

DAIRY PIPELINE

Volume 36, No. 8 October 2015

Department of Dairy Science

Blacksburg, VA 24061

540/231-6870 Fax: 540/231-5014

www.vtdairy.dasc.vt.edu



“Corn silage that is ensiled below optimal moisture levels may not properly ferment, causing an environment that could have higher levels of molds or yeasts”.

GOT DRY CORN SILAGE?

Jeremy Daubert, Extension Agent, Rockingham County; jdaubert@vt.edu

The 2015 growing season started with an abundance of moisture, developing this year's corn crop at a rapid rate. By early August we were getting drier, hotter weather, causing many corn fields to dry down at a slightly faster than normal rate. By now most producers should have their silage stored, but many were caught making corn silage at a drier than optimal level. The chart below shows optimal moisture levels for different storage structures.

Horizontal bunker silos	65% - 70% ¹
Bag silos	60% - 68% ¹
Tower silos	62% - 67% ¹

Corn silage that is ensiled below optimal moisture levels may not properly ferment, causing an environment that could have higher levels of molds or yeasts. Dry silages decrease packing density, causing nutrient losses during fermentation. It is very important that producers have all forages analyzed prior to feeding so that a proper ration formulation can be done. If molds are suspected, the silage should be tested for that, as well. In addition, these drier silages will likely not be as palatable to the cows, decreasing dry matter intakes. If the corn is not kernel processed or poorly processed, the drier silage will tend to be less digestible and you will see many kernels passing

through in the manure. Processing will help with silage utilization, but it will not fully overcome the drier, more mature silage. Consequently, rumen microbial growth and VFA production are decreased. In this case the rations should be adjusted for a higher level of energy as much of the starch is not being digested.

Below are a few recommendations to help get the most out of this year's dry corn silage:

- Adjust ration nutrients according to forage analysis;
- Add water to TMR to make ration more palatable;
- Some studies suggest that adding molasses will increase digestibility and palatability;
- Adjust ration carbohydrate levels to compensate for unutilized corn starch;
- If molds or mycotoxins are present work with your nutritionist to add a product to inhibit or bind the molds or mycotoxins.

If you need assistance with forage testing contact your local extension agent or nutritionist.

¹OMAF Fact Sheet 2013, Harvesting Corn Silage at the Right Moisture

²Feeding Dry Corn Silage and how QLF Liquid Feeds Can Help Improve Corn Silage Quality; Dairy Technical Bulletin



COW MORTALITY DATA CAN PROVIDE USEFUL MANAGEMENT INFORMATION



Dave Winston, Extension Dairy Scientist & Dairy Youth Program Coordinator; dwinston@vt.edu

Culling is a valuable tool to improve the profitability of the dairy herd. Under preferred circumstances, producers limit involuntary culling (reproductive failure, mastitis and udder, feet and legs, disease or injury, and death) to be able to cull for

voluntary reasons (dairy and low production).

Death is obviously the most undesirable category of involuntary culling. Mortality results in an animal with no salvage value and disposal can be inconvenient and costly. Mortality (cont. ...)

Upcoming Events

See [VTDairy](#) for details.

October 17, 2015

Virginia Tech Showcase Sale

October 28, 2015

Reproduction Workshop w/
Dr. Ray Nebel

November 11, 2015

Dairy Management
Workshop-Harrisonburg

December 5, 2015

Dairy Science Open House

November 2015 & January 2016

[Holistic Management & Risk
Assessment Workshops for
Dairy Farmers in the Southern
Region \(Workshops 1 & 2\)](#)

Workshop 1

Nov. 4, 2015—Amelia Co.

Nov. 6, 2015—Franklin Co.

Nov. 11, 2015—Rockingham

Nov. 13, 2015—Smyth Co.

Workshop 2

Jan. 20, 2016—Amelia Co.

Jan. 22, 2016—Franklin Co.

Jan. 27, 2016—Rockingham

Jan. 29, 2016—Smyth Co.

January 13, 2016

Calf meeting,
Rockingham Co.

February 17-19, 2016

VSFA Convention and VT
Dairy Science "Cow
College"—Roanoke, VA

February 20-21, 2016

Atlantic Coast Calf College,
Blacksburg, VA

March 8-11, 2016

Area Dairy Conferences

If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

takes away the opportunity to remove an animal for other purposes and increases the need for replacements, both of which negatively impact a herd's finances.

A recommended goal for cow mortality is to keep death loss less than 2% annually. DairyMetrics data from Dairy Records Management Systems in September 2015 showed that an average of 5.7% of cows die every year in Virginia dairy herds. Nationally, the Council on Dairy Cattle Breeding reported that 5.5% of lactations in 2014 ended due to the death of the cow. The National Animal Health Monitoring System (NAHMS) Dairy 2007 project found that 5.7% of cows died annually in the surveyed herds. Virginia death losses are comparable to national averages, but have room for improvement.

Tracking mortality in a dairy herd can be done through DHI records, dairy management software (PCDART, DairyComp, parlor management software), and/or spreadsheets. Knowing a herd's mortality rate is an important first step in determining whether a manager should be alarmed, but it does not tell the whole story.

The adage, "If you don't measure it, you can't manage it," applies to mortality information. If used in conjunction with health records, mortality information may provide supplemental data to identify problem areas in herd management. Identifying and recording the cause of death should be standard procedure. Necropsies should be performed when the cause of death is not immediately known. Troubleshooting problems can be much easier if the herd manager is recording the cause of death. According to

"Developing a system to record mortality data routinely can provide useful information to herd managers."

NAHMS Dairy 2007, the top three causes of death in dairy cows were: lameness or injury (20.0%), mastitis (16.5%), and calving problems (15.2%). Next was "unknown" (15.0%), highlighting the need for more information in many instances.

Examining the stage of lactation and seasonal patterns of mortality can prove useful. For example, if death losses are highest in the first 60 days of lactation, the manager should closely examine transition cow management. If losses are much higher during the summer months, the manager should consider improving heat abatement for groups most affected.

The *Herd Summary DHI-202* report indicates the number of cows that die annually by lactation number and the number that die during test intervals. DHI herds can request to receive the *Survival Analysis DHI-232* report from Dairy Records Management Systems. This executive report identifies the number of deaths in first and second lactations by days in milk. It does not report the cause of death, however. In smaller herds (<200 cows), it may be more difficult to identify trends because of a smaller number of observations.

Herd managers should work closely with their veterinarian to develop and routinely evaluate a comprehensive herd health program with emphasis on prevention and early detection. Morbidity and mortality should be monitored. The data provided by precision dairy tools (pedometers, accelerometers, rumination monitors, etc.) may be useful to producers in improving overall health of the herd and in reducing morbidity and mortality rates. Technologies should be evaluated on their practicality, precision, accuracy, and cost effectiveness before being purchased.

For more information on Dairy Extension or to learn about current programs, visit us at [VTDairy](#)—Home of the Dairy Extension Program at: www.vtdairy.dasc.vt.edu.

R.E. Jones

R.E. Jones,
Dairy Extension Coordinator & Extension Dairy Scientist,
Dairy Nutrition