

# LAMENESS IN DAIRY COWS

CLAW HORN DISEASE - PREVENTION & CONTROL

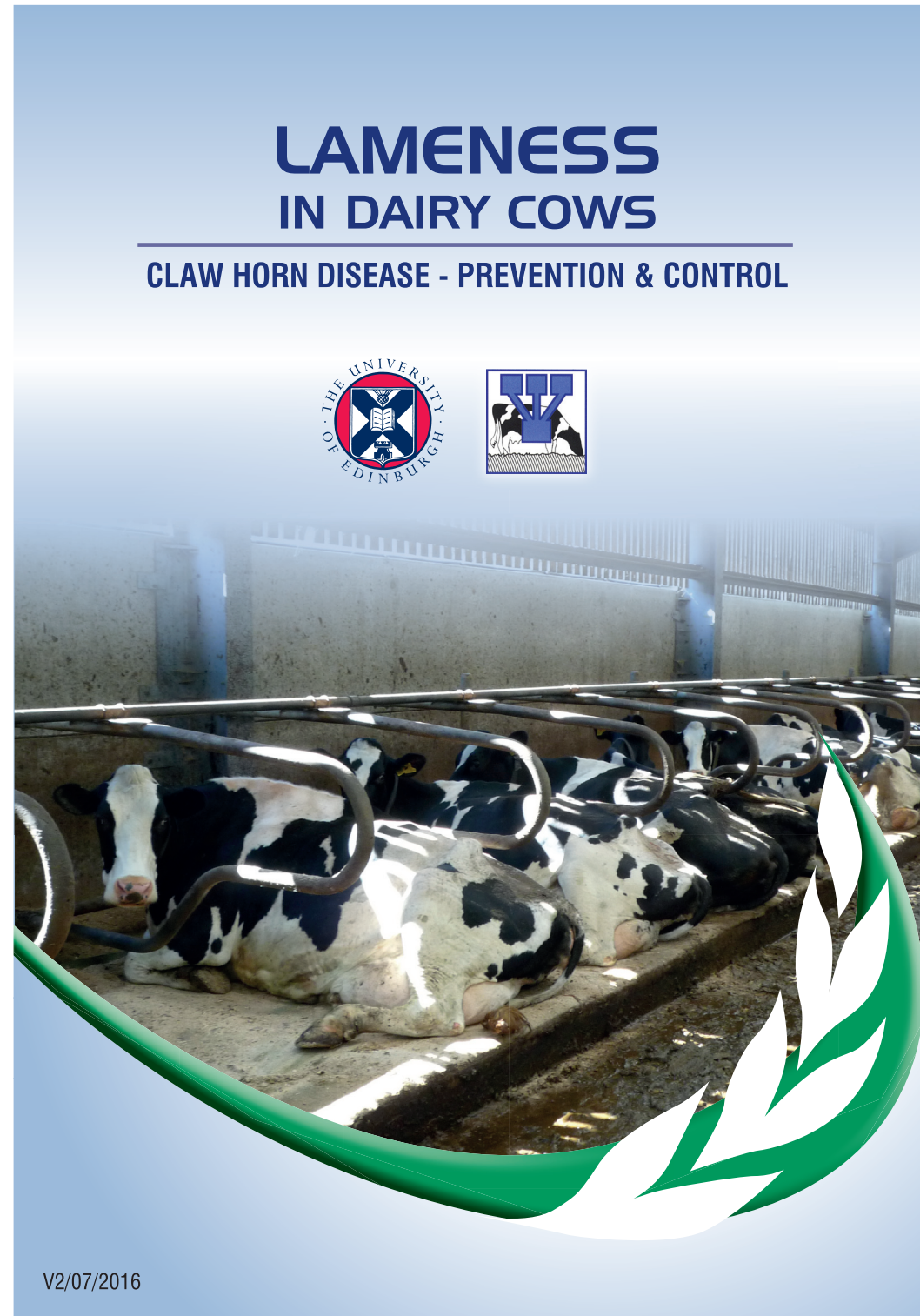


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## The first step **MUST** be to confirm with your vet what the main lameness conditions are on your farm.

### Claw Horn Disease - sole ulcer, white line disease, under-run sole, slurry heel.

- **Sole ulcers** commonly occur on the outer claw of the hind feet. There are a number of different factors involved in their formation including excessive standing on hard surfaces such as concrete, slackening of the ligaments at calving, claw horn overgrowth / foot imbalance and nutrition.
- **White line disease** also commonly occurs on the outer claw of the hind feet. The white line is the glue that joins the wall horn to the sole horn, and any twisting or turning action will potentially damage it.

### TREATMENT

- Lameness should be treated as soon as possible to reduce suffering and speed recovery.
- Use regular mobility scoring to pick up lame cows more quickly.
- Lift the foot, trim any overgrown horn as necessary.
- Putting a block on the unaffected claw will take the weight off the painful claw and promote recovery.
- Consider the use of painkilling NSAIDs in consultation with your vet.



## PREVENTION

- **Cow comfort** is a critical issue in the formation of claw horn disease. Cows should be lying down for 12-14 hours a day, and this means that enforced standing time must be kept to a minimum.
- How comfortable are the cubicles? When the cows are undisturbed, how many cows are actually lying in cubicles as opposed to standing or perching? (ideally over 80% of cows in cubicles should be lying down). If too many cows are standing in cubicles, look at dimensions, neck rail height, lying surface etc.



- How many cubicles are there? There needs to be at least 5% more cubicles than cows.
- Reduce the amount of time that the cows are forced to stand before milking, before they go out to pasture, AI, routine vet visits etc. Cows should stand for no longer than 1 hour at milking times.
- Calving is a critical time for the development of claw horn lameness, as the ligaments in the foot relax and horn growth is disrupted. Consider keeping cows in straw yards from 4 weeks before calving to 8 weeks after calving if practical, and environmental mastitis is not an issue.
- Recent research has shown that thin cows will have a thinner digital cushion, which is the shock absorber in the cows' foot. **Thin cows** are therefore more likely to become lame. Maintain BCS 2.5-3.0 in cows at all stages of lactation.
- Rubber matting in high risk areas such as collecting yards, feed areas and parlours can help, but will not resolve underlying issues with cow comfort. If the cubicles are poor, then cows will lie in passageways!
- Cubicle train all heifers prior to entry into the main milking herd.
- **Examine the feet of all cows at least once a year**, ideally at drying off or go through the herd in one go.
- Only routinely trim feet if necessary (ie. to remove overgrowth or treat disease problems). Over-trimming can cause bruising, damage to the horn and unnecessary pain to the cow – as well as extra work.
- Make sure that all personnel have adequate training, or use a NACFT registered trimmer. Further details are available through the National Association of Cattle Foot Trimmers [www.nacft.co.uk](http://www.nacft.co.uk)
- Prevent subclinical rumen acidosis by feeding sufficient amounts of effective long fibre, and avoid feeding large quantities of starch especially in single meals at milking.
- Biotin supplementation at 20mg per cow per day can help reduce claw horn disease, although the effects will take at least 4 months to become noticeable and supplementation is required long-term.
- Twisting and turning forces on the foot will predispose to white line disease, and so avoid pushing cows in the collecting yard, sharp turns on the parlour exit, and bullying in housing.
- Poor quality cow tracks and damaged concrete will also predispose to white line disease.

**Lameness predisposes to other diseases, and cows with sole ulcers produce 570 kg less milk per lactation and take 40 days longer to get back in calf. Lameness also causes great pain and is therefore a major welfare concern. Control and prevention is very important.**