Department of Dairy Science Blacksburg, VA 24061 540/231-6870 Fax: 540/231-5014 www.vtdairy.dasc.vt.edu

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Ouch! Hairy Heel Warts Grossly Harm Dairy Production

-Haylee Hanling, M.S. Student with Dr. Ben Corl; bcorl@vt.edu

We all occasionally wake up stiff and sore, but we manage to limp our way through the day. However, when you're a 1500lb cow, even a sore foot can put you out of work. A cow with a sore limb tends to alter her gait and is called "lame," which has nothing to do with her popularity. Lame cows are

a serious problem in the dairy industry because they make less milk and less money for the farmer: not to mention, farmers don't want their cows to be uncomfortable. Lameness is most often instigated by foot disorders, and a major cause of foot-derived lameness is hairy heel warts. Formally named digital dermatitis (DD), these gross bacterial infections of the foot are expensive and cause cows discomfort. The average case of DD costs the farmer \$133 including the cost of treatment and milk loss. Hairy heel warts are becoming a national epidemic affecting 70-94% of dairy herds in the US. To tackle this disease, the diagnosis, treatment, and prevention of DD needs to be optimized to avoid profit loss and bad animal welfare.

The most effective time to diagnose DD is when trimming hooves; the warts can easily be seen in the hoof trimming chute because the feet are angled upward. However, cows generally only see a hoof trimmer once or twice per year. An alternative way to catch a case of DD is daily observation while the cows are being milked using a mirror glued to a spatula. The lesions are typically found on the hind feet between the hooves on the cow's heel. Since the heel is pointed down, it can be hard to see the wart, so the spatula is placed on the ground beneath the dew claws to get a better view.

After finding a hairy wart, treatment will help to avoid further lameness and milk loss. The most common treatments are topical antibiotics including powders, pastes, sprays, and footbaths. Antibiotic powders

and pastes can be applied in the hoof trimming chute and covered with a bandage for a few days. Multiple antibiotics can be combined with water and made into a spray. Though this is an



effective method and you don't have to put the cow in the hoof trimming chute, the wart must be sprayed at every milking until it subsides. Antibiotics can also be mixed into footbaths that the cows walk through a few times per week; however, these may require a milk withdrawal period. Therefore, footbaths are more commonly made of a 5% copper sulfate solution. Copper sulfate footbaths are especially useful for treating chronic cases of DD and preventing new infections.

Instead of struggling to treat hairy warts, it's best to prevent them. The optimal way to avoid DD is through good management and animal welfare practices. Feeding cows a nutritionally balanced diet and maintaining proper body condition scores reduces the risk of hairy warts. Keeping cows' feet clean and dry also aids to prevent infections. Cows on pasture have a lower risk of DD than those on concrete. Since indoor housing is more practical in modern times, it is important to reduce manure slurry on the concrete. Digital dermatitis is theorized to be caused by bacteria from the digestive system that is transferred to the feet through manure. Flushing systems aid in cleaning, but DD bacteria seem to thrive in wet conditions. Recycled water in flushing systems can also further spread the bacteria from manure onto the cows' feet, so it is best to flush when the animals are not present.

A healthy cow is a happy cow, and happy cows make more milk. Keep cows happy and comfortable by properly diagnosing, treating, and preventing their hairy warts, and they will make more money in the long run.

"Hairy heel warts are a becoming national epidemic affecting 70-94% of dairy herds in the (JS."

Photo courtesy of University of Kentucky Dairy Extension







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Upcoming Events

See VTDairy for details.

September 28, 2018State Fair Junior Dairymen's Contest, Doswell, VA

October 13, 2018 Hokie Dairy Day (Youth Event) Blacksburg, VA

October 27, 2018
Dairy Science Open House
Blacksburg, VA

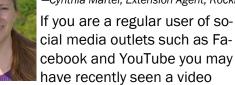
If you are a person with a disability and require any auxiliary aids, services or other accommodations for any Extension event, please discuss your accommodation needs with the Extension staff at your local Extension office at least 1 week prior to the event.

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.

Christina Petersson-Wolfe, Ph.D.
Dairy Extension Coordinator &
Extension Dairy Scientist,
Milk Quality &
Milking Management

Back to School with Agriculture

—Cynthia Martel, Extension Agent, Rockingham County; <u>cmartel@vt.edu</u>



posted from a group claiming 4H and FFA are cults that abuse children and teach our youth to kill animals. We all know is COM-PLETELY UNTRUE, but the sad fact is that over the last several decades people have become completely disconnected from agriculture and where their food comes from. It is time to stand up and get agriculture back into schools. We need to educate youth about 'Ag', so they can in turn spread the word to their parents and siblings, educating them as well.

This is where you as Dairy Farmers (husband, wives, sisters, brothers, grandparents, and kids) can give back to the younger generation. It is time to GET BACK INTO YOUR LOCAL SCHOOLS. Future Farmers of America (FFA) and 4-H promote agriculture, but not all counties and schools have active programs. FFA is a great program, but it is a high school program and we really need to start younger! When you educate youth in elementary schools about agriculture, they get excited and share that excitement at home and with everyone they meet. As dairy farmers, you are more than qualified in your field to educate the public.

There are tons of ways you can bring agriculture back into schools and your community. Reach out to your local Extension Agent; join forces to create programs that can be placed into the schools. Work with local 4-H livestock clubs to find youth who want to show dairy heifers and provide them with the heifers. Encourage youth to come to the farm, halter break calves, and show. This is an amazing experience you could provide to non-farming youth. Host on-farm school tours, your local Extension office can help you with this too. As a dairy farmer in Virginia, you have the support of the Dairy Alliance behind you. They can provide you

with the training to host farm tours or go into the school system. The Dairy Alliance can provide farmers with amazing teaching tools to hand out to the kids and teach ers. Work with your local Farm Bureau, they can provide access to 'Ag in the Classroom' materials. If doing farm tours is not an option with your local elementary and middle schools, bring the farm to the school. Work with the mobile dairy classroom to organize visits to the schools in your county (the mobile dairy classroom program is free!). The mobile classroom brings a dairy cow to the school for the kids to watch a milking session. The trailer is completely equipped with a portable milking parlor, and youth can learn about the milking process from start to finish. What better way to bring the farm to the en-

SCHOOL BUS

"Farming is a full-time job, but finding time once or twice a year to either have classes come to the farm or taking the farm to school can help spark an interest in youth with FACTS about agriculture."

tire school if the kids cannot come to the farm?

Farming is a full-time job, but finding time once or twice a year to either have classes come to the farm or taking the farm to school can help spark an interest in youth with FACTS about agriculture.

To find your local extension agent in Virginia visit https://ext.vt.edu/, The Dairy Alliance at https://thedairyalliance.com/, and The Mobile Dairy Classroom https://

<u>www.southwestdairyfarmers.com/</u>. Together we can keep agriculture strong using the truth to educate the next generation.

Extension is a joint program of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and state and local governments.

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