

Natural Behavior of Horses

Our topics for this week are:

- Horse mental and physical health needs
- Roles of herd members
- Breed differences in temperament
- Horse communications

The natural behavior of horses is based on how feral horses in the U.S. behave. In reality, these are not truly wild horses, but untamed feral horses. Their ancestors were selectively bred for domestication for 6,000 years. The few that descended directly from the escaped Pueblo horses of 1680 have been untamed for only about 340 years.

Unlike actual wild animals, feral horses can be re-domesticated and trained. Their selective breeding in the wild was based on survivability and have resulted in tougher, more resilient, and in some cases, smarter horses than the horses that remained in domestication being selected for breeding based on hair coat color, conformation without meaningful purpose, and extreme placid dispositions that fail to protect them from natural dangers. Feral horse behavior does not always predict the behavior of domesticated horses, but the similarities are greater than those between wolves and dogs.

Horses are highly social prey animals that prefer to live in groups. Horses in the wild prefer to form small bands of 3 to 30 horses, usually a stallion and 4 to 6 mares with foals, that share a grazing territory. The sexually mature mares within a band are called the harem. Each band of mares and immature horses is led by an older dominant (**boss** or lead) **mare**. Dominant mares lead the band to water and grazing sites. She is also the ultimate disciplinarian. She occasionally reinforces her social position by roaming through the herd checking the deference given her. An insufficient response to move elicits controlled aggression to reassert the recognition of her role in the herd.

The band also has a dominant or **lead stallion**. The lead stallion guards the periphery of the herd and the slowest of the band against predators when the band is moving. Young stallions nearing puberty at about 2 years of age are forced out of the herd. **Bachelor stallions** follow bands at a distance. Young stallions will shadowbox (rearing and pawing at the play opponent) as part of the process of determining social rank. During breeding seasons, some bachelors will occasionally challenge the lead stallion for his position as band sire. By the time of social maturity, around 4 years of age, most fillies will leave the band to join another.

After the dominant mare and stallion, the remainder of the herd is in a linear hierarchy. Physical contact among band members is usually avoided by the use of threatened bites and posturing as if to kick. Ignoring this body language will lead to meaningful bites or kicks. Like other animals, the rank of horses in a herd is primarily based on deference, not by actual fighting. Fights that can result in serious injury are most often between adult stallions or between a nursing mare and any perceived threat that might endanger her foal. The occasional mixing of fillies with members of different bands along with roaming bachelor stallions eventually replacing older, previously dominant stallions maintains needed genetic diversity.

Boss mares can be particularly difficult to handle if allowed to control the movement of a handler or access to food, i.e., food possession aggression. Stallions may be more receptive to handling than boss mares if they do not feel the need to assert their social status with a human handler because of breeding seasons or if handled roughly. Fillies and mares are more likely to kick; colts and stallions are more likely to bite or strike.

The opportunity to socialize with other horses, to feel the security of other horses being present, and to graze 12 to 17 hours per day is essential to horse mental health. Each of these opportunities beneficially affects their ability to be handled by humans. Freedom to graze in groups is a great stress reliever in horses. Another stress reliever is mutual grooming, such as standing nose-to-tail with a herd buddy, nibbling each other's withers, and swishing flies away from each other's face. Devoid of companionship with other horses, some horses will develop a bond with goats, ponies, and donkeys, plus other animals. If goats are used, meat breeds such as the Boer or large dairy breeds (Alpine, Saanen, LaMancha, or Toggenburg) should be selected rather than small or miniature breeds.

Horses use their nimble lips to gather grass to bite with their incisors when grazing. This ability allows many horses to learn to open latches on stalls, pick up one grain of corn from a feeder, and untie knots, among other feats of lip dexterity.

Horses main means of defense is to flee from perceived danger. Large predators of horses usually jump on the horse's back and neck to which the horse responds with violent bucking to become free of the attack. If successful in escaping, the horse will be more inclined to buck with greater effort the next time. Analogous actions occur if young horses started under saddle are allowed to buck and especially if they are successful in ridding themselves of the rider.

Horses sleep only a few hours, most of it dozing in a standing position since they are able to fixate their legs in extension with their *stay apparatus*. If startled while dosing, they are likely to kick. The sleep time is usually in multiple short periods of approximately 15 minutes each. To achieve REM sleep, they must lie down to sleep for an hour or two every few days, and in a herd, they typically will not lie down unless another trusted horse is near and remains standing as a sentinel to guard against predators.

The most frequent communication among horses is body language, using the ears, eyes, nostrils, position of the head and neck, pawing with front hooves, cocking a hind leg as if to kick, and swishing the tail. Vocalization is less common, including nickering, neighing (whinnying), snorting, and squealing. Smell and touch (nuzzling, grooming of each other in pairs) are other means of communication. Status in the band is reaffirmed by forcing others to move, particularly from favorite food, using body language. If the threat is unsuccessful, the more dominant horse will follow through with a bite or a kick.

Foals and weanlings play mostly by themselves in the first 3 months of life. Interactive play peaks at 3 to 4 months of age. Friendships with particular horses will later develop. Foals and weanlings defer to the authority of older, more dominant horses by clacking (also called snapping, clapping, or champing), a smiling, smacking action of the lips.

The temperament of horses depends much on their genetics. There are three general groups of horse breeds. The group believed to be the oldest are the *hot bloods* (Arabians, Barbs, and Thoroughbreds) which originated in hot climates and have been selectively bred for racing. Hotbloods are the most likely to be over-reactive and hyperexcitable. *Warm bloods* (Quarter horses, Morgans, Andalusians) tend to be responsive and tractable, but when they react, their reactions are more explosive. They have been selectively bred for diverse forms of work

involving light draft work or under saddle tasks. **Cold bloods** (Clydesdales, Percherons, Freisians) are quiet and relatively unexcitable. Their breeding has been for their large size, quiet temperament, and ability to pull heavy loads.

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

- Horses are highly social, prey animals, whose first defense action is to attempt to flee.
- Horses are stressed without at least one animal companion, preferably another horse.
- Most communications among horses is by body language.
- Being able to graze and continually move is important to horse mental and physical health.
- Horse temperament varies between breeds.

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.