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STORING AND FEEDING HAY LOSSES

Current hay prices have given every livestock owner pause when considering the impact on this winter's feed bill. With such a high value, storing and feeding out hay with as little loss as possible is going to be important. Do you have a game plain to minimize hay storage and feed loss this year?

The only sure way to prevent hay loss during storage is to use it up. Even when stored in a shed out of the elements, losses of up to 6% can be expected in bales stored longer than 6 months. Losses can be much higher for bales stored outside and subjected to the elements. Loosely wrapped hay stored on the ground can easily accumulate losses of up to 40%. Visually this loss is easy to underestimate. In a 5.5 ft. round bale, 1/3 of the bale's mass is found in the outer 6 inches, so even a small amount of loss on the outer ring goes a long way.

When storing outside, keeping moisture out of the bale is key. Store on well drained soils or raise bales up to prevent moisture entering from the ground. Net wrapped, round bales are best at keeping the bale tight and shedding precipitation, especially when lined up end to end so the only exposed surface is the rounded side. Orient bales so precipitation that does fall doesn't accumulate or is quickly dried off.

With storage taken care of, how we feed hay to our animals can be just as important in reducing waste. First let's look at amount and frequency of feeding. If hay is fed free choice or unrestricted, studies have shown cattle wasting up to 45% of what is provided. Limit feeding hay so only what is required is fed, will significantly reduce waste right away, even when fed on the ground. One study looking at frequency of feeding showed cattle fed daily needed 25% less hay than those feed every 4 days to maintain similar body condition. This can be as labor intensive as a daily feeding, or something as simple as limiting access to hay in a feeder for a few hours each day.

Another way to reduce waste is to limiting access to the hay with physical barriers. The most effective physical barriers have solid side bottoms. This prevents the hay being pulled out of the feeder and onto the ground. Studies by the University of Missouri, Oklahoma State, and Michigan State on feed loss from bale feeders all found open bottom ring feeders resulting in 20% losses, closed bottom ring feeders had 13% loss, and cone feeders with only 5% loss. While feeders limit waste, they do require the purchase of additional equipment and increase labor when feeding. For large herds or a changing feeding location, this can add significant time and money.

When we add up the combined impact of storage and feed loss, the results can be substantial. For example, even a 10% storage and 15% feeding loss totaling 25% and $180/ton hay results in 45$/ton lost. Added up over the course of a season, and there can be a lot of money left on the table.

One final point to consider is what we consider as waste. Trampled hay can be considered beneficial as bedding or a soil amendment, and there is truth in this. The addition of organic matter in trampled hay as well as concentrated manure and urine from feeding could be seen as a soil amendment, not a loss. With high hay prices, the cost of amending soil in this fashion needs to be taken into consideration, but feeding loss can sometimes be all in the eye of the beholder.

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