### GUEST COLUMN

# Strategies to Reduce Next Year's Forage Loss

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etting the most out of your harvested feed is vital to your operation. With today's high feed costs, reducing dry matter loss from stored feeds is more important than ever. Now is the time to review your forage inventory to determine the best way to feed out your supply.

#### **Reducing Loss**

Knowing your feed inventory enables you to build rations that consider minimal but sufficient removal of the silage face. Take at least 6 inches of silage daily when weather is cool and 12 inches daily under hot, humid conditions. If you have an exceptionally wide bunker, consider "biting" into one section and completely feeding out that section before moving on to another. There will be feed loss with this strategy but working on the wide face in sections will deliver the most nutrition to your animals. Consult with a forage specialist on what products, such as organic acids or microbial inoculants, can be used to increase aerobic stability of the bunker face.

Forages provide protein and energy, but high quality fermented forages are more digestible. Improved fermentation results in feed being broken down and mobilized out of the rumen more rapidly. This creates space in the rumen, allowing increased dry matter intake that is vital for improving milk production. Full utilization of nutrients from forage provides more home grown nutrition and requires less expensive supplementation of the diet. On the other hand, poor quality forages not only require nutrient supplementation but may be poorly digested and take up valuable space inside the animal. Proper rumen function demands fiber and the most effective fiber comes from forages. Forage-NDF encourages rumination, cud chewing, and saliva production better than NDF from byproducts and nonforage feeds.

#### **Silage Density**

Increasing silage density places more tons of dry matter into your silo, improves fermentation, maintains high feed quality, and allows more feed stored on your dairy. Goals for corn silage and haylage density are 40-50 lbs/ft3 on an As Fed basis or 14-18+ lbs/ft3 Dry Matter. As long as you can unload the silage safely, higher density is always better. Obtaining this density is also dependent on weight of the equipment used and the dry matter of the forage you are ensiling. Treating forage going into the silo with organic acids or microbial inoculants can help to reduce nutrient losses as extreme moisture results in spoilage and dry matter losses.

#### Inoculants

Adding inoculants to forage can help maintain silage quality and reduce dry matter loss. By using an inoculant that provides at least 100,000 colony forming units (cfu) per gram, you "kick start" a desirable fermentation. The forage receives a surge of lactic acid production which drops the pH and restricts growth of undesirable microbes. This is an inexpensive way of reducing dry matter loss. Research shows using an inoculant reduces dry matter loss by 3-5%.

#### **Acid Treatments**

Treating silage and green chop forage with buffered organic acid rapidly pulls the pH down and restricts the growth of undesirable microbes. Blends of organic acids are most effective when dealing with extremely wet or extremely dry forage where inoculants may not support desirable fermentation. Using buffered acids that are commercially available is the safest choice for people and equipment.

Growing quality forages is expensive, so getting the most out of what you grow is more important than ever. You can maintain the high plane of nutrition by ensiling properly and feeding out properly. Many publications and computer software programs calculate silo capacities and tonnage on hand and University Extension websites are a great place to start.