

Restraint of a Cow's Whole Body, Tail, or Feet; and Anti-Kicking Methods

Our topics for this week are:

- Restraint of a cows whole body
 - Stanchions and tying posts
 - Improvised chutes
 - Ropes and snubbing posts
 - Chest twitch
 - Casting methods
- Restraint of the tail
- Lifting feet
- Anti-kicking methods

Restraint of the Whole Body

Stanchions and Tying Posts

Stanchions or tying posts can be used to restrain halter trained or docile cattle. Either stanchions or posts should be strong enough to hold adult cattle that might resist the restraint with all their strength. Tie rings on tying posts should be at a cow's natural head height or slightly higher.

Improvised Chutes and Hay Bale Barriers

A gate that swings against a wall can be used as an improvised treatment squeeze chute when other facilities are not present. Square bales of hay or straw can be used behind restrained cattle to reduce the risk of the handler being kicked if work is needed round their rump, such as rectal palpation.

Rope and Snubbing Post

If adept with a lariat, a handler can toss a lariat loop around a cow's neck and pull it to a stout stationary post. The restraint should be brief or a halter should be placed on the cow's head and the lariat removed. Alternatively, a bight can be run underneath the neck loop at the throat and then placed over the cow's nose to make a temporary halter. This will relieve pressure around the cow's neck. A rope and snubbing post should be used when less stressful means are not available and the need for the restraint is more important than the stress that might result.

Chest Twitch

A chest twitch is a rope looped around the chest and pulled tight. This may calm a tied, agitated cow.

Casting

Casting methods are means to lay a cow down and immobilize it when restraint chutes or tilt tables are not available or appropriate for the procedure to be done. Any time a cow is laid on its side there can be risk of displaced abomasum or bloat if handled roughly or forced to remain recumbent for too long. Cows within 2 months of calving should not be cast due to the risk of

induced abortion.

An appropriate ground surface should first be selected. The ground selected for casting should be clear, smooth, and somewhat soft. Cattle will lay down if a rope squeezes their chest and their abdomen (half-hitch method) or puts pressure beneath their front legs and over their back (Burley or “Flying W” method). With either method, the lead rope should be held by an assistant or tied low, near the ground, to a sturdy object. Both methods require 40 ft of rope.

To perform the *half-hitch method* of casting, a loop is placed around the cow’s neck and tied with a bowline. A half hitch is placed around the chest just behind the cow’s elbows. The rope is thrown under the cow or a pole with a hook that can be used to retrieve the rope on the other side. Another half hitch is placed around the abdomen, avoiding the udder or prepuce, depending on the gender. The remaining line is pulled back steadily in line with the cow’s spine and the cow is gradually laid down on its side. Cattle should be laid either on their back (ventrodorsal) and propped with hay bales with their front legs stretched forward and their back legs stretched back with cotton ropes, or on their right side so that the left side can be uppermost and observed for gas accumulation.

If laying on its right side, the front legs are tied with 6 ft cotton ropes after flexing the leg so that the hoof is near the elbow and restrained with a clove hitch around a pastern, leaving about 8 inches extra. The long end is wrapped around the radius and the pastern 3 to 4 times and then the rope is tied with a slip knot (sheet bend with a bight for quick release) to the 8 inches left over from the clove hitch. Similar ties can be used on flexed hindlegs with a clove hitch on a fetlock, figure 8 wraps incorporating the fetlocks and tibia just above the hock, and slip knot tie. Recumbent ruminants rise with their front legs first. Tying the hindlegs securely is of more importance than the front legs.

The *Burley method* of casting cattle was named for Dr. D. R. Burley of Georgia. It is preferred by dairymen since the ropes are not placed in front of the udder and the cow goes down on its sternum and must be rolled over on its side. There is no pressure on the chest or udder and no knot to tie around horns, neck, or front leg. Therefore, its application and release are quicker. It is also possible to control which side the cow rolls onto. However, it is harder to pull two ropes with enough strength to cast a cow than one rope as with the half-hitch method.

Restraint of the Tail

The tail of a cow can inflict serious injury to a handler since the coccygeal (tail) vertebrae nearly extend to the end of the tail. A quick release sheet bend can be used as a simple, effective hitch using the long hair (switch) at the end of the tail. The long hair of the end of the tail is bent around the tie rope to begin making the hitch. A tied tail should only be secured to the cow’s body in case the cow goes down during the restraint. The other end is tied around the cow’s neck using a bowline knot to prevent the rope from tightening around the neck.

Alternative ties to further reduce or to eliminate the risk of pressure on the windpipe are to put the rope around the neck and behind a front leg on the opposite side as the side that the tail is bent toward, or horned cattle can have a loop around the horns instead of the neck.

Lifting Feet

Lifting a cow’s foot should only be done for brief periods (standing on 3 legs will quickly exhaust a cow and it may go down). Cow legs should not be lifted by hand as done with horses. Dairy cattle can be resentful or sullen and fall on the handler. Beef cattle that are not halter

trained will not tolerate an attempt to pick up a front leg.

To lift a front leg on a dairy cow, a rope with a quick release honda is placed around the pasterns below the dewclaws, and the standing end looped over an adjacent bar or the cow's back and held by an assistant.

Lifting a hindleg is usually done in a chute. A rope with a quick release honda is placed around the cow's cannon bone and looped over a bar above and behind the leg, another wrap is made with the standing end around the leg just above the hock. The leg is hoisted and the rope is held by an assistant. If the bar used to lift the leg is not sufficiently behind the cow, the hindleg will not be stretched back, and the leg will have too much freedom to kick back and forth for safe restraint.

Antikicking Methods

Calves may kick with both hindlegs, but adult cattle usually kick with one. However, they are more flexible in their ability to kick than horses. Cattle can reach forward to their shoulder and sweep outward when they kick.

Tail Jacking

Cattle are reluctant to kick if the tail is bent backward toward their spine. The handler stands to the cow's side and grasps the tail about 1/3 down from the base of the tail. The tail is raised as the handler steps close behind the cow, holding the tail straight up and bend slightly toward the spine. Only moderate pressure should be used to prevent injury to the tail.

Tail jack restraint hold is used for venipuncture of the ventral vein of the tail; to exam, clean, or treat the mammary glands; and for castration.

Flank Pressure

Grasping a flank fold and lifting the skin can inhibit kicking, but the handler's position to apply the hold is dangerous from the risk of being kicked first, or in spite of the hold.

A rope loop with a honda pulled tight around the flank will inhibit vigorous kicking, but it will not prevent subdued attempts to kick.

Large metal flank clamps that close with a screw mechanism or telescoping rods with springed pin locks are available to exert pressure in the flank to inhibit kicking. (Fig. 12.23)

Hock Hobbles

Tendon clamps or metal U-shaped hobbles placed above a hock on the Achilles (gastrocnemius) tendon prevent cows from kicking in milking parlors. Hobbles are connected by a chain which must be long enough to permit the cow keep its hindlegs sufficiently apart to keep its balance. Hock hobbles are applied from the cow's side to the opposite side's Achilles tendon first and then to the near side tendon.

A 4 ft. cotton rope may also be used to hobble the hindlegs. A bight in the middle of the rope is placed above the hock on one leg. The 2 standing ends are twisted several times to provide sufficient length between the legs for the cow to stand normally. The ends are wrapped around the other leg above the hock and tied with a sheetbend knot.

Now let's recap the key points to remember from today's episode:

- 1. Cow legs should be lifted using ropes, not by hand.**

- 2. Casting a cow with ropes can be a safe, effective means of whole body restraint when rotating chutes or tilt tables are not available.**
- 3. Tail jacking is the most common means of inhibiting cattle from kicking while in a restraint chute.**

More information on animal handling is available in my book, *Animal Handling and Physical Restraint*, published by CRC Press. It is also available on Amazon and from many other fine book supply sources.

Additional information is available at: www.betteranimalhandling.com

Don't forget, serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.