Pest management is an important aspect of agriculture, shade tree maintenance, and forest health in New Hampshire. This year’s warmer-than-normal winter may lead to an early spring—and to earlier than usual insect emergence and feeding. Correctly timing activities such as applying pesticide or scouting for specific insect pests can be challenging because of variations in weather from one year to the next or from one area of the state to another.

Many farmers, arborists and Christmas tree growers know that “degree days” are a convenient measure of how warm or cold it has been during the growing season and can be a useful tool to help time pest survey and management activities. Because insects are cold-blooded animals, temperatures generally need to be relatively warm before egg hatch, feeding, flight, or other important activities can occur. Growers can successfully improve the timing of their pest scouting, pesticide applications and similar management activities by monitoring degree day accumulation rather than relying on calendar dates.

The Department of Agriculture, Markets & Food has partnered with the U.S. Forest Service and the New Hampshire State Climate Office to develop a new growing degree day resource to help farmers and landscape professionals improve the timing of insect management activities. Using daily weather records from 1981 to 2010, we developed a series of average seasonal degree day accumulation maps, in 50-degree day intervals, for New Hampshire. We also compiled lists of many common landscape, conifer, and tree fruit insect pests and the degree day thresholds typically targeted for control activities for each. Simply select the appropriate degree day map for an insect pest of interest, then find the location of your property and use the map legend to determine when that specific degree day accumulation is likely to occur. These maps will be a useful resource for farmers and arborists in New Hampshire, but should not substitute for good scouting and on-the-farm surveys.

The growing degree-day resources, which include additional information and current degree day accumulations, may be found on the Division of Plant Industry webpage. Originally published in the Weekly Market Bulletin, March 16, 2016.