

Equine Eyesight

What Do Horses See?

By Cheryl Sutor

Once you have read this article, you will realize how important it is to be educated about equine eyesight. This lesson will change the way you approach and work around your horse, creating a safer and more trusting environment with your horse.

Do horses see color?

Many scientists believe that horses cannot see color, however, **there is no scientific proof of this**. There has been extensive research and studies on equine eyesight, but the topic of whether horses can or cannot see color is **still unknown**.

Can horses see much detail?

Horses see **less** detail than the human eye, but they have a much **broadier** field of vision than we do. Their vision is very sensitive to movement, which allows them to watch for possible enemies, even in the dark.

The horse has a hard time seeing depth. This is why many hunter/jumper riders will experience that it is harder to jump wider (deeper) fences than a single fence. Horses also cannot sense very well how far an object is from their body.

How well can horses see in the dark?

They can see **better** in the dark than humans can, however, they take longer to adapt to light and dark than other animals. Whenever you are in a situation where you are going from a lighted area to a fairly dark area (or vice versa), be sure to give your horse enough time to adjust to the new lighting.

This explains why many horses become frightened or anxious when being lead from a lighted barn aisle into a darker area (such as a dark trailer, or to an outside paddock at night).

Where are the horse's blind spots?

Your horse has a blind spot that extends about 4 feet in front of his face, which may vary depending on the shape of his head. If your horse has a **wider** head, he will have a longer blind spot. If he has a **narrow head**, he will have a shorter blind spot.

You should never approach your horse **directly** from the front. If you approach him from the front, he cannot see you until you are about six inches from his face (this explains why horse will raise and/or tilt or turn their head if you approach directly from the front). Even when you are that close, he only sees your shoulders and not the middle of your body - and even that much is distorted.

Horses cannot see the ground near their front feet, and they cannot see their own knees and chest. Horses also have a blind spot **directly behind** them. This is the most dangerous blind spot, should the horse become frightened and kick at you. Always be careful and alert when walking behind your horse. A horse may kick at any sudden, unexpected noise.

Never punish your horse for spooking. Instead, relax...and take a second to remember that he was born with a blind spot (and with many, many predators). **Punishment will only cause more fear and confusion**. Speak calmly and try to reassure that everything is fine. Horses may occasionally spook or suddenly kick at unexpected noises in their blind spots, of where they cannot see.

Due to many blind spots, horses have to raise and lower their heads in order to see objects **in their proper focus**. This will explain why many horses will raise their head (as if to spook) when a person walks up to them directly in front and reaches to pet the horse's forehead...most likely, he is just trying to focus better on what he cannot see clearly.

Binocular and Monocular Vision:

When both eyes are focused on one object in front, the horse is using **binocular** vision. You will know when a horse is using binocular vision because he will usually stand alert, with both of his ears focused on an object in front of him.

Horses can see with each eye separately. This is called **monocular** vision, which allows the horse to watch in front of him with one eye and in back of him with the other. This is especially useful when watching for predators.

When a horse sees movement using monocular vision, he will usually turn his head to see with both eyes - switching to binocular vision (to focus on the moving object). When a horse switches from monocular vision to binocular vision, this causes objects to jump and distort - until focused on again. **This may cause horses to unexplainably spook.**

Horses **cannot** use binocular *and* monocular vision at the same time. It is very important to have your horse's attention when working with them. It is a safe practice to constantly talk to your horse while working around him.

Are Blue Eyes Inferior?

Most horses have dark colored eyes (usually brown). Some people believe that blue eyes are inferior. However, there is **no scientific evidence** that this is true. Blue eyes are the result from lack of pigment in the iris. This does not affect the horse's vision.

The horse's eyesight is very different than human eyesight. What you see when you look at something is very different from what your horse sees.