

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

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#### **HOOF HEALTH CONNECTION**



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HTA Objective: To provide educational opportunities and mutual support for hoof trimmers and promote quality hoof trimming.

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# President's Message

First off, I'd like to give a big THANK YOU to our past HTA board of directors.

To our knowledge, Phillip Spence, our outgoing president, has been on the board of directors for the longest time of anyone in the history of the HTA. He had two prior terms as treasurer, and went on to serve 18 months as president-elect, which included planning a conference. Then, he served 30 months as president, because of not being able to have the convention in 2020. That is 84 months, plus or minus, of voluntary service for a non-profit organization, and he did it with the class that only Phillip can show. Thank you for your valued time served on the HTA board of directors.

Richard West, our outgoing treasurer, had 2 terms. He went off the board in New Mexico, but then was asked to return after a short couple of months off when a resignation of the person elected to fill the treasures roll was accepted by Phillip. Then on top of that, he sat on the planning committee for the Ohio 2020 convention, which was planned to completion. After hard consideration, the convention was cancelled due to COVID 19. As we began planning for the 2021 convention, he agreed to remain on the planning committee, since it was to be held in Ohio. At this time, we still didn't know if we would be able to meet due to COVID, much less have a convention. So, with this unknown factor, he and his wife, Brenda, offered their home and facilities to us to hold the convention - free of charge. I am sure those that were able to attend could see the amount of work they put into having the event. I made the comment during the business meeting that it could be the largest donation that HTA has ever been given, and I believe this to be true.

Gary Buchholz was secretary for 2 terms, and went off the board at the New Mexico convention. He also had a couple of months off the board and was asked to re-enter service at the same time as Richard, again due to a resignation of the elected secretary. He graciously accepted, and started right back in never missing a beat.

To say that the last board term was a big challenge would be a huge under statement. First off, we started in New Mexico in the winter of 2019 with a new board of directors, with the exception of the president. I was coming on as president-elect having served two terms as director-at-large, but that was the only experience I had on the board. Three new board members, with no prior experience with HTA and it's behind the scenes workings, came on as well. Steve Wunderlich was the remaining board member who was a big contributor throughout the last term. Steve is now your President elect.



We started the convention in New Mexico with a brand new executive Secretary for HTA. Jolie Estes came on board for guidance and restructuring of the way we do business as an organization. It is clear that Jolie has been a big asset to our organization. A great deal of time and effort was made to clean up our bylaws, redesign our website to make it more userfriendly, and just plain surviving COVID 19 as an organization. After working with us hard-headed hoof trimmers, she convinced us that we needed to change the way we do business in order to survive. She brings marketing and pricing of a convention to an improved level to where hopefully we can be in the financial positive on a convention instead of losing a great deal of money each time we have one. On behalf of the Hoof Trimmers Association I would like to say thank you, Jolie, for all of your efforts and support.

In hindsight, we made some mistakes over the past two and a half years, but we didn't have the luxury of being an armchair quarterback on Monday morning. We had to deal with an unprecedented pandemic, as well as trying to keep HTA from being a statistic of organizations that didn't survive COVID 19. We cancelled a convention and paid off a contract with a convention center just under the deadline that would have been extremely costly having been just a few days later. We replaced it with a convention that seemed different, but had to be in order to work within potential CDC guidelines that we thought would be in place a year later (the reason for having it outside).



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We were blessed with some rain and cooler weather for the convention. I can't imagine how hot and uncomfterable it would have been if we would have had the weather we had just a week before or after the convention. Of course, the rain affected our ability to use the internet for transmission of conference speakers that were on zoom. Some of those were out of the country, and because of the COVID restrictions, limited travel to be able to have them speak in person. We had some dropped and frozen signals that we dealt with, but hey, we are hoof trimmers and deal with changing situations every day so we rolled with the punches and made the best of what we had. Since we had been unable to meet as the HTA in person for two and a half years, it was a welcome sight to be able to see some of our friends and colleagues to swap stories and experiences and learn from each other. If you were unable to attend, you'll have another opportunity in July 2022 in Minnesota.

We have a new board of directors that were just voted in, and I look forward to the opportunities we have as an organization. The young men that have stepped forward are full of new ideas to make HTA a valuable and informative asset to all of us in the future. We've

#### already held two board meetings, and our next one is the only in-person meeting of the term, and that will be held in Madison, Wisconsin. The previous board made a decision to not have a booth at World Dairy Expo this year, but we still will be visiting our current vendors there and hope to cultivate more businesses that we align with for potential vendors. We also decided to not have a booth at World Ag Expo, which we have had for several years, in an attempt to reduce expenses. If you have ideas or concerns about HTA or anything you would like addressed, please feel free to contact a board member. This is your organization.

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As president, I would like to ask a favor of each and every one of you. While we all have tried getting our colleagues and competitors to join the HTA and get involved, there has been little success. We've had a large decline in membership in the past 10 years, and unless we get new members, we won't have an association. Our source of income is from vendors, membership and convention earnings. What I'm asking is for you to talk to trimmers in your area and ask them to renew their membership or recruit them. Also, buy your supplies from and thank a vendor that you know who supports the HTA. Spread the word my friends - it's important!

# Corkscrew Q&A: A 10 Year Cumulative Study of Corkscrew Claw Syndrome Roger Olson, Zinpro

#### Q: What defines a Corkscrew claw?

**A:** In my opinion, I define it as any time the P3 is rotated causing the claw capsule to rotate.

#### Q: Is a corkscrew claw treatable?

A: In my opinion, it is not treatable due to the calcification and of the joints and bones along with ligament damage. One can however trim more often and use the balance method along with very aggressive modeling of the affected claw to make the cow more comfortable thus allowing her to lead a somewhat normal life.

#### Q: What variables appear to be correlated with corkscrew claw syndrome?

A: Anything that causes the heifer and or cow to reach, stretch while applying force to their hooves especially at a younger age. Examples are tall feed curbs, very wide feed curbs, young heifers eating out of an H bunk, aggressive sand bedding, Aggressive grooves, etc.

#### Q: I find that recycled sand exasperates the condition. Is that commonly found?

**A:** Absolutely especially if it is recycled sand that is causes great traction thus allowing the heifer to apply more force to the hooves.

#### Q: Do genetics seem to play a role with the condition?

A: In my opinion it is a very small contributor with a small % of the population.

## Q: What has changed in the past 10 years causing the corkscrewing to become more prevalent?

A: Many excellent dairymen have tried to do the same things with their heifers that have worked so well with their cows, head locks, sand, confinement, floor that do not slip etc.

#### Q: Does herd size play a role?

**A:** In my opinion not directly but many of the 800 cow plus locations tend to build the type of

barns that cause this issue trying to kind to their heifers.

#### Q: We know what happens externally, how about internally?

Q: What happens to the ligament? Is it stretched or torn?

**A:** As I understand it weakened thus stretching to some degree.

#### Q: What effect does the condition play on the pedal bone?

**A:** P3 has lots of calcification (bone spurs) and it rotates moderately to severely depending on severity of the rotation.

#### Q: Is corkscrew claw syndrome trimmer caused?

A: In my opinion not so much in young heifers. I do believe that if we grind out the wall between the hooves it does a tendency to rotate both claws as horn grows back faster trying to save itself.

## Q: What type of trimming suggestions would you make?

A: Trimming more often to keep some sense of balance helps. Using the balanced trimming method at least on moderate cases I believe helps. I also like to see very aggressive modeling on the affected claw both under and between on the affected claw.

## Q: Are there certain lesions to watch out for that are more prevalent in corkscrew claws?

A: If the herd has an aggressive floor, recycle sand, long walks etc. the lateral claw (non-corkscrew claw) tends to wear thin and short do to the rotated claw not carrying its share of the weight.

**A:** We do know there is bone calcification (bone spurs) around the joints and all around p3.



#### Q: Will a better claw angle help?

- A: In my opinion if we can go close to the ideal claw angle without causing issue it helps. Since the affected claw has less pressure on it grows faster reducing foot angle.
- Q: What should be done with the overgrowth on axial wall?
  - A: Moderate removal of severe overgrowth is appropriate, however, I see many times the axial wall trimmed excessively causing the axial wall to actually grow thicker and at greater rates.
- Q: Can the condition be found on both front and rear feet?

A: Yes, it will affect front and rear.

- Q: How do find the syndrome affects the opposite claw from the one that is corkscrewed? (Lateral if medial is roled over)
  - **A:** As I mentioned above if long walks with high wear situations the opposite claws become short and thin.
- Q: Have you found tilting the claw inwards

# perpendicular to the axial wall effective? (Aaron Lavoy's method)

- **A:** Yes, with Aaron's method other than maybe the very severe rotations.
- Q: Just because the foot it ugly, is the cow actually lame?
  - A: When I locomotion score corkscrew claw cows they generally do have a higher locomotion score but I do believe with proper and frequent trimming they can function fairly normally without lots of pain.



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# Hoof Health Conference: A Newbie's Perspective

Dan Ceresna

July 8-10 marked the 2021 Hoof Health Conference held in Marshalville, Ohio, n event where professional hoof trimmers, sponsors, innovation and research come together sharing foremost the well being and a mutual passion for cattle globally.

Since the cancellation of the 2020 Hoof Health Conference, due to COVID-19, I have been anticipating with excitement to attend. This year's conference marks the first one I've attended. I did not know what to expect when I arrived, but it wasn't long before I felt welcomed.

Foreword in research and education in both science, strength in business, and future, is the main idea behind the workshops. Speakers represented a broad range of specialties such as university veterinary researchers, nutritionists, financial advisors and many more. All from different professions we inspire each, other planting seeds, sparking ideas, cultivating conversation and debate, with harvesting a common goal of the best cattle health and welfare. Thus bringing success to the Dairyman, Cattleman, and Rancher, and 4h'er (the future) we collaborate.

Conferences can at times be overwhelming but when they are said and done the event is beyond rewarding. The highlights are truly the enrichment from attendees, the knowledge and fun they bring creating a unique experience.

An auction, unlike most, where donations from attendees go to fund new research in hoof trimming and TAP, the Trimmers Assistance Program.



I left this conference more inspired in my work and profession as a hoof trimmer. I know I am part of a group cheering for our individual and team goals.

As a young trimmer, feeling intimidated is pretty easy, especially when among veterans who really have their game on. Yet I did not feel that way for long. It all became like family... until a debate of stand-up or lay-over then, it was more like Hatfields and McCoys.





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#### William "Bill" Riley 1953 - 2021

The family of William "Bill" Riley Sr. celebrated his life of 68 years at 10:00 am on Friday, August 13th, at the Lake Ridge Chapel and Memorial Designers. He passed on Friday, August 6, 2021.

Bill was born in Arco, Idaho, the son of Mildred (Virginia) and Kirk Marvin Riley. He spent most of his youth growing up in Southern California until he enlisted in the United States Air Force in 1969. He was stationed at Blytheville Air Force Base Strategic Air Command in Arkansas where he met his future wife of 49 years, Rosa Marie Presnell. They spent almost two decades in East Texas before moving to Lubbock in the late 90's. Bill was an accomplished inventor and engineer whose career spans across many places, from his patented cattle chutes on dairy farms around the world, to installing his patented water purification systems for President Reagan in the Whitehouse. He was never a stranger at any occasion.

Bill was an original member of Hoof Trimmers Association, one of the founding nine, and served as the first president of Hoof Trimmers Association from 1995 through January 1996. He served with Bill Kopperud (Vice President), John Hooper (Secretary) and Karl Burgi (Treasurer). He was instrumental in planning and hosting the first formal Hoof Health Conference in Sulfur Springs, Texas in 1996 to include speakers, 120 hoof trimmers, sponsors and the election of officers.

While Bill was not a member of Hoof Trimmers at the time of his passing, he was still a force in the industry. I never met Bill personally, but I have heard many trimmers speak of him. He was a frequent topic at the latest Hoof Health Conference in July 2021. He will long be remembered in the trimmer community.



# The Gift of a Broken Ankle Glenn Gabriel

Like most Mondays start, I checked in with the barn crew then put some barn calcite down on the floor that will be my work area for the day. Things move along quite normally. As I moved some cows through a gate I lost my footing. My right foot slipped ahead Special thanks to: Bill Stevens Tom Hosking Zane Hendrickson

of me and I went straight down onto my left foot.

With the diagnosis of a broken ankle, my mood turned to frustration. I had a full week scheduled for trimming and hated to let my clients down. I am the sole operator at my trimming business and have often thought about how I might handle a situation where I may need to take some time off. Now that the time off had been forced upon me. I needed to make some calls to see

what I could put together. My first calls and texts were to my clients to advise them of my situation, that I would be out of work for at least 3 months. I asked them if any of them had another trimmer in mind to fill in for me. To my surprise none of my clients had someone else to call on to trim their feet. I guess I should be glad that all of my farms are happy enough with my trimming abilities that they have no need to think about having another trimmer on speed dial.

After confirming that I would need to get in touch with some trimmers, I called a trimmer that I had known for 22 years. He had just down sized his client list but said he'd be happy to take on what he could until I could get back. I trim on a tip table and he has 2 uprights, but he could probably handle it... He ended up taking on 3

of my farms.

A few weeks

before my incident I was talking to another trimmer about Tuffy leg restraints and if they might work on my chute. He lives about 1.5 hours away from me but I called him up to see if he could fill in on some farms. To my surprise he also said that he'd be happy to fit in what work he could. Finally, I had one farm out to the west of me that would be a little too far for either of these trimmers to get to. I had gone to a hoof trimming seminar out in Batavia, NY back in 2018. One of the

trimmers I met there trims around the Perry, NY area. I called Zane and told him about my situation. He has since trimmed a few times at my western most client.

So in about 3 days, my frustration from an injury had turned into appreciation for the kind people that you find in the hoof trimming business. I've been a member of the Hoof Trimmer's Association since 2004. I went to my first HTA conference in Burlington, Vermont and met many hard working trimmers, people that enjoy this profession as much as I do. Thanks to the 3 trimmers that are helping me through this and to the association that is providing great information and events to all of its members. If all goes well I will be back to trimming by the middle of September. Be safe out there.

# Older and Colder Gary Buchholz

As we all get older the cold weather seems to be harder on our bodies. Circulation to our fingers and toes seems not to be as strong as it was when we were younger.

So far our Michigan winter has not been as severely cold and snowy as normal. Nevertheless, I'm prepared to provide various means of artificial heat to stay thawed out on the cold days.

For me hot pocket hand warmers are the first defense against the cold. I wear a pair of blue liners inside my PCV plastic gloves. The hot pockets are against my hand, between my skin and the blue liners.

The second line of defense is a heated heat board. I'm able to put my hands against it for temporary warm-up between cows. I usually hang it from a gate next to the shoot. The board helps when temperatures are between 20



and 30°F.



The big gun I rely on for very cold days is my ValI 6

heater. This keeps me from freezing on the coldest days. It is, however, the most work to set up, time consuming and a good deal of effort. It uses diesel fuel but it's not as loud as other types of salamander type heaters nor does it produce as many fumes as other heaters.

I'm sure you all have more cold-weather remedies that make winter more tolerable. As for me I will never complain about the few hot days we get, but the cold ones I tend to bark about.

Stay warm, Stay Healthy

#### Hoof Trimming Business Opportunity

Hoof Trimming Business Opportunity Southern Vermont business available beginning in October 2021. 28 year established customer base. Comes with 6 year old Appleton chute and all necessary supplies. Service area is within 1 1/2 hours from home. Contact Rod 802.287.1812.

# Reducing Lesion-related Lameness Using a Combination of Epidemiological, Genomic and Extension Approaches

#### Gerard Cramer and Elise Shepley

Lesion-related lameness is a persistent problem within the modern dairy industry that requires a collaborative approach between all industry stakeholders. To do this, there is a need for a reliable, user-friendly data framework that can serve as an integrated source of information. This integration would facilitate communication between stakeholders and allow for the creation of tools for onfarm decision making, genetic evaluations and use of the data to answer research questions on hoof lesions. Having this framework would allow the industry to understand and start addressing the pain, chronicity and economic costs of lameness due to foot lesions.

A collaborative project between the University of Minnesota and the U.S. Council of Dairy Cattle Breeding (CDCB) has recently started with the aim of developing this framework.

The multi-stage project seeks to combine the large volumes of data recorded on by hoof trimmer software (Hoof Supervisor and All4Hooves) and farm recording programs (such as DairyComp 305), as well as genetic data documented by CDCB, into a single, integrated data framework. This long-term hoof health data pipeline will support future genetic and

management enhancing tools that can be used by hoof trimmers, veterinarians, and farm personnel to improve on-farm decision making and treatment options. It will also serve as an extensive data pool for use in future research into preventative and therapeutic options for the treatment and reduction of hoof horn lesions in our U.S. dairy herds. Further information about the project can be found at https://z.umn.edu/hoofhealthrecords. The research team is currently looking for hoof trimmers that are interested in participating in the project and that would be willing to serve both as contributors to the development of the integrated data framework and as liaisons between the research team and farms to encourage farm participation. Dr. Cramer's team will work with both interested hoof trimmers and farms to set up the integration between the hoof trimming programs used by the hoof trimmers and the on-farm management programs of client farms. The project will collect historical data (up to 5 years) from both hoof trimming and on-farm



software initially. Future data will then be collected using the integrated data framework set up by the research team. In participating, the biggest immediate impact of the project for hoof trimmers will be the way in which the integrated framework simplifies data recording for the clients by saving them from having to manually enter hoof trimming data into their herd management software. Additionally both trimmers and their clients get to continue recording in the software they are familiar with while contributing to reducing the impact of lameness in the dairy industry.

If you are interested in participating in this project, you

can sign up for this project by contacting Gerard Cramer or Elise Shepley at umnhoofhealth@umn.edu. We will send you consent forms and then work with you and your clients to set up the integration. The main things that will be required from you are help in recruiting clients and a backup or access to the hoof trimming software data from your interested clients.

# Pre-Holiday Planning edt. by Jolie Estes

The holidays will be here before you know it. Preparing for the food and merriment and gifts is part of our routine. Another common part of the holiday routine is to help support those in need by donating to the local food bank at the holidays. Food banks need support throughout the year, but certainly, the holidays are the hardest hit. If you are considering donating to a food bank, soup kitchen, shelter or even a family in need, here are some things to consider. These are tips from people who need and use the food bank.

- 1 Everyone donates Kraft Mac and Cheese in the box. They can rarely use it because it needs milk and butter which is hard to get from regular food banks.
- Boxed milk is a treasure. Kids need it for cereal -2 which food banks also get a lot of.
- Everyone donates pasta sauce and spaghetti noodles. 3
- Include a can opener with the awesome canned veggies 4 and soup or get pop top cans.
- 5 Oil is a luxury – but it is also needed for rice-a-roni and a lot of other meals.
- Spices, salt and pepper are a real treat. 6
- 7 Tea bags and coffee make them feel like you care.
- Sugar and flour are precious and go a lot further than 8 pre-packaged food.
- 9 Fresh produce donated by farmers and grocery stores are awesome and rare.
- 10 Seeds are cool in spring and summer because growing can be easy for some.
- 11 Hamburger Helper is pointless without ground beef.
- 12 They rarely get fresh meet.
- 13 Tuna and crackers make a great lunch.
- 14 PB&J are tough to make without sandwich bread.
- 15 Butter and margarine is nice to have.
- 16 Eggs are a commodity.
- 17 Cake mix and frosting makes it possible for a child to have a birthday cake.
- 18 Dishwashing detergent is very expensive and is always appreciated.
- 19 Feminine hygiene products are a luxury and women will cry over them. Same thing for male hygiene products.
- 20 Everyone loves Stove Top Stuffing.



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One of our members, Mitch Ackerman, has suffered a severe accident and requires multiple surgeries.

Please donate to the Trimmers Assistance Program in supporty of Mitch and others like him. Online at hooftrimmers.org/donations Or mail to: TAP, 5014 FM 1500, Paris, TX 75460



## Spastic Paresis; costly defect in dairy cows Huub Peek, Independent Breeding Consultant

n recent years, there has been necessary attention for the increasingly straighter rear leg position in Holsteins. Too often we see young animals that have much straighter rear legs than optimal from side view, often resulting in little flexibility and poor mobility. Only if we continue to objectively record linear data on various farms will we have the possibility to identify individual bulls that transmit straight, optimal or sickled rear legs based on their breeding values. With that, corrective matings can effectively be made based on reliable measured data (proven bulls).

However, there is another problem among dairy cattle which is completely underexposed but causes great economic damage and is often mistaken for straight rear leg(s): "overstretched legs" or "Spastic Paresis" (SP). Therefore, first an explanation of the phenomenon: according to various publications, SP is a heritable disorder in which the hock joint is abnormally stretched as a result of a continuous spasm condition in the Achilles tendon whereby the joint cannot be bent. This condition usually manifests itself in Holsteins after 6-8 months of age. In light cases the hoof is still on the ground, in severe cases of cramping the hoof points backwards. Sometimes both legs are affected and animals with the abnormality lie down a lot. Do you recognize this phenomenon? As a mating-consultant, unfortunately I have seen this defect too often. The regular appearance of SP is confirmed by veterinarians, occurring within different farm systems. Because it is likely that the defect is hereditary, I advise not to use these animals for breeding, but it still occurs regularly. This is of course costly as these animals are immobile, resulting in lower performance and early culling.

It is often said that this is the result of breeding towards straighter rear legs. This is certainly possible with the extremes (ex. Flagship with -5.87 legs side view), but I also come across animals with an overstretched leg where the other leg shows a slight curve. The sires of these animals regularly have a breeding value with above-average set of the rear legs. Therefore, in my opinion, we should approach this defect independently of leg set. On a recent trip, we visited an Al-company. During our bus ride along the open stalls, we saw an adult bull with very clear SP. I always assumed that semen would not be sold from bulls with such a serious defect. Various stakeholders in the Al-industry told me that veterinarians monitor animal health. At the same time, financial interests weigh heavily when expensive high index animals are bought with the potential (high) demand for their semen. Here part of the problem becomes clear; the race for high indexes makes such aspects seem subordinate to the genetically highest progression. But let's be real: a dairyman will not really notice the difference between animals with a sire of 2750 or 2850 TPI, but he does experience whether an animal with a defect does not function properly and is culled too young. Their raising cost is far from being earned back.

# Independent of leg set

I think more genetic research is needed to identify the cause and possible carriers of SP, which is time consuming. More important is that everyone in the industry takes its responsibility. In the Netherlands, it has often been discussed to apply more detailed information for culling reasons. Now there is only the general discharge reason "Feet & Legs" to enter, which does not identify such problems. In addition, it is very important that the AI-companies report defects, same as other known genetic defects. If a bull is presented with notification "SP" to its information (in addition to aAa-codes etc), it is up to the farmer whether the risk is taken to use the bull. In conclusion, I call on the industry to enter into a discussion about this topic, and to heavily weigh the importance of a healthy cow population (long term) in addition to the interests of the dairy farmer.





**Examples of Spastic Paresis** 

This counts for both limiting the increase of inbreeding as well as sharing all (genetic) defects, because we not only influence the income of farmers, but we influence the entire dairy industry.

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# Adhesion Testing at the Bohning Laboratory

#### Introduction

Bohning introduced the Bohning Block in 2020 to apply their 75 years of experience in adhesion to bovine hoof care. To better understand the capabilities of this new product line, testing the Bohning Block's compatibility with the most



popular hoof epoxies on the market became essential in understanding its strengths and limitations.

#### Method

All specimens were prepared using productionquality unpigmented and purple pigmented Bohning Blocks. Blocks were laid out in pairs; 3 pairs were lined up on a table. All epoxies were allowed to acclimate to room temperature prior to application. Each epoxy bottle was fitted with a mixing tip and applicator gun as specified by the glue manufacturer. Epoxy was applied to only one block of each pair. Within 7-8 seconds of epoxy hitting a block, the top surface of the block was fully covered with epoxy and

flipped onto the unglued block lying next to it. Light pressure was then applied

as the fast-setting epoxy set up. NOTE: 3 pairs of blocks were bonded at a time as this was found to be a good amount for most brands of epoxy used. Typically if a fourth pair was attempted, the fast-curing epoxy would begin setting up inside the mixing tip, and it would become much more difficult to coat the block in the limited window of time allowed. Blocks were allowed to fully cure before cutting.

All epoxied hoof block "sandwiches" were then cut to final size using a custom-built sled jig and a band saw. Sandwiches made with Small Bohning Blocks produced four (4) 1.0" x 0.6" cross-sectional specimens each. Specimens were then bagged and labeled at the band saw to remove any possibility of mixing them up.



All specimens were tested in a dual-column tensile tester with a 5-kN load cell and manually tightened jaws. Data was collected using a data acquisition software.

#### Results

The Bohning Company has found that any tensile strength over 750 psi will provide excellent results in most conditions and applications. The tensile strength average per product ranged from 941 psi for one manufacturer to a high of 1427 psi for another manufacturer.

Bovi-Bond, Accu-Bond, PrimaBond, Septicare II Bond Express, Bovibloc, Black Magic Winter, Trimmer's Choice, Hoof-Tite Cold Weather, Hoof-It, Mini Moo Gloo, SureBond 2B, and Hoof-Tite V2 were all tested and passed the 750 psi threshold.



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# Baby, Its (going to be) Cold Outside! Jolie Estes

As a child, I remember getting all dressed up in extra socks, long johns, sweaters, dungarees, gloves, scarves, parka and ski mask. Out we would go to play in the snow tobogganing, building snowmen, snowball fights, snow angels, ice "skating" on the pond (and praying the ice didn't break under us!). One year, my baby sister and I dug tunnels through drifts nearly 6 feet deep! What great fun... right up to the moment one of our tunnels collapsed on her!

We played outside for hours, until Mom would call us in for hot cocoa or we got so cold and wet we couldn't stand to be out any longer. Those were some good times. LOVED being cold and then to snuggle under a blanket in front of a blazing fire. All the innocence of childhood.

Working in the cold can be miserable! As I got older, I learned that. Why is it you can play in the snow for hours and never grow tired and cold, but go chop wood for a half hour and you are hot, frozen, exhausted and disgusted all at the same time?

Working outside is nothing new for trimmers. Weather does not dictate when the work needs to be done – well, not entirely anyway. It does present some very real concerns, however.

Cold weather really is no joke. Hypothermia can and does kill. Napoleon lost most of his army in Russia in 1812 to hypothermia. It was a common cause of death on the Russian front in both World War I and World War II. Between 1999 and 2011, 16,911 people died from hypothermia in the United States. That is an average of 1409 people a year a number which is on the rise. Estimates put hypothermia deaths in the US at over 1500 (.045% of the population) a year – 67% of whom are men. On average, 8000 (.02%) Canadians die from hypothermia annually. New Zealand records only about 176 (.04%) per year. In fact, according to Dr. Jeff Masters (https://www.wunderground.com/cat6/Which-Kills-More-People-Extreme-Heat-or-Extreme-Cold) more people die from extreme cold than from extreme heat – although extreme heat can be quite dangerous as well. The National Oceanic and Atmospheric Administration (NOAA) and Centers for Disease Control (CDC) both project that the number of temperature related deaths is going to continue to rise to as much as 10,000 a year by 2090. CDC data suggests that deaths resulting from excessive cold are approximately twice those resulting from extreme heat.

As a hoof trimmer working in extreme temperatures is not uncommon. Knowing how to do the job and stay safe and sufficiently warm is important. Eat and drink well. Sounds crazy, I know. But eating properly, staying nourished and hydrated allows your body to function at its best. Surprisingly, you can get dehydrated quickly in cold weather. Dehydration causes a slew of bad things including dizziness, headaches, fatigue, disorientation and confusion. The American Academy of Dermatology reports drinking just one glass of water before going outside can decrease the chances of getting frostbite. More than one is better. Eating increased levels of fats and carbohydrates allows your body to produce heat more efficiently and effectively.

Get lots of rest. It sounds silly, but your body uses a lot of effort to regulate its own temperature, particularly in the cold. Additionally, lack of adequate sleep can make you less aware and less safe on a job site. Couple that with the sluggish brain brought about by not eating enough or by being so cold that hypothermia has started to set in and your risk of being injured via accidents goes up drastically!

**Plan ahead.** Have an emergency plan in place before it ever gets cold. Listen to the weather forecast so you know what you may be in for. Carry a blanket in your truck. Those pocket hand warmers can help ward off frostbite – at least for a while. Pack a spare set of clothes, a hat and gloves.

Get out of the cold. Stop periodically and go inside. Look, everyone needs to take a break from time to time. Do it inside, out of the cold. Give your body a chance to balance out and not have to work so hard. Taking a break in the cold does not help your body recover and continue doing what it needs to survive. Wick water. There are a lot of really good cold weather gear manufacturers out there. Find some you like and find comfortable, but make sure they wick water away from your skin. You are working and your body is doing its thing. You are going to sweat even if you are cold. Wear layers at your skin that will wick the water away, keeping you dry and warmer.

Layer Up! Extra layers of clothing help us keep warm. They also work as a manual thermostat. Getting warm? Take off a layer. Getting cold, add a layer. The more layers you have on, the harder it is for the cold to get to your skin. Again, however, layer on clothes designed to keep you warm. 15 t-shirts are not going to do as good a job as an Under Armour cold gear shirt over a quality sweater. Think carefully about what you wear and how you layer it up.

Keep heat producing equipment on hand. In this issue of Hoof Health Connection, Gary Buchholz discusses what he does on the job to keep himself warm. He suggests using the individual inserts to put in gloves to keep your hands warmer, a warming board and a torpedo type heater. All of these are great ideas. Consider your work environment. What measures can you take to provide heat for yourself and your co-workers to prevent getting too cold.

**Be aware** – both of yourself and those around you. Take stock of how your fingers, nose and toes feel... and that they <u>do</u> feel. Check-in with the people around you regularly. Make sure they are keeping

Remember, if you are working in freezing temperatures, frostbite can set in in as little as 30 minutes. The colder the temperature, the faster it sets in.

Some resources which may come in handy:

Environment Canada has a brilliant brochure on wind chill and cold weather safety you can find at https://publications.gc.ca/collections/collection\_2014/ec/ En56-222-2-2014-eng.pdf.

Tableau Public has a cool (pardon the pun) interactive table that lets you determine when you are in danger of frostbite and how quickly it becomes a real risk. https://public.tableau.com/profile/adam.crahen#!/vizhome /BabyitscoldoutsideWindChillFrostBite/Brrrrrr



# 

# Avoid

possible, dress properly and watch for signs of cold related emergencies When possible, stay inside. When not

# Oes Protect Nose

Fingers Ears Chin Cheeks

# Wear

Hqt

knit mask Scarf or

Gloves or Mittens Water Resistant Coat Several Layers of Loose Fitting Clothes Water Resistant Boots

# Redness or pain in skin Spot **FROSTBITI**

White or grayish yellow skin

Remove any Wet clothing

WARM THEM UNDER DRY LAYERS OF BLANKETS AND CLOTHING

Get Them INTO A WARM ROOM OR Shelter

SEEK MEDICAL ATTENTION AS SOON AS POSSIBLE

Treat

**(** 

Place Areas Affected By Frostbite In Warm-to-touch Water

Skin that feels unusually firm or waxy Numbness

# **HYPOTHERMIA**

Hypothermia usually occurs in very cold temperatures. If a person is wet it can occur in temperatures above 40°F.

get medical attention

**IMMEDIATELY** 

temperature is below 95°F/35°C

If a person's

umbling hands shivering exhaustion confusion

case, handle the person gently, and get emergency assistance immediately. be unconscious and may not seem to have a pulse or to be breathing. In this A person with severe hypothermia may

memory loss

slured speech **Orowsiness** 

person responds or medical aid becomes available. Keep warming the person while performing CPR. In some cases, Perform CPR, even if the person appears dead. CPR should continue until the nypothermia victims who appear to be dead can be successfully resuscitated.





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