Welfare assessment of horses: the AWIN approach

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Abstract

The EU-funded Animal Welfare Indicators (AWIN) research project (2011–2015) aimed to improve animal welfare through the development of practical on-farm animal welfare assessment protocols. The present study describes the application of the AWIN approach to the development of a welfare assessment protocol for horses (Equus caballus). Its development required the following steps: (i) selection of potential welfare indicators; (ii) bridging gaps in knowledge; (iii) consulting stakeholders; and (iv) testing a prototype protocol on-farm. Compared to existing welfare assessment protocols for other species, the AWIN welfare assessment protocol for horses introduces a number of innovative aspects, such as implementation of a two-level strategy focused on improving on-farm feasibility and the use of electronic tools to achieve standardised data collection and so promote rapid outcomes. Further refinement to the AWIN welfare assessment protocol for horses is needed in order to firstly gather data from a larger reference population and, secondly, enhance the welfare assessment protocol with reference to different horse housing and husbandry conditions.

Keywords: animal-based, animal welfare, horse, indicator, measure, on-farm

Introduction

Among domesticated animals, horses (Equus caballus) are one of the most versatile species: they are used in several activities, ranging, for instance, from agriculture to animal-assisted therapy. It follows that assessment of horse welfare is difficult, in particular when based on resource or management indicators. Their housing and management conditions are so heterogeneous throughout Europe that collecting harmonised data that could be used to make a consistent evaluation of their welfare is complicated. For example, animals may be stabled individually or kept in groups, in areas with or without access to paddock/pasture, and in a facility where either a sole person or several horse owners can be present.

The objective of the Animal Welfare Indicators (AWIN) research project, funded by the European Commission in the Seventh Framework Programme, was to improve animal conditions through the development of practical assessment protocols concerning on-farm welfare of several animal species, including horses. The AWIN approach was based on the method defined in the Welfare Quality® research project (Botreau et al 2007; Blokhuis et al 2010; Rushen et al 2011). The Welfare Quality® project presented four animal welfare principles (Good feeding, Good housing, Good health and Appropriate behaviour) and within these principles highlighted twelve distinct but complementary animal welfare criteria (Blokhuis et al 2010). Using the four animal welfare principles, AWIN researchers aimed to develop a harmonised and scientific welfare assessment protocol for horses based on valid, reliable and feasible animal-based indicators.

An animal-based welfare assessment protocol serves as a toolbox from which it is possible to select the range of measures necessary to address the specific objectives of the evaluation for that particular species and category of animal at that time (EFSA Panel on Animal Health and Welfare 2012). Animal-based indicators were chosen because they relate directly to the animal itself rather than to the environment in which the animal/individual is kept (EFSA Panel on Animal Health and Welfare 2012). The indicators can be collected in different housing conditions and used to infer how the animal is affected by external factors.

The present study describes the AWIN approach to the development and on-farm use of a welfare assessment protocol for horses.