ISSUE 88 Winter 2024/25

www.paragonvet.com



Inside this issue:

- Controlling Lameness in Housed Cattle
- Extended Colostrum Feeding
- Keeping Calves Warm
- New Worm Egg Count Machine (Test, Don't Guess)

ACHIEVING EXCELLENCE IN HEALTH AND PRODUCTIVITY

farm

LIVESTOCK SERVICES

<u>News</u>

Peter Cullen

We are delighted to announce that Peter has achieved his Level 4 Qualification in Professional Dairy Cattle Foot Trimming which has been awarded by the Royal Agricultural University (RAU) and the Cattle Hoof Care Standard Board (CHCSB).Peter is one of the few foot trimmers in Cumbria to achieve this qualification.



Congratulations to Peter! If you would like to book an appointment, please contact the Dalston practice.

We are also excited to announce the launch of the all new Paragon Farm Livestock Services, please enquire at one of the practices for further information or to book a service:

Foot Trimming

- Level 4 qualified trimmer
- Competitively priced
- Complete foot health service inc ROMS scoring
- No minimum number of animals

Freeze Branding

parago

- Clear permanent ID
- Multiple size options
- Reliable service
- Stress free method used

Services available to all farms/businesses within Cumbria & SW Scotland Contact: Dalston 01228 710208 Newbiggin 01768 483789 Tarn 01931 716024



<u>Controlling Lameness in Housed Cattle</u>

Lameness is a significant welfare and productivity concern that requires a proactive, multi-faceted approach for effective control. In dairy and beef cattle, lameness can lead to reduced milk production, decreased fertility, increased risk of disease, and higher culling rates. It is a multifactorial issue, by management practices, housing influenced conditions, and nutritional factors and effective control requires good husbandry, proper nutrition, By Bruce Richards regular monitoring, and veterinary intervention.



1. Causes of Lameness

In housed cattle, lameness primarily results from hoof problems, including digital dermatitis, sole ulcers, white line disease, and foot rot which can develop from various factors:

- Poor Housing Conditions: Wet and muddy environments weaken hoof structures and predispose cattle to infections.
- Inadequate Flooring: Hard or uneven flooring or excessive turning can cause excessive wear on hooves, leading to bruising, ulcers, and lameness.
- Nutritional Deficiencies: Diets low in essential minerals and vitamins, such as biotin and zinc, impair hoof health.
- Overcrowding and Poor Resting Area Design: Insufficient bedding, cow comfort or space for lying down increases the likelihood of prolonged standing, which stresses hooves.



 Improper or Irregular Hoof Trimming: Neglecting hoof care can lead to overgrowth, which disturbs weight distribution and increases the risk of lameness.

To effectively control lameness, it is essential to address these risk factors through changes in housing, nutrition, and management practices.

(Image from AHDB)

Winter 2024/25

2. Housing and Environmental Improvements

Housing conditions significantly affect cattle hoof health and susceptibility to lameness.

 Maintaining Dry and Clean Floors: Moisture is a major contributor to hoof diseases like digital dermatitis. Regular cleaning and proper drainage can prevent excessive moisture build up. Rubber mats or soft bedding in high-traffic areas, such as feeding and watering zones, can also reduce stress on hooves.



(Image from AHDB)

- Using Comfortable Bedding: Adequate and comfortable bedding increases lying time, reducing the time spent standing on hard surfaces. Sand or soft mattresses are ideal as they provide good cushioning and traction for cattle, reducing hoof wear and tear.
- Providing Sufficient Space: Overcrowding increases stress and leads to longer standing times, particularly in milking cows. Ensuring that each cow has enough space to lie down, stand up, and move without competition can improve hoof health and reduce the incidence of lameness.

3. Proper Flooring and Footbath Management



(Image from AHDB)

Flooring design and materials in cattle housing are critical to hoof health. Hard, rough concrete floors can cause hoof abrasion, while slippery surfaces increase the risk of injuries due to falls.

 Installing Rubber Matting: Rubber mats provide a softer, more forgiving surface that can reduce the risk of lameness by absorbing impact and reducing hoof abrasion.

- Using Grooved Flooring: Grooved concrete floors offer better traction than smooth concrete, helping to prevent slipping and subsequent injuries. Properly grooved floors also reduce the accumulation of manure, which can foster bacterial infections.
- Footbath Usage: Regular footbaths with properly formulated disinfectants can help prevent and control infections like digital dermatitis.

4. Hoof Care and Trimming Practices

Regular hoof trimming is vital in maintaining proper hoof shape and promoting even weight distribution, which minimizes pressure on certain areas that could lead to ulcers or cracks.

- Routine Trimming: Ideally, cows should undergo hoof trimming at least twice a year, especially high-yielding dairy cows. Regular trimming by appropriately trained trimmers helps maintain hoof balance and reduces the risk of structural abnormalities.
- Monitoring for Early Signs of Lameness: Regular observation of cattle gait and behaviour can help detect early signs of lameness, enabling prompt intervention before conditions worsen. Routine lameness scoring (e.g. ROM's) helps identify affected cows and track lameness trends within the herd.



• Prompt Treatment: Early treatment of infections and injuries prevents minor issues from escalating into severe lameness. Antiinflammatory treatments and corrective trimming are often effective for minor cases.

5. Nutritional Management

Proper nutrition plays a vital role in maintaining hoof strength and resilience. Deficiencies in key nutrients can lead to weak hoof walls, making cattle more susceptible to lameness.



- Ensure a Balanced Diet: Diets rich in minerals like zinc, copper, manganese, and biotin contribute to hoof health by strengthening keratin structure.
- Provide Appropriate Energy Levels: High-concentrate diets can lead to acidosis, which affects hoof health by compromising blood flow and tissue resilience. A well-balanced diet with adequate fibre can reduce this risk.

Extended Colostrum Feeding in Dairy Calves

It has been well documented in the farming press about the benefits and importance of getting colostrum into dairy calves as soon as possible after birth in order to maximise their immune status and set them off with the best start in life. More recently further research has been undertaken which has found many benefits in extended colostrum feeding. In this column I would like to talk through some of the



By Jemma Reed

background behind this and why it is a good idea and also how to practically give you some tips to make it work on your farm.



(Image from AHDB)

Firstly extended colostrum feeding can mean feeding transition milk (the 2nd to 8th milking's after calving) or adding true first milking colostrum or colostrum replacer to milk replacer or whole milk for a minimum of 4 up to 14 days of a calf's life.

Colostrum as well as containing the immunoglobulins that are so important to the newborn calf, also contains many factors that benefit a calf in the first

Winter 2024/25

weeks of life and the effect of these factors has also been shown to impact that animal's life time health and performance. Factors include: antibodies, oligosaccharides, fatty acids, insulin and insulin-like growth factor, microRNAs and lactoferrin that provide local gut immunity and help



reduce the effect of gut infections and may also enhance gut development. Therefore, it makes sense in dairy heifer replacements that are the future of your dairy herd to consider it.

One of the first things to think of before you put an extended colostrum policy feeding protocol in place is; 'What is the disease risk of my herd'? Advice has always been feed only the dam's colostrum to her own calf to reduce disease spread, but when extended colostrum feeding is used,



pooling colostrum then or transition milk is the most solution in practical most instances. However, this incurs risks of the transmission of diseases various such as Johne's, Mycoplasma and Salmonella to name but a few.

When pooling colostrum or transition milk, pasteurisation (60°C for 60 minutes) reduces the risk when these diseases are present but obviously incurs a significant financial investment purchasing a pasteuriser. An alternative to feeding cow colostrum is the addition of a colostrum replacer to milk. Beware as all colostrum replacers are not the same - for this to work well it needs to be a product made from actual bovine colostrum with high levels of immunoglobulin and ideally not a synthetic product. The benefit with a colostrum replacer is that disease risks are minimised.

Winter 2024/25

There are also commercially available transition milk replacers that can be used instead of adding colostrum or colostrum replacer to whole milk or milk replacer.

Suggestions for how to put extended colostrum feeding into practice using farm colostrum include: freezing first milk colostrum in ice cube trays and adding 2 or 3 large ice cubes to each feed (time and labour intensive), mixing first milk colostrum into whole milk at a 1:1 mix or feeding transition milk. Issues can come with the storage of colostrum,

so ideally all colostrum and transition milk is fed fresh so that its quality is not affected by bacteria that can proliferate at room temperature. In the vast majority of cases, feeding fresh colostrum all of the time is not feasible, therefore, looking at ways to store colostrum effectively needs to be undertaken. Suggested methods of storage include: refrigeration at 4°C for up to 5 days (in clean buckets with a lid) or freezing at -20°C for 6-12



(Image from AHDB)

months (in colostrum bags or ice cube trays). Care needs to be taken too when defrosting – do not use a microwave! It is also possible to



(Image from AHDB)

chemically preserve colostrum using e.g. potassium sorbate to extend its shelf life but care needs to be taken doing this.

Due to the issues on farm with the volume of first colostrum or transition milk available, disease and storage issues then in a lot of cases feeding a transition milk replacer or supplementing milk with colostrum replacer is the most practical option. These should be fed according to manufacturer recommendation.

Keeping Calves Warm in Cold Weather

As the weather gets colder, calves are susceptible to cold stress due to their reduced ability to regulate body temperature. Cold stress is a major contributing factor to pneumonia, so it is important for calves to stay warm to remain healthy but also to continue growing. Investing time and resources into winter care for calves can lead to healthier animals and more productive herds in the long term.



<u>By India Hoey</u>

Feeding

Calves require more energy to stay warm, and this can be achieved by feeding extra milk. Newborn calves are particularly vulnerable to cold temperatures and should be fed an additional 50g of milk replacer per day, or 0.33L of whole milk per day, for every 5°C drop in temperature below 15°C. Calves older than 3 weeks, although not as vulnerable, still require extra energy to maintain warmth. Therefore, they should be fed an extra 50g of milk replacer or 0.33L of whole milk per day for each 5°C temperature drop below 10°C.



Adequate Shelter and Bedding

One of the key steps in protecting calves from the cold is providing them with dry, draft-free shelter. Shelter is essential for keeping young animals protected from cold winds and rain. Calves should have access to wellventilated sheds or calf huts to prevent the build up of ammonia and moisture, which can lead to respiratory diseases. However, it is

important that the shelter is not overly draftyparticularly at calf level, as direct exposure to cold winds significantly increases the risk of cold stress. A good way to monitor this in your calf sheds is to place a thermometer at calf height. A thermometer with a humidity reading will also give a good indication of how well-ventilated the shed or hut is.



Bedding is another essential component of winter shelter. Calves should be provided with clean, dry bedding daily. This bedding not only provides a comfortable surface for calves to lie on but also acts as insulation, keeping them off the cold, damp ground and reducing heat loss. Wet bedding can quickly lose its insulating properties and increase the risk of hypothermia.

Calf Jackets

You may also want to consider using calf jackets. These specially designed jackets help insulate calves by trapping heat and keeping them dry, which is especially helpful for young or newborn calves. Calf jackets are made from breathable materials and should fit snugly but not restrict movement — calves should be able to stand, walk, and feed comfortably. Newborn calves should be dry before placing jackets on them. Jackets need to be checked regularly to ensure they are clean, dry, and in good condition, as wet or damaged jackets can be counterproductive.



Jackets should be washed at 60°C to kill cryptosporidium (or use a licensed disinfectant). While jackets can be extremely beneficial, they should be used as part of an overall winter care plan that includes appropriate shelter and nutrition.

TEST, DON'T GUESS

We have invested in two new kits, primarily for testing for worm eggs in cattle, sheep and goats. One kit will be based at Newbiggin and one at Dalston. The Micron kit uses faeces and can rapidly run worm/fluke testing in cattle and sheep. It can also give us an indication if there is coccidia present. Using this kit is more accurate and will replace the more traditional modified McMaster technique for counting worm eggs.



<u>By Paul Kirkwood</u>

Ruminants are commonly affected by parasitic worms. These parasites often cause a range of health issues, such as weight loss, reduced milk and meat production, and even death in severe cases.



The presence of eggs in the faeces of infected animals indicates a parasite infestation. The micron kit can be used to;

- Help to determine if treatment is needed
- Test the efficacy of a treatment by testing for resistance
- Give information on the amount of contamination going onto pasture

Faecal egg testing is an essential part of integrated parasite management (IPM), helping farmers make informed decisions on when and how to treat animals. Overusing dewormers can lead to resistance, and under-treating animals can cause ongoing parasitic burdens. The Micron kit helps farmers monitor parasite levels and only treat when necessary, promoting the responsible use of anthelmintics (wormers) and reducing the risk of resistance.

Benefits for Farmers

- Early Detection: The Micron kit enables farmers to detect parasitic infestations early, often before animals show visible signs of disease. Early detection is crucial for minimising the impact of parasites on animal health and productivity.
- Cost-Effective: By providing this diagnostic tool for our farmers, the Micron kit reduces the need for expensive laboratory testing. These tests will be performed on-site resulting in accurate results the same day. Overtreating is common and can be labour intensive and expensive to treat, especially when animals don't actually need to be treated.
- Reduced Resistance: By enabling more targeted treatments, the Micron kit helps reduce the overuse of anthelmintics,





which can lead to drug resistance in parasites. By only treating animals when the egg count exceeds a certain threshold, farmers can better manage parasite populations and prolong the efficacy of available wormers.

- Improved Animal Welfare: The ability to monitor and control parasite loads ensures healthier livestock, reducing the need for frequent treatments and improving the overall welfare of animals.
- Sustainability: Regular parasite monitoring and targeted treatments contribute to sustainable farming practices. By minimising the use of chemicals and promoting healthier livestock, this will improve a farm's productivity and profitability.

The Micron kit will be used to improve the health and productivity of their livestock while minimising the risks associated with parasitic infestations. Also, the kit automatically generates a report with the test results and can be sent directly to the client. If you have any questions or would like to know more about this new testing kit, please speak to a member of the farm team.



Paragon Veterinary Group Carlisle House, Townhead Road, Dalston, Carlisle, CA5 7JF Tel: (01228) 710208 vets@paragonvet.com Townhead Veterinary Centre Newbiggin, Stainton, Penrith, CA11 OHT Tel: (01768) 483789 townhead@paragonvet.com Tarn Farm Vets Ground Floor Office, Unit 3 J39, Green Farm, Shap, CA10 3PW Tel: (01931) 716024 tarn@paragonvet.com





TARNFARM