

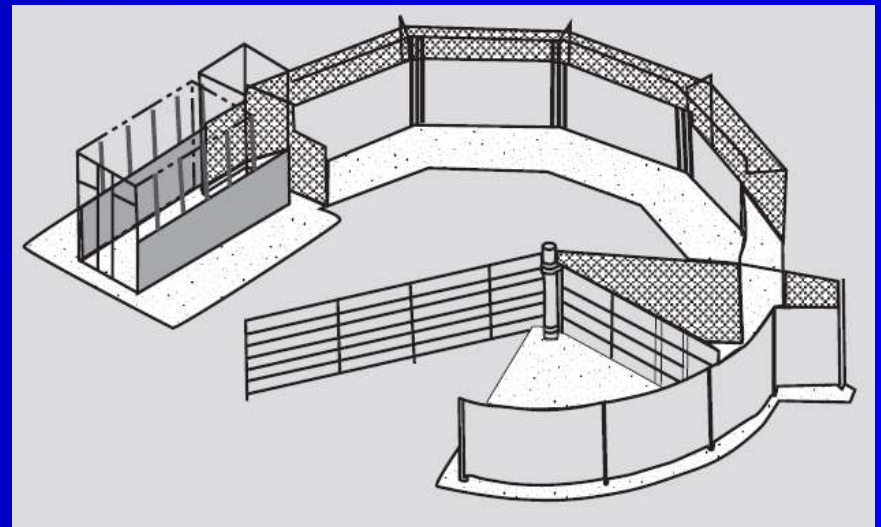
BEEF CATTLE HANDLING FACILITIES



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Beef cattle producers need good handling facilities if they are to perform recommended management practices (vaccinating, identifying, castrating, dehorning, implanting, deworming, checking for pregnancy, etc.)

A good handling facility allows for the treatment of animals, reduces the possibility of injury to both animal and producer and makes cattle handling much easier.



BEEF CATTLE HANDLING FACILITIES

Any producer who is dealing with cattle needs some type of handling facilities whether he has ten steers or a thousand steers. Handling facilities are, and will continue to be an important part of a successful cattle operation, allowing the producer many advantages and options.



Concept of Flight Zone

An important concept of livestock handling is the animal's flight zone or personal space. When a person enters the flight zone, the animal moves away. Understanding of the flight zone can reduce stress and help prevent accidents.



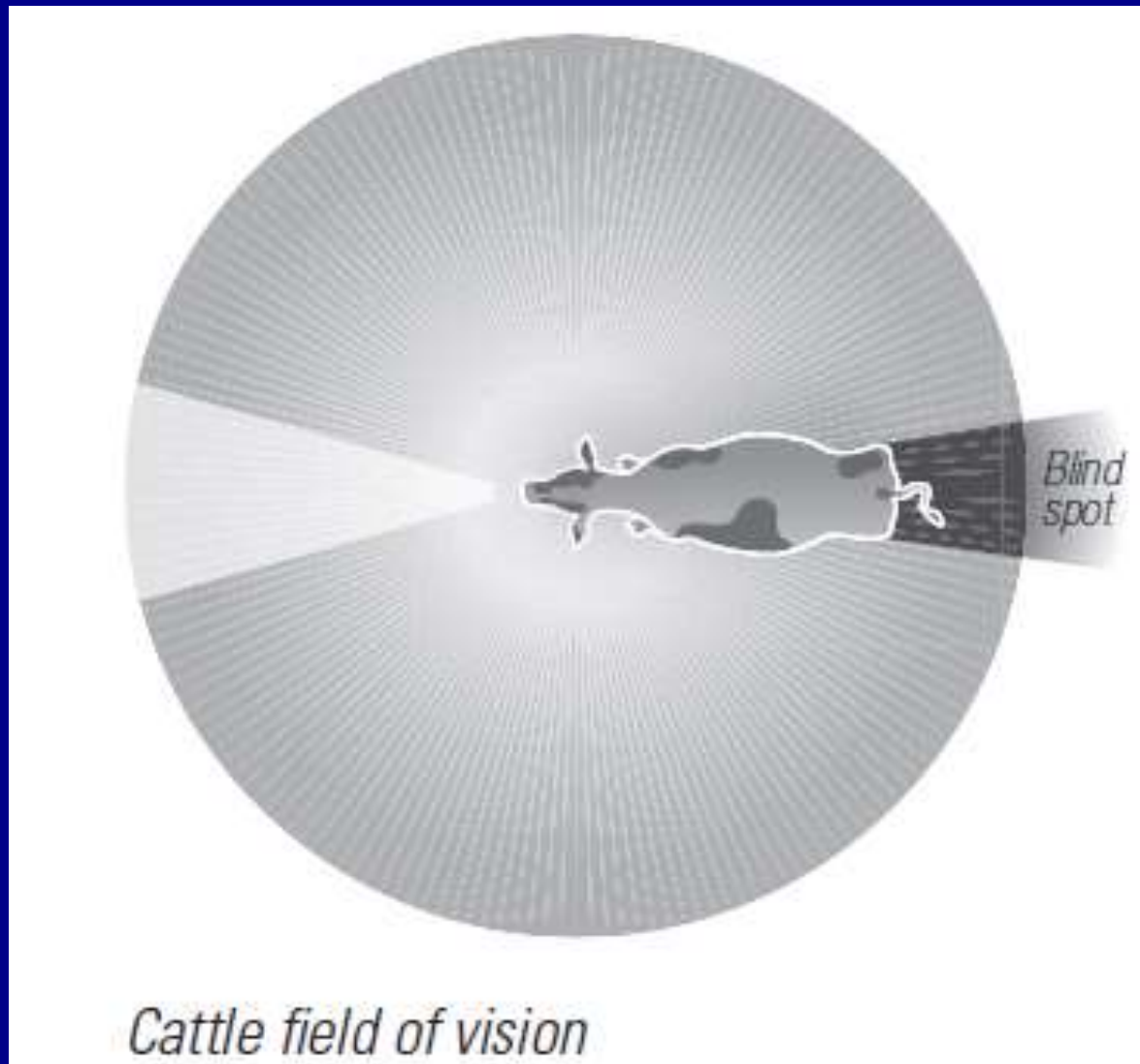
Flight Zone

The flight zone is the animal's personal space. Cattle use their flight zone as an indicator of impending threats. The flight zone can range from 5 to 25 feet for feedlot cattle and as much as 300 feet for range cattle.

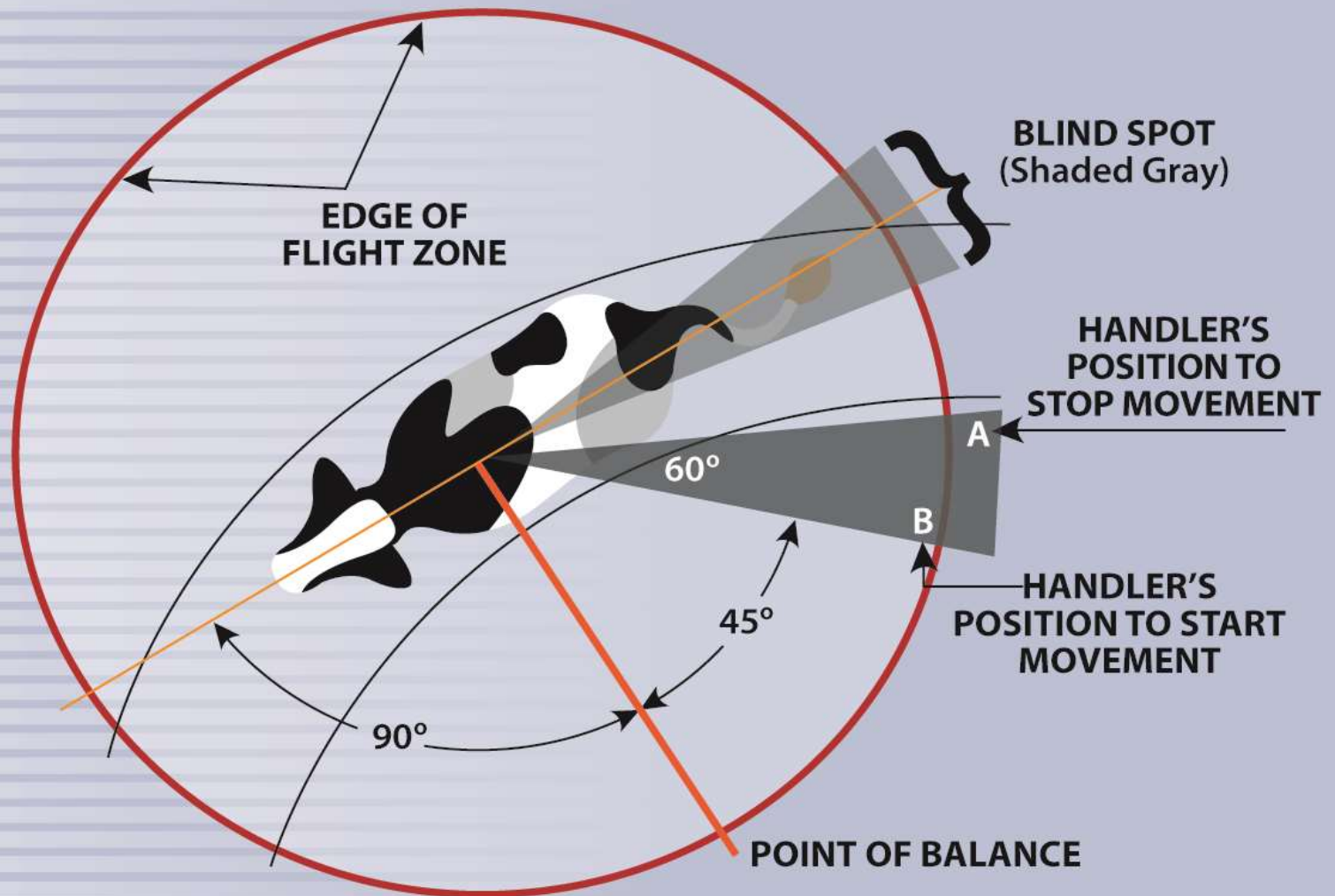
The size of the flight zone is determined by both the animal's temperament and the degree of excitement.

When a person is outside the flight zone, the animals will turn and face the person. When the flight zone is entered, most cattle will turn around and move away. The handler should avoid deep penetration of the flight zone. Deep invasion of the flight zone may cause an animal to panic.

Flight Zone

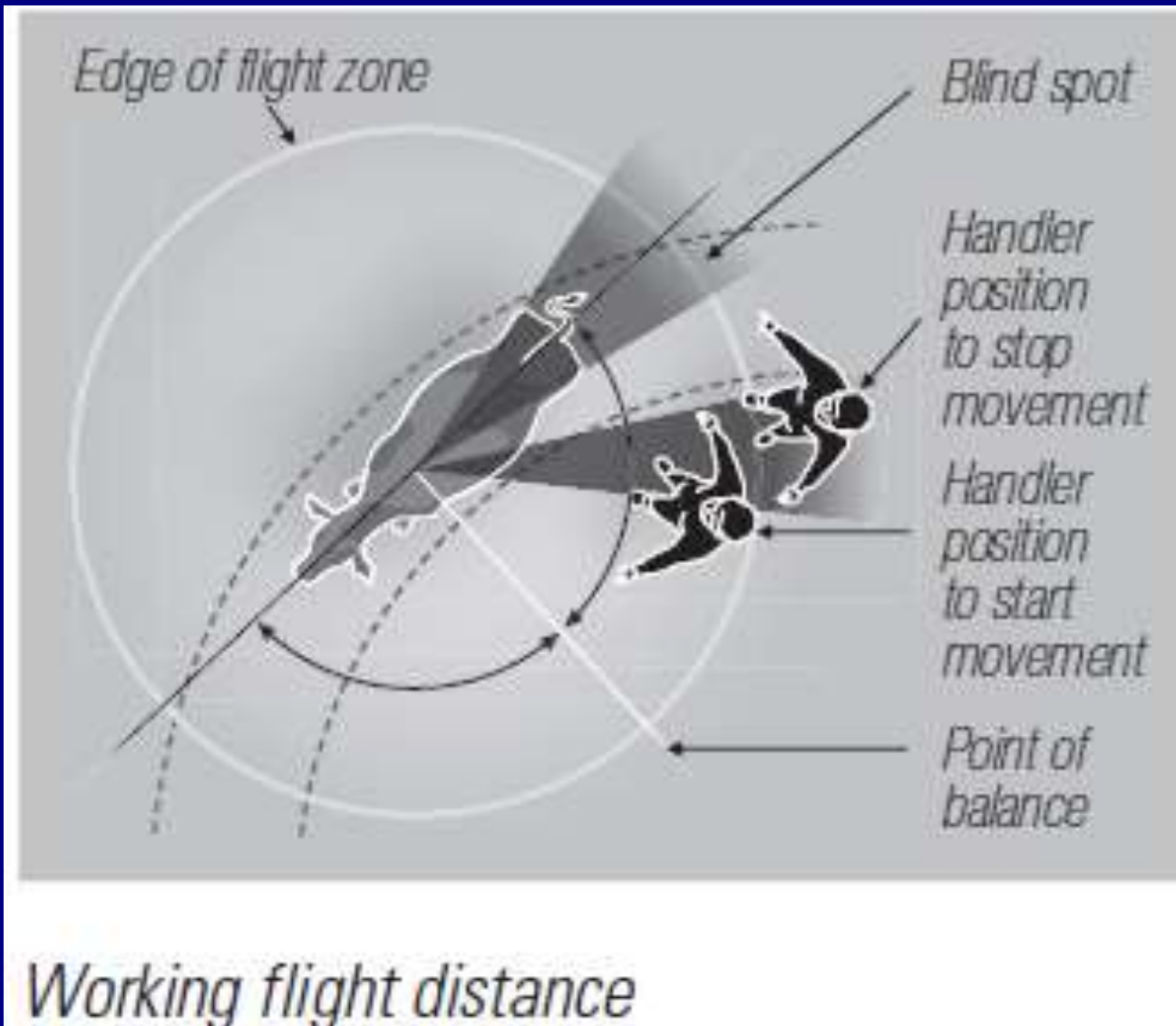


Flight Zone

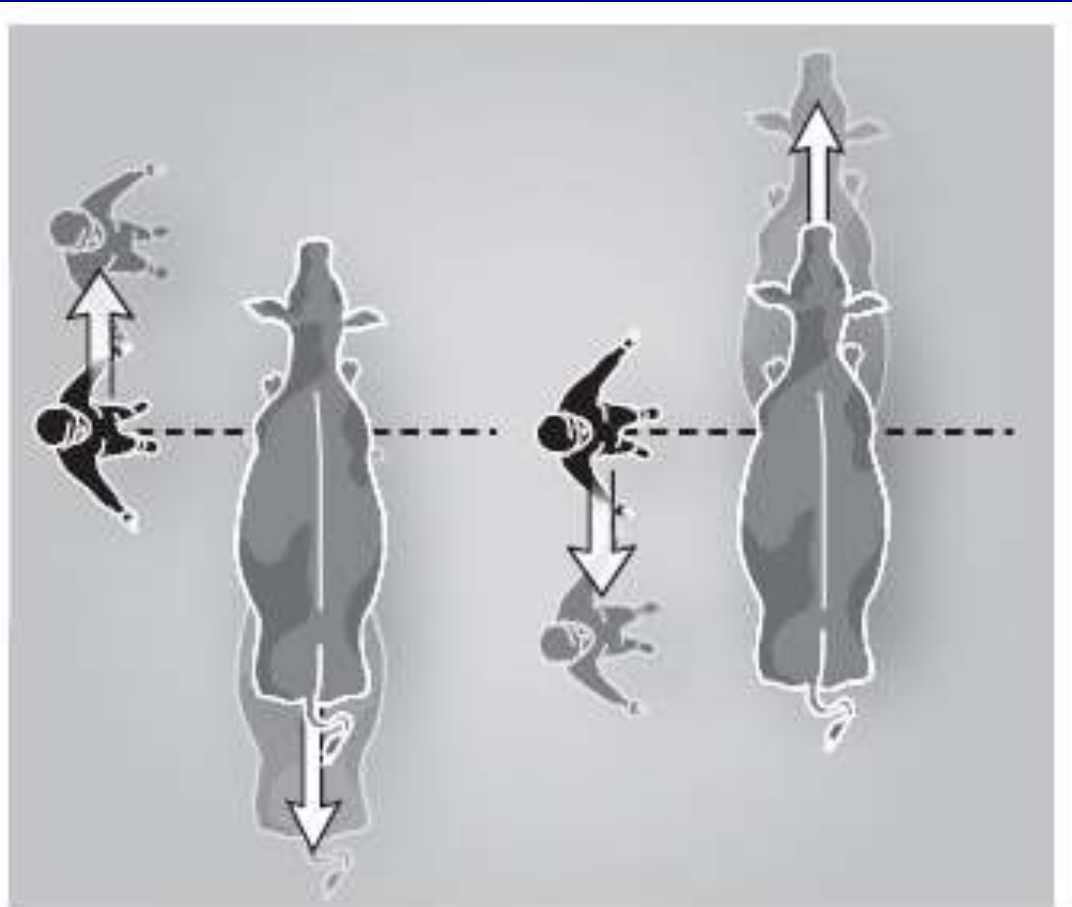


Source: American Veterinary Medical Association, Emergency Response and Preparedness, April 2009, page 207

Flight Zone

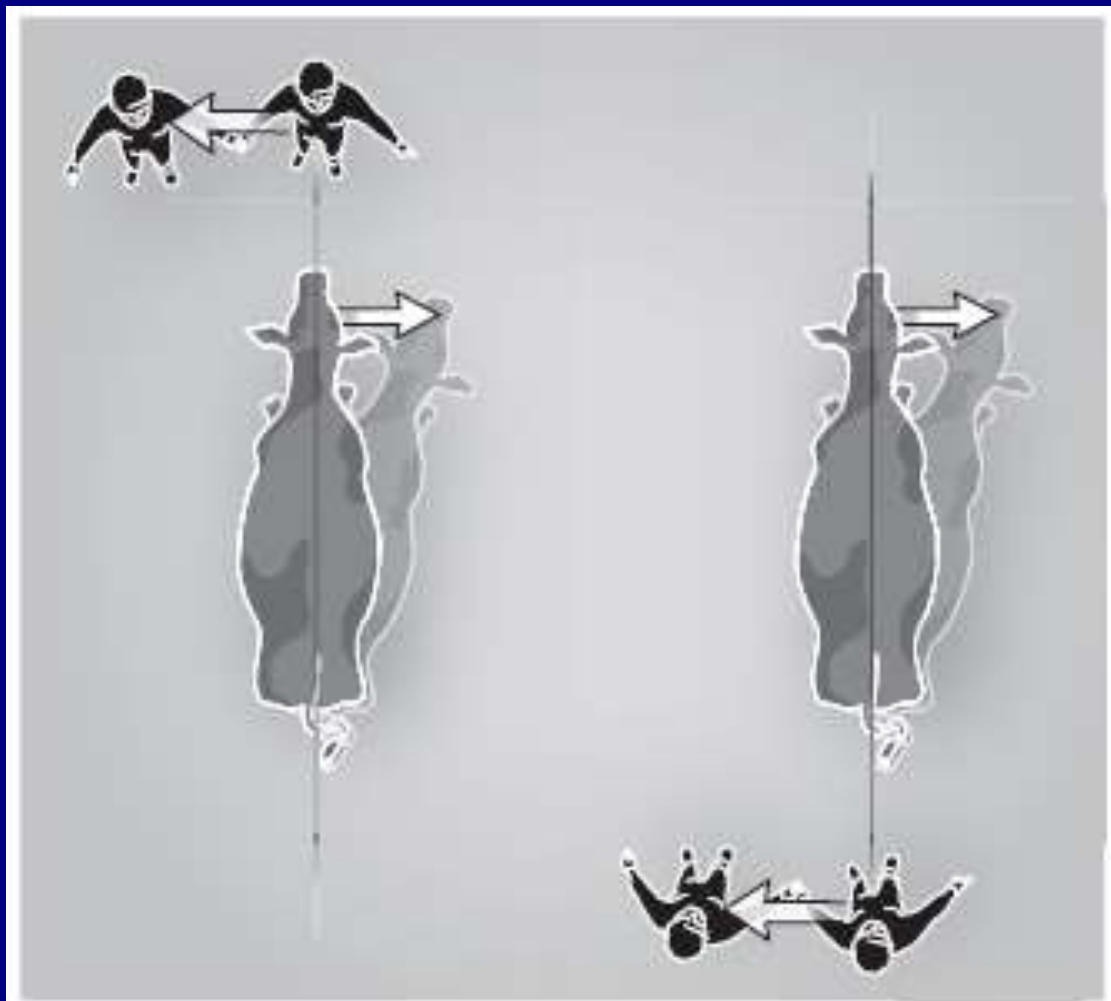


Flight Zone



Shoulder balance points

Flight Zone



Backbone balance point

Flight Zone

This diagram shows the flight zone of a cow. Note the blind spot behind the animal (light gray), this area should be avoided. To make an animal move forward, the handler should enter the edge of the flight zone behind the “point of balance” or shoulder. It is best to work at a 45-60o angle behind the animal’s shoulder, moving back and forth parallel to the direction you would like the animal to move in. The ideal location for the handler is between positions A and B on the edge of the flight zone. Move toward B to start the movement, move to A to stop the animal’s movement.

Flight Zone

If a handler walks deep into the flight zone, cattle will have a tendency to move in a direction opposite of the handler's movement (e.g, an animal will usually move forward if the handler moves from the head toward the rear). To make an animal move backwards, the handler must move in front of the point of balance. Handlers who understand these principles can quietly move cattle and other livestock off of roads and other dangerous places. Graphic from Center for Food Security and Public Health, Iowa State University. Adapted from Temple Grandin.



Beef cattle facilities should provide an optimum environment for good productivity.

Rapid growth

Efficient feed conversion

Good health

Reasonable comfort

Animal and handler safety



Hereford-Angus cross.



Every beef operation must have facilities for handling animals.

Sorting

Treatment

Weighing

Loading

Unloading





Components of a Good Handling Facility

The size and complexity of a beef cattle-handling facility will depend on the number of animals in the herd. A good handling facility should contain the following components:

Headgate

Holding chute

Working chute

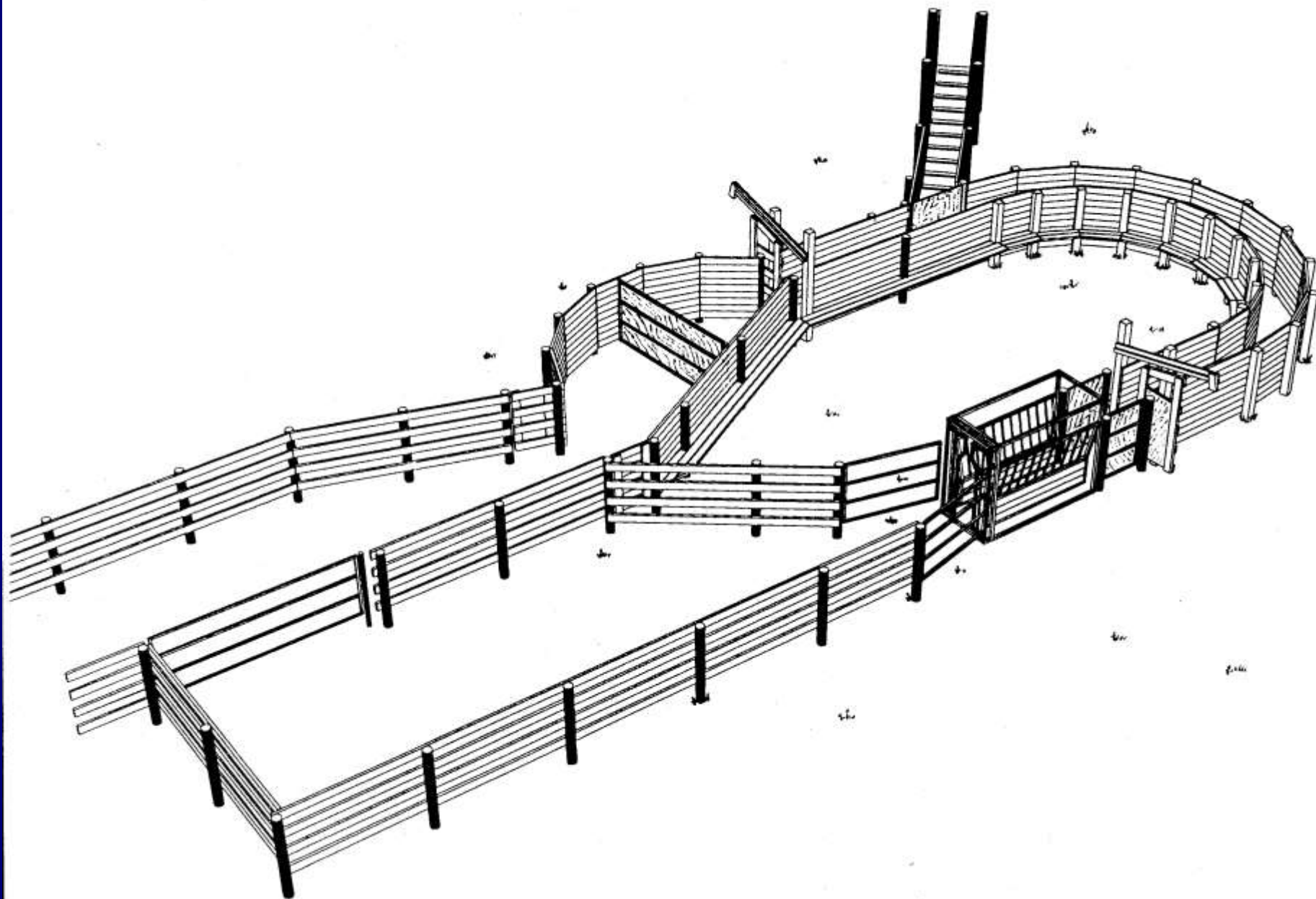
Crowding pen

Holding pen(s)

Scales

Loading chute.







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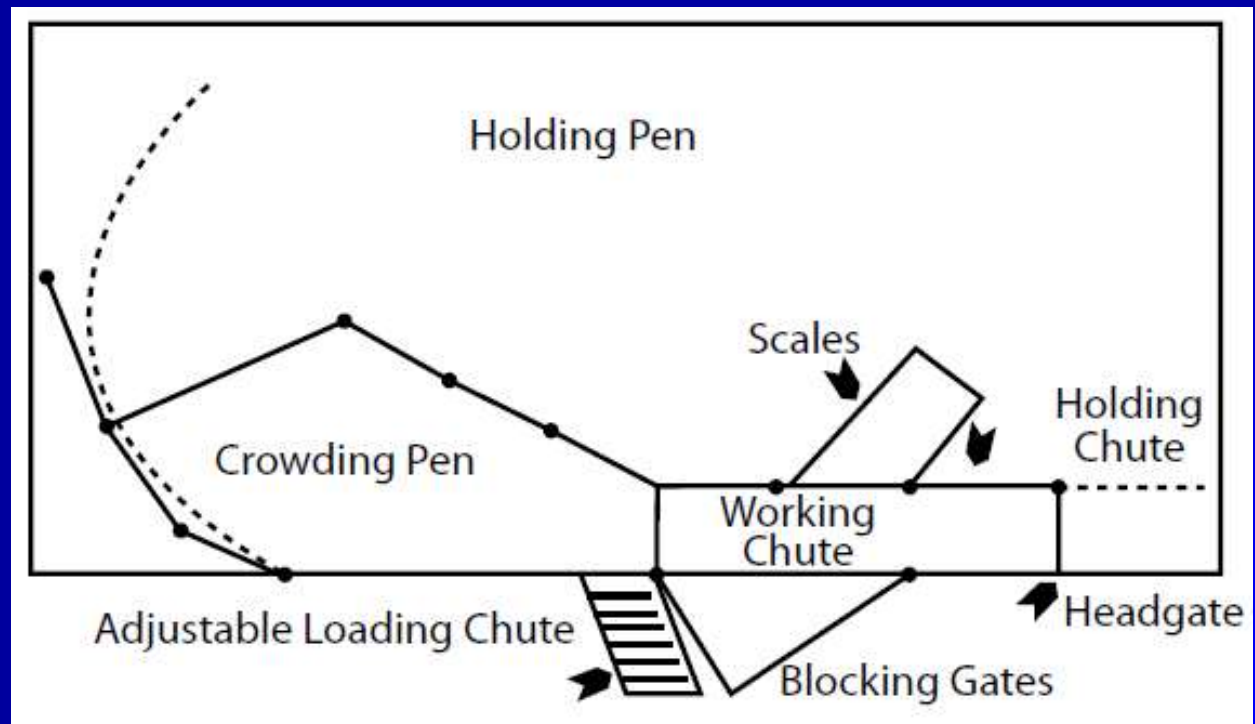


Figure 1. Sample Layout of Beef Cattle-Handling Facility.



Headgate

The Headgate is for restraining animals securely and safely during treatment. They need to be quick, easy to operate and adjustable for different sizes of cattle. Head gates are of four basic types. These are:

Self-catching

Scissors-stanchion

Positive-control and

Fully opening stanchion.





Headgate

The self-catching head gate closes automatically due to the movement of the animal.





Headgate

The scissors-stanchion type has biparting halves that pivot at the bottom.

The positive-control type locks firmly around the animal's neck.

The fully opening stanchion consists of two biparting halves that work like a pair of sliding doors.



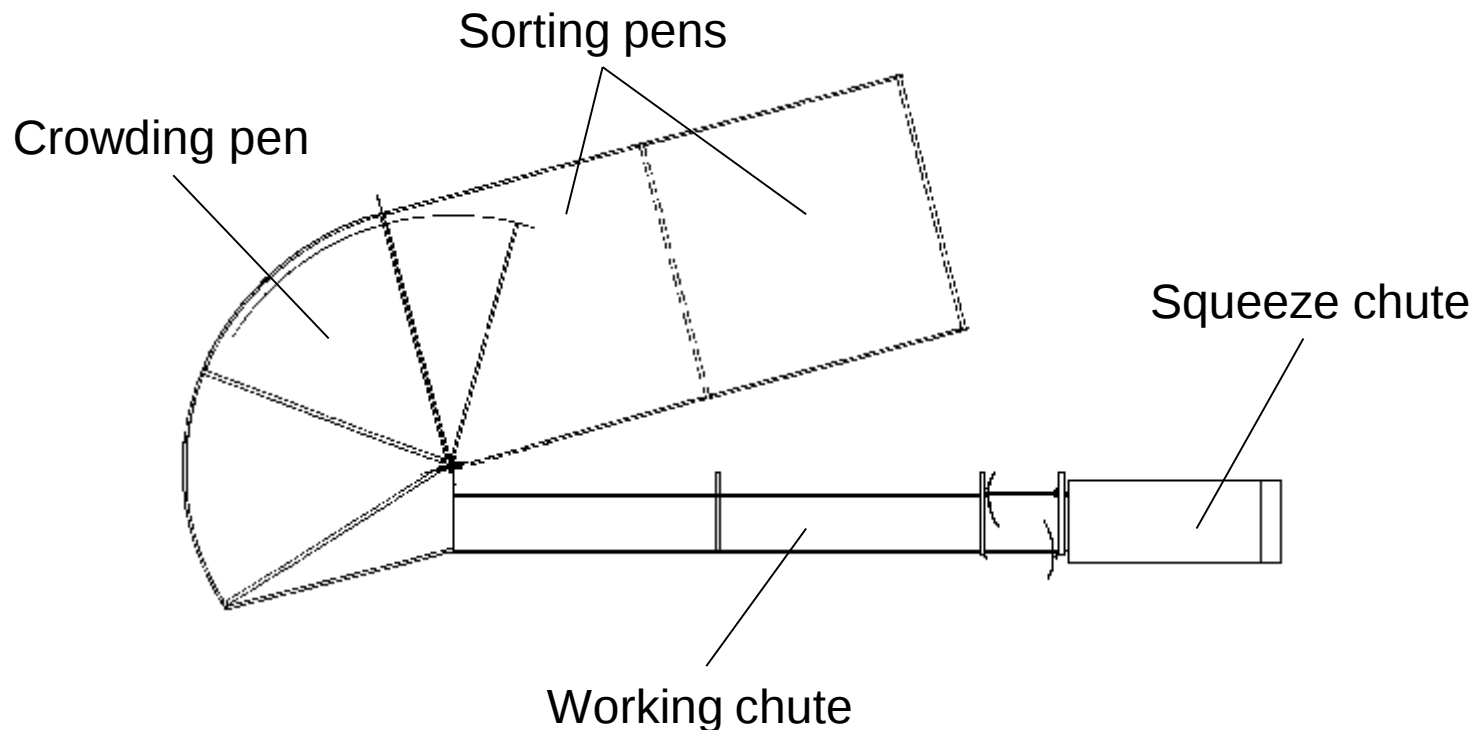
Holding Chute

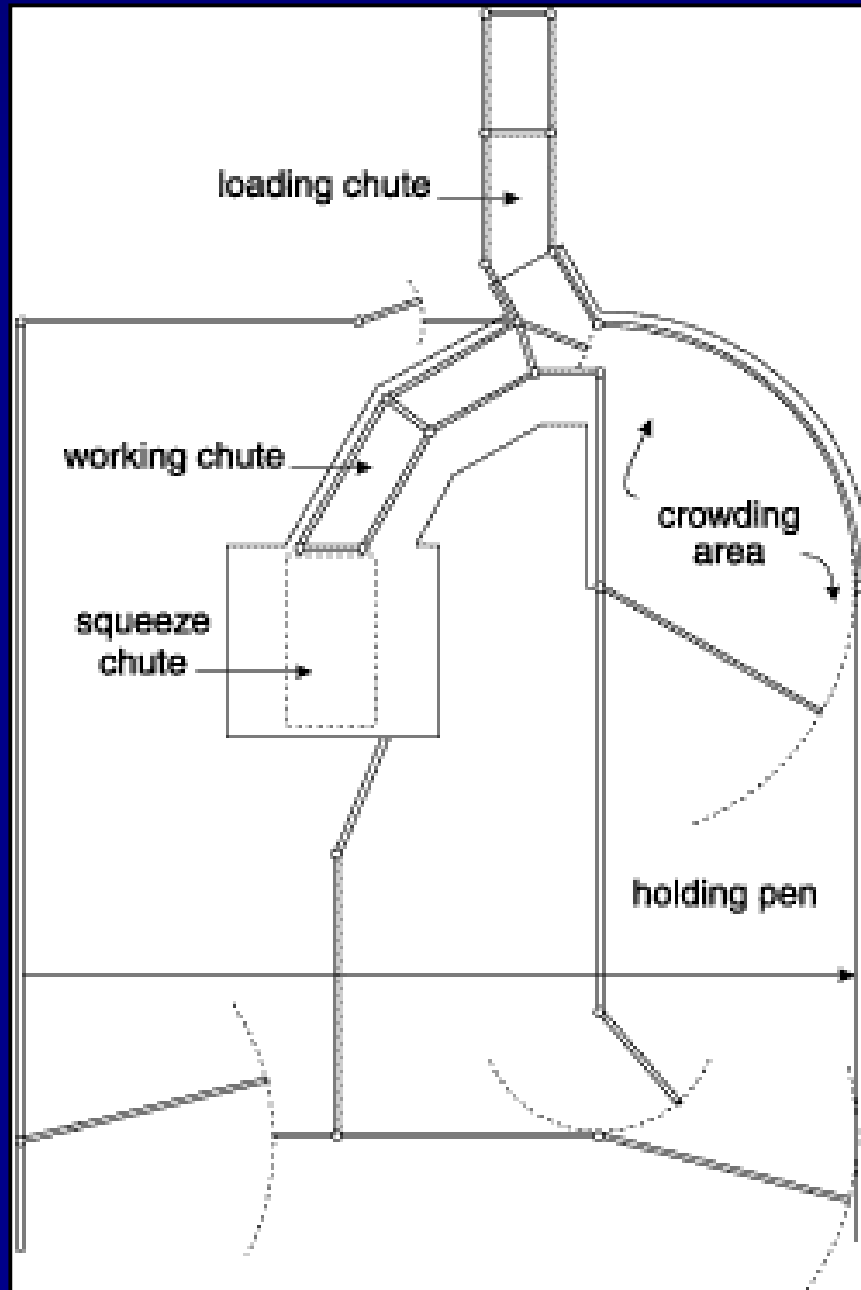
The holding chute is located immediately behind the headgate and secured to it. The holding chute should generally not be any wider than 26 inches. The holding chute should also be adjustable for different-size animals.



Working Chute

The working chute connects the holding chute and the holding pen. It should be a maximum of 26 inches wide for a straight chute. It should be long enough to hold five to six animals at a time. Chutes must be narrow enough to prevent cattle from turning.





Corral with a loading chute, working chute and squeeze chute



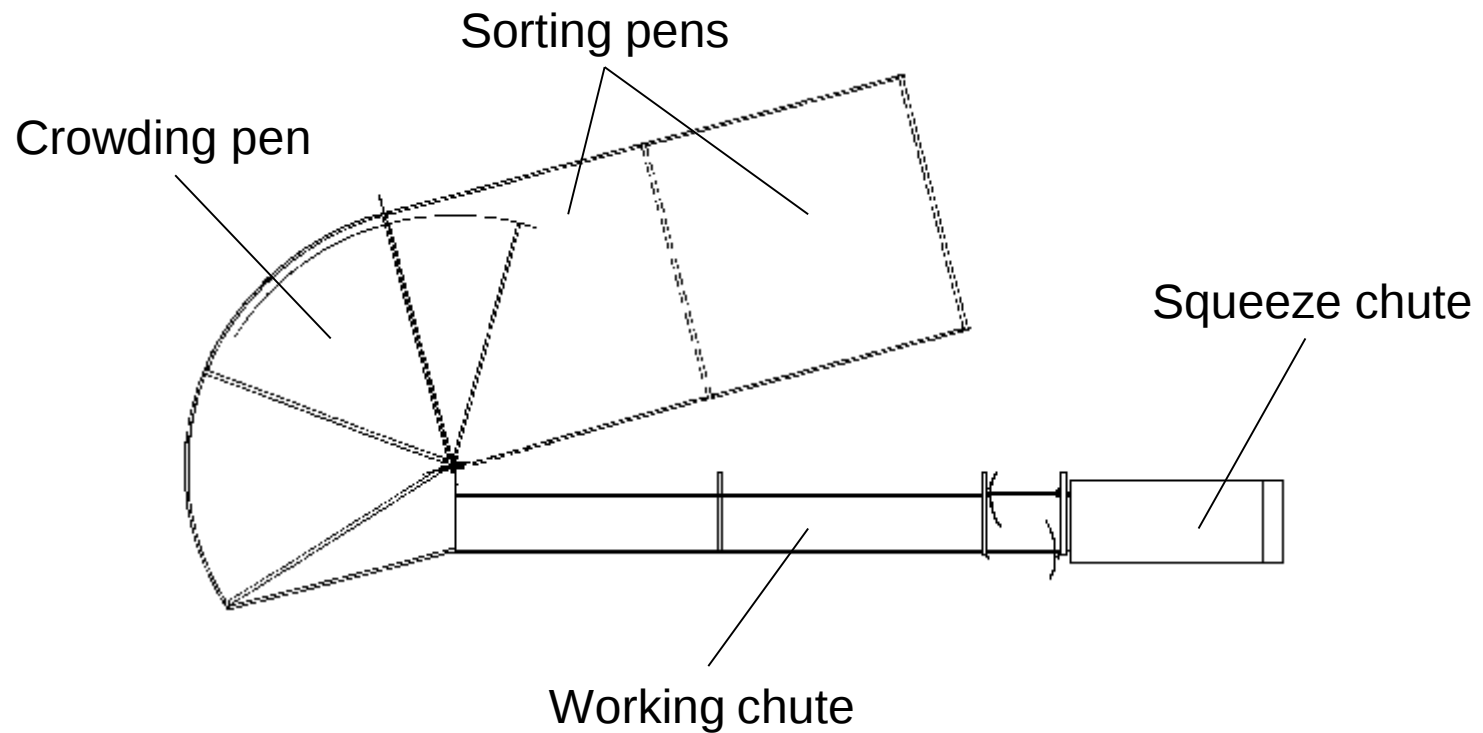
Crowding pen

The crowding pen is located at the back of the working chute. Size should be about 150 square feet. This area will hold five or six head of cattle.





Crowding pen





Holding Pens

Holding Pens will allow for faster handling of cattle as they can be sorted and held prior to moving into the crowd pen. They also prevent the mixing of treated cattle back into the main herd. Each holding pen should provide approximately 20 square feet of space per animal.



Scales

Scales should be made a part of a beef cattle-handling facility if possible. The scales should be located so cattle can be easily moved on and off. Do not locate scales so cattle must cross them each time they are worked. Locating the scales in this manner results in a shorter life and greater repair costs.





Loading Chute

The loading chute may be optional if a trailer is used to transport animals. The loading chute should be located directly off the crowding pen, allowing easy movement of cattle. The loading chute ramp can be either sloping or stepped.

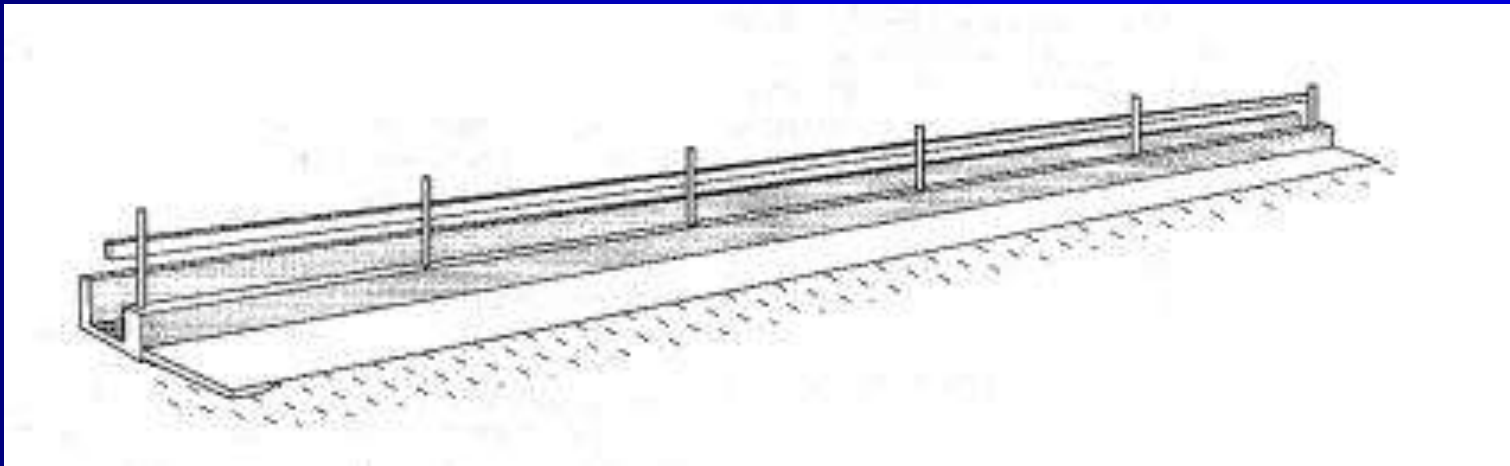




Feeding Equipment

Feed Bunks –

The main requirements for feed bunks are that they are practical, good quality, and economical. The bunk length and capacity should meet livestock requirements.

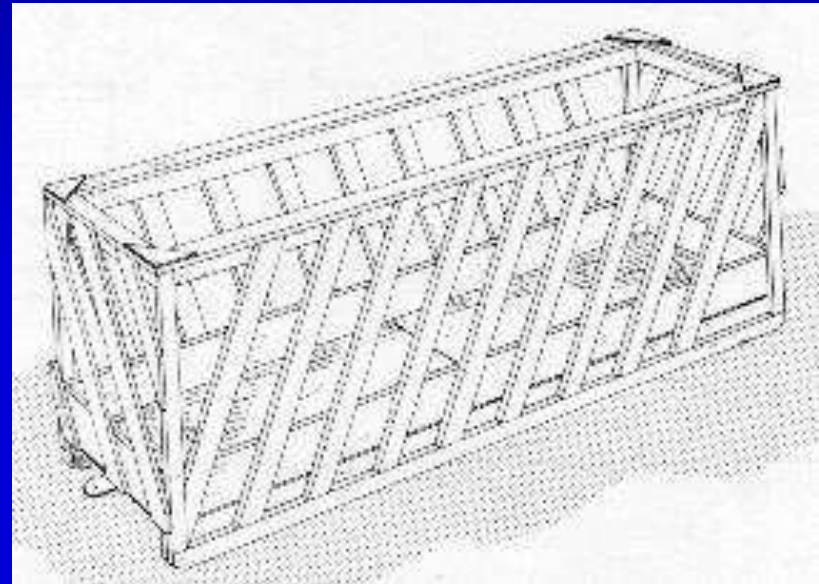




Feeding Equipment

Portable Hay Feeders –

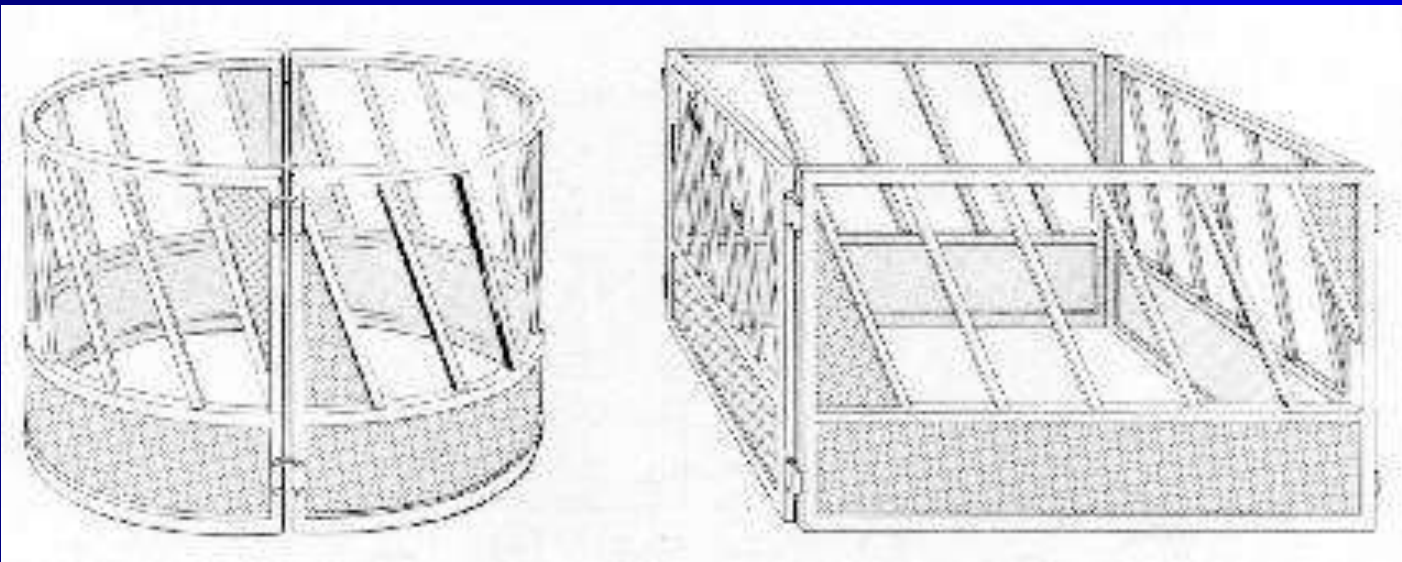
This portable feeder is a proven hay-saving design for free-choice supplementary hay feeding in a field, feedlot, or loose housing barn. The sloping spacers allow cattle of varying sizes to feed comfortably with their heads inside the feeder. This helps to reduce waste since cattle do not have to withdraw their heads to stand and chew.





Feeding Equipment

Round and big bale feed racks are easy to load, move, and also prevent hay wastage. The square version is easier to build in the farm shop, and it can be completely collapsed for transport in a pickup truck.





Water Equipment

- Many watering equipment system options are available. Different systems may be used throughout the year. If you are grazing animals, you may want portable water tanks to reduce the impact of cattle in one location. In the winter, depending upon your climate, you may need heated units for use in pasture. There are many things to consider when selecting a system for use on your farm.



THE END