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 www.ufaw.org.uk

Animal Welfare 2017, 26: 83-93
 ISSN 0962-7286
 doi: 10.7120/09627286.26.1.083

Factors affecting the ability of sheep to rest during time in markets in Great Britain

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Abstract

In Great Britain, more than eleven million animals are transported to or from livestock markets annually. Time spent at markets is considered by Defra (Department of Environment, Food and Rural Affairs) to be 'neutral time', ie potentially a rest period. However, sheep in markets are subject to many potential stressors, which may prevent them resting. Lying and ruminating behaviours were analysed from 1,638 behavioural scans of sheep in 279 pens in 23 markets across Great Britain. Likelihood of observing ≥ 1 animals lying down during a scan decreased as stocking density and activity outside the pen increased. Proportion of animals observed lying in a pen (when at least one animal was lying) increased as group size and stocking rate decreased. Likelihood of observing ≥ 1 animals ruminating increased when there was no activity around the pen, and as number of sheep in the pen increased. Proportion of animals observed ruminating in a pen (when at least one animal was ruminating) increased as stocking rate, number of sheep in the pen and activity outside the pen decreased. Proportion of sheep ruminating was greater where there was no activity, compared with where there was activity outside the pen. We suggest that in order to allow higher quality rest periods for sheep in markets, then markets should be organised so that activity around the pen is minimised, eg by filling the market from back to front so that, once penned, sheep are not passed repeatedly. Stocking densities should also be low enough to allow animals to lie if they wish, while groups sizes should not be so low as to increase fear responses.

Keywords: animal welfare, auctions, behaviour, markets, sheep, transport