

Orchard Outlook



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The past week has seen below seasonal temperatures but significant snow melt. Most orchards should be nearly bare after this current stretch of wet weather. However, saturated soils are going to make for messy field conditions in many places.

Bud Development

The Kentville Research Centre has seen less than half of the growing degree days since March 1st compared to the 5-year average (Figure 3). In the past 15 years, similar growing degree day totals were recorded by April 21st in 2001 and 2007 as in 2015. Interestingly, records for full bloom of McIntosh show dates of May 28th for 2001 and May 30th for 2007. Therefore, it is still early to assume that bloom will be delayed much into June as mid to late May warm ups can advance development significantly.

In comparisons of bud break on an early breaking crab apple in a block at the Kentville Research Centre, bud development is running about 7-10 days behind last season (Figure 1).



Figure 1: Early crab apple buds at Kentville Research Centre on April 20, 2015 (left) and April 16, 2014 (right).

In visits throughout Kings County on Monday, all tree fruit crops were still in the dormant stages of bud development. There were a few apple buds in a historically early block that were at silver tip but this was not the case for the whole tree (Figure 2).



Figure 2: Silver tip of apple. Photo: <http://utahpests.usu.edu/IPM/htm/fruits/home-orchard-guide/> and <http://fruit.umext.umass.edu/tfruit/clements/2004budstages/03312004/03312004-Pages/Image3.html>.

2014 Degree Day Accumulations

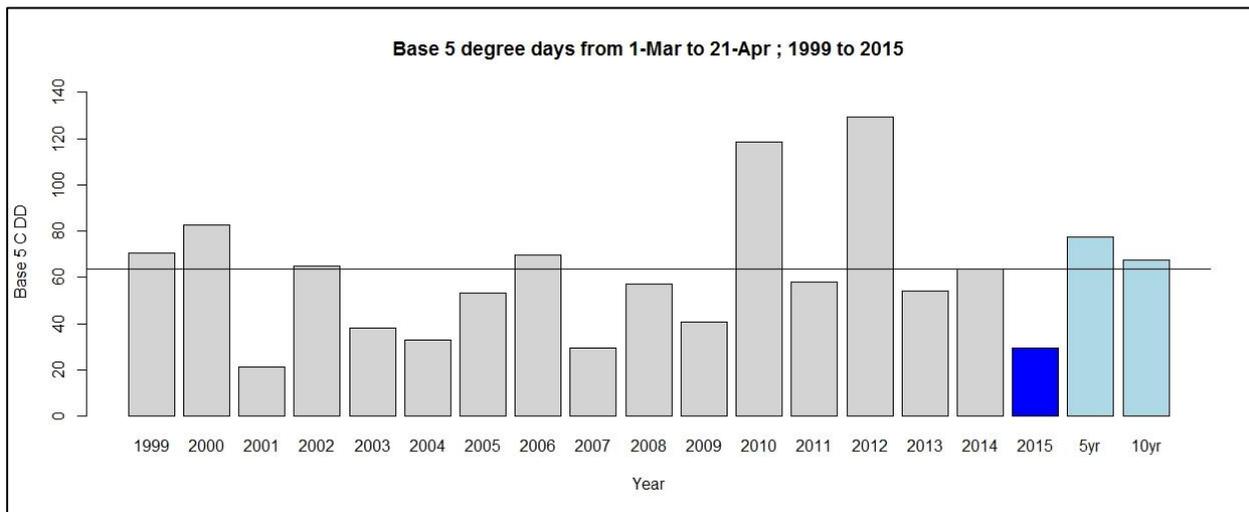


Figure 3: Degree day accumulations from March 1st for the past 17 seasons. Provided by Jeff Franklin (AAFC).

To date heat accumulation since March 1st is:

- About 62% fewer plant development heat units compared to the 5-year average.
- About 54% fewer plant development heat units compared to 2014.
- About 87% fewer insect development heat units compared to the 5-year average.

Green Tip Prediction – Jeff Franklin, Agriculture and Agri-Food Canada

Buds have continued to develop although slowly over the last week. The model indicates that we have accumulated 1150 of the 2500 degree hours required for green tip which is a change of only 300 degree hours from last week. If temperatures are close to seasonal then it should take another 14 days before most cultivars are at green tip here in Kentville. This would put us a week behind last year which seems reasonable given that our orchards are just becoming free of snow. I examined buds from one of our earliest cultivars, Zestar, this morning and could not see any significant signs of development although I observed a few Ida Red buds at early silver tip.

New Tree Fruit Management Guides

The tree fruit production spray guides have been revised with new products for 2015 and are available on the Fruit Production section of Perennia's website: <http://perennia.ca/fruit.php>. Direct links are below.

Apple & Pear -

<http://perennia.ca/Pest%20Management%20Guides/Fruits/2015/2015%20Apple%20and%20Pear%20Guide%20Final.pdf>

Stone Fruit -

<http://perennia.ca/Pest%20Management%20Guides/Fruits/2015/2015%20Stone%20Fruit%20Management%20Guide.pdf>

Dormant Sprays

Next week should offer a window to apply dormant sprays to many tree fruit crops if the weather co-operates as I have not yet observed any signs of bud swelling in peaches, plums, or cherries. The wet weather over the next few days should give you an opportunity to dig out the sprayer and get it ready for another spray season.

Fire Blight Impact Survey

The fire blight impact survey closed today at noon. A total of 51 responses were received. Thank you to all that participated in this important survey. This survey data will be shared with the Nova Scotia Department of Agriculture, Nova Scotia Fruit Growers' Association, and Agriculture and Agri-Food Canada.

This Orchard Outlook has been published with the input of the Orchard Outlook Committee and Erika Bent (APM).

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Perennia



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