

Too Valuable to Waste

Manage hay feeding to reduce costs, improve profit.

by James Neel, University of Tennessee

Feeding the beef cow herd this winter is likely to be expensive due to the added cost of production. In addition, about 30% of the hay allocated to the cows during the winter is wasted due to poor management and feeding practices, which increases the cost of wintering the cow herd.

Approximately 92% of Tennessee beef cow-calf producers winter their cow herds on hay. Hay is simply too valuable to permit a high volume of waste. Ohio State University recently published its 2013 hay enterprise budgets, which showed the cost of grass-hay production at \$67.86 per ton, and alfalfa hay was priced at \$92.96 per ton.

Tall fescue is the primary source of hay for Tennessee cow herds, and University of Tennessee (UT) economists estimated the cost of production to be approximately \$95 per ton. The average hay price reported by the USDA's National Agricultural Statistics Service (NASS) for 2006-2011 was \$80.33 per ton. Regardless of how the hay is valued, producers cannot afford a 30% loss.

The cost could rise to \$123.50 per ton with a \$28.50 loss, given the cost per ton of Tennessee fescue hay and the 30% loss in feeding. In Tennessee, a mature beef cow could consume about 1.6 tons of hay during a 120-day winter feeding period; the daily winter feed cost per cow would be about 4.8¢ per day. Factoring in the 30% loss due to poor management, the cost would increase to 6¢ per day.

Feeding methods also affect the amount



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► Hay feeders can reduce hay waste compared to providing unlimited access to large round bales. UT Extension Director Larry Moorehead has conducted research to estimate hay waste of various types of hay feeders.

of waste and cost. The use of hay feeders compared to allowing free access to the hay has resulted in reduced waste and is a recommended practice. For example, Michigan State University beef specialists studied four types of hay feeders: cone, ring, trailer and cradle. All types allowed approximately 14.5 inches (in.) for each cow. Dry-matter waste was 3.5%, 6.1%, 11.4% and 14.6% for the cone, ring, trailer and cradle feeders, respectively.

Normally, when cattle are allowed unlimited access to large round bales, a large percentage of the hay is wasted. Purdue University researchers have reported a 30% loss, Texas workers reported a 24% loss, and UT researchers reported a 27% loss when providing unlimited access. The use of a ring feeder reduced waste by 8%-9%.

Larry Moorehead, UT Extension director and agent in Moore County, has conducted on-farm demonstrations to estimate hay

waste for various feeding practices. He showed that by using cone feeders, waste was reduced to 1.6%. This loss is less than the reported 4%-5%. However, it was still a large

reduction in waste.

Regardless of the feeding practice applied to your cow-calf herd, some hay will be lost. However, proper management will greatly reduce these losses. Because hay is an expensive commodity, it will be to the producer's advantage to apply those practices that will aid in maintaining

waste at the lowest level possible, thereby reducing the winter feed bill and increasing profitability.

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— James Neel

Editor's Note: James Neel is a UT animal science professor and extension beef cattle specialist. This article is reprinted with permission from the Fall 2013 Beef Cattle Time newsletter published by the UT Institute of Agriculture.