

MINNESOTA TURF SEED GROWERS NEWSLETTER
July 13, 2010

RYEGRASS GROWING DEGREE DAYS (GDD)

Ryegrass GDD will be tracked for the 2010 growing season with comparisons to the last four years. A base temp of 32 degrees F will be used for ryegrass (T-Base = 32 F). The GDD information presented in Table 1 is March to July in 2006 - 2009 and March, April, May, June and July 1 - 11 in 2010.

Table 1. Growing degree days (GDD) for March - July in 2006 - 2009 and March, April, May, June and July 1-11 in 2010 at Roseau MN.

Year	2010	2009	2008	2007	2006	2010 vs. 09
March	137	30	6	90	53	+107
April	476	247	202	322	529	+229
May	707	515	501	746	730	+192
June	911	860	870	990	943	+51
July		943	1,034	1,156	1,206	
July 1-11	422					
Total	2,653	2,595	2,613	3,304	3,461	

Last week we accumulated an average of 35 GDD/day. When we accumulate over 35 GDD/day ryegrass will mature rapidly and seed moisture can drop by 2% points or more per day!

GENERAL CROP CONDITION

Ryegrass

The early seeded ryegrass fields are quickly turning color. GDD model suggests that we have soon accumulated enough heat units for the ryegrass to be close to swathing. Swathers may be rolling in ryegrass fields in the next couple of days.

Bluegrass

The majority of the bluegrass has been harvested.

PEST MANAGEMENT

Ryegrass

Scout fields for armyworms as several ryegrass fields were sprayed last week. Field scouting early morning or in the evening will be the best time to look for army worms. Armyworm infestations range from light to moderate. As would be expected, the most likely areas to find armyworms are lodged areas of the ryegrass fields. The following two links are pictures of the armyworm adult and larvae. Photos were taken from the NDSU Pest Newsletter.

<http://www.ag.ndsu.edu/pubs/plantsci/pests/e830-1.jpg>

<http://www.ag.ndsu.edu/pubs/plantsci/pests/e830-2.jpg>

The economic threshold for armyworms has not been established for ryegrass. However, in wheat, the action level is 4 or more larvae/square foot on wheat that's not headed. If the wheat is headed, the action level is 2 larvae/square foot. With the majority of the ryegrass headed it would seem that the lower action level should be considered.

Armyworms can have 2 to 3 generations/year in Minnesota. The adult moths are brought to Minnesota on south winds. The adult moth deposits eggs on leaves or leaf sheaths. The eggs hatch and go through several instars (egg to pupae usually 20 days) will pupate and drop to the soil and after two weeks, the cycle begins all over again. It's common to see several stages of worms in the field depending upon when the moths were blown into the area.

One of the challenges with armyworms can occur after swathing as the worms concentrate under the swaths. Worms under the swath will continue to consume plant material and can cause problems with the combine itself (gum up rollers and sieves).

Several insecticides are available for the control of armyworms. Consult with your agronomist or agricultural supplier for products that have been successfully used in the area. Bees are working in area fields and make every effort to be conscious of bees in the vicinity of ryegrass fields that warrant an insecticide application for armyworms.

CROP MANAGEMENT

Ryegrass

When to swath ryegrass? That is a question often asked by growers. It seems our eyes are drawn to the most mature areas of the field. When making a determination on when to cut ryegrass make sure a **representative sample is taken from the entire field not just the areas that are most mature**. One method to get a representative field sample is to take samples from areas that look mature, from areas that are intermediate and from areas of the field that look green. Note the percentage of the field in each of these categories. This will give you a good overall field estimate of maturity. Once these samples are collected seed moisture can be determined using a microwave oven. If possible delay swathing until moisture content of the seed is 35 to 40%. Seed moisture content is determined rubbing the seed from the spike and using the microwave oven to remove the seed moisture.

Caution: In addition to the seed sample, place a small amount of water in a microwave safe container. This will prevent the seed from exploding in the oven. Start with a predetermined seed weight (10 grams) and set the microwave oven for 1 to 1.5 minutes. Continue this procedure until the seed weight is constant. For example, if the initial weight was 10 grams and the final weight was 6 grams the seed moisture is 40%.

Bluegrass

With the bluegrass harvest almost complete the next step in bluegrass production is burning. A good burn is one of the **CRITICAL** steps in bluegrass management. A good burn sets the stage for seed production for the next season. A desiccant should be considered if the bluegrass straw is light, poor distribution of straw or excessive bluegrass growth. Relative humidity levels in the 40's or lower tend to promote a clean burn of bluegrass straw.

Remember to get a burning permit and it's always a good idea to give your neighbors a "heads up" when you plan to burn. One of the first reactions to smoke in the neighborhood is a house or building fire. A phone call or two prior to burning will ease some of this anxiety.

The next edition of this newsletter will be released on July 20, 2010.