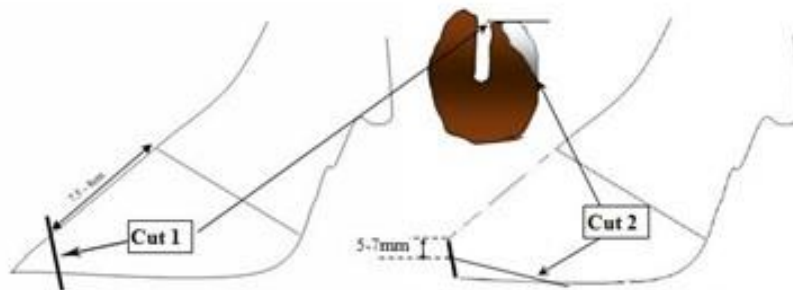


Technique/Procedure of Hoof Trimming

1. Correct the toe length - The front, or dorsal surface, of a hind claw, should measure approximately 7.5 centimeters (or 3 inches) in length from the coronary band to the apex of the claw. With hoof pincers, the technique calls for the wall of the medial claw to be cut straight at the tip of the toe leaving a square end. The thickness of the toe is to be left 5-7 mm. The sole of the toe should not give under pressure. If so, the sole is too thin. Hoof trimming tools such as the hoof knife should always be held with the hand behind. This length may need adjusting according to age, breed, disease and if the wall at the front of the toe is curved.



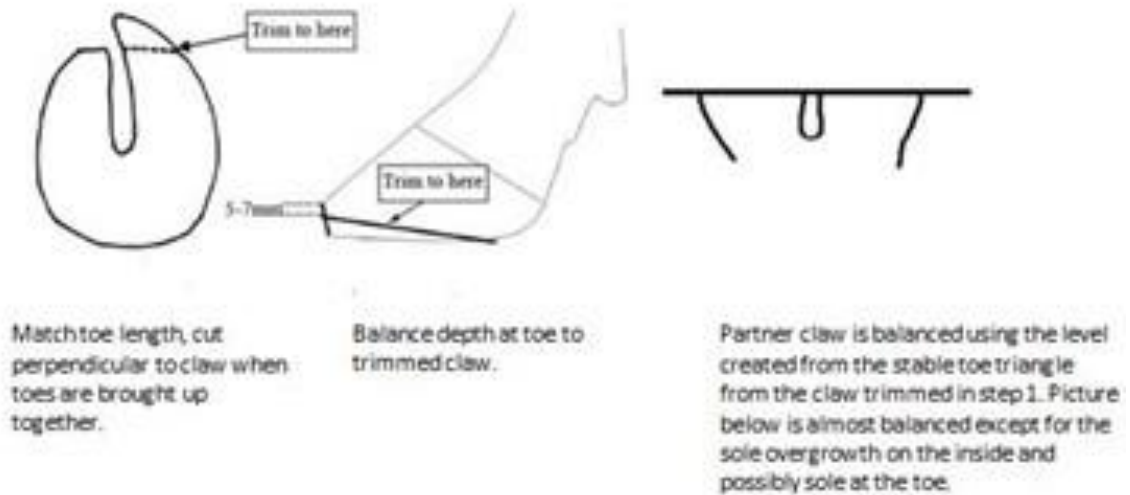
Cut 1 – measure 7.5cm along the front of the claw from top of the hard claw horn. Alternatively wrap your hand around the claw placing fingers in interdigital space and adjust cut length according to how much your hand is wider or shorter than 7.5-8cm. Some large Holsteins need 8cm. Cut straight across toe, as in diagram.

Cut 2 – trim excess sole at toe from the ground surface of outside wall, sparing the side wall, inside wall and heel, and stopping well before detectable sole thinning. As a guide, if toe length is trimmed to correct length then trim until the white line just re-joins at the tip of the toe which should leave a 6 (5-7)mm step at tip.



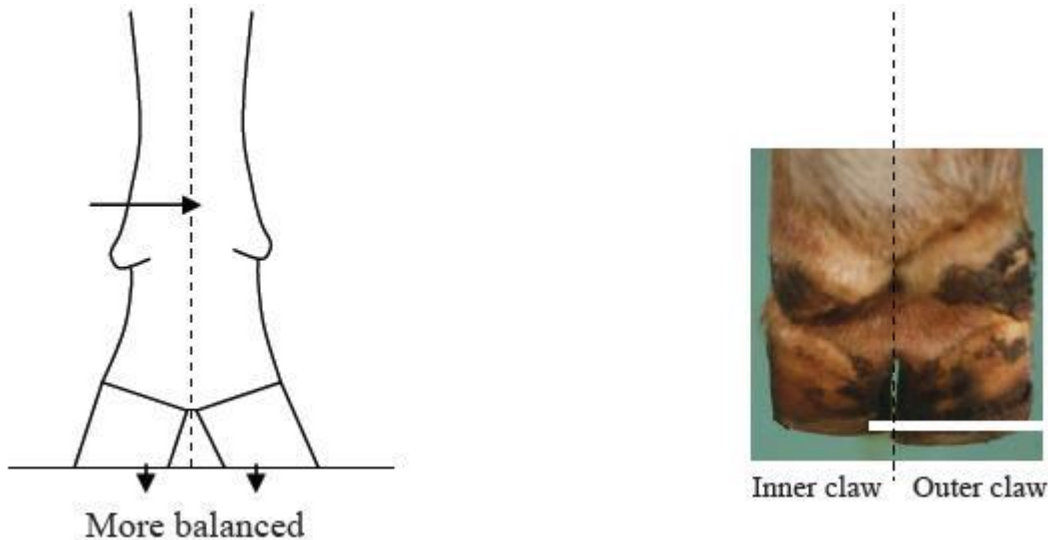
If toe length is correct without trimming, move straight to Step 2. After step 1 (cut 1 and cut 2) you should end up with a claw shape similar to the above.

2. Trim the partner claw to match length and balance to first claw (if correct)



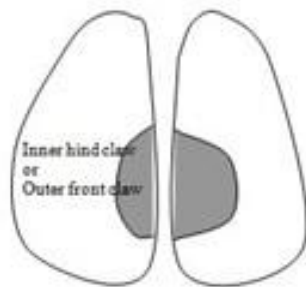
The sole should be trimmed flat from front to back and should be .25 inches thick at the toe. Avoid removing the horn from the heel of the inside hind claw. For hind feet, start with the inner claw (most normal) first. For front feet, reverse the claw order throughout this method (i.e. outer=inner and inner=outer).

The outer hind claw is slightly larger and more likely to be misshaped or affected by bony change around the coronary band. Therefore, errors occur if this claw is measured. Instead, match toe length and levels to the correctly trimmed first claw. Always err on the side of caution, especially in sound and healthy animals. Correct any obvious imbalances in weight bearing between inner and outer claws.



While equal weight bearing is probably ideal, for some animals, a naturally shallow heel on the inner hind claw can leave the outer claw over-trimmed and exposed to bruising if completely equal weight bearing is attempted. Therefore, caution is advised when trimming down heels, with frequent checking of sole depth and slight imbalance preferred to thin soles in the heel of the outer hind claw. In sound, healthy animals the heels rarely need much trimming.

3. 'Model' (Dishing out, hollow out) the ulcer site



The dishing out on the inner hind claw need only be slight to help prevent slurry or mud sticking between the claws. The dishing on the outer hind claw should be larger and shallower to relieve weight off the sole ulcer site. The combined dish should be deep enough to fit a chicken egg but should not risk injury to quick (corium).

This step transfers weight from centre of the sole onto the harder wall, toe triangle and more cushioned heel.



The claw has evolved to absorb concussive forces, bear weight and pump blood through the heel, wall and sole next to the wall. The heel acts like the suspension, absorbing concussive forces as the foot strikes the ground. The wall is the hardest and toughest part of the claw, able to withstand the wear and tear from harsh underfoot surfaces. Carefully dishing out the central sole using a Merlin electric hoof knife will aid this function. To be effective, a greater dished area by 2:1 is required for the outer hind claw compared with the inner. Shape up the slope of the

sole with the innermost back portion sloping towards the center of the claws. Be careful to avoid excessive cupping as it reduces the weight-bearing surface area.

For the functional trim, only excess horn should ever be removed. It also prepares the foot for inspection prior to the corrective trim.

Corrective trim - steps 4 and 5

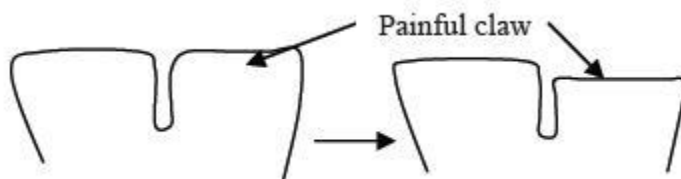
Now begin any therapeutic trimming in regards to lesions. Lesions are generally found in the outer claw of the hind leg. For the corrective trim, functional shape of the claws must be preserved and lesions prioritized for corrective trimming. Many healthy cows receiving a routine trim will have no painful lesions or lesions likely to cause lameness. In these cases, claw trimming can move to the final step. In order for the inner claw to bear more weight and therefore, allowing the outer claw to rest, leave the apical region the same thickness of the inner claw.

In lame cows it is possible to identify painful lesions by:

- Locating a lesion associated with exposed "quick".
- Triggering flinch behaviour when light pressure is applied to the painful claw, either using thumb pressure, pressing on the skin next to the claw or by using blunt "pincers" to apply focal pressure. Similarly, the cow may 'tense' when the claw is gently twisted.
- Heat, swelling, odour or redness affecting one claw or digit (one side of the foot).

By taking a thin 'skim' of horn from the sole surface of the painful claw, tracts of diseased horn may be spotted and pain confirmed using blunt pincers (or thumbs).

4. Relieve weight off a painful claw - trim down the back 2/3 of painful claw and/or fix a block to the healthy claw

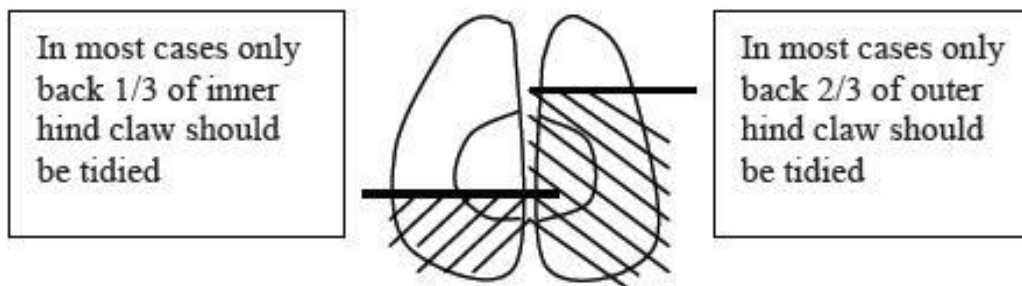


See notes on sole ulcer
and white line disease

Relieving weight off a painful claw can be achieved in two ways. If there is a good depth of heel horn on the unaffected claw, then the heel horn on the painful claw can be trimmed down (red arrows below). Paying special attention to save as much as possible of the posterior part of the inner claw, remove the loose horn and trim down all hard ridges. Do not dig into the claw to remove the loose horn and avoid bleeding. Additionally, a plastic, rubber or wooden block can be applied to the healthy claw for 4-6 weeks. Almost all cows with sole ulcers or white line lesions will benefit from blocks. However, in some cases, bruising or disease may be present on the healthier claw, making it unsuitable for blocking. These cases require a straw yard or nursing paddock to aid recovery. Anti-inflammatory drugs will also help, whether blocked or not.



5. Remove loose or under-run horn and hard ridges



As little serious disease occurs in the front 2/3rds of the inner hind claw, and front 1/3rd in the outer claw, then tracts or under-run horn should be ignored in these regions. Loose horn around the base of the sole ulcer, in the heel or around white line lesions should be removed (red arrows below). However, cutting into the "quick" should be avoided to prevent unnecessary pain, scarring or risk of severe infections spreading to the deeper tissues. The final stage is to ensure there are no sharp ridges that could injure the teats or legs, checked by running the hand over the claw.



Inner hind claw Outer hind claw

