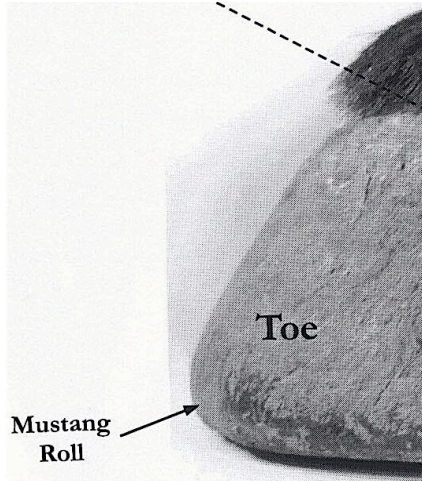


How to Use
Evolutionary Hoof Care's all new
 wall-rounding *Radius Rasp*TM
www.evohoofcare.com

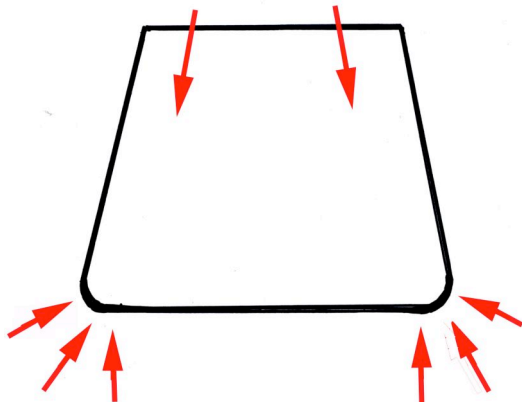
Your Goal: Creating and Maintaining the “Mustang Roll”

Horses evolved to live in dry, semi-arid environments. Under those conditions their hoof walls develop a smooth, rounded profile referred to as the “Mustang Roll.” The way this shape serves to contain bearing forces inside the hoof is essential to healthy hoof function.

Toe wall of wild horse hoof:

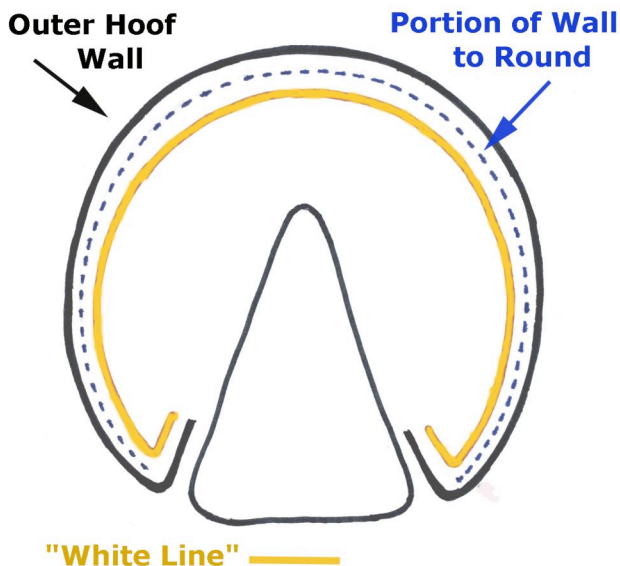


How Mustang Roll maintains hoof shape:

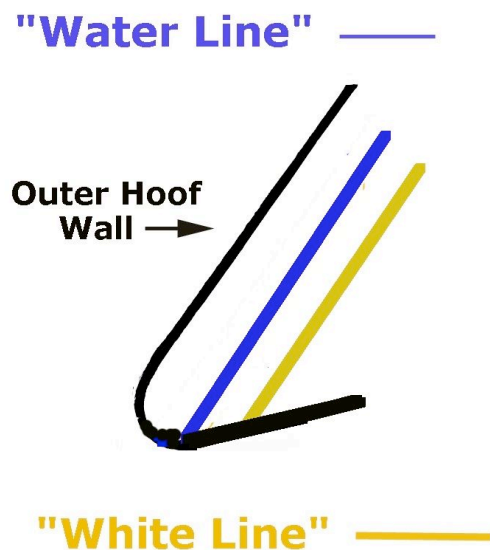


In the domestic horse, this profile is created by rounding the outer 30-50% of the width of the hoof wall in a way that relieves it from direct contact with the surface of the ground.

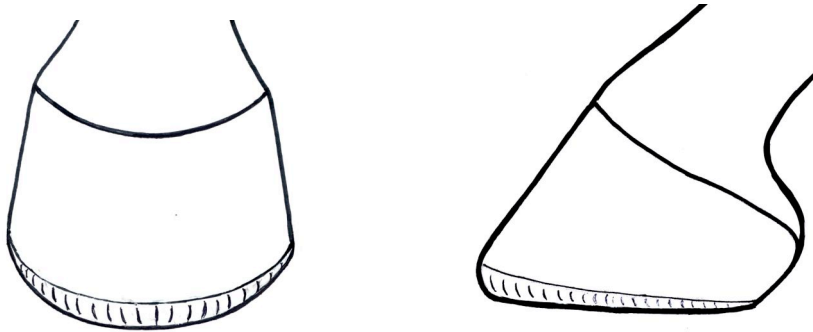
Sole view of outer wall to be rounded:



Cross-section of rounded wall profile



The “Mustang Roll” radius is widest at the toe, tapering in height toward each heel:



Note: Do you need to trim before using the *Radius Rasp*?

The **Radius Rasp** and **Hoof Buffer** are designed for finishing and maintaining the ‘mustang roll’. When you are trimming a hoof with excess growth of hoof wall that needs to be shortened, or has outward flare to be removed, use hoof nippers and a flat rasp first. Once you have shortened the wall, use these tools to rough-in a beveled or rounded edge. Then you are ready to apply the **Radius Rasp’s** curved blade to shape and smooth the Mustang Roll. You can also use the Radius Rasp to maintain the curve of the roll with a few quick strokes ever week or two. Always wipe dirt and grit off the hoof wall before using the rasp to prevent dulling it.

Removing wall flare to promote direct wall growth on domestic hooves:

Rasping side wall flare:



Rasping toe wall flare:



Beginning Mustang roll with a nipper cut along outer edge of “water line” —

Avoid removing the wall *between* the ‘water line’ and ‘white line’:

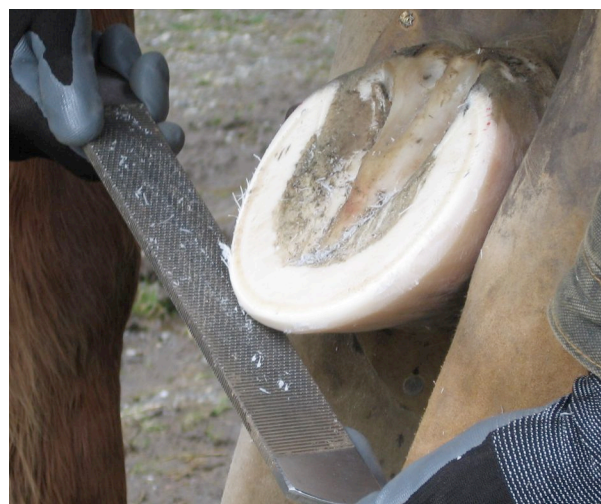


Roughing-in radius arc of the Mustang Roll with flat hoof rasp:

Rasping inner border of hoof wall:



Rasping outer border of hoof wall:



(Notice the sole and bars above have not yet been sculpted into concave form by the Concaving Rasp.)

Now you are ready to sculpt the final contours of your Mustang Roll with the **Radius Rasp** and **Hoof Buffer**.

Using the Radius Rasp™

There are two types of **Radius Rasp**: The white handled '**Original**' with a perforated 'shaving' blade and the black-handled '**PRO**' with a standard type rasping blade. Both versions are used in the same manner to round the outer edge of the hoof wall into the protective arc of the Mustang Roll. But each type has a different purpose.

Applying the Radius Rasp:

The curved blade of the **Radius Rasp** allows you to *shave* the outer edge of the hoof wall to create a smooth arc or radius around its bearing surface. When your Radius Rasp is new it will be very sharp and can 'chatter' a bit as you use it. Glide it gently at first and after a few horses it will move more smoothly. As the blade eventually begins to dull you may have to use two hands to push it—but don't throw that blade away yet because it actually creates an even smoother finish to the hoof wall as the teeth wear down.

The curved blades of the **Radius Rasp 'PRO'** and '**Original**'

The "PRO" has a coarser blade that works best for 'roughing in' the arc of the mustang roll and the 'Original' has a perforated 'shaving' blade that makes a smooth finish"



Push the Radius Rasp with the heel of your hand in a forward, gliding motion:



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'Drive' the rasp forward from heel to toe:

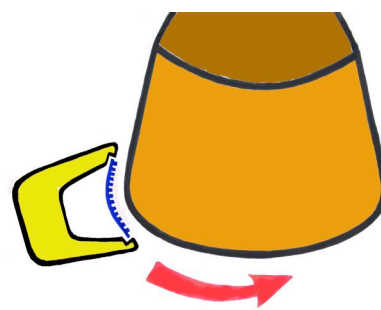
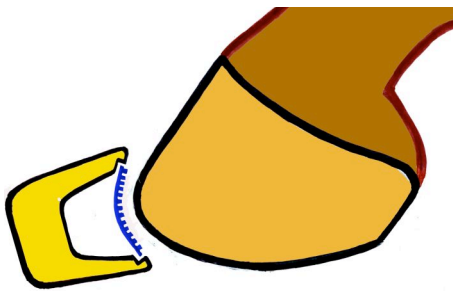


Shape the radius of your 'mustang roll' by making multiple passes around the edge of the hoof wall, holding the rasp handle at slightly different angles to the wall as you do this. You can increase the width or height of the radius across the wall's outer edge by moving the rasp in wide arcs. **Avoid pressing the Radius Rasp against the edge of the hoof wall any harder than necessary to 'shave' shreds of horn. Excessive pressure will shorten the useful life of the rasp's perforated cutting teeth.**

Pushing the Radius Rasp around the edges of the hoof wall

Rounding toe wall with the Radius Rasp:

Rounding side wall with the Radius Rasp:



Basic Guidelines:

1. Make multiple passes around the wall—both directions, heel to toe and toe to heel.
2. Rotate rasp in a spiral arc across the wall surface—twist your wrist as you push
3. Use all parts of the blade—both of the outer edges as well as the center portion.

4. Use both hands, separately and together—you can both 'push' and 'pull' the rasp. Shave more horn off the thicker portion of the wall across its toe area than at the quarters and heels. Be sure to round the wall at least $\frac{1}{4}$ " up along its outer surface—this avoids pressures that crack and flare the outer layers of hoof walls. But always leave at least $\frac{1}{8}$ " of wall to the outside of the white line. Use the 'feel test' to evaluate the smoothness of your radius by running your fingertips around it, noticing any flat parts or sharp edges. Avoid removing. Using the Radius Rasp once or twice a week you can maintain a firmer, stronger hoof wall.

Move the rasp in the direction of the arrow

'pushing'

and

'pulling' the rasp



Move the rasp in a spiral arc around the hoof wall:

Begin on one edge then rotate it across to the other edge of the radius

1.



2.



3.



The width of the blade allows you to work all parts of the hoof wall:

Outer wall:

Mid-wall:

Inner wall:



Use all parts of the rasp blade:

Mid blade to mid-arc of wall:



Edge of blade to outer wall:



Applying the rasp from 'above':

Rounding the wall with the hoof on a hoof stand



Rounding pointed toes:

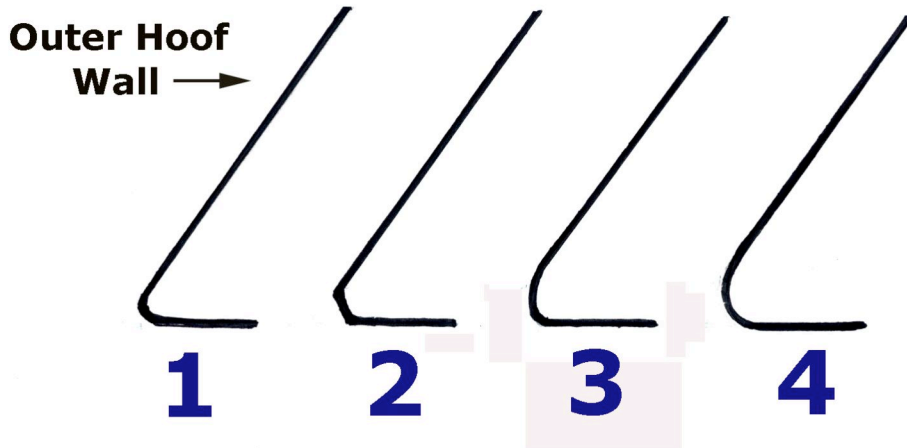


Rounding-off flares:



Your goal:

A smooth radius with no sharp edges or remaining wall flares and approximately half the thickness of the wall remaining outside of the white line:



The drawings of hoof wall profiles above show possible shapes and widths of arcs that you can create in trimming the hoof. #1 is has a thin, narrow edge . This form will encourage flaring and cracking of the wall. #2 is more of a flat bevel with sharp edges than a smooth arc. This will also encourage the layers of horn to crack and separate. #3 is rounded but has a narrow edge along the bottom. This form is also likely to encourage the wall to spread outward. #4 has the fully rounded, smooth contour of the Mustang Roll. This is the profile you need to create using the curved blades of the **Radius Rasps**.

Here is a close up photo of the toe of a hoof on a wild horse that lived in a dry climate:



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This is the type of form you want to give to your domestic horse's hooves:



Use the full arc of the curved blade to round all parts of the hoof wall:



Using the 'Feel Test':

Run your finger over the arc of the hoof wall to locate flat spots and sharp edges



Evolve Your Hoof Care

Remember: Push & glide the rasp across the wall. Pressing hard against the hoof can shorten the useful life of its perforated blade! Make more strokes with lighter pressure.

Using the Radius Rasp's powerful magnet

The magnet conveniently attaches it to any steel hoof stand:



If your hoof stand is not steel, mount a small plate of thin steel to it with a screw to which the Radius Rasp will attach.

Replacing the Radius Rasp Blades

Changing the Perforated Blade on the 'Original'

To remove it, hold the handle firmly in one hand, then grasp the rounded front end of blade with pliers and pull straight back. To install a blade, slide one edge of the new blade into the groove on one side of the handle. Orient the cutting teeth upward and the pointed ends of the rear of the blade toward the closed ends of the blade grooves. Then push down with thumbs or fingers on the opposite side of the blade until it snaps into its groove. Check to see that both edges of the blade are completely seated in the handle grooves.

Removing blade w/ pliers:

Slide edge of new blade in one slot of handle:

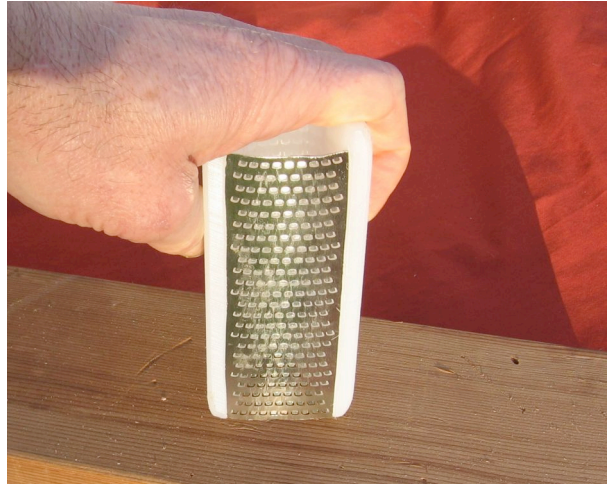


Seating the blade in both grooves

Snap opposite edge of blade into groove:



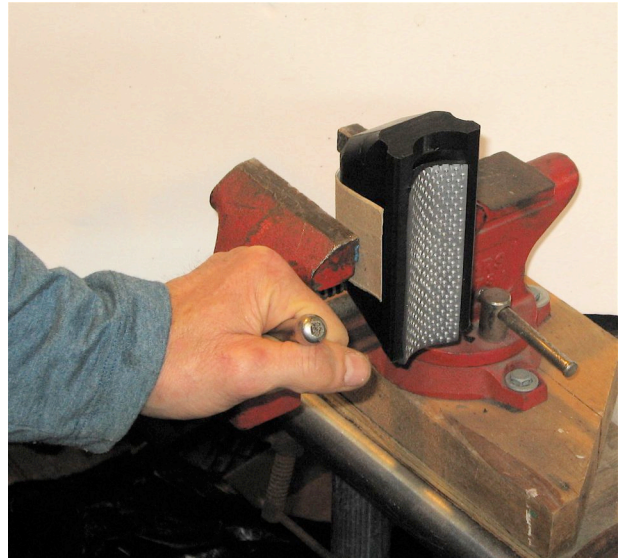
Gently tap rounded front end on board:



Be sure the pointed ends of the rear of the blade are inside not behind the blade grooves! If the pointed ends of the blade are behind the ends of the grooves, remove the blade with pliers and try again: the entire edge of the blade must be seated in the groove.

Changing the Solid Blade on the 'PRO'

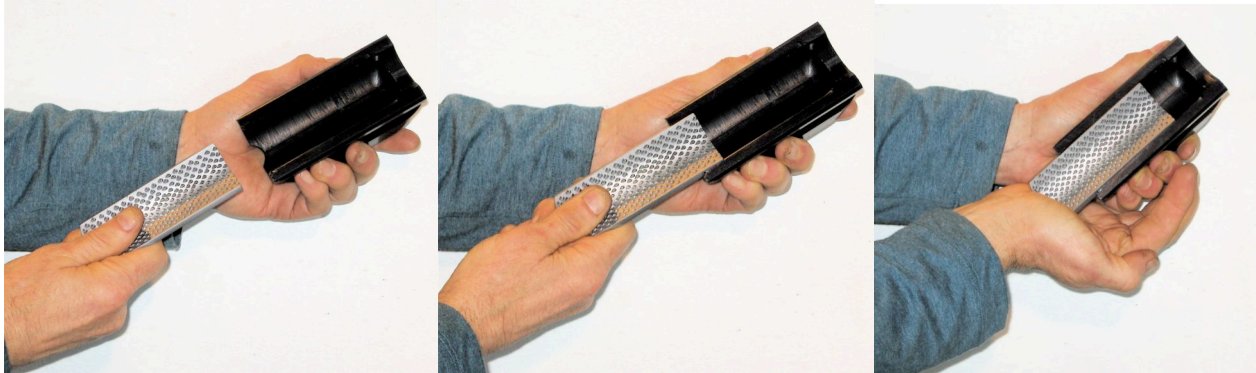
To replace the blade in the 'PRO' handle, wrap it in a piece of cardboard then clamp it firmly in a vise:



Next use a hammer and a flat screw driver or metal bar to gently drive the blade out of the handle:



To insert a new blade into the 'PRO' handle, insert the flat end of the blade into the blade grooves and push the blade inward:



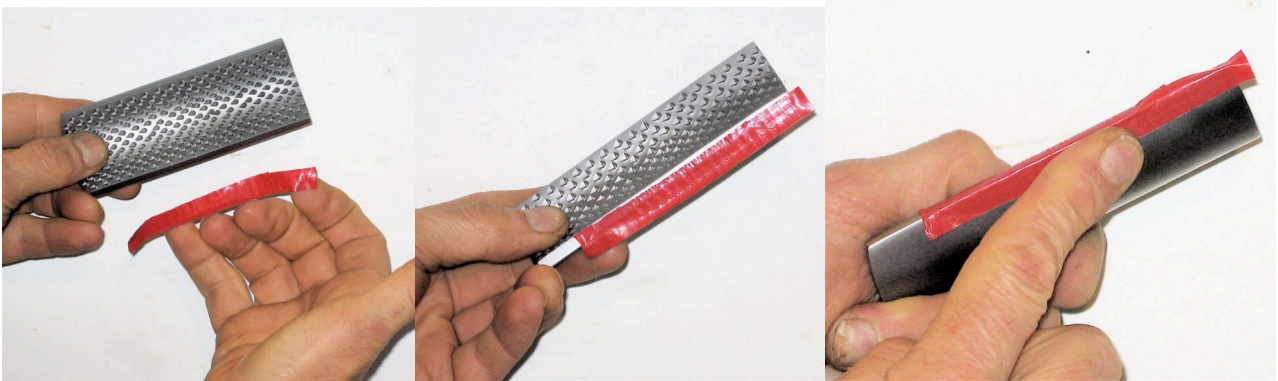
To fully seat the blade you can push it against a hard surface, like board. If necessary, use a hammer to gently tap the blade in to the handle—do not use force to seat the blade! The blade is fully seated when the corners of the flat end reach the curved ends of the blade grooves:



Tightening the Blade Fit in the PRO Handle:

After using more than one blade in the 'PRO' handle, the plastic might stretch slightly, causing the blade to become loose. To tighten the blade fit, place a narrow strip of tape along one edge of the blade. Fold the end of the tape over the corner of the flat end of the blade. Then insert that end into the blade grooves of the handle.

Use duct tape or electrical tape that is about ½" wide:



Fold the end of the tape over the corner of the rasp to keep it in place as you insert the flat end of the rasp into the blade grooves:



Don't Forget to Use the Hoof Buffer!

After creating your "Mustang Roll" with the **Radius Rasp 'PRO' and 'Original'**, follow it up with use of the **Hoof Buffer** contour sander to produce a perfectly smooth, blended surface. This 1 – 2 – 3 combination will create the most durable hoof wall profile possible.



Evolve Your Hoof Care:
Give your horse the most durable hooves Nature has made possible

Evolutionary Hoof Care tools are available at:

<http://www.evohoofcare.com>

and from other dealers worldwide—see our website for dealer locations



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