

## DONKEY FOOT CARE – NOTES FOR OWNERS

### Background

Donkeys are adapted to a dry environment. They thrive in semi-arid parts of the world, where the ground is dry and stony and where, for most of the year, the vegetation is of poor feed value and very fibrous. Their feet are more efficient at absorbing water than horses' hooves are: this is probably an adaptation to the dry environment in which they evolved.

When donkeys are kept in the UK, on lush, wet pasture, their feet easily become soft and more crumbly. They quite frequently get foot diseases associated with this, such as:

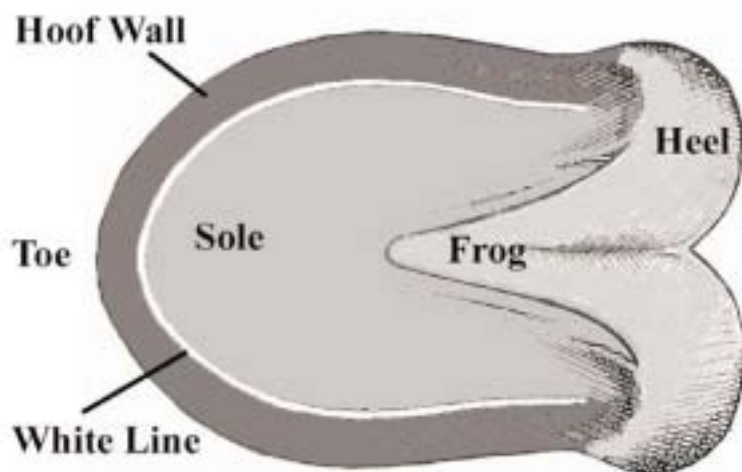
- infection of the sole and frog (thrush),
- infected, penetrating wounds (abscesses), or
- seedy toe (see below).

### Structure of the donkey's foot and differences from the horse

There are a number of differences between horse and donkey feet.

- Donkeys' feet are more upright (between 5° and 10° more) than horses' feet.
- The donkey foot is "boxier" than the horse foot (the horse's foot is more conical).
- The sole is more U-shaped (the sole of a horse's foot is more round).

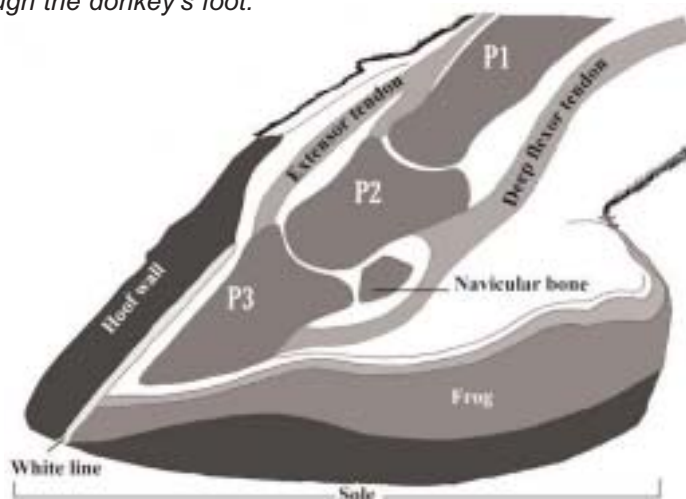
Fig. 1 Diagram showing the names of structures underneath the donkey's foot.



- Donkeys' feet appear to grow more from the heel than from the other parts of the foot.
- The donkey grows nearly as much sole as hoof wall and this needs trimming (in horses the sole growth tends to flake off).

The illustration below (Fig 2.) is a simplified, diagrammatic section through the donkey's foot, indicating some of the important structures. P3 is also known as the "pedal bone" or the "third phalanx" and it is this bone that can be displaced in severe laminitis. More of the second phalanx, P2, lies inside the hoof capsule than is the case in the horse's foot.

Fig 2. Section through the donkey's foot.



### **Routine foot care**

Because of the damp British climate, it is not possible to keep donkeys' feet dry. However, the aim should be to keep donkeys on dry and clean bedding when housed.

When kept outdoors, muddy conditions should be avoided. It is useful to have a dry exercise area, which is very well drained.

All donkeys should be trained to be accustomed to having their feet picked up. Using a hoof pick, all dung or mud in the foot should be picked out regularly, ideally daily.

Be careful not to lift a donkey's foot as high as you would a horse's foot. It can be painful to lift and twist the leg, especially in older animals with arthritis. If necessary bend your knees so that you and the donkey are comfortable.

For non-working donkeys kept on soft ground, plan to get the feet trimmed every six to eight weeks. This is best done by a farrier. In any case, to do it well special tools and training are necessary.

Some owners say that it is difficult to find a farrier willing to trim donkeys' feet. However, most farriers are willing to attend to donkeys, provided that the owner complies with the farrier and makes the job as easy as possible.

These days, most farriers have a mobile telephone. An hour or so before the appointment, it is a good idea to confirm the arrival time. Before the farrier arrives, catch and tie the donkey. Pick the feet out and get ready to make the farrier a cup of tea! When he is there, hold the donkey firmly by the head, preferably with a head collar on.

After trimming, the foot should be left with a concave sole, with the wall bearing the weight. Ideally, the point of the frog or mid-point of the sole should end up around 6 mm ( ¼ in) above the walls, so that there is no pressure on the sole when the foot is on the ground. However, if the farrier had to do any corrective work, for example for seedy toe, the foot shape may be different at the end of the farrier's visit.

### **Seedy toe**

When a donkey gets "seedy toe", part of the white line area becomes weak and crumbly. Often little stones and dirt get stuck in the space under the horny part of the hoof. Eventually it can extend quite far up the hoof, towards the coronary band. It is treated by cutting out the affected part of the hoof wall and allowing new healthy horn to grow down. The donkey must also be kept on clean, dry ground.

### **Thrush**

Thrush is an infection of the underneath of the foot, particularly affecting the frog. It has a distinctive, unpleasant smell. It is often associated with keeping the donkey in wet conditions.

Thrush is prevented by keeping the dirt picked out of the feet and by avoiding letting the animal stand for long periods on wet ground. Treatment is not always successful in long-term cases. Treatment involves cutting off all the diseased tissue and using chemicals to control the infection.

### **Laminitis**

Laminitis is caused by many factors. The most common is wrong diet, such as too much grain or too much rich grass. Donkeys thrive on a diet with a lot of roughage and can easily become overweight and laminitic if not fed appropriately. The "laminae" are layers in the attachment of the hoof wall structure to the foot. These layers can become inflamed and very painful, resulting in lameness. For treatment, urgent veterinary advice is required.

### **Foot abscess**

Usually as a result of a wound that penetrates the sole or white line, an abscess can develop in the foot when the wound is infected and pus builds up. Such wounds can be a cause of tetanus: ensure that the donkey is protected by vaccination or ask your vet how to protect the donkey.

If you suspect an abscess, you should seek veterinary advice. The vet may recommend a poultice, to help draw the infection out of the foot, and/or cut away the abscess with a hoof knife to help the infection to drain out.

### **Foot dressings and feed supplements**

It is not normally necessary to use hoof oil or any food supplements if the donkey is kept on a good, balanced diet.