

**NORTHERN MINNESOTA GRASS SEED GROWERS  
NEWSLETTER  
July 11, 2011**

**RYEGRASS GROWING DEGREE DAYS (GDD)**

Ryegrass GDD will be tracked for the 2011 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).

Table 1. Growing degree days (GDD) for March, April, May, June and July 2006 - 2011 near Roseau MN.

| <b>Year</b> | <b>2011</b> | <b>2010</b> | <b>2009</b> | <b>2008</b> | <b>2007</b> | <b>2011 vs. 10</b> |
|-------------|-------------|-------------|-------------|-------------|-------------|--------------------|
| March       | 7           | 137         | 30          | 6           | 90          | -130               |
| April       | 278         | 476         | 247         | 202         | 322         | -198               |
| May         | 639         | 707         | 515         | 501         | 746         | -68                |
| June        | 898         | 911         | 860         | 870         | 990         | -13                |
| July        |             | 1,174       | 943         | 1,034       | 1,156       |                    |
| July 1-10   | 376         |             |             |             |             |                    |
| Total       | 2,198       | 3,405       | 2,595       | 2,613       | 3,461       |                    |

For the week ending July 10th, 265 GDD were accumulated with an average of 37.8 GDD/day. The last two weeks have been the warmest of the year, thus far in 2011. Short term forecast has temperatures moderating with highs in the 70's and lows in the 50's.

In the month of June, 2011 we had 13 days (43%) with winds from a southerly direction. In the first 10 days of July we have had 5 days (50%) with winds from a southerly direction. Winds from a southerly direction bring rust, armyworms and other pests into the area.

**GENERAL CROP CONDITION**

Ryegrass

Ryegrass fields are in the pollen shed and seed filing stage.

Bluegrass

'Park' and 'Minnefine' bluegrass varieties have been swathed and with good drying weather the combines will be rolling later in the week.

**PEST MANAGEMENT**

Ryegrass

Leaf and stem rust has been observed in several area ryegrass fields. One of the first places to look for rust in ryegrass is lodged areas of the fields. In addition, other "hot" spots for rust development are areas of the field adjacent to tree lines, wood lots etc., which air movement is reduced and the plants remain wet for an extended period of time. Leaf and stem rust develops rapidly when rain or dew is present on the plant tissue and the temperatures are above 50 F. Rust can explode in just a few days. Data from the west coast indicates that rust will complete a cycle in 13 to 17 days in 50F and 8 to 9 days if the temps are 65F. Field scouting will determine the presence of rust and the level of infestation. At this point in the growing season, a full rate of a fungicide should protect the ryegrass plant until swathing.

## Ryegrass

Army worms have been detected in area ryegrass fields. At this time, armyworm infestations are NOT to threshold levels. As would be expected, the most likely areas to find armyworms are lodged areas of the ryegrass fields. Field scouting early morning or in the evening will be the best time to look for army worms. 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.

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**

### Rouging off type weeds

Some ryegrass fields have rouged for off type plants. It is important to control weeds in the field and not run these plants through the combine. Roundup through a wand (spot spraying), or through a rope wick have successfully been used to control off type plants in ryegrass. For larger areas, a rotary mower should be considered to mow these weeds and off type plants to keep them out of the swaths and getting into the combine with the potential to contaminate the entire seed lot.

The next Grass Seed Newsletter will be released on July 18, 2011.