



## Question of the Week, March 21, 2006

### **Q. I recently heard the term “growing degree days.” What are they and how are they used?**

A. Biologists have several ways to predict the emergence of a particular insect, plant disease or developmental stage of a plant. One involves use of growing degree days (GDD). Growers use GDD to help them scout for pests, time pest-control actions, and predict when crops will mature.

The GDD method uses average daily temperature accumulations that influence developmental cycles. The cycles can vary from year to year and among locations throughout New Hampshire. Most plants and insects don't develop at temperatures below 50° F. Therefore we use 50° as a base temperature for calculating GDD. So, if the temperature averages 55° on a given day, that location accumulates five GDD. Early in the season, starting March 1<sup>st</sup>, the numbers add up slowly, but as the days get warmer the GDD accumulates faster.

Scientists have learned at what GDD various insect pests will emerge from their long winter nap and at what stages of development they are vulnerable to treatment. Similarly, they use GDD to predict events in some plant disease cycles—apple scab, for example. By predicting the time when fungal spores are released in the spring, growers can choose the best time to apply a preventive fungicide. Farmers also use GDD to predict changes in forage quality, helping them provide better feed for their livestock.

Educators from UNH Cooperative Extension monitor GDD at 17 locations across the state. You'll find them posted on our Web site at <http://extension.unh.edu/Agric/GDDays/GDDays.htm>

Got questions? UNH Cooperative Extension's Family, Home & Garden Education Center Info Line offers practical help finding answers for your lawn and garden questions. Call toll free at 1-877-398-4769, M-F, 9:00 a.m.-2:00 p.m., or Wednesdays, 5:00 p.m. - 7:30 p.m.. You can also email us at [answers@unh.edu](mailto:answers@unh.edu)

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