

# DAIRY COW MANAGEMENT AROUND CALVING TO REDUCE RISK OF LAMENESS

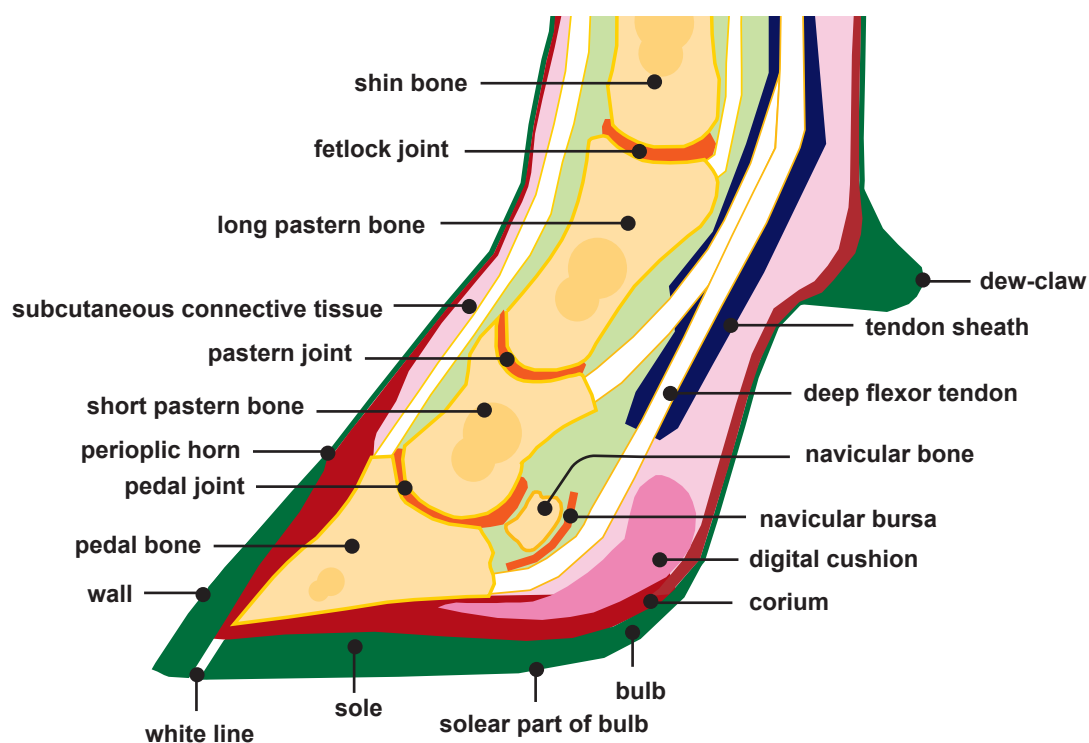
Ger Cusack, Veterinary Practitioner and member of the Hoof HealthCheck Technical Working Group

**F**ebruary and March are the busiest months of the year on any spring calving dairy farm. Many veterinary practitioners see cases of lameness arising in the first 3 months post calving.

## Why does this happen?

There are a few factors contributing to this greater lameness risk.

Firstly, as a cow prepares for the calving event, her body releases a hormone called relaxin. This hormone release is an important part of the calving process. It causes the ligaments around the birth canal to soften. This softening allows the birth canal to expand to accommodate the birthing process. As farmers, you will recognize this as “the dropping of the pin bones”. Unfortunately, the hormone relaxin also affects the ligaments supporting the pedal bone. This is a small bone about 5 centimetres long which sits within the hoof. Softening of the ligaments supporting this bone results in the bone becoming unstable. Movement of this bone can result in bruising of the sole of the foot and the



production of weaker hoof horn. Softer horn is less durable and the cow is therefore at greater risk of becoming lame in the following few months. This hormone affects all cows in the week leading up to calving and for one to two weeks post calving.

A second factor that is likely to be at play in the early post calving period is loss of body condition. Research has shown that cows that are thin (BCS < 2.75) are at a greater risk of becoming lame. Within the hoof, there is a pad of fat that acts as an anti-concussion or shock absorber cushion. Thin cows have a smaller fat pad, experience less shock absorption, and are more likely to become lame.

## TAKE HOME MESSAGES

- ▶ **Move cows gently, avoiding running, pushing or competing for space.**
- ▶ **Avoid walking freshly calved cows for long distances.**
- ▶ **Keep cows close to the parlour for as long as possible (minimum 48 hours) to allow the pedal bone to settle post-calving.**
- ▶ **Plan paddock grazing so that freshly calved cows graze near the milking parlour.**
- ▶ **Mix groups well in advance of calving to avoid fighting and bullying around calving.**
- ▶ **Introduce first calving heifers to the main herd well before calving.**
- ▶ **Ensure that freshly calved cows have adequate feed space (minimum 600mm or 2 feet).**
- ▶ **Give access to comfortable cubicles or straw bedded area to enable cows to lie down as much as possible both before and for the week after calving.**
- ▶ **Calve cows in correct body condition (3.00 to 3.25) and manage feeding to minimize body condition loss in the weeks following calving.**
- ▶ **Treat lame cows promptly and give them access to straw bedded area to avoid the risk of further injury.**