



International
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Learning and Anthrozoology - with a hint of social behaviour



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Handling and stunning of pigs and cattle at slaughter: development and implementation of animal welfare protocols

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The welfare of food-producing animals in the meat industry, especially at the time of slaughter, has become an area of increasing public interest. In order to ensure an acceptable level of animal welfare at slaughter, there is a need of science-based methods to assess how animals experience their situation. The aim of this study was to develop and evaluate the applicability of animal welfare protocols based on animal welfare indicators for pigs and cattle at slaughter. The protocols, based on Welfare Quality®, covered driving of animals (D), behaviour in the stun box (S, cattle only) and stunning quality (SQ). The protocols were tested on 191 pigs and 69 cattle at a Swedish slaughterhouse. The pigs were driven and stunned in groups of 2-3. The cattle was driven in groups of 2-3 and stunned individually. For pigs, D included e.g. use of driving tools and high pitched vocalisation. SQ included e.g. corneal reflex and gasping. Both protocols were considered applicable to use in the present form. For cattle, D included e.g. use of driving tools and voice commands. D was considered applicable although slaughterhouse interiors sometimes challenged behavioural observations and not differentiating between different types of voice commands which could be refined in the future. S included e.g. escape attempts and struggling and was considered applicable in the present form. SQ included e.g. corneal reflex and rhythmic breathing. The stun quality assessment from SQ did not co-align with the assessment of the slaughterhouse nor the competent authority and was not considered suitable to use in the present form. Future research should focus on understanding the discrepancies between these assessments. Apart from SQ in cattle, which needs to be refined, the protocols were consider applicable to use in the slaughterhouses continuous work to improve and ensure animal welfare at slaughter.