



## Alfalfa Fall Harvest

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This year across Manitoba and Saskatchewan we are looking at areas that have a shortage of forage and areas that have the opportunity to sell surplus forage. Given these two scenarios, many alfalfa growers may be looking at taking a final cut this fall to maximize the amount of forage they will have on hand.

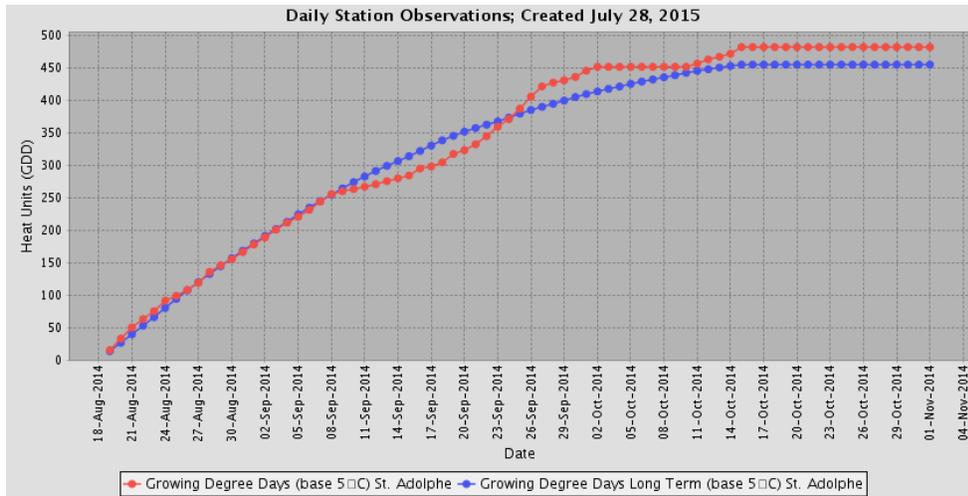
Depending on the amount of growth we see this fall it may be tempting to take a final cut but growers need to consider the possible affect this may have on the plant's natural winterization process and survival. Traditionally, the recommendation has been NOT to harvest alfalfa 4-6 weeks before the 1st killing frost. For alfalfa a killing frost is -5C and that is still very safe advice!

This period is known as the **Critical Harvest Period** and generally starts in the 3<sup>rd</sup> week of August and runs until close to the end of September. This period is necessary for the alfalfa to store adequate energy in the crown and roots to survive winter and initiate growth in the spring till the new growth takes over and starts to feed the plant.

This past spring we had a number of reports of alfalfa fields where an early fall cutting resulted in slow growth this spring. Not having a history on these fields makes it hard to determine the reason for the slow start in the spring but knowing that alfalfa requires between 450 and 500 growing degree days (GDD) in the fall after the last cut to fully charge its roots can sometimes help us understand why some fields do better than others in the spring. Interrupting this process by cutting carries the risk of the plants having inadequate energy and protein reserves to make it through the winter and for initiating vigorous re-growth next spring. It also may interrupt the cold acclimation process.

However, poor hay making weather throughout the year, hay shortages and or the opportunity to market surplus forage may have some producers rethinking this old advice. Perhaps the risk of a cutting during that "critical period" is outweighed by potential increased profits. If you are considering an early fall cutting, look at your harvesting frequency. In other words, the cutting frequency during the growing season can affect the energy status of the plant going into the fall. Frequent cutting (30-day intervals or less) results in the plant never reaching full energy reserve status during the growing season. This makes the critical fall rest period more necessary for plants to accumulate adequate reserves before winter.

Looking at the graph below you can see that for this location (St Adolphe, MB) to reach 450 GDD's (blue line), you would normally need to take your last cut by Aug 19<sup>th</sup> so that the crop can have time to accumulate adequate stores in it's roots and crown. Of course every year is different, such as in 2014 (red line), and this is the risk.



To determine your GDD graph, go to:

<http://agriculture.alberta.ca/acs/alberta-weather-data-viewer.jsp>.

One final note, if you are considering taking a final cut during this critical period and it is young stand, be sure it has been allowed to flower at least once during the season and has adequate fertility, P and K. Taking a cut when there is the possibility of less than 200 GDD's accumulating lessen the risk of the alfalfa drawing down the root reserves and this may help reduce the risk of winterkill and help maintain some of the spring vigor.