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TACKLING LAMENESS

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Lameness, like mastitis, is an ever present problem that dairy farmers have to deal with. The wet weather across NSW over the last two years has been a factor in the increase in lameness on many farms.

During April, NSW DPI co-ordinated three workshops for farmers in the Hunter and Midnorth coast regions, on lameness and hoof trimming. The days were delivered by world renowned veterinarian and cow comfort expert from the USA, Karl Burgi.

Karl provided some interesting messages on the causes and costs of lameness, and some practical strategies for prevention.

Lameness is increasing, mainly due to larger herd sizes, cows walking greater distances each

day, and cows spending more time standing on concrete.

Cow hoofs grow at a rate of only five millimetres a month, and are often worn down faster than they can regenerate. It can be an expensive problem to fix.

Dairy Australia has information for farmers about lameness on their website, including a calculator to estimate the cost of lameness in your herd. Visit them at www.dairyaustralia.com.au/ and look under the Animal Health section.

Focus on First Calf Heifers

Heifers can have major hoof health problems just after calving, as they are undergoing big changes, including:

- Developing an udder, and learning to walk around it
- Added to the main herd with cows they are not familiar with, and being pushed to the bottom of the pecking order
- Grain feeding and rumen adaptation,
- Walking to and from the dairy, standing on concrete, learning the routine of milking.

As heifers tend to be milked last they are spending the longest time on concrete. A lot of heifers develop a red ring on their hooves and lameness problems as they make these big adjustments. Some farmers have resorted to running separate mature and first calf herds to overcome trauma in heifers' hoofs.

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Cow rest time

According to Karl Burgi, cows need at least 8 -10 hours per day lying down time. This improves blood flow to the hooves and udder. If cows spend too much time in the dairy yard waiting to be milked, or confined on a feedpad, they may not get enough time to lay down and rest. This can be made worse in hot weather, as cows will want to stand up to better dissipate heat, so Karl often sees outbreaks of lameness several weeks after spells of hot weather.

Treatment

At the workshops, Karl demonstrated how lameness can be treated by hoof trimming, and how the correct equipment and cow restraint methods are vital for the safety of animal and operator. Correct hoof trimming will rebalance cows to evenly distribute weight over inside and outside claws, and between the heel and toe. Karl recommended functional trimming should occur at dry off and between three to eight weeks pre calving for heifers.



A crush, as shown, helps restrict the cow as the hoof is positioned in an easy to access position and trimmed. When trimming the hoof, follow black marks which indicate ulcers. Once finished trimming, blocks can be attached which can be either plastic or wooden. Blocks should remain on for between five to six weeks and be large enough to cover the end of the heel.

Use of Antibiotics

Some farmers turn to antibiotics to solve the issue of lameness but according to Karl they only have limited applications. The only disease where antibiotics are really effective is footrot which is a disease of the soft tissue between the claws and it is caused by bacteria readily found

in the environment. If the skin is damaged between the claws bacteria can cause an acute swelling. Antibiotics are really only effective if the cows are treated early. Once inflammation in the hoof starts the circulation is reduced and the antibiotics administered may not be effective.



Supplements and Footbaths

Karl stressed that frequent changes to a cow's diet may result in rumen acidosis, so any feed changes should be gradual over seven to ten days. There were no magic solutions with feed supplements to correct lameness. Most supplements need to be fed over a long period of time before they begin to have any effect.

Foot baths using formalin can make hooves tougher but extreme caution needs to be taken with this chemical product. A carpet soaked with formalin may provide a better option as only the soles of the hooves come in contact with the chemical, avoiding splashes and potentially dangerous fumes. Copper sulphate is another product used in footbaths but generally only aids where foot rot exists.

Woodchips can be used on gravel surfaces to provide greater cushion when cows are walking. A number of farmers in the US have installed rubber surfaces where cows are confined and have lameness issues.

Karl's visit was funded by Dairy NSW and organised by Michael Perich from Comfort Hoof Care Australia with the support of NSW DPI. He will be a guest speaker at the DRF Symposium in Camden in July; and you can visit his website www.karlburgi.com.

A fascinating interview with Karl Burgi is available as a podcast on the NSW DPI website: click on Dairy podcasts.

www.dpi.nsw.gov.au/agriculture/livestock/dairy-cattle