



# Tales from the Trails at Dunrovin

October 21, 2019

## Horses' Feet are Complicated

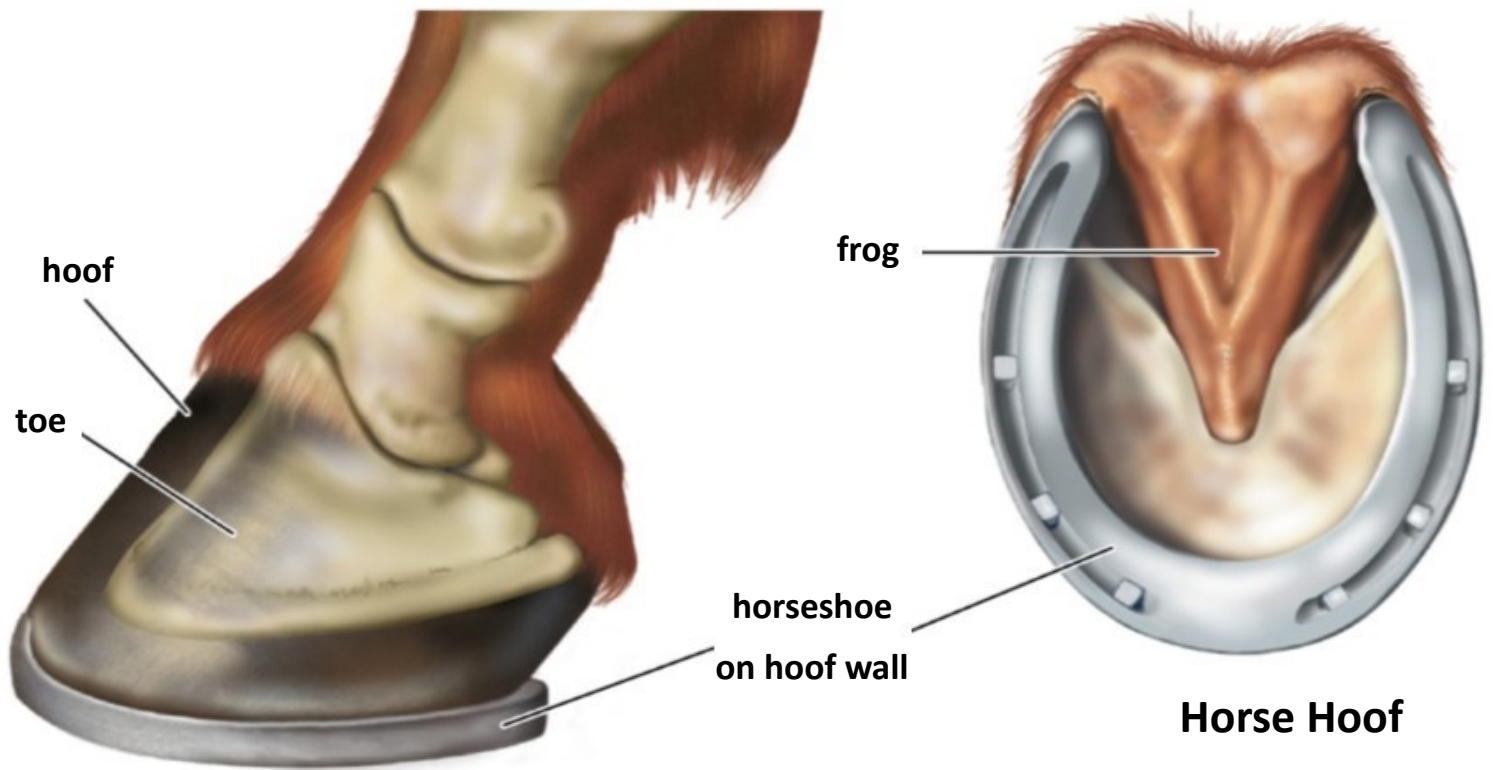


**Horses Hooves are Unique.** All four-legged mammals evolved from a common ancestor that had five toes. The horse is the only land-based mammal to end up with just one toe per foot. Scientists believe that this happened thousands of years ago as horses moved out of forests and into grasslands where they grew in size and needed speed to escape predators. The single toe in the form of a hoof enables their large bodies to be both agile and fast, which has been essential to their survival.

**Only Domestic Horses Need Shoes.** Wild horses like those in the Ghost Herd living in the mountains across the river from Dunrovin don't need shoes. They don't carry riders. They move quickly only to avoid predators, and they can freely avoid hard ground. Domestic horses may need shoes to protect their feet from the extra weight of riders and from the stress of having to trot or gallop for sustained periods across rocky or other hard surfaces at the direction of their riders.



**Are Foals Born with Hooves?** Giving birth to a foal with sharp hooves would be both painful and dangerous to the mare. Nature solves this problem by covering foals' hooves with a rubbery layer called a deciduous hoof capsule. This capsule covers the sharp edges of the foal's new and untried hooves, protecting both mother and foal from injury during birth. Deciduous describes things that are shed at particular stages, like the leaves of a tree. The hoof capsules of a foal naturally fall off without notice and within hours of its birth.



**Horse Hoof**

**Horse's Feet are Complicated.** Like humans' toe nails, horses' hooves are made of dead tissue which feel no pain. The hard hoof protects the toe and the triangle shaped frog that compresses with each step of the horse and serves like a pump to push the blood up the long leg and back to the horse's heart. Shoes are nailed directly into the wall of the hoof. It is advisable to let horses go barefoot for periods so the hooves can periodically spread without being confined by a shoe.



**Horseshoes Vary.** Shoes are available in a wide variety of materials and styles and are developed for different types of horses and the work they do. The most common metals are steel and aluminum, but shoes are also available in rubber and plastic. Hoof boots can be used only temporarily as they do not let the underside of the foot breath. Training is needed to correctly fit a shoe and to properly attach a shoe to a horse.

**Broadcast Date: October 22, 2019**

**Time: \_\_\_\_\_**

**Location: \_\_\_\_\_**