

NWVA Newsletter July 2012

Footbath Revisited

Footbath protocols are an important component of fighting infectious hoof disease control in free stall barns. Topical application of antibacterials such as copper sulfate, formalin, and other, have been shown to aid the control of foot rot and digital dermatitis (heel warts). The footbath is a simple mechanism for treating large numbers of cattle quickly and efficiently.

It is perhaps surprising that there is very little sound, scientific information on optimal hoof bath design. A common design is for the treatment bath to be preceded by a wash bath full of water and for each bath to contain about 50 gallons of solution. Baths are commonly 6 inches deep, 77 inches long, and 36 inches wide. They are often located on sloped return lanes from the parlor, either side of the holding area. These types of footbath designs can be problematic in accomplishing our goal of reduced heel wart and foot rot cases in our herds.

Through, in part due to research done at the University of Wisconsin, and other cow behavior studies, a newer footbath design is being proposed. A bath 12 feet long and 24 inches wide, with 10 inches of step-in height filled to 3.5 inches would contain 52 gallons of solution. This is no more than most of the traditional shorter baths. Sidewalls are sloped from a height of 3 feet above the floor of the bath to the upper edge of the bath, and the sides should be enclosed to create a tunnel.

Length is the critical dimension for footbaths. It determines the number of foot immersions that occur as the cow walks through the bath. At the typical length of 72 inches, half of the rear feet receive only one immersion as the cow walks through the bath. Increased length has been shown to help

optimize the number of foot immersions, achieving the two to three “dunks” some feel necessary for the bath to work. A longer bath might be better, but needs too much water and chemicals and the added expense is not worth it.

Step-in height and width are also important. A ten-inch step-in height will slow cows down and give them a chance to really bathe their feet and it helps retain the bath solution. The narrow width of 20-24 inches keeps the bath at a reasonable volume which helps reduce bath cost. With a 10-inch step, we can fill baths to a 3- to 4-inch depth and still have sufficient chemicals for the last cow through the bath.

This design seems to promote cow flow through the bath and reduces defecation. Because the bath is a long tunnel, it is advised to create a hinged drop panel on one side of the bath so that, if a cow goes down she can be picked up with reduced injury. If infectious foot disease is a problem in your herd, take another look at your bath design. Making these changes may make a big difference.

Vermonters have Raised the Bar for Farm Safety!

Over 300 Vermont tractor owners have now registered with the Vermont Rebates for Roll Bars Program - nearly 100 of these Vermonters have already installed a new roll bar/seat belt kit on their tractors. Launched in September, 2010, UVM Extension's **Vermont Rebates for Roll Bars Program** offers a 70% rebate (up to \$765) to Vermont tractor owners wishing to retrofit that old tractor with a new roll bar kit.

One, five minute call to the **ROPS Hotline (1-877-767-7748)** provides information on roll bar kit availability and pricing.

Farmers are eight times more likely to die on the job than the average worker and tractor rollovers are their leading cause of death and serious injury. Roll-Over Protective Structures (ROPS) with seat belts offer 99% protection in the event of a rollover. For more information about the program, please contact Matt Myers, ROPS Coordinator at UVM Extension in Morrisville at 802 888-4972, Ext. 404 or e-mail at matthew.myers@uvm.edu