

Reducing Hay Wastage When Feeding Large Round Hay Bales

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Hay wastage has always been a problem in beef operations. With the acceptance of large round bales as a way to reduce the labor required for harvest and storage, the amount of wastage has increased during storage and feeding. All hay waste cannot be stopped, however, there are ways to reduced the amount lost during storage and feeding. Reducing the losses during feeding will be discussed.

Research conducted at the time round bales were gaining popularity revealed that the use of a feeder could significantly reduce wastage. Research conducted at Purdue University in 1974 showed losses from 22.6% to 38.7% greater than when no feeders were used to feed round bales to mature beef cows.

Variations in the feeder design have also been studied. Baxter et al., 1986, found losses with slanted bar gates to range from 3.9% to 20.8%. Belvea et al., 1985 showed losses of 12.7% to 29.1% from feeding in bunks with slanted slats. Additional work done by Schultheis and Hires, 1982, showed losses of 16.4% with a slant bar gate. They also showed losses of 9.2% with slant bar gates with pushers and 12.6% using straight bar feeders with pushers.

More recent research has shown that there are different amounts of hay wastage with different feeder designs. Buskirk et al. in 2003 at Michigan State University compared hay wastage utilizing cone, ring, trailer and cradle feeders. Significant differences in hay wastage was noted among the feeder types. The hay losses were cone feeder - 3.5%; ring feeder - 6.1%; trailer - 11.4% and cradle - 14.6%. The researchers were unable to determine why the trailer and cradle had much greater losses than the cone and ring feeders, however, they suspected that the animal's eating position may have been a factor. Animals with their head held higher than the normal grazing position had a greater tendency to back away from the feeder and drop hay on the ground. They also note more aggressive behavior from some cows. There was more butting and more cows being forced back away from the feeder. Once a cow was butted she backed away from the feeder and she tended to drop the hay in her mouth. Landblom et. al., 2006, indicates that losses increase in cone feeders if the bales are loosely and poorly tied.

Based on the research it appears that the cone feeder would be the best to use, however, the much higher costs of the cone feeder causes many beef cattle producers to purchase a ring instead.

Feeding management can also reduce hay wastage. Keeping the feeder out of the mud can have a big impact on waste. Hay dropped on dry ground has a chance of being picked up by the animal while hay dropped in the mud will not be eaten. Feeding pads work quite well to keep the feeding area relatively dry.

Producers should only put out the amount of hay that will be consumed in a relatively short time. Wait until animals consume the acceptable quality hay in the feeder before moving the feeder or adding more hay. Animals that are aggressive should be culled. Animals that move around butting or making other animals move away from the feeder will increase waste.

In summary, beef producers can reduce hay wastage by utilizing a cone or ring type feeder that minimizes wastes. Utilizing common sense while feeding can also reduce waste. Keep hay out of the mud, utilize all the hay in the feeder and cull aggressive animals.

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