The Old School, Brewhouse Hill, Wheathampstead,
Hertfordshire AL4 8AN, UK
www.ufaw.org.uk

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The effects of feeding space on the behavioural responses of cattle during rest periods offered as part of long-distance transportation

M Ross[†], TM Widowski[‡§] and DB Haley*[†§]

[†] Department of Population Medicine, University of Guelph, 50 Stone Rd East, Guelph, Ontario, N1G 2W1 Canada
[‡] Department of Animal Biosciences, University of Guelph, 50 Stone Rd East, Guelph, Ontario, N1G 2W1 Canada
[§] Campbell Centre for the Study of Animal Welfare, University of Guelph, 50 Stone Road East, Guelph, Ontario, Canada, N1G 2W1
* Contact for correspondence and requests for reprints: dhaley@uoguelph.ca

Abstract

Livestock transport regulations in many countries require that cattle be unloaded for feed, water and rest when they are being transported long distances, but there are few evidence-based guidelines about how to most effectively manage and provide these requirements at rest stops. The aim of this study was to assess whether available feeding space at a commercial rest facility affected eating behaviour and general activity. Twenty-four trailer loads of cattle were selected for study, and each load was divided into two groups. The control group was provided ad libitum *access to a single, round, hay-bale feeder. The treatment group had two round, hay-bale feeders and thus twice as much feeding space per animal. Cattle behaviour was recorded during a 5-h rest period using instantaneous scan sampling every 5 min. This was performed at the group level by counting the number of animals engaged in pre-defined activities, as well as individually by tracking a subset of focal animals from each group. Behaviour was categorised as one of the following: eating, drinking, lying, or 'other'. Interruptions to eating were also quantified. Eating was counted as interrupted when, instead of being followed by a consecutive eating observation, it was interspersed by another behaviour. Doubling feeding space increased the mean proportion of cattle eating by 30%, decreased interruption of eating bouts and had no effect on drinking and lying behaviour. Increased access to feed has potential welfare and health benefits. These data can be used to inform standards for feeding beef cattle at rest stops during long distance travel.*

Keywords: *animal welfare, beef cattle, behaviour, feed competition, rest stop, transport*