

Safety First



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∞ Why talk about this now?

- Improved animal safety means:
 - Reduced stress on cattle
 - Improved growth rates
 - Improved reproductive performance
 - Better able to fight disease
- Improved chute safety means:
 - Faster to get the job done
 - Less cost
 - Improved productivity
- Improved handler safety means:
 - No “accidents”
 - People will want to help with the job
 - We can continue to do our job for years to come



Improving Handler Safety

∞ The face of the KVC Veterinarian is changing



Some of us are short on functioning limbs and digits!



Some of us are working with a temporary side kick!



None of us are getting younger!

Improving Handler Safety

- ⌘ Working with large animals always presents a safety risk
- ⌘ Ensuring proper handling facilities, animal restraint and confident, knowledgeable human helpers will help to minimize the risk
- ⌘ Even the good cowboys can get hurt
 - But that doesn't mean we want it to ever happen!



A Good Cow Person is...

- ∞ ...someone who knows cows
 - How they act
 - How they react
 - How they can be unpredictable and never trusted
- ∞ ...someone who is patient
- ∞ ...someone who is quiet yet confident
- ∞ ...someone who works efficiently
 - Fast ≠ Efficient BUT Efficient = Faster
- ∞ Ensure all human handlers/helpers understand the importance of being a good cow person
 - For animal and human safety, but also for animal welfare
- ∞ Regardless of your set up – extra help always makes the job easier and safer

Improving Animal Safety

- ∞ To ensure animal safety you must have a clear understanding of animal behaviour and animal movement
- ∞ Cattle have panoramic vision but poor depth perception at angles greater than 50°
- ∞ Cattle are social animals
 - They like to be in groups and “follow the leader”
 - If 1 animal is stressed, others in the group will react as well
 - If a lone animal refuses to move – release it back with a group and move it again with other animals
- ∞ Cattle do not like sudden changes in floor texture or level

Cattle Response to Light

- ∞ Cattle move better in well-lit areas and fear harsh contrast between light and dark
 - Cattle will balk at shadows and bright light patches
 - Does your handling system have any?
 - Can you handlers contribute to any?
- ∞ Cattle do not like moving into direct sunlight
 - Where will the sun be when you are working cattle?

Cattle Response to Movement

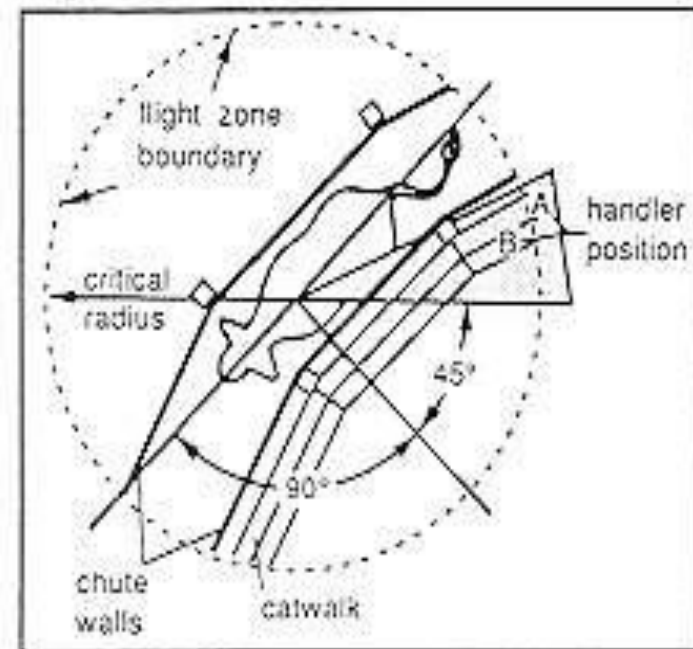
- ☞ Cattle will balk at the sight of spastic, unexpected movement
 - By a person
 - By a piece of material flapping in the wind
- ☞ Handlers should stand back from the head gate when an animal is entering
- ☞ Animals should never be prodded unless an opening to an “escape” can be seen
 - Electric prods can (and should be) replaced by a garbage bag attached to a broomstick
 - The rustling of the plastic bag is enough stimulation to make cattle move
- ☞ Walk through the handling facilities and look for areas of obstruction, distraction or surprises prior to working cattle
 - Be sure to look at the cow’s eye level!

The Flight Zone

- ✂ Moving cattle requires a clear understanding of an animal's flight zone
- ✂ Flight Zone – how close you can get to an animal before it moves away from you
- ✂ Best place to work is edge of FZ
 - Animal will move away slowly and calmly
- ✂ Yelling/Shouting increases FZ size

Speak low – Speak slow – Don't say too much!

Figure 2. Flight zone.



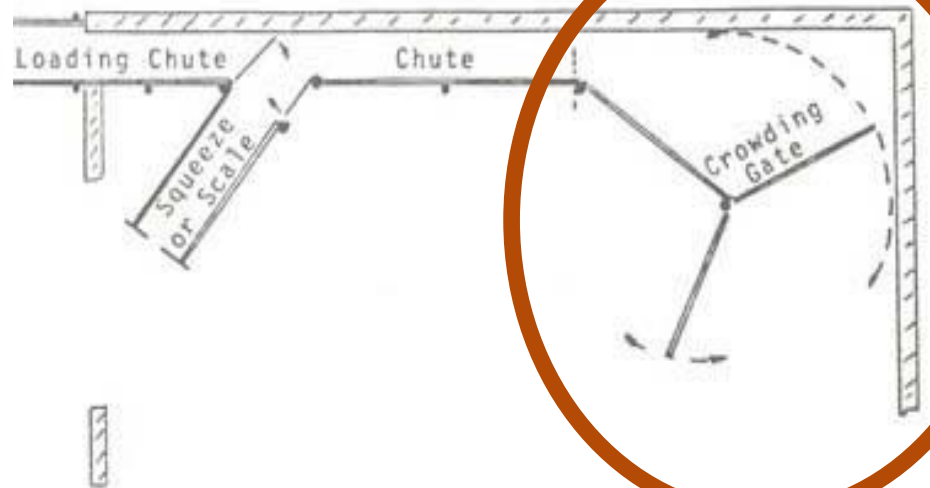
Cattle Handling Facilities

- ∞ Proper working facilities are key to animal and handler safety
- ∞ Facilities will range in size, sophistication and cost depending on your farm's needs
- ∞ 3 basic components to any farm's handling system
 - A crowding pen
 - A chute
 - A **functioning** headgate
- ∞ Optional components:
 - holding pens, squeeze, blocking gates, back stop, kick bar, man gate



Crowding Pen

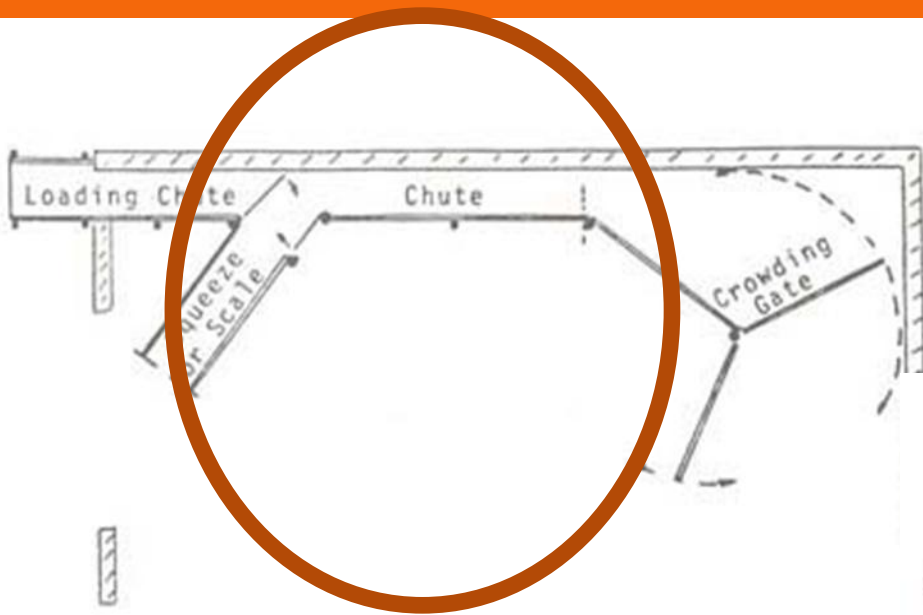
- ∞ Funnels cattle into the working chute
- ∞ A circular or angular pen (“a tub”) helps get cattle facing the right way and entering the chute in single file
- ∞ Solid sides help to prevent distractions
 - The chute is seen as the only way out



The Working Chute

- ☞ Holds cattle in single file ready to enter the headgate or squeeze
- ☞ Ideally, long enough to line up and hold at least 3 animals
- ☞ Curved chutes make moving cattle easier
- ☞ Needs to be wide enough for animals to move through easily but narrow enough that no animal can turn around
 - Alterations may be required for a chute to work cows vs. calves
 - Sloping sides will allow for these size differences
- ☞ Simple procedures may be done in a the working chute (pour on dewormer, BCS)
 - Needles should never be given to an animal in a chute
 - Handlers should never position themselves within a chute while animals are in it

The Working Chute



- Solid sides
- Straight or curved
- Blocking gates throughout



Headgate

- Essential for animal restraint and handler safety
- Wide range of models available
 - Manual, self catching, hydraulic, neck extenders
- Key to a good headgate:
 - Quick
 - Easy to operate
 - Adjustable for different sized cattle
- Prior to working cattle, ensure ALL aspects of your handling system are functioning safely and easily
- Ensure ALL handlers understand how the system works prior to sending the first animal through



Animal Safety

- ∞ Castration and dehorning are painful procedures and if not done properly, or with poor restraint, animal safety is jeopardized
- ∞ How painful?
 - Regardless of method (rubber ring, Burdizzo or surgical castration), castration caused behavioural responses indicative of pain for 3 hours after the procedure
 - ADG decrease of 50 to 70% when done at 8 to 9 months of age
 - ADG of 7 week old calves castrated were lower than those of uncastrated calves, for the first 5 weeks post castration
 - Purchased, castrated males gained 0.58lbs/day vs. intact males castrated on arrival to feedlot

Still not convinced?

- ∞ Castrated calves were observed to vocalize louder and 4x as much as control calves
- ∞ Castrated calves spend a large amount of time standing after castration (79.3% vs. 51.2% of 24hrs post castration)
- ∞ Castrated calves spend a lower percentage of the time eating post castration
- ∞ Faster exit speed from the headgate was observed following castration
 - Fast exit speed in general meant:
 - Lower weight gains
 - More sickness
 - More dark cutting in meat

Controlling Pain, Ensuring Safety

∞ Local Anesthesia (Nerve Block)

- Should be used on all calves at dehorning
- 10-20mL Lidocaine per horn
- Allow 2-5 minutes for effect

∞ NSAID Pain Management

- Recommended for older animals
 - Gouged horns (**Ouch!**)
- Anafen 1.5mL/100lbs IM
- Metacam 1.1mL/100lbs SQ



- ## ∞ Giving both a local anesthetic and ketoprofen (Anafen) before surgical castration was found to virtually abolish the post surgical cortisol response

Sedation

- ∞ Sedation is necessary to reduce stress and increase safety for highly anxious/nervous cattle (and the handler)
- ∞ Many sedation options simply “take the edge off”
 - Minimal risk of going down in the chute
- ∞ Prior to using a sedative, ensure it is safe for the intended animal
 - Safe for use in pregnant animals?
 - Safe for use in breeding bulls?
 - Meat withdrawal
- ∞ Less than ideal handling facilities will greatly increase the need for sedation

Final Thoughts

- ✎ Margins in the beef industry are tight enough
 - Don't spend extra money due to poor, unfit and unsafe facilities that put animals and humans at risk of injury
- ✎ KVC has a portable squeeze and headgate for our clients to use as required
 - Contact the office if needed
 - If a veterinarian will be performing the cattle processing, have the system set up prior to arrival
- ✎ Doing it right will encourage everyone to come back and do it again next year!

Livestock Auction Traceability Initiative (LATI) Program

- ∞ Up to \$20-million three-year program(2011- 2014) undertaken through the Agricultural Flexibility Fund
- ∞ Provide contributions to assist in the alteration of animal handling structures, which will enhance traceability capabilities
- ∞ Up to 80% of eligible project costs, to a maximum of \$100,000 per facility
- ∞ Applications and mandatory supporting documents may be submitted at any time until September 30, 2013 or until all program funding has been committed.
- ∞ All activities must be completed no later than January 31, 2014.

<http://www4.agr.gc.ca/AAFC-AAC/display-fficher.do?id=1294344464885&lang=eng>

- ∞ Or Google LATI Program for more information and an application form