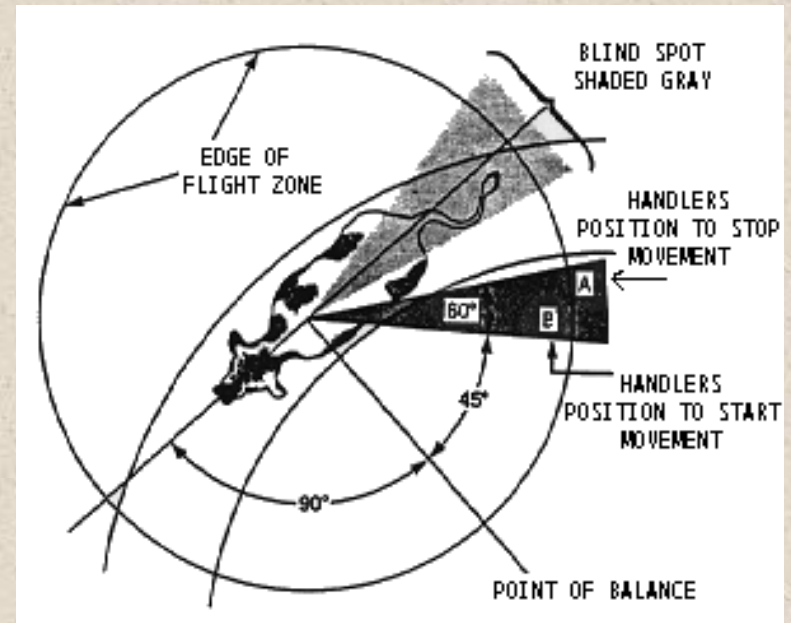


# 6 Principles to Consider When Handling Agricultural Animals

- I. Understand The Flight Zone
- II. Livestock's Field of Vision
- III. Animals “Follow The Leader” Instinct
- IV. Minimize Distractions
- V. Animals Sensitivity to High Frequency Noise
- VI. Keep Equipment Well-Maintained

# I. Understand the Flight Zone and Point of Balance

- A. Flight zone is the animal's personal space; the size of the flight zone is determined by the wildness or tameness of the animal.**
1. Completely tame animals have no flight zone
  2. The flight zone gets bigger when an animal becomes excited.
  3. The flight zone is also bigger when you approach "head on".
  4. An animal's flight zone will vary depending on how calm it is.
  5. Calm cattle are easier to move.
  6. If cattle become excited, it takes 20 to 30 minutes for them to calm back down.
- B. Animal will begin to move away when the handler penetrates the edge of the flight zone.**
- C. The point of balance is at the animal's shoulder.**
1. All species of livestock will move forward if the handler stands behind the point of balance.
  2. They will back up if the handler stands in front of the point of balance.
- D. Handlers who understand the concepts of flight zone and point of balance will be able to move animals more easily.**





**This pictures demonstrates the flight zone of a herd of sheep.**

## II. Livestock have wide angle vision

- A. Cattle and pigs have a visual field in excess of 300 degrees
- B. In sheep, the visual field ranges from 191 to 306 degrees depending on the amount of wool on the head.
- C. Their wide angle vision causes them to get **distracted easily**.
  1. Loading ramps and handling chutes should have solid side walls to prevent animals from seeing distractions
  2. Moving objects and people seen through the sides of a chute can cause balking or frighten livestock.
  3. Blocking vision will stop escape attempts.
    - a. solid portable panel is so effective for handling pigs.
    - b. Sight restriction will lower stress levels



## II. Livestock have wide angle vision

D. Even though ruminant animals have depth perception, their **ability to perceive depth at ground level while moving with their heads up is probably poor**

1. To see depth on the ground, the animal would have to stop and lower its head. This may explain why livestock often lower their heads and stop to look at strange things on the ground.

E. In areas where animals are handled, **illumination should be uniform and diffuse.**

1. Shadows and bright spots should be minimized. Slats on the floor of shearing sheds and other animal facilities, should be eliminated so animals walk across the slats
2. Flapping objects or a coat hung on a chute fence may stop animal movement.
3. Pigs, sheep, and cattle have a tendency to move from a dimly illuminated area to a more brightly illuminated area, provided the light is not glaring in their eyes.

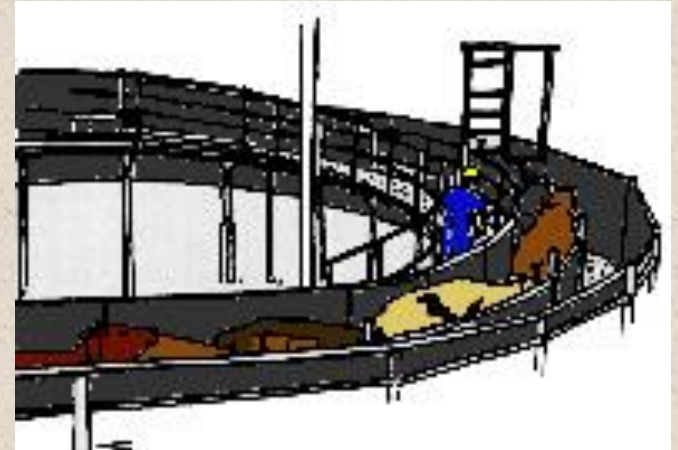


# III. Animals have a "Follow the Leader" Instinct

A. Livestock will follow the leader

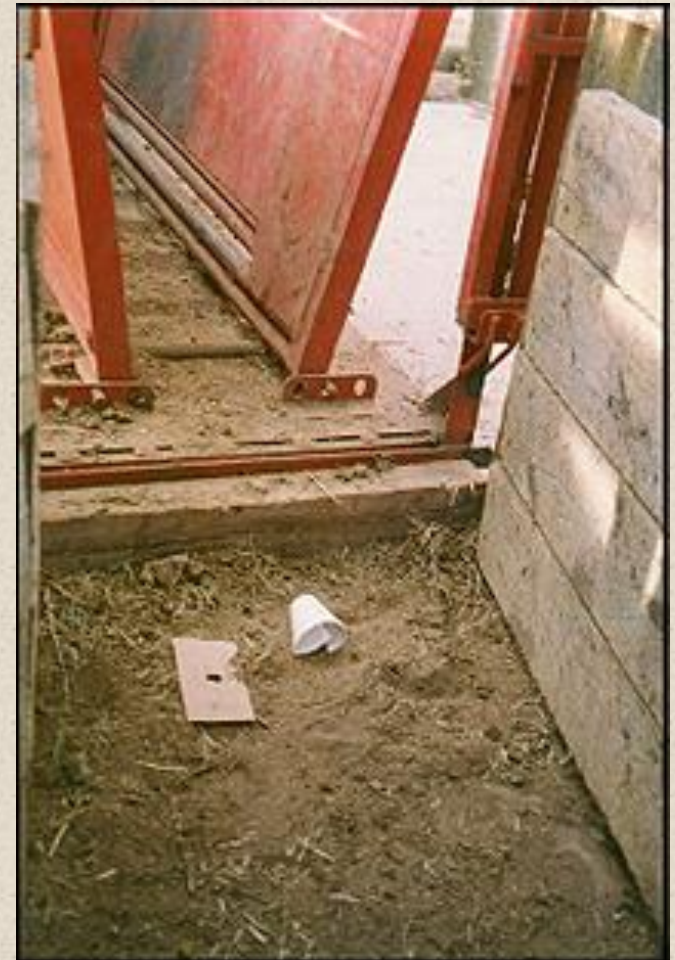
B. Handlers need to take advantage of this natural behavior to move animals easily

1. Animals will move more easily into single file chute if it's partially empty.
2. This takes advantage of this instinct and moves the cattle more smoothly.



# IV. Minimize Distractions

- A. Cattle, pigs and sheep balk and may refuse to move if they see distractions. There are simple solutions to these problems.
- B. Once the area is clear of animal traffic, you need to look up the race for common distractions such as:
1. Sparkling reflections on puddles
  2. Reflections on smooth metal
  3. Chains that jiggle
  4. Metal clanging or banging
  5. High pitched noise
  6. Air hissing - should be silenced with mufflers or piped outside
  7. Clothing hung on the fence / plastic that is moving
  8. Fan blade movement
  9. Seeing people moving up ahead
  10. Small object on the floor - such as a coffee cup



# V. Animals are more sensitive to high-frequency noise than humans.

A. It is important to reduce noise when handling livestock.

1. They can hear high-pitched noises that humans can not hear.

a. Human hearing most sensitive at 1000 to 3000 Hz

b. Cattle and sheep is most sensitive at 7000 to 8000 Hz.

2. Whistling and whip cracking can cause animals to become excited

a. Equipment should be designed to reduce noise

1. Rubber pads

2. Avoid hissing of hydraulic pumps

B. Calm cattle and pigs are easier to handle and move.

1. Animals bunch together when excited.

2. It takes up to 20 minutes for the heart rate of agitated cattle to return to normal.





# VI. Make sure equipment is well maintained

A. Squeeze Chutes: There are many different types available

1. Manual
2. Hydraulic
3. Spring loaded
4. Some chutes will restrain the animal by gently squeezing them in place
5. Also available are swinging handles and closing panels for vaccinating and branding



# VI. Make sure equipment is well maintained

- B. As cattle move toward the squeeze chute, it is important to keep them moving
- C. As an animal comes into the chute, the chute head catch must be closed
- D. Timing is critical
  - The catch must be right as the head and ears come out of the chute
  - If an animal's shoulders get through the chute, it will escape



# VI. Make sure equipment is well maintained

- E. Once the animal has stopped moving or is restrained in a squeeze chute, it can be haltered
  - 1. A bovine halter is a single piece of rope
  - 2. To halter the animal, loosen the nose loop and flipping the head loop over the animal's head.
  - 3. Then the nose loop may be placed over the nose and the halter may be tightened by taking the free end



These general principles can be applied to most agricultural animals. . .

But experience is the best teacher!  
Share some of the things you have learned when handling animals.

# Go easy, don't force them.

Cattle are easier to drive than to halter or lead

- Drive cattle into **well-maintained** pens, alleyways, and chutes



# Avoid rushing the herd

- This leads to bruising and damage to the meat
- It also leads to damaged facilities



# Keep things calm.

New or strange people or objects will cause an animal to balk and bolt

- Get down on the animal's level and see if there are any objects that might scare the animal
  - These include loose flags, tarps, jackets; changes in lighting, etc.



# Keep the Momentum

Animals single file in alleyways may refuse to move or try to back up

- Posts or boards can be slipped behind animals to prevent backing up
- “Tailing” can be used to move the animal forward. This involves grasping the tail in the middle and twisting in up onto the cow’s back
- Hot shots may also be used but are discouraged due to the potential for stress





# The Dangers of Handling Animals



Beware of Kicking, Butting

Bulls can be **VERY** aggressive

- Nose rings may be used to increase control of the animal
- Use feed to entice the bull into the handling area