

1 **Appendix 1** HWAP developed by Viksten et al. (2017). Translated from Swedish. Measures marked with
2 an * were excluded from statistical analysis. The full copy and Swedish original version are available
3 from the authors.

4

5 **INFORMATION**

6 Name*

7 Gender* Mare Gelding Stallion

8 Age*

9 Breed*

10 Witherheight*

11 Main usage*

12 Dressage / Showjumping / Endurance / Eventing / Driving / Recreation-allround / Riding school / Western / Other:

13 Training h / week*

14 Veterinary medical history*

15 **HOUSING**

16 Housing* Group / Box / Tie-up stall Description:

17 Ceiling height*

18 Size housing*

19 Visual horizon no of sides:

20 Enrichments aimed at increasing feeding time 0 1 (yes; no) Description:

21 Possibility of social contact 0 1 2 (touch/smell/visual/sound; one or more missing; social isolation)

22 Description:

23 **FEED**

24 Water height*

25 Concentrates height*

26 Cleanliness concentrate trough 0 1 2 (clean; partly dirty; slimy and dirty)

27 Roughage height*

- 28 Possibility to feed undisturbed 0 1 (yes; no)
- 29 Water in housing* 0 1 (yes; no)
- 30 Horses per drinker*
- 31 Water function (automatic only) 0 1 (yes; no)
- 32 Water drinker type*
- 33 Water cleanliness in stable 0 1 2 (clean; dirty; slimy and dirty)
- 34 Roughage/ day*
- 35 Concentrates /day*
- 36 Roughage without water 0 1 (no; yes)
- 37 Estimated feed availability /day 0 1 2 (>6 h; 3-6 h; <3 h)
- 38 Feeding times /day*
- 39 Concentrates alone or before roughage 0 1 (no or simultaneously; yes)
- 40 **PADDOCK**
- 41 Time in paddock /dag* /week*
- 42 Access to pasture / year or hours/week*
- 43 **HORSE**
- 44 Backmuscles palpation 0 1 (no reaction at first or second palpation; reaction at first and second palpation)
- 45 Body Condition Score 1 2 3 4 5
- 46 Hampered breathing* 0 1 (no; yes)
- 47 Thermal comfort* 0 1 (no sweat or shivering; sweating or shivering)
- 48 Wounds 0 1 2 (none; several; old untreated in need of veterinarian) Place on body:
- 49 Mane & tail condition 0 1 2 (no scratch; some scratching; severe scratching, rubbed off hair or open wounds)
- 50 Coat quality 0 1 2 (normal shiny; part shaggy or dull; very long dull and shaggy)
- 51 Skin condition 0 1 2 (normal; hairless patches/crusts/dandruff; serious issues on majority of body) Place:
- 52 Equipment chafing 0 1 2 (none; chafed coat or hairless patch; chafed off coat and open wound)
- 53 Rug cleanliness* 0 1 (clean; dirty/very hairy on inside)
- 54 Ocular discharge 0 1 2 (none; some or small lump; long lines running down cheek)
- 55 Nasal discharge* 0 1 (clear; runny, coloured or thick)

- 56 Corners of mouth 0 1 2 (no damage; chafing or depigmentation; wound or depigmentation and chafing)
- 57 Hoof quality* 0 1 2 (normal; long or cracked; severely overgrown or cracked) Description:
- 58 Stereotypy* 0 1 Treatment: Year of onset:
- 59 General impression at physical assessment 0 1 2 (positive; neutral; aggressive or avoidant)
- 60 Lameness 0 1 2 (none; short stride or non-rhythmic; not bearing weight on leg)
- 61 **STABLE**
- 62 Location*
- 63 Date*
- 64 Season*
- 65 RH outside* inside
- 66 Temp outside* inside
- 67 Condensation 0 1 2 (none; next to ventilation openings; in ceiling/dripping down)
- 68 Noise* 0 1 (ok; noisy >60 dB)
- 69 Ventilation type*
- 70 Open ventilation inlets 0 1 2 (direct; indirect; none)
- 71 Mould 0 1 2 (none; moist dark patches; visible mould)
- 72 General impression stable morning* 0 1 2 (calm; some horses kicking or stereotypic; noisy and several
- 73 horses kicking and/or stereotypic)
- 74 Coughing*
- 75 Risks of injury in stable*
- 76 **DRAWING OF STABLE LAYOUT (DONE BY HAND)**
- 77 **DRAWING OF PADDOCKS LAYOUT (DONE BY HAND)**
- 78 Bumping into things or slipping (to/from stable) 0 1 2 (safe without slipping/bumping; slipping or bumping;
- 79 slipping and bumping)
- 80 Paddock size*
- 81 Horses/paddock*
- 82 Surface quality 0 1 2 (dry/even; muddy/wet/uneven; unacceptable)

- 83 Possibility to feed undisturbed in paddock (no horses negatively interacting during feeding ie space between roughage piles is
84 sufficient)
- 85 Water access paddock* 0 1 (yes; no)
- 86 Horses/drinker*
- 87 Water function (automatic) 0 1 (functions; squirts water or very hard to push)
- 88 Water flow (l/min)*
- 89 Water drinker type*
- 90 Water cleanliness paddock 0 1 2 (clean; dirty; very dirty or slimy)