

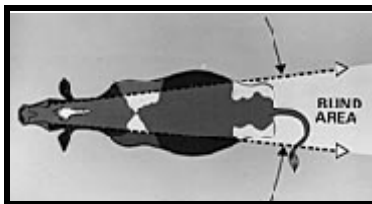


Cattle Safety



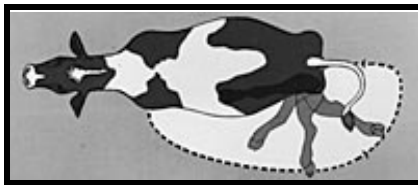
Safe Approach

A key aspect when working with cattle is to know and respect their danger zone. With eyes on the side of the head, cattle have a wide range of vision. However, there is a blind zone in their immediate hindquarter area. Approaching from this direction can startle the animal. If you are behind an animal and must move forward, move off somewhat to the side and advance from a safer angle.



Kick Zone

When startled, cattle may respond defensively by kicking. The rear leg will kick forward and out to the side. This may also be the case if an animal experiences pain from injury or inflammation. For example, a cow with mastitis in a left quarter may kick from the left side. In this instance, approach or examine the cow from the opposite side whenever possible.



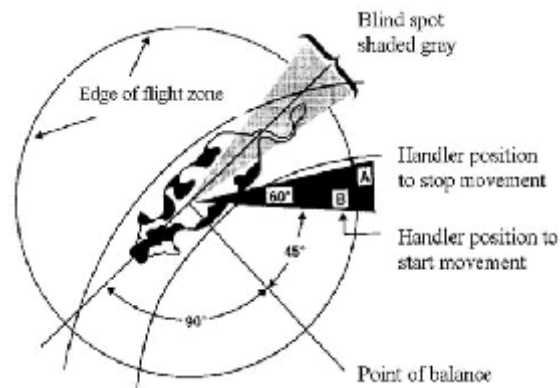
Group Instinct

Cattle are herd animals. Any attempt to separate one animal from a group goes against the herd instinct. Avoid trying to isolate an animal while on pasture. Instead, bring the entire group to a holding area and use a system of gates and chutes to separate the animals while protecting the handler.



Flight Zone and Point of Balance

The flight zone is an animal's personal space. Moving into this zone will cause the animal to move away. The size of the flight zone varies by individual animal temperament, the degree of the animal's wildness or tameness, the angle of approach by the handler and the state of excitement of the cattle. The following diagram illustrates point of balance.



Working at the edge of the flight zone at an angle of 45 to 60 degrees behind an animal's shoulder will cause the animal to circle away from you. If cattle are moving, a good technique is not to approach directly, but work close to the point of balance, moving back and forth in a line parallel to the direction the cattle are moving.

Physical Characteristics

Always respect the size of an animal. A fully grown cow, steer or bull can easily crush a handler who has put himself or herself in a dangerous situation. A younger, less developed animal is also equally capable of inflicting injuries. Horned cattle must be handled with extreme care. Also be aware that individual breeds may vary in aggressiveness.

Gender plays a key role in animal behaviour. Bulls are unpredictable and should never be trusted. Females tend to be quieter but still need to be handled with care. A cow with a calf will fiercely protect her offspring. Never put yourself between a cow and her calf.





Bulls



High conception rates are important to all livestock breeders. While artificial insemination is an important and popular breeding technique, many farms also rely on bulls for natural service. The bull may be either a primary breeding source or a “back-up” for cattle with lower fertility rates. Regardless of the bull’s role in a breeding program, bulls need to be handled with extreme care!

- ◆ **Bulls require secure confinement and retaining areas. An ideal situation would allow the farmer to feed and access the animal for breeding purposes without coming in direct contact with the bull.**
- ◆ **Never try to handle a dangerous bull by yourself. Have support from others who are capable of providing assistance. Keep bystanders away.**
- ◆ **Use a nose ring. If a bull must be led, use two halters on him, one for each handler. Put the halters through the ring and hold the head up by the nose lead. Do not wrap the rope around your arm or wrist.**
- ◆ **Another device to use is a lead pole. This is a pole about 1 metre long with a clip on the end that goes through the ring. Do not assume that this is enough. If the bull gets his head down, the lead pole will not be enough to restrain him. Use the lead pole along with two halters, one for each handler.**
- ★ **Bulls that are pastured with the herd may need at some point to be handled individually. Do not attempt to separate the bull from the rest of the cattle. Instead, bring the herd or a smaller, workable group to an area where the animals can be separated safely.**
- ★ **Do not let the bull sense any hesitation in your actions. This will only enforce the animals’ aggressive behaviour. Be confident.**
- ★ **Be prepared to get rid of a bull once it becomes too unpredictable. Even an extremely good sire is not worth keeping if safety becomes compromised.**
- ★ **If a bull is outside in a fenced area, a warning sign should be posted of the bull’s presence.**
- ★ **Just because a bull is wearing a nose ring does not mean he will lead easily.**

NEVER TRUST A BULL OF ANY AGE!

What Do You Want To Do With Your System?

Before setting up a handling facility or revamping an existing one, ask yourself what you plan to do with the system. Different tasks require different features. Think about the following points.

Is the system is to be used only to sort cattle? *If this is the case, then a chute system with safety features will be adequate. However, if other tasks will be carried out, then other issues need to be addressed.*

Will pregnancy checks be conducted in the system's head gate? *If so, is there a way to prevent other animals in the chute from moving forward? Is there a gate or man pass to allow the veterinarian access to the animal?*

Will work be done around the head of the animal while in the head gate? *If yes, are there places on both sides to tie a halter for additional restraint?*

If the need arises to perform surgery on the animal, is the left hand side accessible? *Are bars or posts in the way or are panels in place that may be removed?*

What will happen if an animal goes down in the chute or while in the head gate? *Can sections be quickly removed without endangering the handler?*

If a nursing cow is to be restrained for a period of time, is there a way for her calf to access the udder and remain out of the way at the same time?

These are some of the questions one must ask while planning a system. Think about what you want to do and what is needed to protect yourself and others while getting the job done.

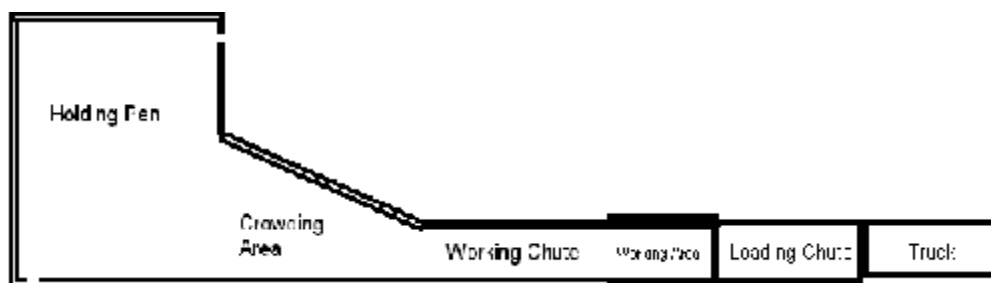
PLAN AHEAD!!!

Five Key Design Elements For Safely Handling Cattle

1. **Holding pens** - an area to hold and sort cattle before or after carrying out a task .
2. **Crowding pen** - an area which allows the handler to begin funnelling cattle into a working chute.
3. **Working chute** - a narrow alley, wide enough for animals to walk single file which 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 the handler to vaccinate, deworm, dehorn and other necessary practices.
5. **Main facility or loading chute** - a narrow, inclined ramp for loading and unloading cattle from trucks and stock trailers.

Ensure that all mechanisms for opening and locking gates are located on the working side of the chutes and holding areas. Do not reach through a gate

Example Of Design Elements:



*Free handling facility plans are available for all commercial livestock on the Canada Plan Service website: www.cps.gov.on.ca

Holding Pens

Once the animals are confined, it then becomes easier to sort out the animals you need to work with. Strong and secure gates, fences, etc. in the holding area are an important asset.

Also remember the following points:

- ★ Never overload a holding pen.**
- ★ Floors should have a non-slip surface.**
- ★ Ensure there is an escape route or man-gate.**

Crowding Area

If both sides of the crowd area chute are angled, cattle may turn around and become jammed. To create a safe, effective funnel effect, one side of the crowd area should feature a straight wall. The opposite side should enter the chute at an angle of about 30 degrees. The wide end of the funnel should be about 8 to 12 feet wide. Ideally, the livestock handler should be on a catwalk or raised alley outside the enclosed area for optimum safety.

Cattle will follow a leader when being moved. Ensure that the animals can see ahead. Blocking gates should be “see-through” so the animals can see those that went ahead. Off to the side, however, cattle may “spook” if they see unexpected movement outside the working area. Solid side walls will prevent these distractions.

- ★ Avoid entering the crowd area. If this is not possible, ensure there is an escape route or man gate through which one may exit.**
- ★ Remember that some cattle may be going through the handling facility for the first time. The handler should practice patience and good common sense to work the cattle in a safe manner.**

Working Chute

An effective working chute is neither too short nor too wide. Ideally, a chute should be at least 20 feet long. This will hold three or four mature cows at once. This takes advantage of the cow's natural tendency to follow the leader. A shorter working chute will lead to delays getting cattle into the working area. Cattle will move more freely and willingly if the chute has solid sides, preventing the animal from seeing any activity beyond the chute.

A tapered chute design is an option for the chute component of the handling system.. Chutes that are wider at the top and narrower at the bottom prevent cattle from turning around in the chute. Ensure that the sloped walls features solid sides.

Cattle that move easily and without being frightened reduce the risk of injury to humans and themselves.

- ★ Do not enter the working chute while cattle are being moved.
- ★ Ensure that walls and gates are in good working order. If something needs to be repaired, fix it properly. Baler twine should not be used to reattach broken components of your cattle handling system.
- ★ Incorporating man gates, blocking gates and back stops into a chute system provides many safe options for the handler.



STOP!!!



Although this individual is standing outside of the working chute, an accident may occur if an animal kicks the gate or tries to bolt. Gates should be solidly attached and closed for maximum safety.



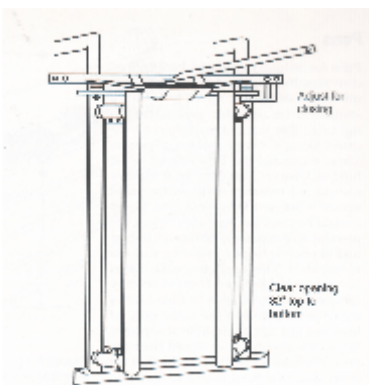
Working Area

If safe, efficient facilities are available, moving cattle through the holding pen, crowding area and working chute can often be done without excessive physical contact between human and livestock. This does not hold true, however, in the work area. There will be a need for physical contact during any chore that may occur at this stage. Vaccinating, deworming, ear tagging, etc. are tasks where extreme care must be taken to prevent injuries.

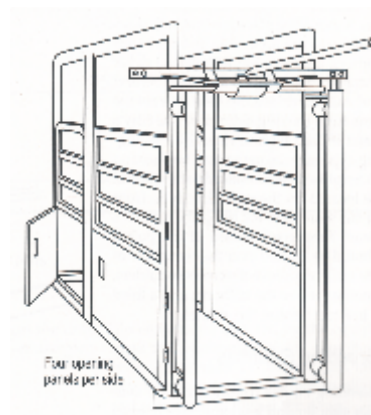


Head gates and squeeze chutes are safe options for the working area but should not be used for foot trimming.

Head gates:



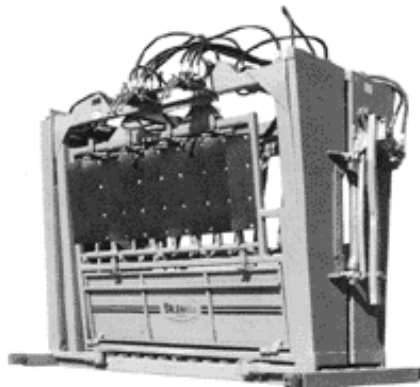
Head gate



Head gate with chute

- ★ A head gate is an easy, relatively inexpensive option. Locating a head gate at the end of the working chute and using a blocking gate at the rear to prevent the animal from backing up is an effective way to temporarily restrain an animal.
- ★ When the animal is ready to release, a gate that opens in two directions allows the handler a safe option for either returning the animal to the holding area or to be loaded for transport.
- ★ Head gates can cause cattle to become excited. Ensure that any latches or levers are in good working condition. Commercially manufactured latches are designed with consideration to operator safety. Avoid “makeshift” replacement parts whenever possible.
- ★ Nose bars are an added safety feature that restrict head movement.

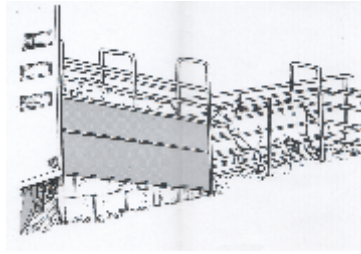
Squeeze gates:



- ★ **A squeeze gate with hydraulic controls is an expensive option but can result in optimum safety.**
- ★ **Squeeze gates control cattle during pregnancy examinations, castration, artificial insemination and allow good access to the hindquarters of the animal.**
- ★ **Squeeze gates are ideal when the farm operator experiences a shortage of labour.**
- ★ **When working alone, use a blocking gate behind the squeeze chute to stop the next animal from advancing. A man gate allows access to the animal. Always ensure that such gates are firmly locked before moving forward. Failure to do so could result in the animal pushing the gate and crushing the handler.**

When working around an animal's head, (ear tagging, dehorning, etc.) refraining from getting too close. If the head gate does not restrain the head sudden movement by the animal can result in painful head-butting. Securely tying the head with a strong head restraint such as a halter will lessen the chance of such incidents, as will the use of a nose bridge.

Loading chutes



When loading cattle onto trucks or trailers, several points need to be addressed.

Ideally, loading chutes should be built at truck height to eliminate ramps. Adjustable loading ramps are great as they are able to accommodate a variety of loading situations.

If this is not possible, a series of steps or a ramp are effective options. If the surface must be sloped, cross slats should be incorporated into the floor construction. Smooth surfaces should be avoided on ramps as they tend to become slippery when wet. Cattle will be safer to handle if they have secure footing. Avoid slopes that are greater than 20 degrees. A good rule of thumb is not to exceed 3 1/2 inches per rise of foot of length.

Side walls from a ramp or chute to the transport vehicle are very important to prevent cattle from falling. Such falls could injure the handler.

There should not be any gaps between the loading chute and truck/trailer. Chutes that are too wide may give cattle an opportunity to turn around..

Do not lead an animal onto a truck or trailer as there is a possibility that crushing may result. Instead, take advantage of carefully planned facilities and an animal's point of balance and herd from behind and to the side.

Also, remember that this may be a new experience for the animal and therefore requires patience, positive attitude and a good dose of common sense.