Five things to consider

Peter Mullan, Teagasc, Manorhamilton, Co Leitrim

Cattle are regularly taken from comfortable surroundings, in their paddock or pen, into an unfamiliar environment where they may be prodded with a needle or have a dosing gun shoved into their mouth. Remind you of anything? A dental visit perhaps?

When it is put like that, from the animal's point of view, it is not hard to see why they might find any handling operation a stressful experience. If the animals find it stressful they may not co-operate, making the experience stressful for the handler too.

Stressed animals are much more prone to picking up infections, which can lead to reduced performance. Animal handling need not need be overly stressful. Small changes can yield significant benefits for all involved.

The Flight Zone

Cattle are prey animals, and they view humans as predators. We’ve all hear of the ‘fight or flight’ response and cattle will usually choose flight, though newly calved cows are likely to stand and fight.

The animal’s flight zone is its personal space. The size of the animal’s flight zone is an indicator of just how tolerant it is of human interaction.

In other words, it is an indication of how wild or tame the animal is.

Dairy cows, for example, have a very small flight zone, indeed many may have virtually none at all. This results from close daily human contact since birth. Young calves reared artificially are totally dependent on humans for feed. This creates a positive association with humans. As adults, daily milking reinforces this close animal/human bond. As a result, dairy animals are generally tame and relatively easy to handle.

At the other end of the scale you have suckler-bred beef animals that may well have had minimal human contact from birth and are almost completely unaccustomed to people entering their personal space. These animals will frequently have a very large flight zone and will not let a person get close to them.

Extreme care needs to be taken when handling these types of fractious animals, especially in the confines of a handling yard, as serious accidents can and frequently do occur in these scenarios.

An experienced handler can quickly identify an animal’s flight zone and can use this awareness when carrying out handling tasks. If you step in and out of an animals flight zone at the correct times, you can get them to move in the direction you want.

An experienced handler will easily identify a particularly difficult animal and be aware of them at all times, in order to prevent a fight or flight scenario developing. In a field, the animal will opt for the flight option, in a confined space, such as a handling yard where flight is not an option, it may choose to fight or attack.

Animal’s point of balance

The animal’s point of balance is at its shoulder. Allowing for the animals flight zone, if the handler stands at its shoulder, the animal, if settled, will not move (Figure 2). Move in front of the shoulder, the animal will move backwards (Figure 3), move behind the shoulder it will move forwards (Figure 1).

A good knowledge and experience with these movements can make tasks such as sorting cattle and moving cattle through a crush much simpler. It can also greatly reduce the need to resort to the use of stick and prods.

"The size of the animal’s flight zone is an indicator of just how tolerant it is of human interaction"

When using its point of balance to get an animal to move in the required direction, you are working the animal from its front and side rather than from behind. This has the benefit of the animal being able to see you at all times, as you are not dipping in and out of its blind spot which is to its rear. Animals will be calmer and less likely to get agitated.

Handler’s attitude and skill level

Starting any task with the right at-
When handling cattle

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An investigation of the HAR using housed pregnant dairy and beef origin heifers

Niamh Woods¹,², Mark McGee¹, Marijke Beltman², David Meredith³, John McNamara⁴ and Bernadette Earley¹

¹AGRIC, Teagasc, Grange, Dunsany, Co Meath
²School of Veterinary Medicine, University College Dublin, Belfield, Dublin 4
³Teagasc, Rural Economy Development Programme, Ashtown, Dublin
⁴Teagasc, Kildalton, Piltown, Co Kilkenny

A detailed understanding of how livestock perceive and communicate with stockpersons is crucial to improving animal welfare and farmer safety. However, research into how animals, and people, experience these interactions is still limited.

To lead and handle animals, a farmer must first understand the way in which the animal perceives its environment. This is essential to understanding and anticipating its reactions.

Thus, it is important to assess the situation (low stress or high stress), attitudes and handler behaviour; the human-animal interactions and the handling facility characteristics.

The outcome of any livestock handling event depends on a combination of factors that are associated with the event.

The human-animal relationship (HAR) can be defined as the perception between the animal and the human, which develops and expresses itself in their mutual behaviour. The level of fearfulness of animals is determined by the experiences the animal has gained, in association with their individual genetic disposition.

This study assessed fear responses and HAR, over time in housed pregnant dairy (20) and beef (43) origin heifers using three behavioural tests; crush agitation (CA), exit speed from the crush (ES) and avoidance distance at the feed face (AD). The CA and ES were recorded consecutively on days 43 and 88 post-housing.

Avoidance distance (AD)

Avoidance distance was measured on day 51 and 99 post-housing by a familiar and an unfamiliar human.

The human was positioned 2m from the feed face and approached the animal slowly with their left arm raised at a 45-degree angle from the hip.

The withdrawal distance of each animal was recorded using a laser distance measure. If the animal did not withdraw, it was recorded whether or not the animal could be touched by the human.

The beef-origin heifers habituated to both the familiar and unfamiliar humans, whereas the dairy-origin heifers only habituated to the familiar human, over time. From the three investigated tests, AD proved to be a more sensitive measure of the human animal relationship and how cattle perceive humans, whether they are familiar or unfamiliar.

Implications

Development of a positive human-animal relationship (low levels of fear in animals and high levels of confidence in humans) can be beneficial, e.g. the presence of a familiar human, providing gentle handling may calm animals in potentially aversive situations (e.g. isolation, calving) thereby reducing distress and risk of injury to the animal and the human.

Further work assessing the human-animal relationship is ongoing, with a primary focus on safety implications when working with cattle.

Acknowledgements: Department of Agriculture, Food and the Marine - Research Stimulus Fund Programme. Niamh Woods is funded under a Teagasc Walsh post-graduate Fellowship with UCD.