



# SHOEING

You need to know some things about shoeing. First of all, you need to realize that farriers are not the enemy. Lack of education is the enemy. The farrier operates from a very simple paradigm: Shoes have been applied for about 1000 years (or more), so they are the right thing for the horse, trainers and owners demand shoes on their horses.

"From the perspective of the horse's health, the claim that a metal shod hoof is an improvement over the natural structure provided by evolution is an extraordinary one, and as such requires extraordinary proof." William Strawbridge

That is certainly something to think about. So what is so bad about shoes?

Watch this video, it has some good analogies.

<https://www.youtube.com/watch?v=WY5QQhQybL4>

There are a few very common statements made by horse owners. Some may sound familiar to you, because you may have said or heard something similar at some stage or another in a discussion about "shoeing or not shoeing"..... for example:

"MY horse needs shoes,  
because....

....he is a performance horse

....he has brittle hooves

....he has shallow hooves

....he is a thoroughbred (a  
warmblood/QH/Arab...)

....I ride on roads

....my farrier / vet / instructor said

so...."





## ADVANTAGES OF SHOEING

The ability to use a horse on any terrain, at any time, without giving any thought to providing the horse with a proper lifestyle or hoof care

The ability to temporarily ignore the biological limitations of the horse

The ability to make a lame horse useable for a while longer (during which time the damage continues to worsen)

These arguments have little consideration for the horse's long term well-being

The reason to shoe a horse is to use it beyond its biological limitations

## SOME HISTORY:

Human domesticated horses about 5000 years ago.

None of the early documentations about horses speaks of any form of footwear

Xenophon (1350BC) writes about "toughening the hooves", ancient Hittites, the old Egyptians rode/drove over great distances no mention of any kind of hoof cover!



There are no artefacts that would prove any existence of iron horse shoes before the Middle Ages! The Dawn of the Horse Shoe: The Middle Ages! If and why is this a coincidence? Noblemen and Castles come to mind, Knights in heavy Armor. Horses would have to be kept in close proximity to these warriors or noblemen: Within their castles. Castles were strategically build on elevated positions (on hills, above villages/towns). There is no room for paddocks within the walls of castles. Horses were kept in stables.

**\* WHAT HAPPENS WHEN WE ALTER LIVING CONDITIONS OF AN ANIMAL THAT MUST HAVE FREEDOM OF MOVEMENT 24/7?**

We weaken the organism.

**\* WHAT IF THE ANIMAL IS EXPOSED TO AMMONIUM?**

(This is what forms when urine and excrements are exposed to air).

It weakens the organism.

Ammonium is present in stable beddings and in the air.



Ammonium dissolves protein: HOOF HORN IS PROTEIN!

(also, ammonium vapor mixed with stable dust is the reason why many horses, even today when conditions are "clean", suffer from respiratory problems)

The

Lack of movement \* Exposure to Ammonium \* Unhealthy Posture (head up) \*

Lack of moisture (water) \* Drying effect of bedding

would have caused deterioration of these horses' hooves.

A protection, something that kept the hoof "together" and kept the horse useable, needed to be developed.

An iron rim, nailed onto the hoof became the trademark of noblemen.

All this, because it was more practical and safer to keep the horses within the castle boundaries than keeping them in paddocks below in the village!

Today we still believe, horses "need" shoes to keep their hooves together (and to protect them from wear etc.). All this belief is based on those who misunderstood the reasoning of the noblemen up in their castles and wanted to have what they had. The common folk associated (and most of us still do) the "clip 'clop" on the pavement as a romantic/positive sound and we consider a horseshoe to be a sign of luck.



Not for the horse, unless he has lost it...

The term "SHOE" is also very deceiving (in German the horse shoe is called "HUFEISEN" which means "hoof-iron". And that is what it is: a shaped iron(metal/plastic) rim, nailed (glued) onto the natural hoof of the horse.



## DETRIMENTS OF SHOEING:

### 1.) Gradual deformation of hoof capsule

Shoe is nailed on when hoof is lifted off the ground, therefore it is fixed in its narrowest contracted state

Contraction, pain, changes in movement, tripping, muscle problems, joint ossification, arthritis, deformation of coffin bone, lateral cartilage, damage to corium, set up for coffin bone rotation, laminitis, thrush, navicular syndrome, white line disease



### 2.) Destroys, weakens hoof wall through nails

Perforation, structural damage

Desiccation and loss of elasticity, insulation of horn capsule is breached, reduction in metabolism due to temperature drop when cold, effecting laminar horn production and therefore coffin bone suspension



### 3.) Reduced circulation

Hoof mechanism cannot function (reversible deformation of hoof capsule)

Overstressing heart, circulatory problems, metabolic problems

### 4.) Metabolic disruptions

Hoof mechanism cannot function (see above)

Protein imbalance in the system, skin, kidney/ liver problems, colic

### 5.) Changes in weight bearing, break over and limb movement

Due to shape, weight and properties of shoe

Muscle and tendon problems, side bone, ringbone over-reaching, self-injury







## 6.) Vibration

Metal vibrates when struck by something hard (800HZ)

Degeneration of capillaries, tissue necrosis, pathological alterations of corium tissue, chronic numbness, coldness (Raynaud's Syndrome)

Micro fractures, ossifications, tendon problems etc.

## 7.) Un-physiological stresses on hoof capsule

Tension through fixation and/or pressure

Horn cracks, white line separation, bruising, keratomas

## 8.) Impaired shock absorption

Hoof mechanism cannot function (60-80% of shock absorption is lost)

The jarring of the horse's unshod leg cantering on pavement is less than the jarring of a shod horse walking on pavement.



Ossification, joint damage, arthritis

## 9.) Greatly reduces sensation of the ground

Reduced nerve function (reduced circulation)

Peripheral loading of the wall leads to un-physiological stress

Danger of misstepping, bruising as stones can be higher than the rim of the iron



## 10.) Increased weight of hoof

Weight of shoe

Increased centrifugal effect (altered gait), ligament sprains, increased impact force and consequent damage (to horses and human toes).

## 11.) Changed traction

Either too much or too little due to metal surface



No suction effect on smooth/slippery/wet surface as bare hoof has, unhealthy resistance when turning. Joint, ligament, tendon damage, ossifications

12.) Conformation changes Pain or trimming errors cause horse to seek more comfortable positions which could result in joint adaptation

Crooked hooves, joints, coon, bucked knees, cow hocked, sickle hocked, "offset" knees, hunter's bump, out behind, base narrow, etc. etc.

13.) Prevents development of healthy coffin bone in young horses



Horses shod before they are mature have not yet fully developed their palmar processes

Narrow coffin bone = contraction

14.) Damage to trails, roads, pasture

Iron shoes "plough" ground, destroy pasture and trails. Damaged flora

Increased restrictions to riders as horses get "banned" from great riding country.

Difficulty to maintain good pasture.

Shoeing also disables the early detection of any damage done when the rider/owner is



exceeding the horse's biological limitations without being aware of it.

The horse does not show immediate symptoms until damage is advanced far enough to cause problems.

So, why would we want to shoe our horses?

Because it is traditionally/conventionally seen as correct and has become part of taking good care of the horse, forgetting its origin when shoeing was indeed a "necessary evil" for a short period in the history of man and horse.

Any good farrier will agree however, that a healthy unshod hoof is a "better" hoof than a hoof with an iron rim attached with nails driven into it.

The romantic "clip-clop" of shod hooves and the way we think about horseshoes makes it seem a lesser "evil". But becoming more aware that the hoof of the horse is not just a hard structure at the end of the horse's leg, may give us an insight to help our horses to a healthier life.