

COMMONSENSE — BAREFOOT — HOOF CARE

*Shouldn't they live the natural way?
Isn't it plain commonsense?*



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CHAPTER ONE



Introduction: How we are failing our horses

Here's a simple fact.

A foal born in the wild will live over twice as long as a domestic horse.

Imagine if we human beings lived half as long as our cavemen ancestors! What a fearful indictment of our civilisation that would be.

How, then, is it that for all our skills his domestic cousins do so poorly – *no, so disastrously* - in our care?

The wild horse has no vet. The wild horse has no man-made shelter. Yet the wild horse thrives and lives so much longer.

So since wild horses are setting the bar for equine health, Commonsense tells us to pay attention.

Kick off the shoes:

You may well be reading this because you're pondering about pulling off your horse's shoes. I'll explain why you should – and fast. Our horses have already waited 2000 years for us to wake up and notice the damage of shoeing.

In the days of knights, archers and brutal sword fights, the shoe had its purpose. Horses could sustain prolonged periods of battle, and their hooves wouldn't fall apart on damp castle floors. But in the 21st Century we're just creating weak, malnourished, malfunctioning hooves. Why are shod horses still almost universal?

It's time to accept something quite clear.

Nature – evolution – did not provide the horse rigid shoes. Instead 60 million years of evolution led to hooves that flex with the terrain. By expanding and

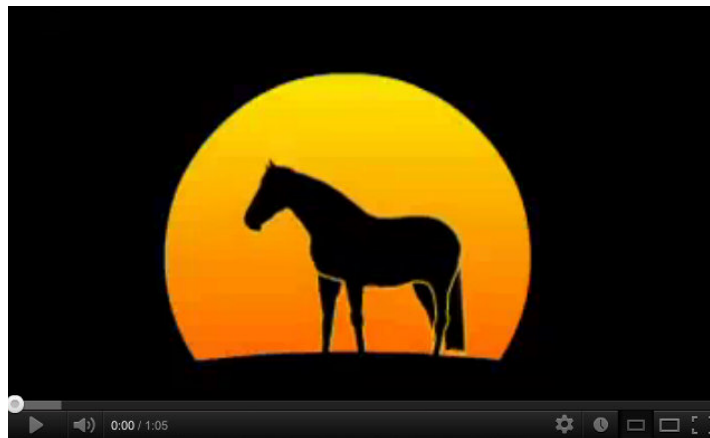
contracting, they act as auxiliary pumps, delivering blood to the hoof's vital white line. And this takes a lot of blood. It's estimated an average horse pumps four gallons to its feet in just 20 strides.

If 'a horse has 5 hearts', as the saying goes, why take 4 of them away? What strain does this put on his organs?

The hooves will give you some indication. The fearful damage of shoeing is utterly clear. You can see it – and see it quickly. Most horses suffer a weak, stretchy white line after just one year in shoes.

That's not all. The shoe removes 75% of the hoof's ability to absorb shock. This forces the trauma of that shock all the way up the leg through the joints and ligaments. Time after time. With every step.

Take a look at this video. It's a wonderful demonstration – a side by side comparison.



[Click here to view video on your browser](#)

Can you imagine Nike developing a running shoe with no cushioning – just a metal plate? It makes no sense. And the same applies to horseshoes.

With most healthy hooves, the heel lands a split second first which stimulates the cushion in the back of the hoof (and absorbs more shock).

On most surfaces, a shod horse – even landing heel first – can't land on the back of the heel and frog. Stimulation is reduced.

What's more, the shod horse is entirely dependent on the farrier for balance, whereas a barefoot horse has regular trims to replicate the natural wear and avoid any major angle changes.

Evolution has given these fine animals superb shock absorbers at the end of their legs. Your horse is growing Nike air hooves right now – this very moment. Why not let him wear them?

A half-tonne animal clearly needs some form of shock absorbance.

It's this shock absorption system that keeps feral horses so healthy. You rarely – if ever – see them with arthritis, back trouble or stiffness. Yet we accept these conditions as 'just age' in domestic horses.

Then there's the matter of grip.

A barefoot horse will always 'feel' more sure-footed than a shod horse because he has much better grip. That's why a lot of barefoot riders say their horse is more confident and less 'spooky' than when he was shod.

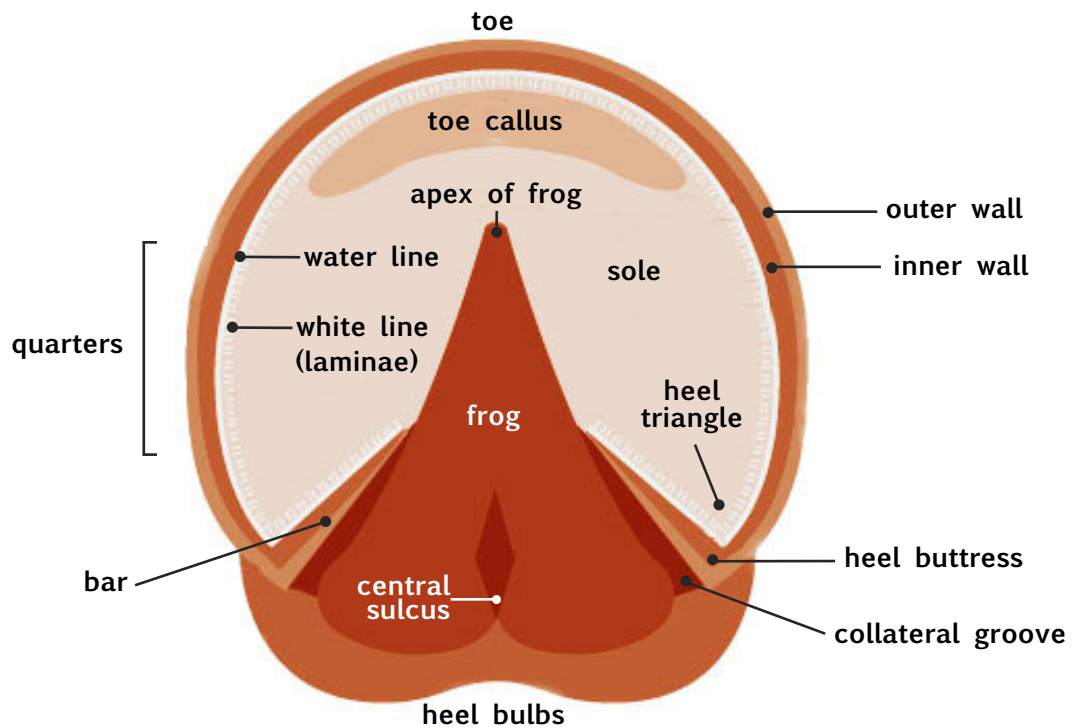
This stands to reason, because horses are natural prey animals, so they prefer being more sure-footed. Could it be that shoeing is also the cause of certain behaviour problems in the domestic horse?

Perhaps. Many farriers do agree there should be periods where the hooves are rested from the effects of shoeing. Hunt and event horses are often 'roughed off' in the summer without shoes.

Understanding the hoof and its structures:

Our poor shod creatures must look at their wild cousins with envy. These horses gallop happily across rocks, sand and gravel. How? Is it so hard to understand, and draw the obvious lesson?

Compare the crude simplicity of the horseshoe to the diagram of the hoof



above. The horseshoe could be the very symbol of human arrogance and ignorance.

The folly of this has been clear for over 2,000 years. The ancient Greek horse trainer, Xenophon never used shoes. Are we right to ignore his advice?

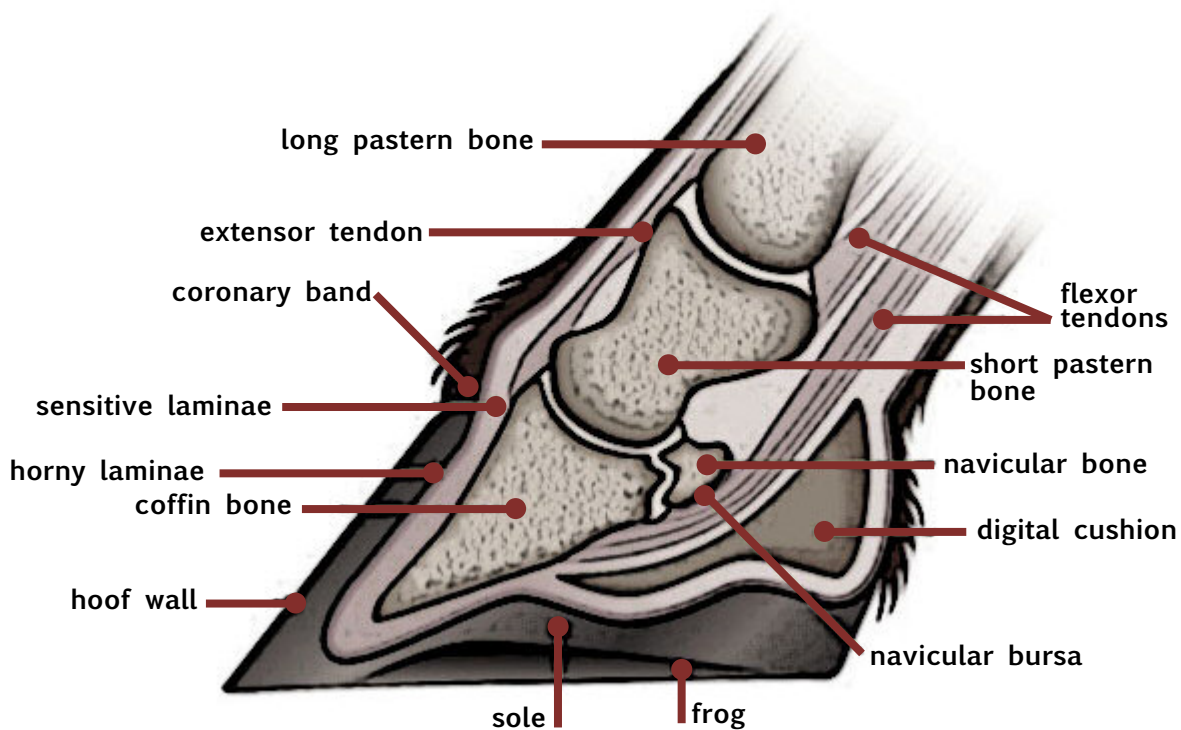
“To secure the best type of stable yard and with a view to strengthening the horse’s feet, I would suggest to take and throw down loosely four or five wagon loads of pebbles, each as large as can be grasped in the hand.”

- Xenophon

Xenophon said this 300 years before the birth of Christ. While we’ve learnt a lot in over 2 millennia, it’s clear there’s also much we’ve forgotten. This is to our horses’ peril.

Behind the hoof, sits the coffin bone (see diagram on next page). It is sensitive and surrounded by blood rich corium.

A weakened white line allows the coffin bone to press down on the soles. Heels running too high will turn it on its point. The sheer force directed on this can be devastating.



For some reason we call this 'coffin bone rotation'. This actually makes no sense. The coffin bone can't unhinge and move around – same as any area of the skeleton. It's these outer hoof structures that have moved.

You might keep turning back to these hoof diagrams while working through these pages. Understanding them is essential as you strengthen your horse's hooves – week in, week out.

To some degree all these structures are supposed to touch the ground. How else could they work together, producing tough hooves that function in their environment?

The bars help to produce sole material. The soles compact this material into the hoof, becoming denser, harder and more concave. And the frog allows the hoof to expand, whilst absorbing some of the shock with each step.

Barefoot trimming aids this process. We trim to simulate – to copy - the wild

horses, who maintain their hooves through 20+ miles of movement a day.

We trim to allow our horses' the relatively sedate lifestyle that comes from being domesticated.

To nail on shoes is to completely ignore the structures in this diagram, and render them virtually obsolete.

Can any horse go barefoot?

There's a really simple, but sad answer to this: every horse can go barefoot, but not every owner can allow it, or take the trouble involved. Shod horses are convenient horses.

The truth is every horse is different. So of course, some will take to going barefoot quicker than others.

Horses with relatively good hooves may need very little change, and adapt to barefoot life very quickly. Meanwhile, a long life in shoes, often demands a longer transition period. This could take 12-18 months, but it needn't be a grind.

Routine is key. After you have your routine in place, looking after barefoot horses is no harder than looking after shod horses. And of course it will save you a lot of money as they can stay out much more.

If you are mulling over going barefoot (of course you are, otherwise you wouldn't be reading this) these three factors will determine your success.

- A regular trimming schedule – one that you know you can realistically stick to.
- A good diet.
- Little or no confinement. The more exercise and natural movement your horse has, the better.

It's not just hoof health that counts. Diet and exercise - food and freedom - are two vitally important differences between the way domestic horses and

horses in the wild live their lives.

This will have a huge bearing on how the hooves will cope. But more importantly, how long your horse will live.

As Darwin pointed out in *The Evolution of Species*, nature does not tolerate weakness in any shape or form. Natural selection weeds it out. Evolution leads to extinction or survival. Bearing this in mind, it is totally beyond me how some people are so blind and narrow-minded about going barefoot.

Of course, there will always be people opposed to having a barefoot horse. They can argue with conviction that a shoe is the best way to protect a horse's hoof from wear.

Whilst this may be the case, it's also true that the wonderfully protective steel plate pretty much kills all the ability to absorb shock.

Should you take the plunge?

It may be you've read and reread all of the barefoot information you can find, and still can't take the plunge.

It's okay to feel like that – and don't forget, the option of shoeing is always there: that's never taken away from you.

But it really comes down to this: are you committed to the amount of work it will take to get the horse through the transition period?

If a horse is constantly lame because necessary lifestyle changes are neglected, it's better to keep the horse shod.

However, if you're ready to dedicate the necessary time, you'll reap huge rewards. Like most things in life, what you put into it is what you get out of it. And a strong start doesn't hurt...

Get your setup trim right first time:

If only it were a simple case of kicking off the shoes.

If only it were a case of continuing with the same pasture trim – only barefoot.

But again, the vital lesson in barefoot horse care crops up. We are simulating the hooves found on wild horses.

So it follows logically that when you take off the shoes, the trim must change.

A typical pasture trim gives the hoof a “solar plane”. The sole is thinned, and often the toe callus is removed. The frog is trimmed, and the bars are often left too long. The outer wall is level with the sole.

The result is a flat foot.

What’s natural or healthy about a flat foot? The barefoot horse will be sore over stones until a new layer of dead sole protects the sensitive areas. With the hoof unable to roll, he’ll be more likely to suffer white line separation.

Now, compare that to the hooves of a sound barefoot horse. A good barefoot trim leaves the horse walking away from the trim as well as when he walked in to it – or better during a transition period.

No hard sole is removed, and the frog is only trimmed if there is diseased debris.

Only what needs to be trimmed, is trimmed. Remember, healthy hooves are grown, not trimmed.

The most important difference is that the hoof wall will be lowered to 1/16 inch above the solar plane.

Next is the ‘mustang roll’ – it is then bevelled back to the water line (this is the unpigmented horn just between the white line and the outer wall).

The rolled effect prevents chipping and controls flaring which are both common in pasture trims.

The picture of the hoof on the next page has been given a fresh barefoot trim. The collected mud shows the outer wall bears the most weight. The frog is wide, as are the collateral grooves, allowing the entire hoof to expand.



The pasture trim is a distant memory for this horse. Having spent years barefoot, this horse is now kept easily with a low maintenance trim. However, this is to a much more regular schedule than the average shod horse.

Pasture trims are often done weeks – sometimes months – apart. A barefoot horse needs to be trimmed more regularly - every 3-4 weeks at least (every week in some cases).

There's a very simple reason for this. Hooves respond to wear, and this continually varies. A good barefoot trim just mirrors the natural wear and tear your horse would have clocked up doing 20 plus miles a day. This is what a horse would do in the wild.

You might choose a professional to do this trim for you. Amen to that.

Please don't think for a minute you can buy an ebook, watch a few videos and then confidently trim horses.

You should always ease yourself into the process. And there are some excellent barefoot trimmers out there, ready to help your horse build sound hooves.

But do be wary. Remember, most farriers work with shod horses. To them, the pasture trim is second nature. It's not uncommon to find yourself paying for the wrong expertise.

The problem is summed up well on The Thoughtful Horseman's Blog...

"It is fact that farrier schools and texts seldom address the different needs of the bare hoof (although they ALL advocate leaving the hoof unshod wherever possible) and instead focus on shoeing techniques."

Do not presume your farrier can deliver a sound barefoot trim. Quiz them thoroughly before you let them near your horse. Before anything happens they need to install confidence in you that they understand the differences barefoot trimming calls for.

It can be uncomfortable watching somebody pasture-trim your barefoot horse. Your instincts may tell you the professional is wrong to rasp down the length of the hoof wall. Well, your instincts would be right.

Behind the hoof wall is sensitive tissue and blood rich corium. *Why weaken this structure from the base of the hoof all the way up to the coronary band?*

Find a good barefoot trimmer – one that is happy to answer your questions, be watched over and give you confidence.

Then you can look at the hooves before the next trim and ask yourself, "What would I trim, and why?"

Did the farrier do the same? What did they do differently? Ask them why. In time you'll have the confidence to try a light trim.

Your setup trim is essentially no different to your maintenance barefoot trim (explained in the next chapter). The major difference is that this is your horse's first trim without shoes. You've a lot more work to carry out first time around.

So with the next pages of this book, you'll understand how to trim the hooves, and what you should strive for. It doesn't matter if you're trimming your horse yourself, or watching somebody else do it. You'll be well equipped to deliver the right setup trim, and a life of barefoot bliss.

The shod horse may have a routine trim every 5-6 weeks. But barefoot he walks on individual hooves, unique and different to those of any other horse.

CHAPTER TWO

Your regular maintenance trim

Suddenly there is no automatic rule of thumb. So how often should you trim?

You'll discover the answer to this question yourself as you learn to read your horse's hooves. Start by considering your horse's movement. How does it compare to the wild herds travelling 20-30 miles per day?

Different terrains cause the hoof to act differently. Soft ground will spread the weight across the plain and inner wall evenly. On harder ground, a heel first landing causes the elastic frog to expand as more weight is placed upon it. This will have an impact on how the hoof grows.

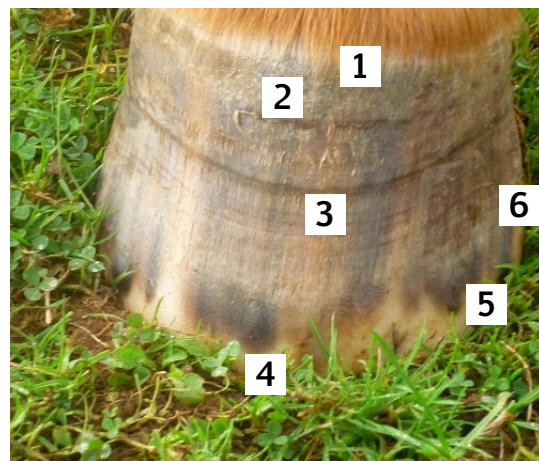
You must consider your horse as an individual. Carry out a regular inspection of his hooves on a level surface.

A healthy hoof has a short heel and toe. You can usually see a rim of sole inside the white line (more so at the toe).

And of course, there is the bevelled edge – the mustang roll – on the outer rim of the hoof wall, which helps reduce splitting and chipping.

The diagram opposite and the following checklist will help you understand your horse's hooves, and assess their health.

- **Are there any hoof imbalances?**
A key part of the trim is how the outer wall supports the whole hoof



- 1. Coronary band:** *This produces the growth of new hoof wall material.*
- 2. Periople:** *Thin layer of soft, flaky horn which forms a protective layer over the join between the coronary band and the hoof wall. In wet weather the periople will swell up and turn a lighter colour.*
- 3. Hoof wall.**
- 4. Toe.**
- 5. Quarters**
- 6. Heel.**

on the ground. This is called ‘hoof balance’. A balanced hoof bears the whole horse on a flat surface with the outer wall in direct contact with the ground. The sole and the frog are not grounded. Just as with the arch of your foot there is no direct contact.

- **Are the toes stretched forwards at all?** Wall flare clearly shows excessive growth. Get trimming!
- **Do the hoof walls appear to have any stretch lines or bulges?** If so, the Quarters may have grown too long.
- **Where are the outer wall support points?** The outer wall does not usually bear the weight evenly. Each horse is different, but some may have three or four areas of the outer hoof wall that are carrying all the weight. Some may bear the weight entirely on one half. Take your lead from the contact points. They tell you a lot about hoof balance.
- **Do the hoof walls have any cracks or splits?** Careful with this one. If the crack can be traced to shoeing or previous growth, ignore it. Let nature take its course and grow out. But if it can't be traced, you need to get trimming.
- **Are the sides pushing outwards?** This will occur with excessive hoof wall growth. It has grown longer than the adjacent sole and frog.
- **Are the heels short? Or are they long and forward growing?** Heels should be short, and meet the ground on a level surface. If they're long and forwards growing, you may need to back the toe up.

The trim that follows will help get rid of such problems and rehabilitate the hoof.

Trim tiny amounts regularly to simulate the wear the hoof would naturally receive. By doing so, the balance and growth of the hoof is manageable. You'll have less to do each time, and you'll keep up with any issues. It also reduces the chance of severe angle changes in the hoof, which can strain the leg.

Removing too much horn makes the hooves hypersensitive. You'll also interfere with the hoof's own naturally driven efforts to grow and shape.



This picture shows a hoof half way through it's trim. Notice, the right of the hoof falls in line with the coronary band. The left still needs some gentle rasping. Invasive trimming can damage the coronary band, and change the way the hoof grows.

Remember, healthy hooves are grown, not trimmed. And this growth begins at the coronary band.



This is a picture of the finished trim.

Most barefoot trimmers work to a routine of 3-4 weeks, starting with...

The sole:

The sole covers most of the hoof's surface area, surrounding the frog. With a view to reading your horse's hooves, this is the best starting point for your trim.

Dead, flaky sole often appears where the hoof needs trimming. It's these areas where the sole is getting no contact with the ground. Scrape this off using the dull side of your farrier knife.

Underneath, you'll find the hoof's live sole. This is smooth, shiny and mustn't be trimmed. Here you'll have a clear picture of the hoof's concavity.

A sound wild horse will have a deep, concave sole, from the white line of the outer wall to the frog. The underside of the hoof looks like a bowl with the deepest point just over the forward half of the frog, behind its apex.

This is the sign of a healthy hoof. A strong white line keeps the coffin bone from pushing down on the sole. Understanding this is crucial to knowing the limits of your horse's sole trim. You must look to the wild horse model as your goal, but never as your first step.

You cannot carve out a concave sole. Doing this would only set the process back further.

Flaky and compacted horn should be scraped away with a hoof knife, but never 'thinned' so it is left soft and too sensitive: it needs to naturally develop into a thick, tough sole.

Concavity will build slowly as your horse moves. He won't exfoliate sole as much as he would in shoes. Instead, sole material will harden, as it's packed down from regular barefoot movement.

To help the hoof along...

- Trim only the dead, exfoliating sole. The hard, live sole must be left. Behind this is sensitive, blood rich corium we have

talked of. It's also essential for developing hard, callused feet.

- Clean out the build up of dead sole material around the frog/sole juncture. Do this lightly, from half way down the frog to its apex. By maintaining a definite line between the frog and the sole, you free the frog of pressure. Its ability to expand and contract would otherwise be restricted. The result is a bare hoof, functioning the same as it would shod.
- Never trim the toe callus. This usually makes up the outer inch of the sole. The toe callus is the weight bearing point. It must be allowed to become thick and hard. During regular trimming, you'll find you're only trimming the sole that surrounds the frog.

The hoof wall:

Once you know where the live sole sits, you can judge the height of the hoof wall. Hoof walls become overgrown when the horse doesn't get enough movement. They take on too much weight, and before long the growth is pushed outwards, away from the white line.

Meanwhile, the sole can't continue its essential callusing process. Without ground contact, it will exfoliate, instead of compacting into a thick, hard, concave structure.

It's true that hoof walls cut too short can cause discomfort. But hoof walls left too long can cause long-term damage. This can mean flaring, cracks, splits, and even heel damage to follow. In fact, most hoof conditions can be traced back to a neglected hoof wall.

A well-trimmed hoof has a straight outer wall that angles down from the hairline to the ground.

Any flare is removed with a rasp, which simulates the natural wear of sand and gravel, mud and other abrasive surfaces.

Your guideline here is to leave no more than 3mm of hoof wall above the level of the sole. 2-3mm is generally ideal. Although the hoof wall should remain slightly above the sole, the step between the two is still small. Be extra

careful not to trim over and into the toe callus.

Next trim the hoof wall's thickness around the bottom. Look to your horse's coronet band. See if the angle of growth changes part way down. A common mistake is to think that the toe is too long. It's not. It has just stretched outwards. Stretched toes are expected on domestic horses. As the hoof grows and the horse moves, the hoof wall continues to pull away from the white line. You must break this cycle.



As you trim the hoof wall's thickness around the bottom, use the white line as your guide. Bring the hoof wall in close to the white line, maintaining the same thickness, right the way around the hoof.

Never, for any reason, trim higher than the bottom third of your horse's hoof wall. No matter what state it's in, the hoof wall is a vital protector of the internal structures. Instead, aim for that initial angle of growth at the coronet band to run true, all the way down to the ground.

Toe angles vary from 50 to 60 degrees in healthy hooves. The toe length will be around 2 ½ to 3 ½ inches, from the hairline to the ground.

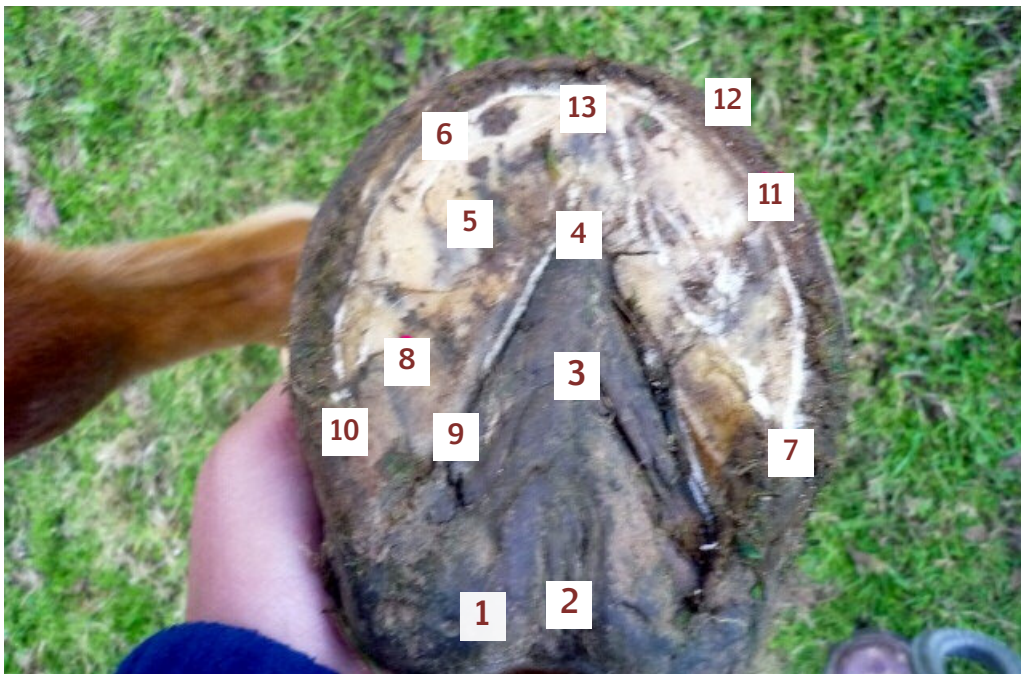
The angle and the length are both important measurements for anyone going barefoot. Record them after each trim. In time, your horse will possess short, stumpy, well-rounded hooves.

The heels:

No wonder the wild horse wears his heels short. Long heels prevent the frog from making any contact with the ground. The hoof cannot expand and contract. The coffin bone is tilted upright, driving its point downwards through the hoof. And the heels can grow forwards, becoming under-run.

Without the ability to self-trim, the domestic horse relieves pain by shifting to a toe first landing. This feeds the vicious cycle, moving him closer to lameness.

With the heels, sole growth will once again tell you how far to trim. This time, look to the hoof's seat of corn (see point 7 on the diagram below). Scrape away any dead sole, and see how far the heels stand above these points. These two points mark the level that the heels should be brought to.



1. Bulbs of the heel 2. Central sulcus 3. The frog
 4. The apex of the frog 5. The sole 6. The white line 7. The seat of corn
 8. The bar 9. Collateral groove 10. Heel Buttress 11. Inner hoof wall
 12. Outer hoof wall 13. Toe callus

Rasp down the heel bulbs, and bars to the level of the seat of corn. Take care not to go below the hoof's live sole level.

When you've done this, lay your rasp across the heels. Your aim is for a heel-

landing platform that includes the heel bulbs, the frog and the rear of the bars. The heel bulbs should be even, making equal contact with the ground.

The heel-buttresses are trimmed and worn in a manner never seen in conventional shoeing.

It's unlikely you'll achieve all this with one trim. You must rely on barefoot movement to work with you. In time, the heels will de-contract, soreness will disappear, and they'll begin to lower themselves.

Feral - wild - horses walk on the back of their heels, and this is the wear and tear that nature intended. This is why you must apply the mustang roll to the entire heel-buttress. Keep reading the soles at the seat of corn, and trim to their direction.

The bars:

From the heels, the hoof wall turns inwards, running towards the frog. These are the hoof's bars. Look at them closely. They should begin with the heel at the level of sole, running in a downward slope.

Overgrown bars are painful for the horse (imagine that pressure on your feet). They'll push up, into the sole, and cause flares in the hoof wall. They'll crush, spreading outwards into the sole.

After you've trimmed away the dead sole around the bars, you'll see if they're functioning properly. They should bear partial weight. Only the rear of the bars should make contact with the ground. At the back, trim them to the level of the heels. Then, using the tip of your farrier knife, slowly scrape away at the bars, sloping them downwards to their finishing point.

Look carefully and you might find the bars are overlaid. They can be difficult to spot, as they're crushed in with the sole. Trim this away carefully over time. Slowly, as the hoof recovers and expands, they'll stand proud above the level of sole.

The frog:

The frog allows the hoof to expand upon landing. It also plays a major role in the hoof's ability to absorb shock.

A healthy frog is smooth, wide and even on both sides. It is trimmed or worn to the level of the ground and heel buttresses. The ridge running through the middle (the central sulcus) is shallow and clear. This helps the heels expand.

You can assess the health of a hoof's frog after trimming the walls, heels and dead sole within the collateral grooves. Lay your rasp across the heel-landing platform. Check that the frog is level 1/3 of the way down, making contact. Then lay your rasp across the hoof walls at the tip of the frog. This area should not be weight bearing.

If necessary, trim the frog level with the heels, using your farrier knife. Next, make sure it follows a slope downwards towards its tip. Clear the central sulcus of dirt and debris.

If you've cleared the collateral grooves the frog should be able to expand properly. If it bulges over these, trim the sides carefully to bring it back into place.

A horse that's just come out of shoes may have a shrivelled frog. Confined to the shoe, it hasn't been able to expand naturally. The result is contracted heels, poor shock absorbance and a deep central sulcus. This can be a breeding ground for thrush.

But the frog is a softer tissue, and will grow relatively fast. Keep it clean, in the correct position, and give your horse regular exercise. In time it will expand.

The quarters:

The hoof walls aren't finished yet. Look again to the sole. You'll probably see it craving a slightly shorter hoof wall at the quarters (the sides of the hoof wall, between the back of the toe and the heels).

This is the natural direction of the hoof. The slight arch (or 'scoop' as it's called) helps the hoof expand on impact. It's a vital component of the horse's shock absorbing system.

As with a shod horse, quarters that are the same length as the toe result in a flat foot. The hoof cannot expand, and unwelcome stresses surround the

hoof wall. 'Bulging' higher up, is a common occurrence where quarters are left too long.

Use flat ground, or a rasp to check along the sides of the hoof. The scoop shouldn't be too prominent (only 2-3mm) - just enough room to tuck your fingernail underneath. And the arch should remain just above the level of sole.

Though small, the scoop must exist for healthy hoof function. If needed, trim a slight arch into the sides of the hoof wall, and inspect again on a flat surface.

The hairline:

The hairline descends from the midline of the toe to each quarter, where it curves sharply to the heels and heel bulbs.

At the heels the hairline touches the frog at ground level.

The angle of the hairline can vary greatly, and is influenced by the size and shape of the coffin bone.

A barefoot trimmer should always leave the hairline contours well alone. Never try and manipulate here.

The mustang roll:

Take a quick look at a wild hoof photo. It tells you how the mustang roll should appear.

Far from ending with a perfect trim, 20+ miles of wild movement beats the hoof into a beautifully rounded object. The mustang roll doesn't exist after a domestic barefoot trim. It cannot be forgotten.

A well-positioned mustang roll addresses almost every hoof ailment that afflicts the domestic horse. Apply this around the entire hoof. You'll find...

- Leverage is removed from the toe at the break-over point.
This stops the toe from stretching outwards and flaring.
- Jarring is taken away from the heel points on landing.

The concussion is now absorbed across the entire heel-bar platform.

- The risk of splits and cracks is reduced.
- The risk of abscessing is reduced.
- The vital callusing process is helped along.

The mustang roll is made up of two bevels.

First, use your rasp to bevel around the top edge of the hoof wall, from the toe round to the heels.

Then apply your second bevel underneath the hoof wall. Starting at the toe's point of break-over, go right the way around the hoof, including the heels.

Your second bevel should be trimmed at a 90 degree angle to the floor.

Inspection:

When you've finished your trim, step back and inspect the hooves. The pictures below give you an idea of how they should look. These hooves are balanced, round and have even growth on both sides. The hoof wall grows in line with the coronary band at the top.



The fore hoof (above) is weight bearing. It's wide and more circular. This allows greater expansion as they hit the ground.



The hinds (above) should grow at a slightly steeper angle. The hind hoof is narrower and more concave. This helps the horse power forwards on varied terrain.

You'll notice the difference if you look closely at your horse's foot prints in the snow. In the next picture, the left print is from a fore hoof. The right print is a hind. It clearly shows the difference in shape. When inspecting the hooves, remember these differences are perfectly natural.



Very important: your horse should never be less comfortable than before the trim. If he's suddenly sore from trimming, you went too far. Find out where you went wrong and correct it next time.

It's a good idea to use a note pad during inspection. Write down any concerns you have, and track the hooves' progress. You'll read the hooves better, and stay on top of any problems you need to address and rehabilitate.

CHAPTER THREE



Assessing and solving common barefoot problems

It's rare to find a wild horse with flared hooves, let alone a wild horse who's foundered or navicular. None of the problems that follow can be the result of barefoot living alone.

How hard it is watching a horse return to shoes because 'barefoot didn't work for them'. Never do such owners consider whether their horse's trimming frequency was the problem, or the diet, or even the shoes they just left. Besides, shoeing can never solve a problem, only hide it – And then make it worse.

You need patience to deal with all these issues and gain a sound barefoot horse.

You may even have a sound barefoot horse. Well, is a simple case of the horse finding his feet really an issue?

Transitioning:

When's the best time to take the plunge and go barefoot?

Normally, when it's time for your horse to be shod again. That's a perfect time.

The wall length will be at its maximum, making the trimming less daunting.

You can also use the time before the shoes come off to get used to your new routine. Chances are the horse will have to change his 'life style' in some capacity. Diet and exercise are critically important.

Now is the perfect time to get his diet checked so all the right nutrients are available to grow his new hooves when the shoes come off.

Now, your horse may seem uncomfortable, feeling the ground during the early days of transition. But that's only because he couldn't feel the ground at all whilst wearing shoes.

You should be proud of yourself. Blood is pumping back to the horse's feet, strengthening the weakened hoof structures and feeding the starved white line.

For goodness sake don't quit now! Many are tempted to return to shoes at this point. It's the worst possible side effect of rider frustration.

On the other end of the spectrum are those who try 'tough love', forcing their horse to walk on harsh terrain. This only slows the process further.

Transition isn't just about building harder soles. Your biggest job is to strengthen the white line. A white line starved by shoes allows the hoof's coffin bone to meet with the sensitive sole corium. The soles feel sore, and need rest as you bring the white line back to good health.

To aide your horse through transition...

- Adopt the 'White Line Strategy' where flaring occurs. This involves bringing the mustang roll all the way to the edge of the sole. Your horse may be a little sore, but not as sore as he'd be with a stretched White Line.
- Use hoof boots on harsher terrain. And insert sole pads if your horse needs them after trimming.

- Trim frequently. It does far more good to adopt a strategy of ‘little and often’. You’ll notice any slight changes in your horse’s hooves, and act long before it becomes a serious issue. Flare is one of the most common problems to keep on top of during transition.
- Keep your horse turned out as much as possible (ideally 24 hours a day).

Your transition time will depend on the horse, and how well you follow these guidelines. A horse that has no immediate problems will probably be quite happy at pasture or for short distances on a hard flat surface.

This would mean that with the right diet and exercise, your horse could be completely sound in just a few weeks.

However, this is not always the case.

A horse with very flat soles and flare can take months to reach the same level of soundness.

You can get a measure of what to expect by thinking back to when your horse last lost a shoe. Did it bother him? Or was he sore quite early on?

When you take the plunge, be mindful that the hooves need time to get used to their new freedom.

As clever as Mother Nature is, you can’t expect instant results. Patience is your most valuable ally when solving barefoot issues. Never is that more true than during transition.

You must also remember movement is crucial for the development of the frog, sole and heel. If your horse seems too sore, don’t lose heart. Through this phase, boots and pads can be used to keep your horse working.

Using hoof boots during transition and rehabilitation:

The shoe spreads a horse’s weight on to the hoof’s outer wall. The frog, sole and heel have very little stimulus. This means they are not developed – the

complete opposite of a barefoot horse.

The chances are, when your horse comes out of shoes, he will have a long capsule, thin sole and very little concavity.

Continue with your normal mileage, and the amount of wear on the hooves will likely exceed the growth. Should your horse appear sore, boots and pads are your first step forwards.

Perhaps your memory of hoof boots is one of constantly getting on and off to fit them. Or backtracking miles and miles to find them. Don't worry, they are now quite different. Not only do they stay put, they are comfortable for the horse too. Modern materials mean boots have come a long way.

Turn to Pete Ramey's 2003 book, *Making natural horse care work for you*. In the hoof boot section he writes, "the biggest advantage I see is that they get owners of horses in rehabilitation on their horses sooner".

Now, visit Pete Ramey's website. He views boots as a crucial tool in hoof rehabilitation.

At last, we can break the vicious cycle that links lack of movement with continuing hoof degeneration.

We can provide comfort for horses who would otherwise be immobile from founder or navicular.

And we can do all this using protection that flexes with the hoof.

Firstly, hoof boots still allow the hoof to function as nature intended – the shock is dissipated and the hoof is still free to expand and contract, allowing good circulation.

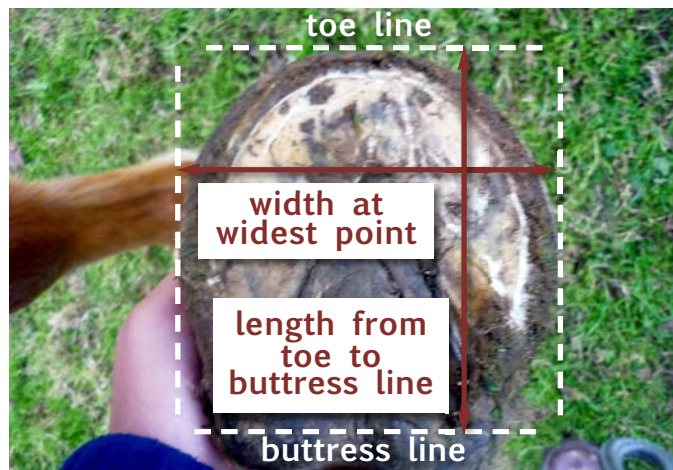
Secondly, it's likely the boots will only be on for a couple of hours a day, so the hooves have the rest of the time to adapt to being barefoot.

Hoof boots are practical. If you only have a few hours each week to ride, boots give you that opportunity in the transition period. This also keeps your

horse's fitness up, and of course, the more mobile he is, the quicker the hooves will adapt.

It's hard to find a horse that doesn't take to wearing hoof boots. They seldom object to the boots going on after the first time.

Indeed, it's almost always the fitting that lets people down. So if you're not having your boots fitted professionally, here are some tips to help you get the right size.



The points of the hoof to use when measuring for hoof boots

- Only begin measuring after a fresh trim. Boots allow for hoof growth, but are virtually impossible to use if they're too big.
- Take precise measurements, down to the correct millimeter.
- Measure the width of the hoof at its widest point.
- Measure the length of the hoof from the toe to the heel buttress. These are the weight bearing points.
- Measure with a flat line over the soles and frog. The boot itself will be a platform for the weight bearing sections of the hoof. In-soles are needed to stimulate other structures.
- If your horse has underrun heels, measure to where they should fall.

- Measure all four hooves. It seems obvious, but it's easily forgotten. When it comes to the important millimeters, your horse's hooves might be very different.
- Make sure the brand is appropriate for your horse. EasyCare Epics and Bares are popular. Old Mac G2s are also useful for wider, more round hooves. EasyCare's site is excellent for selecting the right boot from their range. Each option has charts for size, traction, difficulty to apply, hoof shape, recommended mileage, plus articles describing its function.

You can hire boots first, before choosing to buy. This works well as a trial, to see which brand best suits your horse.

Whether you're rehabilitating, riding or soaking, hoof boots will bless your life on the horse. Just because you use them for the transition, or regularly, doesn't mean your horses aren't 'barefoot horses'. They are still using their hooves as nature intended.

But remember, hoof boots are still just an aid for your horse, not to hide poor hooves. Boots aren't going to make up for poor diet and poor trimming.

If you need boots as permanent crutches, there's certainly an underlying problem. Look to your horse's nutrition before anything else.

Abscesses:

One of the most common problems in the transition period is an abscess. You'll know when your horse has one, because he'll develop severe lameness. Not only is this alarming, it can sometimes happen within a few hours.

I know it's easy to say, but try not to panic. Have a vet check your horse over to make sure it is nothing more serious and get some management advice.

Although not every horse develops abscesses in the transition period, the longer your horse has been shod, the more likely it is to happen

This is because a shod horse accumulates cellular debris in the hoof capsule

quite happily. But when the shoes come off, the circulation starts whizzing around the hoof again and the debris is not easily absorbed within the blood stream. The only way to get rid of it is through an abscess.

When the abscess bursts, it usually does so through the soft tissue of the coronet band or the heel. If this happens, keep the area as clean as you can, boot him up and let him move as much as he wants: the more he moves, the quicker his body will expel the waste and heal.

Within just a few days, you should be firmly back on track with going barefoot.

Flares, bulges and cracks:

Waiting for your horse's hooves to adapt and strengthen is stressful. It doesn't matter how long transition takes.

Flare (outwards growth on the bottom of the hoof) can happen from excessive growth, infrequent trimming or stress.

Flaring and bulging points to a stretched white line. Unusual mechanical forces have pushed the hoof out, away from the coffin bone.

Horses with neglected, overgrown hoof walls are especially at risk. The hoof wall takes on too much weight forcing the growth outwards.

Horses without a mustang roll are at risk. The leverage on the ground prises the hoof wall away from the coffin bone.

And of course transitioning horses are also at particular risk. Their white line is already weak and stretchy.

The picture opposite shows a flared hoof. See how the hoof wall is sloping away from the coronary band. This white line pressure is painful for the horse.

The slightest of flares, cracks and bulges



have kept barefoot horse owners awake at night. This is undoubtedly because a simple flare, left to its own devices, can become mechanical founder.

The trouble is every horse has its own optimum angle. The right hoof/pastern angle is what you have to watch for. The pastern bone should remain in line with the dorsal angle of the hoof when the horse is standing.

Another useful thing to watch out for is the inch of new growth below the coronet band. See if it matches the angle of older growth below.

Don't panic if there's a change of direction. These issues are easily resolved if caught early. You must help your horse grow the problem out. Take action by regularly trimming the walls, quarters, and applying the mustang roll. This alone can deal with most flares, cracks and bulges.

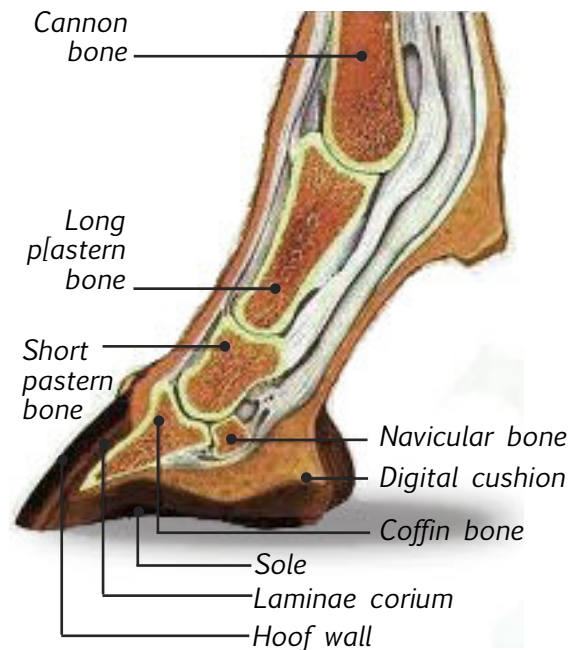
You can take a great deal of strain off a weakened white line by bringing the mustang roll back to the edge of the sole. When your horse is ready, move the mustang roll forwards again to the usual water line.

With more pressure on the soles, this can be uncomfortable for your horse. But as barefoot expert Margaret Smith says...

"We see repeatedly that white line pain bothers horses more than sole pain."

Whether you follow this 'White Line Strategy' or not, the mustang roll is always the most important part of your trim. Not just for dealing with flares, but splits and bulges too.

Renew this weekly, keeping flared sections off the ground at the point of break-over. It's the only way you can contain the problem as new hoof material grows out.



Please remember to trim no higher than the bottom third of the hoof. It may be tempting to rasp down that bulge or crack that runs further up, but you must restrain yourself. Your horse's hoof wall is still a vital protector of the internal structures. Besides, it cannot reconnect to the coffin bone once separated. The only way to tighten up your horse's white line is to encourage growth of new hoof material.

Keep that mustang roll renewed. And keep your horse turned out and moving as much as possible.

Founder/Laminitis

Founder is a severe case of flaring. The horse loses all white line integrity, and the hoof wall detaches from the coffin bone. The result is severe pain and lameness.



Founder/Laminitis

Although a simple flare can lead to mechanical founder, this is more common among shod horses. It's laminitis that founders a horse with very little warning. You'll often see the two conditions mentioned in the same sentence.

Laminitis is an inflammation of the laminae. The white line is weakened, right the way through. For the wild horse on low quality pastures, laminitis is little more than a painful interruption. He'll soak his hooves in water and keep moving (as he's forced to do each day). Unable to roam wild, your horse relies on your fast action.

Laminitis can be the result of illness - blood poisoning, colic, or infection. However, in most cases, overloading on sugar is the cause. This sugar is often hidden in lush pastures, legumes, feed and even supplements.

When faced with a foundered horse, your first thought shouldn't be to pick up the rasp. Instead, encourage as much movement as possible and take strict control of your horse's diet.

24-hour turnout on a dirt pasture halts the feeding of lush, green grass that is high in sugar. Give your horse 24-hour access to grass hay and fresh water. And stick with it – No grass, no grain and no legumes during rehabilitation.

Of course, force walking a lame horse is cruel, and you mustn't panic if your patient is lying down. He is, after all, under a lot of strain. But you can encourage your horse to move around by placing his food, water and shelter far apart in the paddock. If possible, turn your horse out with a second horse. This is another good way to keep his feet moving.



Your task with a foundered horse is simple and straightforward. You must grow strong, new hoof material around the coffin bone, just as any barefoot horse owner strives for each day. Though similar, in this case the trim is designed to bring relief to the horse's feet.

Back up the foundered toes, using a vertical cut from the edge of the white line at the bottom of the hoof. Then trim the heels, following the sole's guidelines at the seat of corn. As with the maintenance trim, the sole is your map to knowing where the coffin bone is, and where it wants new hoof growth.

A healthy horse bears most of his weight on the front legs. At founder he'll lean back to relieve the pain. This is called 'founder stance'.

Founder stance puts unnatural strain on the muscles and ligaments in the hind legs. It causes the hind toes to grow out long, and the heels to move forwards. Avoid this by backing up the hind toes to the white line.

This is not a complete 'do it yourself' guide to founder rehabilitation. The subject itself demands an entire book. Luckily, someone has written it – and very well too. Jaime Jackson wrote the excellent book 'Founder'. You should read it, no matter what the health of your horse.

You can also turn to the advice of vets and barefoot professionals. A vet's painkillers don't cure the problem, but do help keep your horse moving. This is a most important part of founder rehabilitation. Drugs can also be prescribed to help reduce the inflammation.

Contracted heels and thrush:

Most transitioning hooves suffer a degree of heel contraction. The frog is narrow and shrivelled, pulling the heel bulbs inwards.

It's vital that you appreciate one thing. Movement is the remedy. Any trim that tries to 'de-contract' the heels would be invasive. As the frog is stimulated it will expand, and so will the heel bulbs.

However, during this time you must be extra wary of thrush in the frog. Contracted, the central sulcus is far too deep. It creates an environment that's ripe for bacteria.

Thrush eats away at the frog. The horse becomes sore, and shifts to a toe first landing. Without stimulation, the frog weakens further, and so the problem continues.

To help your horse as the frog transitions:

- Hand-walk your horse on a hard surface (if possible) for 15-20 minutes per day. Roads and pea gravel are both excellent for stimulating the frog.
- Clean the hoof regularly of foul mud. Doing this while standing your horse in fresh mud, delivers new protection to the frog.
- Take extra care to clear the central sulcus and collateral grooves.
- After cleaning, keep your horse's hooves as dry as possible.
- If your horse is uncomfortable moving, use hoof boot insoles. Cut them to apply gentle pressure to the frog. This will ensure its stimulation and growth.

If your horse is infected with thrush, all the more reason to follow these steps. You must keep the frog growing faster than the thrush can attack it. Also, soak the hoof 20 – 30 minutes a day in Apple Cider Vinegar.

Thrush should concern you anyhow, regardless of your horse's health. Even a fully transitioned hoof can be afflicted. And hooves shod from an early age may not fully de-contract. The coffin bone has grown to the constraints of the shoe.

But there's no reason why this should be a worry. Just be wary of thrush – always – and work to prevent it. You can keep a perfectly sound barefoot horse, no matter how contracted his heels are.

Under-run heels:

The heel on a healthy hoof is short and steep. The frog makes light contact with the ground, and the quarters are free to expand with it. The digital cushion at the back is large and fatty. By nurturing these structures, the hoof continues the essential 'heel first landing'.

When these structures are neglected (commonly through shoeing) the hoof becomes flat and the heels grow forwards. The position of the hoof's landing surface changes. The heel angle becomes less steep than that of the outer hoof wall.

These are under-run heels. Suddenly the hoof is in an unnatural position in relation to the coffin bone. The area of direct pressure has moved, from behind the coffin bone to underneath it.

This puts immense strain on the navicular bone and soft tissues within. Under such pain, the horse's only option is to move his landing to the toes, further weakening the hoof.

As you've probably gathered, under-run heels are rarely a 'heel only problem'. You must focus on the health of the entire hoof capsule.

To begin, a forward growing toe almost always accompanies the problem. Start by backing up the toe, moving the base into the correct position.

Next, make sure the hoof isn't flat. This means applying the mustang roll, but also scooping the quarters to the correct height. When the quarters are left too long, bulging appears in the hoof wall above them. This forces the hoof to grow forwards, rather than down.

Always shorten under-run heels that have grown too long. As usual, the sole at the hoof's seat of corn will direct you on the height of the heels.

These measures cannot bring immediate soundness. As I keep saying, strong hooves are grown, not trimmed. However, shortening the heels and removing the cause of abnormal growth will soon bring your horse's under-run heels into check.

Always watch your horse's hooves to make sure they're growing properly, and keep trimming when they need help.

Navicular:

One shudders to think how many horses in recent years have been put down for being 'navicular'. Trimming to the wild horse shape is found to easily relieve what many believe is an "incurable condition". This has been proven time and time again.

As we already mentioned, if your horse's heels are under-run, their landing is too far forward. The pressure on the navicular bone is brought directly underneath it, rather than behind it. The problem is completely mechanical.

Navicular points to an inflammation of the impar ligament that holds the bone in place. The pain causes the horse to wear away the bone. This is serious. But over wearing of the navicular bone is not a sign of disease. It's a sign of incorrect hoof shape.

Barefoot virtuoso, Pete Ramey says this...

"It is a simple fact that I have never seen a "navicular horse" fail to be completely healed under my care."

As he then points out, you can attack the problem with regular trimming and observation. So follow the methods in this book. It will restore health to your horse's heels, bringing them back into place.

As you back up the toe and shorten the heel your horse will slowly land heel first with greater consistency. With that, the pain should disappear.

It's a crying shame. Many of today's 'navicular horses' will still endure a lifetime of painkillers, until inevitably, the pain becomes too much. Once again, we can learn from the wild where navicular pain is virtually unknown.

CHAPTER THREE



Considering diet as a route to barefoot soundness

Obviously, preventing ailments in your horse is better than a cure.

And keeping a healthy horse takes more than a rasp. Laminitis alone is proof of this.

Indeed, it's a mistake just to worry about trimming. Diet and surroundings are just as important - perhaps more so.

It's time to consider your horse's lifestyle, from your horse's perspective.

The stall:

Confinement is contrary to nature. And nature knows best.

If your horse can't roam around as nature intended, he can't forage for the natural plants and herbs essential to being as healthy as possible.

The more a horse is confined, the less conditioning the hooves are getting.

What's more, it doesn't take a genius to realise that standing in his own dung and urine, hour after hour, isn't ideal for hoof health.

Some still consider 'stall rest', a viable cure for hoof problems. They forget,

the stall was invented for one reason only – human convenience. Perhaps more important than hooves or health, is the fact that horses are happier outside.

The horse is an intelligent animal. Head rocking, and other ‘stable vices’ can develop as a result of the extreme boredom.

Take action. 24 hour turnout is best for your horse. If you can’t manage that, aim to limit your horse’s stall time as much as possible.

Finding a diet that’s low in sugar:

Hooves that simply will not improve are often a manifestation of poor diet. You’ll have to surround him with the ideal conditions. Otherwise, transition would be a slow and worrying process.

A good diet is simply a natural diet. Your horse doesn’t need anything ‘special’. Give him what nature intended and you’ll have fine, healthy hooves.

The trouble is, many domestic horse diets are deceiving. They may look as though they’re a natural diet, but they are far from it.

In the wild, a horse will eat short, dry grass, herbs, hedges and trees. And he will cover many miles to do so.

Now, let’s compare this with a ‘domestic’.

The horse usually only has a few acres to exercise in, or is stabled. The fields are planted with rich grass to grow all year round. Of course, this means they’re high in sugars, starch and lack in herbs.

The hard feed is no better. It’s usually coated in molasses to reduce dust and make it more ‘tasty’.

These may not sound like big differences to you, but:

A natural diet is packed full of fibre.

Without fibre, a horse’s gut doesn’t function properly.

A slow, steady intake of fibre, with herbs and other plants, keeps the blood sugar levels steady.

Horses, just like us, act differently when their sugar levels increase or drop. And the high sugar and starch levels in a domestic diet mean it's easier for your horse to put on weight.

When this happens, it may sound obvious to restrict grazing, but this takes your horse further away from nature, with long periods of not eating and digesting fibre. It's a vicious cycle.

Ideally, your horse's pasture should be allowed to regenerate naturally (you can encourage this using a broad meadow seed with herbs).

Grass that looks long and rough is believed to have a much lower sugar level than short rich grass. It will also mean your horse will never go prolonged periods of time without fibre, which is critical for optimum health.

If there is only short, rich grass available, another option is to leave piles of meadow hay dotted around the field. This has to be managed so your horse does not put on weight. If that's too much work, you can leave some small holed nets around the field as slow feeders.

Supplements:

Low sugar forage should be the largest part of your horse's diet. But this does not supply everything your horse needs on its own.

Any deficiency will soon be seen in his hooves or general health.

To avoid this, have your grass and hay analysed. This way you know which supplements complete your horse's diet.

The alternative to grass and hay testing is a multivitamin approach that covers all areas that may be lacking. Stay away from the supplements with added sugars.

Vitamin H (Biotin) is very important for hoof health. It is often fed with

methionine and zinc to help with absorption.

Magnesium oxide is also very important, especially during the transition period.

Another supplement worth mentioning is a good prebiotic and probiotic. These are live bacteria that have a significant impact on the health of a horse's gut. Many hoof-related problems (such as laminitis) can start from the gut.

The importance of whole oats:

The enzymes in your horse's small intestine, face a constant battle against acid. Overloaded with food that's high in starch, the digestive process will be hindered.

This disrupts the PH balance within your horse, leading to ulcers, gas, even colic (as mentioned, this can lead to laminitis).

Whole oats will fight on your side. They have a 90% starch digestability, compared to the 30% - 35% starch digestability of barley and corn. They're easily broken down within the small intestine.

However, whole oats are of course high in fat. So consider your horse's work load when feeding, along with the amount of time he spends stabled.

Generally, a 1330lb horse exercised regularly (as all domestic horses should be) should have a maximum of 5lbs of whole oats with each meal.

CHAPTER FIVE



Conclusion

Sound hooves are grown, not trimmed. I've mentioned this before. I could have mentioned it after every chapter.

We should never trim simply to achieve a barefoot goal. To do so would most likely harm the horse, and set his progress backwards. This is seen continually, when trimming the soles, the heels, anywhere on the hoof.

It is vital to understand that we trim to imitate the rigours of wild horse living. Only when you have done so can you genuinely appreciate much of what it takes to be an exceptional barefoot trimmer.

You cannot trim to rehabilitate the hoof, only to help the hoof rehabilitate itself. You cannot trim to build hoof strength. This must work in partnership with your horse's diet and exercise. And if your horse is uncomfortable after a trim, you know you've gone too far. Seek out where you went wrong, and trim with caution next time.

Perhaps today, somewhere in Wild Horse Country, a mare is giving birth. Almost immediately, her foal must keep up with the herd. If he fails, death will arrive sooner than any hoof problems. Yet the wild foal's life should deliver a comforting lesson for you.

Your horse was born tough. Ride and enjoy him as much as you possibly can. The more you do, the less you'll need this information.