## CURB COSTS OF FEED BY MANAGING WASTE WHILE STORING AND FEEDING

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Feed waste is like a hole in your pocket – it loses money. Although we can't completely eliminate feed waste, like we can patch the hole, feed waste can be minimized, and taking steps to do so is more important now than ever with the current cost of feed.

If you produce your own feed, managing harvest to reduce waste is important, but for this article we will concentrate on waste during storage and feeding. Feed waste can occur during each step of storage and feeding: harvest, transport, storage, processing, mixing, feed delivery and finally at the bunk, hay ring, or feed trough. To manage losses it helps to know where waste occurs and how much there is – weighing feed before and after each step will help determine both.

Feed waste during storage can be greater when storing wet feeds, like silage or modified distillers grains, storing feed outside or storing feed for a longer period. Some of the loss is due to spoilage, part is moisture loss and then there is dry matter loss. It would not be unheard of to have greater than 25% feed loss when storing it on earth with large round bales and twine wrap. In this situation, a great deal of that waste would be due to spoilage. Net wrapping and storing large bales on rock or tires off of the ground can significantly reduce those losses by 10% or more. Storing hay under a roof out of the weather would typically be the lowest loss, which has been measured to be close to a five percent loss. Covering piles of silage and wet or modified distillers grains or other wet feeds to eliminate exposure to air and weathering can reduce spoilage and losses. Managing silage piles so that three to four inches of the exposed area is removed per day when feeding will also help reduce losses.

Processing some feeds will reduce losses when feeding, but there may be some waste when doing the processing, so there is a tradeoff. For example, grinding large bales of forage will result in some loss, especially if it is windy, but the increased consumption and lower waste when feeding may offset the loss and cost of grinding. There will certainly be some loss in delivery and mixing of feed. Having equipment that is operating efficiently and operator management are keys to lowering feed waste in this area.

The hardest area to determine waste is at the feed bunk or feed trough. If you can see even a little feed or forage on the ground or floor it is likely that three to five percent of what is delivered is wasted. A total mixed ration would typically have lower losses than feeding forages and grains separately. High forage rations are probably



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prone to more waste, mainly due to the volume of the material delivered and the nature of the animal when consuming the feed.

Making sure feeders and bunks are in good repair with no holes is primary. Adjusting self feeders so that a majority of the feeder bottom is visible is advisable. It may be advantageous to deliver smaller amounts of feed to help minimize feed waste caused by refused feed that gets stale and needs to be discarded. This advantage has to be weighed against the cost and time to deliver feed.

If you total all the feed waste from storage to consumption by the animal it would not be unheard of to have 30% or more loss on high forage and high moisture feeds used in a cow-calf herd, most of which would be in storage and feeding losses. A goal would be to get that waste down to 10% or less. Producers need to focus in on areas where they observe higher feed loss and then determine how much feed is

being wasted. Some waste may be controlled with little or no extra out of pocket cost, while other methods may require more expense. Pushing the pencil to determine the cost of waste versus the expense to reduce the waste is important. High feed costs justify additional expense in reducing feed waste.

