



Making Hay in Hot Weather

By Barry Yaremccio

Hot, dry conditions negatively impact forage quality and hastens maturity. In general, when plants mature, the percentage of high quality cell contents is reduced and low quality cell walls increase. The active growing period can be reduced by as much as 3 to 4 weeks.

A mixed alfalfa–grass stand should be cut when the alfalfa is at 10% bloom. That is when there is one open flower on 10% of the plants. This provides a high quality hay or silage. For every week that cutting is delayed, protein content is reduced by 1 to 2% and TDN drops by 2%. If the bottom leaves on the alfalfa plants are starting to turn brown or are dropping off the plant; it is time to cut. Waiting to get a higher yield only reduces quality. Plants reduce growth rates during stress and there is no guarantee that there will be a higher yield. Set the cutting bar at 3 to 4 inches above the ground. There is a better chance to have re-grow when some leaf material is left on the plant.

In hot conditions, surface moisture is quickly removed from forages. Moisture inside the stem is more difficult to remove. The hay is not “cured” until the stems have dried out and have become brittle. Moisture probes only measure surface moisture. It is not accurate to provide total moisture in the plant. A microwave moisture test or using a Koster oven provide accurate results. Take a small sheath of hay and if you can break the stems, this is a good indicator that the hay is cured and ready for baling. Baling uncured hay could result in mouldy or dusty hay due to heating after the bales are made.



Let the bales stand in the field until the sweat is complete and temperatures moderate. Stacking hay in hot conditions reduces air flow between the bales which traps heat. If heating starts, and temperatures reach 40° C, some protein denatured and is tied to fibre. This protein is not available to animals. If temperatures reach 70° C, spontaneous combustion is possible.

For more information on when to cut and bale hay, contact Barry at 403-741-6032 or bjyaremccio@gmail.com.



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