

## **Mobility matters – pay attention to hoof health**

Written by Tim Henshaw Published on 31 August 2015

Hoof health remains one of the most critical issues for dairy farmers today. Mobility is directly tied to hoof health, and it behooves (pun intended) dairy farmers and veterinarians to do all they can to promote hoof health, including identifying and treating hoof issues.

Lameness is a key predictor of productivity and profitability, as well as an issue of animal welfare concern.

Cow comfort is crucial. A clean, dry and comfortable environment is the first prerequisite. Stocking density is important. A stocking density greater than 85 percent can lead to cow comfort issues and subsequent hoof health issues.

Cows need enough bunk space to eat and enough space to lie down. Minimize competition if possible by grouping 2-year-olds and thin, older cows separately. Identify disadvantaged animals early and consider moving them to special-care areas.

In freestall facilities, animals must have lunge room so they can stand up in a continuous and smooth movement. Improper stall design or inadequate room can lead to injured hocks, hips and hooves.

Cow comfort extends to the surfaces cows are standing on all day. Cows standing on hard concrete all day exacerbate some hoof issues, such as foot rot and laminitis. Cows restricted to concrete have more foot and leg problems.

Grooved concrete provides greater grip for cows. It is important freestalls provide some cushioning for hooves. There are a lot of options available.

Sand bedding is very comfortable, and is great for hoof and leg health, but may result in issues with manure-handling equipment. Comfort mats and water-filled mattresses also provide good cow comfort measures and are great as long as they can be kept relatively dry.

A number of hoof issues are influenced by moisture. Cows standing in manure are more likely to have hoof issues. Environment control is critical to minimize breeding ground for bacteria, which can impact hoof health.

Cows on pasture need to have access to supplementary feed and water that is not surrounded by a mud hole. Consider topping off those areas with sand or a sand-gravel mixture. Wet conditions, the presence of other infected animals and poor foot hygiene are risk factors for hoof problems.

Lameness is one of the most common and economically damaging issues dairymen face. Some estimates suggest each case of lameness costs the dairy producer up to \$700 including cost of treatment and loss of productivity.

Four main areas of concern include laminitis, foot rot, sole ulcers and digital dermatitis. Routine hoof trimming will identify these early and help minimize the economic loss related to these diseases.



Digital dermatitis and foot rot are often the result of trauma or damage to the skin between the claws, front or back, from urine, feces or water. This is another good reason to keep pens and barns clean, dry and free from foreign objects that could injure the hoof.

Footbaths using approved solutions may help prevent the spread of infection when they are used correctly. Used incorrectly, they may actually spread the pathogens and disease-causing organisms.

Non-infectious foot problems include issues of conformation, management and nutrition. Some foot issues are a result of overcrowding and prolonged standing time.

Some issues such as sole ulcers may be linked to transition ration issues resulting in metabolic problems after calving. Happy, healthy hooves are one of the byproducts of a proper dry cow program that meets the nutritional needs of the dry cow and a transition ration that minimizes metabolic disease post-calving.

Trace minerals including copper, zinc and manganese are important for hoof health and should be part of any supplement program.

Sometimes, rations high in soluble proteins may result in greater hoof sensitivity and lameness. Consult your nutritionist or veterinarian for advice in this department. Regular maintenance from a professional hoof trimmer helps identify and treat problems early.

Prevention can go a long way when it comes to hoof issues. Consider this top 10 list:

1. Provide a clean and dry environment.

2. Provide non-abrasive flooring with good traction.
3. Consider stall size and bedding.
4. Avoid overcrowding and monitor stocking density.
5. Provide regular hoof maintenance and corrective trimming.
6. Use and maintain proper footbaths.
7. Feed a nutritionally balanced diet.
8. Avoid sudden feed changes.
9. Identify lame cows early and implement corrective action plans.
10. Correctively mate animals to improve feet and legs for the next generation.

Lameness is a key area of economic loss for the dairy producer. Cow comfort is key to productivity. Paying attention to hoof health is important, not just for productivity, but because it is the right thing to do. **PD**

**PHOTO:** Cow comfort extends to the surfaces cows are standing on all day. Cows standing on hard concrete all day exacerbate some hoof issues, such as foot rot and laminitis.

Source: <http://www.progressivedairycanada.com/topics/herd-health/mobility-matters-pay-attention-to-hoof-health>