

# Basic Foot Care for Horses

By Jen Reid

## Why is foot care so important for my horse?

Conscientious, routine care of your horse's feet can prevent many of the problems that can lead to early retirement and even death. Just like a house needs to sit on a sound foundation, horses need good healthy feet — feet that are free from pain and distortion, and that allow the rest of the body to move naturally. With no hoof, there is no horse!

The hooves of most domesticated horses need to be trimmed regularly. Every horse grows at a different rate, but a good average for a trimming schedule is anywhere from 5 to 7 weeks. In the wild, horses can walk up to 20 miles a day in search of food and water. This constant movement wears their feet down and keeps their hooves at an appropriate length for the environment they live in. Domesticated horses don't often do this much walking, so we as caregivers have to step in and trim their hooves to keep them healthy and balanced.

## What is a healthy foot?

Like people's feet, horses' feet are unique to each individual. Furthermore, each foot on a horse is unique to the leg it is attached to. There are lots of variations in shape, size and even color (sometimes on just one horse!). Because of this wide variety, it is difficult to make every foot conform to a set pattern or shape. There are, however, a few basic guidelines you can use to evaluate the health of your horse's feet. (This can be done whether the horse is barefoot or has shoes on.)

Have another person walk your horse on a flat surface. Carefully observe how the horse's feet contact the ground. A healthy foot should land slightly heel first. A foot that lands toe first is a foot that is in trouble. Often, lameness can be seen in the landing of the foot before it becomes evident in the rest of the body. When a horse lands heel first and his frog makes contact with the ground, the bones, joints, tendons and ligaments in the hoof and the leg are supported and move with the least amount of stress and strain. The impact from the ground is dissipated by the soft tissues of the frog, the digital cushion and an amazing mass of tiny blood vessels.

When a horse's foot lands with the toe first, that natural support structure gets all out of whack. The bones in the coffin joint can mildly subluxate (move farther in the joint than they're supposed to) and this starts to damage the tendons and ligaments holding the joint together. The shock-absorbing ability of the frog and digital cushion can't happen, so instead all of the concussion that occurs when the foot touches the ground travels up the leg into the tendons, ligaments and muscles. It's quite common to observe toe-first landings in horses who stumble, interfere, forge or have other gait faults.

## What does a "balanced foot" really mean?

While the hoof might seem like a rigid, immovable structure, it actually changes shape all the time and can be quite easily distorted. There are, however, some techniques for evaluating a hoof to determine if it is "balanced" and in the proper proportions.

The word "balanced" is used a couple of different ways to describe the hoof. "Balanced" means that the coffin bone within the hoof is an equal distance from the ground on



*Poor balance around the widest part of the foot: 30% behind the widest part of the foot and 70% in front of the widest part of the foot.*

Last part of heel to touch the ground



Widest part of the foot



Last part of toe to contact the ground



*Good balance around the widest part of the foot: 50% behind the widest part of the foot and 50% in front of the widest part of the foot.*

the medial (inside) and the lateral (outside) of the hoof. It also means that the foot is centered around the coffin joint (the last joint in the legs that is actually inside the hoof capsule).

**Evaluating the balance of a hoof around the widest part of the foot with hoof mapping.** While parts of the hoof can change shape and distort, the widest part of the foot is relatively stable and consistent. To find the widest part of the foot, you can use three separate landmarks: the point where the bars terminate, the widest point of the arc where the sole meets the hoof wall in the quarters, and, in an average size hoof, measuring back one inch from the true apex of the frog. Draw a line with a Sharpee connecting all of those spots and there you have the widest part of the foot. The widest part of the foot is always located very close to the center of the coffin joint and is the best reference to determine if the foot is balanced around the joint.

Once you have the widest part marked, mark the last point on the heels, and the farthest point on the toe to contact the ground. A balanced foot should have at least an equal amount of ground surface from the widest part to the heel marks as it does from the widest part to the toe. If there is more in front of the line, the foot is distorted and out of balance.

**Evaluating medial/lateral balance.** The functional sole of the foot has been shown to be a good reference for determining if the coffin bone is an equal distance from the ground on the medial and lateral sides. The functional sole is where the sole transitions from chalky and flaky to solid and waxy in texture. Another way to evaluate medial/lateral balance is to look at the curve of the heels and the bars. In a balanced foot, both heels and both bars will have an equal amount of curve. If one side is more curled and bent than the other, that foot is most likely higher on that side.

**Evaluating the health of the frog.** The frog is like the gel insert in a running shoe. It is there to provide support to the internal structures of the foot, to absorb and disperse the

forces resulting from impact with the ground, and to provide proprioceptive nerves that help the horse negotiate the terrain he's walking over. The frog in a healthy foot should be able to have contact with the ground, and should be healthy and robust-looking. A stretched out, shrunken, tiny little frog with a lot of thrush (black, stinky goo) is not a healthy frog and is an indication of problems.

### **How can I help my horse's feet stay (or get) healthy?**

The most important thing you can do is to be aware of your horse's feet. Notice how they grow, how the horse moves, and how the feet contact the ground. You are the most important link in the chain when it comes to your horse's health (feet or otherwise). If you're interested in learning more than the absolute basics, a good place to start is [www.e-hoofcare.com](http://www.e-hoofcare.com). This is the website for the Equine Lameness Prevention Organization, which provides many classes and other educational opportunities for horse people, farriers and anyone else interested in learning more about keeping horses sound. The organization is also a great resource to inquire about certified farriers in your area.

### **How do I choose a good farrier?**

Next to you, your farrier is the most important person when it comes to your horse's feet. There is no licensing required to be a farrier, so the skill and knowledge level can vary greatly. Don't just assume that all farriers are the same. When choosing one, keep the following in mind:

- **Does the farrier come with a good recommendation?** Talk with other people who have used him/her and look at their horses' feet.
- **Is the farrier kind to your horse?** Farrier work is very physically challenging and it can be easy to lose patience with a horse who doesn't stand still, but there is never any excuse to lose your temper and physically abuse a horse.
- **Is the farrier open to new ideas?** There are new and exciting discoveries happening all the time in the world of farrier science. You want a farrier who is open and willing to learn, grow and keep abreast of current developments.
- **What does your horse think?** As a general rule, your horse should be at least as sound after being shod or trimmed as he was before. If your horse is consistently sore after being worked on, you may want to look for a new farrier. There is no reason that a horse should be tender-footed after every farrier visit.

Basic horse care literally starts from the ground up. Being aware of the health and well-being of your horse's feet is one of the most important parts of his care.

*Jen Reid, CNBF, CLS, CE, is the manager of Horse Haven at Best Friends and is a professional farrier certified through the Equine Lameness Prevention Organization.*