

NEED TO KNOW



Things you need to know about safe practices for beef cattle health.

How to handle & restrain beef cattle

A thorough understanding of cattle behaviour is necessary for humane, safe and low stress handling.

Cattle can be difficult to handle if you force them to act in ways that are not natural for them.

KNOW ABOUT FLIGHT ZONE AND POINT OF BALANCE

All animals have a **flight zone** – the animal's personal space. It is where the animal feels comfortable and unthreatened. When a person is outside the animal's flight zone, the animal will turn and face the handler.

It is best to work on the outside of an animal's flight zone. If the flight zone is penetrated too deeply, animal behaviour can be unpredictable and dangerous.

The size of an animal's flight zone varies. It depends how wild or tame the animal is. Cattle confined to a small space will have a smaller flight zone than cattle confined to a large area. Frequent, gentle handling tends to diminish the size of the flight zone.

Point of balance is another important livestock handling concept. The point of balance is at the animal's shoulder and it is determined by the animal's wide angle vision. All species of livestock will move forward if the handler steps behind the point of balance. They will back up if the handler stands in front of the point of balance. Many



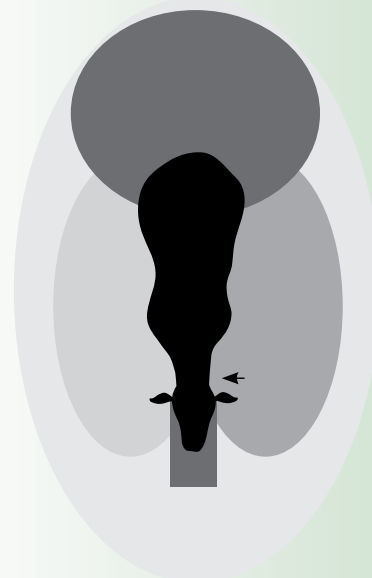
DO YOU KNOW

enough about the principle of flight zone and how it relates to safe handling? If you think you need to know more, revisit the information in **Humane Animal Handling Skills** on the *Virtual Apprentice 1040: Animal Basics* website at www.ctsanimals.ca/va1040/farmQ3.html.

people make the mistake of standing in front of the point of balance while trying to get livestock to move forward through a chute. Cattle will usually refuse to move if they see people up ahead.

Calm cattle are easier to move. If cattle become excited, it takes 20 to 30 minutes for them to calm back down. People should be quiet when moving animals. Yelling and loud noise is very stressful. High pitched noises are especially stressful.

Adapted from Grandin, Temple: *Understanding Flight Zone and Point of Balance for Low Stress Handling of Cattle, Sheep and Pigs*. www.grandin.com/behaviour/principles/flight.zone.html



What do the shaded zones in this illustration tell you about handling safety?

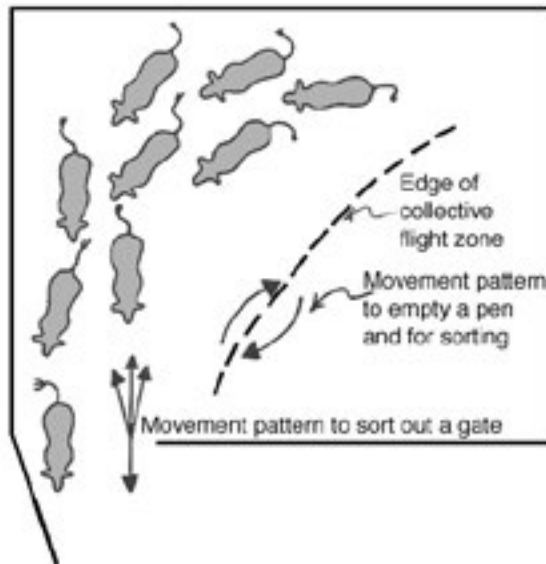
KNOW STRATEGIES FOR SAFE HANDLING

The following strategies, recommended and written by animal expert Temple Grandin, provide examples of techniques for handling cattle.

Emptying a pen and sorting at a gate

Curt Pate, a cattle handling specialist, has the following tips for emptying a pen and sorting at a gate:

- When cattle are being sorted out through a gate, stare and look at the ones you want to hold back and turn your eyes away from the animals you want to move through the gate.
- Guide from the nose, because cattle go where the nose is pointed.
- Get the animal you wish to sort through the gate to look at you with both eyes before attempting to move it through the gate. This relieves pressure on the animal before you attempt to direct it through the gate.
- When cattle are handled in a single file chute, called a **race**, the balance point will be at the shoulder. When they are worked on a pasture or in a pen, the point of balance will move forward and be closer to the eye. When cattle are handled calmly, the balance point will move forward, but it will never be in front of the eye.
- By alternately penetrating and then backing out of the flight zone you can carefully "test" to determine the correct angle and spot to move an animal.



Movement Patterns to Empty a Pen and Sort Cattle

Handling cattle on foot

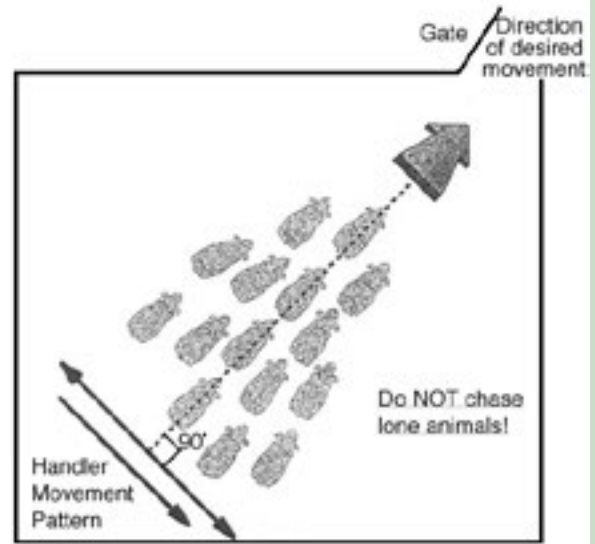
Cattle can be trained to be handled by a person who is on foot as well as on a horse.

- Cattle that have never seen a person on foot will have a large flight zone when approached by a person on foot.
- Cattle that are used to being handled with horses will have a small flight zone when approached by a horse.
- The best way to get cattle accustomed to a person on foot is to approach them while leading a horse. Then, the person should gradually move away from the horse.
- If the cattle start to get wild, the person should move back toward the horse.

It is important to get cattle accustomed to being moved by people on foot before they leave the ranch. This will make them safer to handle when they are sold at an auction or when they go to a feed yard where all the handling is done by people on foot.

Moving a group of cattle toward a gate

- The handler's movements, back and forth behind the group, should be at a 90 degree, or right, angle to the direction of the desired movement. The handler's movements are perpendicular to the animal's movements. Imagine that you are moving back and forth on the cross bar of a giant T-square.
- Work on the edge of the flight zone. Use the principle of pressure and release. When the cattle start moving, back off and reduce pressure on their collective flight zone. Increase pressure when they slow down. Wild running is prevented by using pressure and release.
- As the group of cattle approaches the gate, the handler must shift his position to head the cattle out of the gate.
- Remember, calm cattle are easier to handle. All movements are done at a walk and handlers should be silent with **no** yelling or whistling. If cattle become excited it takes 15 to 30 minutes for them to calm down.



T-Square Pattern for Moving a Group out of a Large Pen

Use a straight back and forth movement. Do **not** circle around the cattle.

Information and illustrations provided courtesy of Temple Grandin (May 2012): *Moving Cattle out of Pens and Sorting*. <http://grandin.com/behaviour/principles/moving.sorting.html>



KNOW FACILITIES FOR SAFE HANDLING

Beef cattle producers require handling facilities, whether they are dealing with a herd of ten cattle or a few hundred cattle. These facilities should encourage cattle handlers to use the best and most humane handling methods. Good facilities reduce time and labour for producers and handlers, and therefore reduce costs.

The safety and health of both the animals and the people working them need to be considered any time cattle are handled.

Beef cattle handling and proper use of facilities is much more likely to happen if cattle are handled with safety in mind and can be properly restrained. The following facilities affect handling practices:

1. Holding pen – an area to hold and sort cattle before or after carrying out a task.
2. Crowding pen – an area which allows a handler to begin funnelling cattle into a working chute.
3. Working chute – a narrow alley, wide enough for animals to walk single file that moves cattle into the working area.
4. Working area – a place where animals can be safely restrained with a squeeze chute or head gate that allows a handler to vaccinate, deworm, dehorn and perform other necessary practices.
5. Main facility or loading chute – a narrow, inclined ramp for loading and unloading cattle from trucks and stock trailers. All mechanisms for opening and locking gates should be located on the working side of the chutes and holding areas. Do not reach through a gate.



DO YOU KNOW

enough about other housing facilities? If you think you need to know more about ways that housing can help ensure safe and humane handling of beef cattle, go to **Housing & fencing structures for beef cattle** in the inquiry topic, **Know livestock housing & equipment** at www.etsanimals.ca/va2040/environment.html.



LINK

Cattle handling facilities contribute to safe and humane handling. Plans can be accessed on the Canada Plan Service website at www.cps.gov.on.ca/english/frameindex.htm. Go to the plans for Beef Cattle and look for *Cattle Handling Facilities*.



What does the Code of Practice for the Care and Handling of Beef Cattle say about handling beef cattle?

There is less risk of injury to both animals and handlers when cattle are handled quietly and calmly. Experienced handlers who are aware of cattle behaviour, including herd instinct, flight zone and point of balance, reaction to wind, noise, sudden movements, light contrast or shadows etc., will be able to move cattle more smoothly. This will minimize stress and promote animal welfare. 🍃

The following **requirements** are identified in the Code of Practice.

Animal handlers must be familiar with cattle behaviour (through training, experience or mentorship) and use quiet handling techniques.

Electric prods must only be used to assist movement of cattle when animal or human safety is at risk or as a last resort when all other humane alternatives have failed and only when cattle have a clear path to move.

Do not use electric prods repeatedly on the same animal.

Do not use electric prods on the genitals, face, udder or anal areas.

Do not use electric prods on calves less than three months of age that can be moved manually.

Willful mistreatment or intentional harm of cattle is unacceptable. This includes but is not limited to beating an animal; slamming gates on animals; allowing herd dogs to continue pushing cattle with nowhere to move; dragging or pushing cattle with machinery (unless to protect animal or human safety).

These **recommended practices** are also provided in the Code of Practice.

- a. Adjust your handling techniques and positioning according to the response of the animals and the situation.
- b. Take a course in cattle handling techniques.
- c. Use handling tools, such as flags, plastic paddles or rattles, to direct animal movement.
- d. Evaluate your cattle handling techniques regularly, and make improvements to them as needed. Factors to consider include the percentage of cattle:
 - Falling (belly or torso touches the ground) during handling
 - Stumbling or tripping (knee contacts ground) after being released from the chute
 - Requiring the use of electric prods to move
 - Running or jumping when leaving the chute
 - Vocalizing as a result of restraint.

Increasing levels of the above handling events may indicate a need for changes in lighting, noise levels, equipment, handling methods or environment.

KNOW THE PRINCIPLES OF LOW STRESS RESTRAINT

Beef cattle should always be handled using behavioural principles. The design of restraining devices should enhance animal welfare and reduce stress and injuries. The use of behavioural principles when restraining keep cattle calm.

The principles of low stress restraint are:

1. Solid sides or barriers around cattle prevent them from seeing people deep inside their flight zone. This is especially important for wild or excitable cattle.
2. To prevent lunging at the headgate, the animal's view of an escape pathway must be blocked until it is fully restrained.
3. Provide non-slip flooring for all species of animals.
4. Slow steady motion of a restraint device is calming, while sudden jerky motion excites.
5. Use the concept of optimal pressure. Sufficient pressure must be applied to provide the feeling of restraint, but excessive pressure that causes pain or discomfort must be avoided.
6. The entrance of the restraint device must be well lit. All animals must be able to see a place to go.
7. Livestock will remain calmer if they can see other animals close to them.
8. Select equipment to minimize noise. High pitched noise is more disturbing to livestock than a low pitched rumble from a conveyor.
9. Restraint devices must be designed to avoid uncomfortable pressure points on the animal's body.
10. Restrain livestock in an upright position.

The best restraint equipment in the world is useless if it is operated in a careless or rough manner. Equipment can be engineered to enable an inexperienced person to operate it but there is no way engineering can prevent a rough or careless person from stressing or injuring the animals.

Restraints can be necessary for safely completing some tasks involved in beef production. The restraint tools must quickly and easily restrain cattle without injury. These tools must also be safe for the handler and should allow secure restraint and quick and easy release. Depending on their purpose, restraints can include ropes or mechanical devices. The use of mechanical devices, such as manual or hydraulic squeeze chutes, depends on the size and number of animals to be handled. Cattle tend to rush when they exit a squeeze chute, so a slip-resistant surface should be used to prevent injury. Regardless of the type of restraint tool, it should only be used by a trained and experienced handler who knows how to prevent injury.

Information in this card is adapted from Grandin, Temple: *Restraint of Livestock: Animal Behaviour and the Design of Livestock and Poultry Systems*. www.grandin.com/references/abdtps.html

Excerpts from the *Code of Practice for the Care and Handling of Beef Cattle* (©2013) have been used with permission, Canadian Cattlemen's Association and the National Farm Animal Care Council. www.nfacc.ca/pdfs/codes/beef_code_of_practice.pdf

The process for the development of updated Codes can be accessed through the National Farm Animal Care Council at www.nfacc.ca/codes-of-practice.