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THE NEWSLETTER FOR DAIRY FARM ESTABLISHMENTS

FROM THE... resident's Desk

Brown Dairy Equipment thanks all of our dairy operation customers for all the hard work you put in day in and day out. Your dedication to the dairy industry is greatly appreciated as we enjoy a cold glass of milk on a hot summer day!

We are highlighting some of our products we carry at Brown Dairy Equipment and on page 2 is an article on *"How to Label the Type of Lameness in Your Herd."* Following the article is a chart showing the different types of lameness. Brown Dairy Equipment offers hoof care products: **HealMAX** and **HoofMAX**. Contact one of our store locations or a Brown Dairy Equipment Dairy Solutions Provider for additional information on the products.

The warmer weather brings on many challenges with animal health and getting enough clean water, **Clearitas** is a product that removes organic and inorganic deposits from water lines and on the walls of animal drinking fountains. Additional information are shown on page 3.

Visit us at the **AgroExpo August 13 & 14, 2019** in **St. Johns, MI**. More details on the back page.

- Dennis Brown

Thanks to all of our dairy operation customers for all the hard work you put in day in and day out!



IN THIS ISSUE

How to Label the Type of Lameness in Your Herd Page 2

Hoof Care Products Page 3

Improving Water Systems at Dairy and Cattle Farms Page 3

2019 AgroExpo Page 4

How to Label the Type of Lameness in Your Herd

Labeling lameness

Chip Hendrickson for Progressive Dairy Published on 16 July 2019

By definition, lameness is any abnormality that causes a cow's gait to change. However, within this broad term are very specific types of hoof lesions and injuries, and each requires specialized treatment for the best recovery opportunity.

There are several causes of lameness found on a dairy farm. They range from biomechanical injuries to infections to injuries and more. That is why it is important to identify and differentiate between the causes of lameness, as the control and treatment methods for each cause will differ. For example, the protocol used for sole ulcers differs from a protocol for digital dermatitis (hairy warts).

Once a dairy producer is aware of the lameness presence in the herd, the next step is to understand what is triggering the hoof health challenge. As previously stated, there are multiple sources of lameness, with the main causes being: show signs of lameness no matter how perfect the preventative plan. Take action right away at the onset of lameness symptoms, before it spreads. Ask for help from a dairy specialist to create a proper preventative plan.

One last thing we want to understand is the economics of lameness. Research shows lameness reduces productivity at peak yield by up to 20 percent, at an estimated cost of \$350 per case. There is money to be made by tending to lameness issues when they first emerge. On an average well-run farm with timely intervention, preventative care will make the dairy considerable dollars. Trained trimmers with the correct equipment make a difference. The safe and timely intervention will take care of your cows.

Chip Hendrickson, Hoof Care Specialist, AgroChem Inc. • https://www.progressivedairy.com/topics/herd-health/how-to-label-the-type-of-lameness-in-your-herd

• Non-infectious injuries: An overgrowth that does cause pain. Cows may have overstretched ligaments or toes, which leads to ulcers and heel cracks.

• Infectious lesions: Most commonly, digital dermatitis or foot rot.

• Upper or non-hoof injuries: A stifle injury can cause the cow to go lame, but it's not a foot injury. It's simply an injury.

The chart describes several of the main types of lameness, as well as characteristics, treatment and prevention methods for each ailment.

These are not the only causes of lameness but the ones that occur most on dairies. Dietary issues, respiratory infections and improper stall size can also lead to lameness. If you cannot detect the cause right away, it is best practice to get a vet or hoof trimmer on-site as soon as possible. They will then be able to inspect the herd and instruct on the best treatment method.

In a perfect world, a preventative plan is in place on the farm to reduce the chances of lameness and save the farm money long term. With proper preventative measures, lost milk production can be avoided, the spread of infectious diseases can come to a halt, and money is saved without the need for an emergency vet or hoof trimmer visit.

An ideal preventative plan includes:

• Proper and regular hoof trimmings to ensure good shape and overall health. This helps reduce biomechanical issues and injuries.

• Consistent footbath routine or a proper topical spray/foam routine to prevent foot rot and digital dermatitis.

• Ensure farm employees are properly trained on cow handling and that the barn and environment are properly maintained.

If a farm has a preventative plan in place and follows it, most lameness issues should remain minimal. Occasionally, a few in the herd may Determine the type of lameness affecting your herd in order to provide the most effective treatments and prevention methods.

Lameness	Root of problem	Characteristics	Common causes	Common treatments	Prevention
Infectious	Hairy wart (digital dermatitis)	 Painful lesions on the soft tissues between the claws and the heel, although occasionally it occurs on other soft parts of the foot. Depending on the severity, cowe often walk tenderly on the affected hooves. 	 Lack of proper preventative footbath routine More prominent in poor hygienic conditions in housed dairy herds 	 Individual cases with the symptoms of digital dermatitis should have their feet lifted and examined, and treated topically. 	 Routine footbaths or a proper topical spray/foa routine in heifers and dr cows and milking cows
nfectious	Heel erosion	 Recognizable by the damage to the surface of the bulb of the heel. Actual evidence of mobility problems due to the condition may not be present unless it becomes severe. 	 Predominantly observed in poor hygienic conditions in housed dairy herds 	 Routine footbathing or a proper topical spray/foam routine as well as routine hoof trimmings 	 Routine footbaths or a proper topical spray/foa Routine hoof trimmings
Infectious	Hoof rot	 Reddened tissue above the hoof and between the rear claws. Acute swelling of interdigital tissues and around the hairline of both hooves. In some instances, fever can be present. Foul-smelling discharge, toes possibly spread outward. If left untreated, swelling may progress upward from the foot. 	Bacteria enter the hoof via compromised interdigital skin, causing infection.	Based on the case, foot soaking and/or antibiotic therapy under veterinarian supervision	Routine footbaths or a proper topical spray/foa routine
Non-infectious	Sole hemorrhage	 Slight to significant red (or blue) coloration of the sole Not to be confused with natural black pigmentation of claw horn 	Excessive standing More common on thinner cows	Hoof trimming and blocking, if applicable Comfortable and adequate stalls to encourage lying time	Stall comfort Adequate number of sta per cow Good-quality cow track are essential Regular, competent foot trimming
Non-Infectious	Sole Ulcer	Infection forms where the sole meets the heel bulb, in the underlying tissues Very painful	Often occur when the soft tissues inside the sole are damaged and normal horr cannot be produced for a number of reasons. Excessive standing is the most common cause.	Trimming by hoof trimmer to relieve pressure Possible application of a block	Stall comfort Adequate number of str per cow Good-quality cow track are essential Regular, competent foo trimming
Non-infectious	Thin sole	 Sole is thin and flexible when pressure is applied Caused by insufficient length of the toe, excessive wear over trimming Minimum claw length of 3 inches (does not apply to helfers or animals that weigh less than 900 pounds) 	Excessive walking on abrasive surfaces	Rubber tracts/flooring Possible application of a block	Rubber tracts/flooring Move pen closer to the parlor to avoid excessiv walking
Non-infectious	White line lesion	Occurs when the sole separates from the side wall of the hoof, allowing foreign material to penetrate and infect the white line region Often develops into an abscess	Often due to poor flooring surface Common with cows that make sharp turns	 Properly parring of lesion Possible application of a block 	Routine hoof trimmings Proper walking surface Avoid sudden change o direction and rapid pivo due to flow pattern
Non-infectious	Physical injury/ Pinched nerve	Caused by swollen joints, broken bones, muscle damage or tendon damage	Improper stalls Calving injuries Improper cow handling Bullying	Case by case, based on the injury and severity	 Employee training on ca handling and care Well-maintained facilitie





Visit Brown Dairy Equipment for these Hoof Care Products **HealMAX**®



Brown Dairy Equipment carries spray in quart size and 55-gallon concentrate. • The advanced topical antiseptic for safer more effective control of hoof problems.

Safer than formaldehyde for humans and animals.
Gets cows back on track fast with visible results beginning in approximately one week.

• Remains effective in both hot and cold weather.

HEALMAX[®] is ideal for:
Dairy producers who have experienced corrosion problems from copper sulfate or formaldehyde.
Dairy producers in areas where use of formaldehyde use is banned or limited.
Dairy producers who want a safer footbath for their family, employees, herd, and environment.

HoofMAX®



Brown Dairy Equipment carries HoofMAX in 5-gallon, 15-gallon, and 55-gallon activate copper sulfate acidifier. • The original additive designed

to optimize footbaths based on copper or zinc sulfate, to keep copper working. • Highly concentrated formula achieves the same level of control with less copper and expense.

• Delivers more consistent, effective results than a traditional copper sulfate footbath.

Enables copper to continue working even after the bath is heavily loaded with manure and urine, allowing you to change the bath less frequently.
Can help reduce copper loading on land.

Improving Water Systems at Dairy and Cattle Farms

THE PROBLEM: Organic masses of biofilms, algae and slime build up inside water lines and on the walls of animal drinking fountains. These masses harbor and breed bacteria that are continually released into the drinking water. As a result, water quality is compromised and may contribute to poor animal health and/or inhibit optimum production. Moreover, hard mineral scale buildup can cause clogging in water lines, plate coolers and hot water tanks. If left untreated, water lines can plug up and cause drops in pressure, resulting in expensive corrective measures to restore the water system.

THE SOLUTION: Clearitas® is Blue Earth Products'[®] proprietary formulation of highly oxidized chlorine engineered to remove organic and inorganic deposits from all online water infrastructures. Clearitas 401 is specifically used in agricultural applications to remove films and scales from drinking water infrastructures, milk house equipment and Clean-in-Place (CIP) systems. The addition of Clearitas 401, in conjunction with a traditional disinfectant, removes these organic masses within water lines and water troughs, making water cleaner and more attractive for consumption. With higher water consumption comes improved milk production and better overall animal health. Clearitas 401 also eliminates and prevents scale buildup that often causes low water pressure, clogged valves, poor equipment performance and costly repairs. Water heaters, plate coolers and other CIP system equipment will be scale free, requiring less energy, improving heat transfer and increasing equipment performance and life expectancy. Clearitas 401 is NSF 60 certified and safe to use in all water systems including drinking water. This product is applied online with low upfront capital costs and minimal maintenance.

CASE STUDY: Clearitas 401 removes deposits and biofilms within water lines and water troughs, making water cleaner and more attractive for consumption. With higher water consumption comes improved milk production and better overall animal health.

Clearitas 401 also eliminates and prevents scale buildup that often causes low water pressure, clogged valves, poor equipment performance and costly repairs. These benefits were experienced by Greg Endsley as he describes in his own words:

"We recently added a heifer barn on our 600cow dairy. We have a 2" water line running to all the cow drinkers and have extended the line to the new heifer barn. As the weather became warmer, the drinkers were frequently lacking water in the new barn and elsewhere. We excavated the line between the barns and found the 2" pipe was plugged so full that it was doubtful you could fit a pencil down the length of the pipe. After talking with others and researching options, we decided to try the Clearitas 401 deposit control product with a standard chemical injection system. The Clearitas product was dosed aggressively for about 5 months. During which, the water flow to the drinkers was restored and the water itself became much cleaner even in the *heat of summer. After the five-month treatment.* the water line was again excavated in the same location. The difference was amazing, the pipe was completely clean. Before starting the Clearitas treatment, we were concerned that it would have a detrimental effect on cow health or productivity. However, we monitored the treatment closely and were not able to detect any adverse effects. We believe that it is a good product and would recommend it to someone with similar water to keep the lines clear."

> – Greg Endsley, Endsley Dairy Farms LLC Hastings, Ml.

CLEARITAS BENEFITS: Clearitas is a powerful and economical solution that effectively removes and prevents scale and slime buildup throughout the entire water system. In addition to cleaner water and drinking troughs, benefits to using Clearitas as part of your water treatment program include:

- · Hard scale removal from water contacted surfaces
- Biofilm and slime removal from wetted surfaces
 Restored heat transfer in water heaters and
- Restored heat transfer in water heaters and plate coolers
- Increased removal of milk stone from CIP systems
- Enhanced soap and sanitizer effectiveness



Brown Dairy Equipment Newsletter Summer Edition 2019

> 2153 North Van Dyke Bad Axe, MI 48413



2019 AgroExpo

Most farmers are always looking for ways to improve efficiency, yield, and their bottom line. The AgroExpo will provide answers, ideas and inspiration...

August 13 & 14 • 5605 N. Findlay Rd, St. Johns, MI

Experience over 100 exhibitors showcasing and demonstrating the latest products and services available in agriculture as well as numerous educational speakers, in-field experiences, and countless opportunities to see how new technologies can be incorporated into a management strategy. The AgroExpo is free to all attendees.

Visit Brown Dairy Equipment's booth #E003 and mention that you read the article in our newsletter and you will receive a BDE gift.

For more information on the event visit the AgroExpo website http://www.theagroexpo.com