

# A Guide to Low-Stress Cattle Handling and Working Facilities



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What is low-stress cattle handling and what are the advantages of utilizing it on our farms?

Low-stress cattle handling saves time, energy and money when working cattle. Most importantly it protects the livestock and workers at the same time. The point behind low stress cattle handling is to prevent the cattle from getting excited, fretting, and getting nervous when being worked. When this happens, cattle get stressed and can injure themselves and/or the people around them, as well as equipment.

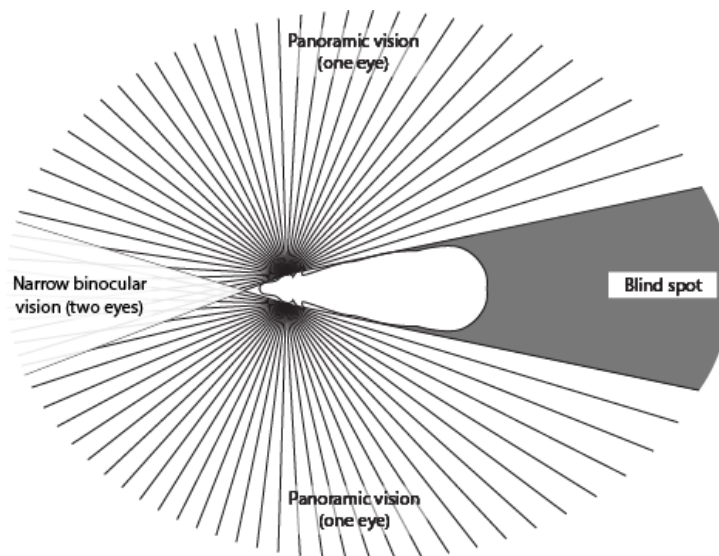
The first thing to do when wanting to improve your cattle handling techniques is to forget about the stereotypical ways people think of moving cattle. These may include, running, hollering, hitting things to create loud noises, using “hot-shots” or electric cattle prods, and hitting the animals. All of these things put the livestock in a stressful environment and can lead to injury when they try and get out of that stressful environment.

To be successful at low stress cattle handling, there are a few things that you need to understand about cattle behavior. First is their flight zone and how to use it to move the animal in the desired direction. Then understanding cattle’s peripheral view and knowing where their blind spots are. After those topics are understood, you can combine all of that information and knowledge, along with some other techniques, to achieve a low stress environment when you are working or moving cattle to and from pastures all the way through the working chute. An advantage of understanding low-stress cattle handling is that these techniques can be applied to other types of livestock.

## Blind Spots

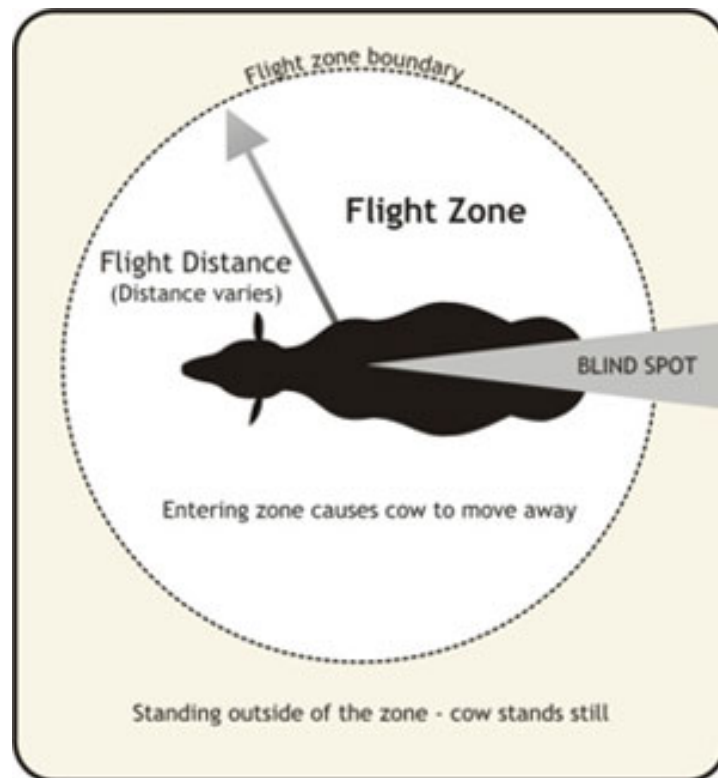
*Cattle have approximately 330° of vision. So, they can pretty much see all the way around them. The only real blind spot they have is directly to the rear of them.* When you are working cattle, try and avoid being in their blind spot. They will move and turn to get you in their plane of sight. This can affect their behavior when trying to move them. Cattle have a hard time with depth perception directly in front of them and directly below their head. They can see, but if there is something on the ground in front of them, or a shadow you may have a difficult time getting them around the object or shadow. This is important to consider when designing a working facility and working them in a chute or covered area.

<https://nswschoolanimals.com/cattle/>



## Flight Zone

Understanding the flight zone of cattle is an important part of moving and working cattle. *The flight zone is the area around the animal that they feel comfortable.* It is like our personal space. Each animal's flight zone will be different. Show cattle, and cattle that are worked with frequently, will have a smaller flight zone than one that has limited human interaction. So, it can range from a few feet to hundreds of feet in extreme cases.

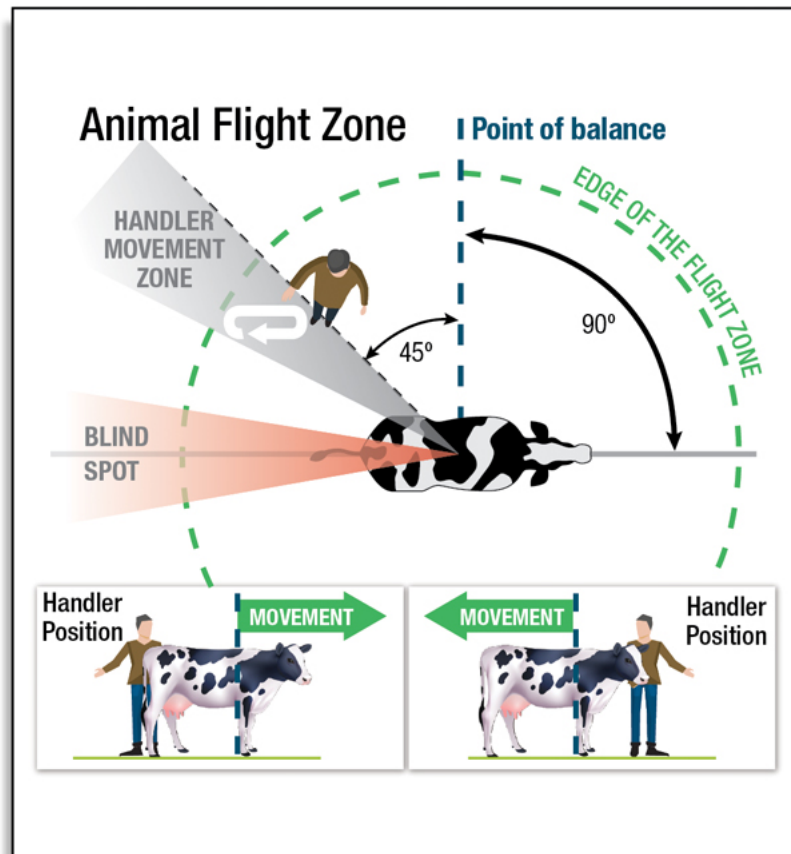


<https://onpasture.com/2018/09/17/improve-your-stockmanship-by-understanding-the-flight-zone/>

The figure above shows that the flight zone as an imaginary circle around the animal. When you are on the outside of the circle, the animal may still be watching you and keeping up with where you are, but they are comfortable with the distance you are away from them. As you move inside their flight zone, they will move away from you to try and get you out of their flight zone. This is the basis of low stress cattle handling. The flight zone allows you to move the animal towards the direction you are wanting them to go, as well as can be used to speed up or slow down the animal while you are moving them. Staying towards the edge of the flight zone will generally move them slower than you being closer to the animal. To gain more control of moving cattle with their flight zone, we need to understand the importance of the point of balance.

## Point of Balance

The animal's flight zone helps aid us in movement of cattle. As mentioned, to gain more control over where the animal is going, you need to understand what the point of balance is and how it affects direction. *There are two invisible lines when it comes to the point of balance. The first point, is at their shoulder (see the figure below). This point controls front and back movement.* When you are behind the shoulder, the animal will move forward and away from you. When you cross and get in front of the point of their shoulder, the animal will turn around or back up to move away from you. *The second point of balance is directly in front of their head, this will help control left and right movement.* Once you move across or near the point of balance in front of them, the animal will begin to turn away from you, either to the left or the right depending on which side you are approaching from. Combining the flight zone and point of balance will gain you control of where you want that animal to go.



<https://extension.sdstate.edu/handling-reminders-dairies-training-resources>

There are instances that may occur when you lose control of the flight zone and point of balance. Moving too aggressively, having an animal that is too “flighty” (a term that is used to describe an animal that has a large flight zone and or does not respect human interaction) or making the

animal feel that they are in danger. When these instances occur, for the animals and your safety, they just need to be left alone. After they have calmed down, then you can go back to moving them.

## Moving Groups of Cattle

Not only can you utilize the techniques above for moving one animal, they can also be applied to moving groups of cattle to new pastures or to a catch pen.

Below are two figures demonstrating moving groups of cattle.

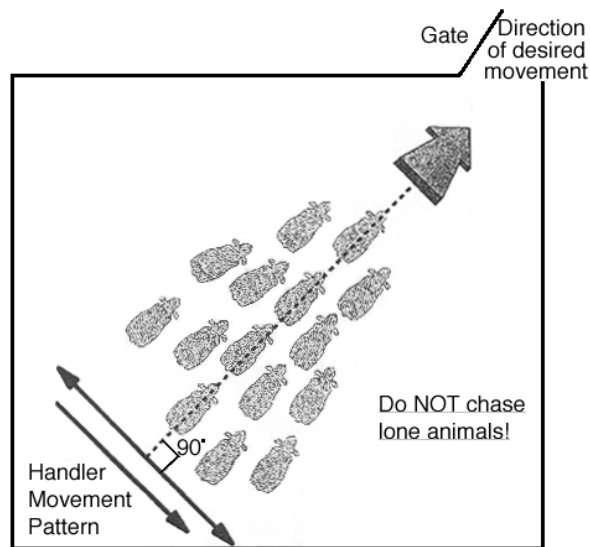
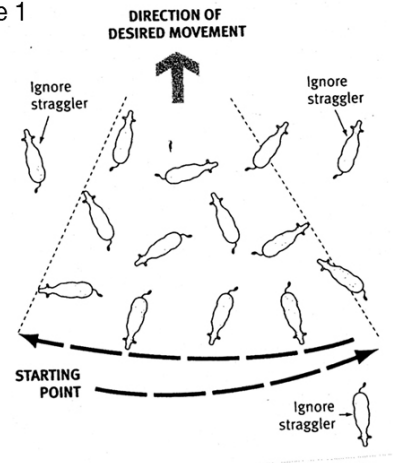


Figure 1



<https://grandin.com/behaviour/principles/moving.sorting.html>

<https://www.beefmagazine.com/cattle-handling/8-steps-stress-free-handling-cattle-range>

If you notice in both of the figures, the handler is moving in a back-and-forth movement behind the cattle. In moving groups, you will have to cover a wider area to ensure that you cross multiple animals flight zones and points of balance to ensure movement. Always stay at the edge of the flight zone, this will keep the cattle calmer and they will move slower than you may want them to move, but they will be less likely to break away from the main group. The key is to move at a steady pace and limit running from one side to the other. The goal is to move the entire group as one, but there may be times when you have stragglers. When an animal gets away from the group you are moving, just let them be and move them once you get the main group in the desired area. If you focus on one straggler, you will lose control of the main group and they will likely disperse. The more times you have to regain control of the group, the harder they will be to move and keep them all together in a low stress environment.

## Cattle Handling Facilities

Before we go into low-stress cattle handling in a working facility, having a facility that encourages a lower stress environment is key. Facilities can have parts and pieces that are homemade and or purchased. If they are homemade, they need to be made structurally sound and correctly to ensure safety is met. There are many different ways that facilities can be set up and the best option will vary from farm to farm.

Open sided (cattle/corral panels or boards) facilities do work well, but it can allow what is going on outside the facility to affect how the cattle behave and move. Where a solid sided facility is more forgiving on cattle flow with the outside environment.

### Bud Box System



<https://www.farmranchstore.com/corral-systems/bud-box-160-head>

Above is an example of a Bud Box System. It is meant to be more of a portable design that when used correctly is great for low-stress cattle handling. They can be purchased as a set or you can find designs on the internet. It is designed to mimic cattle instincts. Cattle want to go back to where they were. The Bud Box system allows the cattle to see where they were at every alley or smaller pen.



## Curved Designs



<https://www.farmersjournal.ie/the-important-aspects-to-consider-in-designing-cattle-handling-facilities-586632>

The picture above is of a curved working facility. It is designed to be effective by two purposes. Unlike straight alleyways or runs, in a curved design the cattle cannot see the end of the chute until they are at it. The second purpose is that the curved design encourages the cattle's natural instinct to curve around the handler on the inside to move away from them. The curved design avoids sharp right turns and corners that cattle do not like to go through. Even on other designs other than curved, it is recommended that sharp curves are avoided.

## Tub/Sweep Gate Design



<https://sutherlands.com/products/item/7293491/tarter-farm-and-ranch-cattle-master-open-sweep-system-180x20>



<https://www.hi-hog.com/products/cattle-handling-equipment/crowding-tubs-sweeps/overview-of-tub-options/>

This is more typical for a design many farms have. It may have a smaller crowding pen that is connected to a tub or sweep gate. The sweep gate pivots and is self-locking and allows the handler to push the cattle towards the alley or raceway and funnels them in single file.

Generally, these set ups lead to a straight alley that leads to the head gate, but can be designed to fit the farms need. They can lead to a curved or S curve alley as well.



## Other Facility Considerations

There are many other considerations to think about before building a working facility that effects cattle stress. Below are several topics to consider.

**Utilities-** Having water and electricity can be helpful. It is not recommended to work/move cattle during the heat of the day but even in cooler time of the days, cattle still need to have access to water while they are in holding/sorting pens. Electricity on site would prevent using generators when power could be needed, in return creating a quieter environment for working cattle. Electricity would also create the option for having lighting. Having consistent light would help prevent shadows and encourage smoother movement of the cattle.

**Covered Area-** Not only would having the bulk of the working facility covered to protect it from the environment, it would also provide shade to the cattle and handlers. Even when working cattle in cooler temperatures and less sun, the cattle will still get hot. Having shade or cover would help keep the cattle cooler. If the working area is covered, good ventilation and air flow is important to help with respiratory issues.

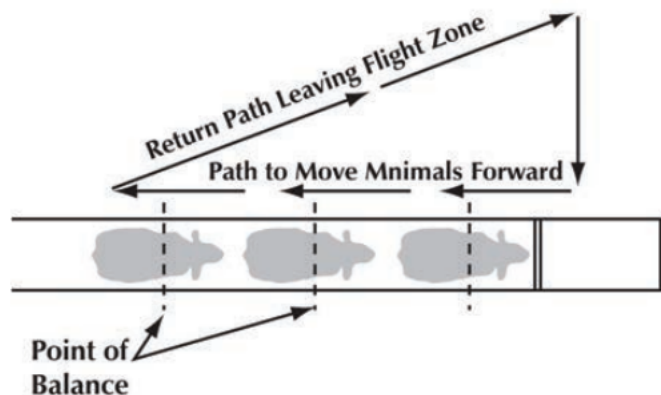
**Size-** Size is an important aspect to consider to create a low-stress environment while working cattle. You want to have a facility big enough that can handle the size groups you are working. Overcrowding in the facility can be dangerous to you and the cattle. The width of the alley is another important consideration. For most cattle, the alley should not be wider than 26-28 inches (larger cattle/breeds may need more). Having the correct width of the alley for the breed and size of cattle will prevent them from turning around in the alley. The correct height of the alley should be considered for safety. If the alley is too short, cattle may be able to jump out or get hung, which can lead to injury. 60 inches tall is about average for alley height. Working chutes need to be able to hold your largest animal you have, including your bull. Many chutes are designed to be able to adjusted to fit different sized cattle.

**Location-** In general, for permanent working facilities, it is best that they are in a central location to where the cattle are. This helps cut down on the amount of time the cattle have to move to get there. They can also be placed where cattle have access to them on a regular basis which helps them get more comfortable and use to going into the working facility.

## Working Cattle

Now that we have covered the basics of cattle handling facilities and low-stress cattle handling, we can cover some tips and techniques that are importing when working cattle in a working facility. Moving cattle in a working area is where most accidents occur when compared to moving them in pastures and paddocks. This is why keeping them in a low stressful environment is helpful. Having a good facility design is key to keeping their stress down. Here are some factors that will help ensure cattle are worked in a low stress environment.

Never try and push cattle faster than they are able to move. Trying to speed them up can lead to injuries to the cattle or the handlers. Making sure that they move in a steady pace and keeping them calm is important. This also goes hand in hand with sorting stick and hot shots. Hot shots should never be a go-to when working cattle. Sorting sticks should only be used to guide cattle or to touch them, just to let them know you are there. However, they should never be used to hit or beat the cattle to make them move. When cattle do not move, try utilizing the point of balance and flight zone. Remember not to move cattle from behind, especially in an alley. Behind them is their blind spot and it makes them uncomfortable when they cannot see you. When cattle are in a chute, below is a diagram that shows the correct way to move them forward.



<https://extadmin.ifas.ufl.edu/nwdistrictmedia/phag/2013/09/BQA-On-Farm-Training-Manual.pdf>

In the image above you can see the triangle made of arrows. It demonstrates the path that the handler needs to make to encourage cattle to move forward in the alley. You would start to walk past the animal. As you cross the point of balance, the animal should move forward. After you move the cattle forward, you walk back away from the cattle back to in front of them. If you were to turn around and walk back up beside the chute, as you move forward in front of their point of balance, they may start to back up. This is why the triangle is helpful when moving cattle down the alleyway.

Working smaller groups of cattle can make thing less stressful to the group. Especially when bringing animal closer to the working facility. Working larger groups can lead to overcrowding holding pens and the working facility itself, increasing the chance for stress.

The handlers actions goes a long way when working cattle. Avoid yelling, moving quickly or sudden actions. Cattle can sense fear, and aggravation. The more aggravated handlers get, the worse the cattle respond to our actions.

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