

Managing lameness through better stockmanship

Twelve cow behaviours affecting cow flow

The following has been adapted from Neil Chesterton. Neil is a dairy vet in New Zealand. He has great experience and credibility as an expert on dairy cow lameness. Many of his observations have been recorded on video by him and his wife, over a period of many years working with and watching cows. His material, including some excellent instructional DVD's is available via his website, www.lamecow.co.nz.

In New Zealand, sole bruising and white line disease are the predominant forms of lameness and attention to good stockmanship and cow flow is at the forefront of their control strategies. These are very relevant to all UK cows, and particularly those herds with a grazing management system.

1. *Rear foot placement is almost in the same position as the front foot.*

If a cow can drift at a voluntary pace the front foot will be safely placed as the cow looks where she puts it. The rear foot will be placed in the same spot. Under pressure, or on slippery or painful surfaces the rear foot steps short, and the cow is less able to choose her front foot placement either.

Action: Reduce herding pressure if cows are short stepping and improve walking surfaces.

2. *Cows walk and stand with their heads down.*

With space for their heads to move up and down freely they can find safe foot placement, avoid cows of higher dominance and respond to pain if they stand on a stone. If heads are up either on the track or in the collecting yard it is because they are too tightly packed.

Action: Cows need space. Don't force bunching up.

3. *Cows have a pecking order.*

Cows have a walking order that is slightly different to their milking order. After entering the collection yard, cows need time and space to rearrange themselves before entering the parlour.

Action: Cows need space and time to rearrange their position once they are in the collecting yard.

4. *The majority of dominant cows walk at the front of the herd but a significant number are present throughout including at the rear.*

It is important that cows have space to be able to keep their distance and avoid forced interaction with cows of similar or higher dominance

Action: Don't put pressure on the rear cows when driving.

5. Dominant cows set the walking speed of the herd.

Pressure on the rear cows when herding or using the backing gate causes the rear group to compact because they will not overtake dominant cows in front. The front cows are unaffected and will not go any faster.

Action: Don't pressure the rear cows.

6. Cows follow their leaders; their movement is forwards.

Under pressure, lower dominance cows and heifers reverse out of a tight spot. Reversing cows indicate too much pressure.

Action: Increase the distance between the herdsman and the rear of the herd, or reduce pressure from the backing gate.

7. Cows avoid bumping other cows side to side.

Dominant cows will push in amongst other cows when under pressure causing sideways bumps and shoving and unplanned foot placement.

Action: Identify and reduce the causes of pressure. Cows need a minimum space in the collection yard: 1.8m² for Holsteins and 1.3m² for Jersey size.

8. Cows respond to voices.

Cows are afraid of low, harsh voices. Calling out or whistling softly behind the herd whilst they walk along a track keeps them moving without fear.

Action: Use a higher, friendly tone or whistle rather than sharp, gruff tones when herding cows from behind or calling them into the parlour.

9. Cows have flight/fight distances.

Each herd is different. If a herd has never been hurt or learned to trust you then the distance will be very short. If you keep out of the flight distance from behind when herding, compaction of the rear group will be minimal.

Action: Find the flight distance for your herd and stay outside it.

10. Cows have two balance points.

Their shoulder can be used to direct them backwards or forwards and their backbone to direct them left or right. For example, coming out of a parlour pit to collect cows will place you in front of their shoulder and the cow turns away or moves backwards.

Action: Use the balance points correctly. Do not come out of the pit to collect cows.

11. High and low dominance cows use different feet to push with when responding to pressure.

A dominant cow in a tight situation pushes sideways using the back leg closest to the cow she is leaning against for propulsion. The white line of the rear outer claw takes most pressure. A lower dominance cow will reverse out of a tight situation using the front foot for propulsion. The white line of the front inner claw takes most pressure.

Action: Reduce herding pressure to reduce white line injuries.

12. Cows are creatures of habit.

Cows respond positively and flow better if they have a consistent routine. Backing gates must be used in the same way by all milkers or cow flow is disrupted.

Action: Milking should be an “exercise in contentment”. All routines must be the same each day. Voices, herding technique and use of the backing gate must be done in the same way by all milkers.

Management Rules

(adapted from Neil Chesterton, NZ)

On tracks:

1. Allow the herd to drift to the milking parlour/ collection yard by keeping outside the flight distance of the rear of the herd. Quad bikes or other vehicles may have a longer flight distance than walking. Talk or whistle to the cows, but don't frighten them. Best not to use a dog... if you absolutely insist on bringing along your dog, make sure it is friendly with the cows; it might bark a little, but must never nip ankles. Don't let it bunch up the rear cows.
2. Look for heads up. The rule is “NO HEADS UP”.

In the collection yard:

1. Allow a minimum of 1.8m² floor space for Holstein cows; 1.3m² for Jersey-size cows.
2. Don't use the backing gate until at least two rows are milked (15 minutes minimum).
3. The backing gate is regulated to move for no more than 5 seconds each time.
4. The backing gate moves at no more than 12m/minute (1m in 5 seconds) in round yards or 6m/minute (0.5m in 5 seconds) in rectangular yards.
5. Install a bell or buzzer on the gate so cows know when it is moving. Because cows are creatures of habit, they will soon learn the predictable nature of the gate and a ripple effect of gentle movement will occur.
6. Don't come out of the pit or stand in front of a cow's shoulder - stay in the pit!
7. No harsh voices or use of sticks; no banging metalwork - stay calm during milking.
8. Look for heads up. The rule is “NO HEADS UP”.

And finally... developing good stockmanship skills and adopting these management rules is likely to take time to perfect. Both the people and the cows must develop new habits.

It will take around two weeks for the cows to learn, and maybe two months for the people! Stick with the rules. Perseverance in the short term will give benefits for ever more.