

Fences and Gates

Our topics for this week are:

- Recognizing improper fencing
- How fences work
- Considerations for new enclosures
- Safety and routine care of enclosures
- Proper gates

CONSTRUCTION AND MAINTENANCE

Definitions

Fences are used for enclosures of various sizes. There are perimeter fences and pasture fences. **Perimeter fences** are usually on the edge of the owned property with a 15-foot alley to the pasture fence. Perimeter fences along a road may be referred to as an exterior fence. If the perimeter fence is between two adjacent landowners, it may be called a **divisional fence**. Double fencing (perimeter with a pasture fence) aids in protecting horses from escape and resulting liability risks as well as risks of people attempting to interact with a horse over a single fence line. Because people will put themselves at risk in trying to interact with horses, horses are considered an attractive nuisance liability. **Pasture fencing** consists of boundary fence and may also include temporary cross fencing for more efficient grazing. Cross fencing can be two or three strands of electric wire or rope. Pastures are larger enclosure for grazing and exercise.

All large animal enclosures should include a small catch pen for feeding, watering, and checking the condition of livestock or horses. **Pens** are fenced areas at least twice the size of a typical stall for fresh air. **Runs** are a narrow pen for fresh air that is usually attached directly to a stall. **Corrals** are square or round pens approximately 50 ft in diameter for exercise or training. **Paddocks** are small pastures of half an acre or more for exercise. **Alleyways** between paddocks aid in moving horses and prevent play and fights over a fence.

Improper Fencing

The price paid for a fence does not indicate its ability to contain and protect animals. Human error (poor construction or maintenance) is the most common cause for fence failure. Although some areas may have regulation on the placement and appearance of farm fencing, there are no regulations on the quality of farm fencing. It is incumbent on owners and contractors to know the proper fencing to contain different species safely. Unfortunately, contractors without proper animal handling knowledge may recommend and build improper fences and gates. Members of the American Fence Association are pledged to adhere to a code of ethics. If they become a Certified Fence Professional, they must pass a certifying exam and attend continuing education courses. Proper animal fencing requires knowledge of specific needs based on species, age, breed, sex, and production system. Proper fencing should last 25 to 50 years.

Fencing is an expensive investment. Often, improper fencing is selected because it is less expensive, e.g., barbed wire for horses. Conversely, fencing may be selected because it is more

expensive with an assumption it is best for a situation, although in reality its use is inappropriate, e.g., pipe fencing for goats. Typical relative costs (in increasing cost) are barbed or high-tensile wire, polyester braided electric rope, wire mesh, wood, vinyl, and pipe.

How Fences Work

Fences are intended to keep animals from escaping and, in many cases, to keep intruders out. Fences for horses and cattle are often assumed to physically keep them from escaping, but that is not true. Common fences for horses and cattle are more psychological barriers than physical barriers. Field fences are psychological barriers. Horses or cattle can go through them or over them, but they must not think so. Desire to escape is increased by fear or the insufficiency of food or water.

Still, fences for large animals must either deter them from rubbing on the fence or be built in a manner to withstand the weight and pressure of a cow, bull, or horse rubbing against the inside of the fence. Nails and staples are to keep boards or wires from falling on the ground. Fence posts provide the strength of the fence. For strength, boards and wires should be on the inside of the fenced enclosure. If the animal presses on, rubs, or runs into the horizontal planks or wire, the pressure should be absorbed by the posts, not the nail heads or fence staples.

The suitability of fencing varies with the size, sex, age, and disposition of the animals to be contained and the density of containment (animals/sq. yard). The height of fences and gates depend on the enclosure size, number of animals, and type of animal to be contained. Smaller enclosures (corrals, paddocks, runs), large herds, stallions, or horses trained to jump require fences of greater height than standard pasture fence height.

New Enclosure Considerations

If creating new pasture, what the land was previously used for and what physical or toxic hazards might be present should be investigated. Outdoor containments for large animals should be located on higher ground with good drainage. Pastures for horses should be ridded of burrowing varmints (moles, prairie dogs, groundhog, and badgers). Burrow holes pose a risk to horses that could break a leg.

Access to water is essential, but ponds and lakes can be dangerous drinking water sources during winter weather. If ponds or lakes freeze, animals can slip, fall, and break bones or fall through ice in the attempt to reach drinking water. Horses that have not been raised in pastures or on a range are at greatest risk of making bad decisions with ice. All livestock should be provided access to drinking water from running streams or heated water troughs during icy weather and barred from access to ponds and lakes due to the risk of slips and broken bones, and break-throughs and drownings. Snow should never be relied on as a source of drinking water.

Square corners for enclosures should be avoided, when possible, if groups of animals will be contained. Square corners discourage large animals from moving when driven into right-angle fence corners. Hogs tend to pile on each other and overheat in corners, and submissive horses are more easily trapped in corners by dominant horses attempting to bite and kick them. Rounded corners can be built or horizontal boards can be applied diagonally across square corners to eliminate the risk of submissive animals being trapped in corners by bullies.

Vegetation should be mowed under and outside of fences to prevent livestock and horses from reaching through the fence to eat the “greener grass” on the other side and breaking down the fence. The fence line should be set back from the property line to ensure being able to mow

an outside strip. Keeping vegetation mowed under fencing is also important to prevent electric fencing from shorting out on wet vegetation. Perimeter fence surrounding the primary fence should be considered for busy roads to prevent escape and to keep livestock or horses away from possible discarded trash from vehicles.

Safety and Routine Care

Safe, effective fencing does not have to be expensive and expensive fencing is not necessarily safe or effective. Furthermore, fencing that is built to be safe does not remain safe without appropriate routine care. Fences should not have any protruding nails or loose wire. Possible sources of injury inside fence enclosures, such as old farm equipment or other junk that could cut or otherwise injure enclosed animals, should be removed as well as noxious weeds. Trees should be fenced. Horses may strip the bark, cause the tree to die, and might result in the tree falling on the boundary fence. Dead limbs on standing or down trees can also cause penetrating wounds in horses.

Fence materials should be as visible as possible so that animals, especially horses, can easily see their boundaries and not run into the fence. When light colors cannot be used for horizontal portions of the fence, streamer ribbons (fladry) should be tied to the fence to increase visibility.

New herd members must be introduced gradually otherwise dominant herd members will chase the new member into, through, or over a fence. New herd members need to be introduced across a fence by keeping them in adjacent pens and later together in a pasture or large pen that allows personal space to not be violated until social adjustments are made. The introduction of a new herd member is facilitated by providing a single gentle companion at first and slowly adding more members of the herd. Diversions at the time of initial entry of a new member, such as moving the herd to a fresh pasture also aid the acceptance of the new member.

Gates

Gates are used to provide access for humans, animals, or machinery. Gates for a man or a horse should be at least 4 ft wide. Gates for trucks and small tractors should be 12 ft wide and for larger farm equipment, it should be 16 ft wide.

Each pen or pasture should have at least two gates. Latches should be able to be opened with one hand but secure against animals opening them. Horses can learn to open simple latches with their lips and cattle will open them with their tongues.

Upper hinge pins (pintles) for gates should be positioned pointing downward so that horses or cattle cannot lift the gate up and off its hinges with its nose or neck, or rubbing with its rump. The lower hinge pin should point upward.

Posts that long gates attach to should be buried at least 4 ft. deep. Gaps between gates and adjacent posts should not be more than 3 inches to prevent hoofs from getting caught when rearing.

A “man gate” or “pass through” is an opening that will only accommodate humans. A simple one is created with a triangle made with three posts in a fence line. It creates a 90-degree turn to pass through which most livestock or horses cannot maneuver.

Gates have to be as secure as the adjacent fence. If mesh wire extends to near the ground on the fencing, the mesh on the gate should also do so. If chicken wire is buried on the outside of the fence, it will discourage dogs or other predators from digging underneath if it is also buried

on the outside of the gate.

Gates should open only to the inside of the pen or pasture and be located in well drained areas. Gates for livestock should be located in a corner of a pen or pasture to aid in moving the animals along the fence line and out the gate. Corner gates are not recommended for horses. Horses congregate around gates. If a gate is in a corner, it may facilitate trapping a subordinate horse in the corner for being bitten or kicked. Therefore, gates for horse enclosures are best located along the fence line, not in a corner. If a gate will be left open at times, they should fold against the fence rather than form an acute angle to trap a horse being chased by another.

Gates to pastures separated by an alleyway should oppose each other and swing open across the alleyway different directions. When they are opened, the gates can form a channel for animals, usually horses, to move freely from one pasture to the other while still being contained.

Children should not be allowed to swing on gates. Sagging gates become dysfunctional. A short post, called a toe block, at the latching post can be a support for the swinging end of the gate when the gate is closed and aid in preventing sag. Diagonal brace wires from a hinge post to the end or middle of a gate should not be used for horse enclosure gates due to the risk of a horse's head getting caught in the wire and gate angle. For the same reason, cross braces should not be used on gates because they may trap feet and legs.

Gates should be located 40-60 ft from a road to permit parking without obstructing the road while opening the gate.

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

- Most fences for horses and cattle are effective psychologically, not impenetrable barriers
- As the space inside a containment decreases, the height of fencing of the containment needs to increase
- Horizontal fence boards and wire or mesh should be attached to the posts' inside of enclosure side.
- Gates should only swing into an enclosure and when closed, rest against a post for strength.

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.