

## Fiji DAIRYNOTE 5.3 Animal Health – Lameness

### Good Practice Guide for Fiji Dairy Farmers

#### What is lameness?

Lameness occurs when an animal has leg or foot pain that affects how they move. It is an animal health and welfare concern. Lameness causes major drops in production and weight, as the animal will not eat and drink as much due to the pain and effort of doing so. Lameness also reduces animal reproductive performance:

1. In the cow, due to lack of hormone activity associated with the weight loss and pain.
2. In the bull, because of the lack of mobility.

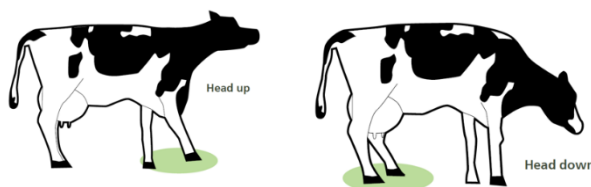
Lameness is one of the major health problems around the world that affect dairy production.

#### Detecting lame cows

The earlier a lame cow is detected the better. An easy way to see early is to observe walking motion.

**Normal** is when she is walking with her head level and putting her back foot where her front foot had just been placed.

**Abnormal** is when the strides are shorter and there is obvious favouring on one leg to take weight off the painful one. If she is walking with her head up this would indicate a front foot problem and head down a back foot.



Source: DairyNZ

#### What should I do when I find a lame cow?

When you find a lame cow you should:

1. Minimise her walking and have her close to the milking shed, with easy access to food and water. This will stop further damage to the foot. If the cow is being milked twice per day, put her on once per day.
2. As soon as possible you should examine (or get someone with experience to examine) the foot and find out what the problem is. Check in particular between the claws of the foot for foreign objects like stones.
3. Treat the problem as required. This may require hoof trimming, removing rotten flesh or cutting away parts of the wall of the hoof. In some cases antibiotics may be required. Antibiotics must be prescribed by a veterinarian.

**If using antibiotics observe all the dose rates, as well as the milk and meat withholding recommendations!**



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- Record the reason for your animal's lameness and the treatment required. This particularly important if antibiotics are used.
- After treatment, minimise her walking and have her close to the milking shed with easy access to food and water. Milk your cow once per day until she is walking normally again. Don't be tempted to put her back into the main herd too soon.

### The main causes of lameness of Fiji are:

#### Overgrown Feet



The hooves are overgrown, so when the cow walks she is walking on the bulb of her hoof not the sole. We describe this as "walking flat footed".

#### Cause

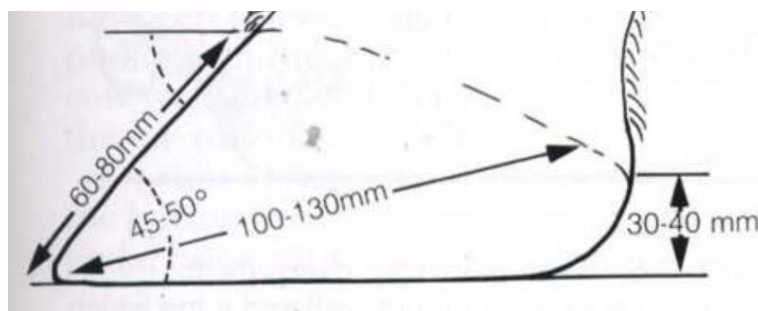
Hooves left to grow too long. Soft wet ground conditions make this problem more common.

#### Treatment

Trim the affected hoof back to a normal state. This requires safe and secure handling facilities. Experienced hoof trimmers have gained their skills by doing many cows and can be called in to do this, these skills can then be passed on to the farmer during the process so they can do it themselves.

The aim of hoof trimming is to get the foot back to normal and will require trimming the toes back and scalloping out the insides of the claw to allow for dirt and debris to fall out of the middle of the foot as the cow walks.

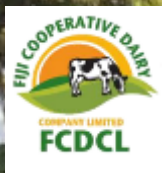
Below is a guide of the normal measurements of a hoof. Looking at younger cows and how they walk is a good way to see the right position that different parts of cows' feet should be in as they are usually in a better state than older cows.



Source: IHMC Public Images

#### Prevention

A regular hoof trimming regime.



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## Bruising



Source: DairyNZ

The sole of the foot has dark areas, just like when you get a bruise on your body.

### Causes

Stony tracks, stones in the cow yard, soft feet and cows being rushed on the track.

### Treatment

Minimise walking – this may mean putting cows on once per day milking if they are being milked twice a day. Use a footbath to harden the feet (see the last page of this DairyNote for directions).

### Prevention

Repair tracks so they are of a smooth surface, make sure the yard is clear of stones and don't rush the cows when moving them.

## White Line Disease



Source: DairyNZ

At the top of the hoof there are signs of infection and under the hoof dirt and stones are working their way up between the soft and hard part of the hoof (the 'White Line').

### Causes

Stones and dirt on tracks and in yards, sharp turning motions putting pressure on the outside edge of the hoof and hooves with long toenails.

### Treatment

Cut away the side of the hoof to clear the debris away and allow drainage of any infection.

### Prevention

Repair tracks so they are of a smooth surface and make sure the yard is clear of stones. Keep cows' hooves trimmed.





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## Foot Rot



Source: DairyNZ

The skin between the claws is cracked, there is swelling around the foot and sometimes up the leg, and more than likely, an obvious foul smell.

### Cause

The gap between the two claws is injured, usually by a stone, allowing bacteria to get in and causing an infection.

### Treatment

Remove the item (stone) causing the injury if it is still in there. Clean away the pus. Treat with antibiotics if required.



**If using antibiotics follow the instructions on the label regarding treatment, as well as the withholding periods of milk and meat.**

### Prevention

Ensure stones are not present on the cow yard, have good track surfaces and use a footbath.

## General injuries

### Signs

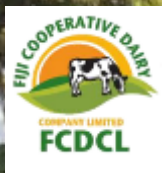
Cuts and grazes on feet and legs, swelling and obvious limping.

### Causes

Foreign objects in paddock and on tracks – nails, wire, old machinery, holes, pushing through fences, dog attacks and rough handling.

### Prevention

Ensure paddocks, tracks and yards are free from foreign objects and animals are protected from dog attacks.



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### Prevention of lameness key points

- **Quiet movement of stock** – move stock quietly so they can see where they are walking to avoid stepping on foreign objects like stones.
- **Maintain tracks and yards** – so they are smooth to walk on and are not stony.
- **Keep feet trimmed** – with a regular foot trimming regime. Learn how to foot trim yourself so a small number of cows can be done at a time.
- **Avoid injuries** – keep paddocks and sheds free of hazards that a cow can injure herself on.
- **Detect problems early** – the earlier you find a cow with lameness and do something about it, the quicker she will recover.
- **Have a lameness plan** – this will ensure people working on the farm know the steps to take when they find a lame cow.
- **A foot bath can be useful at times** – ensure that it is well-managed to get maximum benefit and not cause other problems like mastitis.

### Footbaths

Footbaths are a good tool to help harden hooves and prevent infectious lameness diseases such as footrot but they have to be well managed. If they are not, they can cause other problems such as mastitis. They should be viewed as a tool for lameness management.

Footbaths should be positioned at the exit of the cowshed in a way that does not restrict animals exiting the milking bail.

They should also:

- Have a floor that is not slippery.
- Have a drain in one corner to allow for cleaning.
- Have a roof to prevent dilution from rainwater.
- Be long enough for cows to take 3 steps, i.e. be 2.5 – 3 metres long.
- Be deep enough to come up to the cow's dew claw, i.e. 80-100mm.
- Be cleaned regularly.
- Have solution rates maintained at the right levels.

