

Cold Weather and Forage Considerations for Cattlemen

In this information sheet...

- 1) Changing energy requirements of cattle during cold weather and appropriate feeding strategies
- 2) Limit-grazing cool-season annual forages
- 3) When to limit-feed hay

1) Animal energy requirements increase in cold weather, and often mean supplemental energy is needed in the diet.

Providing additional hay to cattle during cold weather is certainly a good practice. Research suggests that cattle will increase forage intake by as much as 30% under cold conditions. This increase in intake means that the animal is using most of this energy for one thing... increased maintenance requirements. Cattle with a full rumen generate heat and energy that can help the animal achieve a more desirable body temperature. However, remember that forage quality is key every time! Depending on the quality of the forage and the magnitude of the cold, hay alone may or may not meet this increase in animal energy requirements. The best strategy for helping the cow meet her energy needs is to make sure that **moderate to good** quality hay (> 52% TDN) is available free-choice and provide a 20 to 30% increase in any energy supplement being fed during cold, wet weather to help overcome losses.

Even with increased forage consumption during cold weather, it is likely that feeding low quality forage (< 52% TDN) alone will not meet the higher energy requirements of the animal. As cattle consume more low quality forage, the risk for compaction of the digestive tract increases, and can lead to serious health issues. If low quality hay is the only source available, it is important to provide a fiber-based energy supplement to help address nutrient deficiencies (i.e. soyhulls, corn gluten feed, whole cottonseed).

Consider feeding cattle in the late afternoon or early evening. Increased heat production by the animal occurs 4 to 6 hours after forage and feed is consumed. Therefore, providing feed before temperatures reach their lowest point for the day can help combat some loss from the cold as well.

2) Use Limit-Grazing When Possible

Remember: When we see temperature lows, forage growth slows: manage your winter annuals for the long haul! Growth of cool-season annual forages slows during cold weather extremes. Continued grazing of these forages during cold weather may lead to overgrazing, overgrazing may further set back regrowth once the weather adjusts, thus decreasing stand life.

Grazing recommendations are to begin grazing when forage is 6 to 8 inches in height, and remove cattle when the height reaches 2 to 3 inches. When temperatures drop and forage growth has stalled, consider removing livestock from the area until temperatures increase. When weather begins to warm and growth begins again, consider limit grazing the area to increase forage utilization. Limit

grazing cool-season annuals involves moving animals onto high-quality forages for a short period of time (3 to 4 hours) to graze, and then moving them to a drylot and providing access to hay or dormant forage. Pull animals out of the pasture when they are no longer actively grazing or begin to lay down to improve forage use efficiency. Limit grazing may decrease hay consumption and help stretch hay supplies. Additionally, hay digestibility may improve due to a desirable rumen fermentation environment when limit grazing winter annuals.

3) Know the Boundaries for Limit Feeding Hay

Limit-feeding hay may be an option to stretch the hay supply. This involves either 1) limiting the time animals have access to hay (avg. of 6 hrs/day) or 2) reduce the amount of hay given each day. However, **this is NOT a recommended practice during extreme weather conditions**. It is extremely important to allow animals free-choice access to hay during periods of environmental stress. After cold weather subsides, limit-feeding hay may be a useful practice when using mid- to high-quality forage (> 52% TDN). This practice is not recommended for low quality forage or for feeding thin cows.

Conclusions

- Even if hay supplies are tight, do not cut nutritional corners during cold weather. Evaluate the forage base being used and provide appropriate energy supplementation as needed.
- Use cool-season annuals if available, paying close attention to grazing height and limit-grazing where possible.
- Forage Quality is Key!

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