

The Mirage of the “Natural” Foot:

Limitations of the Feral Model in Domestic Horses

Submission for FWCF Thesis Requirement
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Introduction:

This study reviews and analyzes techniques for trimming and maintaining the horse's foot. This includes the recent revival of the fashion for keeping horses unshod. This trend, or movement among a small, vocal group of enthusiasts is often called "barefoot" or "natural" maintenance of the equine foot.

This study is presented in four sections:

First is a history of trimming techniques for shod and unshod foot care, with special emphasis on the work of Bracy Clark, which is often cited by adherents of "natural" foot care.

Second, a review more recent theories or techniques proposed by a range of individuals for foot preparation and barefoot maintenance of the horse's foot.

Third, I will present information on horses which I have maintained unshod at their owners' request, illustrating a practical and conservative way of trimming the foot, and some results of this method. *This section will specifically address the claims of some of the "natural" foot theorists regarding patterns of foot wear.* This section also deals with the core question raised by this study: Is there a single model of the ideal foot that we can apply to all horses?

Fourth, is a presentation of a controlled comparison study of conventional versus the "four-point" or "Natural Balance" foot trimming. This appears to be the only such study available at this time.

I. Bracy Clark: Patron Saint of Barefoot Horse Care?

Bracy Clark's self-published work (Clark, 1809, republished and expanded 1829) "A Series of Experiments on the Foot of the Living Horse" discussed the desired flexibility of the equine foot, and the ill effects of contracted feet caused by "...the very method by which the shoe is affixed to the foot." The "experiment" was actually a series of plaster casts taken of the front foot of a young mare before shoeing at the age of five, and yearly thereafter, to show the effects of shoeing. The initial casting (fig.1.) was illustrated with the follow-up casts depicted at yearly intervals. As such it was not an experiment, but simply a series of observations., as he had no control or comparison group.

Fig.1 "The Natural Foot" before shoeing

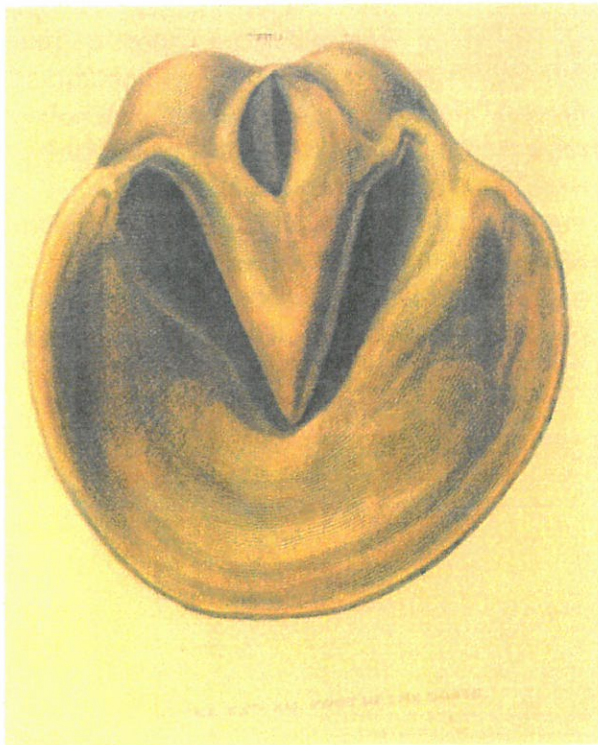
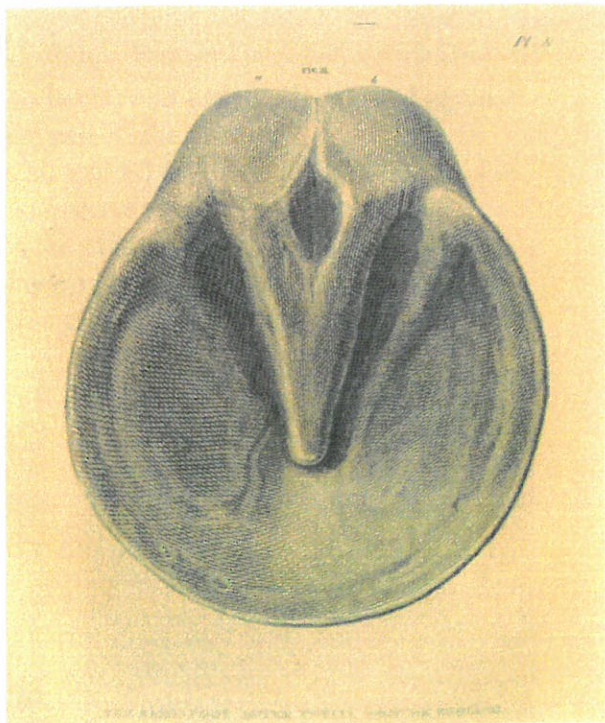


Fig.2 The same foot, shod one year



Clark noted that after one year, the frog appeared narrower; the junction of the bulbs with the posterior part of the frog had flattened. Two years later, the hoof capsule showed a clear change in shape, elongating and with further narrowing of the heels and frog (Fig.3). As there is no description of the shoeing techniques used for this horse, one cannot say whether such changes were avoidable with better foot preparation or shoeing.

Clark, like his teacher Coleman, believed in the importance of primary or "active" frog pressure from ground contact.

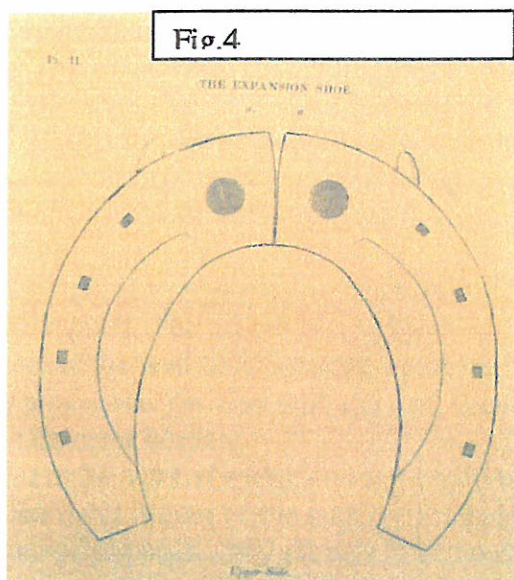
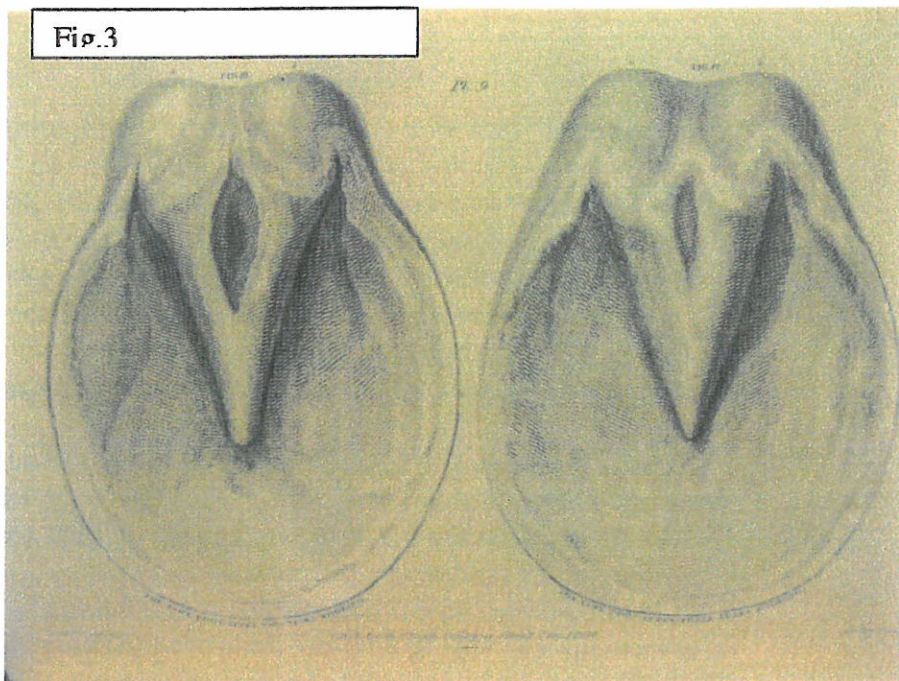
Foot Preparation:

Bracy Clark gave only the briefest description of foot preparation, and did not address barefoot trimming as such. He said that the wall should be reduced to "proper length and leveled with a rasp." The frog was not to be trimmed, and despite saying that only exfoliating sole should be removed, he also describes paring the sole on some animals to yield to thumb pressure, a practice championed by Coleman. He

condemned "throwing open the heels" (opening the heels) and especially warned against the paring away of the sole and bars at the posterior part of the foot.

Clark made experimental rides of between 30 and 80 miles on unshod horses, but found that the feet did not fare well on the gravel and stone roads of his day.

Eighteen years after his first publication on the effects of shoeing, Clark devised, or re-introduced a shoe hinged at the toe, to avoid what he felt were the ill effects of rigid horseshoes. (Clark, 1827) He also described a series of shoes to be held on without nails. (Figs.4,5)



Neither of these methods of shoeing ever gained wide acceptance. None of the modern barefoot horse enthusiasts mention Bracy Clark's apparent change of heart about the utility of horseshoes.

II. Historical Concepts of Equine Foot Function, Preparation, and "Balance":

Anton Lungwitz (Lungwitz pp 98-102) said that foot preparation was "...a most important step in the process of shoeing." He said that the horse must be examined from all sides to assess limb and foot alignment, and noted that conformational variations sometimes required leveling the foot in the medial-lateral (ML) plane not perfectly perpendicular to the long axis of the limb. He apparently believed in frog contact with the ground, but not frog "pressure" as he recommended trimming the frog to be even with the ground surface of the shoe.

The bars were to be trimmed if overlong. If the heels and bars tended to curve inward towards the frog, the "prolongations" of the bars and heel could be trimmed to restore the bars to a straight line through the commissures. This is not to be confused with "opening the heels."

The sole was to be freed of loose flakes of "dead horn" using the junction of the wall and sole for leveling the wall, preparing the outer 1/8 inch of sole near the wall to participate in weight bearing. The wall was to be leveled to the line of the wall-sole junction, causing the dorsal wall at the toe to align with the axis of the pastern. The outer wall was dressed only to remove dishes or flares.

Balance: The foot was balanced when "...the horse places the foot flat upon the ground in traveling."

Lungwitz specifically mentions that *the hoof is strengthened by the horse going barefoot*, and recommends that the hoof wall be well-rounded off, sometimes as far as the white line, in preparation for unshod maintenance.

Dollar (Dollar&Wheatley, 1897, pp117-128, 204-210) like Lungwitz, discussed the mechanics of foot expansion, concluding that expansion of the foot occurred at the coronary border as well as the plantar surface, and that the sole did descend under weight bearing load. Expansion appeared to be limited to 1 – 2 mm.

Dollar specifically recommended *imitating the effects of natural wear*, keeping the outer border of the wall well-rounded, the toe relatively short, and sparing the sole, frog, and bars.

The frog should project below the foot surface a distance equal to the thickness of the shoe to be applied. The proper level of wall trim is determined by removal of exfoliating sole at the wall-sole junction, combined with observations of AP and ML balance. The sole at the junction with the wall should bear weight over an area "the width of a straw" at its outer border.

Horses to be worked without shoes should be trimmed removing only loose pieces of frog, and the outer border of the wall well rounded off, sloping walls needing more rounding than upright ones. Weight was to be taken up by "...the entire bearing surface of he hoof."

Roberge, Magner, and Rich each described use of the wall-sole junction as an initial guide for trimming the hoof wall.

Russell (Russell, 1907, pp.78-83, 318) stated that "The natural slope of the pasterns is the only safe guide to be followed in all cases..." He insisted that the foot should be perfectly

symmetrical and developed his foot gauge to assure this. He also used a T-square device for setting ML balance.

Although never specifically writing about the barefoot horse, he mentions a “natural model” with the foot nearly circular, concaved sole, and well-defined bars and heels. He recommended that the wall be trimmed “...even with the frog.” One presumes that he was speaking of a front foot.

The foot preparation removes only exfoliating tissue, but never thinning the sole. Unless diseased, the frog “...should on no pretext whatever, be disturbed by the shoer.”

The plantar surface of P III is shown as perfectly parallel to the ground, or what is now called a 0 degree plantar angle. This is at variance with current teachings, *but it is important to remember that Russell, like all of his contemporaries, lacked radiographic evidence with which to test his theories. Wilhelm Roentgen took the first radiographs in 1895, and this new technology was not extended to veterinary practice for several years thereafter.*

Russell attempted to establish reliable external landmarks for foot preparation and balancing, but based upon more recent work, his recommendations do not fare well.

Recent (but not necessarily new) Concepts:

Emery, et al. (Emery, L., Miller, J., and Vanhoosen. N, 1977, pp.66-80, 90-106) are *the first authors of the current era to describe the “natural” foot from the arid climate and hard surfaces of the United States Great Basin as an ideal model.* They also noted that the dry, hard hoof was better than a moist foot for resistance to wear, and the mechanical properties of the hoof wall. They described this ideal foot with “...a concave sole, strong quarters and heel, protected frog, and rolled toe.” Figures 6 and 7, taken from Emery, show feet from feral horses that they studied. Redden, Ovnicek, and others later claimed the same ideal type of foot. Redden, in advising that the quarters of the wall should be gutted, clearly varies from Emery’s ideal, as the authors of this text spoke against lowering the wall at the quarters to the level of the sole. These authors also argued that some trimming of the sole was often needed, and should not be condemned outright.

optimum thickness.

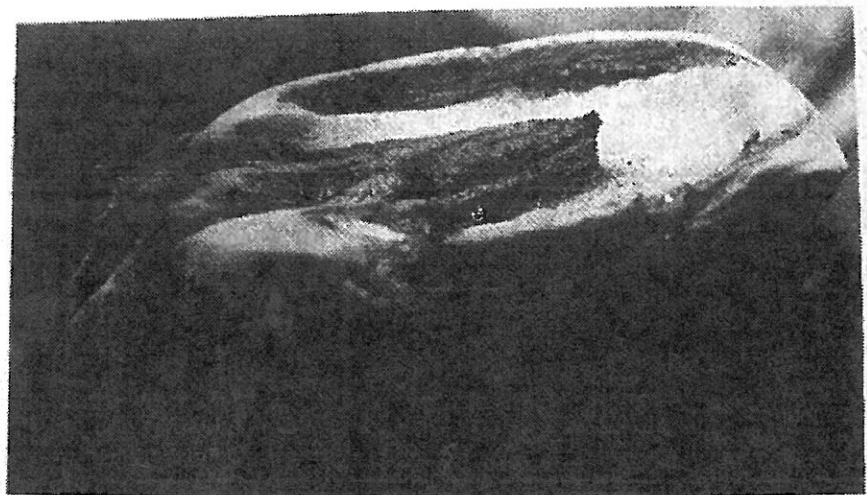


Fig.6 From Emery, Miller and Van Hoosen. Used courtesy of Leslie Emery

Emery and his colleagues discuss the issue of frog pressure and the active vs. passive theories of frog contact, stating that the concept of active frog contact probably became popular in the last half of the nineteenth century. Both Lungwitz and Dollar stated that the frog should be in primary contact with the ground. Emery states that the frog is neither structurally nor anatomically suited to “spread the heels,” and has little to do with circulation, as pumping action of the foot is dependant on recoil of the lateral cartilages.

With frog hypertrophy, the DDFT and the navicular bone are caught between the descending pressure of P II and the ground reaction force. These authors noted little correlation between contracted or normal feet, and the presence or absence of a large frog or frog contact. They felt that

contracted feet were in most cases due to posterior foot pain or lameness which altered the horse’s gait from normal weight bearing balance.

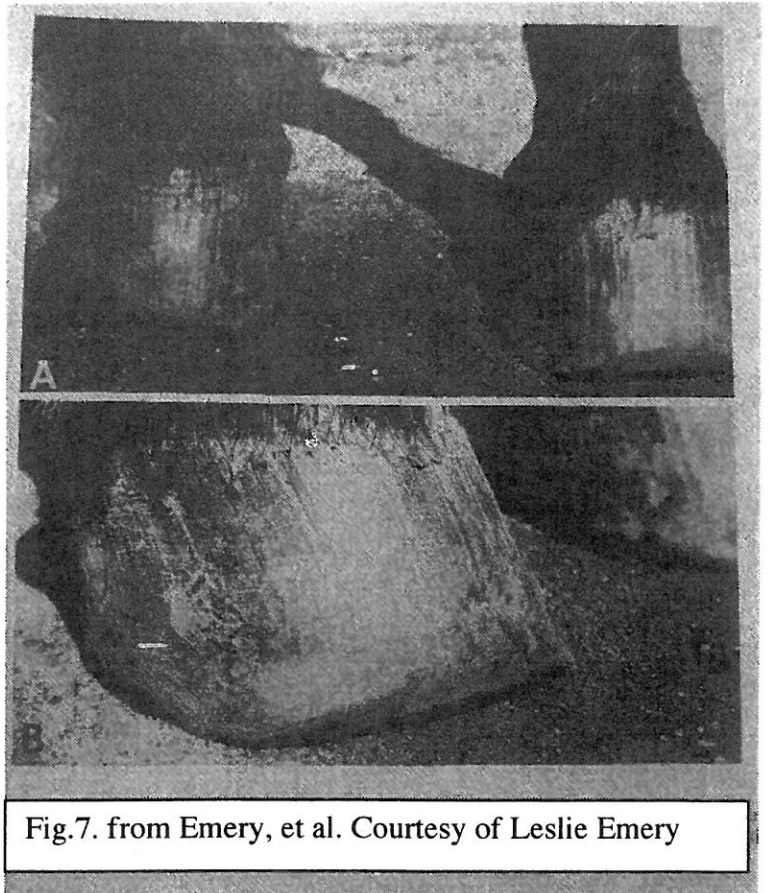
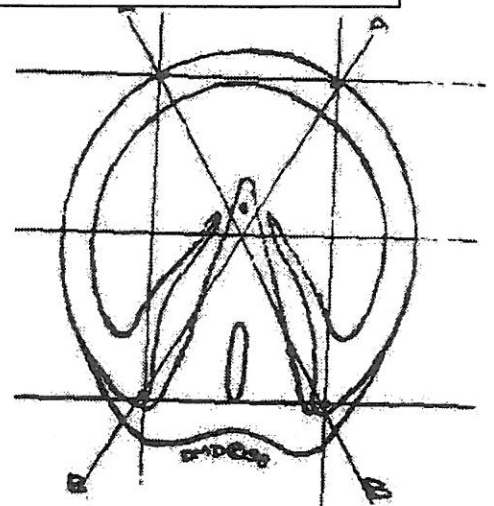


Fig.7. from Emery, et al. Courtesy of Leslie Emery

Fig.8. Courtesy of David Duckett, FWCF

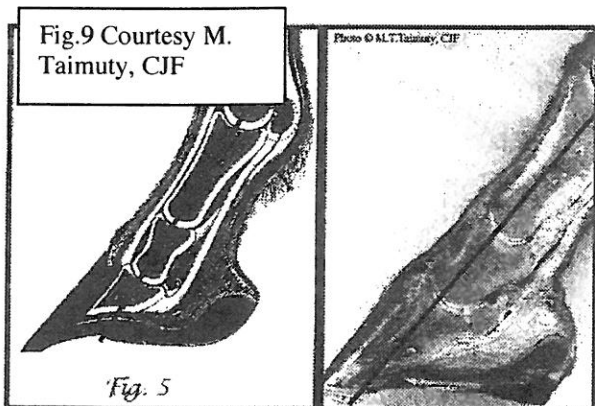
Duckett (Duckett, D., 1988) did extensive work on external landmarks used for appropriate evaluation and trimming of the foot. He described a frog bridge midway of the frog, bonding the frog and bars. The bars terminate at a point near the apex of the frog, about 3/8 inch from the tip of the horny frog, in an average-sized saddle horse. This point is now referred to as “Duckett’s Dot”. In an average sized horse, the bridge is about 3/4 inch caudal to the Dot. The center of articulation of the coffin joint (DIP joint) should lie on a perpendicular above the bridge. A line or drill hole from the Dot carried up perpendicular to the properly prepared ground surface of the foot should pass through the semilunar crest, the extensor process, and the common extensor tendon, exiting just above the coronary band. The Dot also is the center of a circle which encompasses the solar margin of P III. A larger concentric circle describes the proper margin of the wall, with the flares removed.



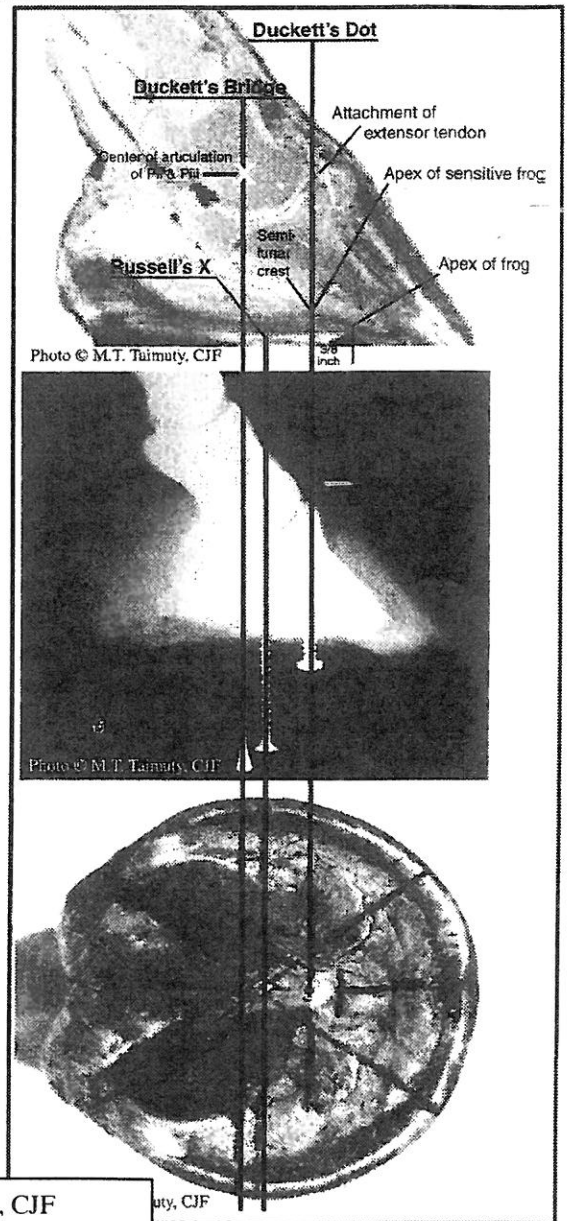
Duckett found that in a well-trimmed foot, the length of the dorsal wall from coronet to ground should equal the length from the toe to the bridge on the plantar surface, and that this same length from the bridge to the posterior part of the foot would determine appropriate shoe length for properly balanced weight distribution. He notes the feet of horses in the “natural environment” which under arid conditions causes the toe to wear, maintaining a natural breakover point.

This point of breakover can be approximated by drawing diagonals from the hind most points of weight bearing, through the mid point of the bridge to intersect with the toe. The transverse line at the toe intersection should be the natural line of breakover, according to Duckett. (Fig. 8) [above]

Taimuty (Taimuty, M., 1999) cites Duckett’s recommendation that the foot should be balanced in the AP plane using the hoof-pastern axis, and with the



Sagittal view of Duckett's method is shown at right. Note line through centers of rotation of joints passing through point of breakover. Also note that this line does not pass through the tip of the frog as Russell claims it should.



Dot and bridge for profile. He also cites Duckett as describing the T-square method as not sufficient to balance the foot in motion. Flat landing of the foot is not necessarily desired as much as “...joint congruency under load”. Duckett also feels that opening the heels should be forbidden, and that the sole should not be pared unless overgrowth is not compensated by exfoliation. The recent fashion of lowering the heels to gain posterior support is “...misguided information.”

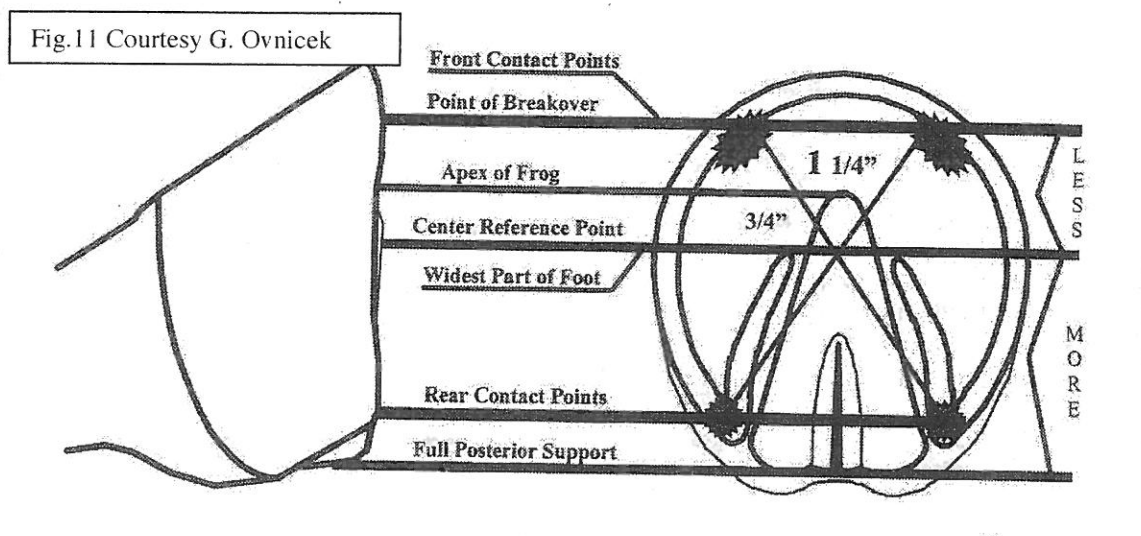
Although both Russell and Duckett worked to establish external references for foot trimming, their results when compared are quite different. (Fig.9. 10)

Ovnicek (Ovnicek, 1997, pp.8-24) based his entire system of foot care on observations of 65 feral horses, which he referred to as “wild”. These animals lived in an arid environment with firm or abrasive footing. He postulated the rather short, heavily worn feet of these horses as an ideal.

Ovnicek claimed that all horses examined had four points of ground contact: the heels, and at the toe at the medial and lateral wall points of breakover or wear. He described a “sole callus” extending between the front points of weight bearing at the toe.

Ovnicek’s trim procedure is to remove loose sole and frog fragments. The “true” tip of the frog at its junction with the sole is determined, and a point about 3/4 inch posterior to this is used as the center of the foot. Depending on foot size, a transverse line 1 – 1 1/2 inches anterior to the center should be the natural point of breakover. The quarters are trimmed down to the level of the sole, leaving the heels prominent. He claims that there is “...no correlation between environment and the point of breakover.” His (and Redden’s) practice of gutting the quarters to mimic the “natural” foot directly contradicts the findings of Emery, et al., who showed that the quarters were strong and well maintained on the feral hooves that they examined. (See Figs. 6,7 above)

Ovnicek’s reference points, apparently derived from Duckett’s earlier work, are seen in Fig.11.



Jackson (Jackson, J. 1992, pp108-125) Made observations of “wild” (feral) horses in the western United States, and like Ovnicek after him, he felt that the worn, well rounded feet he observed should be held out as a model. The frog is hard and not prominent. He also mentions finding a sole “callous”.

His trimming technique uses the “natural” foot angles that he derived from his observations, rather than the hoof-pastern axis. The wall is to be lowered to just above the sole level, consistent with shod or unshod use. Distortions of the wall are removed to produce straight growth. The frog should be passive to the heels for weight bearing. The

hoof wall is to be well-rounded, and polished with fine sandpaper to mimic the polished surface seen in feral animals.

Bergeleen (Bergeleen, L. 1998) using a large number of trade-marked terms, describes a method of foot trimming aimed at producing a short foot. He sets fairly rigid guidelines suggesting that a 1,000 lb horse should have a 3 1/4 inch toe, then adding or subtracting 1/4 inch for each 200 lbs of body weight. He prescribes paring the sole at the toe until it yields to thumb pressure, and says that the bars should be cut down to improve flexibility of the foot. He places great importance on keeping the hairline flat, and in the ML plane, parallel to the ground surface.

Redden (Redden, R.) introduced the term “Four-point Trim,” which, while controversial at the outset was really not much different from the “Natural Balance” technique of Ovnicek. Redden’s trim is more radical in terms of squaring the toe for breakover and gutting the quarters. While Redden says that he “...squares the breakover and not the toe,” his videotape shows otherwise. His work clearly derives from Duckett’s, but carries it to an extreme.

LaPierre (LaPierre, K., 2004, pp.79-103) like Bergeleen, is fond of trade-marked terms, but basically describes a rather conservative trimming technique. While he is enthusiastic about barefoot horse care, he does admit that some horses simply cannot be maintained without shoes. His technique begins with a transverse line across the widest part of the foot. But he does not say that a badly distorted foot with “late” quarters should first be dressed to bring the foot into better profile. All of his illustrations show nicely rounded, well-proportioned feet. Once the line is established, the wall-sole junction is determined, establishing two points of a “live sole plane.” The third point is estimated as being 1/4 – 1/2 inch above the highest, widest part of the frog. Thus the “plane” is actually not based on fixed landmarks. The wall is trimmed to match this plane, and the toe is rounded from side to side beginning at a line one-half way between the first midline and the toe. The resulting trim, in his photos, looks very much like the “physiologic trim” described by Bowker, below.

Bowker (Bowker, R., 2003, 2005) in his veterinary research has concluded that from a biomechanical and neuro-anatomic point of view, the posterior structures of the foot should bear maximal weight, and that the foot should land heel-first. The “Physiologic Trim” which he describes uses the junction of the live sole and the wall to determine the level of wall trim. The heels are then lowered “...sufficiently for the frog to contact the ground and participate in weight bearing.” In his studies, Bowker said that trimming the foot in this manner generally maintained a straight hoof-pastern axis, and did not change the angle of the toe. The photographs in his article (2005) do not support this claim. He did note the development of a sole callus in front of the apex of the frog. The end result of this technique is similar to that of Savoldi, except that the latter does not emphasize loading the posterior structures of the foot as does Bowker.

Savoldi (Savoldi, M., & Rosenberg, G., 2003) has done extensive research on standardizing the foot trim based on Uniform Sole Thickness (UST). Savoldi has found

that the junction of the live (non-exfoliating) sole with the wall reflects the level of UST, which varies by only 1-2 mm. He and his colleagues have demonstrated the motion of PIII within the hoof capsule, and the fact that PIII "...seeks out the level of the horizon..." with resultant distortion of the hoof capsule. If UST is not established, P III will remodel. These concepts are illustrated in Fig. 12, below.

The information from UST must be combined with evaluation of the individual horse's limb alignment and action to determine a satisfactory foot preparation.

Pathology Based On the Plane Of The Pedal Bone (PIII)

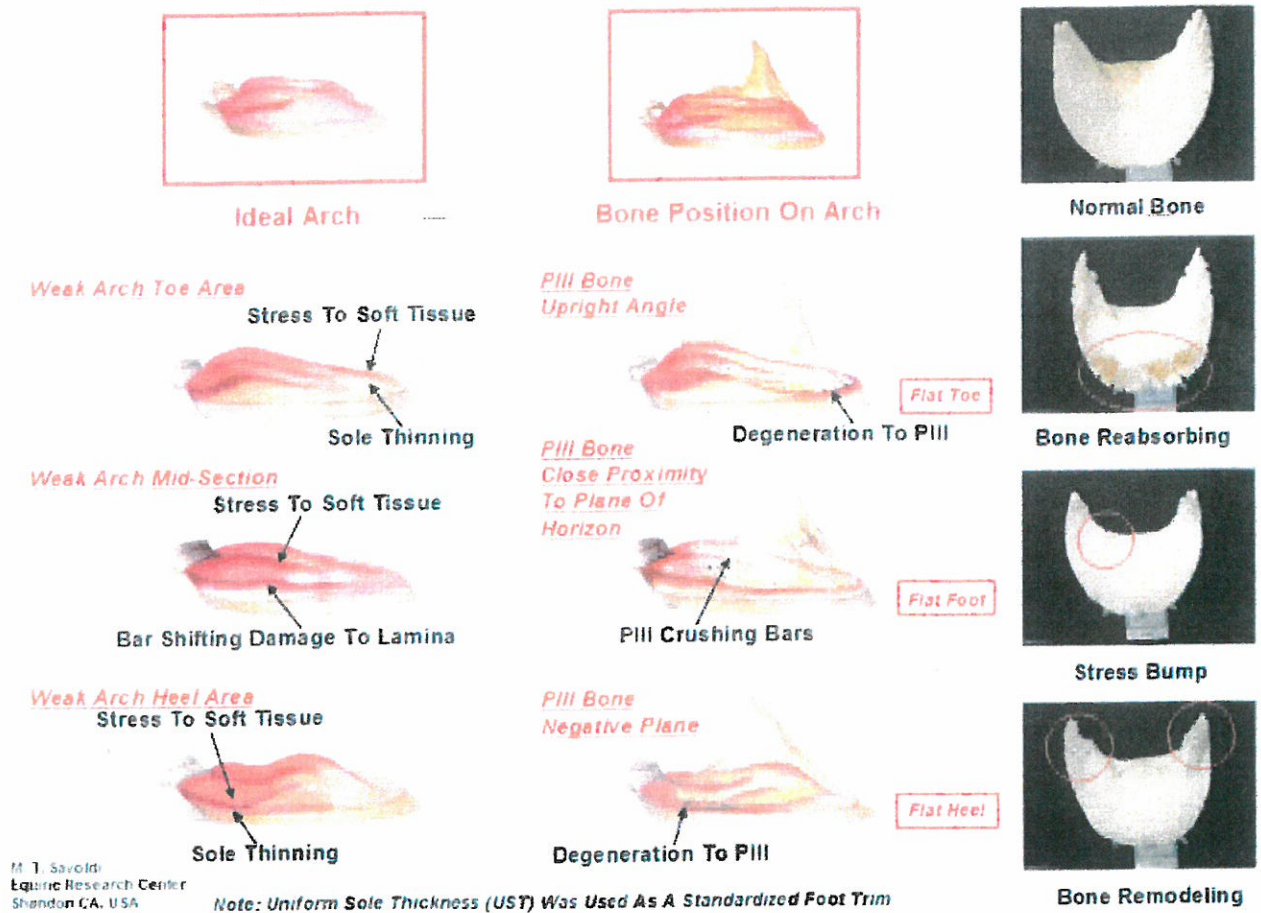


Fig.12 Courtesy M. Savoldi

Strasser (Strasser, H. trans. Kells, S., 2000, pp.99-113, 171-182) Proposed the most radical method of foot preparation for barefoot maintenance, and is also the most virulent of opponents of any form of shoeing. Her arguments against shoes are quite unusual "...it is statistically not possible to survive a kick to the head by a shod horse. Without a shoe, it is. For this reason alone, shoeing should be illegal..." Strasser also asserts that horseshoes vibrate at frequencies which will cause circulatory and neurological impairment in the horse. The thesis on which this idea is based was

published in 1910 in Switzerland, and has been neither translated nor corroborated.

Strasser reviews Bracy Clark's work, but neglects to mention his publication of shoeing methods eighteen years after his initial work on unshod horses. (Clark, B. 1827). Neither does she mention that after his experimental distance rides, Clark described the excessive hoof wear resulting.

Strasser's trimming technique is to lower the wall at the toe to the level of live sole, lower the quarters with a rasp, and lower the bars to the level of the sole. The frog is lowered to the level of the wall. The heels are shortened so that the height of the bulbs to the ground is 3 – 4 cm. She also recommends the use of a hoof gauge to bring the hairline to an angle of 30 degrees to the ground in all horses.

Two of Dr. Strasser's disciples have been convicted and fined under the animal protection statutes of the UK. The mutilated foot of the pony from the most recent case is seen here (Fig.13). The destruction of the posterior structures of the foot is evident. Dr. Strasser testified on behalf of her student at the trial.



Fig.13 The heels and bars of the foot have been removed up to the level of the bulbs. (from [www. UKHSU.com](http://www.UKHSU.com))

For a comparison composite photo of feet trimmed by proponents of the techniques described above, see Appendix 1.

III. The Importance of Footing, and the Author's Own Experience:

Most of "natural" ideal feet of recent description above were derived from horses on hard footing in arid climates. *Note that the "natural" foot illustrated by Bracy Clark (Fig.1) is not like these later models.*

Pethick (Pethick, R., 2004) showed radical changes in foot wear after horses spent five weeks in very abrasive arena footing. (Fig.14) Note the completely recessed frog, worn dorsal wall, loss of sole, and prominent bars. These findings, and my own observations contradict Ovnicek's claim that footing does not alter the breakover point.

Pollitt (Pollitt, C., 1995, pp. 112, 146) Showed examples of badly distorted feet from feral horses in hard and sand footing in Australia, noting that many were lame, especially among the mares. (Fig. 15) Clearly, even in arid climates with firm footing, severe hoof capsule distortion and lameness are not unusual.

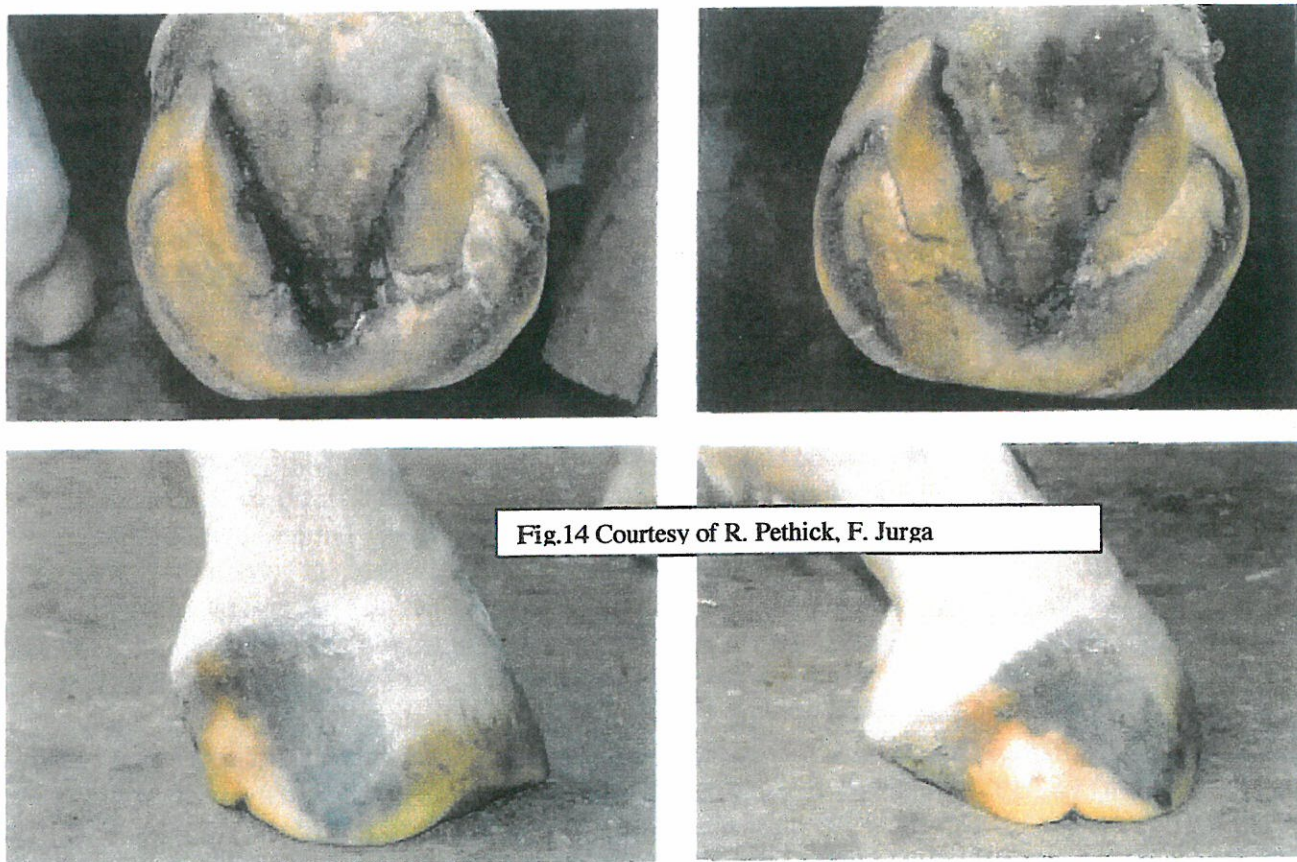


Fig.14 Courtesy of R. Pethick, F. Jurga



Fig.15 Courtesy C. Pollitt, DVM

Fig.16: Front and hind feet of Przewalski's horse in Alberta, Canada zoo. Courtesy S. Elliott, CF



Figure 16, above shows the front and hind feet of a Przewalski's horse from a zoo in southern Alberta, Canada, where this herd of true wild horses is kept on a quarter section of land. The soft soil is evident on the horse's feet, as is the evidence of even hoof wall growth. This does not match the findings of Ovnicek, Jackson and others who espouse a model of the "wild" horse hoof capsule based on more arid environments.

The Mirage of the "Natural" Foot: A single ideal fails to explain function and morphology in all feet

Physiologic Reserves and the Equine Foot

All successful higher animals demonstrate the *principle of physiologic reserves* for multiple vital functions. For the horse, mobility and a sound foot are vital for survival. In most mammals, including human beings, there are many examples of physiologic redundancy: Most mammals have two kidneys, but can survive well with only one functioning. Similarly, the loss of one-half of normal lung capacity is compatible with continued, if sedentary living. With a loss of about 50% of the capacity of the blood to clot, most animals, including man, will not exhibit catastrophic bleeding after minor injury. The horse's foot shows a similar pattern of reserve function.

The horse's foot is overbuilt or over-engineered. This built-in reserve allows the horse to lose some function of the hoof capsule, and still remain sound and mobile. All farriers have seen horses lose the function of the frog without obvious ill effect. The frog may be diseased, atrophic, or dry and hard from arid environments such that it never contacts the ground. Similarly, portions of the hoof wall may be lost from breakage or excessive wear. The sole and bars as *load-sharing* structures may relieve the wall of some of its *primary weight bearing* function, again, without obvious detriment to the animal, at least in the short term. Some horses with chronically weak heels form large, hypertrophic frogs, which assist with weight distribution. The foot is in constant interaction with the environment, and has a tremendous adaptive capacity.

The horse's foot, as it interacts with the ground may form a composite weight-bearing surface made of the ground surface of the hoof capsule, and the soil on which the

horse travels. In the case of the animals under my care, the adherent clay soil in my area sticks to the bottom of the foot, forming a mould which coats the foot and distributes weight over the entire plantar surface. The wall, sole, bars, and often the frog participate in weight bearing. This soil coating is similar to semi-rigid pour in protective polymers such as Vettec "Equibuild." In loose soils, the dirt moulds to the foot surface in a similar way, but is left behind at each step. I believe that the horse's foot functions ideally when the *weight-bearing* hoof wall and the *weight-sharing* sole, bars, and sometimes the frog are recruited for load distribution. This is in agreement with Dollar, cited above.

An example shown below is typical of horses under my care for a minimum of four years, maintained barefoot at the owners' request. These horses have free exercise in a large pasturage, and are schooled in an arena covered with finely crushed stone. The soil in my area, like much of the southeastern United States, is red clay, which when moist is soft, and densely adherent to the foot. *The footing here creates a composite weight bearing structure combined with the wall, sole, bars, and frog. Note that the hoof wall is well maintained, including the quarters.*

Because of the clay footing on which these animals spend their time, there is no sole callus formed in most cases. Most of the 14 horses kept at this facility have strong and unbroken quarters. Figure 17, below, shows a typical front foot 6 weeks after its most recent trim.



Fig.17 Six week's of growth on a typical front foot. The clay footing adherent to the sole, bars, and commissures is obvious. This soil is densely adherent, and somewhat difficult to clean out when dry and hardened. The entire circumference of the wall is intact, and polished by wear. The toe (dorsal wall) is not excessively worn nor squared off, as is seen in feet from horses in more arid climates and harder footing. The clay footing may reduce breakage of the quarters by covering and reinforcing the exposed edge of the hoof wall at the quarters.

The footing on which the horse lives and works and environmental moisture are some critical determinants of its foot wear patterns.

The author's trimming method is quite similar to the UST technique of Savoldi, combined with Duckett's landmarks for the plantar profile or outline, and observation of the individual horse's hoof-pastern, and limb axes and landing pattern. With appropriate modification for wall length and rounding, this can be applied both to shod and barefooted horses. Dressing of the toe and hoof wall edge is shown in Fig.18.



Fig.18: The edges of the hoof wall, especially at the toe, should be well-rounded, but not dumped off or squared, as has been suggested by Redden and Ovnicek. The dorsal hoof wall is a useful load-bearing structure, and protects the anterior edge of PIII and the circumflex artery of the sole. Formation of toe callus can be viewed as a response to excessive wear or trimming of the dorsal wall.

The UST method is actually in agreement with traditional trimming practices suggested by the majority of authors cited in the historical review above, and by many in the bibliography, but not specifically quoted in the text. Using the live or non-exfoliating sole at its junction with the wall as a guide to the appropriate level of resection of the horny hoof wall is supported by Savoldi's extensive anatomic research: The sole-wall junction is a reliable indicator of the plane of PIII within the hoof capsule, and the corresponding uniform sole thickness overlaying the plantar surface of PIII. Savoldi himself prefers to call his technique "trimming to the plane of the sole" at this time.

Like any guideline, however, UST must be accepted as a useful starting point, like the T-square method, and then altered to fit the individual animal. I have found that the majority of horses trimmed to UST in the AP plane will be brought very close to satisfactory alignment of the hoof-pastern axis. In considering the medial-lateral (ML) plane, the technique may require modification.

Savoldi (private communication) has found in his studies that even horses with medial-lateral (ML) angular deformities will tend to correct somewhat after two or three trims by UST, with the foot and fetlock moving into improved alignment with the weight-bearing axis of the limb. The traditional practice for some farriers (the author included) is to start by sighting the front leg and foot in a relaxed position under the horse's body, and then attempt to dress the foot perpendicular to the long axis of the limb in the ML plane.

Strict adherence to this technique might require not trimming to UST in the ML plane. A shoe that is fitted "full" on one side or a medial or lateral extension to align the

weight-bearing axis of the leg with the center of the prosthetically enhanced foot surface may augment the trim. Excellent examples of this technique are shown in Williams and Deacon (Williams, G. and Deacon, M. pp.69-72) The disadvantage of this approach is the increase in mechanical load on the side of the foot bearing the extension or extra length of wall.

The additional length of the shoe (or foot) is an extension of the hoof wall that increases the bending arm moment on hoof capsule (wall *and* sole). Savoldi has found that PIII will tend to settle or descend on the side of the foot so extended. "Length is leverage." (Jim Keith, CJF, Personal communication) I have found that the foot responds to unbalanced leverage with continued distortion. Sometimes the leverage goes inward, rather than outward. (See Fig.19, below) In animals with major conformation problems, the unbalanced load is a lifelong problem to be addressed by the farrier with palliative, but not curative foot care.



Fig.19: A hind foot 10 weeks after the most recent trim. Wear has weakened the dorsal wall enough to cause it to collapse inward, covering the white line. While not necessarily desirable, this is certainly preferable to excessive length of growth at the toe. This wear pattern is not rare in clay soil footing.

When investigating the level or orientation of PIII, radiographs of the foot may be misleading as uneven loading of PIII can cause partial demineralization of the bone and thus skew the x-ray appearance. Savoldi feels that the appearance of the distal interphalangeal joint and the bottom of PII actually are a more accurate indicator of how the foot is loaded. This actually echoes Duckett's assertion that "...joint congruency under load" is the true goal of balancing the foot. [See page 7 above, quoted by Taimuty] I agree that radiographs of the bony column above the foot are more useful than x-rays of the foot itself. It is critical for all farriers to develop expertise and confidence in the use of external landmarks for foot trimming. Few horse owners can afford the cost of a series of x-ray views simply to examine the alignment of the leg.

Most of the horses in this group maintain strong quarters, but a few do show some breakage of the wall at this weakest zone. As all horses show variation in the shape and strength of their feet, this is not surprising. About one-quarter of the horses at the facility also show a small amount of "toe callus". Most of them tend to have a low arch or so-called flat foot.

The issue of toe callus mirrors the controversy in the increasingly raucous debate over foot trimming methods. Ovnicek and others clearly believe that this callus is a desirable and normal feature of the healthy foot. (The "Natural Balance" horseshoe that he favors mimics this wear pattern.) This belief is derived from the studies of a particular hoof wear pattern and a particular environment. As I have implied above, *the toe or sole callus may equally be viewed as an adaptation of the foot to a deficiency of the hoof wall caused by excessive wear or injudicious trimming; it is therefore an expression of physiologic reserves in the hoof capsule.* I could as easily propose the wear pattern of the feet that I have presented as an ideal, because they do *not* show toe callus, and thus are examples of feet that are not pushed into the use of these reserves.

Because of the disparity between the claims made by proponents of the "Natural Balance" or "four-point" trim technique and the author's observations, the following study was made.

A Controlled, Comparison Study of The “Four-point” versus Conventional Equine Hoof Preparation Techniques.

This study was done to assess the effects of “Four-point” or “Natural Balance” trimming versus conventional foot preparation on the condition and morphology of the equine foot in the test area. This study is *not* an attempt to prove or disprove the utility of unshod foot care in performance horses. The author is not aware of any other randomized, controlled, prospective study of the type detailed here, as all evidence supporting the “newer” trimming techniques appears to be anecdotal.

Animal Welfare Considered

This study was done to clarify an important equine welfare issue: is there a single method of trimming which serves as a model for maintaining a sound and healthy foot? The subject animals are owned by two veterinarians who were well qualified to monitor the horses for any harmful results during and after the completion of the study. Because of the constant growth and adaptation of the hoof capsule, the author felt that any changes seen in the feet would be transient. Indeed, within three trimming cycles after the close of the research, all feet had returned to their pre-experiment morphology, and all animals remained sound.

Materials and Methods

The index group of horses were bred and pastured in Barton County, Missouri. The soil in the test area is a fine, soft loam, (USDA Soil Survey, 2001) and the average annual rainfall is 40 inches (1 meter). Twenty-one horses were selected from a herd which was of mixed Arabian bloodstock, and the herd was about 60% line bred, which reduced the variation in horse size and foot quality to a minimum. These animals are maintained in pastures year-round, and are not worked in any discipline.

The herd was divided into three groups: (1) Seven horses (1–7) were trimmed by the four-point/natural balance method. (2) Seven horses (11–17) were trimmed left front and hind by four-point method, and right front and hind by conventional technique. (3) Seven horses (21–27) were trimmed by conventional methods. Feet were branded for identification.

The study covered 3 complete cycles of 6 weeks each, with all feet documented using before and after trim photographs. Due to lack of financial resources, no x-ray documentation was available.

All trims were done by the author, or under his direct supervision, assisted by 3 qualified farriers. Completion of this study generated over 1,000 photographs and entailed nearly 5,000 miles of travel by the author.

Trimming techniques used for conventionally prepared feet were basically as described above, maintaining the dorsal-wall and pastern axis, and the UST method. The hoof wall was rounded to prevent uneven wear or breakage.

Fig20: Palmar surface and lateral-profile view of conventionally trimmed foot. The opposite front foot from the same horse is seen below, trimmed four-point style.



Trimming techniques for the four-point/natural balance group closely followed the recommendations of Redden in his videotape, and the writings of Ovnicek referenced below.

Fig21: Profile and palmar view of four point trimmed foot



The profile of the four point trimmed foot shows the lowering of the quarters and squared toe, leaving only the four contact points envisioned with this method. (Fig.21 -- arrows)

Results

One horse in the conventionally trimmed third group (#27) died shortly after the initial trim from systemic causes not related to foot lameness. All of the remaining horses were able to complete the study, and none showed significant foot lameness.

There were two major effects of the four point method compared with the control feet

- (1) Splitting or delamination of the dorsal hoof wall occurred in the areas of the toe left prominent by the four point method. This was seen through the stratum internum (epidermal lamella). Such an effect is seen in Fig. 22. (arrows)

Fig. 22: Splitting or delamination of the hoof wall at the point of prominence left by the four point trim. (arrows) With the dorsal hoof wall trimmed excessively, these areas become points of leverage.



Table 1 shows a comparison of the frequency of occurrence between the four point and conventional groups:

Occurrence of Wall Splits or Delamination

Horse Group	Front Feet	Hind Feet	% of feet affected
1 – Four point	9/14	8/14	17/28 = 60%
2 – Mixed - Four point Feet	4/7	6/7	10/14 = 71%
2 – Mixed Conventional Feet	2/7	1/7	3/14 = 21%
3 -- Conventional	1/12	1/12	2/24 = 8%

The results in the table show an obvious and significant relationship between the occurrence of the types of splits illustrated and the use of the four point trim.

(2) A persistent and reproducible distortion of the hoof capsule occurred in the horses trimmed by the four point/natural balance (NB) method. The distortion was seen as flaring or dishing at the “toe quarters” or the area left prominent by squaring the toe and gutting the quarters. In addition, a similar distortion was seen at the heel quarters, which tended to flare outward just behind where the quarters were cut down. Three composite figures (23,24 and 26) show feet of four point/NB trimmed animals paired against conventionally trimmed horses. Figure 25 shows a four point trimmed horse at the beginning of the study and at the end. This comparison of group 1 (all four point) with group 3 (all conventional) is shown at the completion of the study following three trim cycles.

Fig. 23 Four point/NB trimmed horse (4) compared with control horse (22) at the end of 3 shoeing cycles
Distortion of four point feet is obvious



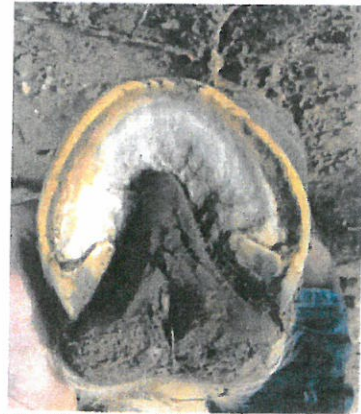
4 SweetRock 4th LF 4pt



22 SkyDust 4th LF conv



4 SweetRock 4th LH 4pt



22 SkyDust 4th LH conv



4 SweetRock 4th RF 4pt



22 SkyDust 4th RF conv



4 SweetRock 4th Rh 4pt



22 SkyDust 4th RH conv

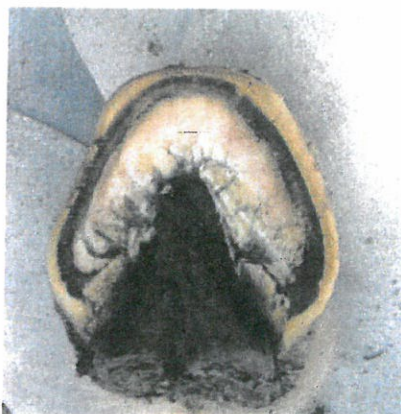
Fig. 24 Four point/NB trimmed horse (2) compared with control horse (21) at the end of 3 shoeing cycles
Distortion of four point feet is more obvious on front feet



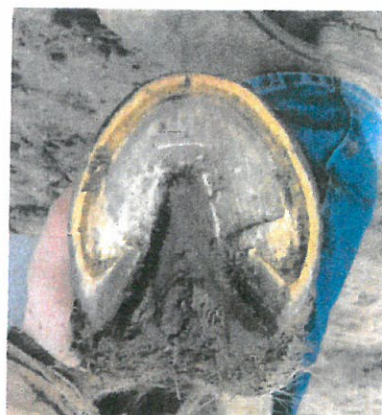
2 Gracie 4th LF 4pt



21 WhiteCarn 4th LF conv



2 Gracie 4th LH 4pt



21 WhiteCarn 4th LH conv



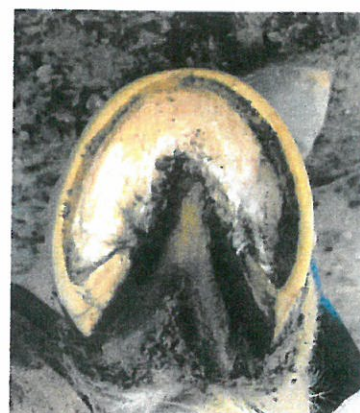
2 Gracie 4th RF 4pt



21 WhiteCarn 4th RF conv



2 Gracie 4th RH 4pt



21 WhiteCarn 4th RH conv

Fig. 25 Four point/NB trimmed horse (5) before trim at start of study, and at end of study
Distortion of feet from same horse after 3 trim cycles



5 Sue 1st LF



5 Sue 4th LF 4pt



5 Sue 1st LH



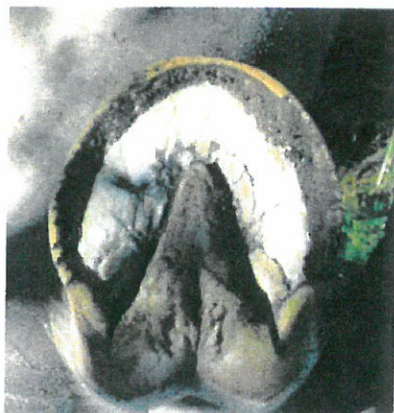
5 Sue 4th LH 4pt



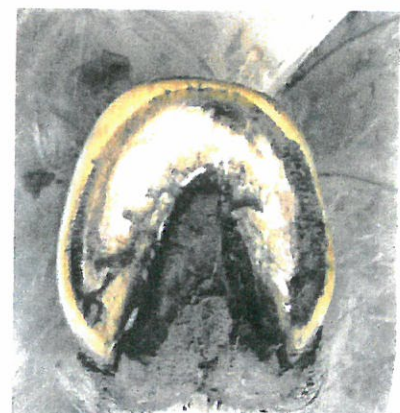
5 Sue 1st RF



5 Sue 4th RF 4pt

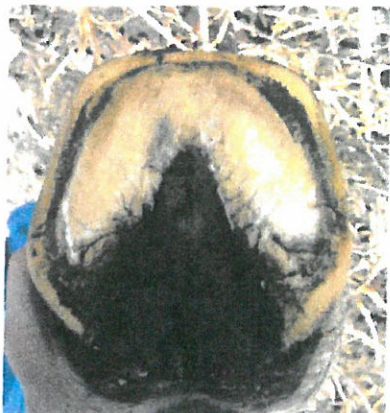


5 Sue 1st RH



5 Sue 4th RH 4pt

Fig. 26 Four point/NB trimmed horse (7) compared with conventionally trimmed horse (24)
Distortion of feet in four point/NB trimmed horse after 3 trim cycles



7 Sparkle 4th LF 4pt



24 Fetzy 4th LF conv



7 Sparkle 4th LH 4pt



24 Fetzy 4th LH conv



7 Sparkle 4th RF 4pt



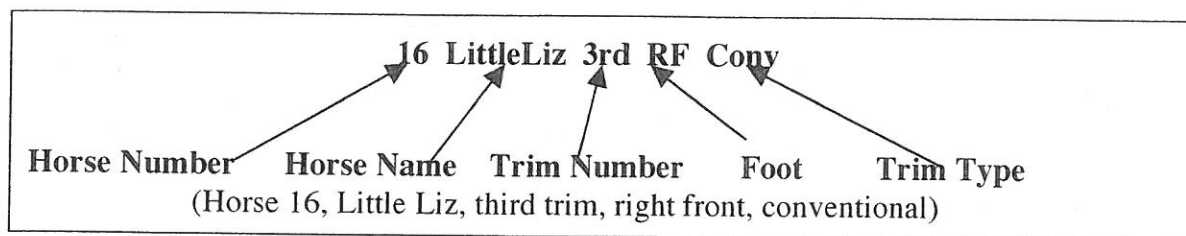
24 Fetzy 4th RF conv



7 Sparkle 4th RH 4pt



24 Fetzy 4th RH conv



Key to Photo Labels

More dramatic comparisons were found pairing the feet of horses from the mixed trim group (2). Composite figures 27 and 28 show horse 15 (Silver) after the initial trim, and at the end of three cycles. Figures 29-33 show other horses from group 2 at the end of the study period. There was clear evidence of hoof capsule distortion in the four point/NB feet compared with the opposite side in the same horses

Discussion

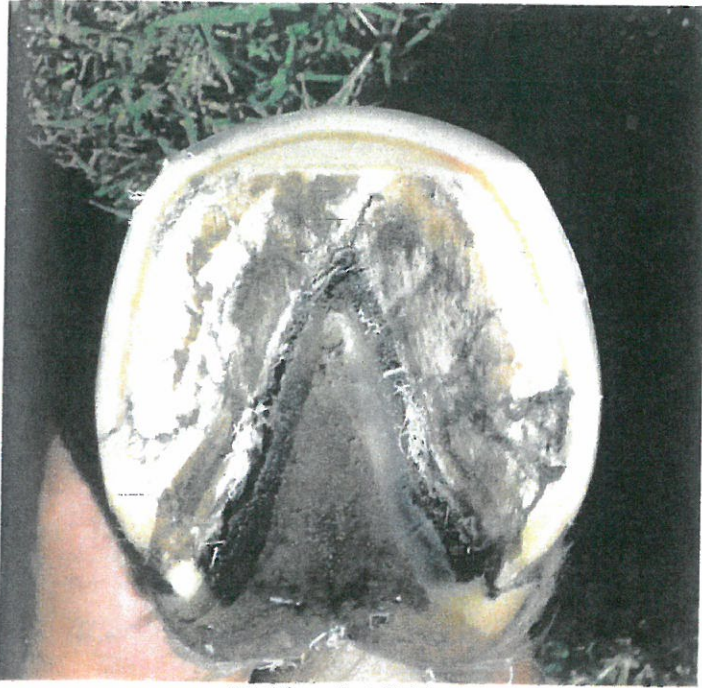
This research study was done as an extension of the writer's initial anecdotal observations of horses maintained and worked without shoes. His initial findings contradicted the claims and theories of two proponents of non-conventional trimming techniques. It appears that this study is the first ever done which allowed for a controlled comparison of methods of equine foot preparation. The author is not aware of any similar comparison study done by the proponents of the four point/NB theory. The latter theory was conceived after observations of horses from an area which receives about 5 inches (13 cm) of precipitation per year.

Based on this study, footing and moisture have a lot to do with the shape and wear of the equine foot. In soft, moist soil, the conventional trimming technique did a good job of maintaining the hoof capsule with a minimum of distortion and breakage. The author subscribes to the belief that the hoof capsule should reflect or repeat the basic shape of the underlying distal phalanx or PIII. Except in cases of disease or deformity, PIII is not flat or straight along its anterior edge, and in the case of the hind foot, it is actually somewhat pointed. The flaring, distortion, and/or delamination of a majority of the four point/NB feet was an undesirable result of the use of the technique in soil and climate conditions not at all suited to its use. The relative extra length of the dorsal hoof wall at the anterior points of contact increased the leverage on these zones and predictably leads to the distortion seen. The heels suffered a similar result.

Based on the results cited here, the author believes that the four point/NB trim, if it is to be applied anywhere, ought to be reserved for dry environments with hard footing. There is no clear indication for its use in most of North America outside of the dry areas of the Great Basin.

Weaknesses of this study include the lack x-ray examinations of the feet, and the fact that these animals were not worked in any discipline. It might have been better to trim the mixed group of horses with four point/NB on one diagonal, and conventional trimming on the opposite diagonal, rather than a right/left split. Some might say that the four point/NB technique should have been represented by one of its proponents doing the trimming. The author believes that experienced farriers should be able to learn new techniques from the instructional videos and written materials available.

Fig. 27 Mixed trim horse (15) after first trim
Left side is four point trim, right is conventional



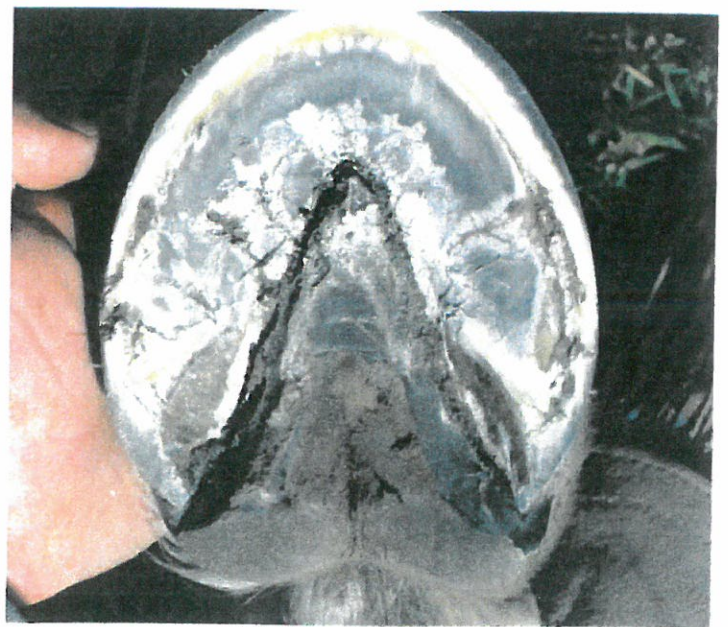
15 Silver 1st LF 4 pt



15 Silver 1st RF conv



15 Silver 1st LH 4 pt

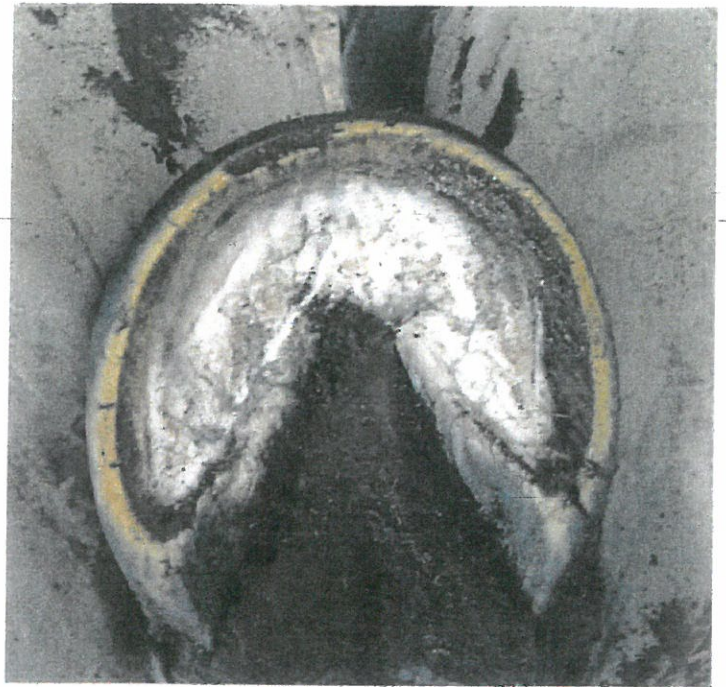


15 Silver 1st RH conv

Fig. 28 Mixed trim horse (15) at end of study following 3 trims
Left side is four point trim, right is conventional



15 Silver 4th LF 4pt



15 Silver 4th RF



15 Silver 4th LH 4pt



15 Silver 4th RH conv

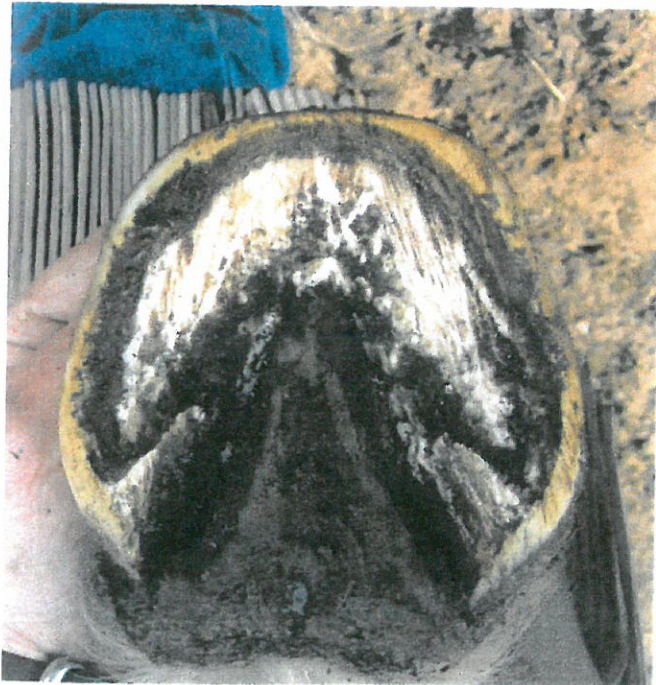
Fig. 29 Mixed trim horse (12) at end of study following 3 trims
Left side is four point trim, right is conventional



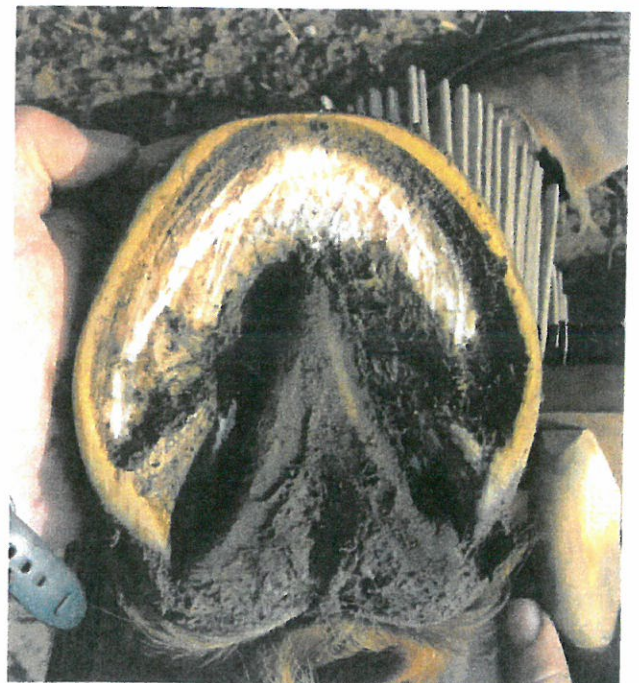
12 Revel 4th LF 4pt



12 Revel 4th RF conv



12 Revel 4th LH 4pt



12 Revel 4th RH conv

Fig. 30 Mixed trim horse (13) at end of study following 3 trims
Left side is four point trim, right is conventional



13 Betty 4th LF 4pt



13 Betty 4th RF conv



13 Betty 4th LH 4pt



13 Betty 4th RH conv

Fig. 31 Mixed trim horse (14) at end of study following 3 trims
Left side is four point trim, right is conventional



14 Lovelace 4th LF 4pt



14 Lovelace 4th RF conv



14 Lovelace 4th LH 4pt



14 Lovelace 4thRH conv

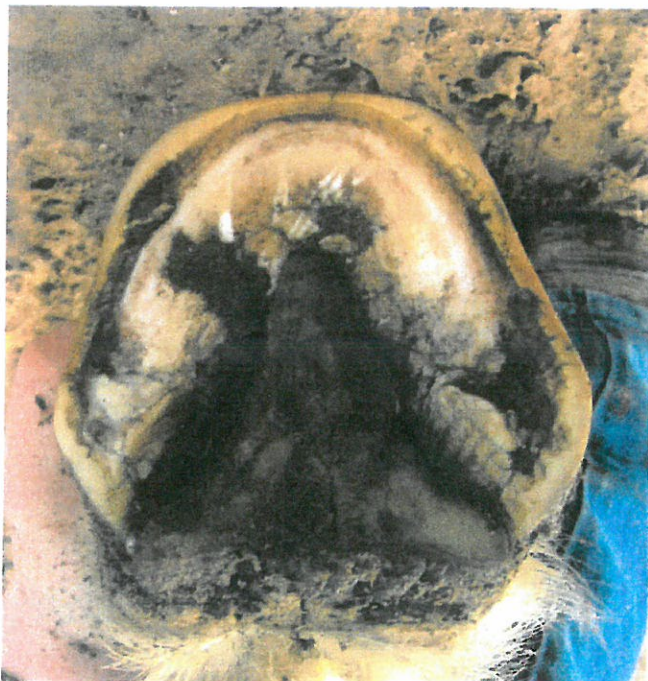
Fig. 32 Mixed trim horse (16) at end of study following 3 trims
Left side is four point trim, right is conventional



16 Little Liz 4th LF 4pt



16 Little Liz 4th RF conv



16 Little Liz 4th LH 4pt



16 Little Liz 4th RH conv

Fig. 33 Mixed trim horse (17) at end of study following 3 trims
Left side is four point trim, right is conventional



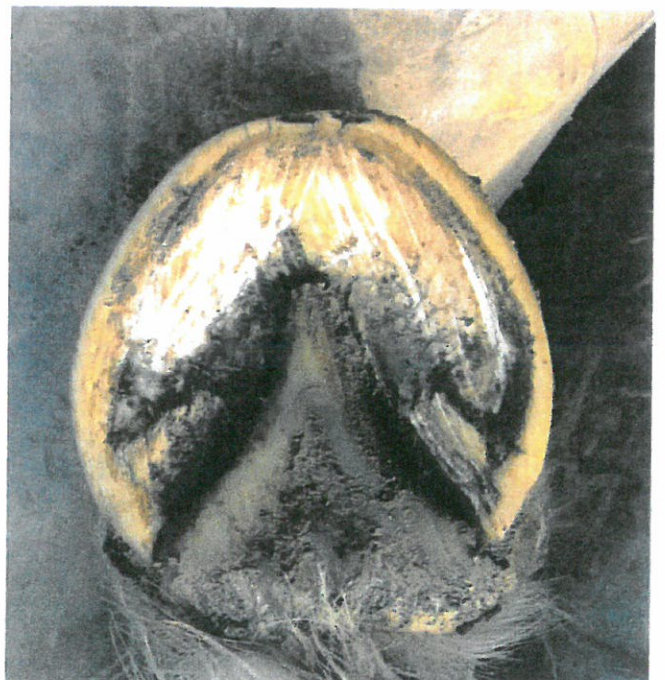
17 RedCarn 4th LF 4pt



17 RedCarn 4th RF conv



17 RedCarn 4th LH 4pt



17 RedCarn 4th RH conv

Final Remarks:

Those students of the hoof capsule who espouse a particular shape and wear pattern as an ideal ignore the wide range of wear patterns and morphologies evinced by the hoof capsule in response to different environments. The heavily worn foot of the horses in the arid, hard grounds of the western United States, still allows the horse to remain sound and mobile because of the physiologic reserves of the foot (hypertrophy of the sole – “sole callus”) despite the pronounced wear of the hoof wall. Although Ovnicek has based his system of foot care and shoeing on this “western” model, one could just as easily say that the horses he studied were sound *despite* their foot morphology and not *because* of it. Ovnicek and Redden’s focus on the four points of contact on the foot surface has limited application in my geographic area, because this is not at all a normal wear pattern here. If I tell an Eskimo that people in Tahiti have calluses on their feet and don’t get frostbite, the Eskimo would probably say “...yes, that’s true, but it has little bearing on me or my environment.”

Techniques and landmarks for equine foot preparation and maintenance have been recorded and discussed for more than one thousand years. The recent (cyclic) resurgence of interest in barefoot horse care has brought these techniques back into focus.

Many older texts, and most modern authors agree on use of the live sole – wall junction as a reference point for the plantar surface of P III. As **Balch** (Balch, O., 1992) has stated, there are really two ways to trim the foot: a geometric, or limb-based method; and a result-based method, which requires more time and effort, and an assistant to lead the horse as the farrier watches it travel. This is called static vs. dynamic balance by some farriers. Thus the Statement by one FWCF (Ferrie, J. 1997) that “I can make them stand straight or make them move straight, but not both simultaneously.”

The “Natural” Foot:

Theorists who idealize a single type of unshod foot ignore the effect of footing and environment on the morphology of the foot, and ignore the adaptability of the hoof capsule to a wide range of environments and work or riding disciplines. This unitary, idealized foot is indeed a mirage. The pursuit of any mirage ultimately leads to frustration.

“Natural” and “barefoot” horse care have become advertising terms used for marketing expensive weekend trimming courses, tools, and protective boots for “barefoot” horses. The very terms “natural,” “barefoot,” and “wild” have a romantic appeal to some horse owners. Some of the purveyors of unshod horse training have followed a marketing model, which is commercial franchising. (Heymering, H. 2002) Besides the pressure from marketing, the short-term costs of keeping a horse unshod are lower than having to pay a farrier for regular shoeing.

In North America, we have seen explosive growth in educational and ‘certification’ offerings by self-styled “equine hoofcare” experts who tout the benefits of barefoot horse care, and the unnecessary or evil nature of horseshoes. This new sub-culture has also generated a large number of offerings on the Internet, and many of these websites are rabidly anti-farrier. A partial listing of these sites is attached in Appendix 2.

Farriery is completely unregulated in North America. The average horse owner in the author’s experience has become more affluent, better educated, and *less*

knowledgeable about horses over the last 35 years. They, and their horses, have no protection from increasing numbers of marginally qualified individuals.

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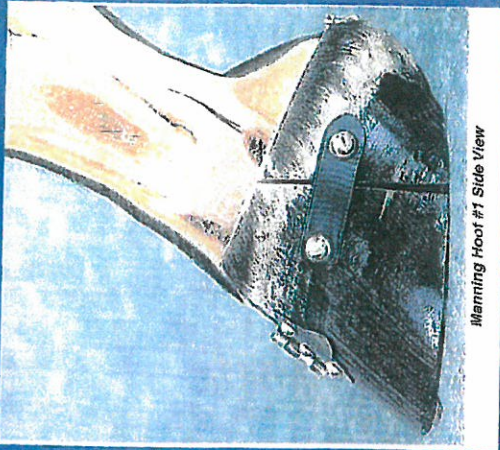
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Appendix 1. Trimming Techniques Compared



Manning Hoof #1 Side View



Strasser Hoof #1 Side View

"Consider the angle, length and proportions of the hoof with respect to breed to see whether the walls, toe or heels need to be shortened..."



Bergelson Hoof #1 Side View

"The end goal is to establish and maintain straight hair lines that represent even dissipation of concussion..."



Similar Hoof #2 Side View

"Trimming to uniform sole thickness simply means trimming a hoof wall to the same plane of the healthy sole..."



Reardon Hoof #1 Side View

"When trimming, I use the philosophy to leave everything the horse needs and leave nothing he doesn't need..."



Dymilek Hoof #1 Side View

"The hoof is in balance when the bottom of the distal phalanx is parallel to the ground on a medial/lateral plane..."

Appendix 2. A Few Websites on “Natural” Foot Care

[Web](#) [Images](#) [Video](#) [News](#) [Maps](#) [more »](#)

barefoot trimming courses

[Advanced Search](#)
[Preferences](#)**Web**Results 1 - 10 of about **202,000** for **[barefoot trimming courses](#)**. (0.12 seconds)**[Bitless Bridle™ UK Useful Links - Bitless. Barefoot. Treeless ...](#)**

Charlie Girdlestone - **Barefoot** hoof **trimming** in the South East (UK) - Email Charlie or phone ... **Courses** include communication-healer practitioner training. ...

www.bitlessbridle.co.uk/bitless-bridle-links.php - 34k - [Cached](#) - [Similar pages](#)

[David Farmilo: Horse Farrier](#)

Many owners then find the horse still has problems without shoes, so then they decide to do a **course** and learn to **barefoot trim** the horse themselves. ...

www.horsefarrier.com.au/barefoot_trimming_the_debate.htm - 41k -

[Cached](#) - [Similar pages](#)

[Hoof Care Courses](#)

My 2 day hands-on **course** covers the basic principles of hoof care, horse shoeing and **barefoot trimming**, incorporating Assessment, Balance & Correction in ...

www.horsefarrier.com.au/shoeing_horses.htm - 42k - [Cached](#) - [Similar pages](#)

[Barefoot for Soundness](#)

To find **barefoot** trimmers who do a "wild-horse" or "natural" type of **barefoot trim**, and for **courses** that teach professional **trimming**. ...

www.barefoothorse.com/ - 2k - [Cached](#) - [Similar pages](#)

[The Natural Barefoot Horse](#)

NATURAL HOOFCARE **COURSES**: Online Winter 2007 ... "**Trimming barefoot** riding horses demands a higher level of intuition and competency. ...

www.barefoottrim.com/ - 24k - [Cached](#) - [Similar pages](#)

[Natural Horse People. barefoot trimming, holistic horse keeping ...](#)

We have resident experts offering **courses** and advice on horsemanship, **barefoot trimming**, holistic horse care, aromatherapy, homeopathy, equine behaviour and ...

www.naturalhorsepeople.com/wellbeing.html - 15k - [Cached](#) - [Similar pages](#)

[Natural Balance & EDSS Hoof Care Courses Brought to You by: The ...](#)

Attending a Full 3 Day Gene Ovnicek Clinic in the Past Also Qualifies for L3 **Course**. ☞ - If you are only interested in **Barefoot Trimming, barefoot** horses ...

www.hopeforsoundness.com/education/elpo/elpo-courses.html - 55k -

[Cached](#) - [Similar pages](#)

[Treating Founder \(Chronic Laminitis\) Without Shoes--Home Page](#)

Some of the 'non-denominational' **trimming courses** do borrow more from ... It is easier to maintain frog pressure consistently with a frequent **barefoot trim**, ...

www.naturalhorsetrim.com/ - 107k - [Cached](#) - [Similar pages](#)

[Glfach-Wen Hoofcare for horses in Carmarthenshire, Wales, UK](#)

During the certification **course** we are trained in **trimming** techniques to deal with ... I got into **barefoot trimming** because one of my horses had Navicular. ...

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barefoot trimming courses

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[Preferences](#)**Web**Results 11 - 20 of about 202,000 for [barefoot trimming courses](#). (0.05 seconds)**Horses Hooves or the Holy Grail?**

The FRC does not recognise any of the **courses** provided by various **barefoot/natural ... barefoot trimming** and should an opportunity to amend the Act arise ...

www.horseshoes.com/advice/barefoottrimming/barefoot.htm - 29k -

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Welcome to Nature's Barefoot Hoofcare Guild

Both the **Trim Your Own Horse** and **Barefoot Hoofcare Specialist courses** will be offered on these dates at Kate's farm in Woodville, Ontario. ...

www.natureshoofcare.com/home.html - 8k - [Cached](#) - [Similar pages](#)

Home

Of **course**, this "required" shoes to fix. So, when Claudia Garner sent out the email for a **barefoot trim course**, I couldn't attend because it was "necessary" ...

www.hoofcareunltd.com/lsabella.htm - 17k - [Cached](#) - [Similar pages](#)

The Barefoot Trim

Find out the general guidelines to the proper **barefoot trim**. ... They were **barefoot**. They had to execute sliding stops, spins, roll backs, jumps and high ...

www.suite101.com/article.cfm/natural_horsemanship/73268 - 28k - [Cached](#) - [Similar pages](#)

The Horse's Hoof. News for Barefoot Hoofcare

Barefoot Trimming, a Means to Rehabilitating Founder - **Trimming** from the Top by Paige Poss ... NEW "Online Hoofcare 100" - 7 month self study **course** ...

www.thehorseshoof.com/ - 1k - [Cached](#) - [Similar pages](#)

City of Houston Police Horses Go Barefoot, part 1

My assigned horse, a Dutch Warmblood named Shadow, became the first horse to begin with a **barefoot trim**. At that time, he was a 4-year-old just starting his ...

www.thehorseshoof.com/success_Houston1.html - 12k - [Cached](#) - [Similar pages](#)

Equusite.com - Martha Olivo Brings the Whole Horse Barefoot Trim ...

... will be offering a certification **course** in the physiologically correct **trim**, ... Martha has studied **barefoot trimming** with a number of people, ...

www.equusite.com/articles/holistic/holisticMarthaOlivo.shtml - 13k - [Cached](#) - [Similar pages](#)

Private Equinextion Courses

Private natural **trim** training. ... EQUINEXTION. Private Equinextion **Courses** ... you have read up on **barefoot trimming** and have read our site cover to cover. ...

www.equinextion.com/id43.html - 24k - [Cached](#) - [Similar pages](#)

Why your horse should go barefoot- Horse health problems and ...

She teaches all over the globe and runs **courses** for horse owners and farriers ... for a long time before putting her **barefoot** and especially **trimming** her. ...

www.horsetalk.co.nz/health/ik-barefoot.shtml - 27k - [Cached](#) - [Similar pages](#)

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barefoot trimming courses

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-having graduated from the one-year-long Strasser **barefoot trimming course** in 2003, I now also often use techniques proposed by Jamie Jackson and Pete Ramey. ...
www.equipforme.net/productssimple5.html - 43k - [Cached](#) - [Similar pages](#)

PDF] The Alamance Cooperative Extension Service and its Livestock ...

File Format: PDF/Adobe Acrobat - [View as HTML](#)
"Barefoot No Horse-Know Foot Know Farrier" and "**Barefoot Trimming**". There will be a \$5.00/person registration fee for each of these **courses**. Youth members of an ...
alamance.ces.ncsu.edu/files/library/1/horsenwsltrApril06.pdf - [Similar pages](#)

Hoofcare Unltd

Instructor **Barefoot Trim Clinics**. Clinics in Savannah, GA and Hilton Head, SC. Hoof care practica in Germany and Canada. Enrolled in 9-month **course** to ...
www.hoofcareunltd.com/aboutus-claudia.html - 70k - [Cached](#) - [Similar pages](#)

Penzance Hoofcare Services

30 Hour Equine NATURAL HOOFCARE & **TRIM** Certification **Course** ... Always consult your veterinarian or **barefoot trim** specialist. Problems? ...
www.barefoottrim.com/services/barefoottrimcertificatecourse.htm - 16k - [Cached](#) - [Similar pages](#)

Equusite.com - Navicular Problems (Navicular Syndrome, Navicular ...

Trimming: For information and education on natural **barefoot trimming** for treatment of ... Clinics and certification **courses** on natural **barefoot** hoofcare. ...
www.equusite.com/articles/health/healthNavicular.shtml - 13k - [Cached](#) - [Similar pages](#)

Barefoot Horses In Action

I have been **trimming** Tonka myself since I bought her. I DID take a 'Farrier Science' **course** at CSU, so I wasn't totally in the dark about **trimming**, but, ...
www.tribeequus.com/action.html - 14k - [Cached](#) - [Similar pages](#)

Barefoot

And, of **course**, because you owe it to the horse in your care. ... A "physiologically correct" **barefoot trim** is created almost like a "piece of art", ...
www.eques.com.au/health/sep_05/barefoot.htm - 35k - [Cached](#) - [Similar pages](#)

Bright Barefoot Equine

Consultation & support for those learning to **trim** their own horses. Includes recommending reputable **barefoot courses**, books and websites; advising on tools ...
www.brightbarefootequine.com/bbequine.htm - 10k - [Cached](#) - [Similar pages](#)

Treating Founder (Chronic Laminitis) without Horseshoes--5

FREQUENT **trimming**, which mimics the constant wear and shaping **barefoot** wild ... these weekend classes are just an introduction, and not the full **course**. ...

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barefoot trimming certification

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The Natural Barefoot Horse

certification Courses Clinics & Workshops ... "Trimming barefoot riding horses demands a higher level of intuition and competency. ...

www.barefoottrim.com/ - 24k - [Cached](#) - [Similar pages](#)

Penzance Hoofcare Services

80 Hour Equine NATURAL HOOFCARE & TRIM Certification Course ... Always consult your veterinarian or barefoot trim specialist. Problems? ...

www.barefoottrim.com/services/barefoottrimcertificatecourse.htm - 16k -

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Natural Balance & EDSS Hoof Care Courses Brought to You by: The ...

certification, None, LS-HM **Certification**, LS-HM **Certification** ... If you are only interested

in **Barefoot Trimming**, barefoot horses will be provided for you ...

www.hopeforsoundness.com/education/elpo/elpo-courses.html - 55k -

[Cached](#) - [Similar pages](#)

Live Sole - Hoof Mapping Endorsement

That means that in order to become a Certified NB Farrier, you will have already needed to pass the LS-HM **Certification** and the NB **Barefoot Trimming** ...

www.hopeforsoundness.com/education/elpo/nbcertification-overview.html - 105k -

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Gilfach-Wen Hoofcare for horses in Carmarthenshire, Wales, UK

During the **certification** course we are trained in **trimming** techniques to deal with ... I got into **barefoot trimming** because one of my horses had Navicular. ...

www.gilfach-wen.co.uk/hoofcare.htm - 16k - [Cached](#) - [Similar pages](#)

Barefoot for Soundness

The wild-horse **barefoot trim** re-balances the navicular foot to allow ... I terminated my **certification** with Dr. Strasser and do not recommend her **trim**, ...

www.barefoothorse.com/ - 2k - [Cached](#) - [Similar pages](#)

Barefoot for Soundness

Barefoot promotes soundness in horses; instructions for a **barefoot trim**. ... I terminated my **certification** with Dr. Strasser and do not recommend her **trim**, ...

www.barefoothorse.com/barefoot_home.html - 32k - [Cached](#) - [Similar pages](#)

[[More results from www.barefoothorse.com](#)]

Hoofcare Unltd

Organizing **Barefoot Trim** workshops with various Instructors ... Demonstration Rider in
USDF Instructor **Certification** Testing ...

www.hoofcareunltd.com/aboutus-claudia.html - 70k - [Cached](#) - [Similar pages](#)

Hurrell Hill Trailer Sales Center

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barefoot trimming certification

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The **Barefoot Trim**, as defined by Nature's **Barefoot Hoofcare Guild**, ... April 20: Level 1 **Certification** examination for students who have reached their ...
www.natureshoofcare.com/home.html - 8k - [Cached](#) - [Similar pages](#)

[About NBHG](#)

She has recently opened a **Certification** Program in the **Barefoot Trim**, and gives workshops and seminars. Kate's love and compassion for all horses is evident ...
www.natureshoofcare.com/about_kate.html - 7k - [Cached](#) - [Similar pages](#)

[Treating Founder \(Chronic Laminitis\) Without Shoes--Home Page](#)

The **Barefoot trim** approach in action: ... For information on the Strasser Hoofcare Specialist **Certification** course in N. America, contact Todd Merrill for ...
www.naturalhorsetrim.com/ - 107k - [Cached](#) - [Similar pages](#)

[Going Barefoot](#)

This includes a programme of regular correct **barefoot trimming**, ... publisher of Study Guides (to aid farriers for AFA national **certification** examinations) ...
www.equinewhispers.co.uk/barefoot.html - 29k - [Cached](#) - [Similar pages](#)

[Equusite.com - Martha Olivo Brings the Whole Horse Barefoot Trim ...](#)

... will be offering a **certification** course in the physiologically correct **trim**, ... Martha has studied **barefoot trimming** with a number of people, ...
www.equusite.com/articles/holistic/holisticMarthaOlivo.shtml - 13k - [Cached](#) - [Similar pages](#)

[Equusite.com - Navicular Problems \(Navicular Syndrome, Navicular ...](#)

Trimming: For information and education on natural **barefoot trimming** for treatment of ... Clinics and **certification** courses on natural **barefoot** hoofcare. ...
www.equusite.com/articles/health/healthNavicular.shtml - 13k - [Cached](#) - [Similar pages](#)

[Lifeway & the Natural Hoof Clinics \(AANHCP\)](#)

This clinic is required for **certification** by the American Association for ... impact of a good **barefoot trim** or they can undermine the efforts of even the ...
homepage.mac.com/brucenock/AANHCPclinic.html - 29k - [Cached](#) - [Similar pages](#)

[PDF\] Equine Lameness Prevention Organization, LLC](#)

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Certified NB Farrier, you will have already needed to pass the LS-HM **Certification** and the B. **Barefoot Trimming Certification**. ...
www.e-hoofcare.com/miscfiles/L2CoursePackage.pdf - [Similar pages](#)

[ELPO Membership List - Farriers](#)

The second list consist of **Barefoot Trimmer** (meaning they only **trim** horses, and do not apply shoes). All reached a **certification** level of at least "Certified ...
www.e-hoofcare.com/support/search/farrier/elpomemlist.html - 99k - [Cached](#) - [Similar pages](#)