rotational crop for 2014, strong consideration should be given to spring seeding of ryegrass due to the late spring of 2013 and projected planting constraints in the fall of 2013.

A discussion of fertility programs in ryegrass will be included in next week's newsletter which will be released on May 14, 2013.