



# HOOF HEALTH CONNECTION

A quarterly news magazine produced by the Hoof Trimmers Association, Inc.

A photograph of three black cows standing in a field of dry, yellowish-brown grass. They are behind a wire fence with a wooden post. The cows are looking towards the camera.

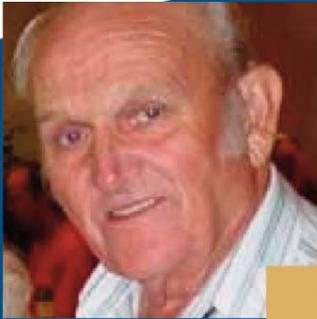
**Issue 101**  
**Spring 2020**

*Photo Credit: Matthew Whitten © 2019*

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Spring 2020



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Networking hoof trimmers, veterinarians, nutritionists, dairy producers, consultants and researchers around the globe to promote quality hoof trimming, provide educational opportunities on hoof care, and improve hoof health.



# PRESIDENT'S MESSAGE

Seeing out the old year and bringing in the new or reflection of all that we've accomplished, allows me for a moment to stop and give credit to those accomplishments to so many who have made a significant difference, and also to reflect on the negative experiences; to learn from them and move forward.

As 2020 begins, HTA board and committees are hard at work. President Elect Mark Burwell and the conference committee continue with preparations for conference in Ohio July 22-25. More information can be found on the HTA website and by contacting the office or HTA board members.

Speaking of the website, throughout January and February, Executive Director Jolie Estes and website co-chairs Steve Wunderlich and I have been working hard to design a new site. The change in web platform from YourMembership to WordPress allows plug and play options specific for our needs, hopefully generating a renewed excitement for all that we're about and what our association has to offer at a significant cost savings. Everyone on the web team is excited to present what we've developed. My gratitude to Jolie for the tremendous time, expertise and commitment. Jolie's workdays extended into the wee hours of the morning, holidays and weekends. Thank you.

We hope you'll find that we've kept a sense of what the HTA is all about. From where the HTA started - recognizing founding members and life time contributions in our industry - the support of volunteers spending countless hours on boards and as



**Philip Spence**  
**President, HTA**

representatives and on committees, and honoring the invaluable support of our partners, we believe we have built a website that honors this fabulous industry.

Of course we maintained our regulatory documents, policies and procedures and governance along with member value items like "Find a Trimmer" and Equipment Ads. In addition, we implemented some new features and programs to add value to membership. You'll be able to find archives of the Hoof Health Connection newsletters. We are also introducing a Trimmers' Mentorship Program (TMP) and because we are a passionate and caring group, a page called 'Family Update' where we will be able to keep in touch with each other a little better. We will announce births, deaths, marriages, who's hurt and who needs help. In this same vein of caring, we are reintroducing TAP! We are also introducing a new educational section with the resurrection of the Trimmers Toolbox, a new trimmers wellness section, podcasts and webinars.

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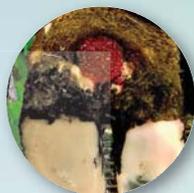
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# JUST A QUICK NOTE...

Christmas, New Years, Valentines and that silly groundhog. What do they all have in common? They are behind us. And there is so much ahead!

If you've visited our website recently, you should have noticed a big change. The website is completely different. In a move to make better use of association resources, the board cancelled the contract with the old website management platform and created an all new one. Some features you will find on the new one include:

- A return of the Trimmers Toolbox
- A new Mentor Program
- An online application for the HTA Scholarship
- Return of the TAP (Trimmer Assistance Program)
- Introduction of podcasts and webinars
- A Family Update section where we will keep you up-to-date on the welfare of our members
- Old copies of the *Hoof Health Connection* are archived on the site
- Opportunities to get involved in leadership and in developing HTA are made available
- A calendar of events – both HTA and other organizations – which we believe could be beneficial to you are included

- An online store featuring HTA merchandise (they make great gifts, too!)

Like any website, there is always room for improvement, so let us know what you think. Tell us how we can make it

even better. Don't be shy! We want to hear from you.

In other news, the board has reinstated the TAP program. It is available to support member trimmers in need. We all know, trimmers are a proud bunch and may be hesitant to ask for help. So if you know a trimmer who needs assistance, let us know. YOU can ask on their behalf. HTA is the biggest hearted group of people I've had the great fortune to know. Your donations (which can be made online through the new website) help your fellow trimmers. Thank you for your continuous generosity.

It's scholarship season! The scholarship application is available online. Check the website - we even have the ability to submit directly through the website! Remember, the deadline to submit is May 1st. Not going to college or sending someone? You can help support the next generation with a donation to the scholarship program!

Finally, the 2020 Hoof Health Conference is coming up in July. If you have not yet registered, please do. Registration is open at [www.hoofhealthconference.org](http://www.hoofhealthconference.org) and you can find registration materials later in this publication. Mark Burwell, Allen Schlabach, Richard West and the gang have been very hard at work. Allen gave a description of the pre-conference tours they have lined up in the last *Hoof Health Connection*. These folks have been working super hard on the conference and it is really shaping up to be something special.

The Nominations Committee is looking for people to step up and be a part of the new Board of Directors. If you are interested, please email Jamie Sullivan ([rippleviewhwc@gmail.com](mailto:rippleviewhwc@gmail.com)), or go to our website (yep, there is a nomination form there!) and put your name, or the name of someone you think would be an asset to HTA, in the hat.

Have a great spring!

Jolie Estes  
HTA Executive Director



# GEORGE LOWREY

1924 - 2020



George Harvey Lowrey, 95, was given his angel wings on Saturday, February 8, 2020. George was the son of Otho and Beulah (Lewis) Lowrey and he was born on August 5, 1924, in Breathedsville, Maryland. He grew up near the Antietam Battlefield with his eight siblings. His family attended church regularly. His father taught him to work hard and that the work was to be done before play.

On December 20, 1942, George married Audrey Stotler. His parents' faith driven ethics helped build the foundation for their 72 years of marriage. His wife lovingly called George, "Hammerhead." Soon after he married Audrey, George accepted his first cattle manager job at Hillside Lake Angus in Maryland. He admires and credits George Porter, an advisor from Scotland, for teaching him how to be a manager and how to trim hooves on cattle. He worked hard always striving to make the best better.

In 1954, George and Audrey moved to Williamsport, Maryland, where he managed Hopewell Hereford Farms. There he raised and showed many Champion Polled Herefords. One of his greatest accomplishments at Hopewell was raising and showing "Pawnee's Daisy," who reigned as the Champion Female at the 1958 American Royal.

George and Audrey moved to Pierpont, Ohio, in 1969, when he accepted the position of manager for Spring Creek Farms. There he continued raising and showing champions throughout the United States. George judged many cattle shows. He enjoyed sharing his knowledge with 4-H youth and

young cattlemen. He had an eye for selecting a calf that would grow up to be a "Winner." He devoted much of his life trimming and correcting the hooves for 4-H steer and heifer projects.

His expertise in selecting a calf, feeding, grooming, clipping, fitting, and showing cattle attributes to the many champions his own daughters and grandchildren have shown both locally and nationally. Some of the highlights were his daughters showing the Champion Polled Hereford Steer at the Ohio and Maryland State Fairs, Junior National Champion Heifer in Louisville, Kentucky, and Grand Champion Heifer at the Eastern National in Harrisburg, PA. In 1973 he handed the halter to one of his daughters so that she would be the first woman to show a National Champion Heifer in a National Show in Fort Worth, Texas.

George continued to trim hooves on cattle at each of the farms he managed. As years passed his expertise in trimming hooves grew. In the early 80's, George, along with his wife, decided to start their own hoof trimming business. He designed and invented a hydraulic hoof trimming table along with many different tools to do the trimming. The business was called "Corrective Hoof Trimming." Together they traveled the tri-state area trimming and correcting cattle's hooves.

His expert skill, to make an animal walk balanced and correct, accredited him to be known as one of the best cattle trimmers in the country. George and Audrey attended many National Hoof Trimmer Association Conventions where he has won recognition for his pursuit of excellence and service as a professional cattle hoof trimmer. He was awarded the Lifetime Achievement Award of the Hoof Trimmer's Association in both 2002 and 2005. When he was still able to travel, he attended the 2014 Hoof Trimmers Convention in Brookfield, Wisconsin, where he was again recognized for his contributions to the industry. He is known to be "one of the grandfathers of hoof trimming tools and innovations." After 63 years, George and Audrey retired in 2006, but still stayed in touch with many of their friends from their hoof trimming travels.



George will be remembered for his wit and sense of humor. When asked "How do you feel today?" he would grin and reply "with my fingers." He enjoyed sharing lots of stories and delighted in sharing a "dirty joke." George loved eating Cheetos. You could always find a bowl of Cheetos within his reach. George was a good judge of character. If you met his high expectations, he would wittingly proclaim that; "You're a great one." George was a perfectionist. If you showed him something you did well, he was quick to tell you, "It looks like I did that!"

Good-bye kisses will be remembered by his great grandchildren. He would instruct each one to tip their head to the side and then snort a loud kiss on their neck, sending them squealing with glee and running back to get one more kiss from their Pappy.

George is survived by his three daughters: Judy Gaylor of Pierpont, Georgia (Donald Bortnick) of Conneautville, PA, Barbara Niznik of Green Valley, AZ; and son-in-law William Hofka of Pierpont; six

grandchildren, Dustin Gaylor, Holly Gaylor, Heidi (David) Johnston, Kristi Graf, Matthew (Anne) Hofka and Michael Schwentker; eleven great-grandchildren, Dakota Gaylor, Jimmy, Jack and Annie Mae Johnston; Madelyn, Owen, Tanner and Teagan Graf; Megan and Lindsay Hart; and Breah Schwentker; and many nieces and nephews. George was preceded in death by his loving wife, Audrey; his parents; brothers Donald, Milton, Hugh and Robert; sisters Margaret, Beulah, Nanny and Josephine; and son-in-law Ted Gaylor.

George was laid to rest at Evergreen Cemetery in Pierpont, Ohio.

A special thanks to the nurses, aides, and staff at Jefferson Healthcare; his dear friend Kerry Loucks, who faithfully visited him every Thursday afternoon, and Pat English for providing a home for his beloved dog, Pepper.

If desired, contributions in George's name may be made to the Trimmer Assistance Program, Hoof Trimmers Association, 5014 FM 1500, Paris, TX 75460.

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# Prevent Young Stock from Acting as Digital Dermatitis Reservoir

Daisy Roijackers, MSc., Marc Spackler, MSc., Gerwen Lammers, Ph.D.



## Lameness

Lameness has a major impact on animal health, welfare and production. It is one of the main reasons for mature dairy cattle to be culled, next to mastitis and infertility. Combine this with the additional treatment costs and diminished milk production, and it results in major financial consequences for the dairy farmer (Willshire & Bell, 2009). The amount of scientific research focussing on lameness has increased rapidly over the last decade (Laven, 2019), and the mature dairy cow is almost always the main research subject. One of the main causes of lameness in dairy cows is Digital Dermatitis (DD) (Barker et al., 2010; Refaaj et al., 2013). Several studies have identified first parity animals as the most

susceptible to developing Digital Dermatitis (DD). The stressful experience around the first time calving, caused by environmental and metabolic changes, is suspected of causing a higher prevalence. However, the time before the first lactation is often overlooked. A small number of studies that did focus on DD in young stock found very interesting results.

## Prevalence of Digital Dermatitis in young stock

A study in Alberta, Canada, studied the prevalence of DD in young stock older than 12 months. In 11 DD positive herds, the DD prevalence in young stock > 12 months was 9.9% (95% CI: 7.8 – 12.0) (Jacobs et al., 2017). In Denmark, the pre-calving heifer prevalence for DD was 15% (data from 5 herds, 4 months before calving) (Capon et al., 2009). An even higher DD prevalence for heifers was found in a study from

Wisconsin, where the prevalence was 21% in 1 herd (at 21 months of age) and 30% at a mean age of 23 months (Gomez et al., 2015). This is problematic since these studies also showed the following Consequences for lactating dairy cows:

A. DD in young stock increases the risk and severity of DD after calving.

The presence of DD in young stock is associated with an increased DD prevalence in the lactation stage. When the young stock is exposed to an environment with a high DD risk, more severe DD lesions were observed after calving (Laven & Logue, 2007; Jacobs et al., 2017; Gomez et al., 2015; Holzhauer et al., 2012).

B. Lower heifer DD prevalence has a positive effect on hoof health and treatment costs in the 1st lactation.

A study by Gomez et al. monitored the percentage of animals that received treatment for DD in the 1st lactation in 3 groups: heifers

with no DD in the rearing period, one DD treatment in the rearing period and several DD treatments in the rearing period. The percentage of animals that received treatment for DD in the first lactation was 13.7%, 45.6% and 67.6%, respectively (Table 1). (Gomez et al., 2015). Previous studies have shown that first lactation cows have the greatest odds for DD, which shows the importance of controlling DD in this specific group (Somers et al., 2005; Rodriguez-Lainz et al., 1999).

**C. DD status as heifer impacts reproduction in the 1st lactation.**

Cows without DD in the rearing period had a higher conception rate compared to cows with DD in the rearing period. The conception rate after the first insemination was monitored again in 3 groups: heifers with no DD in the rearing period, one DD treatment in the rearing period and several DD treatments in the rearing period. The results were 42.3%, 36.3% and 29.0%, respectively (Table 1) (Gomez et al., 2015), which confirms the importance of DD control in young stock once again.

**The importance of healthy hooves in young stock**

It is often hypothesized that young stock may act as DD reservoir, in which the causative agent can be transmitted to lactating cattle after calving. By preventing DD infections in young stock, major

problems may be prevented in the lactation stage, including chronic cases of DD.

As footbathing is often not a practical application for young stock, alternative prevention measurements are needed. Individual spraying with a low-pressure sprayer or an automatic sprayer is easier, more practical and gaining in popularity compared to footbaths. Intra Hoof-Sol Spray has been specially developed as a ready to use rinsing liquid for spot spraying on the hoof. The strong adhesion provides a long contact time (over 9 hours) and reduces waste on the floor or in the manure pit (Roijackers et al., 2019).

The weekly use of Intra Hoof-Sol Spray maintains, supports and promotes healthy hooves and dermis. This product is registered with Health Canada as a Veterinary Health Product (VHP number: NN.U5D5). This usage approach and protocol provides a dual return on investment in your herd: by reducing hoof problems in young stock and providing a longer lifespan for adult dairy cows.

The Intra Hoof-Sol Spray is distributed in Canada by Diamond Hoof Care Ltd and their network of dealers.

Table 1: The effect of the DD status as heifer on first lactation treatment and the conception rate after the first insemination (Gomez et al., 2015).

DD status as heifer	No DD in the rearing period	One DD treatment in the rearing period	Several treatments for DD in the rearing period
Treatment for DD in first lactation	13.7%	45.6%	67.6%
Conception rate after first insemination	42.3%	36.3%	29.0%



# How Cold Weather Affects Cow Claws

by Brad Ingram, Midwest Regional Sales Manager and Bovine Hoof Care Expert, Vettec, Inc.

As winter weather sweeps across the nation, dairy farmers face tough conditions when it comes to maintaining healthy cow claws. Heavy rains and frequent climate changes from wet to dry create sloppy conditions and raise the potential for bacterial infections and other negative effects on cows' feet.

When seasonal changes take their toll, farmers can do two things to manage claw hygiene: keep walkways clear and utilize foot baths or use foot spray regularly.

## Wet Weather Attracts Bacteria

In cold, wet weather, cows' feet tend to retain more moisture than in dry conditions. Wet hooves have a higher chance of developing foot rot, which causes the hoof to deteriorate, due to excessive bacteria that get caught in the moisture. This can be very difficult to combat and usually requires antibiotics to get the feet back to normal.

The best way to avoid a bacterial infection from wet weather is to stay mindful of the bacteria that collects in the manure, and keep walkways as clean as possible.

## Clearing Common Animal Pathways

As a wet climate sets the stage for bacteria to run rampant, scraping alleys of manure more often in the wintertime will reduce the chances of it sticking to animals' feet. It's also important to note that the wetter the manure, the easier it sticks.

To keep cow claws clean in wet weather, a daily scraping routine is key, especially on pathways that the animals travel across multiple times throughout the day. Bacterial infections can lead to serious hygienic issues that are costly to fix.

## Utilize Footbaths or Foot Spray

Footbaths and foot spray are another crucial part of a winter hoof care regimen. These techniques involve chemicals that help fight infection when the potential for diseases is at its peak. If outside temperatures permit footbaths, farmers can move their cows through them twice a day to ensure hoof cleanliness. With two steps per foot in the footbath, the cow will exit the bath with a residue that

provides a hostile environment for bacteria to grow. Ideally, footbaths should be near a water source to keep the process efficient.

In subzero temperatures where a footbath would cause a slippery ice problem, dairy farmers can use foot spray on the hooves to keep them treated. A concentrated foot spray can help prevent infections like digital dermatitis, which can cause intense pain and even lameness. Farmers can spray the back of the feet about three to five times a week while the cows stand in feeding stalls. Employing these techniques will help maintain healthy claws through the cold season.

With the right tools, dairy farmers can help ensure the comfort of their animals and maintain the productivity of the herd. Stay ahead of lameness this winter by keeping your cows environment as clean and dry as possible.



# Herds with the Best Hoof Health Have These 5 Things in Common

Jolie Estes, Executive Director, Hoof Trimmers Association



Photo Credit: Matthew Whitten © 2019

*This article originally appeared in the February 25, 2020, issue of Progressive Dairy magazine.*

Every dairyman knows the health of the herd is invaluable when working to achieve the highest production and profit. The old adage “an ounce of prevention is worth a pound of cure” certainly goes a long way to not only prevent the reduction in production but to reduce the difficulties and expense in reaching that pinnacle of profitability.

Hoof Trimmers Association recently surveyed our members to determine the Best Practices of dairy processes with respect to hoof health and care. The resultant information provides an excellent road map for dairymen and trimmers alike to promote the welfare and productivity of the herd. These areas of consideration are all equally important and listed in no particular order other than ease of the author.

## FARM HYGIENE

Ben Neadom has been trimming hooves for 29 years. Currently he trims more 10,000 cows a year in central New York. Neadom swears, “Environment is very important, especially when it comes to heel warts. Keeping the barn cleaned in

between milking helps keep the cows’ environment cleaner to help reduce the spread of heel warts.” Mark Burwell, HTA President-Elect and Virginia trimmer, concurs. According to Burwell, cleaning free stalls and scraping alleyways every time the cows leave the pen and providing ample bedding in the stalls helps cows remain healthy and reduce stress on their hooves resulting in healthier cows, increased milk production and lower veterinarian costs.

The evidence of the impact of hygienic practices is not merely anecdotal. Ongoing research by the University of Liverpool reports there is significant data demonstrating that digital dermatitis (DD) treponeme DNA on hoof knives after trimming infected hooves. The Liverpool study is investigating various ways to increase the disinfection of hoof knives following trimming to eliminate or at least largely curtail the spread of DD from shared knives. Additional information on the protocol and research is available at <https://ahdb.org.uk/reducing-spread-of-DD>.



## FOOTBATH

Anyone who has spent time in the dairy industry knows that a significant cause of income loss is directly related to hoof disease and lameness. According to the Welfare Quality project, the average farm experiences a fairly consistent 25% lameness in the herd.

One relatively easy and inexpensive way to offset the threat of profit reduction due to hoof problems is the consistent use of a footbath system. Various studies have clearly demonstrated that when processed through a properly prepared foot bath once a day for just three months, one can reduce disease and lameness by as much as 20%. Once any chronic conditions are corrected, HTA trimmer Paul Hilgers of Wisconsin recommends creating and running a regular footbath schedule three to five days a week. Needom agreed, suggesting the footbath should include a copper sulfate solution.

It should be noted that footbaths are preventative, not therapeutic. In other words, once the infection has set in, the dairy is already behind in the care process. While the footbath is not going to cure what ails them, it does play a vital role in preventing the spread of infectious conditions. Burwell reports one of his farms runs a regular footbath in both the milking herd and dry cow barn. In his latest visit he found that out of 520 head, there was not a single case of DD. He largely credits the footbath for this achievement.

## MAINTENANCE

Let's cut to the chase on this one. Trimming is not a "one and done" proposition. Maintenance trimming should be conducted every five to six months, according to Hilgers. For cows with chronic lameness, he recommends high maintenance trimming every three to four months, as determined by a quality, trained trimmer based on collected herd data. He also suggests trimming springing heifers two months before calving.

Needom employs a regular trimming schedule for the herds he works. Typically, this includes a weekly visit to the herd to trim maintenance cows, address any new issues. Follow-up with cows previously treated is possible with this weekly schedule as well. Additionally, that weekly visit

allows for early intervention with cows who are developing concerns. This early intervention can save the cow a lot of pain and the dairy a lot of money down the road.

## COW COMFORT

Cow comfort impacts quality of life and by extension the quality and production of milk. There are multiple areas of consideration when discussing comfort with respect to hoof health: walking/standing, exercise and lying.

No one likes standing on a hard surface all day. Ergonomic engineers have spent thousands of hours creating special cushions for office workers to stand on when using photocopiers! It doesn't take that long to make a few copies. If humans need special cushions to stand on for those few moments in front of the copy machine, cows need some help for their feet and legs, too!

Proper floor surface and maintenance should be a first thought in developing or modernizing any dairy cow structure. These girls are going to be spending a lot of time on their feet in there and in the long run, the investment in a good surface will pay off. The surface should be sloped to allow for proper drainage. Simply grooving the floor will not accomplish that. The grooves will fill up with solids. Slip & catch floors – where the grooves are not sufficiently close together to stop slipping – can damage hooves and contribute to lameness rather than aid in prevention. The key is implementing a non-slip surface which may or may not include grooving.

Consideration of a rubberized floor surface should also be considered as it provides some cushion while maintaining a naturally occurring non-slip feature. Rubberized flooring has been shown to help improve motility in lame cows and reduces the occurrence of lameness related to slipping and weight stress. According to the University of Wisconsin-Madison School of Veterinary Medicine, rubberized flooring is highly recommended in transfer lanes, holding areas, parlor returns, platforms and exits.

Rest is vital for cows. On average, cows need between 12 and 14 hours of rest time daily. For rest to be restorative, it should be conducted in a comfy



place with fresh, clean, soft bedding. The use of clean straw – changed out every couple of days – provides the cow with the opportunity to relieve naturally occurring weight stress from the hooves.

Finally, providing exercise space accessible both day and night, is important. The exercise areas should be accessible without impediment or fear and constructed of such material to ease the stress placed on the hooves – in other words, not on concrete.

## TEAM APPROACH

Keeping cow feet healthy is a big job and is certainly not a one-man undertaking. It takes a full team, working in concert to bring all the factors together.

One key member of that team is a quality trimmer. Many dairies are managing the trimming in-house. The problem is the in-house trimmer may not be a trained trimmer, but rather the person who happened to draw the short straw for that day. There is much to be said for generational knowledge, particularly in the agricultural industry. However, a lot has been learned over the years and having a well-trained, quality trimmer – either on staff or as a visiting consultant – is vital to the hoof care process explains Gary Buchholz of Michigan.

Phillip Spence, HTA President and trimmer in Alberta, Canada stresses the importance of ongoing locomotion assessment, but from a trimmers perspective. He has found that the trimming data collected from hoof care programs can quickly and reliably assess the levels of lameness on any given farm. This helps develop a treatment protocol by identifying which cows have lesions and which are lesion free. It also enables the trimmer to track progression of lameness in the stock of the farm noting both infectious and noninfectious conditions.

Once this information is gathered, it can be shared with farm management and the appropriate farm staff. Making the dairy manager aware of potential risk factors and advising him of the options available for trimmer-provided care begins the process. The manager can then bring in key farm

employees to implement the plan. The first step in implementing a health improvement plan? - getting the farm help involved and trained to recognize sore feet and render aid between trimmings. This everyday level of involvement is vital to early identification and treatment of hoof problems and results in a quicker return to optimum health, according to Neadom.

Dairymen know that what they feed their cattle, how they treat their herd, the responsiveness and availability of good veterinarian support is all necessary to positive operations and herd management. The exchange of information between the dairy manager, nutritionist, field team, veterinarian and trimmer is not always easy. Getting all these people in the same place is difficult. This can be remedied to some degree, reports Spence, by collecting hoof health data electronically and compiling it for quick review by the other members of the care team.

The cost of raising a cow – the food, veterinarian expense, land, equipment – adds up quickly. Retiring one before her time just does not make sense when prolonging her life and productive years and levels is not just possible it is a practice that helps one cow while improving the entire herd. The applications discussed can resolve existing hoof health issues and prevent their recurrence as well as the development of others. This translates to a savings of thousands of dollars for the dairy.

The best way to reduce the number of lame or hoof diseased cows in the herd is to hire a quality trimmer. They can provide a valuable resource in developing an encompassing approach to herd care designed for the best hoof results.

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HOOF HEALTH  
CONNECTION

13

# Now Accepting Applications for the 2020 Hoof Trimmers Association Scholarship



Annually, Hoof Trimmers Association offers two \$1,000 scholarships to the children of an active trimmer or a student sponsored by an active trimmer. Applications must be completed and submitted by May 1st.

## Student/Child Eligibility:

- A. Those eligible to apply must be dependent children of an active member who meet the parent criteria defined below OR if not a dependent child, the applicant must include a letter of high recommendation from an active member. Dependent children are defined as unmarried children supported by a parent including natural children, adopted children, foster children and step-children.
- B. The student/child must be enrolled, or enrolling in, a post-secondary educational program: four year accredited college or university, junior college, vocational or technical school.
- C. Previous recipients are not eligible.

## Employee/Parent Eligibility Requirements:

All of the following requirements must be met.

- A. Active Member for two consecutive years.
- B. Children of selection committee members are exempt.
- C. Recipients of scholarship may hold other scholarship awards or prizes in addition to the HTA Scholarship.

For full information, please visit our website: [www.hooftrimmers.org](http://www.hooftrimmers.org)



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# Top 4 Foot Bath Management Mistakes - Solved

Jim Edwards, Ph.D., Hoof Zink Consultant, Hoofzink.com



No doubt that you've read numerous articles on footbath management; but, few tell you the common mistakes that impact the success of your footbath program.

Most footbath product labels include generic management protocols which are effective when "accurately" implemented. Although there are many points where footbath accuracy can be lost, let's focus on the top four mistakes that are key to achieving maximum value from your footbath.

## **Common Mistake #1 - Water volume**

Often, footbath manufacturers quote their volume based on a complete fill when placed on a level surface. To best determine the "working" volume in your footbath, the measurements should be taken with the footbath in its normal use position and filled to no more than one inch from the top at any point. This reduces sloshing in the first few cow passes which lead to loss of volume and effective cow passes.

Product labels often provide this equation for determining your footbath volume: Length, ft. X Width, ft. X Depth, ft. X 7.48 = gallons. The depth

measure should be taken at the absolute middle of the bath as this provides the average depth.

Accurate water volume is critical for determining treatment product inclusion rate and cow passes. Placing a plastic ruler or marked measure with the correct depth next to the footbath reminds employees the importance of accurate footbath fills and provides a quick tool to verify fill accuracy.

## **Common Mistake #2 - Treatment concentration**

Achieving the right treatment concentration is completely reliant on knowing your footbath volume as determined above. On most farms, once the footbath volume is determined, a container is marked to indicate the amount of footbath product for that volume.

There are two potential mistakes:

**Overfill** – Adding the correct footbath product measure to an overfilled footbath results in a diluted treatment solution that is less effective for every cow walking through the bath.

Common footbaths near 6 ft. length calculate 10 gallons for every inch depth. If the appropriate middle depth is 5 inches but is overfilled to 6 inches, the volume increases from 50 to 60 gallons. That's an increase of 20% volume but decrease of 20% treatment concentration.



**Underfill** – Adding the correct footbath product measure to an underfilled footbath produces a more concentrated footbath solution. If we use the same example as above, one inch less middle-depth fill produces a footbath with a 20% decrease in volume; but an increased solution concentration greater than 20%.

Depending on the product, this increase may produce a greater acidity (lower pH) which may be detrimental to hoof tissue. In addition, footbath contamination of manure, urine, mud, etc. is similarly concentrated which reduces effective cow passes.

Most dairy producers and nutritionists would never accept the variation in rations that are commonly found in footbath concentrations on some of the best managed dairies.

### **Common Mistake #3 - Cow Passes Before Refill**

A cow pass is often defined as one cow walking through the footbath. However, was it an “effective cow pass” with the antibacterial benefit to kill harmful heel wart and foot rot bacteria?

Many footbath product labels provide ranges of 300 to 500 effective cow passes based on the common 50-gallon footbath volume. Producers often accept the higher number, representing ideal management, rather than the lower number which considers common on-farm conditions and is more realistic. If the treatment cost is \$25 per 50-gallon bath, 500 cow passes would cost \$0.05/cow pass compared to \$0.083/cow pass at 300 passes.

Some products suggest optimum pH ranges for effective cow passes. Few dairy producers monitor pH by cow pass to establish a baseline of maximum number of passes. In addition, changes in water alkalinity can greatly impact pH ranges. If pH is used to determine footbath cow passes, it should be routinely monitored rather than accept a single initial measure.

Not only is the “effectiveness” of a cow pass a function of the footbath product and proper concentration, it’s also affected by the length of the footbath and the number of rear hoof immersions for each cow. Rear hoof immersion is important as 90% of hoof problems are on the rear hooves.

Ideally, each rear hoof should have at least two immersions. The University of Wisconsin School of Veterinary Medicine has researched footbath length with rear hoof immersions (shown below).

A footbath length near 6 ft. has just over half the probability of two or more rear immersions on each hoof while a footbath length near 10 ft. almost always has at least two immersions.

The common question is why are so many poly footbaths near 6 ft. if they do not provide adequate rear hoof immersions? The answer is simple - most do not have plugs and this length is more easily dumped and cleaned.

These shorter baths can still be very useful if placed end-to-end providing a total footbath length near 12 ft. Producers immediately respond that this requires more treatment product and cost. NOT TRUE. Effective cow passes are a function of footbath volume, which is doubled by using two short baths end-to-end.

*Would you ever tell a producer with a 100 gal. footbath to expect the same number of effective cow passes as a producer with a 50 gal. footbath?*

### **Common Mistake #4 - Footbath frequency**

Frequency for an effective footbath program is much like to teat dipping. Teat dipping does not cure mastitis; but prevents the spread. Similarly, a footbath program should be run frequently enough to control the spread of bacterial hoof problems rather than wait for a widespread outbreak.

Footbath frequency can vary from every milking to “as-needed” based on the prevalence of heel warts or foot rot acceptable to the dairy producer. An effective footbath program results in a hoof trimmer report of less than 10% of the trimmed-cows requiring treatment for heel warts or foot rot. The frequency needed to produce this result is based on the efficacy of the treatment product and cleanliness of the hoof and cow environment.

Dr. Nigel Cook, U. of WI School of Veterinary Medicine, proposes leg hygiene (cleanliness) scoring to determine the frequency of foot bathing.



If Dr. Cook's recommended frequency does not produce acceptable hoof health in a properly prepared footbath, the product efficacy or "scheduling of treatments" should be questioned.

Scheduling of treatments refers to the chosen days each week for treatment. It is common to hear producers say they run treatment three times a week on Monday, Wednesday and Friday. However, running the footbath on consecutive days provides a more effective bacterial kill than spanning treatments over time.

Remember, each mistake impacts the effectiveness of your dairy's footbath program and multiple mistakes compound the problems. Management's best understanding of a footbath protocol and a quality product; can still produce poor hoof health. Each verbal transfer or translation of the footbath program is an opportunity for misunderstanding. Written protocols are a must.

Review your footbath procedure for any of these common pitfalls. Make sure everyone knows the

proper protocols and routinely monitor that they are being followed.

Sources:

[www.vetmed.wisc.edu/dms/fapm/publicats/press/hw\\_footbath.pdf](http://www.vetmed.wisc.edu/dms/fapm/publicats/press/hw_footbath.pdf)

*continued from page 3*

The deadline for change over to the new site was, February 29 (Sadie Hawkins Day). By the time you read this the new site will be up and running.

We acknowledge that there is a great deal of work still to do. While we are caught up in the excitement of building on a very strong foundation, the goal of this project is also to perpetuate a vision for the future of HTA and the wellbeing of our members. We welcome your feedback.



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# How to Position a Block on a Cow

by Brad Ingram, Midwest Regional Sales Manager and Bovine Hoof Care Expert, Vettec, Inc.



Blocking is a helpful treatment option hoof care professionals can use for dairy cows to elevate an affected claw off the ground. With a block in place on a healthy claw, an affected claw has the necessary elevation and comfort to heal properly. While applying blocks can help maintain milk production and ultimately save money, it's important for hoof care professionals to also position blocks correctly.

## Where to Line Up a Block

For a cow's optimal safety and comfort, hoof care professionals should first consider the size of the block they use on their cow. Think of a block like a shoe.

Similar to how a shoe fits on a human foot, with the shoe not extending far past someone's heels or toes, a block should fit the length of a dairy cow's foot. If a block doesn't fit the foot properly, it can put the cow at risk for injury. For instance, many times dairy cows will walk in a single file line when taking trips to the parlor. If a block is too long past a cow's heel, the cow behind it could step on the block from behind and rip off the block, not only causing pain for the cow but an added hassle for dairy farmers.

It's ideal to position a block just past the weight-bearing part of

the heel. This technique provides a soft cushion on the heel and prevents it from striking the ground, similar to a runner's heel coming into contact with the hard ground. If a cow's heel is not lined up with a block, the strike on the heel could eventually lead to tendon damage.

Another tip to consider is the positioning of the block at a cow's toe. If the block is too long beyond the toe, it forces the cow to walk straight on the heel which can also cause bruising or injuries to the tendon. Again, it's best if the block fits a cow's foot like a shoe to keep them from developing injuries.

### Applying and Managing Blocks

When applying a block, hoof care professionals should line it up at a 90-degree angle with the inside of a cow's leg. This helps to keep the foot from rocking left to right, and instead holds it securely in place. Once the block is positioned correctly on the foot, a quarter inch of glue is just enough for the block to stick and stay. Using an excessive amount of glue acts similarly to a peanut butter sandwich with too much peanut butter. If too much glue is applied, the material oozes out the sides and goes to waste.

For best results, hoof care professionals should only apply the necessary amount of glue to hold the block to the foot firmly. It's also crucial to be aware of how the glue dries. Keeping the spread of adhesive even across the block will ensure the glue dries smoothly and will avoid sharp edges that could stab into the cow's heel and cause discomfort.

In terms of which blocks to apply to a cow's hooves, rubber blocks from Bovi-Bond™ provide the necessary traction and cushion hooves need for a dairy cow to stay safe and comfortable. Whether a cow is spending its time on lush grass, soft or hard dirt, gravel or concrete, Bovi-Bond rubber blocks add give and help avoid the potential for slippage and injury while allowing an affected claw to heal.

Depending on the cow's sole thickness, there are different adhesives that hoof care professionals can use to attach the blocks onto the claws. Bovi-Bond adhesives are proprietary two-part polyurethane adhesives that bond both wood and rubber blocks. They have a fast, 30-second set time and a strong bond to keep blocks in place.

The feet and claws support a cow's entire body weight. When a cow injures a claw, blocks must be applied correctly in order to support the healing process as opposed to elongating it with the potential for more injuries. Talk to your hoof care professional about the importance of applying blocks properly.



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# My 45 Years as a Hoof Trimmer

Peter Kudelka

Looking back on a professional life that started in September of 1973, which makes it 45 years plus, the real beginning was a fall evening in 1961 coming home from school on a beautiful, calm September evening to find Martin Snyder, a Pennsylvania Deutsch gentleman finishing up trimming the dry cows out in the pasture with Stanley 60 C chisels, a teak mallet & a hardwood box on a sheet of plywood. He would come back for the next six years and do a run through Ontario that stretched from Almonte outside of Ottawa to Woodstock. As a young assistant herdsman, he had learned his profession from a man called Punky Anderson at Flying Horse Farm, Pennsylvania. But by the time I met him he was living outside of Cortland, NY, and doing most of his work in the northeastern US. His brother Dutch worked as a ring man for well-known auctioneer Johnny Merryman and my father met him through Guernsey sales at McDonald Farms, which later became McJunkin Properties.

I was born Peter David Kudelka, the eldest of 6 children to Kathleen and John Kudelka in Newmarket, ON in February 1947. My father, a Hungarian immigrant, took a farm manager's job in 1948 near Newmarket, ON, on 270 acres, 30 miles north of Toronto. The farm had been purchased as an estate to keep polo ponies and later Irish hunters for riding to fox hounds. The farm would be a Guernsey powerhouse for the next 37 plus years. Raised on this dairy farm, I lived and worked with Guernsey dairy cattle until the age of 26, except for two years getting a diploma in agriculture from the University of Guelph (Farm Operators and Managers) and two years with Canadian University Services Overseas, Canada's version of the Peace Corps) in Tanzania.

Martin Snyder had time for a 14 year old kid and as he came to the farm for the next 6 years I was

always there to help and was fascinated by what he did and how he did it. He tied the cow to the wall of a stall standing on plywood, using a one inch chisel, lifting the foot to the wooden hardtop box, carving the bottom with a two inch chisel, and finally using a rasp to finish off the hoof. There was no hooked knife or anything else. There were a lot of cracked heels that after cleaning out were sometimes flooded with gentian violet, muriatic acid or chlorine. In my high school years, I trimmed with him on the home farm and also at the Jersey farm of Norm Bagg on my own on Saturdays.

December 1972, at a family Christmas Party I walked into a room and my brothers, sisters and cousins promptly left. I realized that I was living with too much stress and tension and that there had to be a change. Seeing what my father had had to deal with over the years I knew that whatever I did, I did not want to work for someone else. I would have something for myself and hoof trimming dairy cattle was an option but I did not know if my back could take it. I had a connection with a chiropractor so I went to see him. He took about 13 X-rays of my back and sent them off to be properly read. When they came back, I went to see him. His comments were that I survived two years in Africa with no problems and he saw no reason that I would not be okay with whatever I decided to do. At the same time Hank Van der Post had come to trim Glenville and encouraged me to get on and start trimming as he could not cover all the work he was getting.

So in September 1973, I had bought a used F150 Ford half ton truck and \$60 worth of equipment: a wooden mallet - not teak, 2 two-inch & four one-inch chisels which I kept in a wooden box that my Grandfather had made for me. With my Grandmother as an answering service, I started to trim feet on dairy cattle. I tried to do at least 12 a



day and on good days I was doing 22 head a day. I worked on so many corkscrew claws that it got to the point that I would ask the farmer to bring me a cow with long toes so that I could get an idea of what a foot should look like.

My equipment kept changing. I found more efficient ways to do the job that allowed for my size, strength, and knowledge. My mallet became a two-and-a-half-pound steel. My 1-inch chisel became an inch and a quarter. A hook knife was added. A stanchion head gate with 20 feet of chain top and bottom that I could hang in any barn. When I was not trimming, I found a part-time job with a building demolishing crew and numerous other odd jobs. I honestly thought that I would be hoof trimming, wheeling and dealing livestock, prepping cattle for sales and shows, and relief milking; living out of motels and in bars for meals. That all changed pretty fast and common-sense set in. The first thing I had to do was to learn to eat and sleep properly and drink enough water. In other words, I had to look after myself and live the adage of not burning the candle at both ends. I had to realize that being a horse by day and a bull by night was not going to work.

At this time my name was recommended to Gordon Bell, a fieldsman for the Holstein Association, who was looking for a hoof trimmer in the southwest Ontario. In June of 1974 I ended up moving to Stratford, as it had lots of Holstein cows nearby and live theatre. So, I had an apartment and lots of work. On February 2, 1975 I met my future wife on a ski slope outside of Thamesford and after a whirlwind courtship we were married in Deganwy, North Wales, on August 5 1975. That December we bought a house and a year later moved to a country property (16 acres) in Ellice Twp outside of Stratford.

In 1975 I also got a call from an agricultural representative in St. Hyacinthe, Quebec, asking if I would be interested in coming to work in Quebec. I said, "Sure", if they could wait until I finished a three-week run in the Ottawa Valley. They agreed.

By 1977, I was going to Quebec first and doing the run in The Ottawa Valley second. The Quebec run starts on the first Monday in April and at its height

was a 4-6 week run. Home for two and back to the Ottawa Valley on the Victoria Day Weekend for another 3-4 weeks.

Three and a half years after starting to trim dairy cattle as if they were horses, I finally had the discipline, muscling and knowledge to know what I did not know and was running a successful business. The following years saw the growth of my family and my business and life's balance come into place. Those first three and a half years were extremely difficult. The discipline of sticking to the job was not hard but the building of muscle, learning to lift feet without twisting and learning to keep my mouth shut as I had always tended to be outspoken took some doing. I cannot describe the number of times I visited my chiropractor in a cold sweat to try and get my back to loosen up. Laying around until my back loosened never worked and eventually I would learn that if I kept trimming, generally it would loosen after two and a half days but during that time I lived in a cold sweat.

The other issue that I had to deal with in those first ten years was anger management which tended to surface out of frustration and the fact that I was living as an adrenalin junkie. This did not change until I got the nerve to tell the farmer that if I was going to trim in his barn that I had to control the radio or the radio had to be turned off. Trying to relax into a job with heavy metal or disco was really hard for this folkie, Motown, country and western fan.

I always saw myself as an educator, as I was well travelled, a political junkie, a people person and knew the likes of differences and the differences of likes and I did use these in my work and personal life. I made a point of never telling a dairy farmer what to do but I always asked questions which would leave him thinking of alternate possibilities.

I found a border collie pup in the Ottawa Valley and took her at a year of age to obedience school and it was not what she learned but what I learned that mattered most. Rules: 1. Keep it Simple and Special 2. Be Consistent 3. Always be fair even when it is going against you. I have always attempted to treat my wife, my kids, my clients and cows the same way. A strong sense of right and



wrong, plus 'the golden rule', those were the rules that I abided by.

In my community I sang Barbershop and in Church Choir. I also joined the local Optimist Club and became Chairman in my turn. Having joined the Hoof Trimmers Association, I took a turn at the Presidency there too. After 12 years of living on the farm and an amazing trip to attend The World Sheep and Wool Congress in Tasmania, I came home one day to my wife suggesting we should move as we had already sold our small flock of sheep. We were not making any money from them and she had things she wanted to do, so we ended up moving to town. I knew that my kids were not going to be farmers. Little did I know that my wife would end up going back to University and 7 years later I would find myself married to an Anglican minister! This was not how I saw my life but my mother had done something similar and ended up with a Master's in Education and a fourteen-year teaching career. How could I not support my wife's decision?

The dairy industry was changing quickly. When I started, we trimmed once a year and with the pasturing of dairy cattle that was all that was needed. By the nineties this had changed as more and more herds were going to total confinement both in free stalls and tie stalls and herds were getting larger and larger. I was a tie-stall trimmer and was exceptionally good at what I did. I had never had an anatomy lesson on the cow's foot until I had been trimming for twenty-four years; the importance of knowing anatomy and the mechanics of the foot cannot be understated and was what the profession really needed to hear in the nineties. This happened 24 years after I had started trimming from Paul Greenough at the North American Veterinary Conference and a visit to Ontario by Chuck Guard.

The Hoof Trimmers Association became more and more important. It seemed like free stall housing and multiple trimmings on the same large farms seemed to happen almost at the same time. Hoof trimming was changing as well. Because I was trimming with chisels and only trimming once a year, it was no problem over-trimming because two weeks later the cow had grown back the foot she needed. This was not going to work in the free

stalls. It was the late '90s before I started to use a grinder and many years before I was comfortable with it. Reading the *White Line Method* was a big help in my rethinking how I wanted to trim.

Equipment has seen a radical change almost as much as the people who did the job. Previous to the 1950s, hand tools were the order of the day but by the '70s we were starting to see tables and by the '90s numerous lifting standup chutes. Grinding discs and wheels also saw a big growth not only in style but quality, not only the wheels but knives.

Safety has always had to be #1. We are a long way from handling cows on a halter, standing them on plywood, quality chisels, knives and restraints that make for safe handling animals about 1600 pound plus, with flying feet and sometimes questionable attitudes. With the advent of grinding discs, the issue of safety became paramount because grinders are not very forgiving.

The breeding of purebred cattle has changed from going to buy a quality bull better than what you have at home to AI to the collection of data on the individual cows to DNA. All these changes we have seen over the last 70 years. This was done by cattlemen who have now been replaced by dairymen. All those cattlemen who mentored us are gone and I feel will be sorely missed. When I started to trim, I was aiming to keep a cow in the herd productive and there were a lot of 12 and 14-year-old cows who have completed 10 plus lactations. Now most herds have completed just over two and the average age is less than three years of age.

For the past 15 or so years one of the changes we are starting to see in the hoof trimming is the collection of data on computers. We have some awesome programs out there to do it.

Thirty-five years on there was another notable happening going on. All those herds that I had worked on over the years were changing. Some were gone and cows no longer there! Some changed hands or generations and you were their father's or grandfather's hoof trimmer and you were not theirs. Part of my problem was the fact that I was old technology in a new technology system. Funnily enough I seem to have no



resentment to this as life goes on and we roll with the punches.

I will never stop trimming but obviously there will be fewer and few farmers that will want to use my services. When I started there were only 4 full-time hoof trimmers in Ontario. There are now 63 plus and they have the chance of being much better educated than I was when I started and more power to them.

Looking back on my 45 plus years of working life, I have enjoyed every minute of it. There have been challenges but I have enjoyed - for the most part - my clients, the animals, the travel and the ability to keep learning new things, such as sheep shearing and writing. Like all of us with children, the example my lovely wife and I set gave them a work ethic and they are now both gainfully employed and only coming home for very welcome visits.

I would like to say thank you to all who have supported me in so many ways. I hope that I was a support to you and others. While I may not be trimming full time, I certainly support what you are trying to do in the care of cow's feet and looking after each other as part of the hoof trimming fraternity. I will always be on the side lines watching and will be of help in any way I can.

God Bless You All!



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# Risk of Lameness in Dry Cows

Ruan Daros, Hanna Eriksson, Dan Weary and Marina von Keyserlingk  
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Lameness is common in dairy cows and is considered a major welfare challenge for the dairy industry. Lameness is a painful condition that reduces milk production and reproductive performance, and increases involuntary culling. Lameness is often caused by hoof lesions that can be identified at hoof-trimming. Longer lasting and more serious lameness cases are more difficult to cure and more likely to reoccur, meaning that prevention and early identification and treatment are key.

The majority of research to date on lameness has focused on lactating cows, and several studies have identified early lactation as a period of high risk. However, very little research has assessed if lameness early in lactation is associated with events occurring during the dry period. For example, it is commonly recommended that cows be hoof trimmed at the end of lactation (i.e. dry-off), but little research has investigated the effectiveness of this practice.

In this report we summarize recent UBC work that focuses on this gap in research. In one recent study, we assessed how new cases of lameness develop and resolve during the dry period. We also examined which factors were associated with lameness onset and cure, including hoof trimming before dry-off. We followed 455 cows on 6 different

dairy farms in the lower Fraser Valley of BC. Cows were enrolled two months before calving and their gait was assessed weekly until calving. Cows were gait scored on a 1 to 5 scale (where a score of 3 or higher was considered lame, and a score of 4 or higher was considered severely lame). From these weekly gait assessments, we determined both the number of new lameness cases (i.e. cows that were originally scored as sound but then became lame) and the number of cases that cured (i.e. the reverse pattern) during the dry period.

As illustrated in Figure 1, a little less than half of the cows we followed were scored as lame when first assessed after dry-off. Of the lame cows, about two-thirds continued to be lame throughout the dry period, whereas the remaining one-third showed signs of recovery. Of the cows that were assessed as sound after dry-off (i.e. with a gait score of less than 3), half of these remained sound throughout the dry period, but the other half developed lameness. The overall effect of these patterns is that lameness prevalence increased from dry-off to calving, suggesting that the dry period should be considered a risk-period for lameness onset.

One special feature of this study was that we gait scored cows very frequently – this routine gait scoring allowed us to detect even short cases of lameness. For example, 44 cows were only



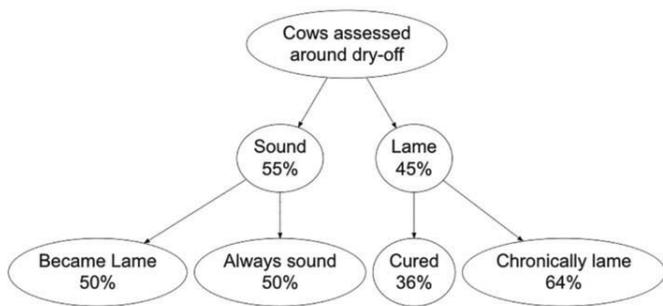


Figure 1. Proportion of cows that became lame and cured from lameness from dry-off to calving. Data from 455 cows from 6 freestall dairy farms in the Fraser Valley, BC.

diagnosed as mildly lame (gait score = 3) in one week but not lame in the remaining weeks. Including such short cases of lameness may artificially increase the number of new cases of lameness, so in our study we made the decision to consider them sound. Assessing lameness more often allows for timely detection and confirmation of milder cases.

We assessed factors associated with lameness onset during the dry period. From all of the cows enrolled at the beginning of the dry period that were sound, 50% developed a case of lameness lasting two weeks or longer. Primiparous cows benefited more from hoof trimming before dry-off than multiparous cows. Our interpretation of this result is that older cows are more likely to have been lame in previous months, hindering the protective effects of hoof-trimming. Also, younger cows are less likely to have been lame in the previous months, and thus may have benefitted more from hoof-trimming at dry-off.

In the case of dry cows that started the study as lame, 36% cured during at least part of the dry period. Compared to cows that were chronically lame – i.e. always lame during the study period – cows that cured were younger and over conditioned (BCS > 3). These results are consistent with previous studies that reported that thin and older cows are more likely to become lame. We also found that thin cows (BCS ≤ 3) were more likely to be chronically lame. Managing body condition during lactation may prevent lameness cases from developing and becoming chronic. Of the cows hoof-trimmed before dry-off, 10% presented claw horn lesions and another 10% presented infectious hoof lesions. Cows with claw horn lesions before dry-off were more likely to be chronically lame

compared to cows that did not have any lesions or only infectious hoof lesions.

Just over a quarter of cows were sound and remained sound throughout the dry period. Efforts to reduce lameness should focus on understanding the benefits in preventing the first case of lameness in a cow's life. We urge future studies to focus on the risk factors associated with first cases of lameness and intervention studies to guide best practices to prevent this malady.

We also followed cows after calving, gait scoring cows at 2 and 8 weeks fresh. A key result from this analysis was that cows that developed lameness during the dry period were 37 times more likely to be lame at 2 weeks fresh, and 4.5 times more likely to be lame at 8 weeks fresh, compared to cows that were sound before calving. This result suggests that the management of dry cows may be especially important in reducing the risk of lameness during the first months after calving.

Overall, our study shows that the dry period should be considered a risk period for lameness development; dry cows should be routinely monitored for lameness and timely lameness treatment applied. Lameness is a complex malady and due to the poor prognosis of lameness cases future studies should focus on finding the factors associated with the development and prevention of first cases.

<sup>1</sup> For further information please Email [marina.vonkeyserlingk@ubc.ca](mailto:marina.vonkeyserlingk@ubc.ca) or [dan.weary@ubc.ca](mailto:dan.weary@ubc.ca). This report is based on Daros et al., 2019. *J. Dairy Sci.* 102:11414–11427 and Eriksson et al., 2020 *J. Dairy Sci.* 103:638-648. General funding for the Animal Welfare Program during the time of this research was provided through the NSERC Industrial Research Chair program with industry contributions from the, Dairy Farmers of Canada (Ottawa, ON, Canada), British Columbia Dairy Association (Burnaby, BC Canada), Westgen Endowment Fund (Abbotsford, BC, Canada), Intervet Canada Corporation (Kirkland, QC, Canada), Zoetis (Kirkland, QC, Canada), Novus International Inc. (Oakville, ON, Canada), BC Cattle Industry Development Fund (Kamloops, BC, Canada), Alberta Milk (Edmonton, AB, Canada), Valacta (St. Anne-de-Bellevue, QC, Canada), and CanWest DHI (Guelph, ON, Canada). Partial fund for these studies were provided by the British Columbia Dairy Association through the Dairy Industry Research and Education Committee, and the Agriculture and Agri-Food Canada and the British Columbia Ministry of Agriculture through the Canada-British Columbia Agri-Innovation Program under Growing Forward 2, a federal-provincial-territorial initiative. The program is delivered by the Investment Agriculture Foundation of British Columbia. Opinions expressed in this document are those of the author and not necessarily those of the Governments of Canada and British Columbia or the Investment Agriculture Foundation of British Columbia. The Governments of Canada and British Columbia, and the Investment Agriculture Foundation of British Columbia, and their directors, agents, employees, or contractors will not be liable for any claims, damages, or losses of any kind whatsoever arising out of the use of, or reliance upon, this information.





# 2020 Hoof Health Conference

22-25 July, Cuyahoga Falls, Ohio

## Wednesday, July 22

- 8AM - 9:30AM Registration Open
- 9AM - 5PM Pre-Conference Tour
- 3PM - 6PM Registration Open

## Thursday, July 23

- 7:30AM Registration Open
- 9AM - 12PM Annual Business Meeting
- 12PM Trade Show Opens
- 12 - 1:30PM President's Lunch  
*Members only.*
- 1:30PM Opening Remarks  
Richard West & Allen Schlabach
- 1:45PM Working Together for A  
Common Goal - A  
Consultant View  
*Todd Ward*

- 2:55 - 3:35PM Trimmer's Future  
Game Plan: Art or  
Science  
*Jamie Sullivan*
- 3:35PM Break with the Vendors
- 4:05 - 5:30PM Prevention and Control  
of Risk Factors for Hairy  
Heel Warts  
*Dr. Dorte Dopfer*
- 5:30 - 6:30PM Vendors' Reception in  
Exhibit Hall
- 6:30 - 10PM Dinner, Awards &  
Entertainment  
*Bill Boronkay,  
Comedian*

## Friday, July 24

- 7:30AM Registration Open
- 8AM - 5PM Exhibit Hall Open
- 8:30AM Financial and Insurance  
Management: Having  
something left at the  
end of your career;  
protecting your  
business  
*Clantz Liggett*



10:00AM Break with Vendors

10:30AM Current Research Projects to Reduce Risk Factors for DD - Artificial Intelligence Applications and More Feed Supplements  
*Dr. Dorte Dopfer*

11:30AM Cork Screw Claws: How are you helping the cow?  
*Aaron LaVoy*

12:00PM Lunch  
*Dr. Jeffery Weyers, Zinpro*  
*Keynote Speaker*

1:30PM Feet - Not Just a Measurement on a Ruler!  
*Todd Ward*

2:40PM Cattle Movement To and From Your Chute - Gate Set Up & Cow Flow  
*Steve Wunderlich & Dan Rainville*

3:30PM Break with Sponsors

4:00PM A Trimmer Visit with Frank Burkett  
*Richard West*

5:15PM Off-Site Dinner: Pro Football Hall of Fame

## Saturday, July 25

7:30AM Registration Open

8AM Trim Demonstrations

12PM Lunch on the Farm

3:00PM Locomotion and Body Scoring Workshop

6PM Reception

6:30PM Dinner & Auction



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## Registration Options

### Full Conference:

Includes registration fees, President's Lunch (Thursday, members only), Thursday Dinner & Awards, Friday Lunch, Off-Site at Pro Football Hall of Fame, Saturday Lunch on the Farm, and Saturday Dinner & Auction

### a la carte:

Includes registration fees only., President's Lunch (Thursday, members only), Thursday Dinner & Awards, Friday Lunch, Off-Site at Pro Football Hall of Fame, Saturday Lunch on the Farm, and Saturday Dinner & Auction tickets are individually available for purchase.

### Cancellation Policy:

HHC registration cancellations received by May 31 will be subject to a 10% cancellation fee; between June 1 and July 15 will be subject to a 50% cancellation fee. Cancellations after July 15 subject to 75% cancellation fee.

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## Registration Selections:

	Early Before 5/31	Regular 6/1 - 7/18	Onsite
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### Full Conference

<input type="checkbox"/> Member	_____ \$500	_____ \$600	_____ \$780
<input type="checkbox"/> Non-Member	_____ \$625	_____ \$750	_____ \$975
<input type="checkbox"/> Vendor	_____ \$625	_____ \$750	_____ \$975

### a la carte Registration

<input type="checkbox"/> Member	_____ \$275	_____ \$330	_____ \$430
<input type="checkbox"/> Non-Member	_____ \$410	_____ \$495	_____ \$645
<input type="checkbox"/> Vendor	_____ \$410	_____ \$495	_____ \$645
<input type="checkbox"/> Member Spouse	_____ \$50	_____ \$60	_____ \$80
<input type="checkbox"/> N/M Spouse	_____ \$60	_____ \$75	_____ \$100

### Social Events - MEMBERS

<input type="checkbox"/> President's Lunch ( <i>members only</i> )	_____ \$35	_____ \$42	_____ \$55
<input type="checkbox"/> Thursday Dinner	_____ \$55	_____ \$66	_____ \$90
<input type="checkbox"/> Friday Lunch	_____ \$40	_____ \$48	_____ \$65
<input type="checkbox"/> Off-Site Pro Football Hall of Fame	_____ \$90	_____ \$108	_____ \$145
<input type="checkbox"/> Saturday Lunch on the Farm	_____ \$25	_____ \$30	_____ \$40
<input type="checkbox"/> Dinner & Auction	_____ \$65	_____ \$78	_____ \$105

### Social Events - NON-MEMBERS & VENDORS

<input type="checkbox"/> Thursday Dinner	_____ \$60	_____ \$75	_____ \$100
<input type="checkbox"/> Friday Lunch	_____ \$50	_____ \$60	_____ \$80
<input type="checkbox"/> Off-Site Pro Football Hall of Fame	_____ \$95	_____ \$115	_____ \$150
<input type="checkbox"/> Saturday Lunch on the Farm	_____ \$35	_____ \$45	_____ \$60
<input type="checkbox"/> Dinner & Auction	_____ \$70	_____ \$85	_____ \$115

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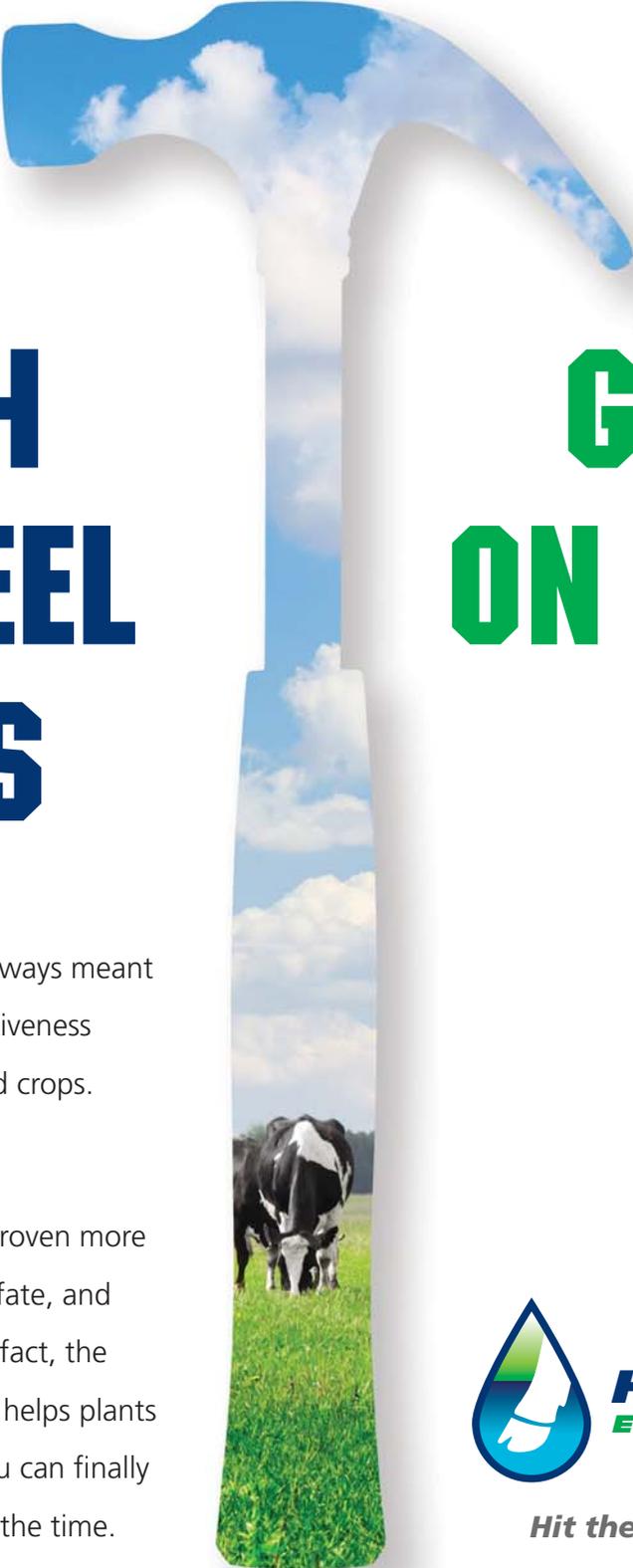
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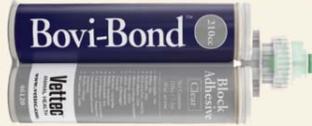
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