

Common Hoof Problems and their Treatments

The following contains basic information and guidelines only. Please consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.

Navicular can mean simple inflammation of the navicular bursa (a fluid-filled sack for lubrication of the tendon surface), navicular ligament sprain, or tendon destruction and bone changes. The load-bearing front feet are usually the only ones affected.

Navicular disease generally begins as inflammation, and gradually results in deterioration of the bony tissue of the navicular bone. Minute holes appear near the surface of the bone, which begin to extend inward and outward to form large cavities. The cartilage covering the bone is softened and destroyed, leaving a rough, eroding surface next to the deep flexor tendon. The constant rubbing against this rough surface irritates and inflames the tendon, which eventually breaks down completely. Along with this breakdown, the synovial membrane and all other structures in the joint are usually affected. In extreme cases, rupture of the tendon and fracture of the bone can occur.

Causes:

Heredity - foot too small to support body size; long pasterns. Poor trimming or shoeing - low heel and long toe adds strain to the deep flexor tendon and navicular bone; raising the heel too much increases concussion on the navicular ligaments and bone; reducing the size of the foot by rasping the hoof wall concentrates concussion into a smaller area, magnifying the effect.

Diet and exercise - Over-exertion while under-conditioned; standing idle for long periods of time, which smashes the ligaments through standing compression.

Concussion - Blood supply and nourishment to the bone through the navicular ligaments are disrupted through injury.

Treatment Guidelines:

Damages from navicular disease are considered irreversible, but judicious management can restrain progress and reduce effects. Conservative approaches focus on management of the horse's environment:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.
- Condition for strenuous exercise, feed a balanced diet, provide a soft, moist environment.
- Consult your hoof care professional on a proper trim for your horse's individual condition.
- Protect the injured and painful area; cold water soaks can be helpful.
- Retain moisture in the foot and protect with a pad or boot.

EasySoaker Applications:

- Reduced concussion
- Keep foot moist through use of conditioners inside boot
- Complete protection of painful areas
- Cold water soaking

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Founder - The coffin bone (or interior foot bone) of the hoof is covered with a leafy, skin-like substance called the sensitive laminae. The sensitive laminae interlock the coffin bone tightly with the horny laminae on the inside of the hoof wall. Founder is the inflammation of the sensitive laminae of the hoof. Like a blood blister under a human fingernail, founder can be intensely painful. First symptoms may be loss of appetite, high temperature, colic and sweating. The feet will be warm to the touch. The front feet are most commonly affected.

In acute laminitis, the laminae extending from the toe, along the entire surface of the coffin bone, can die quickly. The hoof wall then separates from the coffin bone, allowing the bone to rotate or sink. If the bone is not stabilized, it may penetrate the bottom of the sole, resulting in infection, extreme pain and often death of the horse. Chronic laminitis is characterized by a lingering lameness, irregular rings on the hoof wall, a wide white line at the toe, and a flat sole on the bottom of the hoof.

Causes: Blood circulation to the sensitive laminae is disturbed or disrupted by a variety of conditions. This is usually caused by some kind of stress in the horse's environment, although heredity may also pre-dispose some horses. Some

possibilities are excessive food or cold water intake, changes in feeding routines, excessive concussion or fatigue, infections or poisons, drug abuse or allergic reactions.

Treatment Guidelines:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.

Acute laminitis requires immediate medical attention. The horse may need to be put into slings to remove the weight of the body from the feet. A soft environment must be provided. Shoes should be removed and the feet poulticed to reduce inflammation. Once inflammation is reduced and pain is tolerable, soaking in warm water will improve circulation and help abscesses to drain.

Care for chronic founder is very difficult and often disappointing. It may take as much as a year of daily treatment to recover. Horses with chronic laminitis are occasionally lame, but they may be usable for light work when properly cared for; many horses never recover fully.

Treatment should focus on the following:

- Medically stabilize the horse's system to reduce pain and infection.
- Drain abscesses and keep foot clean and pliable. Soaking in a hot epsom salt is recommended.
- Stabilize the coffin bone to prevent further rotation or penetration.

EasySoaker Applications:

- Poultice applications
- Warm water soaks
- Keep foot clean and pliable

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Abscesses are infections of the sensitive structures of the hoof, most common in the sole or white line area. These “pus pockets” or festering sores will migrate in the foot, seeking an opening for drainage. Even though the wound may begin in the sole of the foot, it is not unusual for it to break open as high as the coronet band (commonly known as a Quittor).

Causes: Abscesses most commonly result from puncture wounds, thrush, bruises or laminitis. They may also develop from bacteria trapped in hoof tissue through the normal expansion and contraction of the hoof.

Treatment Guidelines: In order to heal, the abscess must be opened to allow drainage and drying. Good drainage is essential, but recovery time is usually faster with a small hole. The horse may also need a tetanus shot or antibiotic for possible infection. The following course of action should be followed:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.
- Contact your veterinarian or hoof care professional for advice or assistance in digging out the abscess and administering systemic medication.
- Rinse out the tracts of the abscess with a germicide, and pack with a poultice to encourage drainage.
- Apply a pad or boot to hold the medication at the site of the abscess and to prevent dirt and bacteria from entering the area.
- Soak daily in Epsom salts to relieve pressure and encourage drainage. The foot should be bandaged or protected between treatments.

EasySoaker Applications:

- Applications of germicide and poultices
- Pad inside boot to hold medication at abscess site
- Keep foot clean and free from dirt and bacteria
- Soak in Epsom salts

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Thrush is a destructive bacterial infection of the frog, usually characterized by a black or gray strong-smelling discharge and a “cheesy” appearance. The bacteria responsible is anaerobic (can live only in a no-air environment).

Causes: Bacteria in dirt and manure, allowed to pack into the hoof for extended periods of time, will attack the frog tissue. Dirty stable conditions and lack of regular hoof cleaning will contribute to the problem. Thrush may also be encouraged by lack of exercise or sudden weather changes (dry to wet).

Treatment Guidelines: Cleaning the foot and exposing the affected areas to air, as well as removing the infected portions of the frog, will help stop thrush. Apply an antiseptic agent to dry and destroy any remaining bacteria. For more advanced or serious cases:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.

- Trim away the infected portions of the frog and wash with a scrub brush.
- Let the infection drain, and then treat with iodine or copper sulfate solution. Other drying agents such as bleach or peroxide may also be used.
- The hoof may be padded and packed with medication.
- Tetanus immunizations should be current.
- Frequent hoof cleaning and clean stable conditions are imperative.

EasySoaker Applications:

- Protection while infection drains
- Pad and pack foot with medication
- Keep foot clean and free from dirt and bacteria

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Sand Cracks are vertical cracks in the hoof wall. They may extend part way down the wall from the coronet band, part way up from the ground surface or the full length of the wall. A sand crack is referred to by its location: toe, quarter, heel or bar, and may be superficial or deep and painful. The sides of a crack will not heal (join together).

Causes: Cracks may be caused by unbalanced feet. Dry and brittle feet crack more easily than healthy hooves. Shoeing nails, driven close to the outside wall, will split an otherwise healthy hoof.

Treatment Guidelines:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.

The sides of a crack must be immobilized until new hoof grows out from the coronet band. Cracks that move and cause pain (cracked clear through to the quick) may be filled with acrylic plastic or epoxy material. Sensitive tissue should be protected with sterile cotton or other suitable material.

EasySoaker Applications:

- Overall support for cracked hoof to allow growth
- Protect sensitive areas (with packing or padding) during growth period

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Seedy Toe - The hoof wall is composed of two layers, the outside portion made up of horn fibres, and the inside portion consisting of horny laminae. In a normal hoof, these layers blend closely together, forming a solid, continuous whole.

In the presence of the condition called seedy toe, the horn uniting the two layers decays, breaking up into a granular, cheesy-textured debris and leaving a gap. Although called seedy toe, the condition is not limited to the toe; it sometimes extends around the hoof from quarter to quarter. In its limited form, seedy toe creates a superficial hollow in the toe, but may extend upward to any height towards the coronet.

Causes: Various causes have been attributed to seedy toe. Some refer to an injury done to the toe or coronet, by abrasion or concussion, which results in the secretion of a defective horn. A more common opinion is that a yeast infection or fungus, similar to that found in thrush, is responsible. The yeast appears to prefer the inner layer of the hoof wall, whereas thrush prefers the frog. Wet or dirty stabling conditions encourage the infection.

Treatment Guidelines:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.
- All of the infected material must be removed with a hoof knife or motorized tool. A bacterial agent helps destroy remaining infection.

EasySoaker Applications:

- Applications of bacterial agent
- Protection of tender areas

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Contracted Heels - A heel is said to be contracted when the width at the base of the frog is less than 2/3 the width of the widest part of the hoof. Contracted heels may be seen as a symptom of a disease (such as when associated with navicular) or result from poor trimming or shoeing. There may or may not be lameness present.

Causes: Contracted heels may be caused by lack of moisture in the hoof, or lack of pressure or weight bearing on the heel area or frog, lack of exercise, repeated fitting of too small a shoe, poor shoeing, or poor trimming. Excessive hoof length can also contribute to atrophy and contraction.

Treatment Guidelines:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.

Remove shoes. Moisture can be returned to the hoof by turning the barefoot horse out into a damp pasture. Moisture can also be restored by use of poultice boots or clay packs. A boot allowing for natural heel expansion is a preferred supplement to moisture restoration.

EasySoaker Applications:

- Keep foot moist and pliable through use of hoof conditioner
- Restore moisture through use of poultices or clay packs
- Allow natural heel expansion and hoof protection while barefoot

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Corns - A corn on a horse is simply a bruise of the sensitive sole of the foot. The injury causes lameness and is usually accompanied by a red, circular stain where blood has effused underneath the horn. Advanced corns are yellow, infected and become abscesses.

Causes: Corns are caused by unequal pressure and/or concussion, through conformation defects, over-trimming of heels, shoe heel caulks, short-heeled shoes or un-level shoes. Neglect of the foot or leaving shoes on for long periods without re-setting is also a common cause.

Treatment Guidelines:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.
- Removing or compensating for the cause is the best form of treatment
- Infected corns which are draining should be protected by a boot or pad.
- Pads or boots also help hold medication at the site of the wound.

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EasySoaker Applications:

- Provide protection and support for the hoof while leaving barefoot
- Pad or boot to reduce concussion
- Protect draining areas with pad
- Hold medication at site of wound with pad or boot

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White Line Disease - A breakdown of the protein and collagen of the hoof wall, affecting the area between the horny laminae on the inside of the hoof wall and the sensitive laminae of the coffin bone. White line disease may be apparent only at the surface where the “white line” is evident on the sole, or may become imbedded deeply within the hoof wall, sending out thread-like filaments that absorb nutrients much like the roots of a plant.

Causes: White line disease is caused by a combination of bacteria and fungi, living together within the hoof wall in a symbiotic relationship. They can live alone, but benefit mutually from each other's presence. The microorganisms enter the foot through bruises, tears in tissue, quicks from nails, or minute abrasions of the white line area. Since there are innumerable types of bacteria and fungus, there are also innumerable combinations of relationships which can occur in each instance of white line disease. Each can result in varying degrees of virulent reactions, some benign but others increasingly destructive. Enzymes and toxins are produced by both bacteria and fungi to break down blood, collagen and protein, resulting in the ultimate destruction of connective tissue in the hoof wall.

Treatment Guidelines:

- First, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.

Effective treatment requires an early, aggressive attack. Be suspicious of any injury or unusual appearance of the white line area, however slight. Any trace of bruising, dried blood or minute tears in the sensitive tissue are perfect nutrients for growth of the microorganisms.

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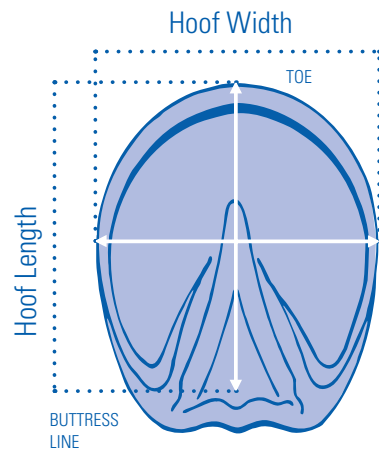
Treating for bacteria or fungus alone is relatively useless, as there may be destructive varieties of each microorganism present. Each may break down the hoof in a different manner. Both must be controlled simultaneously through the use of a broad-spectrum bactericide along with a fungicide. Warm and wet conditions contribute to growth of both fungus and bacteria, so the hoof must be kept clean and dry. Time and patient application of medication is required to treat the infections. If the problem is kept under control until the hoof can grow and repair itself, full recovery can be expected.

EasySoaker Applications:

- Application of fungicide and bactericide by use of pad or boot
- Protect affected areas from further invasion from dirt and debris
- Reduce chance of future injury due to bruising or quicking
- Protect hoof wall from excessive chipping during growth period

EasySoaker Sizing

To determine the proper size boot for your horse, measure the width of the affected hoof, across the bottom at the widest point and from toe to buttress line. **We recommend sizing up when purchasing an EasySoaker.** This allows extra space for bandages and liquids to be used inside the boot. A larger size also makes application and removal quicker and easier.



Size	Width	Length
(Imperial)		
Small	3 3/4 - 4 1/2in	4 1/4 - 5in
Medium	4 1/2 - 5 1/4in	5 - 5 3/4in
Large	5 1/4 - 5 3/4in	5 3/4 - 6 1/4in
X-Large	5 3/4 - 6 1/4in	6 1/4 - 6 3/4in
XX-Large	6 1/4 - 6 3/4in	6 3/4 - 7 1/4in
XXX-Large	6 3/4 - 7 1/4in	7 1/4 - 7 3/4in
(Metric)		
Small	95 - 115mm	108 - 127mm
Medium	115 - 134mm	127 - 146mm
Large	134 - 146mm	146 - 159mm
X-Large	146 - 159mm	159 - 172mm
XX-Large	159 - 172mm	172 - 184mm
XXX-Large	172 - 184mm	184 - 190mm

Accessories

Easy Dirt Skirt

Light sheet foam which fits under the hoof and extends up the back of the heel. Helpful for holding medication at wound site.



Comfort Pads & Dome Comfort Pads

Check out EasyCare's line of Comfort Pads to provide extra cushioning and support. (We recommend that you work with your veterinarian or hoof care practitioner when treating any type of hoof ailment.)

Accessories available through EasyCare Inc. or your local EasySoaker distributor.

EasyCare Inc. Warranty

EasyCare Inc. offers a 90 day (from date of purchase) repair or replacement guarantee on quality and workmanship for all merchandise manufactured under the EasyCare or Old Mac's label. Please return the Guarantee Registration Card, or keep your original proof of purchase documents during the warranty period. While this guarantee is generally very broad in nature, it does not cover normal wear, misuse or abuse. Products returned for evaluation must be washed clean and free of debris, dirt, sand and manure. Failure to return clean product will result in product(s) being shipped back at sender's expense or a \$10.00 cleaning fee will be assessed. Damage inflicted by omnivorous horses, rodents or other unusual abuse is not covered. Returns must be authorized before sending and must be returned with an RMA number. Contact us at 800-447-8836 to receive an RMA number.

If you have purchased a Horse Boot product, and your boot fails during warranty, it is generally a minor hardware issue. Please bear in mind, that most components of any of our horse boots are either replaceable or repairable. This includes wire laces, cables, buckles, gears, rollers, screws and straps. Many repairs can be easily accomplished with simple household tools. Depending on the individual circumstances, EasyCare will either provide the repair parts for your use, or ask that you return the boots to us for evaluation. We will then repair or replace at our discretion.

Specifically:

1. Returns for credit only (refund of purchase price only): Products must be in new, unused condition, free of dirt and wear marks. It is your responsibility to evaluate the fit of your new product in a manner where you may return it in new condition if you have doubts about the fit. Be certain that you know the return policy of product purchased from dealers other than direct from EasyCare (the manufacturer). EasyCare will not give credit for product purchased elsewhere. Return to point of purchase in that circumstance. Also, all brochures, inserts and/or free gifts must accompany returned items.

Online Warranty Registration:
easycareinc.com/warranty_reg.aspx

2. Exchanges of new product (size or color issue): EasyCare will only exchange NEW items with same product style and model for same product when requested with NEW items only. You may exchange for a different size or color exchange only, no exceptions. If you wish to have a different style of horse boot, etc., you must return new item for refund (original point of purchase) and then purchase new choice.

3. Warranty failure (used product that is within 90 days of purchase): Contact us at 800-447-8836. EasyCare will either provide repair parts directly to you, or repair/replace after our evaluation. Items must be returned to EasyCare at the consumers cost with original receipt. EasyCare will return the items via ground service (UPS or FEDEX) free of charge. Requests for faster shipping service will be at the expense of the consumer.

4. Not under warranty (over 90 days or no proof of purchase): Repair parts may be purchased from your local dealer or EasyCare, or product may be returned for evaluation and possible repair (parts, labor and freight charges will apply).

5. Call for an RMA number (under warranty or not): Returns must be authorized before sending and must be returned with an RMA number clearly written on outside of packaging. Contact us at 800-447-8836 to receive an RMA number. Returns will be refused without an RMA number on outside of package.

6. Freight charges (outside warranty period): Freight charges to and from EasyCare for repairs, exchanges and items outside the warranty period will be the purchaser's responsibility.

7. EasyCare staff is always willing to discuss any specific issues you may have regarding the performance of your EasyCare or Old Mac's products. Please contact us at 800-447-8836 or email to admin@easycareinc.com. Visit our website, easycareinc.com, for tips and product information that will help with the use of any of our product line.



EasySoaker

The EasySoaker is perfect for a variety of applications where temporary protection or treatment of the hoof is required. As with any hoof or leg related injury, consult your veterinarian or hoof care professional for diagnosis and treatment recommendations.



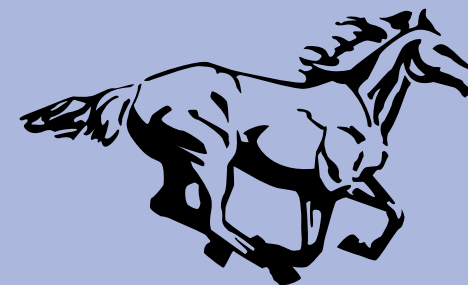
- Soaking and Poultices
- Conditioning
- Clean, protected environment
- Medication at wound site
- Reduced concussion

Directions for Use

1. Loosen the webbing and hook and loop closure at the top of the boot, allowing the strap to move freely.
- 2-3. Slip the boot over the toe and use the pull tabs located at the top of the boot to pull boot on.
4. Place the hoof on the ground to set the heel. Secure by tightening the strap. Secure the strap with hook and loop closure after tightening.



TO REMOVE: ▶
Unfasten the hook and loop to release the strap. Pull the boot off by pulling down and away on the back of the boot.



EasySoaker

Application Guide



EasyCare
easycareinc.com

Have Questions? Need Help? Visit easycareinc.com