

SEBWAT parameter

(Standardised Equine-Based Welfare Assessment Tool)

Frog Gait

Welfare issue

- The animal has evidence of disease of the frog in one or more hooves.
- This may include discharge from the frog or associated structures, thrush or canker.
- *Note:* in SEBWAT, only the fore hooves are assessed for practical reasons; therefore prevalence of frog disease is likely to be underestimated.

Welfare significance

- The frog acts as part of the shock-absorbing mechanism of the foot. When the equine hoof touches the ground during motion, the frog should be in contact with the ground. This should be true, with or without, shoes.
- Poor hoof shape, or disease, damage or removal of the frog will prevent this happening, thus severely disrupt the normal functioning of the hoof.
- If the frog does not make contact with the ground, the shock of impact will be transferred upwards through the hoof wall into the limb, which can lead to jarring.
- The frog also has an important role to play in promoting healthy blood circulation around the equine foot, which can also be disrupted if normal ground contact is prevented.
- Frog abnormality can be both a cause and a consequence of poor hoof shape and structure. A frog that is unable to function correctly may lead to abnormal hoof functioning, affecting growth and conformation, e.g. contracted heels. Conversely, a poorly-shaped hoof may prevent the frog from functioning normally.



No disease of frog.

Possible causation

- Thrush is a common degenerative bacterial infection characterised by a distinctive black, foul-smelling discharge in the central sulcus and collateral grooves. If left untreated the infection can affect the sensitive structures, eventually causing lameness.
- Canker is a bacterial infection which causes overgrowth of some parts of the hoof tissues, typically around the frog sulci and heel bulbs. Like thrush, it is characterised by a foul-smelling pus-like discharge. Canker often recurs, and therefore can require long-term treatment to resolve.
- Penetrating injury to the frog (e.g. from standing on a nail) can be serious, and lead to infection of the internal structures. If veterinary attention is not sought at an early stage, this can progress to be untreatable and the animal may have to be euthanased¹.
- Sometimes, service providers who are poorly trained and do not understand the structure and function of the equine hoof may excessively trim, or even remove the frog during hoof trimming. This is unacceptable practice, and both owners and hoof trimmers should be educated about the function and health of the frog.



Bloody discharge from frog.



Frog completely eroded.



Thrush of the frog.

Means of resolution

- Thrush and canker are often caused by with poor hoof hygiene. The importance of daily cleaning of the hooves with the correct use of a hoof pick should be promoted to owners.
- The hygiene of underfoot surfaces is important to prevent frog infection. Underfoot surfaces in resting areas should be dry and clean. Faeces and urine-soiled materials should be removed frequently to avoid creating an environment that encourages bacteria to thrive, including those which infect the frog.
- Equids should have ample opportunity to walk around, as locomotion promotes healthy blood circulation in the hoof. Animals who spend long periods of time standing in dirty stables, or mud, are particularly prone to infection of the frog.
- Correct and regular hoof trimming is essential to maintain a good hoof shape, which supports a healthy frog.



Owner learning how to clean hoof for the first time.

Refer to the Working Equid Veterinary Manual, Community Engagement work plans or strategies and the Handling Guidelines before conducting an intervention.

References

The Brooke (2013) *The Working Equid Veterinary Manual*; Whittet Books, Essex.

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Loving, N.S. (2011) *Hoof Care*; The Horse, <http://www.thehorse.com/free-reports/30195/hoof-care>, accessed April 2016.