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College of Veterinary Medicine

VETERINARY CONTINUING EDUCATION



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## CORRECTIVE FOOT TRIMMING

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As a veterinarian almost all hoof trimming consists of dealing with lameness rather than prevention. This is rather frustrating and furthermore very challenging. Only a limited number of farms have implemented a good hoof health prevention program. Many times the person doing the preventative trimming lacks of knowledge and good understanding of correct trimming procedures. Not to even take into consideration the changes, that occurred in the dairy industry in the last ten years. Hoof care in a large herd environment is so different compare to the small to medium size dairy farm.

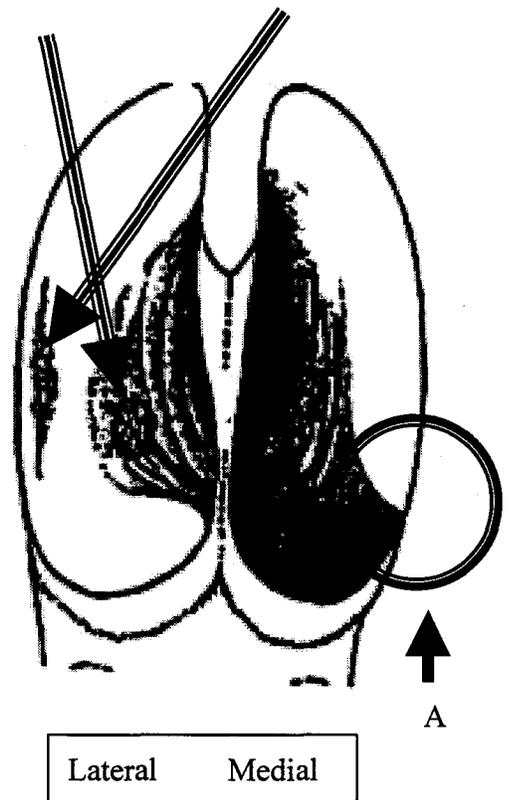
It has been very challenging for myself to keep up with these changes and I must tell you it could never been possible without attending many continued education functions. It is of utmost importance to have a good understanding of the causes of lameness in conjunction with taking into consideration the effects that today's dairy environment has on hoof health. There is a reason why lameness is on the rise. Poor hoof trimming procedures, environments not suitable for cows and lack of management adjustments are the culprits of this lameness epidemic.

Dealing with lame cows is always challenging. Through many years of experience I will describe a few simple steps of corrective trimming. When dealing with lameness in the hind limbs, 85 % of all lameness is at the typical site of the sole ulcer or at the white line of the lateral claw.

How do we proceed?

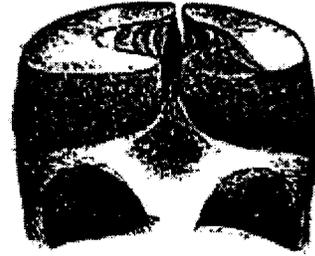
### Step 1:

Check the length of the medial claw. In many cases the medial claw is already the correct length and does not need any trimming. The heel (A) of the medial claw must be spared this means that we should never trim this area unless it is determined that lameness is in this area. A common mistake that is made by many is that the medial claw is checked for lameness and trimmed to thin. This can be especially devastating if at a later point in the procedure we have to apply a block to the medial claw. Also by trimming the medial claw we loose height that will benefit us in balancing the heels.



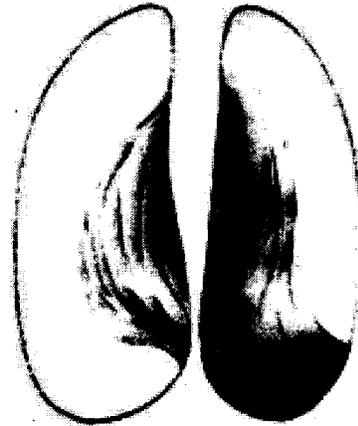
**Step 2.**

Trim the lateral claw to the same length, size and balance. Here many times we have to do some extensive trimming because it is the lateral claw that is always overgrown and out of balance. If in the process of doing the first step we removed heel of the medial claw it will be difficult to balance the heels.



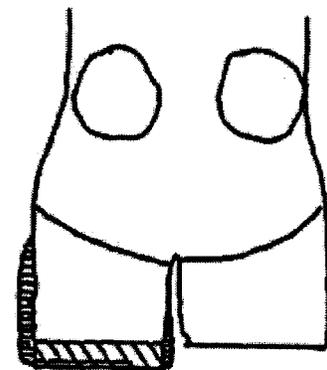
**Step 3.**

Now we slightly model or cup the typical area of both claws. The medial claw many times has a natural model and needs little trimming. The lateral claw is always overgrown and it needs extensive trimming to relieve the pressure on the typical sole ulcer site. It is a goal that when this step is finished we end up with equal square inches of surface on each claw.



**Step 4.**

After some trimming on the lateral claw lesions start to occur. By now we should have found the lameness. In many cases it will be a sole ulcer or a white line lesion. In this case we lower the heel of the lateral claw starting from where the axial wall quits in the toe area towards the heel. We lower the whole area towards the heel. The reason we remove horn from this area is to rest the deceased area of the claw by taking the concussion away. A good guide is to have 1/2 inch of rest for any problem that occurs but milder lesions will heal with less. If in case the sole part of the heel is already thin after Step 2, and we find a lesion we apply a block to the medial claw.



(medial) (lateral)

## Step 5.

By now we have found the lesions causing the lameness. It is very important to follow this step through. We trim away all the loose horn that is associated with a lesion (sole ulcer, white line lesion, toe ulcer, double sole, abscess etc.). This step is essential for prompt healing. Hard edges or sharp points are a liability and slow down the healing process. Good healing will occur if we have a gradual increase of horn around a lesion.

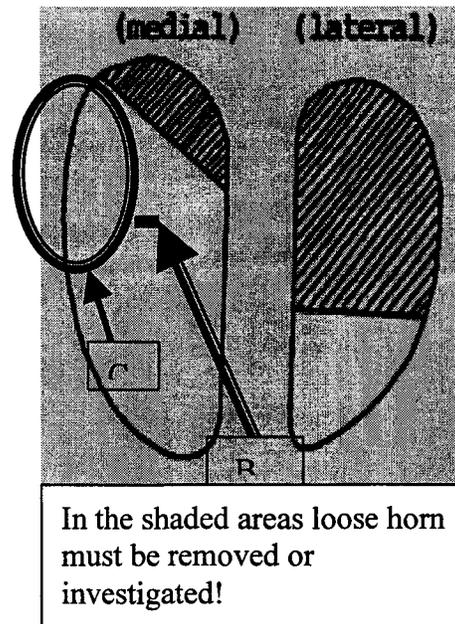
Also loose horn provides a good environment for bacteria and if not removed can be the cause of secondary infections. In many cases removing more is better than less.

The horn being removed in general is unhealthy to start with, and it is difficult for the corium to recover if unhealthy horn is present. Caution has to be taken not to damage the corium in the process. The less injury we cause to the corium the quicker the recovery.

### Additional Rules of Trimming:

**Sole fracture** is a lesion that only occurs on the medial claw. It is at the heel and sole junction (B). Here we trim away the loose horn. Under no circumstances do we ever remove the abaxial wall (C) towards the heel of the medial claw. When we remove this essential part of the medial claw it has been my experience that we never gain it back.

**Toe ulcers** must always be blocked. If the wall is in tact it is best to leave it there.



**Toe abscesses** are always blocked. If a toe abscess starts eroding the white line or wall and we have a sinus to the coronary band, the loose horn from the sinus must be removed and both margins must thinned. This will prevent the walls from pinching or irritating the corium.

**Application of a block to the lateral claw!** This sometimes is a task that has to be done to heal a severe problem on a medial claw. It is important that the block be recessed from the toe and the load shifted back towards the heel. Blocks on the lateral claw should not be left on longer than two to three weeks, as there damage can occur on this claw.

Front claw are reversed so we treat the lateral claw the same as the medial claw in the hind feet. The same trimming rules must be applied.

Reference: CATTLE FOOTCARE AND CLAW TRIMMING: E. TOUSSAINT RAVEN 1989