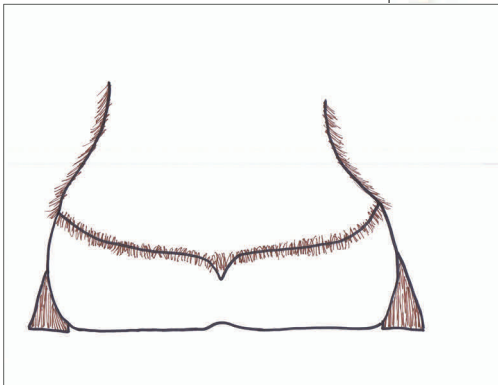




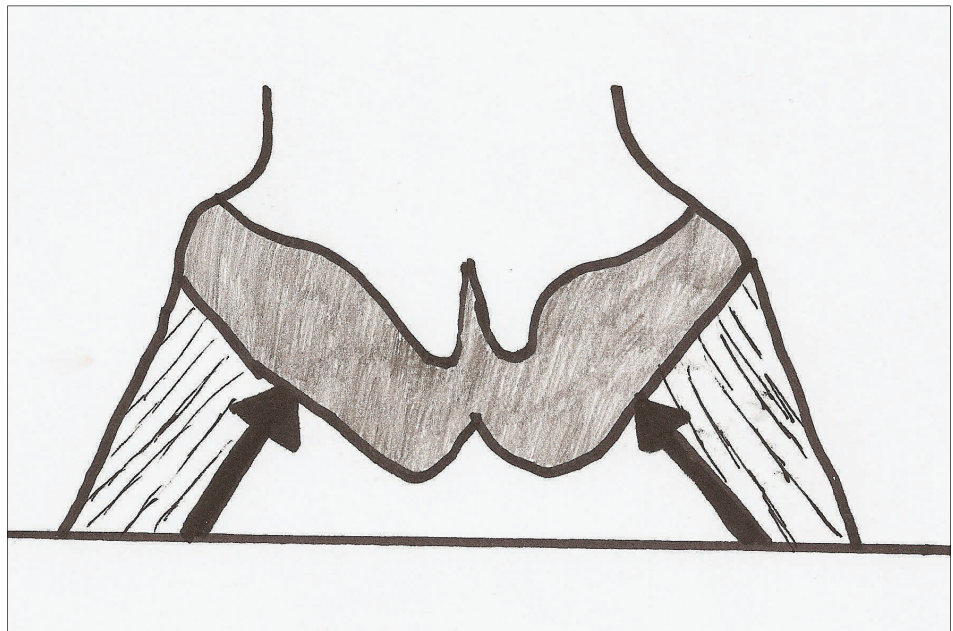
Bulb Contraction

The bulbs merge with the frog on the volar (*) side of the hoof. The last third of the frog and the bulb bear weight under normal circumstances.

Right and below: Fairly healthy bulbs



Below: Bulb contraction is primarily caused by the lever actions of long, outward growing heel horn. Acting at an angle, this forces the coronet area in the heels together, levering towards the mid-line of the hoof.



(*)volar : relating to the palm of the hand or the sole of the foot; *specifically* : located on the same side as the palm of the hand <the *volar* part of the forearm>

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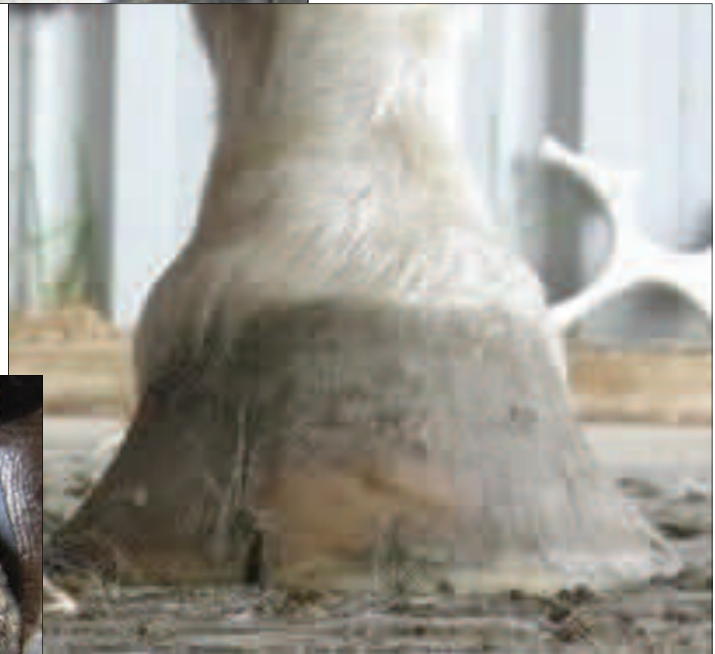
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The bulbs are very thin. The digital cushion is virtually non-existent. There is no "substance" to the back of the hoof.

Right: This is how this hoof looks from the front.



Left: This is a sole view of the



same hoof.



Causes for Bulb Contraction

Bulb contraction is primarily caused by the lever actions of long, outward growing heels. These force the lateral cartilage and coronet area in the heels together. The bulbs are folded into the central frog groove. The lateral cartilages are bend inward instead of laying straight against the palmar processes. The longer the heels are, the greater are the lever forces exerted on the bulb.

Trimming for Bulb Contraction

In a contracted hoof the bulb and frog are usually thinner than in a healthy hoof. When trimming for this kind of contraction, it is important to leave as much heel as it is necessary for proper heel height. The wall will be left protruding from the bulb. The bulb will regenerate with sufficient circulation (movement).

The forces on bulb contraction will change as the hoof is brought more into it's correct form. As bulb and heel contraction usually go together, we will share more trimming techniques about heel contraction.



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Here is a progress report from Lynn Williams in New Zealand. She worked on the horse with the hooves depicting bulb contraction on page 2.



He's an unraced 9 year old TB - 15.2. Came from up north and was retired as a 'navicular' horse at 7.



Was being sold cheap as a paddock companion / light hacking. The woman who wanted to buy him hoped to be able to get his feet right and contacted me for help. The first lot of pics were taken by an SHP who did a check on the feet on my recommendation. By the time he got down here a couple of months later the feet looked even worse than they had in August. It would have been pretty damp where he was at that time of year and as the hooves dried out the full extent of the under-slung heel and bulb contraction was more apparent.

He came to live with me for a few weeks while the owner sorted out accommodation for him and to give me a chance to work on the feet and other issues. He lived with my herd and ate pretty much what they ate. He was a bit thin when he arrived but soon filled out on varied pasture, loads of meadow hay, a cup of oats and soaked sugar beet with a bit of lucerne [alfalfa] chaff. He wouldn't touch any of the hemp and linseed pellets I give my horses but hoovered up the oats. I gave him some extra iodized salt and selenium for a couple of weeks and then just the liquid kelp solution



LF sole
Above Aug 8
Below Sept 9
Right Oct 12



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I feed my others, nothing special. I soaked his feet in water and a baby bottle sterilizer tab to blitz the bugs for a couple of days, then in ACV; syringed the frog sulcus every second day or so with dilute ACV. Cleaned out the holes in the white line and filled with glaziers putty mixed with tea tree oil. Scrubbed the soles and frogs with a firm brush every day and trimmed weekly to get the heel and bar off the sole but leaving

enough heel to give depth to the back of the foot.

He got to move around a whole lot here - very active - and very fast! Wasn't the most well socialized horse with the others so I think he may have been kept on his own. He is a lovely little horse to handle and to trim though. The bulbs continue to plump up and the frogs to open out. He went away from here in November - the place he went to was not ideal - too wet and insufficient grass (quantity and quality). I threw a hissy fit and said I wouldn't even walk my horses through such a field let alone expect them to live in it (I am very forthright) - and the owner managed to get another, better paddock. He's just been moved to another place - a few acres of a sort of savannah area on river sand with one other horse. He's as happy as - will see how the different soil affects the feet. For him the soft ground is good - just hope it's not too soft.

After he left my place I trimmed pretty much fortnightly up to to Xmas when he wasn't trimmed for a month because the owner was away. Trimmed him three days ago and the walls and toes had got away a bit which has slowed progress a little but not so much.

I hate this hoof form in rehab terms - it's the hardest one I think. His front feet will probably always be a bit flat - and I doubt whether the severely contracted medial heel on the LF will ever open fully. BUT the hinds are astonishing. I could push my forefinger into the frog sulcus up the first knuckle when



Top left - August 9th before purchase
Middle left - September 9th before first trim
Bottom left - September 9th part way thru first trim
Right - after third trim October 12th



he arrived and the heels could be moved apart with very little pressure from my thumbs. The frogs are still very turned inwards but they are opening and the horse has regained concavity very fast. The heels are still too flexible but not nearly as weak as they were. There was a lot of bar pushed right under the frog and once that was released and the toes were backed hard and the heels slid back, they've really opened up. Very satisfying.

What has helped this little guy is his attitude - he's a fun loving horse - happy, light hearted - so he's always on the go and life is all about having fun. AND - he's light on his feet - he touches down very softly - and has no major soft tissue complications. Hopefully he'll grow reasonable enough feet that he'll be able to be ridden without it harming them. The owner is being sensible and giving him the time he needs and will curtail what she does - ie she knows that with flat-tish feet he'll always be at risk of jarring up if worked too hard.



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