Virginia Cooperative Extension

A partnership of Virginia Tech and Virginia State University

College of Agriculture and Life Sciences



Department of Dairy Science Blacksburg, VA 24061 540/231-4762 Fax: 540/231-5014

www.vtdairv.dasc.vt.edu

DAIRY PIPELINE

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FACTORS AFFECTING DRY MATTER INTAKE

Monitoring dry matter intake of herds and groups of cows can be a key component in preventing overfeeding of nutrients. Environmental conditions such as extreme hot or cold weather will at least influence short term consumption of feed. Other conditions that lead to reduced consumption are poor quality forages high in fiber, herds with a high incidence of foot problems, and limited feed bunk space.

When predicting dry matter intake with the 2001 NRC model the body weight, milk production, milk fat test, and days in milk are used. For instance, an increase or decrease of 100 pounds of body weight will change predicted intake by 1.3 to 1.5 pounds per cow per day. A change in milk produced of 10 pounds per day will result in a change of 3.3 to 3.5 pounds of dry matter consumed. Also, a change of .5% milk fat will change intake by 1.8 pounds.

It is best to monitor actual dry matter intake in a herd or groups. Compare predicted intake to actual accounting for body weight, milk production, days in milk, and lactation number. If they are drastically different ask why. Use actual intake to adjust rations where needed.

—Charlie Stallings Extension Dairy Scientist, Forage Quality & Nutrition (540) 231-3066; cstallin@vt.edu

DEALING WITH CATTLE MORTALITY

On April 27th 2009, the Food and Drug Administration's Final Ruling on Substances Prohibited in Animal Feed went into effect. This ruling in essence excluded un-inspected cattle mortality from being included in any animal feed. In the Shenandoah Valley area, this ruling eliminated the option of disposing of dairy cattle mortality via rendering as the local rendering plant, Valley Proteins, discontinued accepting cattle mortality. This begs the question—

What regulations exist regarding livestock mortality?

Livestock mortality is regulated by the Virginia Solid Waste Ordinance as enforced by the Virginia Department of Environmental Quality. As such they have established the hierarchy of preferred disposal options listed below.

- 1. Rendering
- 2. On site Composting
- Concentrated Composting (landfill or other approved composting site)
- 4. Incineration

- 5. Landfill burial
- 6. On site burial

Until recently, a permit from DEQ was required to legally compost or bury dead cattle. Once rendering was no longer an option locally, DEQ changed their regulations to allow the composting of livestock on farm. While a permit is not required, DEQ has established a Waste Guidance Memo highlighting recommended Best Management Practices to be followed in establishing onsite mortality composting. A copy of this memo can be obtained by contacting DEQ or your local Extension Office. The Cornell Waste Management Institute publication titled Natural Rendering: Composting Livestock Mortality and Butcher Waste is also recommended as a resource. It is available online at

http://compost.css.cornell.edu/naturalrend eringFS.pdf .

The concentrated composting of livestock mortality at approved sites is the next best option to on-site composting. DEQ has authorized local landfill operations to estabPage 2 (Continued from page 1) Volume 30, No. 6

Upcoming Activities

Dairy Management Institutes: All sessions are from 9:30 to 2:30. by June 10th

-June 22 (Rockingham) Persons interested in the Rockingham DMI should contact the Rockingham Extension Office at (540) 564-3080 for more information

-June 23 (Southwest) Persons interested in the Southwest DMI should contact the Wythe County Extension Office at (276) 223-6040 for more information

-June 24 (Rocky Mount) Persons interested in the Rocky Mount DMI should contact the Franklin County Extension Office at (540) 483-5161. for more information

DMI second session is July 10 with location TBA.

June 19th - Dairy on your Small Acreage; VCE Rockingham (540) 564-3080

June 30th - Anaerobic Digester Tour to Mason-Dixon Farm - Gettysburg, PA; VCE Rockingham (540) 564-3080

July 17 - VA Holstein Field Day (540) 564-3080 for details

July 21 - Hoof Care Workshop - Location TBA VCE Rockingham (540) 564-3080

July 25th 4-H Dairy Show at the Franklin County Recreational Park...

lish composting sites for livestock mor-

tality generated in the county. Rockingham and Shenandoah Counties have composting programs and accept live-Preregistration is required stock mortality in exchange for a "tipping fee" determined by animal size. Fees range from \$20 to \$40 depending upon the size of the animal.

> On site burial of mortality is a more controversial disposal option. At the time this article is written, DEQ has taken the position that it is legal to bury mortality without a permit but

"This ruling in essence excluded un-inspected cattle mortality from being included in any animal feed."

that it is discouraged due to the potential to affect ground water quality. As such, the determination on legality of mortality burial has been left to local governments. A Waste Guidance memo has been established for burial BMP's and is available from DEQ or your local Extension Office.

> -John Welsh Extension Agent, Rockingham County (540) 564-3080; ilwelsh@vt.edu



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...(Dairy Show) Participation open to ages 5 to 19, (540) 483-5161 for details

Virginia Ag Expo — August 6, 2009 hosted by the John N. Mills & Sons farm in King William County - details to be posted at www.virginiagrains.com as they become available

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 vour local Extension office at least 1 week prior to the event.

For more information on Dairy Extension or to learn about current programs, visit us at VT Dairy—Home of the Dairy Extension Program on the web at: www.vtdairy.dasc.vt.edu.

Bennet G. Cassell

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Dairy Extension Coordinator & Extension Dairy Scientist, Genetics & Management

www.ext.vt.edu