# Handling Systems

There are many types of handling systems. The following are some examples.

## Example 1: An In-Line Handling System



1. Work area. This includes a head gate and scale. A more detailed photo is shown below.

2. Working chute.

**3.** Man gate. This safety feature allows access to the cattle and an escape route if necessary for the handler.

4. Crowd area. Cattle funnel through this section and are lined up in single file prior to entering the chute.

5. Holding pen.





This photo shows the detail of the working area of the in-line system. Note the catwalk, an elevated plank running along the length of the chute. This allows the handler to access the animals and eliminates the need to reach through the sides of the chute.

#### Example 2: Circular Crowd Area

The following photos show an effective circular crowd area. The cattle enter the crowd area from the barn. As the cattle leave the crowd area and enter the chute, a hinged gate can be closed behind the animals. The circular system is effective as it takes eliminates sharp corners that may cause cattle to balk, and takes advantage of an animals' circling instinct.



After entering the chute, the cattle are moved along to a scale, complete with head gate for restraint. There is another door at the back of the head gate, again to prevent the animal from backing up.





A great safety feature of this system is a series of "locks" around the circular area. As the gate is closed, it slides over these locks and cannot be pushed unless manually opened. This prevents the cattle from pushing the gate open and keeps the handler out of harm's way. Spring to open gate

These locks work much like cogs. They are placed at even intervals around the inside of the crowd area. To open the gate, a spring or rubber strip allows one to pull back on the handle, giving enough space for the gate to clear the locks.

## **Example 3: Incorporating System Into Existing Facilities**

This is a relatively inexpensive system that has been incorporated into an existing facility. The cattle are housed in a loafing barn that is separated by a wall. When the need to work with the animals arises, they can be isolated in one end of the barn. A series of gates narrows the available space, funnelling the cattle into the chute.



This photo is looking through the chute, from the rear. Note the door to the right that when closed, prevents the animals from moving backwards.

The chute features tapered walls made from plywood. This is advantageous when moving different sized animals through the chute. Smaller cattle cannot turn around and get caught or cause other problems. The sides are wider at the top and narrow at the bottom.





Head gate detail

Gates at the end of the crowd area direct cattle into the chute. The gates are hinged and can be swung out of the way when not in use.

This shows an overhead diagram of the above facility. "X" symbols represent cattle. The gates can be moved out of the way when not needed.



Diagram is not to scale.

### **Example 4: Safe Working Area Within Handling Facility**

This handling facility has been built in a building formerly used for hay storage, now a loafing barn for the cattle. A long gate with solid sides swings to move the cattle into a crowd area. From there, the animals move into a chute that leads to a scale.





The scale is at the beginning of an angled corner. A safe working area was created by building a low wall between the head gate and scale area which separates the handler from livestock in the loafing barn. A rope attached to a gate at the front of the scale raises the gate and moves the animal ahead towards the head gate.

If the animal is to be returned to the loafing area, another rope operated gate in front of the scale can be lifted to allow this. The panel on the left of the photo shows the door.





After an animal exits the scale, it moves through the angled corner section into a head gate. The next animal is restrained in the scale. At the back of the head gate area, a small gate swings to allow access to the hindquarters of the animal.



When an animal is ready to exit the head gate, the handler has three options. The cattle may be moved directly forward to a loading ramp onto a trailer for transport. The other options allow the handler to send the cattle back to one of the two sides of the loafing barn.

Detail of gates at loading chute and head gate

1 -Gate to send cattle back into loafing barn.

3

4

2

- 2- Loading chute
- **3- Head gate**

1

4- This handle, when pulled, releases the head gate allowing handler to remain behind the animal.





This photo shows the front of the head gate. Note the work area to the right of the photo between the head gate and wall. This is wide enough for the handler to work safely and is a barrier from any cattle which may be in the loafing area behind the wall.

This diagram shows an overhead view of the above facility. The double lines represent gates.



#### **Example 5: Visibility Through the Head Gate**

Cattle do not like to move forward if they perceive that their path is blocked. The following system takes advantage of this fact to allow for easy, safe movement of the livestock.



1 2 3 4

A door directly in front of the head gate is opened when cattle are being moved through the chute. By not seeing a solid object, the animals will continue to move forward until they are restrained in the head gate. After leaving the head gate, cattle may pass through the door to pasture or another gate may divert them back into the paddock.

- 1 Sliding door stops cattle from advancing while another animal in the head gate.
- 2 Man pass/ escape route
- **3**-Head gate
- 4 -Swinging door allows cattle to see what is ahead, preventing balking at head gate.



This photo shows a gate that expands and reaches the opposite side of the doorway, creating a crowd area to funnel the animals into the chute.

The diagram to the right shows an overhead angle of this system. Note the top left corner. Cattle will hesitate to make a sharp turn in a chute. As a result, the corner has been angled to facilitate easier movement.



Diagram is not to scale.

#### Example 6: Crowd Area

This photo shows an easy way to incorporate a crowd gate into an existing facility. There are three gates in the centre of the photo that, when closed, take up the length of only one gate.

When opened, they divide the feedlot area into two sections. To easily confine the cattle to one side, the operator simply needs to put feed out along the fence. As the cattle are eating, the gates can be spread and fastened. This effectively crowds the animals into a smaller area which can lead to a chute and head gate.





These diagrams show the gates closed and opened from an overhead angle. The circle is the round bale feeder. The "x" symbols represent cattle. A fourth gate behind the feeder prevents cattle from escaping while being worked.

Diagram is not to scale.

Another important aspect of any handling system is fencing/gating. The above photo shows strong, secure fencing, essential for good restraint. Such a system has great advantages as it is relatively easy to set up in an existing yard. However, it is important that when using any system, the handler not turn his or her back on the cattle. Anytime a person must enter a livestock pen, chute or other handling area, there should be an escape route. This escape should be easily accessed and large enough to accommodate an adult, but small enough to prevent livestock from through.

The following photos illustrate various effective man gates. The styles differ but they all provide a safe way out should a potentially dangerous situation occur.



This gate is incorporated into the side of a chute, where the crowd area meets the chute.

This man gate is located on a crowd gate near a milking parlour. The opening is covered with a small, hinged gate that swings in one direction, allowing passage for the handler.



This man gate is directly behind the head gate. A sliding door prevents animals in the chute from moving forward. This allows the handler access to the back of the animal without climbing over gates, etc. Boards attached to the inside of posts make the pass narrower, ensuring that smaller animals cannot exit.





This man gate is incorporated into an existing gate. A steel frame, wide enough for a person was attached to the end of the gate. When the gate is closed, an effective escape is provided.

### **Example 8: Restraint System In Treatment/Maternity Pen**

The following photos illustrate an effective means of restraining an animal inside a pen. Without a head gate, an animal is free to move around. Attempting an internal examination, artificial insemination, surgery, etc becomes difficult. Simply tying the animal with a halter prevents the animal from circling, however, this still permits a fair degree of movement.



This photo shows the pen with a swinging gate and head gate. Normally the animal is free to move around within the pen.

When the occasion arises that the animal must be restrained, the animal can be drawn to the head gate with feed, then the locking mechanism holds the animal in place. The gate is then swung around and secured. preventing any sideways movement.





This diagram shows an overview of the gate in an open and closed position. The "x" symbols represent the animal.

Swinging gate

Diagram is not to scale.

### **Example 9: Locking Headgates In Feed Area**



Restraining cattle while at a feed bunk with the use of locking headgates is an effective means of holding larger numbers of animals.

The photo at right shows a series of head gates that can either be released individually or all at once.





The photo at left shows a series of home made locking head gates. A bar on the top, attached to the individual gates, slides to either hold or release the animals all at once. The upright posts are wooden and are stationary.

If using a head gate to restrain an animal for veterinary work, be aware that administering an intravenous injection may be difficult as the bars of the head gate may interfere with the task.