



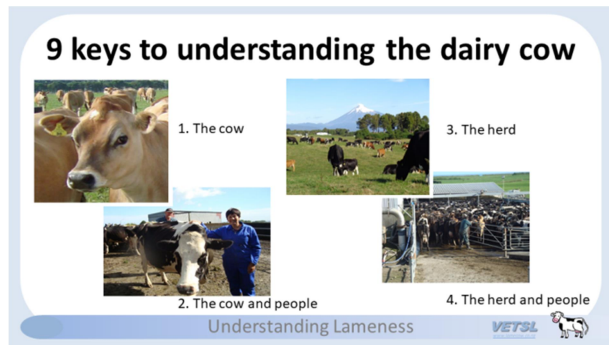
Understanding and Managing Lameness in Pastoral Systems

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I notice as I watch cows / herds being milked that in fact pressure on a herd usually results in poor cow flow, not faster flow. Poor cow flow causes impatience and so we end up with a cycle. In order to break the cycle and reduce pressure on the cows we need to understand cows.



1. The cow is an animal of prey.

Therefore she has to keep herself safe and this affects everything that she does and how she reacts to different people.

2. Vision of the cow.

Cows do not see the world as people do. As a prey animal they have eyes on the side of their heads and keep a watch on their surroundings by their almost 330 degree vision when the head is down grazing. Their vision is predominantly monocular with only about 25 – 50 degrees of binocular vision within which both eyes can focus on an object to perceive depth, distance and speed. They need time to be able to work out what they see – is it a threat or not. Another result of the cow's vision is a blind spot directly behind them of about 30 degrees.

3. Limited up and down vision.

Cows need their head down to see where to place a front foot safely. Normal walking is when the back foot follows the front foot and lands in almost exactly the same place that the cow chose for the front foot. Even in the dark when a cow can't see the track surface she must have her head down so she can lift or lower her head if she stands on something uncomfortable. In the milking yard, too much pressure from a gate or a person will cause the cows heads to be forced up and again they cannot respond to a rock on the concrete.

4. Cows recognize people

Cows can recognize individual people. The recognition may be due to sight, voice / sound and possibly also smell (as cows have an acute sense of smell). Many anecdotal stories of farmers suggest that cows sense bad temperament in some people and fear those people.

Cows remember people who have hurt them and may develop "permanent memory" of that person if the first encounter was a fearful one. Cows will be more forgiving if the first memory of a person was positive.

Lack of understanding of cows produces fear

The sorts of things that cause fear in cows are:

- too much noise – cows are sensitive to high pitch (whistling) and loud noise (shouting)

- fast movement – they think we are a predator
- coming out of the pit and not respecting flight distance and balance point
- standing at the entrance end of the pit facing the cows
- hitting cows up the bails or even tapping the rails behind them

5. Flight zone

Definition of flight zone: the area within which a cow is secure, the space it needs to feel safe. Cows have a flight zone for people and a flight zone for other more dominant cows. Distance of flight is a measure of how fearful a cow is. Looking a cow in the eye increases its flight zone.

6. Balance points

The most important balance point to remember is at the shoulder. Working on the edge of a cow's flight zone, using the balance points, moving quietly closer to encourage her to move and moving out to take the pressure off her, results in low stress handling. When we appreciate this, low stress handling of the whole herd becomes a possibility.

7. Cows are followers.

If a leader cow will move, others will follow. It is their nature to follow. One of the first signs of pressure herding on a track is bunching up – not allowing space for choosing which cow to follow.

8. Collecting order and milking order

There are two following orders: into the collecting yard – the walking / arriving order, and the milking order. Cows need space to allow them to move among each other in the milking yard in order to change from the arriving order to the milking order.

Some cows will stand right up by the milking bail entrance for a long time and allow cows from further back to walk around them. Some cows from the rear will overtake those in front, drawing others behind to follow into the milking bails.

Cows need space for this to happen.

How can we tell if there is too much pressure.

The signs of pressure are:

1. Not following (bunching)
2. Sideways touching.
3. Lower dominance cows having to reverse to escape.
4. Heads up.

9. Cows are creatures of habit

What you are doing directly with the cows and indirectly with gates etc will determine how much pressure there is. Cows (and herds) are creatures of habit (the last behaviour) If everything follows the same routines then there will be less stress and pressure. It is up to us to provide the routine!

Rotary and H/B protocols available

Understanding the cow – reduces pressure - improves cow-flow - Less lameness - Good welfare for cows.

So we need to understand the cow!