Impact case study (REF3)



Institution: University of Edinburgh #GWthUbXtg FifU~7c~Y[Y

Unit of Assessment: 6

Title of case study: H: Qualitative Behaviour Assessment: An animal welfare assessment

tool used worldwide

Period when the underpinning research was undertaken: 2001 E 2016

Details of staff conducting the underpinning research from the submitting unit:

Name(s):

Françoise Wemelsfelder

Alistair Lawrence



Impact case study (REF3)



- [3.2] <u>Wemelsfelder, F.</u>, A.S. Hunter, E.S. Paul, A.B. <u>Lawrence</u>. 2012. Assessing pig body language: agreement and consistency between pig farmers, veterinarians, and animal activists. *Journal of Animal Science* 90, 3652-3665. <u>doi: 10.2527/jas.2011-4691</u>
- [3.3] Rutherford, K.M.D., Donald, R.D., Lawrence, A.B., Wemelsfelder, F. 2012. Qualitative Behavioural Assessment of emotionality in pigs. *Applied Animal Behaviour Science* 139, 218-224. doi: 10.1016/j.applanim.2012.04.004
- [3.4] <u>Camerlink</u>, I., Peijnenburg, M., <u>Wemelsfelder</u>, F., <u>Turner</u>, S.P. 2016. Emotions after victory or defeat assessed through qualitative behavioural assessment, skin lesions and blood parameters in pigs. *Applied Animal Behaviour Science* 183, 28Ë34. <u>doi:</u> 10.1016/j.applanim.2016.07.007
- O") OA Ugŵk g_Už? "žA]nncb]ž: "ž Dwyer, C.M., Wemelsfelder, F. 2020. Qualitative behavioural assessment of pain in castrated lambs. *Applied Animal Behaviour Science* 233 105143. doi: 10.1016/j.applanim.2020.105143
- [3.6] Minero, M., Dalla Costa, E., Dai, F., Murray, L.A.M., Canali, E., <u>Wemelsfelder, F.</u> (2016). Use of Qualitative Behaviour Assessment as an indicator of welfare in donkeys. *Applied Animal Behaviour Science* 174, 147-153. doi: 10.1016/j.applanim.2015.10.010

4. Details of the impact

Impact on policy: EU and Australian animal welfare assessment protocols *Australia*

In 2019, the Australian Standards for the Export of Livestock incorporated QBA into its animal health and welfare assessment protocol [5.1]. This protocol is now mandatory to apply during sea voyages of sheep and cattle taking longer than 10 days. Furthermore, Meat and Livestock Australia (MLA) and the Australian Lot Feeders Association commissioned an adjusted version of this protocol, again including QBA, for welfare monitoring in feedlot cattle [5.2a]. A MLA report in 2018 specifically highlighted that performing QBA "provides a useful measurement of an animal's wellbeing, capturing how it reacts to its environment at a specific time point "O" "&VO"

Europe

E 65 k Ugʻ]bWi XYXʻ]b h\Yʻ9 l @ K YʻZUfY E i Uʻ]mifK E Łk YʻZUfY UggYgga YbhidfchcWcʻgʻZcfʻd][gž cattle and poultry in 2009 (before the REF2021 census period) and in the Animal Welfare Indicators (AWIN) protocols fo57.24 6QEMC Q/P &MCID 56 BDC q57.24 67.44 461.14 499.5 (

Impact case study (REF3)



A QBA descriptor list for captive elephants was developed and validated by researchers at the University of Nottingham [5.8a]. This list is now included in the elephant welfare UggYgga YbhdfchcWc`k]h]b8YZfUbgiGYWYHJfmcZGHJHYbgiGHJbXUfXgicZAcXYfbiNcciDfUWfWixs%+12*UbXayUbgih,UhU``%]1?nccidUf_gi\cX]b[YYd\UbhgiUre legally mandated to apply this protocol quarterly [5.8b, c]. Between 2015 and 2019, a total of 475 records were submitted for 65 elephants [5.8d]. Researchers at the University of Nottingham report that the assessments have resulted in notable improvements in elephant management, such as enrichment, larger outdoor enclosures, increased access to other elephants, and consequently improved behavioural scores through more affiliative behaviour, reduction in stereotyped behaviours which indicate stress, and more lying rest, which indicates a relaxed state [5.8d].