Developing a horse welfare assessment protocol

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Abstract

This paper describes the development and pilot-testing of a horse welfare assessment protocol (HWAP). The HWAP consists of the collective measurement of numerous factors considered likely to affect a horse’s welfare and is thereby designed to provide a holistic score of its welfare status and to identify potential risk factors. The draft protocol contains 47 measures: 15 animal-based, 24 resource-based and eight management-based. It was tested in the autumn at two Swedish riding schools using a total of 37 horses of varying breed, gender and age. Each assessment was repeated after 16–25 days. The results showed that 66% (31/47) of the measures had over 85% repeatability between assessments. Results indicated occurrence of behavioural issues, e.g. aggression and avoidance, and potential risk factors, such as inadequate management routines and feeding regimes. Using the HWAP, the assessment of up to 22 horses could be carried out in one day. Changes were proposed to the draft protocol which included incorporating an ethogram to assess the human-animal relationship and assessing bit-related injuries. We propose that the protocol might: i) provide a firm basis for the welfare monitoring of horses; ii) identify important potential risk factors; iii) guide welfare improvement and management practices for horse owners and stable managers; and iv) contribute to the development of certification schemes for horse facilities.

Keywords: animal welfare, assessment, equine, horse, protocol, Welfare Quality®

Introduction

Welfare is a multi-dimensional concept. It comprises physical and mental health, and includes aspects such as comfort, absence of hunger, thirst, disease and fear (Blokhuis et al 2010), and not least the animals’ own experience of their environment (Mellor et al 2009). Thus, assessing an animal’s welfare status requires protocols that include a variety of effective and practical measures covering these different dimensions. The results of such a holistic assessment can identify welfare problems and potential risk factors thereby enabling animal owners and managers to adopt appropriate remedial measures. Traditional assessment protocols for horses, such as the Swedish protocol for official welfare controls (Jordbruksverket 2009) comprise numerous measures but the majority are resource-based and simply ensure that the environmental conditions and resources, such as box size, water availability and noise levels, comply with legal requirements. In the last decade, such protocols used on farm animals have been criticised for not assessing the actual welfare status of the animals themselves (Bracke et al 1999; Blokhuis et al 2003). Indeed, although the available resources are clearly relevant to welfare, how they relate to the animals’ actual welfare status is not always clear. Factors such as management, husbandry methods and genetic background can have a profound influence on the relationship between the quality of a resource and actual achieved welfare (Blokhuis et al 2013). Consequently, there has been increased focus on implementing animal-based parameters (observed behaviour, physical condition, injuries, disease) and identifying related risk factors to safeguard and improve welfare. Thus, an effective assessment protocol, irrespective of species, should examine welfare from the animal’s point of view, monitor changes over time and include management- and resource-based measures (Sørensen et al 2001). Some protocols already implement more animal-based measures in farm animals, notably the Welfare Quality® (WQ®) protocols for cattle, poultry and pigs (Welfare Quality® 2009a,b,c).

Horses are individually managed and used mainly for leisure and sport which makes some of the measures applied in farm animal protocols less suitable (eg pain from tail-docking) and may necessitate the inclusion of other measures (eg time in training). Horse protocols include the Australian Welfare Protocol (AHIC 2011), the Assessment Protocol for Horses (Wageningen UR 2012) and Minimum Standards of Horse Care in the State of California (Miller 2010). Visser et al (2014) specifically assessed the prevalence of health disorders and possible risk factors in Dutch horse stables and showed that a mix of animal-, resource- and management-based factors are required to enable the identification of causal factors. Based on the above study...