

Cattle transport Loading strategies for road transport

Background

Good preparation of livestock is essential to minimise stress and injury during transport. Good communication and cooperation between the cattle producer (owner/owner's representative) and the transport driver will maximise animal welfare while the animals are in transit and also improve meat quality.

The cattle producer has a major influence on handling and transport strategies. This will affect the meat quality of their cattle. The consignor decides which cattle are selected, how they are segregated (type, sex, horns, size) and whether they are offered feed and water while in the yards. They also set the time they are held in the yards following mustering, and the rest/fasting period prior to loading. The producer sets the handling standards, which influence the actions of their stock workers and the transport drivers.

The truck driver, after consultation with the producer or their agent (and using their own knowledge and experience), will decide on the loading density. The driver is responsible for the welfare of the animals, from loading to unloading.

Animal selection

When selecting animals for transport they must be 'fit to load', strong enough to undertake the journey and not have any visible signs of injury or disease. Animals in late pregnancy should not be transported.

Feed and water

Cattle begin to lose live weight when they're taken off water and feed, most of which is gutfill (faeces and urine). The greatest weight loss will occur in the period between yarding and loading. Cattle off grass lose weight at a faster rate than cattle off grain (feedlot).

When cattle are fasted before transport the floors of trucks are drier. The animals travel better—they are cleaner and are easier to unload. It is therefore recommended that cattle be kept off water for 6-8 hours and off feed for 6-12 hours before loading. The actual time off water will depend on the weather, distance to be travelled, road conditions, the cattle's previous feed and previous transport history and when they last had access to water.

Rest

Cattle require time to settle down after mustering. After handling in the yard they should also be rested prior to transport. Rushing cattle causes stress, which leads to tough or dark-coloured meat.

A survey of deaths among railed cattle from western Queensland showed that fewer animals died in transit when they were rested for more than 12 hours between mustering and loading at the property yards. It is recommended that cattle are rested for 6–12 hours before transport. The length of the rest period prior to transport depends on the time taken to muster and handle the cattle, the distance to be travelled and the prevailing weather conditions.





Handling

Success in transporting cattle is determined by the attitude and actions of the handler. Cattle travel better when they are quiet and also when segregated according to horn status, size and sex. Mixing horned and hornless cattle should be avoided as it will increase the risk of injury and losses from bruising.

Correct handling of cattle reduces bruising and stress. Skilled stock workers work cattle without noise and bustle to reduce animal stress. The training of weaners to normal yard handling practices is the first important step towards improving meat (product) quality.

Loading densities

Appropriate loading densities will depend on the size, shape and horn status of the cattle, as well as weather conditions and the distance to be travelled. Loading densities must be assessed for each pen in the stock crate to ensure the animals give each other mutual support.

Appropriate loading densities reduce stress, bruising and deaths during the journey. Overloading increases the risk of an animal going down and being unable to get up again, especially horned cattle. Downer animals significantly increase the risk of bruising, injury and mortality.

Recommended loading densities of adult cattle for road transport

Mean live weight of cattle (kg)	Floor area (m²/head)	No. of head per 12.2 m deck*
250	0.77	38
300	0.86	34
350	0.98	30
400	1.05	28
450	1.13	26
500	1.23	24
550	1.34	22
600	1.47	20
650	1.63	18

* Equates to a single-deck trailer.

More information

The following publications provide further information on loading livestock:

- Australian standards and guidelines for the welfare of animals—land transport of livestock (available to download at www.biosecurity.qld.gov.au)
- Is it fit to load? A national guide to the selection of animals fit to transport (available to download at www.mla.com.au).

For more information visit www.biosecurity.qld.gov.au (and follow the links to 'Animal welfare and ethics') or call Biosecurity Queensland on **13 25 23**.

