

DAIRY PIPELINE

Department of Dairy Science

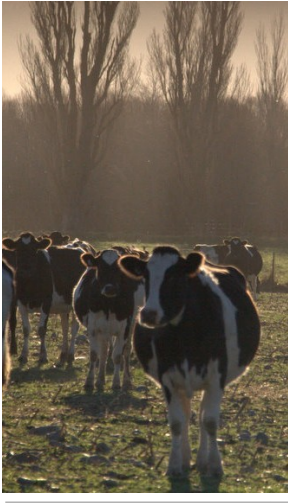
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WHAT'S IN IT FOR ME?

In September of this year, the Commonwealth of Virginia submitted a draft version of their Chesapeake Bay TMDL Phase I Watershed Implementation Plan. In this plan, Virginia laid out their plans for achieving the reduction in nutrient loading necessary to achieve EPA's water quality goals for the Chesapeake Bay. After review by EPA, it was described as having "serious" deficiencies. Following are some of the items that will impact agriculture.

First it is worth noting that progress towards achieving water quality in the Chesapeake Bay is predicted by numerous computer models. The one that will be tasked with measuring agricultural progress is the Chesapeake Bay Watershed Model. Rather than actually measuring the level of soil, nitrogen and phosphorus in tributaries, the model credits nutrient reductions achieved by Best Management Practices (BMPs) against the estimated base line nutrient loading based on the amount and type of agriculture present in any given watershed. Therefore, to achieve their target loads states will have to document that sufficient additional BMP's have been installed to reach the assigned load allocation.

To this end, Virginia's WIP focuses on documenting as many BMP's as possible. One part of this approach is to develop a system to capture and document the many voluntary BMP's that have been and will be implemented on Virginia farms. Secondly, they intend to expand cost sharing opportunities through the Virginia Agricultural Cost Share program through expanded funding. They also indicate that they might consider tying the ability to receive land use taxation rates to the adoption of certain BMP's.

In contrast to the voluntary nature of the Virginia WIP, EPA's criticisms suggest a more regulatory approach. They suggest that placing all Animal Feeding Operations under the regulatory umbrella of the current VPA permit would be more acceptable to them. For more information on the Virginia plan, visit DEQ's Bay TMDL website at <http://www.deq.state.va.us/tmdl/chesapeakebay.html>

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—John Welsh
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IMPROVING ANIMAL WELL-BEING: A LOOK AT FOOTBATH MANAGEMENT

Foot health is fast becoming a major economic and animal well-being issue on many farms across the United States. The on-farm costs are estimated at \$300 to \$375 per lame cow. This includes the costs related to decreased production, treatment costs, increased days open, additional labor, and increased culling/mortality. The cost to the industry involves

animal well-being concerns as well as the bad press that is associated with these cases. Reducing lameness on dairy farms requires a look at many different aspects of the farm and types of foot health issues the dairy is facing. A well-designed footbath plan is one of the keys to reducing these losses.

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Upcoming Activities

Alfalfa Haylage/Baleage Conference:

Dec 7: Wytheville, Wytheville Meeting Center

Dec 8: Rocky Mount, Franklin Center

Dec 9: Weyers Cave, Weyers Cave Community Center

Discount for registrations received by Dec. 1.

For details, contact Chase Scott for details at (276) 223-6040 or miscott1@vt.edu

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.

Creating a successful footbath management program is important to any dairy farm. We need to understand the root of the issue and the farm-specific management abilities. The main causes of hoof health problems can be divided into two groups, non-infectious and infectious diseases. The non-infectious diseases include issues like laminitis, sole ulcers or physical injury. The infectious diseases, such as digital dermatitis (hairy warts) and foot rot, are the targets of a well-designed footbath management plan. A footbath allows the dairymen to reduce the severity and incidence of infectious disease by targeting all cows on a regular basis. Once we have identified severity and set goals for control of the infectious disease, we can then develop a management protocol, which is farm-specific.

A footbath protocol should take into consideration frequency, concentration of chemical, measures for success, safety for workers and animals, and the environmental impact of the chemicals in use. The goal of a successful footbath is to prevent new infections and help to eliminate existing infections. Therefore, the frequency of footbath use depends on the severity of existing problems, as well as leg hygiene. Chemicals such as copper sulfate and formaldehyde have long been the basis for footbath mixes. Copper sulfate is typically used at a 5-10% concentration. However, some states and some individual farms have limits for copper application on fields. Copper is not recommended for use with digesters, which are becoming more popular on US farms. Formaldehyde, a carcinogen and skin/lung irritant, is

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typically used at a 2.5%-5% concentration. It can cause burns around the top of cows' feet if concentrations are too high and can speed tissue degradation in open wounds like are seen with foot rot. Be sure to include the foot trimmer at the farm in any recommendations and the goals for measures of success. The measures for success are going to be farm specific but a farm should be able to achieve very low rates of warts and foot rot by running a consistent footbath program - prevention is the best treatment.

Reducing lameness on dairies needs to be a high priority for the industry and the dairymen. We want to reduce infectious and non-infectious diseases through cow comfort and cleanliness, proper nutrition, and a preventative footbath

management program. Successful footbath management can increase profitability and decrease the opportunities for negative press for the dairy industry.

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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.



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