

## **Cattle Business in Mississippi – May 2004 “Beef Production Strategies” article**

### **Working Facilities that Work**

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Cattle handling facilities allow beef producers to perform many recommended management practices including identifying, vaccinating, castrating, dehorning, implanting, pregnancy checking, weighing, and loading cattle. A good set of facilities is designed to minimize handling stress and risk of injury to the producer and livestock. No one facilities design works best for every situation. Facility design needs will vary depending on type and size of the cattle operation, space limitations, and personal preferences. Here are some useful concepts to consider when building or modifying cattle working facilities.

Planning where facilities should be located is an important first step in developing cattle handling facilities. Ease of cattle movement to and from working facilities and ease of access to facilities for trucks and trailers is essential. Look at the pasture layout to determine if there is a central location that would be convenient to serve multiple pastures. Make sure that there is an easy way to herd cattle to the facilities use existing fencelines or a lane system. Try to avoid placing working facilities in the center of a pasture where cattle must be lured and likely chased into the pen.

Drainage is another key consideration in facilities site selection. Secure footing is a must when working cattle. Slipping and sliding makes movement through the facilities more difficult, increases fear and struggling, and can result in injuries. Well-drained areas work best. A gravel pad improves drainage and provides secure footing. Other surfaces can be appropriate as well.

Effectively designed pens can enhance a good set of working facilities. Pens should accommodate holding, sorting, and grouping of cattle. Pens can also be used as receiving, quarantine, and hospital areas. Pen design should take gate direction and size into account so that cattle can be easily worked and sorted in any order. Proper pen numbers and size and use of an adequate number of effective gates can make the difference between being ahead of the game or having a cattle working headache down the line. In addition, it may be worthwhile to design the pen layout such that additional pens could be added in the future with little trouble if needed.

Incorporating curves into facilities design should be considered. Curved single-file chutes work more smoothly than straight chutes by preventing cattle from seeing people and working activities at the end of the chute. Similarly, a round crowd pen works better than a straight crowd pen by taking advantage of natural behavior and allowing cattle to turn more easily. Sharp angles or bends in single-file chutes or crowd pens should be avoided. In addition, chute width should not allow cattle to turn around. Some chutes are designed to allow the width to be adjusted to fit several sizes of mature cattle and calves.

Facility designs that decrease or minimize potential distractions can make working cattle through the facilities much more pleasant. Distractions such as noises, hanging chains, and shiny reflections can cause cattle to balk. Installing rubber pads where metal clangs against metal can help silence or muffle sharp noises. Using chutes with solid sides can limit outside distractions that can be seen by cattle in the chute. Chute position can even be manipulated so that cattle cannot see people or vehicles moving in front of the chute. Use of solid-sided chutes also eliminates openings where cattle can wedge a foot, leg, or head. A solid crowd gate is important as well for preventing cattle from going back to where they came from. Strategic placement of gates for people to enter and exit the chute and crowd pen is both handy and a good safety precaution.

Proper lighting is sometimes overlooked and yet is a critical part of facilities design. Translucent skylights or wall panels take advantage of natural lighting and contribute to a well-lit facility. Cattle will draw back from black holes and shadows. This is why it is often effective to open the head gate so that cattle can “see daylight” when being coaxed forward. Cattle do not like to walk directly into blinding light either. Anyone who has ever driven directly towards the rising or setting sun or had the sun shining squarely in the rear and side view mirrors of the truck knows how unpleasant bright light can be. Similarly, a chute opening facing the rising or setting sun is not recommended.

Keep cattle working needs in mind when designing or modifying handling facilities. Incorporation of palpation cages and protection from the weather is particularly important when utilizing artificial insemination or embryo transfer, for example. Plan ahead and make sure that cattle facilities are in proper working order well in advance of needing them. Properly designed facilities are safe and efficient. Good working facilities work for you and make cattle handling easier on both people and livestock.

### **MSUcares Beef Production Website**

The MSUcares website is the official website of the Mississippi State University Extension Service and the Mississippi Agricultural and Forestry Experiment Station. This website contains lots of useful information and announcements related to beef production and agriculture. The MSU Beef Production website is located at [msucares.com/livestock/beef](http://msucares.com/livestock/beef) and can also be accessed by 1) going to [msucares.com](http://msucares.com) , 2) clicking on the *Livestock* link, and 3) clicking on the *Beef Production* link. The Beef Production website contains a weekly cattle market update, the Mississippi Beef Cattle Improvement Association website, a Mississippi beef cattle breeders directory, Farm to Feedlot information, and a calendar of upcoming beef-related events and short courses along with other useful information. Information on the website is updated on a regular basis, so check it frequently for the latest information. For more information on cattle handling facilities or the MSU Beef Production website, contact your local Extension office.