# Virginia Cooperative Extension

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# DAIRY PIPELINE

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"Your feed management plan should focus on

knowledge of inventories, feed nutrient content and controlling shrink."

The coming year promises to be exciting! Milk prices are near record highs, but unfortunately so are feed prices. With corn prices nearly \$8/bushel, the successful dairy manager must squeeze every bit of energy, protein and carbohydrates from the forages on the farm to maintain margins on income over feed costs. Your feed management plan should focus on knowledge of inventories, feed nutrient content and controlling shrink.

ESSENTIALS OF FEED PROGRAM MANAGEMENT

Successful feed program management demands knowledge of inventories of forages and feed grains as well as their quality. Determine as closely as possible the amount of all silages and hay crops on hand and project utilization through the next harvest period. The silocap program, an Excel spreadsheet developed by VT faculty and available at www.vtdairy.dasc.vt.edu, can help estimate forage inventories in various silos. The program also has the ability to consider storage losses in determining how much is available to feed. Project utilization of each forage by considering how much is fed daily and project needs until the next harvest. Remember to consider the following in projections:

- Herd expansion. What about those extra heifers freshening over the next year? Twenty five extra heifers consuming 60 lb. of silage per day will mean an extra 1500 lb. of silage daily and 275 tons more silage required annually.
- Forage quality. Some producers have planted acreage to BMR varieties of corn silage. Rations with BMR varieties will contain more silage due to its higher digestibility. This means less corn to purchase,

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but it increases silage consumption by as much as 10%.

Higher production. As cow's milk more they eat more. If herd average has increased this past year, expect greater demand for forages.

Recognize deficiencies in forage supply early and purchase feed before it becomes more expensive in the spring. Don't totally rely on what was needed in the previous year.

Determine forage and feed nutrient content routinely. Ohio State studies suggest corn silage should be tested at least monthly. Routine testing of commodity feeds during our 5 year phosphorus field study demonstrated that every load of commodity feeds arriving on the farm should be tested. This enables timely adjustment of rations and in some cases, deficiency payments can be expected from suppliers if feeds don't meet guaranteed nutrient specifications for DM%, CP% or other nutrients.

What's your shrink? How much harvested forage or purchased grains and commodities are wasted? A trailer load of corn grain costs in excess of \$8,000. Reducing shrink from 10 to 5% is worth over \$400. Focus on the following in reducing shrink:

- Dry storage, ٠
- Insect and animal damage, ٠
- ٠ Spillage during loading of mixer wagons.
- Overloading mixer wagon.

Average daily feed cost for a cow producing 70 lb. of milk is close to \$8.00 which represents a daily cost approaching \$1500 for the typical lactating herd in Virginia. Incentives are especially attractive

# ACTIVITIES

Nov. 17—Smyth/Washington Cattlemen's Meeting. Washington County Fairgrounds, Abingdon. Speaker, Dr. Tom Noffsinger, a veterinarian from Nebraska, will hold a discussion on cattle handling. Meeting begins at 6:30 with meal \$5 for members, \$10 for non-members. Memberships can be purchased at the door for \$25.

November 21—Smyth Farm Management Meeting. Chilhowie Town Hall Community Room. Meal is \$5 per person. Our speaker will be Corky Sheets and we will discuss farm tax planning for 2011-12. Call 783-5175 to RSVP.

Nov 29-Dec. 1—Private Pesticide License Recertification Meetings. Smyth County Extension Office and Chilhowie Town Hall. Call 783-5175 for more details.

February 15-17, 2012—Virginia State Feed Association/ Virginia Tech Dairy Nutrition Cow College. Hotel Roanoke. Program with special emphasis on feeding management on dairy farms; sourcing feed ingredients; controlling feed quality of forages and grains; Feed and forage evaluation; Accurate TMR mixing and delivery. Call 540-231-4770 or visit www.vtdairy.dasc.vt.edu for additional details.

Income Tax Seminars (General Session and Farm Session): For more information contact 540-231-3306. Oct. 31-Nov 1: Richmond Nov. 2-3: Weyers Cave Nov 7-8: Abingdon Nov. 9-10: Roanoke Nov. 14-15: Lynchburg Nov. 30-Dec. 1: Fredericksburg Dec. 5-6: Williamsburg

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.

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for managers to optimize nutrient balance through timely ration formulation and knowledge of nutrient content and quality of all feeds. Further improvements can be expected through reductions in losses during storage and feeding.

—Bob James, Extension Dairy Scientist, Dairy Nutrition (540) 231-4770; jamesre@vt.edu



Dr. Charlie Stallings, Professor and Extension Dairy Scientist—former Dairy Extension Coordinator, Interim Department Head, Associate Director of VCE, and Director of the Forage Lab will retire December 25, 2011. Dr. Stallings has served the dairy industry

well in varying roles from Virginia Tech for 32 years. We would like to thank him for his service and many contributions to VCE and the dairy industry—both of which have benefited greatly from his expertise.

- We wish him well.

# FEED IN GROUPS TO REDUCE LEAD FACTOR

Feeding more groups can be used to feed closer to the cow's nutrient requirements and reduce the lead factor for ration formulation. Back in 1984

Mike McGilliard and I published an article in the Our Industry Today section of the Journal of Dairy Science. We looked at the use of lead factors for formulating rations for TMR feeding. The lead factor was used to increase the nutrient demand by feeding to a higher

level of milk production than the average. Basically, we found that for an ungrouped herd we needed a lead factor of 1.32. Therefore if we averaged 60 pounds of milk, we would actually balance a ration for 79 pounds (60 \* 1.32). More recently this practice has come into question because it overfeeds a majority of the cows and leads to issues with environmental quality due to excretion of excess nutrients. Nutritionists are now saying we need to reduce the lead factor-which means feeding closer to the average requirement. Since the lead factor was calculated to be one standard deviation

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above the mean it would support the requirement for the 83<sup>rd</sup> percentile cow in the herd. So instead of reducing the lead factor it is possible to feed two groups of

equal numbers and reduce the lead factor to 1.17 for high production group and 1.23 for the low production group. Further reduction can occur if feeding three equal groups with a lead factor of 1.14 for high, 1.1 for middle, and 1.21 for low production groups. As our herds have gotten bigger it is now easier to feed more groups and thus reduce the lead factor needed. This not only makes

nomically now that high feed prices are the norm.

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

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

Bob James, Dairy Extension Coordinator & Extension Dairy Scientist, Dairy Nutrition

## www.ext.vt.edu

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