Objectives: To know something of the structure of the horse’s foot, the need for daily care and some knowledge of the trimming and shoeing process.

- To know something of the structure of the horse’s foot.
- To recognise what is needed for daily care e.g. picking out hooves and applying appropriate hoof dressing to avoid problems listed below.
- To have some knowledge of the process and need for regular trimming and shoeing.
- Knowledge about the problems, which can occur in the foot, and their treatments:
  - thrush
  - laminitis

Structure of the foot

The exterior of the foot is made up of three main parts: the wall, the sole and the frog. All three are non-sensitive, without nerves or blood supply, much like human toe nails.

- **The wall** – The most visible part of the hoof. Although it is continually growing, it is insensitive outside the white line. The toe, the quarters and the heel all form part of the wall.
- **The sole** – This protects the underside of the foot and gives the foot a better foothold. It is quite thin which is why you should take care when riding over stony ground.
- **The frog** – This V-shaped section is the pony’s anti-slipping and shock absorbing device.

Daily care

**Picking out the hooves**

Whether a pony is kept out in a paddock or in a stable, his feet need daily attention to keep them clean and healthy. You should pick out your pony’s feet at least once and preferably twice a day. Start with the near fore leg, face toward the pony’s tail. Run your left hand down the pony’s leg and rest the foot in your left hand. If your pony does not lift his foot, squeeze the pastern.

Using the hoof pick in your right hand, gently pick away any mud, manure or stones. Always work from the heel toward the toe, this way there is no chance of pushing a piece of grit into the sensitive part of the frog by the bars (and you will not hurt yourself either.) Pick out each foot in turn; front feet, then hind.

**Applying hoof oil**

If your hoof pick has a brush attachment, use it to remove any traces of dirt. You may need to use a water brush dipped into a bucket of water to really clean the feet in rainy, muddy weather. You may choose to apply a thin coat of hoof oil to dry feet, both inside and out. This is beneficial for ponies with dry, brittle or cracked feet in winter, and to make their feet gleam before entering the show ring.
Regular check ups
Remember to get your pony’s feet checked every 5 – 6 weeks by a farrier, since his hoof wall grows non-stop and will need a trim. A horse / pony should have his shoes checked every 3 – 5 weeks, depending in the amount of road work you do with him.

The shoeing process
There two systems of shoeing; ‘hot’ shoeing and ‘cold’ shoeing. In hot shoeing the shoe is specially made to fit the foot. It is tried on hot, and adjustments are made before it is finally nailed on. In cold shoeing a shoe which has already been made is fitted. Minor adjustments to the shape are possible, in which case a forge is not required. Traditionally hot shoeing is preferred.

Hot shoeing
The procedure for re-shoeing a horse by this method falls into 6 stages; removal, preparation, forgeing, fitting, nailing and finishing.

Removal
To remove an old shoe, the farrier cuts away the clenchers, using a buffer and driving hammer. He then levers the shoe off using pincers. If the clenchers have been cleanly cut away, there should be no breaking or tearing of the wall as the shoe is released.

Preparation
The farrier cleans out, and carefully cuts away ragged parts of the sole and the frog, and cuts way the overgrowth of the wall with a drawing knife, to prepare the foot for the fitting of the shoe. A rasp is then used to give a level bearing surface.

Forgeing
This is the making of a new shoe. The weight and type of iron selected depends on the type of work the horse does. Once the iron has been shaped on the anvil, the nail holes are stamped and the clips are drawn Most farriers use manufactured shoes which already have nail holes stamped. They then adjust these shoes to fit individual horses.

Fitting
This is carried out while the shoe is still hot, the shoe being taken to the horse with a pritchel. The searing (burning) of the horn which occurs when the shoe is fitted on the foot indicates the extent to which the foot and shoe are in contact. After searing, any adjustments necessary to the shape of the shoe or the length of the heel are made.
Nailing on
The shoe is cooled by being dropped in a bucket of cold water, and then nailed on using special horse shoe nails. The head of the nail, where it penetrates the wall, should be turned over and twisted off, leaving a small piece called a clench. Clips (usually one per fore shoe and two per hind shoe) help to keep the shoe in place.

Finishing
The clenches are tidied up with a rasp and a small indentation made in the wall beneath, after which they are embedded with the driving hammer. The toe clip is tapped lightly back into position, and a rasp run over the edge of the wall where the horn and shoe meet to reduce the risk of cracking.

The newly shod foot
When a well-shaped and balanced foot is newly shod, the points to check are:

- That the shoe has been made to fit the foot, and not the foot to fit the shoe i.e. the wall should not be rasped away to meet the iron and the toe should not be ‘dumped’ (over rasped)
- That the type of shoe is suitable for the work required of the horse
- That the weight of the iron is chosen in correct relation to the horses size
- That the foot has been suitably reduced in length at both the toe and the heel, and also on each side, so that it has a level bearing surface
- That there has been no misuse of the knife on either the sole or the frog
- That on soft surfaces the frog is in contact with the ground
- That the correct number of nails has been used (3 on the inside & 4 on the outside, except in special cases)
- That the size of the nails is correct i.e. that they fit & fill the nail holes
- That the nails have been driven home (knocked in fully)
- That the clenches are in line, the right distance up the wall, correctly turned down and embedded
- That there is no daylight between the shoe and the foot, particularly at the heel region
- That the clips fit well
- That the horse is sound when trotted up in hand, due to the heels being open but supported and the feet being the right length
Problems in the foot

Causes of lameness
Horses/ponies become lame if a stone gets stuck between the shoe and the frog. This may happen when you are out riding – you suddenly feel your pony falter. Dismount immediately and pick out his feet gently. It makes sense to take a hoof pick with you when you go out on outrides. You can buy portable, folding hoof picks; otherwise you can use a strong stick or even your finger.

Nails in the feet are also common. Before you remove a nail note whereabouts it is, what angle it is at and how deeply it has gone in. The nail may be penetrating a vital part if it is in the back third of the foot or frog, in which case a vet needs to be called.

Thrush
Thrush is a fungus, which needs to be treated. It appears in the cleft of the frog and gives off a foul smell much like stinky cheese. It occurs if you do not clean out your pony’s feet regularly, if you leave him standing in dirty bedding or in a wet, muddy paddock. Regular picking out of the feet, and the application of an anti-fungal disinfectant will clear it up.

Laminitis
This has many known causes, one of which is eating too much lush grass. Typically the pony is in considerable pain and is unable to walk and his feet are hot to the touch. It is very serious and should always receive swift veterinary attention. Care will include being confined to a paddock with minimal grazing, and cutting down on concentrates.
Revision questions

Name the parts of the foot by labelling the diagram

Use the following pictures to help you to answer the question below.

Describe how you care for your pony/horse’s feet on a daily basis, in order to ensure that s/he is healthy and happy.

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