



Recognition of Equine Poor Performance: The Ridden Horse Pain Ethogram

An ethogram is simply a catalogue of different kinds of behaviours observed in an animal, each with strict definitions. The majority of the following 24 behaviours are 10 times more likely to be seen in a horse that may be experiencing discomfort or pain, compared with a pain-free horse.

If a ridden horse displays 8 or more of these behaviours, it is likely to be lame or have another source of musculoskeletal pain. Many lamenesses are only observed when the horse is ridden, and may only be apparent as gait abnormalities, or difficulty in performing certain movements.



1. Repeated changes of head position

- Up / down
 - Not in rhythm with the trot
-



2. Head tilted

- Or tilting repeatedly
-



- 3. Head in front of vertical**
- By more than 30 degrees
 - For 10 seconds or longer
-



- 4. Head behind vertical**
- By more than 10 degrees
 - For 10 seconds or longer
-



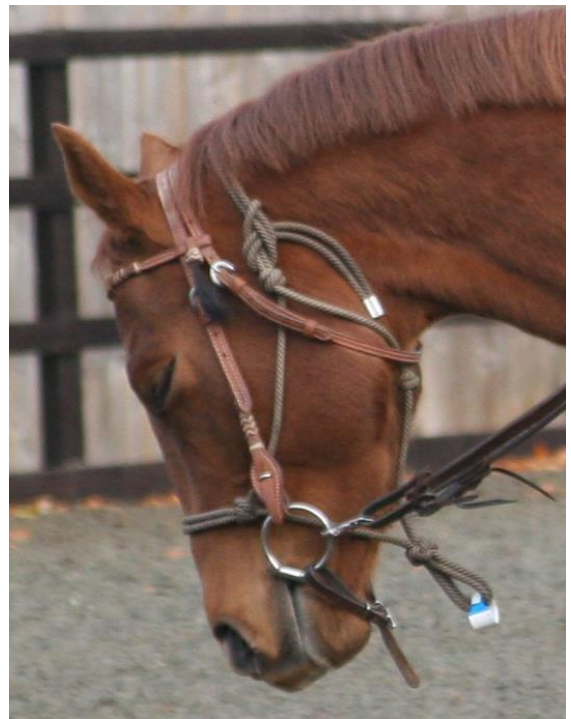
5. Head position

- Changes regularly
 - Tossed or twisted from side to side
 - Corrected constantly
-



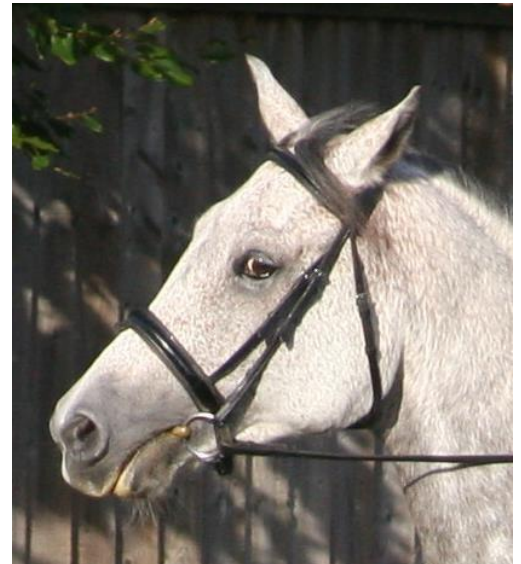
6. Ears rotated back

- Behind vertical or flat
 - Both ears or one only
 - For 5 seconds or more
 - Repeatedly lay flat
-



7. Eye lids closed

- Or half closed
- For 2-5 seconds
- Frequent blinking



8. Sclera (white of eye)

- Exposed repeatedly



9. Intense stare

- Glazed expression or 'zoned out'
 - For 5 seconds or more
-



10. Mouth opening

- And / or shutting repeatedly
 - With separation of teeth
 - For 10 seconds or more
-



11. Tongue exposed

- Protruding or hanging out
 - And / or moving in and out repeatedly
-



12. Bit pulled through the mouth

- On one side
 - Left or right
 - Repeatedly
-



13. Tail clamped

- Tightly to middle
- Or held to one side



14. Tail swishing

- Large movements
- Repeatedly up and down / side to side / circular
- Repeatedly during transitions



15. A rushed gait

- Frequency of trot steps more than 40 in 15 seconds
 - Irregular rhythm in trot or canter
 - Repeated changes of speed in trot or canter
-



16. Gait too slow

- Frequency of trot steps less than 35 in 15 seconds
 - Passage-like trot
-



17. Hind limbs do not follow tracks of forelimbs

- Repeatedly deviated to left or right
 - On 3 tracks in trot or canter



18. Canter repeated leg changes

- In front and / or behind
- Repeated strike off on wrong leg
 - Disunited



19. Spontaneous changes of gait

- E.g. breaks from canter to trot, or trot to canter



20. Stumbles or trips

- More than once
- Repeated bilateral hind limb toe drag



21. Sudden change of direction

- Against rider's direction
 - Spooking



22. Reluctance to move forwards

- Has to be kicked and / or verbal encouragement
 - Stops spontaneously
-



23. Rearing

- Both forelimbs off the ground
-



24. Bucking

- Or kicking backwards
 - One or both hind limbs
-

This article is adapted from:

DYSON, S., BERGER, J., ELLIS, A. D. & MULLARD, J. 2018.

Development of an ethogram for a pain scoring system in ridden horses and its application to determine the presence of musculoskeletal pain. *Journal of Veterinary Behavior*, 23, 47-57.

DOI: 10.1016/j.jveb.2017.10.008

Images copyright of S.J. Dyson



About the author

Sue Dyson is a world-renowned orthopaedic clinician with a lifetime's experience in assessing poor performance in sports and leisure horses, but she is first and foremost a rider, and it is that which sets her apart from many other veterinarians in her field.

Educational Course

In a collaboration with Equitopia, Sue has created a 12 part, interactive online course on how to apply the Ridden Horse Pain Ethogram.



Equitopia is a resource for online and in-person educational content on the care, welfare and training of horses, bringing highly qualified professionals in the equine industry to your phone and computer through online courses, webinars, blogs and podcasts.

Equitopia have generously offered a **25% discount** to all SRT supporters - just use the coupon code EQSRT2020 at the checkout.

To find out more, go to <https://www.equitopiacenter.com>

The SRT promotes the welfare and performance of the ridden horse. As a registered charity, we support scientific research in the complex area of horse, saddle and rider interactions and promote evidence-based education for all stakeholders in the equine sector.

To help achieve our aims, we have created this illustrated guide with Dr Sue Dyson on a subject that we feel is of the utmost importance.

Sign up for our newsletter to keep in touch with all the latest research news!

Go to: <https://www.saddleresearchtrust.com>

or email: admin@saddleresearchtrust.com

Saddle Research Trust
Registered Charity: 1182661

