

Fall Harvesting Second-Cut Alfalfa Hay

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Autumn is here and harvest is well underway for most areas. Harvest for second-cut hay has been behind this year due to a hot dry summer for most parts of Alberta, and there is still concern as to when to cut to prevent risk of winterkill.

Alfalfa typically requires a critical growing period between August 1st and the first killing frost, which normally occurs around September 15th. However, since we are well past that point, cutting can happen at any time, with little risk for winterkill. With the cold nights and cool days, and since many areas of Alberta have already received damaging and killing frosts, these plants have been forced into dormancy. Regrowth will have been limited or halted entirely. The plants will not be pulling stored root reserves for regrowth; instead, these stores will remain for regrowth next spring.

Cutting alfalfa after a frost is primarily concerns the ability to capture sufficient leaf material. After a couple hard frosts, alfalfa plants will dry up and turn brown, and the leaf attachment to the stem becomes weak. If you are waiting to cut until the plants are turning brown, rather than cutting when plants are still green yet starting to wilt, you may end up with hay that is predominantly stemmy material rather than hay containing both stem and leaf components. Leaves contain a significant amount of nutritive value compared with stems, and the loss of this part of the alfalfa plant will result in low-quality hay which may be no better than straw.

Nitrates are a regular concern with alfalfa. Fortunately, nitrates are not an issue in alfalfa because it is a nitrogen-fixing plant. Any excess of nitrates tends to stay in the root crown and roots. Also, most hay fields are not fertilized at high-enough rates to be a concern for nitrate accumulation. If a field has been fertilized in, either in the fall or the spring, much of that fertility would have already been used up during the growing season and with the first cut.

Some other tips to keep in mind for fall harvesting alfalfa:

- Don't set the crimper rollers too close together because there's not as much need to crimp the stems that are already dried from frosts.
- Set the knives of the hay-bine or mower to a minimum of 4 inches, although you can also go to a 6-inch stubble height. This helps with snow capture.
- Form the swaths wider and shallower so that the time it takes to dry the hay will be faster.
- The ground may be prone to ruts from machinery if it has been softened by significant rainfall, damaging the alfalfa crowns. These ruts can damage machinery the next time hay must be harvested, and can last for years.
- Leave strips of uncut alfalfa every 40 to 50 feet to catch snow and insulate crowns from cold winter temperatures.
- Fall application of fertilizer, particularly potassium and phosphorus, can help increase winter survival of alfalfa.