Shoeing and Hoof Care of Horses

Kevin H. Kline, PhD, Professor of Animal Sciences, University of Illinois
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Spring is here and it’s time to enjoy horseback riding on the trails, at shows, or just in your own back yard or boarding stable. Before heading out to ride, though, your horse’s hoof care and shoeing should be maintained.

Having a good relationship with a dependable farrier (horse shoer) that can keep your horse on a regular trimming and shoeing schedule is an important part of maintaining sound and healthy feet for your horse. Although professional accreditation is not necessary for horse shoers, one should find a shoer that communicates well, has good horse handling and shoeing skills, and preferably has AFA (American Farrier’s Association) accreditation. Even the most skilled farriers that are overbooked or live too far away, may not offer you a regular enough schedule of hoof maintenance for your horse to have optimal hoof care. Therefore, good and dependable farriers that can help the horse owner maintain a steady routine of trimming and shoeing are invaluable assets.

There are several good reasons to shoe horses that will be ridden or driven recreationally or competitively. These reasons include protection, correction, action, traction, and therapeutic shoeing to reduce discomfort from underlying pathology of the hoof. Horse shoes, which may be made of various materials including steel, aluminum or plastics, eliminate the contact of the hoof wall with the ground surface, thereby protecting the hoof wall from excess wear. Horses that have developed unbalanced hooves through deferred hoof maintenance, or less than ideal conformation, can have the hooves reshaped to a certain degree, and then have shoes applied to protect the newly shaped hoof and at least partially correct problems related to poorly shaped hooves. Horses that should have high action at the trot and canter, such as American Saddlebreds and Morgans, tend to carry heavier shoes to accentuate the high-stepping action, whereas horses like hunters and Thoroughbred race horses should travel much lower with a long, low sweeping stride that does not waste motion. Therefore, these horses typically wear thinner steel shoes or even aluminum shoes to reduce shoe weight and encourage a lower arc of flight of the hooves when traveling. Horses that need to gain extra traction over potentially slippery or icy terrain may have various traction devices added to the shoes such as “calks” (spikes), swedges (creases in the shoes) or borium (a rough tungsten-based weld) applied to the shoe bottoms to gain a more
secure foothold. Therapeutic shoeing, such as the addition of a plastic or leather pad between the hoof and shoe, can protect sensitive easily-bruised soles. Bar shoes that stabilize and reduce heel movement in horses with sore heels or navicular bone pain, can greatly reduce hoof discomfort in horses with less than perfect hoof soundness. Your farrier, in consultation with your veterinarian, can help you decide if special therapeutic shoeing may be necessary to improve the soundness of a horse that has hoof discomfort.

The average horse’s hooves grow at a rate of about 1/3 to ½ inch per month, so horses that are shod should have their shoes removed and have their hooves trimmed and be re-shod about every 6-8 weeks so that excess hoof growth does not occur. Shoes left on too long can drastically change the hoof length and angle, causing potentially damaging changes in the biomechanics of the hooves and legs. When measuring the angle of a horse’s hoof, defined as the line running along the front of the hoof wall, compared with the line running along the bottom, or sole of the hoof, the front feet should carry an angle of about 55 degrees and hind feet an angle of about 58 degrees, on the average. There is quite a bit of natural variation among horses, according to individual conformation, and the ideal angle for any given horse may be plus or minus three or more degrees from these average values. A good farrier will not force a horse into a predetermined hoof angle that does not match its individual conformation.

Horses that won’t be traveling over rough or abrasive terrain while not being ridden frequently during parts of the year may not need shoes in many cases, and the natural wear on the unshod hoof walls will decrease the need for as frequent trimming. Still however, uneven hoof wear patterns should be noted and the farrier should trim and re-balance the hooves of bare-footed horses every couple of months to maintain proper mechanical function.

Routine hoof care and shoeing of horses should be part of a comprehensive horse management program that also includes proper nutrition, and general health maintenance through vaccinations, parasite and pest control, and facilities and waste management. Horse owners are well-advised to heed the old horsemen’s adage: “No hoof – no horse”, as sound feet and legs are absolutely required in order to enjoy recreational or competitive riding with your favorite horse.