

Low Stress Cattle Handling



AND ANIMAL BEHAVIOR

F. David Kirkpatrick, Professor Animal Science
University of Tennessee

Stress Occurs When

Demands are placed on an animal that cannot calmly or naturally respond.

When stressed, the animal operates in a survival mode (fight or flight).

Panic follows too much stress

Results of Stress In Livestock

- reduced performance**
- upsets rumen function**
- low conception**
- suppresses immune system**
- reduced meat quality (dark cutters)**
- animal injury**
- human injury**

**Understanding cattle
psychology and
behavior principles
combined with well
designed handling
facilities can reduce
stress in cattle.**

ANIMAL BEHAVIOR

An animal's response to a stimulus that is directed toward survival.

Evolved as animals of PREY

rely on sight, sound ,smell to detect predators and respond to danger by fleeing or fighting (survival mode)

Perceive human as PREDATORS

Eyes in the front, the animal hunts.

Eyes on the side, the animal hides."

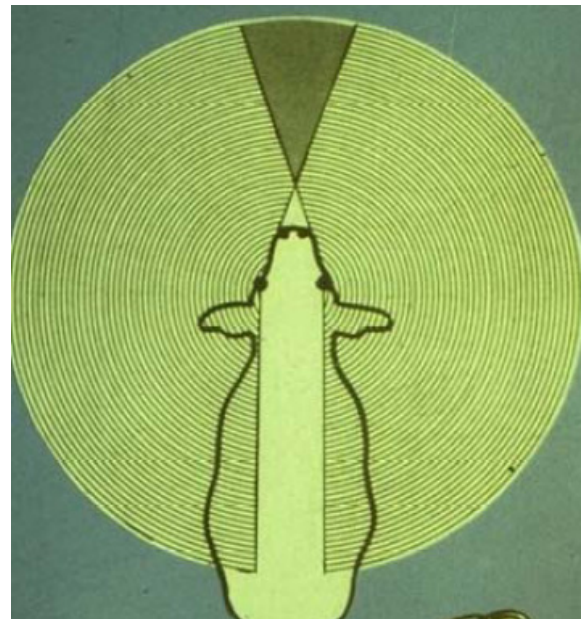
VISION

**Panoramic vision (over 300 degrees)
blind spot directly behind them**

**Poor depth & vertical perception
ability to perceive ground depth while
moving is very limited (balking).
Can only focus on an area of 25 -50
deg. in front of them**

**Sensitive to light differently than
humans move more easily from dark
to light, fear extreme contrasts
of light & dark**

**Chasing is perceived
as Predatory**



HEARING

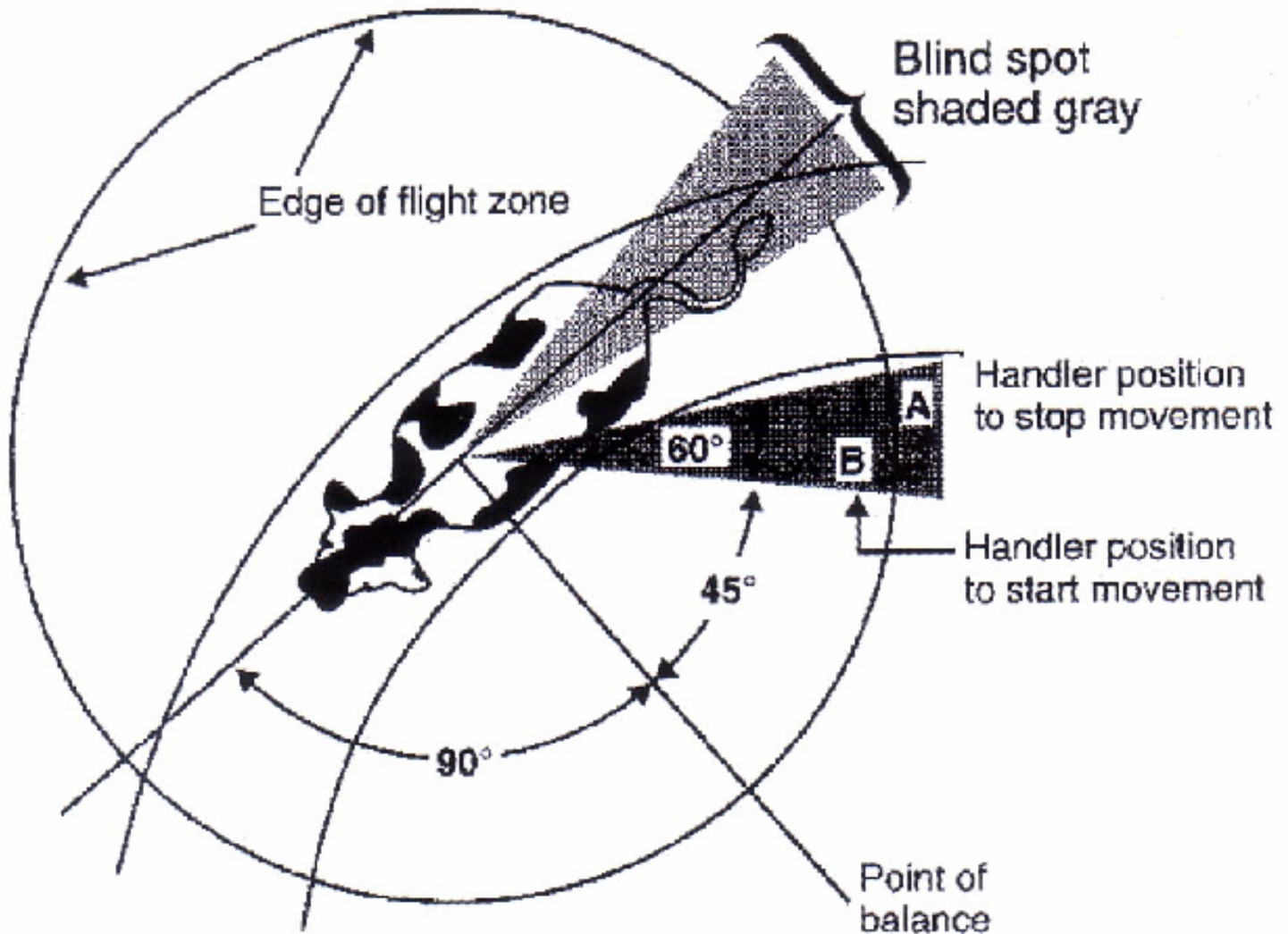
Have sensitive hearing & are stressed by excessive noises

Can hear lower volume & higher frequency sounds than humans but cannot pinpoint it as well as humans

Visually impaired cattle may overcompensate & are extremely sensitive to sound.

Screaming, hollering, whistling and whip cracking are stressors

FLIGHT ZONE (comfort zone)



Size is dependant upon familiarity with handler, prior treatment (great memories), breed, temperament, etc.

Herd Instinct

**Feel comfortable and safe in a group
(prey instinct)**

**Follow other animals in the group
(follow movement)**

Go in direction they are facing

Want to see what is around them

**React adversely when individually
separated**

Maternal Instinct

Defensive instinct to protect young

**Can become very aggressive or
unpredictable after calving**

**Practice extreme caution when
working with newborns**

Territorial Instinct

**Comfortable in familiar environment
(creatures of habit, e.g. paths)**

**Change of location can alter comfort
level**

Re-establish peck order

**Change for a single animal may
require a companion**

Testosterone Instinct (Bulls)

**Are territorial and possessive
of their space and cows**

**Need to be respected not necessarily
feared**

**Submissive & docile may turn
aggressive and cause injury
and/or death**

**Never trust or turn back on or separate
from herd by yourself**

**Management of rearing has effect on
temperament**

Understanding Behavior of Cattle While Working Slowly & Quietly Will Reduce Stress & Injuries

Modifying working facilities to exploit behavioral instincts will also contribute to less stress and problems.

**Low Stress handling is less work
and offers greater profit potential!!**