# Understanding Bovine Behavior for Safe Handling

Sarah Wagner, DVM, PhD

 $\label{lem:continuous} \textit{Veterinary Technology Program, Department of Animal and Range Sciences, North Dakota State University, Fargo, ND$ 

#### Abstract

Understanding the behavior of cattle makes working with them easier, safer and more enjoyable. Reading the cow's body language helps indicate if she is relaxed or stressed, healthy or ill. A cow will remain calmer and easier to work with if she can see you approach her. Stress may be minimized by taking care not to isolate a cow away from other cattle and by minimizing startling or loud noises, including yelling. Cows are individuals; like people, some will remain relatively calm and some will become agitated under the same circumstances. Cows that are handled gently tend to be gentler cows than those that are handled roughly.

Keeping the principles of flight zone and point of balance in mind will make moving cattle as quick and calm as possible. When cattle are lined up in a chute or alley, walking through their flight zone in a nose-to-tail direction will cause each animal to step forward as their point of balance is passed.

Cattle may become aggressive when they feel threatened, anxious, or protective of a calf. If a cow shows signs such as vocalization, pacing, pawing, or head-shaking, entering her flight zone may cause her to attack. Bulls must always be handled carefully, particularly dairy breed bulls. A bull that displays a broadside threat should be removed from the herd at once.

## Résumé

Quand on comprend le comportement des bovins, il devient plus facile, plus sécuritaire et plus agréable de travailler avec eux. Bien lire le langage corporel d'une vache nous permet de savoir si elle est stressée ou détendue, malade ou en bonne santé. Une vache sera plus calme et plus facile à manipuler si elle peut nous voir quand on s'en approche. On peut aussi minimiser le stress des bovins en faisant attention de ne pas les isoler des autres et en évitant de les faire tressauter, que ce soit par des bruits forts, des cris ou autrement. Les vaches sont des individus. Comme les gens, certaines resteront relativement calmes et d'autres s'agiteront dans les mêmes circonstances. Les vaches manipulées avec douceur sont habituellement plus douces que celles qui sont manipulées avec rudesse.

Toujours se rappeler les principes de la zone de fuite et du point d'équilibre des bovins nous permettra de les déplacer aussi vite et aussi calmement que possible. Quand les bovins sont alignés dans une rampe ou une allée de contention, on les fera s'avancer en marchant vers eux à travers leur zone de fuite et audelà de leur point d'équilibre.

Les bovins peuvent devenir agressifs quand ils se sentent menacés ou anxieux, ou qu'ils protègent un veau. Quand une vache se manifeste en faisant des beuglements ou'des pas nerveux, en donnant des coups de patte, en piaffant ou en remuant la tête, elle risque d'attaquer si on pénètre dans sa zone de fuite. Il faut toujours manipuler les taureaux avec soin et précaution, particulièrement les taureaux de race laitière. Un taureau qui menace les autres animaux par le flanc doit être rapidement retiré du troupeau.

### Introduction

Understanding behavioral principles enhances interaction with any species, including other humans! In the case of cattle, which typically weigh well over 1000 pounds at maturity, understanding their behavior makes working with them easier, safer, and more enjoyable for both species.

## **Bovine Behavior Principles**

One of the most basic and effective strategies for working with individual cows is to ensure that the cow can see you as you approach her. Cows have a blind spot directly behind them, much like a truck. Approaching a cow in her blind spot may cause her to become startled when she is touched; to prevent the cow being startled and reacting in an unsafe way such as bolting or kicking, she should always see a handler before being touched by the handler. The cow will remain calmer and easier to work with if she is also able to see other cows nearby. Reading the cow's body language will help indicate how much stress the cow is feeling and how much care should be taken in approaching her. The tail of a relaxed cow will hang loosely, away from her body. A more nervous cow will tuck her tail up next to her body. Especially tense animals may "wring" the tail, curling and flipping it.

The cow can also give you clues as to her general health using body language. A healthy, relaxed cow that is not in pain will frequently stretch upon arising, as

SEPTEMBER, 2006 227

will healthy calves. Animals in pain will tend to have a hump in their back and may hold the tail away from their body.

Cows may also display stress by urinating and defecating. A high level of stress and agitation are displayed as bellowing, butting, kicking and fence-walking. One should be very careful around cows in a high level of stress, as they may become aggressive. Stress may be minimized by taking care not to isolate a cow away from other cows and by minimizing startling or loud noises, including yelling. Cattle tend to be more agitated around strangers or people with whom they associate being stressed.

Cows are individuals; like people, some will remain relatively calm and some will become quite agitated under the same circumstances. The behavior of the individual cow is dictated by genetics, individual variation and the cow's experience. Cows that are handled gently tend to be gentler cows than those that are handled roughly.

Cattle are frequently moved in groups. Keeping the following basic principles in mind when moving groups of cattle will facilitate the arrival of humans and bovines at their destination quickly and calmly.

- 1) Flight zone: this is the cow's personal space. Entering a cow's flight zone will cause the cow to move away from the handler. The flight zone tends to be larger in beef cattle than in dairy cattle.
- 2) Point of balance: in cattle, the shoulder is the point of balance. Entering the cow's flight zone from behind the shoulder will cause the cow to go forward, while entering the flight zone from in front of the shoulder will cause the animal to turn away or back up.

When cattle are grouped or lined up (in a chute or otherwise), walking through their flight zone in a nose-to-tail direction will cause each animal to step forward as the person passes their point of balance (shoulder).

It is important to remember to release flight zone pressure when the cattle begin to move. Step towards the cattle until you enter their flight zone and they begin to move, then stop moving towards them. By allowing the cattle to retreat after you enter their flight zone, they may be moved in a calm fashion, with minimal or no running. Running tends to excite the animals and make them more difficult to handle. Not putting undue pressure on the flight zone of the cattle also reduces the likelihood of a handler being kicked!

Cattle may become aggressive when they feel threatened or become very stressed. Cows with new calves may become aggressive to protect their calf. If a cow shows signs of agitation such as vocalization, pacing, pawing, or head-shaking, entering her flight zone may cause her to attack. Agitated or defensive cows can be dangerous and should be avoided. Sick dairy cows, especially those with a displaced abomasum, may develop ketosis, a condition of abnormal metabolites in the blood. This condition can affect the temperament of the cow, making a previously docile animal behave in an agitated or even aggressive way. Such animals should be handled with caution.

Bulls must always be handled carefully, particularly dairy breed bulls. From www.grandin.com, the website of animal behaviorist Dr. Temple Grandin:

"A bull will perform a broadside threat prior to attack. He will stand sideways so the person or other bull can see how big and powerful he is. Sometimes a person can make a bull back off by responding with the human variation of a broadside threat which for people is a frontal stance. Alternatively, the person may just back slowly away from the bull. NEVER RUN away and do not turn your back on him.

In dairies where bulls run loose in the cow pens, managers should be trained to notice aggressive postures. The bull should just move away along with other cows when the milkers approach. A bull that does a broadside threat to milkers should be culled. Even if a bull calf is reared properly with other cattle, an adult bull is usually safer if he spends most of his adult life penned with other animals. Bulls that are penned alone for long periods of time may be more likely to attack people."

### Conclusions

Understanding bovine behavior results in less stress on cattle when they are handled or worked making it safer for both the cattle and people working with them. People who work with cattle should familiarize themselves with these principles, and practice them whenever possible.