

Motivating Your Horse

Trying to get your horse to do what you want.

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"You get more flies with honey..." "You can lead a horse to water, but you can't make him drink..." The English language abounds with colloquialisms like this dealing with ways to influence other creatures and the quirks this involves. From the beginning, humans have been trying to control other animals — and dealing with their frustrations when they fail. Animals have independent wills, and controlling them successfully takes intelligence and strategy. Like the first adage suggests, manipulation of motivation gets the best results, and this works for more than just trapping flies. When training your horse, the key is to understand and capitalize on his motivations.

The Veterinarian's Encyclopedia of Animal Behavior defines motivation as the "desire or inner drive that causes an animal to do something." It further explains that an animal's motivation to get a specific reward, even an internal or poorly defined one, or to avoid a punishment can affect how quickly an animal will learn. The degree of motivation varies among individuals, so results will always vary. For example, the VEAB states:

"Food rewards are more acceptable to animals that have been held off food; however, for some individuals, food is not a strong motivational tool. The success of any learning project may depend on finding the strongest motivating factor for each individual."

Since most riders are aiming for improved horse performance, it follows that developing a working knowledge of motivation will help achieve these goals. In the learning studies I've conducted, withholding food a few hours before each training session always made the horses try harder to learn the tasks. Perhaps you've experienced where a few carrots or a bucket of grain helped encourage your horse to walk into a horse trailer, or to allow himself to be caught in a pasture.

It's easy to see that food rewards, or food stimulus reinforcers, are powerful motivators for nearly all horses and can be readily used to stimulate desired behavior. For this reason, a food that horses enjoy and are highly motivated to work for is known to scientists as an unconditioned stimulus. These are things that horses don't have to be taught to work for because they are naturally motivated by them. In contrast, reinforcers such as pats on the neck or verbal praise are not things horses find naturally rewarding and so they must be taught to want to work for them. Therefore, a reward a horse must be trained to work for is known as a conditioned stimulus, because he must be taught, or conditioned, to work for it.

What does it take to inspire animals to want to work as hard for praise or petting as they might for their favorite foods? The process is called conditioning, and there are two major forms that apply to horse handlers. The earliest form, which is known as classical conditioning is based on the involuntary responses of animals to stimuli such as food. It focuses on maintaining these responses when the stimulus changes from something naturally rewarding (such as carrots) to something contrived (such as verbal praise).

The most famous example of classical conditioning was carried out by Russian physiologist Pavlov, who presented dogs with meat powder, triggering a natural salivation response. He then paired bell ringing with the food presentation, until the dogs began associating the bell with the food. The dogs began salivating when they heard the bell, even in the absence of food.

While this can work with horses, too, another branch of conditioning, operant conditioning, is more relevant to horse training. Operant conditioning is similar to classical conditioning, except that it focuses on eliciting voluntary behavioral responses rather than measuring involuntary responses. An example of this would be teaching a horse to work for praise rather than for a food reward.

To do this, the reinforcers should initially be naturally rewarding things, such as food treats. The treats should eventually be paired at the time of delivery with the less "natural" verbal praise. Much as the bell eventually came to be stimulating to Pavlov's dogs, the praise will eventually be a meaningful reinforcer to the horse.

But it is important to pair the two in the right order. In her Journal of Animal Science article "A Review of Learning Behavior in Horses and its Application in Horse Training," Dr. Cynthia McCall looked at the effects that different ways of

pairing something horses already knew, with something not yet learned had on training results. A practical example of this would be teaching neck reining to a horse already accustomed to direct rein cues. Dr. McCall found that the two most effective ways of pairing were to either apply the neck rein first and then continue it until the direct rein cue is presented, or to apply the neck rein first, then terminate it before the direct rein cue is applied (a method known as trace conditioning).

The methods Dr. McCall found did not work well were to apply both neck and direct rein cues together, or to apply the direct rein before the neck rein cue (a method known as backward presentation). She explained by doing so trainers are using the old cue to show the horse the meaning of the new cue and to reinforce the new cue.

The research I've discussed lays the foundation for an important point. While there is an inherent difference between food treats and petting/praise when it comes to motivating horses, we don't have to strap on a fanny pack full of food treats each time we ride: There are effective ways to teach our horses to respond as powerfully to things that aren't innately rewarding to them.

However, even the most positive or natural rewards may not work all the time. Punishment is also a powerful behavioral motivator. Think about your own childhood experiences of being corrected for inappropriate behavior, and you'll see that punishment can answer for many occasions where rewards have failed, such as when the "inappropriate" behavior is self-rewarding. For example, as a child I didn't stop riding my bicycle in the street until after I was punished for it, because bicycling there was fun.

Rewards and punishment are two very different ways to motivate learning. Something a horse finds unpleasant, such as the rider's use of a spur, can be either a behavioral reinforcer or a behavioral punisher, depending on how it's used. There are three key terms that need to be defined at this point to prevent confusion, namely positive reinforcement, negative reinforcement and punishment.

Positive reinforcers are rewards for behavior given because the horse enjoys and wants to work for them. A negative reinforcer, on the other hand, is something unpleasant, which, when removed, increases the probability of a behavioral response. An example of this is when riders use a spur aid to ask for a canter or lope on a specific lead. The reward for the horse is that the aversive spur aid goes away if he does what's being asked of him. Punishment has abusive connotations to many people, but all that the word means is "the use of a negative stimulus with a behavior to decrease the frequency of the behavior." It differs from negative reinforcement only in that it is used to reduce an unwanted behavior, whereas negative reinforcement is used to increase the frequency of a desired behavior. An example of punishment is swatting a horse from behind with a broom when it pulls back when tied, to reduce the likelihood of the horse exhibiting that unwanted and potentially self-injurious behavior again.

In her article, Dr. McCall noted that trainers motivate horses to learn primarily through negative reinforcement techniques. Consider that every time we pick up the reins and the horse responds by giving to the bit, that behavior is motivated by an aversion to the bit. Every time we give a leg cue and the horse responds, he's reacting to make that leg cue go away.

We can use petting, praising and treats where they'll work for us in training, but negative reinforcement and punishment will also be part of our training regimens. In a proper strategy, trainers use all three categories of behavioral motivators in a positive, respectful way and monitor the results, modifying them as necessary. As each horse's behavior develops over time, so should his training program grow in the hands of a conscientious trainer.