

Defensive Horse Safety



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For ease of navigation through this training program, you may use the space bar to advance to the next screen and the backspace key to return to the previous screen.



Introduction

What does it take to be safe around pack or saddlestock? This training course provides safety information and teaches basic horsemanship safety practices. The course serves as an introduction for those new to pack or saddlestock and as a refresher for more experienced stock users. Simply reviewing this material alone is not enough to qualify or certify you as competent to ride or work around pack or saddlestock. A novice stock user must also receive hands-on instruction from an experienced stock user.

Safety is the most critical objective. Your safety, the safety of your coworkers, the safety of the public, and property protection should be a part of every plan and every action you take. The U.S. Forest Service requires employees working for, or on behalf of, the agency receive training to safely perform the specific work they plan to do. Work supervisors need to make sure that personnel assigned to work with pack or saddlestock are competent in the task.



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* For further information on Dr. Miller's natural horsemanship techniques, please see the link to his Web site in the references section of this presentation.



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Notes On This Presentation

Why use this presentation? Good question. Similar commercial training courses already may be available. Because there is no Forest Service policy direction on what defensive horsemanship training must cover or what media to use, this presentation serves as Forest Service guidance for instructors. The media selected combines text and video graphics to convey best management practices for transfer of information. As an instructor or experienced rider, you might not feel that all the practices covered are exactly how you would present them—and that's okay! We realize there are differences in teaching styles. This presentation was designed to be supplemented with other material that the instructor feels is necessary. The presentation can also be used as pre-work material, allowing instructors to tailor their course time to specific needs of the students. Used as a refresher course, instructors can navigate to and highlight specific topics.

Since this presentation covers just the basics of horsemanship, you'll want to expand your knowledge of safety using pack and saddlestock with other related or similar material.

For the sake of convenience, we use the term 'horse' in this presentation to refer to all pack and saddlestock used by the Forest Service.

Topic 1: Handling Horses





Some Common Concerns

- **Catching a horse**
- **Bridling a horse**
- **Saddling a horse**
- **Getting hung up in the stirrups**
- **Bucking or rearing**
- **Kicking, biting, or striking**
- **Unfamiliarity with a horse or mule**





Human Emotions

Horses respond to confidence and ease.

Human emotions that work against effective communication with a horse:

- Anger
- Fear
- Impatience





Anger

Horses are exceptionally perceptive animals and respond accordingly to human emotions.

Anger may be construed as a threat by the horse, potentially precipitating flight. A fleeing horse can be injured or injure you.



Fear

Fear is never a good emotion to have when dealing with horses.

Horses sense fear and may "lose respect" for the handler, becoming less responsive to direction.

The best thing to do when you feel afraid is to leave the horse's presence and try to regroup.



Impatience

Impatience can spook a horse.

Any fast or abrupt movements may potentially result in flight.





Annoying Manners and Bad Habits

- **Biting**
- **Kicking**
- **Bucking**
- **Pawing the Ground**
 - **Causes resource damage, particularly in the backcountry.**
- **Chewing Ropes and Equipment**
 - **May be caused by boredom or problems with diet.**



General Guidelines

- **Never corner a horse. If a horse's means of escape is cut off, it will fight to protect itself.**
- **Check a horse's disposition before grooming, saddling, or mounting.**
 - **This is why knowing a particular animal is important. Horses and mules have bad days, just like humans.**
- **Remember: Most people are injured by gentle horses. When horses are frightened or startled, they can hurt you accidentally.**
- **Be careful with horses that are eating or drinking. A horse with its head down is in a vulnerable position and may react violently if startled.**
- **Always try to maintain two to three points of contact with the horse anytime you need to be in close proximity. Contact helps the horse know where you are at all times, while also allowing you to feel if the horse is about to bolt or move abruptly.**



Topic 2: Understanding Horses





Perception

Horses are prey animals. To survive, prey animals must be more perceptive than predators.

Horses see, hear, smell, and sense better than humans.

They have excellent peripheral vision and night vision, though they cannot see behind or beneath themselves, which is why it is so important to maintain physical contact while in close proximity.

Horses have an exquisitely developed tactile sense and can actually feel when a rider is tense or nervous.



Flight Animal

The horse's primary defense is flight.

- **They run first and determine the stimulus later.**

The horse's secondary defense is to fight.

- **Horses are generally timid, but will fight (bite, kick, strike) when they feel threatened and can't get away.**





Fast Reflexes

A horse's reflexes are far faster than those of a human being.

If a horse decides to kick or strike you, chances are you won't get out of the way in time.

The safest position near a horse is ahead of the shoulder and to the left, in what is referred to as "the safe zone."

Standing in the safe zone and maintaining three points of contact substantially reduces your risk of injury.



Fast Learner/Excellent Memory

Most horses learn a lesson from three experiences (good or bad) and never forget it.

Horses divide all remembered experiences into two categories:

- **Things to run away from.**
- **Things not to run away from.**

When training a horse, you need to repeat the same lesson in various settings in order to generalize the behavior.



Dominance Hierarchy

Horses live in a dominance hierarchy in which seniority (not gender or physical strength) usually determines the herd leader.

Flight control establishes leadership.

- Causing or preventing the movement of a horse establishes dominance.





Body Language

Paying close attention to a horse's movement and disposition are critical to safety while working around stock.

A head held high and wide open eyes may indicate a frightened animal that is ready to bolt.

A horse with its head held down performing licking movements with its mouth is submissive and acquiescent to leadership.

- **A slight decline of the head indicates an inclination to accept you as leader.**
- **A full decline of the head (eating posture) indicates acceptance of you as leader.**
- **A horse bumping its nose against the ground indicates overwhelming submissiveness.**



Easily Desensitized

Because horses are intelligent, they can become habituated to stimuli that might at first make them uncomfortable. Repeated exposure to such stimuli will result in the horse becoming acclimated and, consequently, at ease.





Critical Learning Time

Horses are fully developed neurologically at birth.

- **Foals stand up and follow the herd shortly after being born.**

From birth through the first 3 to 5 days is the most important imprinting period in a horse's life. Foals learn best through flooding (endless repetition of lessons) at this stage of their development.

- **Unfortunately, the Forest Service rarely gets to take advantage of this opportunity, as most stock is purchased at an older age.**

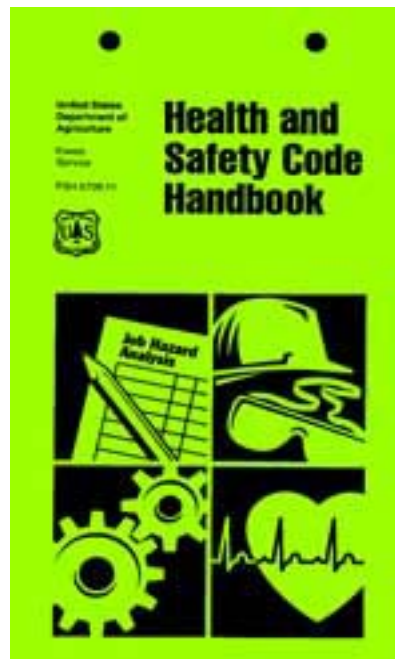
Topic 3: Equipment





Personal Equipment

According to the Forest Service Health and Safety Code Handbook (FSH 6709.11) section 16.3, a job hazard analysis should be undertaken to identify personal protective equipment (PPE) specific to any activity to be performed.





Review

- **Wear boots with a substantial heel when riding to prevent the foot from slipping through the stirrup and getting hung up.**
 - A slick sole is preferable, but a low-traction sole can be worn.
- **Cowboy boots are the best choice for riding because they were designed specifically for that purpose, but packer boots with a low-traction sole are also good and are often preferable for many Forest Service situations.**
- **Never wear sneakers or tennis shoes.**





Recommended Head Gear

Though most western riders do not wear helmets, they provide a considerable level of protection and are recommended for all riders.

- **Helmets worn while riding should have chin straps. Aside from the fact the strap will keep the helmet on your head in case of a fall, your animal may be startled if your helmet falls off while you're in the saddle.**

At the very least, a cowboy hat is recommended, particularly for trips into the backcountry. Though it doesn't provide protection in case of a fall, it will block the sun and rain.





Other Recommendations

Chaps or Chinks

- Provide considerable protection for the legs while in the saddle.

Gloves

- Avoiding rope burns, nicks and scratches, and a variety of other problems can be accomplished by wearing protection on your hands.

Spurs

- Use of spurs is a personal preference, but keep in mind that they can cause significant problems if used incorrectly.

A Knife

- Though not really considered safety gear, a knife is recommended while working around stock.



Equipment for the Horse

Equipment for the horse, like equipment for the individual, is a matter of personal preference. Keep in mind, however, that equipment is primarily about the horse's comfort. A horse that has comfortable, properly fitted equipment is less likely to experience problems such as bucking or rearing.





Standard Equipment

Saddle

- The type of saddle and its accessories depend on individual choice. Remember, though, that the saddle should be comfortable for the horse as well as the rider.

Stirrups

- Should be adjusted so that your knees are slightly bent, but you can still see the tip of your boots while sitting in the saddle. You should also be able to stand in the stirrups and just clear the saddle seat.

Reins

- Should be longer rather than shorter, and heavy enough for the job.

Bits

- Bit selection requires some degree of experience and knowledge of bit types and functions.



Optional Equipment

Crupper

- Hooks under the tail and prevents the saddle from riding forward (used more with mules).

Breast Collar

- Fastens around the neck and chest of the horse to keep the saddle from sliding back (tied down to the cinch of the saddle).





First Aid

A first aid kit, particularly when you're in the back country, is essential to attend to any injuries your horse might suffer. A standard first aid kit should include:

- A saline solution for cleaning wounds
- Nitrofurazone soluble dressing or bag balm
- Pytenol Lotion or Blue Lotion (mild antiseptics)
- Scarlet Oil for large wounds (not to be used on joints)
- Nitrofurazone powder for drying wounds
- Cotton and 4"x4" gauze bandages or sponges
- 4" or wider gauze wraps or vet wraps (Ace bandages)
- Banamine paste for colic
- Phenybutazone for pain and to ease joint problems

These are just the basics. You may want to add other items, but every kit should at least contain these items.

Topic 4: Catching the Horse





Remain Calm

The most important advice to remember is to remain calm. As stated earlier, horses are extremely perceptive and will know if you are impatient, angry, or frightened. Approaching a horse in an agitated state is not a good idea.





Approach Slowly

When trying to catch a horse, approach slowly and speak to the animal in a quiet voice to alert it to your presence.

Have the bridle or reins in plain sight (draped over your arm) as you approach to let the horse see what you are holding.

Remove your sunglasses so the horse can see your eyes, but avoid making direct eye contact.

- **Predators lock eyes with their prey as they approach.**



Remain Alert

As you near, pay attention to the horse's reaction. If the horse appears agitated, immediately relax your posture and stand at ease.

- **Predators don't stand at ease as they're stalking.**

If necessary, take a step or two back to further increase the horse's level of comfort.

Under no circumstances should you ever chase the horse.



Note the Horse's Body Language

Note the direction the horse's ears are pointing. A horse's ears can move independently of one another, as can its eyes. The direction the ear is pointing indicates the direction the eye on that side of its head is looking.

If the horse is looking at you and its ears are pointing in your direction, it is probably not considering which way to bolt.





Things to Remember

Familiarity with an animal always makes approaching it easier.

As with other lessons, acclimating a horse by repeated instruction in various settings is imperative.

A horse must be able to be approached and caught consistently to be useful in Forest Service situations.

Catching a horse may require patience, but most horses can be taught to relax and accept the handler's approach.



Considerations

When removing animals from a corral, it is always best to remove the easiest ones to catch first.

Often, when the horses leave a corral first, the mules will follow readily.





Review

- **Have the halter ready to place on the horse as you approach.**
- **Speak in a quiet voice. Approach slowly toward the left shoulder and remain in the safe zone while near the horse.**
- **Loop the halter rope around the horse's neck at the base of the skull to help control movement.**
- **Always maintain three points of contact and keep your face back from the horse's head.**
- **Remember, some horses shy away from people working around their faces.**

Topic 5: Leading and Tying





The Halter and Lead Rope

The halter should be of good quality. Halters made entirely of rope are a good option.

It should be light and contain a single latch.

It should be easy to work with.

A ½ inch diameter lead rope is best. Your fingers can close over it easily and it provides a substantial tie for the horse as needed.





A Warning About Halters

Never turn a horse loose with its halter on. A halter left on a horse can result in disaster if the animal gets a hoof or leg entangled in it.





Review

- The halter knot should always be tied under the loop, not above it.
- The tail of the halter tie should be facing toward the rear of the horse and not toward its face where it might potentially cause eye injuries.





Leading the Horse

The horse is led primarily with a halter and lead rope.

The lead rope should be about twelve feet long.





Review

- **When near the horse, stay in the safe zone by the left shoulder and maintain three points of contact.**
- **Never wrap the lead rope around your hand. Either form a loop or carry it straight through your fingers.**
- **When leading, always maintain a safe pace and walking distance from the horse. Watch your step, not the horse; tripping or stumbling could startle it.**
- **Don't let the horse crowd you, teach it to respect your space.**
 - **If a horse does crowd you, often just twitching the lead rope from side to side a few times will make it back away.**



Tying

A horse should be tied to a post or tree (or something else that cannot be easily moved or broken) with a slip knot. In case of emergency, the slip knot can be pulled loose quickly and easily.

A rider should carry a serrated knife in order to cut the horse free should the need arise.





Review

- **A horse should be tied to something at a level between its eyes and muzzle while it is standing at its normal head height.**
- **The length of the lead rope to be used when tying should be equal to the distance from the horse's muzzle to the ground as it stands at its normal head height. This length allows the horse enough slack to be comfortable.**





Topic 6: Grooming





Standard Grooming

Aside from brushing a horse, standard grooming procedures should include:

- Checking the eyes
- Checking the ears
- Checking the teeth
- Checking the feet and shoes for rocks that may have become lodged or any other abnormalities
- Checking for sores, bite marks, and ticks



Tools

- **Shedding Blade**
- **Curry Comb**
- **Rubber Curry Comb**
- **Brush**
- **Tail and Mane Comb**





Review

- It is a good idea before you start grooming to untie the horse, particularly if you will be working around its face. This is also a good time to observe the horse's frame of mind and to be looking for any abnormalities in movement, behavior, etc.
- Stay in the safe zone near the left shoulder and maintain three points of contact.
- Use a curry comb to remove loose hair, mud, and any objects that become entangled in the horse's coat. A rubber curry is a gentler tool for use around scabs and abrasions.
- Use a stiff brush to remove dirt and dust from the coat. Always move the brush from front to back in the direction the horse's hair naturally lies.
 - There is no need to brush beneath the horse's knees. This area will gather dust and dirt again as soon as the horse is roaming free, and it serves no purpose to run the risk of being struck, kicked, or stepped on.
- A shedding blade helps in the spring to remove excess hair. Use a tail and main comb to prevent mats and tangled hair.
- Remember, select the right tool and don't rush while grooming.



Topic 7: Saddling and Bridling





Before Saddling

When saddling a horse, let the animal see the saddle before putting it on. This way the horse will be aware of what you are doing and will not become startled.





Review

- It is a good idea to clean your pads each time before you saddle.
- When laying the pad on the horse's back, you should place it on the shoulders and slide it smoothly back to lay down the hair. Bunched hair beneath the pad and saddle will make the horse uncomfortable.
 - Remember, a horse that is uncomfortable is more likely to buck or rear.
- Don't disturb the pad as you place the saddle on top of it.
- When latching the cinch, always face toward the front of the horse. A double-rigged saddle (a saddle with two cinch straps) is not recommended for packing or mountain riding, and is only suggested for use in roping. However, if you are using a double-rigged saddle, be sure to adjust the rear cinch properly. A loose or hanging cinch can be hazardous if a horse gets a hoof entangled in it.
- When removing the saddle, everything should be put up so that nothing is left to drag on the ground.



Review

- **Always loosen the tie of the lead rope from the post before bridling.**
- **Spread the curb chain and bit with your fingers and use your thumb to press the gum between the teeth at the corner of the horse's mouth. As the horse opens its mouth, pull the bridle up until the bit sits on the gum. Push the ears through the head stall before securing the throat latch.**
 - **The bit should create a slight smile at the corners of the horse's mouth, but should be loose enough to be comfortable. Likewise, you should be able to fit two fingers easily beneath the straps of the head stall.**
- **When removing the bridle, undo the throat latch and wait for the horse to open its mouth, allowing the bit to fall out naturally. Never jerk the bit out of a horse's mouth.**

Topic 8: Mounting and Dismounting





Review

- **Before mounting, check your cinch to be sure it is secure. The cinch should be tight enough so that the saddle does not slide, but not so tight as to make the horse uncomfortable. A good test for this is to see if you can slip your hand flat between the cinch strap and the horse.**
- **When holding the reins before mounting, keep the left rein slightly shorter. If the horse begins to move, pulling on the left rein will draw it in a circle around you and will prevent it from bolting ahead or away from you.**
- **Always check the location where you plan to dismount before leaving the saddle. Make sure there are no obstacles in your way.**
- **Always dismount to the safe zone near the horse's left shoulder.**

Topic 9: Transportation





Trailers

All trailers should have:

- **Secure footing, such as rubber mats, on the floor to provide traction and cushioning for pack or saddlestock being loaded, unloaded, and transported.**
- **Racks or sideboards.**
- **Trailer brakes for all trailers 1500 pounds gross trailer weight and over. The brakes must be set to engage when the driver in the towing vehicle applies the normal truck service brakes.**
- **A round metal or rubber bumper for the rear of the trailer.**
- **Appropriate height and length clearance, and no sharp edges or loose boards that might injure pack or saddlestock during transport.**

Always check your trailer for a sound floor in good condition.



Loading

Always stand to the side as you raise or lower the ramp tailgate of the trailer.

Make sure the ramp is evenly supported on a level surface before loading.

Never ride a horse into a trailer.

When leading a horse, always leave yourself an escape route—never let the horse get between you and the exit.

Load pack and saddlestock to maintain balance, stability, and vehicle control.

When hauling only one animal in a two-stall trailer, always load it on the left side to keep its weight near the center of the road.



Securing the Horse

The horse should be haltered and its head fastened securely to the wall of the trailer.

Secure excess rope away from the horse.

Secure divider ropes between animals when hauling more than one.

Close the tailgate immediately after securing stock.



Unloading

Always untie the horse before opening the tailgate.

Open the tailgate from the side and stand clear.

Unhook divider chains on two-stall trailers. Be careful, the horse may back out of the trailer rapidly.

Stand clear, remain alert, and remember to never let the horse get between you and the exit from the trailer.



Conclusion

This presentation was developed to provide information about basic horsemanship skills and safety practices while working around pack and saddlestock.

It was designed to be the classroom portion of an 8 hour training program that includes field “hands-on” instruction.

We hope you enjoyed this presentation. Happy “safe” trails to you!



References

Ninemile Wildland Training Center

Robert M. Miller Communications

Backcountry Horsemen of America

American Association for Horsemanship Safety

National Ag Safety Database (Horse Trailer Maintenance and Trailing Safety)