

# Understanding Basic Horse Training Techniques

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## Introduction

Many horse owners are content owning a pleasure horse which can carry them at a leisurely pace along a trail. Others want a horse that can compete successfully in competitive events. For a horse to be a successful competitor, it must be able to learn specific tasks. Most of these tasks are based on natural physiological responses of the horse, but they are performed with an intensity and duration that the horse normally would not use on its own. For example, polo ponies must discriminate and follow a fast moving ball while running at top speed, and making hard turns and stops. All these tasks have components of natural behaviors which have been developed to an extreme degree. Teaching horses specific tasks is a fairly simple procedure, but it is a procedure which is often mishandled in spite of good intentions.

## How Horses Learn

Horses learn through stimulus-response-reinforcement chains (commonly called trial and error). The stimulus-response-reinforcement theory states that a stimulus, or cue, perceived by the horse results in random responses (reactions) from the horse. When the horse makes the correct random response, the trainer reinforces (rewards) this response in some way so that the horse begins to associate a specific cue with a specific action. A reinforcement can be either something that the horse likes and works to receive (positive) or something the horse does not like and works to avoid or eliminate (negative). Either way, the end result is the same: reinforcements increase the probability that a specific cue will produce a specific reaction in the horse. The trainer's job is to present understandable cues, know when the horse has made the correct response, and reinforce the response in the correct way at the right time.

## Cue Presentation

When you are teaching your horse a new maneuver, begin with a simple, obvious cue that makes use of the horse's natural behavior and balance. For example when teaching a young horse to turn to the right, a natural cue combination would be to put weight in your right stirrup and move your right hand out to the right (providing a leading rein which allows the horse's head and neck to turn right). The horse will instinctively step to the right to keep your weight balanced comfortably on its back and to follow its head and neck. While it is possible to teach the horse to turn right when you touch its left ear, this cue is not natural and will not lead the horse to the desired response easily. Using natural cues will make training easier and more enjoyable for both the horse and the handler.

Cues used in animal training should be consistent and specific. Once you have decided that a specific cue will be used to ask for a certain action, the cue should not be varied until the horse learns the response. Suppose, in the above example, your horse is a real blockhead and fails to make the right turn consistently. This does not mean you abandon these cues and try a new combination of cues, or that you give up and try a left turn. It means that you need to make sure the same cues are presented each time you ask for a right turn. You can increase the intensity of the cues (really weight your right stirrup and move your right hand far out to the side), but do not confuse the horse by suddenly deciding to use a different cue combination.

Once your horse has **mastered** a specific cue combination, you can refine or completely change the cues used to get the response. This is done by repeatedly presenting your new cue to the horse and following it with the old, previously learned, cue. Again, both your new cue and old cue must be specific and consistent. For example, once your horse has learned the simple

cues for a right turn, you might want to teach it to respond to a neck rein. You give the horse the new, less-natural cue (the left rein placed against the neck) and follow this with the old cue (weight the right stirrup and the right leading rein). Repeated pairing of the cues in the specific order of the new cue first followed by the old cue is the most effective way to teach a horse to respond to a more subtle cue.

## **Responses**

Once the horse has responded to a cue, the trainer must be able to recognize that the horse has made the correct response. It is important to realize that all major maneuvers horses perform are just a series of small responses connected together. Horses do not learn major maneuvers such as rollbacks all at one time. They learn many small responses (bend the body, shift weight onto the hindquarters, cross over the front legs, etc.) that result in a finished rollback when the responses are connected together. Learning psychologists call the process of connecting small responses together “chaining”, and this method of training will result in a horse that can perform finished maneuvers confidently and effortlessly. The key is to recognize the small responses that make up a finished maneuver and to successively ask for more of the responses which make up that maneuver. For example, the first response that a horse has to make to back up correctly is relax his jaw and poll. Successful trainers recognize this response and reinforce it by releasing pressure on the horse’s mouth and barrel and letting the horse relax. Once the horse responds consistently, the trainer will ask the horse to add the next response (shift its weight backwards) before rewarding the horse. Then the next response (take one step back) will be connected. By shaping the horse’s behavior one response at a time, you can have a horse backing correctly and quickly in a few training sessions.

During training sessions, it is important to review responses learned in the previous lessons. If the horse is having trouble with an intermediate response in the chain that makes a finished maneuver, you must make sure the horse can perform this response before you can expect it to perform the finished maneuver. Do not ask the impossible. You cannot expect a young horse

to do flying lead changes before it can perform a balanced, collected canter with your weight on its back. This could be compared to asking a toddler to water ski. The strength, balance and coordination needed for the movement have not been developed yet. When asking for specific responses from the horse, be aware of your horsemanship. Sometime horses cannot make the correct response because the rider lacks the balance and coordination needed to help the horse through the maneuver. If the horse is not performing a response correctly, always check your horsemanship to insure that you are not accidentally causing the problem.

## **Reinforcements**

Reinforcements are the glue that connects a specific stimulus to a certain response. Correct timing of reinforcements is essential to successful training. To make a good association, the stimulus, response, and reinforcement must follow each other closely in time. All reinforcements should be given immediately after the horse has made the desired response. The horse cannot associate a response it made five minutes previously with the pat on the neck that it is getting now. Likewise, if you are using negative reinforcement, you must remove the aversive situation, such as your spur in the horse’s side, immediately after it gives you the desired response. It is important that reinforcement is dependent on the horse making the correct response. Presenting reinforcements in the absence of any appropriate response from the horse reduces their effectiveness. Decide what the correct response is, and reinforce the horse only when you get that response. However, remember that a response does not have to be a finished major maneuver before it can be reinforced. You should set standards about what is the correct response for the horse in its particular stage of training.

When you are first teaching a horse a response, the horse will learn more effectively if it is reinforced every time it performs the response. However, once the horse has learned the response, successful trainers shift to an intermittent schedule of delivering reinforcements. All animals will work harder to obtain a reinforcement if they do not know when the reinforcement will be delivered. A good comparison in

humans is gambling. Since you do not know when you are going to win big money on a slot machine, you keep putting money into it. The slot machine gives you small intermittent rewards which keep your interest focused on winning the jackpot. To use intermittent rewards in horse training, you must be sure that the delivery of reinforcements does not accidentally fall into any pattern. If a pattern develops, the horse will quickly figure it out and work only when reinforcement is imminent. Be careful that you do not quit reinforcing the horse altogether. Horses eventually quit performing a response if they are never reinforced for it.

### **Other Considerations in Training**

When you train a horse for a specific performance event, you must consider the horse's athletic ability and suitability for that event. It does not matter how well you utilize the stimulus-response-reinforcement chain if the horse cannot physically perform the task. Keeping your horse well-fed, physically fit, and well-shod will increase training effectiveness. But all the good feed and good training in the world cannot make a world champion out of a horse that is unsuitable for that event. All horses can be improved by training, but do not expect the horse to perform at a level that is beyond its physical abilities.

Because training involves some type of physical activity from the horse, avoid drilling the horse until it is exhausted. Too much physical work will quickly teach the horse to dread training sessions. You do have to repeat the stimulus-response-reinforcement sequence enough times for the horse to learn it, but you can weave the lesson into other activities so that the horse is not continuously drilled. This keeps the horse more alert mentally and reduces physical fatigue. Horses probably have very short attention spans. A two-year-old can concentrate for approximately 10 minutes; a mature horse may be able to last about 20 minutes. So give the horse frequent breaks in learning. Train for three or four minutes, then trot the horse around on a loose rein and let it relax. Exercise does not have to be paired with training. You can exercise a horse sufficiently without overwhelming it with training.

Successful trainers realize that the horse is not a small child or a large dog. They realize that it is a horse, and they treat it accordingly. A successful trainer is always the dominant member in the human-horse relationship. Because horses are herd animals and innately understand a dominant-subordinate relationship, they will respond willingly and happily to a dominant trainer. Establishing dominance over a horse does not have to be a painful experience for either the horse or the trainer. It is accomplished easily by recognizing dominance challenges the horse presents to the handler and dealing with these challenges immediately and consistently. Dominant horses can threaten and move subordinate horses around without any retaliation from the subordinate. Dominant horses do not have to turn and face a subordinate when it approaches and are free to rub on subordinates and initiate mutual grooming activities anytime they desire. So if you are the dominant member of the horse-human partnership, your horse should never run over or past you, threaten to bite or kick, rub on you uninvited, or fail to turn and face you when you enter the stall. If your horse does any of these actions it is challenging your dominance status, and you must correct the horse immediately and consistently. A dominant horse (or you as the dominant human) never misses an opportunity to remind other horses that it is the boss. Remember that once you establish a rule, it is forever.

Once the rules have been established, it is occasionally necessary to punish a horse that breaks a rule. Punishment differs from negative reinforcement in that it is used to eliminate an undesirable behavior. It is applied **after** the undesired behavior has occurred, where negative reinforcement is applied **until** the desired behavior occurs. Using punishment follows many of the same rules as using reinforcement. Punishment must be applied immediately after the undesirable behavior for the horse to associate the punishment with its previous action, and the trainer must think about which response he is really punishing. For example, your horse bites you in the arm. If you wait for pain to lessen, then go find an appropriately big stick, then catch the horse, then whack it with the stick, the horse will think it is being punished for letting you catch it. There is no way it can associate the whack with biting you three minutes previously. Similarly, punishment of a response that is

partially correct and partially incorrect works to eliminate both the correct and incorrect parts of the response.

## **Conclusion**

Whenever you work around a horse you are giving it stimuli, intentionally or unintentionally, and your horse is responding to these stimuli. You are training a horse continuously, and the horse is learning continuously. So, you should think about your actions and your horse's reactions at all times, and be consistent in what you expect from the horse. For example, if your horse is allowed grab the sleeve of your heavy winter coat in his teeth without any negative reaction from you, then the horse rightfully can assume that it is acceptable behavior to grab your bare arm in the summer. Using stimuli correctly and consistently, recognizing segments of behavior that constitute the desired response and reinforcing the response in a timely manner are the main components of a successful training program.

Combining these correct training procedures with a basic understanding of horse behavior and an empathy for horses will make training easy, enjoyable and fun for you and your horse.

## **Additional Reading**

Evans, J.W., A. Borton, H. F. Hintz and L.D. Van Vleck. 1990. *The Horse*. W.H. Freeman Co., New York, NY.

Fiske, J.C. 1979. *How Horses Learn*. S. Greene Press, Brattleboro, VT.

McCall, J. 1988. *Influencing Horse Behavior*. Alpine Publications, Inc., Loveland, CO.

Waring, G.H. 1983. *Horse Behavior*. Noyes Publications, Park Ridge, NJ.