

Standing Committee
on Agriculture and
Resource Management

Australian
Model Code of Practice
For the Welfare of Animals

Land Transport of Cattle



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AGRICULTURE AND RESOURCE MANAGEMENT COUNCIL OF AUSTRALIA AND NEW ZEALAND

The Agriculture and Resource Management Council of Australia and New Zealand (ARM-CANZ) consists of the Australian Commonwealth/State/Territory and New Zealand Ministers responsible for agriculture, soil, water (both rural and urban) and rural adjustment policy issues.

The objective of the Council is to develop integrated and sustainable agricultural and land and water management policies, strategies and practices for the benefit of the community.

The Council is supported by a permanent Standing Committee, the Standing Committee on Agriculture and Resource Management (SCARM). Membership of the Standing Committee comprises relevant Departmental Heads/CEOs of Commonwealth/State/Territory and New Zealand agencies as well as representatives of the CSIRO and the Bureau of Meteorology.

PREFACE

The Australian Model Codes of Practice for the Welfare of Animals have been prepared for the Standing Committee on Agriculture and Resource Management (SCARM) by representatives of State and Federal Departments with responsibility for agriculture and/or animal welfare, CSIRO, and other relevant committees within the SCARM system. Extensive consultation takes place with industry and animal welfare groups in the development of the Codes.

This Model Code of Practice was endorsed by the Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) as a national code at its sixteenth meeting in August 1999.

The Codes are intended as models to enable the States to develop codes of practice to meet their individual needs. The Model Codes of Practice that have been endorsed by ARMCANZ (and its predecessor, the Australian Agricultural Council) are:

- Animals at Saleyards (1991)
- Buffalo, Farmed (1995)
- Camel (1997)
- Cattle (1992)
- Deer, Farming of (1991)
- Emus, Husbandry of Captive-Bred (1999)
- Feral Animals, Destruction or Capture, Handling and Marketing of (1991)
- Goat, The (1991)
- Horses, Land Transport of (1997)
- Livestock, Air Transport of (1986)
- Livestock, Rail Transport of (1983)
- Livestock, Road transport of (1983)
- Livestock, Sea Transport of (1987)
- Pigs (2nd Edition) (1998)
- Pigs, Land Transport of (1997)
- Poultry, The Domestic (3rd Edition) (1995)
- Rabbits, Intensive Husbandry of (1991)
- Sheep, The (1991)
- Welfare of Animals at Slaughtering Establishments

and by agreement with the National Health and Medical Research Council and the CSIRO,

Care and Use of Animals for Scientific Purposes (1990).

The following Code is based on current knowledge and technology. It will be reviewed in five years to take account of advances in the understanding of animal physiology and behaviour, technological changes in animal husbandry and their relationship to the welfare of animals.

1 INTRODUCTION

- 1.1 This Code of Practice is intended as a guide for people who are involved in transporting cattle. It emphasises the responsibilities of the owner of the cattle (or his/her agent), livestock transporters, livestock transport drivers, attendants and railway officials. It is intended to encourage considerate treatment of the cattle so that transport stress and injury are minimised at all stages of the transport operation.
- 1.2 For this Code, transport includes the period immediately after mustering for loading including any handling in yards, waiting periods, loading, transit, rest periods and unloading at the point of destination.

Cattle can be transported more effectively and with less stress if:

- **care is taken in the selection of cattle prior to transportation;**
- **care is taken in the loading/unloading of cattle, using facilities well designed for cattle;**
- **well designed road and rail transport vehicles are used;**
- **the trip is scheduled to minimise delays in travel or at the point of disembarkation of the cattle.**

- 1.3 Unnecessary transport of cattle should be avoided, however any transport that is required should be carried out in a way that minimises stress, pain and suffering.
- 1.4 Ignorance is no excuse for inappropriate handling of cattle. Employers have an obligation to make employees aware of the principles of humane handling, equipment use and livestock care.
- 1.5 The responsibilities of persons handling cattle during transport include an awareness of the provisions contained within this Code and also the *Australian Model Code of Practice for the Welfare of Animals: Cattle*.

2 RESPONSIBILITIES

- 2.1 Cattle should be transported to their destination as quickly as possible within legal requirements.
- 2.2 The owner or manager of the cattle is responsible for the cattle until they are on the transport vehicle. They then become the transporter's responsibility until they are unloaded. After delivery to an abattoir (including service abattoirs), management assumes responsibility until slaughter. When at saleyards, they are the responsibility of the manager, superintendent or supervisor of the saleyard complex. When at a second property, the owner/manager of that property is responsible unless other agreements over responsibility have been made.
- 2.3 Plans should be made to minimise any delay that could be stressful to cattle. The driver must ensure that he/she is provided with the name and telephone number of the owner of the cattle, owner's representative or agent (whichever appropriate) and of the consignee.
- 2.4 Persons organising the transport of animals must be aware of any requirements for health certification and welfare of the animals and ensure that all legal approvals and documentation are completed before the commencement of the planned journey.
- 2.5 Only animals fit to travel should be selected and presented for transport. Those most susceptible to stress or injury during transport should be loaded last and unloaded first.
- 2.6 Livestock transporters should establish effective liaison with experts on animal husbandry and welfare and consult routinely on the design, construction and maintenance of stock crates, existing or new rolling stock, stock assembly yards and other facilities.
- 2.7 **Owners' responsibilities**
- 2.7.1 The owner, owner's representative or agent has a responsibility to select and present only cattle fit for travel.
- 2.7.2 The nature and duration of the proposed journey should be considered when determining the degree of fitness required.
- 2.7.3 The owner, owner's representative or agent is responsible for the provision of well maintained holding and loading facilities.
- 2.8 **Livestock transport drivers' responsibilities**
- 2.8.1 The driver of a road vehicle is responsible for the care and welfare of the cattle during transport unless an attendant appointed by the owner travels with the consignment. Drivers must stop and assist a distressed or injured animal as soon as practical after they become aware of a problem.
- 2.8.2 Drivers should be experienced in animal handling to ensure the welfare of cattle in their charge and be familiar with the contents of this Code of Practice.
- 2.8.3 Learner-drivers should not be permitted to transport livestock without supervision.

2.9 Responsibility for rail transportation

- 2.9.1 The welfare of cattle is best safeguarded by a clear understanding and acceptance of responsibilities of the owner, owner's representative or agent and railway staff during the various phases of transportation.
- 2.9.2 Train drivers, if employed, should be competent in handling cattle, be required to complete trip reports, and have authority to delay trains and attend cattle.
- 2.9.3 The owner, owner's representative or agent is responsible for:
- careful selection, loading and unloading of animals;
 - the provision of competent stockpeople to load the stock;
 - loading stock to railway schedules that will best avoid climatic stress;
 - dealing with injured stock or other emergencies when notified by the railway authority;
 - ensuring water and stockfeed is available at cattle rest stops;
 - providing a train driver or stock care system where appropriate, to care for larger consignments of stock, especially on journeys greater than 24 hours, or to share the care for several small consignments;
 - supervision of the unloading process and the final loading onto road transport (where applicable);
 - ensuring that the stock are spelled after rail transport in preparation for any further travel;
 - providing contact names and phone numbers for the owner, owner's representative or agent as well as the person responsible at the destination.
- 2.9.4 The railway authority is responsible for:
- providing well maintained wagons appropriate for cattle;
 - ensuring train drivers are aware livestock have been loaded and of their location on the train;
 - provision of accredited stock care managers at regular railway stopping points to inspect stock and provide relief to sick and injured animals;
 - taking care that materials carried in other wagons on trains do not affect the welfare of cattle eg. wagons containing dusty material placed in front of cattle wagons.
- 2.9.5 The owner of loading and unloading facilities, including ramps, yards and watering points is responsible for their maintenance.

3 TRAVELLING STOCK RESERVES (TSRs)

- 3.1** These reserves are important to the welfare of travelling stock. All TSRs should be well maintained by the responsible authority and clearly identified. Drinking water facilities should always be available in the TSR.

4 MINIMISING STRESS

- 4.1 Stress is a cumulative response of an animal to its surroundings and may result in severe physiological effects. Animals of different breeds and ages may vary in their susceptibility to stress.
- 4.2 Cattle may be stressed during transport by effects of mustering, handling, holding, deprivation of water and food and extremes of weather.
- 4.3 Cattle should be mustered and handled in a way that maintains them in a condition suitable for transport.
- 4.4 The animals most severely affected by stress are those not accustomed to handling, those in poor condition, heavily pregnant females and young and old animals. It is essential that such groups be handled with due care.
- 4.5 The stress of transport will be greatly increased by extremes of weather.
- 4.6 Wherever possible cattle should be transported directly to their destination.

5 PRE-TRANSPORT PREPARATION OF CATTLE

5.1 Pre-travel rest period

- 5.1.1 A rest period after mustering and handling before transport is essential.
- 5.1.2 It is desirable to feed, water and rest cattle for at least 12 hours close to the loading facility if mustering has caused considerable physical exertion.
- 5.1.3 Cattle mustered from pastoral country by helicopter or light plane into unfamiliar conditions, eg, exposed to an unaccustomed level of contact with man, dogs, motor vehicles etc, should be provided with feed, water and rest for at least 24 hours before loading onto transport.

5.2 Water and feed requirements

- 5.2.1 Deprivation of food and water will compound the stress associated with transportation. However if hungry and thirsty cattle consume large amounts of water and/or feed immediately prior to trucking, then further stress may be caused.
- 5.2.2 Cattle should be offered water and feed of reasonable quality if water deprivation time is expected to exceed 36 hours (see 9.2.5 and 9.3.1). Animals should not be offered large amounts of water and food within 6 hours of loading. Dry roughage (not lush lucerne hay) at rates of 2–3 kg per adult animal should be provided. Adult cattle may drink 45 litres (10 gallons) of water per head/day and double this amount in extremely hot weather.
- 5.2.3 Water troughs should be large enough and designed in such a way that cattle have unrestricted access. Troughs should be firmly fixed so they cannot overturn. They should be kept clean and should be designed and maintained to prevent injuries. The supply of water must be sufficient for the herd's needs.
- 5.2.4 Water and feed requirements during transport are specified in Section 9.2.

5.3 Shelter

- 5.3.1 Where necessary, use should be made of natural and artificial shelter to protect cattle from extremes of wind, heat or cold. In determining the need for shelter, environmental conditions, geographic location, breed and type, body condition and degree of acclimatisation of the cattle are to be taken into account.
- 5.3.2 Shelter must be provided for young calves (especially those under 2 weeks of age) if they are left in yards without their mothers for more than 1 hour before loading and transportation.

5.4 Special requirements

- 5.4.1 Under normal circumstances, **cattle which are more than eight months pregnant** should not be transported. Where this is unavoidable they must not be transported for periods longer than eight hours due to the increased risk of metabolic disease and injury. They should be offered water and food upon arrival at the destination.

- 5.4.2 **Cattle that have recently given birth** should not be transported until at least four days after calving. In exceptional circumstances, it may be more humane to truck recently calved cows sooner than 4 days after calving.
- 5.4.3 **Lactating dairy cows** should be milked at intervals not exceeding 24 hours.
- 5.4.4 Cattle must not be restrained by their noses during transport.
- 5.4.5 **Calves** are especially susceptible to stress and care is required to ensure they are strong enough to withstand transportation. The following considerations apply especially to calves less than one month of age:
- they should be transported in vehicles with enclosed fronts to reduce wind chill in cold conditions;
 - they should be handled carefully in hot weather because of their susceptibility to heat stress;
 - they should be old enough so that the navel is dry and the umbilical cord at the junction with the skin is dry and wrinkled;
 - they should be fed within 6 hours of transportation and must not be left without appropriate liquid food for more than 10 hours;
 - those being transported for slaughter should be taken to the nearest suitable abattoir with minimal travelling time.
- 5.4.6 Injured, weak or diseased animals may be transported on veterinary advice. Where veterinary advice is not readily available, the decision may be made by experienced personnel.
- 5.4.7 It is appreciated that stud and show cattle may be safely transported long distances in specially designed floats and under expert standards of care and supervision which will allow exemption from the general provisions of this code.

5.5 **Cattle injured by bushfire**

- 5.5.1 After bushfires, only those animals assessed by a veterinarian or livestock assessment team as capable of travelling without undue pain or stress resulting from burns, may be transported.
- 5.5.2 In the absence of a veterinary surgeon or livestock assessment team, bushfire affected cattle should only be transported for agistment or slaughter if they meet all of the following criteria:
- they do not show severe respiratory distress;
 - they are able to walk;
 - they do not have burnt bare skin.
- 5.5.3 Cattle that show signs of obvious distress should be treated by a veterinarian or humanely destroyed without delay (refer to Section 11).

5.6 Drought affected cattle

- 5.6.1 It is preferable that cattle should not be allowed to become so weak that they are not fit to travel. Animals that go down after limited exercise are not fit to travel. They should be fed until strong, or promptly and humanely destroyed.
- 5.6.2 Weakened cattle should be transported to their destination by the quickest, least stressful route. They should be given special protection against exposure to extremes of weather. They should only be transported with stock of similar condition.

5.7 Handling cattle rejected from transport

- 5.7.1 Animals that are showing signs of obvious distress which cannot be relieved, should be promptly and humanely destroyed. Methods for humanely destroying cattle are provided later in this Code (see Section 11).
- 5.7.2 Humane and effective arrangements should be made by the owner or agent for the handling and care of any animal rejected as unsuitable for loading.

6 LOADING

6.1 Supervision

- 6.1.1 Persons responsible for the transport of cattle have legal responsibility for their care and welfare.
- 6.1.2 Injuries and stress are most likely to occur during loading and unloading where facilities and handling practices are unsatisfactory.
- 6.1.3 The loading procedure should be planned to allow adequate time for stock to be loaded quietly and without causing them injury.
- 6.1.4 Loading should be supervised by competent stock handlers who have a basic knowledge of the behavioural and physical needs of cattle.
- 6.1.5 Supervisors should ensure that spectators or untrained assistants do not impede the smooth loading of animals. Unnecessary noise, harassment and force should be avoided.

6.2 Cleanliness

- 6.2.1 It is preferable that cattle should be loaded onto vehicles or railway wagons with dry floors or floors that have been cleaned before loading.
- 6.2.2 Appropriate construction methods should be used to prevent the soiling of animals on the lower deck of a double-deck or multi-deck transport.

6.3 Facilities

- 6.3.1 Cattle will tend to follow each other unless they are distracted and this behaviour should be exploited in the design of facilities.
 - Sufficient area should be provided in forcing/receiving yards during loading and unloading to allow them to move freely in the desired direction.
 - Movement can be helped by using curved races and fully covering the sides of ramps to provide visual barriers.
 - Movement of cattle is also improved by providing clearly visible passage ways and gateways.
 - Cattle will behave defensively when confronted by visually contrasting surfaces such as shadows, gratings and surfaces that are uneven or steeply sloping.
- 6.3.2 Loading should take place from a properly constructed ramp or loading bay suitable for cattle, or an appropriate portable facility where a permanent loading ramp is not available.
- 6.3.3 Yards should be constructed to avoid sudden changes in levels, steep slopes, dim and uneven lighting, narrow passages and sharp turns.
- 6.3.4 Ideally, the area of the forcing yard should to be sufficient to hold the transport pen size.

- 6.3.5 There should be no protrusions or sharp edges on the fences or gateways of the loading and handling facility that are likely to cause injury to animals. Hinges and latches must not project into the pathway of animals.
- 6.3.6 Gates should operate smoothly, retract fully from the pathway of animals, and not be susceptible to jamming. Gates should also be made clearly visible to animals when shut by providing, where necessary, a 'sight board' to improve visibility.
- 6.3.7 Ramps should be constructed so that they are appropriate to the transport being used. Ideally, there should be a flat platform at the top of the loading/unloading ramp, level with the deck being unloaded. This should not be less than 1.5 metres in length to aid the safe movement of animals.
- 6.3.8 Ramps and walking surfaces should minimise the risk of slipping by animals. Ideally ramp slopes should not be greater than one in five (20°).
- 6.3.9 Solid extensions must be used to cover any gap between the loading ramp and the floor of the stock crate and must not dislodge when in use.

6.4 Lighting

- 6.4.1 Artificial lighting is desirable for loading at night. Such lighting should be carefully positioned to give even light over ramps, races, yards and transport vehicles. Lighting should not cause deep shadows or bright spots in areas where animals move.
- 6.4.2 The stock crate of the vehicle may also have diffuse interior lighting to help cattle see where they are going.

6.5 Segregation during transport

- 6.5.1 It is preferable that the following classes of stock are segregated and transported in separate groups:
 - horned cattle;
 - hornless cattle;
 - adult bulls;
 - cattle greatly different in size (cows and calves may preferably be transported together under some circumstances);
 - females apparently in advanced pregnancy (note that cattle more than 8 months pregnant should not normally be transported);
 - weak cattle should be segregated from strong cattle.
- 6.5.2 Cattle should not be mixed with other species during transport.
- 6.5.3 Working dogs must not be transported in the stock crate with cattle. Dogs should be transported out of sight of stock in a suitably designed and ventilated kennel elsewhere on the vehicle.
- 6.5.4 Ideally, horses should be separated from cattle by a suitable partition.

6.6 Assisting the loading of cattle

- 6.6.1 Cattle are difficult to move unless they can see somewhere to go. The use of force on animals that have little or no room to move is cruel and must not occur.
- 6.6.2 Electric prods should be powered only by battery and their use restricted to the amount necessary to assist the loading.
- 6.6.3 Manual lifting is permissible for young animals that may have difficulty negotiating a ramp.
- 6.6.4 'Flappers' (a length of cane with a short strap of leather or canvas attached) or 'metallic rattles' are ideal in that they encourage movement in response to sound. Large sticks, lengths of metal piping, fencing wire or heavy leather belts must not be used to strike cattle. Canes or other materials used as an extension of the arm to direct cattle are a useful aid for handling.
- 6.6.5 The use of well-trained dogs to help with the loading of cattle is acceptable. The number of dogs used should be the minimum necessary to complete the task.

7 TRANSPORT DESIGN

7.1 Construction and design

- 7.1.1 Vehicles and their fittings must be strong enough to contain the animals and prevent their escape. Design of crates must be such that cattle cannot jump out of the crate under normal circumstances.
- 7.1.2 The parts of the vehicle or wagon through which cattle move or in which they are held, should be free from obstructions, projecting objects and hazards that could cause injury. Doors should be wide enough to allow easy exit and entry (no less than 900mm).
- 7.1.3 The space between decks should be sufficient for the cattle, including horned cattle, to stand in a natural position without contacting overhead structures.
- 7.1.4 Materials used in the construction of transport vehicles must be able to be cleaned effectively.
- 7.1.5 The inside of stock crates should be smooth and free of protrusions to minimise pressure points and reduce bruising.
- 7.1.6 The spacing of side rails, where they are used, should be adequate to prevent the heads or legs of animals from protruding.
- 7.1.7 Floor surfaces should provide a good foothold. The floor should be constructed from a non-slip material that will not injure the legs or hooves of animals.
- 7.1.8 Ideally, stock crates should include provision to load/unload animals directly from the upper deck.
- 7.1.9 Vehicles should be serviced and maintained regularly to minimise breakdowns. The crate should be maintained in good working order.

7.2 Ventilation

- 7.2.1 The exhaust system of a vehicle must not pollute the air inside the stock crate.
- 7.2.2 Sufficient gaps in the sides should be present to provide adequate air flow for the comfort of animals without over-exposing them in cold conditions.

8 LOADING DENSITY DURING TRANSPORT

- 8.1** The livestock transport driver, after consultation with the owner, owner's representative or agent, is responsible for ensuring that the loading density and penning arrangements are compatible with the welfare of the cattle and the capacity of the transport vehicle.
- 8.2** Loading cattle either too loosely or too tightly predisposes them to injury.
- 8.3** Traffic density in the areas where the trucks mostly operate should determine pen lengths. For example, 3–4.5m when mostly in heavy density traffic and 6.1m in other areas.
- 8.4** The density of loading should be determined by the need to minimise injury but allow fallen animals to rise without assistance.
- 8.5** It is accepted that different types of transport vehicles are used across Australia and that the transportation system has evolved to suit the husbandry system in each area. Acceptable loading rates will vary with the factors listed below (see 8.6) and must conform with state and Territory transport regulations. Average recommended loading rates are given in the table below and numbers above or below these will be appropriate in different circumstances.
- In extensively grazed areas the number of animals per load and the partitioning reflect these different circumstances.
 - Other variables such as breed, traffic density, road conditions and travel in double deck transports have a major effect either alone or in combination.
 - However, the welfare of the cattle must not be compromised and hence guidelines follow.
- 8.6** When using these loading rates, note:
- Loading densities are determined according to the average liveweight, condition, size, shape and horn status of the cattle, as well as the prevailing conditions and the distance animals are to be transported. Loading rates must be assessed for each pen or division in the stock crate.
 - 5% fewer cattle should be loaded if they are horned.
 - In hilly and more populated areas where road vehicles change speed more frequently, sufficient internal partitions must be used and numbers may have to be increased to prevent animals being thrown about.
 - When fewer cattle per pen than below are transported, they are more likely to be injured during emergencies and the use of firmly fixed portable partitions should be considered in these situations.
 - When more cattle per pen than below are transported, fallen animals are unlikely to be able to regain their feet. The possible saving in freight from sending the extra animal, or animals, should be balanced against animal welfare considerations, potential product losses and mortalities.

Recommended average loading rates for cattle of various liveweights

Mean liveweight (kg) of cattle	Floor area (m²/head)	No. of head per 12.2m 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

9 TRAVEL

9.1 General

9.1.1 The following factors will all have an extremely important effect on the welfare of cattle during transport:

- a) the method of, and stresses imposed, during mustering and handling;
- b) the time cattle are off water ('water deprivation time' – see 9.2.5);
- c) the time cattle are off feed (see 9.4);
- d) the weather conditions prior to and during transport;
- e) the type of road surfaces traversed;
- f) hilly terrain and populated areas causing frequent speed changes;
- g) the body condition of the cattle;
- h) the pregnancy status of the cattle;
- i) the fitness of the cattle.

Acceptable total travel times will vary greatly with the above factors, and can only be calculated after careful consideration of all the above factors.

It is the responsibility of the livestock transport driver to carefully assess and monitor the condition of the stock, prior to loading and during transport, to ensure the welfare of the cattle is maintained at an acceptable level.

Of paramount importance is the actual response of stock to transport, and this can only be evaluated by close inspection of the stock by an experienced driver during transport.

9.1.2 Transport should be completed with minimal delays. Where delays cannot be avoided, watering, feeding, and protection from extremes of weather must be addressed.

9.1.3 Drivers should drive smoothly to prevent bruising and the risk of injury.

9.1.4 Animals which are distressed or injured should be given immediate assistance from the transport driver, train drover or stock care manager. Where necessary, Department of Agriculture/Primary Industries, veterinary, police, RSPCA or other authorised assistance should be sought as soon as possible to deal with severely distressed or injured animals.

9.2 Planning a journey

9.2.1 The main objective of planning a journey is to start and finish the journey with stock which are:

- fit;
- not dehydrated;
- able to walk freely on and off the truck/wagon;
- without injury or significant bruising;
- minimally stressed.

- 9.2.2 In planning a journey, the owner, owner's representative or agent, transport operator and transport driver must consider the factors in 9.1.1 and the objective in 9.2.1
- 9.2.3 Very hot, cold or wet conditions impose certain stresses during transport. These stresses can be minimized by attention to the construction of the transport unit, its ventilation, the speed of travel, and the number of planned stops as well as the number, age and condition of the animals to be carried, during planning of the journey.
- 9.2.4 Liaison amongst the different parties involved (owner or owner's representative, transport operator and transport driver) in all the stages of animal transport is essential to ensure that cattle are not deprived of water beyond the limits specified for each class of animal in 9.2.9.
- 9.2.5 It is more important for cattle to have access to water during transport than to feed. Cattle may be offered water without feed but it is not recommended that feed be offered without water. It follows that the recommended maximum time without water is less than the time without feed.

The relevant period for determining when animals will need water during transport is the total continuous period of water deprivation, defined as 'water deprivation time'.

It starts when stock last had access to water and must include:

- time off water during mustering;
- time off water when yarded after mustering;
- 'empty out' time (refer to 9.2.6);
- all time on vehicle, whether moving or stationary;
- any time after unloading, such as at a saleyard, spelling centre or abattoir, without water.

- 9.2.6 'Empty out time' is the deliberate and variable period of water and/or feed deprivation aimed to minimise faecal and urine spoilage of the transport vehicle and subsequent problems with animals slipping.

This time will vary from 0 to 12 hours, depending on cattle condition and class, feed type and distance to be travelled. Liaison must occur between the owner of the cattle and the livestock transporter at the time of booking, to ensure an appropriate empty out time is agreed on.

- 9.2.7 Transport drivers must be aware of, and consider, the time cattle have been without water and/or feed during mustering and in holding yards prior to loading. (This will allow calculation of when the animals should next be spelled and given water and feed.)
- 9.2.8 Livestock transporters should provide checklists to accompany consignments which record times when animals in their care last had access to water and feed.

9.3 Water requirements

9.3.1 After consideration of factors outlined in 9.1.1 and 9.2.5 the **maximum 'water deprivation times'** for cattle, including the mustering and holding period prior to actual transport, and after unloading, are:

	Normal Time	Extended Time**
Mature stock	36 hours	48 hours
Lactating dairy cows	24 hours	No extension
Cows more than 8 months pregnant	8 hours	No extension
Calves less than 1 month old, travelling without mothers	10 hours	No extension
Calves less than 1 month, travelling with mothers	24 hours	No extension
Calves 1–6 months of age	24 hours	No extension

** The extended time is permissible only if:

- the animals are travelling well and not showing signs of fatigue, thirst or distress; *and*
- adverse weather conditions are neither prevailing nor predicted; *and*
- it will allow the entire journey to be completed within the 48 hours, and animals are rested with water and feed for at least 18 hours immediately upon arrival.

Note: These times are total times the stock are deprived of water including the holding and mustering period if applicable, and time after unloading.

9.3.2 Particular care should be taken to avoid deprivation of water beyond the above specified periods when a journey is broken by unloading and reloading such as at saleyards/dipyards en route to an abattoir.

The imposition of dry curfews at saleyards is not recommended since it increases the risk that the total time the cattle are off water (before and after the sale) will exceed the permissible maximum water deprivation period.

9.4 Feed requirements

9.4.1 The time which cattle (as ruminant animals with a ruminal capacity of 90–120 litres for medium-sized cattle) can be off feed without detriment to their welfare is generally much greater than the above maximum water deprivation times. This time will vary according to the condition, breed and sex of the cattle as well as the type of feed they have been on. It is therefore not possible to stipulate a recommended maximum time of feed deprivation which will meaningfully cover all transport situations.

- 9.4.2 Those involved in transporting cattle should consider all the relevant factors, including the access which the cattle will have to water, and ensure that the total time off feed does not have an adverse effect on the cattle.

9.5 Spelling periods

9.5.1 Spelling stops extend the total time of a journey. Unloading and loading cattle for spelling and subjecting them to unfamiliar surroundings may impose a greater stress than continuing the journey for a limited period.

9.5.2 However, cattle older than 6 months of age should be spelled for 12–24 hours after each 36 hours 'water deprivation time' (see 9.2.5) for a normal journey, or for 36 hours after journeys of 36–48 hours if conditions as detailed in 9.3.1 are met.

9.5.3 Calves under 1 month of age travelling:

- a) *with their mothers*, should be spelled for 12–24 hours, after each 24 hours of 'water deprivation time';
- b) *alone*, must not be kept without an appropriate liquid food for more than 10 hours.

Calves 1–6 months of age should be spelled for 12–24 hours after each 24 hours of 'water deprivation time'.

9.5.4 During every specified spelling period, cattle must:

- be unloaded;
- have access to water and feed for at least 12 hours followed by any required empty out time as defined in 9.2.6, before commencement of the next transport phase;
- have enough space for exercise and rest.

9.6 In transit inspections

9.6.1 Consignments by road should be inspected within 30–60 minutes of commencing a journey and after that, at least every 2–3 hours as well as whenever the driver has a rest stop. After meal breaks and/or refuelling stops, the cattle must be inspected immediately prior to departure.

9.6.2 Every opportunity must be taken to inspect the animals during rail transport.

9.6.3 The rail transporter/train drover will monitor the progress of trains carrying cattle and take all appropriate action to minimise delays

9.6.4 A suitable source of lighting should be available to carry out inspections at night.

10 UNLOADING

- 10.1 Similar requirements to those listed under 'Loading' apply to the unloading of cattle, but note that cattle may be tired after a journey.
- 10.2 Cattle must be unloaded as soon as possible after arrival at the destination. Injuries will be reduced if stock are given the opportunity to walk quietly off the vehicle.
- 10.3 When unloading animals from rail or road transports, unloading 'banks' (earthen mounds) are recommended. If such banks are long enough, several wagons or trailers can be unloaded at once. Where rail wagons have two doors, both must be dropped and secured in place before stock are allowed to be unloaded unless cattle are being unloaded down a single race or being transhipped from rail to road transport.
- 10.4 Where sufficient pens are available, cattle unloading should avoid mixing of unfamiliar animals, which often causes fighting.
- 10.5 All cattle must be offered water as soon as possible after arrival at the destination. There is no justification for depriving cattle of water before slaughter.
- 10.6 **Responsibilities**
 - 10.6.1 The drover or transport driver must bring to the attention of the person in charge at the destination, any aspect of the journey that might affect the future welfare of the animals. This includes the last feeding and watering times and full details of any treatment given.
 - 10.6.2 Persons in charge of the consignment must notify and transfer responsibility for the stock to a suitable person at their destination. A system should be in place for delivery to premises that may be unattended such as saleyards and abattoirs.
- 10.7 **Injured animals**
 - 10.7.1 There should be facilities for the humane unloading or slaughter of animals that are unable to walk off because of injury or exhaustion.
 - 10.7.2 Severely injured animals must be humanely killed without delay. This should be done by, or at the direction of, the person in charge at the time if a veterinarian is unavailable. It is unacceptable to delay the humane destruction of severely injured animals.
 - 10.7.3 Animals requiring emergency euthanasia should be shot, or stunned and bled, without moving them further than is necessary. This may be on the transport vehicle.

11 EMERGENCY EUTHANASIA OF CATTLE

- 11.1** Previous sections of this Code have drawn attention to circumstances in which cattle may need to be humanely killed.
- 11.2** Where euthanasia is necessary, the person responsible for the animals must ensure it is carried out humanely and results in immediate death. Assistance may be sought from Department of Agriculture/Primary Industries, a veterinary practitioner, authorised inspector or the police.
- 11.3** Euthanasia of animals is an unpleasant experience for most people and should be carried out with due consideration for any spectators, who should be actively discouraged from viewing the destruction of injured animals.
- 11.4** The animal to be euthanased should be handled quietly to ensure it is not unnecessarily distressed or alarmed.
- 11.5 Use of firearms**
- 11.5.1 The most efficient, safe and widely available method of humanely destroying cattle during transport is to shoot the animal through the brain at close range. Legal considerations regarding use of firearms must be observed.
- 11.5.2 A .22 calibre firearm is adequate for humane euthanasia of most cattle. However, use of this calibre firearm must be followed by immediate bleeding out. Older bulls and bullocks may require the use of firearms with calibre bigger than .22 to ensure penetration of the cranium.
- 11.5.3 Any use of firearms is potentially hazardous.
- 11.5.4 Persons other than the person firing the weapon should be cleared from the area or should stand well behind the marksman.
- 11.5.5 Never fire while the animal is moving its head. Wait patiently for the animal to be still before firing.
- 11.5.6 To provide maximum impact and the least possibility of misdirection, the gun should be fired at a range that is as short as circumstances permit, but not in contact with the animal's head.
- 11.6 Use of the captive-bolt pistol**
- 11.6.1 When used with care this alternative is safer than the use of a firearm.
- 11.6.2 The operator does not have to be an experienced marksman as the instrument's muzzle is firmly pressed against the skull before firing.
- 11.6.3 A captive bolt pistol only stuns the animal and, to ensure death, it is necessary to bleed out the animal by severing the major blood vessels of the neck with a sharp knife when it collapses to the ground. To avoid injury due to the animal's involuntary movements, the operator should stand behind the neck.

11.6.4 Blank cartridges for the captive-bolt pistol are colour-coded according to the amount of charge they contain, and the manufacturers' recommendations should be followed on the most appropriate blank cartridges for different classes of cattle.

11.6.5 Regular maintenance of the captive-bolt pistol is essential for efficient stunning and avoidance of malfunctions.

11.7 Temporal method

This is only suitable for firearms. The animal is shot from the side so that the bullet enters the skull midway between the eye and the base of the ear on the same side of the head. The bullet should be directed square on to the side of the head.

Bleeding out of calves without pre-stunning is not acceptable because an additional blood supply to the brain enables the animal to remain conscious for a considerable time after the throat is cut.

11.8 Frontal method

The captive-bolt pistol or firearm should be directed at the point of intersection of lines taken from the base of each ear to the opposite eye (as in Figure 1).

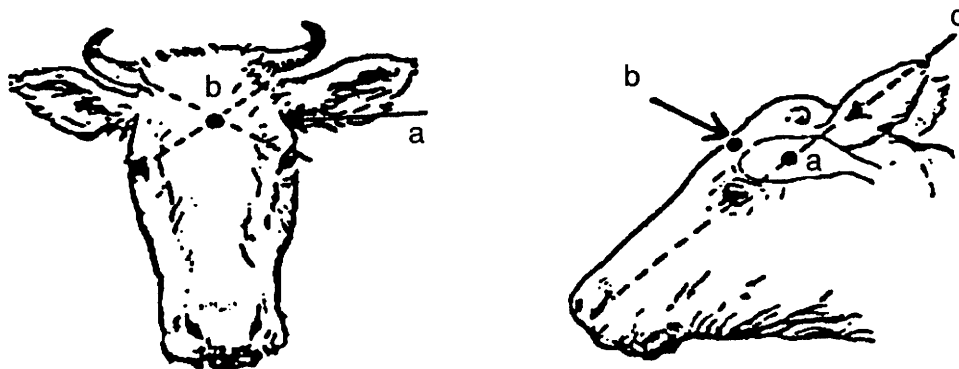


Figure 1: Humane euthanasia of cattle.

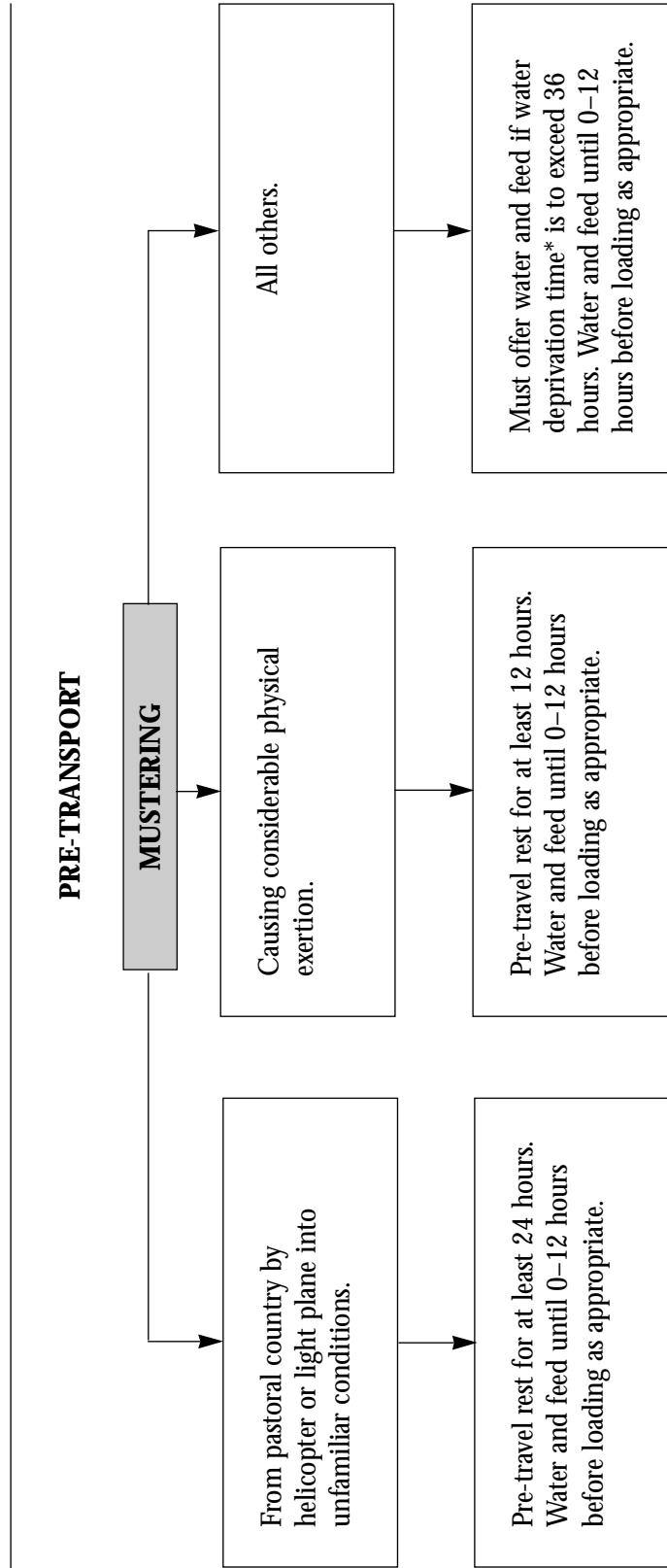
'a' indicates recommended position for temporal method. (suitable for firearms only).

'b' indicates recommended position for frontal method. (suitable for firearm or captive-bolt pistol).

APPENDIX I

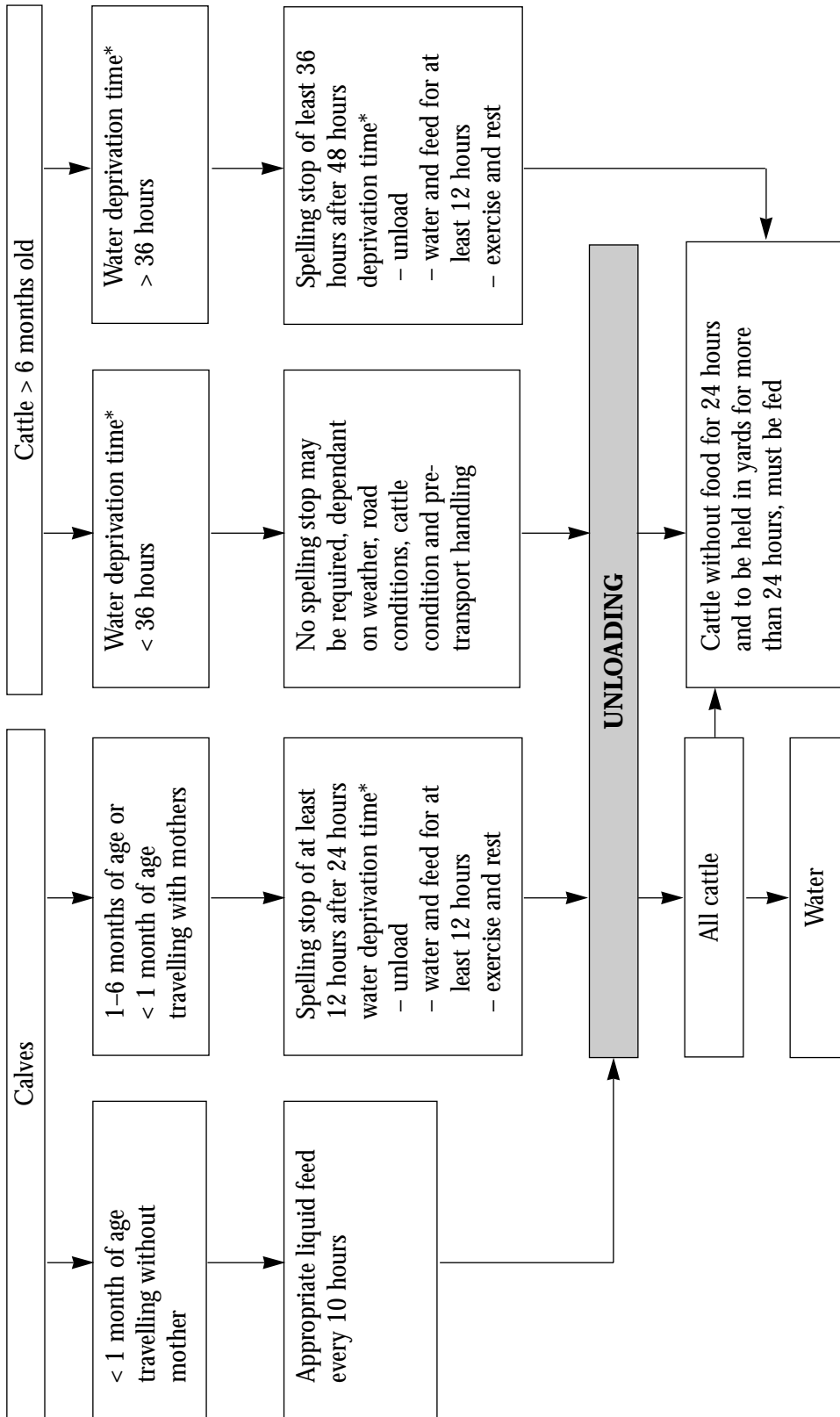
LAND TRANSPORT OF CATTLE – SUMMARY CHART

NB As outlined in 9.1.1, the most important indicator of welfare is the actual response of cattle to the transport. This response will be greatly influenced by factors mentioned in 9.1.1 and these charts only provide an outline which must be used in conjunction with frequent inspection and assessment of the cattle being transported.



* Note: Water deprivation time, as defined in 9.2.5, includes actual transport time plus time off water before and after actual transport.

TRANSPORT



* Note: Water deprivation time, as defined in 9.2.5, includes actual transport time plus time off water before and after actual transport.

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