

## Guidelines for Chute Design and Cattle Handling—To Make it Easier

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Cattle handling facilities are essential to carry out economically important health and management practices. These practices should be done efficiently and properly and in a manner that will reduce blemishes and minimize the potential of injury to both the producer and cattle. Poor facilities and cattle handling practices create problems and can cause stress to both producer and cattle.

Following are several tips on facility design and construction and cattle handling facilities that should make it easier on both the producer and animals, and to ensure that the practices are appropriately carried out.

1. **PAY ATTENTION TO LOCATION.** Locate the facility where cattle can easily be driven into it. The facility should be accessible to trucks and convenient for loading or unloading cattle. Make sure the facility is in a well drained area which permits access and use during bad weather. A facility under a roof, such as in a tobacco barn, is ideal.
2. **DESIGN YOUR FACILITY CAREFULLY.** Before designing your facility, contact your Agricultural Extension office. The county Extension agent can assist you in finding information and can suggest alternatives for your construction. Also, visit other beef operations similar to yours to get ideas on construction.
3. **ACCESS CATTLE FLOW.** Look at the overall flow pattern of cattle through the facility. Avoid situations where cattle are caught in dead ends, or where gate placement makes cattle movement difficult. Move cattle up slope when possible and always try to move toward an outside light so the animals think they are escaping. Also, avoid construction where zebra-like strips of light occur because this causes cattle to balk.
4. **MOVE CATTLE INTO CHUTE EASILY.** Construct your facility so cattle can be easily moved into the chute. Use gates to move cattle into the chute.

5. **DO NOT MAKE CHUTE TOO WIDE.** Chute width should be no greater than 26 inches for beef cattle (22 inches where only calves are worked). Cattle turning in the chute can cause stress on both the animals and the handlers.
6. **USE HEAVY MATERIALS IN CONSTRUCTION.** Use solid, heavy materials and anchor firmly. A little extra money for pressure-treated lumber and sturdy hardware will pay off in the long run because it lasts longer and causes less stress to the cattle. Too many chutes are built with 1-inch and  $\frac{3}{4}$ -inch plank materials. It is better to use 2-inch boards. Also, make repairs as necessary.
7. **USE SOLID SIDES, CURVED CHUTE.** Solid sides are better on chutes, service gates and other areas where cattle move. Solid sides on the chute permit the cattle to only see the animals in front of them as they forward. If sides are solid, cattle cannot put their legs through the wall and actually seem to work more easily. Solid sides are especially important on crowding pen gates. Designing chutes in a circular fashion also helps cattle move easier through the chute.
8. **HAVE SOLID FOOTING.** Rough concrete or diamond-shaped grooved concrete chute floors work well. No matter what material is used, cattle will work better and have less chance of injury if they can keep their footing.
9. **AVOID NOISE.** Cattle are sensitive to sudden, loud or high-pitched noises. Excessive noise makes cattle nervous and more difficult to work. In metal working facilities, install rubber bumpers where gates clang against metal. Avoid unnecessary shouting or other noise when possible.
10. **FAMILIARIZE CATTLE TO FACILITIES.** Anything new or different causes cattle to become nervous and can lead to handling difficulty or production losses. That is why cattle work better when they are handled more frequently. You should also allow cattle to become familiar with the working pens by occasionally feeding in the pens or placing mineral feeders near the working area.

**11. LIMIT THE USE OF WHIPS, PRODS AND STICKS IN WORKING CATTLE.** Avoid use of electric cattle prods with cattle. Use electric prods wisely and sparingly. Applying prods to the side or back only confuses cattle. It is best to apply below the tailhead to get cattle to move forward. Beating with sticks or boards stresses animals, causing injuries and making them more difficult to handle in the future. Whips are noisy and can frighten animals, so use them sparingly.

A good method for driving and sorting cattle is to use a broom or a paddle. Cattle seem to see the broom better and follow directions more readily if it is used rather than a stick.

Cattle that will not move forward, often respond better to a quick twist of their tail than to shouting or beating. Avoid twisting the tail too hard or it may break.

**12. WORK CATTLE IN GROUPS.** Cattle have a strong herd instinct and become nervous or aggressive when alone. It is best to work at least two or three animals at a time. It is also best to have one or two mature cows in the group if trying to work a group of young calves.

**13. CALL CATTLE RATHER THAN DRIVE THEM.** Train cattle to come to your shout or truck horn. This can be done by blowing your truck horn or shouting when feeding or providing salt to the cattle. Cattle are more likely to respond to your call in the morning or evening than in the heat of the day.

**14. PREVENT BACKING IN WORKING CHUTE.** A means to keep cattle from backing in the chute will make cattle-working easier. Various ideas work, from saloon-type doors to boards manually placed behind the cattle. Plans are available at the local UT Extension office.

## **FACILITIES CAN ALSO REDUCE STRESS ON PEOPLE**

Properly designed working facilities can make handling cattle much easier and safer. Almost everyone who has worked cattle has a tale of a serious accident or a narrow escape, and almost all of these accidents could have been prevented with some common sense and a good working facility. Some pointers for making handling facilities less stressful for producers include:

1. **USE EXPERIENCED PEOPLE.** Inexperienced people are easily frightened by cattle and may be hurt if they do not understand cattle behavior.

2. **TREAT CATTLE WITH RESPECT.** Cattle are large, strong and can be unpredictable. It is unwise to relax around them too much, or to try to work them without adequate facilities. Cattle are stronger than humans and humans are smarter than cattle; therefore, humans should try to out-think cattle, not out-wrestle them.
3. **REMOVE SHARP OBJECTS.** Avoid protruding objects, sharp corners, low overhangs or other traps that can harm humans or animals when working cattle.
4. **CONSTRUCT CATWALKS.** A catwalk built along the cattle working chutes or loading chutes is a much better place from which to work cattle than standing behind them.
5. **BUILD SERVICE GATE.** A small gate behind the catch or squeeze chute that allows access to the cattle from the rear, makes it much easier and simpler for such procedures as pregnancy checking, artificial insemination, castration or examining and treating certain injuries. Hang the service gate so it swings inward toward cattle in the working chute, blocking them from the person working behind the one in the squeeze chute.
6. **WATCH FOR KICKS.** If cattle are to be worked in close quarters, either work close to the animal or stay out of kicking range. Cattle cannot kick hard when you are very close. This is not recommended, however, because the danger of being stepped on is greatly increased.
7. **KEEP ALERT.** Stay alert when working cattle. Cattle usually choose to become unruly when least expected. Make certain that everyone is cautious at all times. If workers become fatigued, it is best to rest for a while.
8. **SORT COWS AWAY FROM CALVES.** It is less stressful on the cattle and the sorter if cows are sorted away from calves instead of moving calves away from cows.
9. **USE PRODUCTS CAREFULLY.** Many of the tools and products used in working cattle can be harmful if improperly used. Read and follow directions carefully. Accidental ingestion of chemicals by humans, spilling certain products (especially organophosphates) on the skin or in the eyes, or accidental injection can be stressful to people. If accidents happen, contact a physician immediately. Take the label with you so the physician can have full knowledge of the product which is causing the problem.

10. **PROPERLY RESTRAIN CATTLE WHEN WORKING THEM.** Cattle that are not properly restrained in good facilities can cause accidents by throwing their heads or kicking. This may result in dangerous, painful jobs by vaccination needles, castration knives or implanting tools. It is also difficult to deliver precise dosages of vaccines, pour-on insecticides, wormers or other products without good facilities. Improperly delivered product dosages can increase animal stress by inducing overdose reactions or alternately, by not doing the proper job because too little product is delivered.

11. **PROVIDE FIRST AID.** Have a first-aid kit available near the cattle working area. First-aid training is recommended to handle possible emergencies.

The preceding should contribute to the safe and correct application of health and management practices as well as appropriate use of health products. Injuries and bruises to the cattle and producer can also be reduced by following the suggestions.

For additional information on cattle management, handling facilities and beef quality assurance practices, contact the local University Extension Service, University of Tennessee office.