

NATURAL HOOF PRINTS



Equine
Digit
Support
System,
Inc.

Volume 2, Issue 1

**“I pray
that my
mind will
always
be open
so that
my heart
can
guide
me.”**

THE MORE WE DO THE MORE WE



I would like to start by thanking Dr. Barbara Page of Littleton, CO and Dr. Robert Bowker of Michigan State University for the work they are doing in Equine Hoof research. Countless farriers and veterinarians across the country are also conducting research with each lameness cases they care for within their own practices. Here at EDSS we have received an overwhelming response of excitement from results and learning opportunities the wild horses have given through EDSS and Natural Balance principles and guidelines.

This coming year appears to offer hoofcare practitioners even more opportunity to solve mysteries of the equine limb. We see more and more people using Natural Balance ideas and applying them to the principles they have developed for themselves, whether their views are traditional or non-traditional in nature. I'm pleased to receive reports from many Certified and Journeyman farriers who say that they use the guidelines of Natural Balance and are able to recognize hoof deformity that were steering them away from the picture-book hoof model they learned from school. They still feel that traditional values are high priority, but feel that it is now much easier to see the proper hoof capsule's relationship to the coffin bone. Many veteran farriers have experienced the positive hoof restructuring that occurs once Natural Balance principles are used. They express excitement when the hoof reforms itself

to the true hoof shape as it was intended. Our ongoing awareness of how to better service the needs of the equine digit has in part come from the research done by Dr. Page and Dr. Bowker. The field experience and input of other veterinarians and farriers makes Page's and Bowker's research more worthwhile and rewarding. The list of key players is long and getting longer as more people are exposed to the wild horse information. I feel it's of paramount importance as we look differently at the equine foot that we don't create a hoof shape that was never intended to be, but only what nature intended. **BE PATIENT. BE CONSERVATIVE. BE AWARE.**

Each year we will grow in our understanding of hoof balance and the changing needs for domestic horses. We will need to modify our thinking some along the way, so we can better serve the animals we are dedicated to. I pray that my mind will always be open so that

Table of Contents

THE MORE WE DO	1
THE MORE WE KNOW - Editorial (GO)	
STYROFOAM CRUSHING AT THE TOE	2 - 3
- PROCEDURE UPDATE (GO)	
IN THE WOOD WORK	3 - 4
- EDSS, INC. UPDATE (CO)	
FROM THE MAIL ROOM	4 - 5
- Letters of Encouragement	
SUPPORTING THE FROG BUTTRESS	6 - 7
- Procedure Article (GO)	
FOR THE GOOD OF THE ORDER	8
- Tidbits (CO)	

STYROFOAM CRUSHING AT THE

We find an overwhelming number of farriers and veterinarians using the EDSS Styrofoam Support Blocks with great success. However, with the success comes questions and suggestions about application procedure when results don't follow the normal, simple pathway. In some cases of acute and/or reoccurring chronic laminitis patients, some individuals applying support blocks have reported that the toe portion of the block has crushed immediately with no substantial crushing in the heel. The feeling is that the equilibrium of the limb is altered by this action and a satisfactory impression or mold cannot be achieved until the heel portion is crushed. These are excellent observations and raise some valid concerns. We have received suggestions from support block users that have been extremely helpful to those who have had problems. We are happy to pass on these helpful hints to you so that you may continue getting the high level success in supporting and protecting the distal border of P3 in these volatile times.

One suggestion that works well is to place the block substantially forward on the foot before horizontal wraps are applied. Try placing the support block about 1 1/2" ahead of the leading edge of the rocker you've prepared in the ground surface of the foot. (Fig. 1) In most cases the block will normally line up with the back part of the frog. If moving the block forward does not eliminate the rapid toe compression after 10 minutes or so, (Fig. 2) try removing the block, turn it around and turn it over. Place the block back on the foot ahead of the toe, with the previously crushed portion under the heel. (Fig. 3) Placing the block forward on the hoof will allow

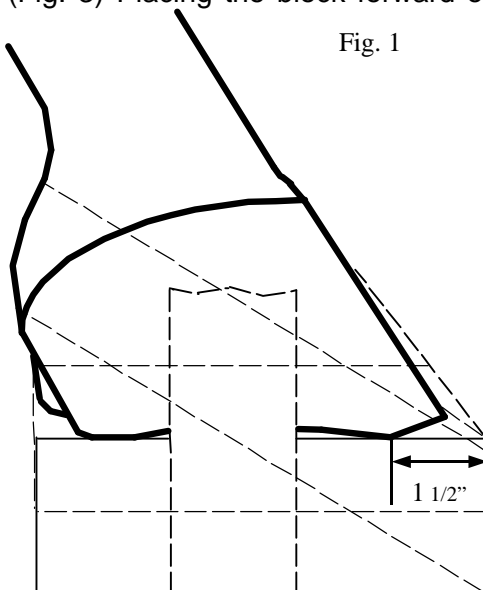


Fig. 1

an extra amount of Styrofoam (about 1" or so) ahead of the toe. The material ahead of the toe, when crushed, will curl up ahead of the toe and will create a rim around the toe. This will keep the foot from sliding forward on the support block.

Steve Foster of Arizona suggested another interesting

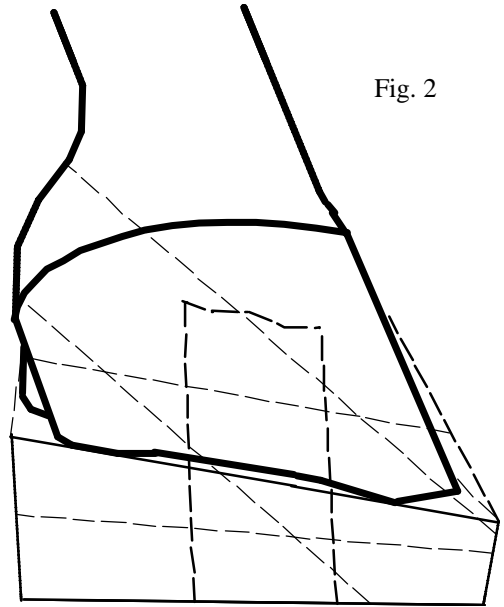


Fig. 2

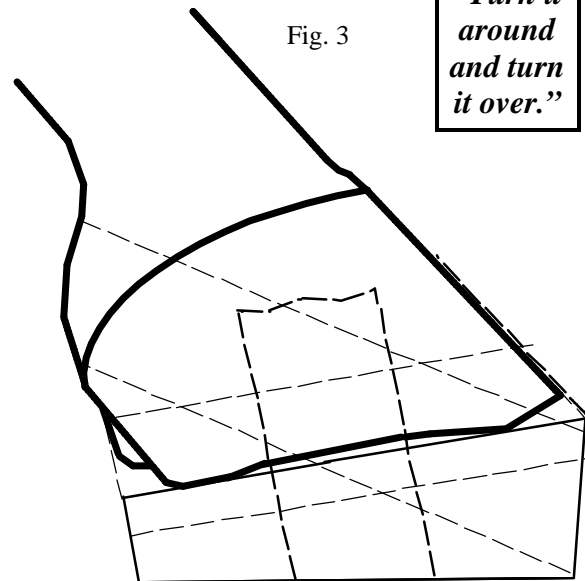
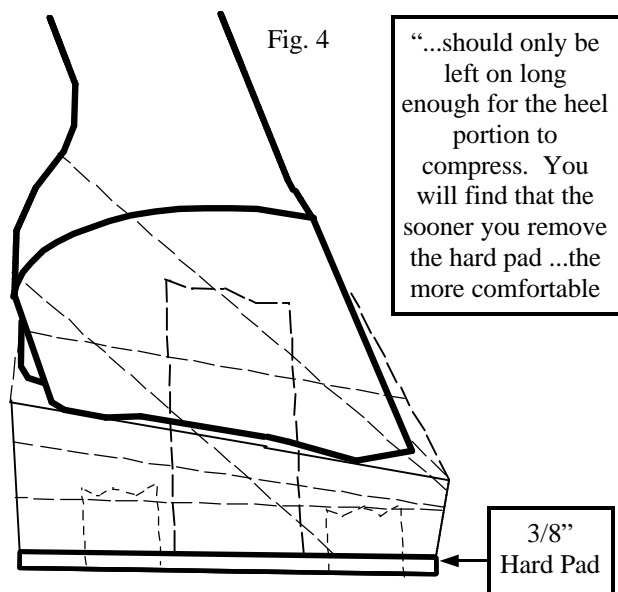


Fig. 3

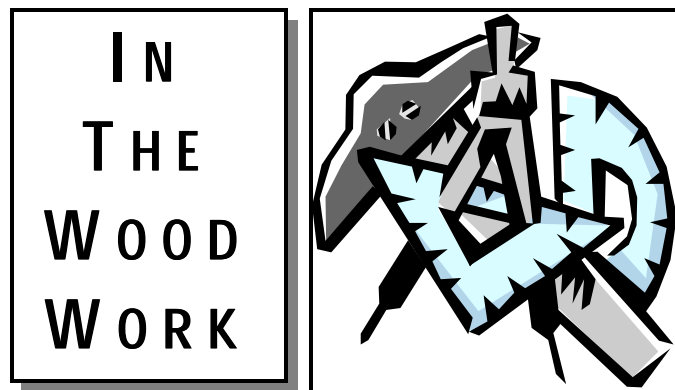
"Turn it around and turn it over."

technique that seems to work very well in some cases. Steve feels that a flat firm plastic pad (about 3/8" thick) taped to the bottom of the support block (on the ground surface) allows the Styrofoam to crush more evenly. (Fig. 4) A piece of plywood fitted to the size of the pad can be used as well as an EDSS Impression Pad. The hard plastic pad or the wood pad is applied once the support block is attached to the foot and should only be left long enough to allow the heel portion to compress. It shouldn't take over an hour or so to compress if the horse is standing and move



around some. You will find that the sooner you remove the hard pad from the ground surface of the support block, the more comfortable the horse will be. Again, the hard pad is only used if you notice extreme compression of the support block in the toe portion within the first 2 to 3 minutes after the block is attached to the foot (about 1" or so ahead of the toe).

Reinforcing the ground surface of the EDSS support block with 1 or 2 layers of duct tape is advised before the horse is turned loose. These duct tape layers will protect the ground-side of the Styrofoam from being chewed up by rocks and such. The protective layers will also help to reinforce the compressed heel portion once it's trimmed and placed back in the rear of the foot. If both compressed layers are reinforced with duct tape on the ground side before they are attached together (as indicated in Volume 1 Issue 2 of this newsletter and in the "New Hope for Soundness" book) you should have approximately 1" or so of highly compressed layers secured together ready to go back in the rear of the foot. These two compressed layers should be attached to the foot with Elasticon tape and expected to be left in place for as long as it takes for the horse to reach Obel grade II and is off medication for pain. Our consulting veterinarians feel encouraged by the patient response when meds are kept to a minimum and used short term. Remember to de-rotate the compressed support block if the rear does not compress significantly. Explicit instructions for this procedure can be seen on page 35 of the "New Hope for Soundness" book.



We've got a lot of new things in the woodwork for 1998. Gene has several clinics already lined up for the spring and summer, including a dual presentation with Dr. Bob Bowker of Michigan State University. This seminar will be held at the University of California at Davis on January 24th. We are also very excited about the new Natural Balance Shoes that have a little different design and will now come in 6 sizes. They are currently in the mill and should be out hopefully early this spring. We will keep you posted on their arrival.

The other major development as far as products has to do with our Impression Material. First we will be changing the packaging containers to a more durable plastic container with a tighter fitting lid. Second, we will be changing the size availability from our current 3, 4 and 5 lbs. to 2, 4 and 6 lbs. Prices will stay pretty much the same (\$/lbs.) except we will try to give more of a break per pound as the size increases. Third, we are going to be offering some smaller sizes that will be available for suppliers. And finally we are putting out a new video that will cover Styrofoam and Impression Material application, maintenance and troubleshooting. All Impression Material related products should be available by mid February.

Last but not least we would like to take this time to give recognition to all past clinic sponsors and attendees. It has been a pleasure to be able to meet and work with every single one of you. You are largely responsible for a majority of the positive feedback we receive here at EDSS. To continue getting positive and encouraging results with our clinics, we would like to ask your permission to place your name and phone number on a list that will be supplied with clinic formats. These formats are received by potential clinic sponsors and will give them a source of reference if they should need one. On the following page is a list of names of several past clinic sponsors and attendees. If your

name is on the list and you would like it removed, please contact us either by mail, fax, e-mail or phone and request that it be taken off the list. If your name is not on the list and you would like to be a clinic reference, again just mail, fax, e-mail or phone us and will add you to the list. If you would like to have your name on the list but do not wish to have your phone number printed, that can be arranged as well. We again would like to thank you for your support and participation in the ongoing promotion of soundness through *Natural Guidelines for Hoof Balance*.

Veterinarians

Judith Shoemaker
 Kim Henniman
 Leonard Eldridge
 Thomas Castleberry
 David McCarol
 Bob Bowker
 Barb Page
 Bill Page
 Diane Isbell
 John Koella
 Scott Green
 Andrew Dibbern
 David Klue
 Mark Silverman
 Julie Grohs
 Jessica Morgan

Horse Owners

Lynette Sybly
 Karen Leibe
 Clare Bloome
 T.J. Vietor
 John Hovde
 Bill Novac
 Donna Gray
 Barb Swift

Farriers

Mark Plumlee
 Bill Merfy
 Doug Frazier
 David Sherod
 Gordon Goss
 Bill Heflin
 Ben Shipard
 Todd Kennedy
 Kent McKann
 Doug May
 Pat Doyle
 Kane Rubalcaba
 John MacKenzie
 Jerry Caswell
 Steve Foster
 Dave Isreal
 Mike DeLeonardo
 Kathy Wardenaar
 Matthew Frederick
 Robert Catanach
 Jeff Salter
 Jim Heflin
 Kevin Hatridge
 Pat Thacker
 Doug Fouty
 John Arkley
 Henry Heymering
 Matt Tegin
 David Nichols
 Joel Ringler
 Bill Kornell
 Dallas Morgan



Once again we would like to share a few of the letters we have received here at EDSS, Inc. Although the letters have been addressed to us, you all are largely responsible for the stories within them. The support and encouragement we have received over the last few years has been phenomenal and we would just like to pass on to you equal support and encouragement. Thank you and keep up the superb work!!

In an era where heroes are hard to find, I found 3. My mare, Paelo Hawk, had been a very competitive and active horse when she was young but as we grew older we both became less active and overweight. In December of her 11th year (1993), she became extremely ill and 'went down' in the pasture. We called our veterinarian and he diagnosed founder although he said it was unusual to founder on hay. Doc did take some blood samples to eliminate other possibilities and warned us that with founder so severe, it would take weeks/months before she would come out of it. We put her on a diet and a regime of Thyro-L (even though her thyroid tested within the normal range) and Bute for the pain. By spring, she was doing fine. But in the fall of '94, even though we maintained her Thyro-L treatments, she foundered again. I had Doc do more tests (hair & blood samples) but the diagnosis was still founder. The winter of '94/'95 was hard on all of us but once again, she recovered in the spring. Doc had recommended I have a farrier put specialty shoes on Paelo. Unfortunately, the two farriers I contacted in our area said that she had been foundered too long and that there was nothing they could do.

During the winter of '95, Paelo had several severe incidences of founder. I had Doc come out to drain abscesses from the soles of her feet and she would be okay for a few weeks, then suffer another setback. We were at a loss and the horse was in such pain that we finally arranged to have Doc come to put her to sleep. A local wild life park would take the carcass to feed their wild animals. I had bought Paelo as a yearling and she meant more to me than a horse should, so it was an extremely difficult decision for me to make. The destined day arrived with severe weather

and we had to postpone the inevitable. Within a few days, the weather warmed up and Paelo once again recovered. It was my own selfishness keeping her alive when she was in such obvious pain. My husband James and I decided to let her live through the summer of '96 and we would consider putting her down with the first founder incidence that fall, rather than allow her to suffer through a fourth long, hard winter.

As luck would have it, my good friend Marsha Blake visited us in July of '96. When she learned of my plans for Paelo, she recommended her brother-in-law Todd Kennedy. Todd lives about 300 miles from here but he would be vacationing in the hills in a couple of weeks. I called Todd and he felt confident he could help my horse. He needed x-rays of her front hooves to determine how much coffin bone damage and rotation had occurred. I arranged for a veterinarian to bring her portable x-ray machine. The day before she was to come, Paelo relapsed. It took a shot of ACE and 2 people to pull her feet up onto a 2" x 6" block of wood for the x-ray. Todd arrived the following day and he expressed his concern with the severe amount of rotation evidenced by the x-rays. He warned me not to get my hopes too high.

What Todd did to Paelo's front hooves was nothing short of drastic. He applied the *Natural Balance Trim* technique that he had learned from Gene Ovnicek. Within an hour, Todd completely reshaped Paelo's front hooves and applied the EDSS (Equine Digit Support System) shoes with pads. Todd warned me that Paelo would likely be uncomfortable for a few days but that she would improve within the week. I told him I was use to that, as my horse was frequently sore for days, often times after trimming. This had been happening for years with several different farriers. I led Paelo out so Todd could see her walk which was quite humorous at first. Paelo had about half of the hoof she used to have and when she would attempt to set her hoof down and the toe did not touch the ground right away she would paw the air a few times until her hoof touched the ground. She gingerly walked out of the barn but once she figured out her new feet, she stepped right out. I turned her loose in the corral and within 1/2 hour she was trotting around. The next morning she actually loped up to greet me. She hadn't done that in literally years!!

Paelo became a new horse overnight. She enjoyed being ridden -- she enjoyed running around the pasture; her eyes were bright and her whole demeanor changed. By November, I needed her shoes reset but I didn't know of any local farriers who could do it. Todd's friend, Bob Fritz, happened to be in the Black Hills area deer hunting. Bob said he'd "stop by" on the way home which was only about 150 miles out of his way!! His wife even made a special trip to bring his farrier

equipment. Bob trimmed and reset Paelo's pads and 3 of our local farriers came out to see the technique. Paelo did great all winter (and we had a long winter). She didn't have one single incidence (not even a minor set back) through the entire winter.

In March, Gene, Todd and Bob hosted a "New Hope for Soundness" seminar on the EDSS system here in the Black Hills. Several good local farriers and veterinarians attended so I now know of several local farriers who can apply the EDSS system. Todd and Bob trimmed and reset Paelo's shoes but removed the pads and Gene suggested that the next time she was trimmed, I leave her barefoot.

Paelo has now been barefoot for 2 months and she has been on the run since August 16 of 1996. She is not on Thyro-L, I haven't given her pain medication for over a year nor did I change her diet (now that she's more active, she has lost some of her obesity). I've been able to ride her more in the last year than the previous 4 years combined. I really don't know how the system works -- I just know that it worked for Paelo -- and I know the bears at the wildlife park missed a wonderful meal. Thank you Todd, Bob and Gene for not only giving me back a healthy, happy horse but for going to such extreme length to do so!!



Just a note to let you know how the EDSS system is working for one horse here on Kodiak Island.

I shod 'Buffer', a 25 y/o mixed breed gelding, with EDSS on his fronts about 6 weeks ago after trying several other remedies for his 'caudal heel syndrome' or navicular condition. I had previously shod Buffer with a handmade eggbar shoe, a 3° wedge, and a sharply rockered toe. This at least got him off the ground (he was laying down most of the time), but he still exhibited a grade 4 lameness.

Then I shod him with the EDSS. I looked for dramatic, immediate improvement, but was somewhat disappointed. After a week, he had improved, but not dramatically, so I put a higher wedge on. After a couple more weeks, he is improved dramatically and has been chasing and biting his stablemate unmercifully. His stablemate is a sound 5 y/o QH with a 90+ speed index. The owner has suggested that I remove the shoes before Buffer inflicts more damage on the 5 y/o. Owner has also been riding Buffer for the first time in years.

Anyway, I am sold on the system and will recommend it to several owners here with similar problem horses.

~ Jerry Clayton

SUPPORTING THE FROG

In our first newsletter we talked briefly about structures of the foot that are often taken for granted. These are features of the shod foot as well as those without shoes that stare back at us each time we pick up a normal foot. The following is a list of questions that I was faced with quite frequently, however I had little to no answer for.

1. Why do shoes seem to be worn squared and rolled across the toe and seldom line up with the frog, yet the rest of the shoe has very little wear?
2. Why do most feet have flares that start about half way down the hoof, with a small portion of wall just below the coronary band on a different plane than the rest of the hoof wall?
3. Why do the quarters always chip and break on bare footed horses?
4. Why is it that the frog and sole seem to respond more quickly than the hoof wall does to changes in the environment (wet/dry, hot/cold)? Why does the hoof wall wear away rapidly when exposed to rigorous use and abrasive terrain, while the sole and frog get callused and hard?
5. Why is the frog buttress always callused, re-grows rapidly and is the last to exfoliate in the shedding process?

I would like to focus on the function of the frog buttress in this short article, as new information from research and personal experience has brought to light some encouraging results when treating cases of laminitis and navicular type lameness'. We also find this information extremely important and very helpful for horses that land toe first and exhibit pain in the shoulders, back and hips. The research of Dr. Bob Bowker at Michigan State University on "Neurological Intervention of the Equine Foot" has made us aware of approprial receptors located in the buttress of the frog. This information combined with the research fact that wild horses land

heel first, seems to indicate that Mother Nature preserves and nurtures the rear portion of the frog for the purpose of sensory perception. We've also found that domestic horses benefit as well if heel first landing can be attained, when the frog buttress makes primary ground contact. Please do not confuse this statement with hoof wall contact or only frog loading. The sequence is for the foot to land enough heel first to allow the frog buttress to only make contact with the ground before the foot is fully loaded. Feet that are prepared in a Natural Balance manner will load the back portion of the foot equally when the foot is flat on the ground. The guidelines for hoof preparation and shoe placement are found in the EDSS Instruction tape and book, as well as in the "New Hope for Soundness" book. The use of Impression Material is important and should be applied properly (find these instructions in the EDSS Instruction tape and book). Whether you use the Equine Digit Support System, conventional wedge pad with a Natural Balance Shoe or modified keg shoe with pad, the goal is the same, utilize the frog buttress for contact and promote heel first landing.

The shoe is fitted so it extends as close to the full length of the frog as possible. (Fig. 1) The pad should extend beyond the heels of the shoe about 1/4" to 3/8". (Fig. 1) A wedge shape insert should always be used and is attached to the pad as far to the rear as possible. (Fig. 2) The attached frog insert

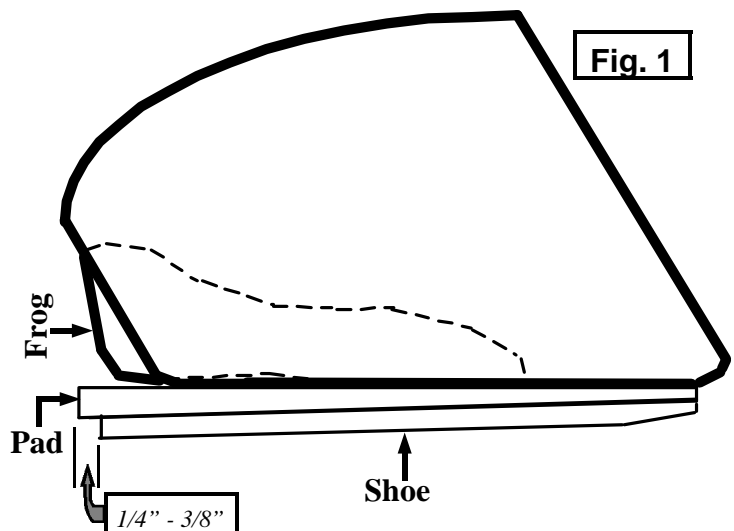
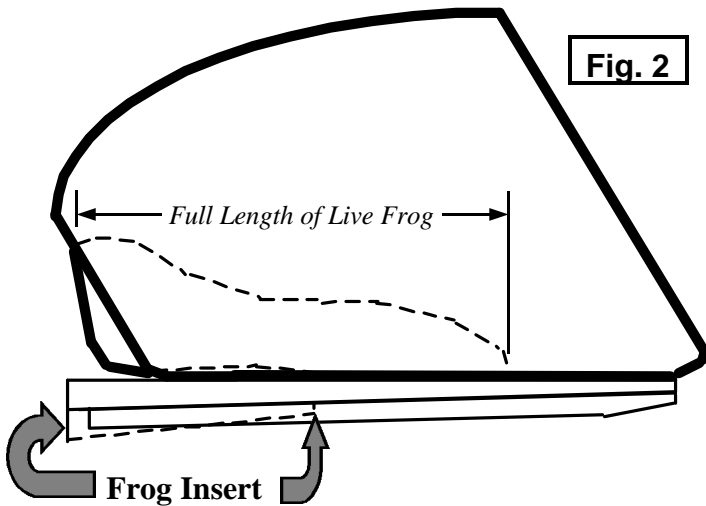
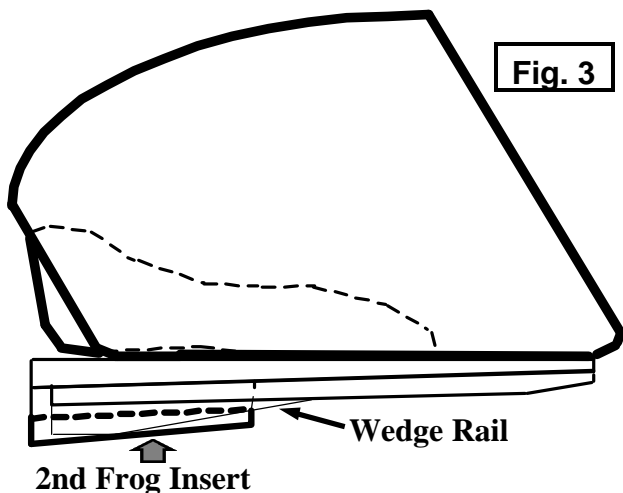


Fig. 2



should be short in length and only extend forward about half the length of the live frog. (Fig. 2 - 4) The portion of the wedge frog insert that extends beyond the heel of the shoe needs to be thicker than the heel of the shoe (about 1/8" or slightly more). (Fig. 2) In cases where heel rails are used with the EDSS, the frog insert must be raised as well until they extend about 1/8" beyond the height of the heels and about 1/4" behind the heel rails. (Fig. 3) The frog inserts that work the best are those available with the Equine Digit Support System. There is a selection of sizes available that makes it easier to choose the appropriate one for each horse. They attach easily to the EDSS pad without having to remove the shoe if adjustments are necessary. When conventional wedges or flat pads are used, the insert must be riveted to the pad, which does not offer you the opportunity to make changes without removing the shoe. However, both

Fig. 3

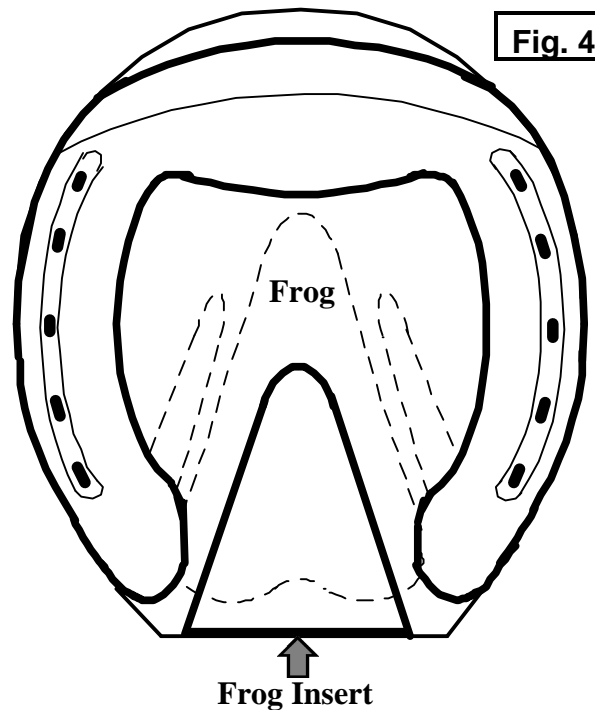


ways work very well once the support to the back of the pad is appropriate for each horse.

Proper heel landing should not be excessive and could be interpreted as intermittent flat landing. Three of five strides at a walk should be noticeably recognized as landing heel first. Horses that have not been landing heel first for some time and have an altered posture in the way they move, frequently have pain or muscle soreness in their shoulders, withers, back and hips. We have found the Equine Digit Support System or modified versions of Natural Balance Shoes, wedge pads, frog inserts and impression material to benefit horses that land toe first and move poorly. Those horses that exhibit body soreness and are slightly lame seem to benefit as well. The chronic cases of laminitis and navicular type patients do extremely well with this treatment. Again, the key is to expose the frog buttress for initial contact with the ground and promote slight heel landing. The biomechanical effects of heel landing and support to the frog buttress will be discussed in depth in future articles of this newsletter and other publications.

The word around the campfire is that Dr. Diane Isbell from Livermore, CA has been using this procedure on a few rear leg

Fig. 4



NATURAL HOOF PRINTS

Equine Digit Support System, Inc.
525 Halfmoon Road
Columbia Falls, MT 59912

NATURAL HOOF PRINTS

As we have mentioned before, it is important to us that this newsletter serve the needs of the people who read. This means printing and writing articles that the readers will enjoy and benefit from. Once again I would like to encourage anyone who wished, to send us an article or request an article be written that they feel will be worthwhile. I have listed some suggestions below that perhaps will spark an idea or remind you of a story that you might like to share. We really enjoy the participation.

- ~ Product Application Problems
- ~ Useful Application Techniques
- ~ Troubleshooting Questions
- ~ Stories of Success' & Failure's
- ~ Industry News
- ~ Product Suggestions
- ~ Problems or Questions About Drawings
- ~ Newsletter Good's & Bad's

