

Outsmarting Your cows

*A good corral design can cut working time
and stress in half
So what makes a design good?
Livestock specialists and two Angus breeders
share their ideas.*

By Jerilyn Johnson

It's roundup time. The cows need to be pregnancy checked and deloused, replacement heifers sorted, and culled calves sent to market.

You've patched the corral's top rail that crazy black steer managed to jump through last spring. The loading chute is still standing — it will do another year. You're not so sure about your left knee, still gimpy from that balky cow's kick. You hope the vet brings his squeeze chute. Just in case, you've hired a few extra cowboys to help.

Sound familiar? Then you're a prime candidate for investing in better cattle handling facilities.

Gary Varner, Extension livestock specialist at West Plains, Mo., says no farm investment will pay for itself faster.

Average cost of a commercial corral is around \$3,500. Add a hydraulic squeeze chute, weight scale and tip-table and your investment can run up to \$12,000.

If hearing that a new corral falls somewhere between the price tag of a top performance-tested bull and a new pickup makes you balk, keep reading.

"The best building materials money can buy don't necessarily make a good set of handling facilities," Varner says. "It's how well planned and designed they are."

Many Angus producers can renovate or purchase second-hand pipe and metal for good facilities at reasonable cost.

Cattle corrals are essential for herd health and production management. But if they are run down or poorly designed, cattle are often stressed or injured.

Temple Grandin, a livestock handling consultant for the livestock and meat industry, estimates the incidence of rough handling and abuse in all types of livestock operations at 10 to 15 percent.

"The size of an operation has no bearing on the incidence of abuse," Grandin says. "Design and condition of a facility can either make it easier or more difficult to handle animals humanely."

Varner advises producers to work smarter, not harder.

"Stress can be avoided when you work with the natural tendencies of cattle and apply some cow psychology," Varner says. "It's easy to incorporate this psychology into your methods of working cattle."

Understanding cattle behavior is not difficult. It's just a matter of keeping in mind that cattle have wide-angle vision, a definite flight zone, the tendency to circle, and a herd instinct.

Wide-Angle Vision

Unlike humans, cattle have panoramic vision of 340 degrees. This is possible because of their wide-set eyes. When looking straight ahead they see all surroundings, except the area directly behind their tail. Cattle have poor depth perception,

however. Both eyes have to focus on an object to judge how far away it is.

Cattle are sensitive and distracted by light-dark contrasts, bright lights and distinct shadows. Knowing this makes it easier to understand why cattle are often distracted at working time.

To prevent this problem, chutes and crowding pens should be designed with solid sides, which act as blinders and keep cattle calm and unstressed. This helps to move cattle in one direction — straight ahead — and prevents them from balking.

"You don't want cattle to see all the things going on around them that may be perceived as bad news — people running around with needles, hot brands, knives, ear-taggers, or the dogs and trucks," Varner says.

Make sure there are no distinct shadows in alleyways or working areas. Try to avoid moving and loading cattle from the bright outdoor light into a dark barn.

Anything new causes cattle to become nervous. Allow cattle to become familiar with working pens by occasionally feeding in the pens or placing mineral near it.

Flight Zone

The next lesson in behavior is flight zone. This is the area of space that an animal instinctively keeps between itself and anything it's not comfortable with.

When you approach your cowherd and

invade its space, the herd moves away. A flight zone's size depends on tameness.

"The flight zone of a 7-year-old steer on a Mexican range may be a quarter mile," Varner says, "while the flight zone of a feedlot steer may be only 10 feet."

The best place for a handler to work is at the edge of the flight zone. When the handler steps into the flight zone, the cattle calmly move away. Cattle will stop moving when the handler steps back.

Varner says a common mistake handlers make when cattle panic is to jump up and down, yell and get closer to cattle. It's better just to back-off and let them calm down.

'Use a broom to move, turn or sort cattle. The old cowboys on the fence may laugh, but the cattle will understand.'

Spare the Rod

Use whips, electric prods and sticks sparingly and carefully. Excessive or improper use of these tools will only frighten and confuse cattle. It also will make them more difficult to work the next time.

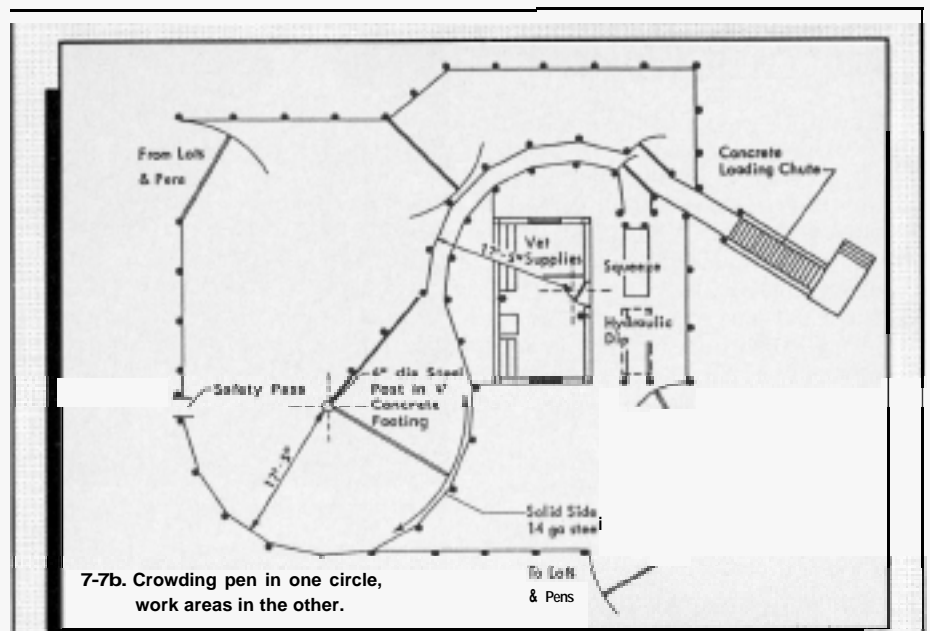
"Instead, use a broom to move, turn or sort cattle," Varner says. "The old cowboys on the fence may laugh, but the cattle will understand."

In the chute, balking cattle often move forward if given a quick twist of their tails, rather than shouting at or beating. Because cattle have a natural instinct for circling, the curved chute tends to work best. It takes advantage of the circling instinct and prevents cattle from seeing what awaits them ahead.

Three's Company

The last lesson in cattle behavior is to remember that cattle, by nature, are herd animals which find safety in numbers. When cut off from the herd, an animal will frequently panic, become nervous, or aggressive, making it hard to handle. The best remedy is to work several head at a time.

Editors Note: Portions of this article are reprinted with permission from Missouri *Ruralist* Magazine.



7-7b. Crowding pen in one circle, work areas in the other.

The O.K. Corral

An ideal working corral is this double-circle layout from Midwest Plan Service. It combines a crowding pen, loading chute and squeeze chute into one efficient system.

Cattle are pushed into the chute with a swinging or pivot gate. They find only one direction to go — straight ahead — through the curved, narrow, solid-sided chute.

When they reach the work area they can be directed into a squeeze chute or a loading chute. All vet sup-

plies are conveniently located in a nearby covered shed.

Though material costs vary, if this corral was built with rough oak wood and treated posts, it would cost approximately \$4,000, including squeeze chute. It should handle from 35 to 150 cows.

If interested in this corral plan, contact Midwest Plan Service, Iowa State University, Ames, Iowa 50011; (515) 294-4337. Ask for corral plan 7-7b.

Look At It From the Cow's Point of View

A good cattle handling facility is designed from the cow's eye view, says Gary Varner, Extension livestock specialist. It helps reduce costly stress on cattle, as well as cowboy aggravation.

Here are a few of Varner's best suggestions:

- Plan ahead. Visit other beef operations and your Extension office to gather ideas.
- Select location carefully. Build the facility in a corner of the pasture where cattle can be easily driven. It should be accessible to trucks during wet weather.
- Quiet please! Cattle are sensitive to sudden, loud or high-pitched noises, so keep noise level down. Rubber bumpers on metal gates or chutes can help.

- One way only. Construct a curved working chute with solid sides. It should be no wider than 26 inches; 22 inches for calves only. Cattle will easily move when undisturbed and given only one way to go.
- Go with the flow. Avoid abrupt dead ends and gates that interfere with movement. Cattle move best up a slope and toward light. Strips of light and light-dark contrasts will cause cattle to balk.
- Easy does it. Move cattle into the chute slowly and easily. Use a gate to push cattle into a curved working chute.
- Load em' up. Loading chutes should be built at a 20-degree grade or less and have solid sides. Make footing planks no more than 8 inches apart.

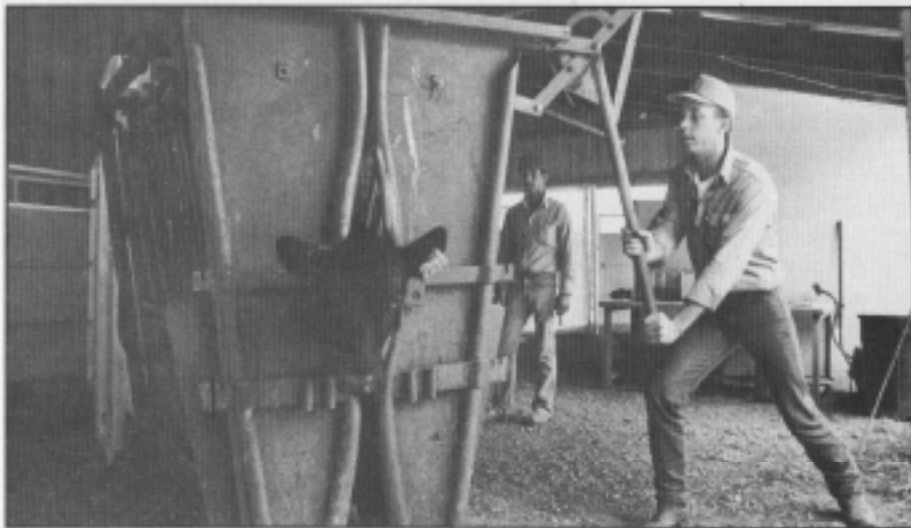
All-Weather Working Corral

It's hard to pass by Silverline Ranch without stopping and admiring the scenery. Grazing contentedly on the rolling Ozark pastures of this southwest Missouri beef operation are a herd of Angus cows, surrounded by stately white pipe fences and corrals.

The white pipe corrals provide more than atmosphere, however. They are used year-round to help maintain a strict herd health, A.I. breeding, performance-testing and recordkeeping program.

A corral system was built soon after Silverline started its purebred Angus operation in 1985 near El Dorado Springs, Mo. Ranch manager Chris Silvers says a good set of well-designed working facilities were top priority on his list. After visiting other farms and seeing numerous plans and layout ideas, he decided to build a versatile corral system.

A set of pens was built in front of a barn. The pens are made from oil field pipe, welded together in 20-foot panels. The pipe is durable and strong, measuring 1 1/4-inch in diameter. An alleyway leads from the pens to a crowding tub and curved alley. The curved alley leads to a



Chris Silvers works a calf in the covered-chute area.

JERILYN JOHNSON PHOTOS

weight scale and squeeze chute housed underneath the barn's extended roof.

Silverline Ranch purchased a heavy-duty crowding tub and curved alley from Linn Enterprises Inc. for \$3,500. This versatile unit is adjustable to fit any size of cattle — from small calves to bulls. Its curved design and solid sides keep cattle moving straight ahead. It also has a unique sorting cage with spring-loaded sorting gates to allow the operator to work or load cattle through the same system.

The no-return latch on the crowd gate has safety stops welded to the tub's inside.

A Powder River squeeze chute was purchased for \$1,200 to complete the corral system. It has a palpation cage, and is adjustable to any cattle size.

"We liked this corral system so much, we built one just like it at our commercial cow operation and plan to build a third," Silvers says. "It has reduced our labor by 50 percent. More importantly, it has reduced stress on our cattle."

Designed from a Vet's Viewpoint

If you're looking for a good set of cattle corrals, ask a vet.

This is sound advice. After all, who knows more about how well a corral works than someone who gets in there and tries it out on 200 head of cows?

When I asked Glenn Rogers, DVM, if he could locate a top corral system in northern Texas, he saved me a step. He volunteered to show me his own new working facilities.

A large animal veterinarian serving ranchers in the Graford, Texas area, Rogers has seen all kinds and shapes of cattle corrals.

"When you vaccinate or pregnancy check as many cows at a time as I do, you learn fast which facilities are good and which are poor, he says.

So when it came time to build new working facilities for his 120-cow Angus operation he put together the best ideas he had found. The result is a corral that "makes working time enjoyable," Rogers says.

To cut costs, Rogers used whatever



A circle layout corral with solid-sided, tapered chutes and strategically-located gates, make working time enjoyable at Glenn Roger's Angus operation.

materials he could find. In Texas that means a good supply of recyclable oil field pipe: pump jack pipe was purchased at 20 cents to 70 cents per foot; posts at \$1 per foot; and sucker rods at 50 cents per foot.

The pipe was welded together to make panels. Sheets of steel were used to make solid-sided chutes. The chutes taper from 30 inches at the top to 14 inches at the bottom. This allows cows and bulls to move through smoothly, but prevents smaller

calves from turning around in the chute.

Pipe and panel gates were made by local FFA members or purchased at a local ranch dispersal sale. The gates are used a lot to sort and move cattle into the chute.

Operating a new veterinary practice and Angus operation doesn't allow Rogers any extra time to work his cattle. With the help of his new corral system and herdsman J.J. Mayo, however, he is getting the job done.

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