

Cow
SIGNALS®



Cow Signals **Checkbook**

Working on health,
production and welfare

Jan Hulsen

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Cow Signals Checkbook

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Feed Intake Score Card

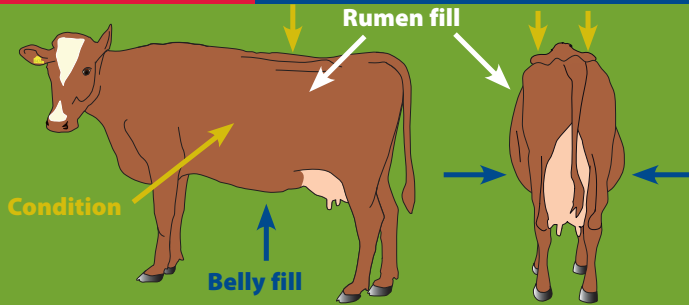
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You can see how much a cow has eaten today, this week and this month. Make sure that the cows are not deprived of anything.



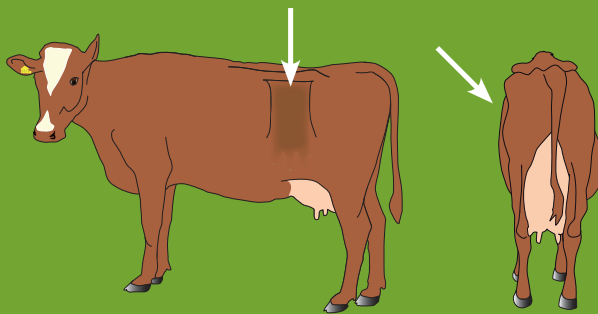
Eaten well

This cow has eaten well. Rumen fill, belly fill and condition are OK.



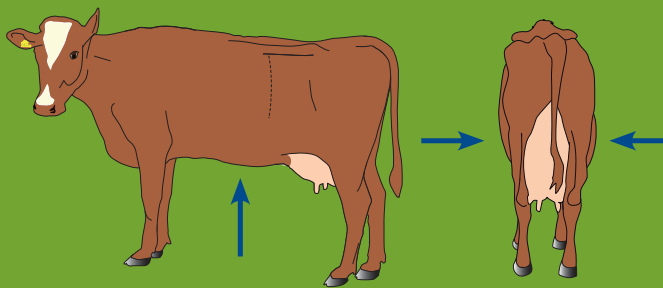
Rumen fill

This cow has not eaten enough **TODAY**.



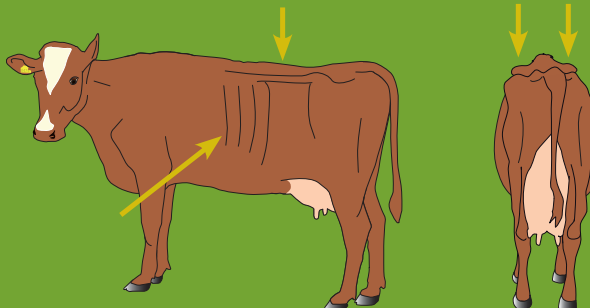
Belly fill

This cow has not eaten enough **THIS WEEK**.



Condition Score

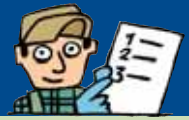
This cow has not eaten enough **THIS MONTH**.



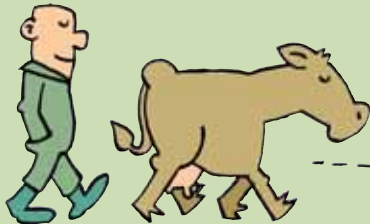
Stress-free Driving Instruction Card

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Calm people have calm cows. Calm cows give more milk and have fewer problems such as hoof conditions. This saves time and money and delivers job satisfaction.



1 Let cows walk at their own pace: heads down



Always drive the cows at their own pace. Hurrying only makes the last two or three cows nervous and achieves nothing else. Cows always walk in order of rank and do not overtake each other. When they are calm they keep their heads down so they can see where they are placing their feet. They lift their heads when they are nervous.

2 Routine: always the same, everywhere the same



Cows are creatures of habit, and after two or three weeks they know exactly what is happening, what they have to do and when. Like going into the milking parlour. Have the patience to allow routines to develop and then stick to the routines rigidly.

3 Stay in the milking pit



Wait until the cows come in by themselves; only bring in the last row if necessary. If you go into the collection yard from the milking parlour to fetch the cows, the cows will first move backwards and then forwards. This causes nervousness and large forces on the feet. They will also get used to you coming to fetch them. Walk around the cows, from behind.

4 Think "cow flow": no turbulence



A group of cows moves like a flowing stream. Prevent this stream from being interrupted; avoid obstacles, passageways with dead ends, or things that cows are afraid of. Use a backing gate to reduce the size of the collection yard, with a bell and not electrified. Make sure that a cow can always walk from the back to the front through the waiting cows.

5 Risks: know them and manage them



Make sure you know the high-risk times and high-risk locations, and do not allow them to cause problems. The best approach usually consists of cleanliness, rest, space and rubber. Cleanliness makes for clean, dry hooves and no stones on the track. Rest reduces hoof wear and the likelihood of sole bruising. Space allows cows to get out of each other's way. Rubber provides a soft surface with grip.

6 Docile cows: a lot of gentle contact with people



To achieve docile cows, start with the youngest calves. Make sure they see people often enough and walk among them. Always be calm and predictable. Never raise your voice and do not use force. Breed and select cows with a gentle nature.

Instruction card: Managing cattle in a stress-free way

Cow SIGNALS®

A cow is a four-legged, rigid, rectangular object around 2.5 m long, 1.5 m tall and weighing about 600-800 kg. She has difficulty with smooth floors and is wary of protrusions, transitions, walking backwards and other cows. Cows walk at about 4 km/h and people at 6 km/h.

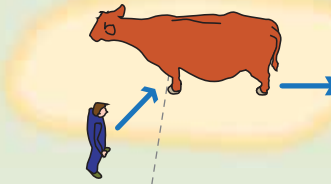


Escape zone and exerting pressure

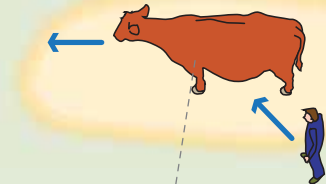
You get a cow moving by putting her under pressure. You put her under pressure by moving towards her, making yourself bigger, talking to her or touching her. Eliminate the pressure once she is moving in the right direction.



The cow will react to anybody coming close from the edge of the escape zone. Look at the eyes, the ears and the position of the head.

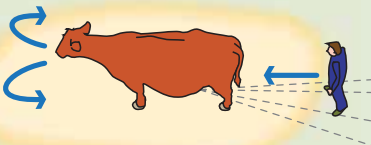


Exert pressure forwards of the shoulder: the cow will walk backwards.

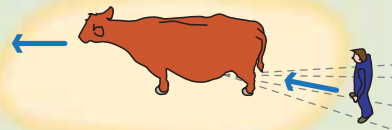


Exert pressure behind the shoulder: the cow will walk forwards.

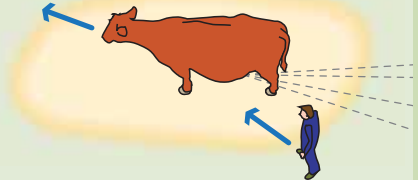
Where are you?



Exert pressure right behind the cow where she can't see you: she will turn round.

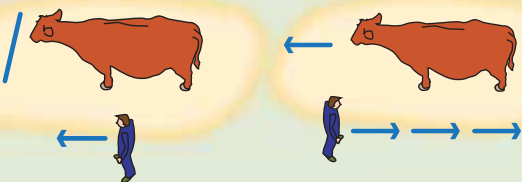


Exert pressure diagonally behind the cow so that she can just see you: she will walk straight ahead.



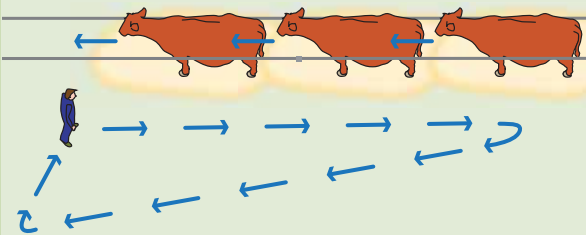
Exert pressure diagonally behind the cow, slightly to the side: the cow will turn away from you.

How are you moving?



Walk parallel to the cow in the same direction and she will stop.

Walk parallel in the opposite direction and she will walk forwards to pass you.



Use walking in the other direction to get cows standing behind one another in a driving alley to move forwards.

Do not:

- hit
- kick
- pull their tails
- hurt them
- shout
- make loud noises

Lying Comfort Scorecard

Cubicles that are too hard are painful for the cows to lie down, lie or stand in. A cow that is reluctant to lie down will spend less time lying down per day. Sole damage is also a sign that the cow is putting too much weight on the hooves from standing for too long. Weaker cows are the first to suffer from poor cubicles, while they are the ones that really need their rest and comfort.



Assessing cow behaviour and cubicle surface

Check whether the cows have enough room to stand, lie down and stand up in. Monitor large cows in particular. The floor surface must be soft and dry and provide grip.



≤ 10% of the standing cows are standing with their legs outside the cubicle.
≥ 85% of the cows in the cubicles are lying down.



Brush the back of your hand across the surface of the cubicle to make sure it does not graze or cut.



Kneel down on the cubicle floor about five times. This 'knee test' should not hurt.

Hock and carpal (knee) joint score card

Damage to the hocks and carpal (knee) joints tell us that the cubicle surface is too hard.

Swelling



0

No swelling.



1

Swelling of the skin, thickening of subcutaneous connective tissue.



2

Acquired bursa (irritation swelling) between bone and skin.

Swelling is caused by landing and lying on a too hard surface. (Target: < 20% score 1, none score 2)

Hair loss and skin damage



0

No hair or skin damage.



1

Hair loss and slight thickening of the skin.



2

Hair loss and wounds or severe thickening of the skin.

Hair loss is caused by rubbing on a rough surface. (Standard: < 30% score 1, < 10% score 2)

Hoof Trimming Instruction Card

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Trimming requires knowledge, insight, skill and good equipment. The five-step plan on this page provides guidelines, but you can only really learn to trim properly by taking a hands-on course given by a certified trainer. And take regular refresher courses.



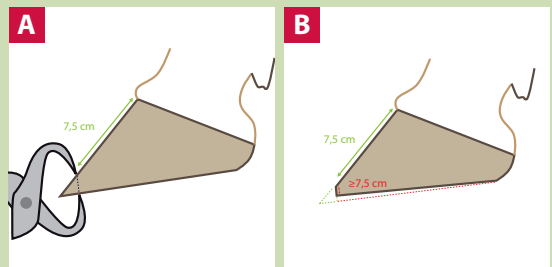
Steps 1—3 are preventative

Step 1 Inner claw

Trim the inner claw to length by cutting the tip off 7.5-8 cm from the coronary band, at right angles to the sole. See diagram A. This length applies to a cow of average size. Lower the sole until the clipped tip is still at least 0.5 cm thick. Keep the sole flat and do not remove any horn from the bulb area. See diagram B.

Step 2 Outer claw

Make the outer claw the same length and height (if possible). On hind feet, the outer claw usually needs more horn removing, especially towards the back. For your own safety, never cut towards your free hand.



Step 3 Model repair

Make a small dish in the sole in the centre of both claws, keeping at least 3 cm away from the toe tip. Remove any frayed horn in the interdigital space. Cut away as little as possible of the horn from the horn wall at the tip.

Steps 4 and 5 are curative

Step 4 Take the pressure off affected horn (lowering)

Coloured horn (yellow, orange or red), loose horn or tears form weak spots in the sole can develop into ulcers. Take the pressure off these areas by lowering them. Only do this in the back two-thirds of the outer claw. Make sure the inner claw and the front part of the outer claw retain a sufficiently large functional bearing surface, or attach a block.

Step 5 Check, remove loose horn, treat

Remove any heel horn erosion fissures in the inner claw and any loose horn in the back two-thirds of the sole of the outer claw. Around the affected area, thin the hard edges to prevent pressure points and irritation.

Remove loose horn so that no contamination remains behind. After trimming, carefully inspect the coronary band and the interdigital space. Treat any skin irritation/ infections and digital dermatitis lesions. Carefully clean and dry the affected areas and apply effective medication. Use a clean piece of cloth for every cow.

Pedicuring, or hoof trimming

The aim of a functional pedicure is firstly to monitor the health, structure and shape of the hooves. Then the idea is to remove as much horn as necessary to improve the shape and therefore the load. You will also treat any hoof conditions. Cut off as little as possible and in particular avoid cutting away horn in the bulb area. A power disc trimmer requires much more skill than knives. Abrasive-type grinders are not suitable, and in any case are less effective than sharp knives. In functional trimming, the final trim (see step 3) is best done with a knife. If in doubt and under a lot of work pressure, leave the pedicuring to the professionals: the cattle pedicurist or hoof trimmer.

Calving Assistance Instruction Card

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By assisting with calving in a hygienic and structured way, you are giving the calf and the mother the best possible start in life. Standard procedure for calving assistance



Step 1



Equipment: calving gown, bucket of tepid water containing disinfectant for yourself, bucket of cold water for the calf, halter for the cow and plenty of lubricant. Calving aid at the ready. Calving ropes are in the disinfectant water.

Step 2



The cow is restrained. Wash your arms and the cow's rear end with the disinfectant. Make sure none of it gets back into the bucket. Use plenty of lubricant. Tie the tail to the halter.

Step 3



With reasonable traction on the calving aid, check if the calf is ready to be delivered. Practise recognising the feel of the pelvic entrance and the different parts of the calf. Most calving cows will lie down by themselves.

Step 4

Can the calf be delivered?

Assess whether the calf can pass through the pelvis. Too little space: call the vet.

Normal position: At the pelvic entrance, feel the space over the calf's head and how the shoulders are lying with respect to the pelvic entrance. Are they in front of or outside the pelvic entrance? How far are they from the pelvic entrance?

You should find:

- you can get your hand over the head
- distance from pelvic entrance to both shoulders:
 - in a cow standing up < 10 cm
 - in a cow lying down < 5 cm (measure with your index finger).

If the calf is the wrong way round (posterior presentation):

turn the calf's hindquarters 30° to the left or right. With reasonable traction, the heels should come to the level of the vulva. In the case of a heifer, take plenty of time to stretch the birth canal. Ask your vet how.

Step 5



A cow lying on its side (rather than on its belly) has a wider pelvic entrance and can push harder. With a rope under its belly, behind the forelegs and in front of the udder, you can make the cow lie down. Take your time. Pull when the cow pushes and stop pulling when she doesn't, to let the calf rest.

Step 6



After the birth, feel for another calf and check the birth canal for injuries. If the vagina is very blue or torn, cool it for 10 minutes with cold running water. Ask your vet for a treatment plan for these animals.

Cow Signals **Check Book**

Working on health,
production and welfare

The *Cow Signals Check Book* is a collection of the 65 most important checklists, score cards and instruction cards designed to help dairy farmers manage their day-to-day operations. These cards cover all aspects of cow husbandry. This Check Book is part of the successful Cow Signals series.

The cards are designed to be used separately. It is therefore not a book in the usual sense of the word, but a source of information for you to dip into as and when you need it.

By working with the *Cow Signals Check Book*, every dairy farmer can improve the health, production and welfare of their cows. And benefit your economic results.

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