

AUSTRALIAN ANIMAL WELFARE STANDARDS AND GUIDELINES

LAND TRANSPORT OF LIVESTOCK

Edition One, December 2008



Australian Government

Department of Agriculture, Fisheries and Forestry

This document describes the welfare standards and guidelines for the Land Transport of Livestock and has been prepared under the auspices of the Australian Animal Welfare Strategy.

Primary Industries Ministerial Council

This document forms part of the *Australian Standards and Guidelines for the Welfare of Animals*. This publication is a stand-alone document.

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Abbreviations and acronyms

AAC	Animal Advisory Committee
ABAH	Australian Bureau of Animal Health
AWWG	Animal Welfare Working Group
CSIRO	Commonwealth Scientific and Industrial Research Organisation
PIMC	Primary Industries Ministerial Council
PISC	Primary Industries Standing Committee
SCARM	Standing Committee on Agriculture and Resource Management

DRAFT FOR ENDORSEMENT 2009

Preface

The *Australian Animal Welfare Standards and Guidelines—Land Transport of Livestock* are an important component of the Australian Animal Welfare Strategy (AAWS)—an Australian Government initiative that guides the development of new, nationally consistent policies to enhance animal welfare arrangements in all Australian states and territories.

The standards provide a basis for developing and implementing consistent legislation and enforcement across Australia, and provide guidance for all people responsible for livestock during transport. They are based on current scientific knowledge, recommended industry practice and community expectations.

The development of these standards is the inaugural project in a comprehensive program under the AAWS to develop standards and guidelines for all commercial livestock species and at all points along the production supply chain.

They were developed in consultation with state and territory governments, livestock industry organisations, animal welfare groups and the general public under the auspices of the Animal Welfare and Product Integrity Taskforce, which is ultimately responsible to the Primary Industries Ministerial Council.

The standards were drafted by a small writing group comprising researchers and government and industry representatives, supported by a widely representative reference group and managed by Animal Health Australia. An important part of the process was the preparation of a Regulation Impact Statement to assess the proposed standards and evaluate costs resulting from changes to existing requirements.

An extensive consultation process was undertaken, with the final public consultation highlighting ethical and practical issues and leading to the development of more robust standards. The reference group carefully considered the views and comments of all stakeholders in developing the final standards and guidelines for recommendation to Primary Industries Ministerial Council.

While these standards reflect a high level of agreement about the welfare aspects of land transport, it is recognised that there are some contentious issues where it has not been possible to reach complete agreement at this time. In particular, the current standards for transport of calves, time off water and loading density do not represent complete agreement. The reference group has resolved that bobby calf transport issues will be reviewed within two years, with relevant government and industry parties firmly committed to improving calf welfare outcomes within that time frame. In the interim, it is recognised that some jurisdictions may adopt additional regulatory requirements for the transport of calves.

These standards and guidelines replace the following model codes of practice:

- *Draft Model Code of Practice for the Welfare of Animals—Land Transport of Sheep*
- *Model Code of Practice for the Welfare of Animals—Land Transport of Cattle*, PISC/SCARM Report 77—CSIRO Publishing, 2000
- *Model Code of Practice for the Welfare of Animals—Land Transport of Horses*, PISC/SCARM Report 62—CSIRO Publishing, 1997

- *Model Code of Practice for the Welfare of Animals—Land Transport of Pigs*, PISC/SCARM Report 63—CSIRO Publishing, 2003
- *Model Code of Practice for the Welfare of Animals—Land Transport of Poultry*, PISC/SCARM Report 91—CSIRO Publishing, 2006
- *Model Code of Practice for the Welfare of Animals—Rail Transport of Livestock*, AAC and ABAH, 1983
- *Model Code of Practice for the Welfare of Animals—Road Transport of Livestock*, AAC and ABAH, 1983.

The standards and guidelines also replace provisions on livestock transport in the following codes of practice:

- *Model Codes of Practice for the Welfare of Animals: Animals at Saleyards*, PISC/SCARM Report Series 31, CSIRO Publishing, 1991
- *Model Codes of Practice for the Welfare of Animals: Cattle*, PISC/SCARM Report Series 85, CSIRO Publishing, 2004
- *Model Codes of Practice for the Welfare of Animals: Domestic Poultry*, PISC/SCARM Report Series 83, CSIRO Publishing, 2002
- *Model Codes of Practice for the Welfare of Animals: Farmed Buffalo*, PISC/SCARM Report Series 52, CSIRO Publishing, 1995
- *Model Codes of Practice for the Welfare of Animals: Farmed Ostriches*, PISC/SCARM Report Series 84, CSIRO Publishing, 2003
- *Model Codes of Practice for the Welfare of Animals: Feral Livestock Animals*, PISC/SCARM Report Series 34, CSIRO Publishing, 1992
- *Model Codes of Practice for the Welfare of Animals: Husbandry of Captive-Bred Emus*, PISC/SCARM Report Series 90, CSIRO Publishing, 2006
- *Model Codes of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments*, PISC/SCARM Report Series 79, CSIRO Publishing, 2001
- *Model Codes of Practice for the Welfare of Animals: Pigs*, PISC/SCARM Report Series 66, revised draft in press, 2007
- *Model Codes of Practice for the Welfare of Animals: The Camel*, PISC/SCARM Report Series 86, CSIRO Publishing, 2006
- *Model Codes of Practice for the Welfare of Animals: The Farming of Deer*, PISC/SCARM Report Series 30, CSIRO Publishing, 1991
- *Model Codes of Practice for the Welfare of Animals: The Goat*, PISC/SCARM Report Series 32, CSIRO Publishing, 1991
- *Model Codes of Practice for the Welfare of Animals: The Sheep*, PISC/SCARM Report Series 29, CSIRO Publishing, 1991

The preparation of these standards represents a significant investment by all parties, especially members of the writing and reference groups. Their efforts are acknowledged with my sincere thanks.

The Hon. Tony Burke MP

Minister for Agriculture, Fisheries and Forestry

Introduction

Purpose

The purpose of this document is to describe standards and guidelines that ensure the welfare of livestock during land transport.

The standards provide the basis for developing and implementing consistent legislation and enforcement across Australia, and guidance for all those responsible for livestock during land transport. They reflect available scientific knowledge, current practice and community expectations.

The standards and guidelines may be reflected in the industry-based quality-assurance programs that include livestock welfare provisions.

Scope

These standards and guidelines cover the transport of livestock by road and rail, and by livestock transport vehicle aboard a ship.

They apply to the major commercial livestock industries in Australia: alpacas, buffalo, camels, cattle, deer, emu, goats, horses, ostrich, pigs, poultry (meat chickens, layers, turkeys, ducks, geese, pheasants, guinea fowl, partridge, quail and pigeons) and sheep.

The standards apply to all those responsible for the care and management of livestock that are transported, including drivers, transport companies, owners, agents and livestock handlers at farming enterprises, depots, saleyards, feedlots and livestock-processing plants. The chain of responsibility for livestock welfare in transport begins with the owner or their agent, and extends to the final receiver of the livestock.

These standards and guidelines should be considered in conjunction with other requirements for transporting livestock, and related Commonwealth, state and territory legislation, including:

- for transport — the *Australian Standards for the Export of Livestock*¹, livestock health and biosecurity requirements, and regulated livestock loading schemes and driver regulations
- for other enterprises — model codes of practice or standards and guidelines for livestock species, saleyards, livestock processing (slaughter) establishments and the *Australian Standards for the Export of Livestock*.

Where legislation requires a higher standard than these standards, the higher standard will apply. Where there is a conflict with another standard in meeting the livestock welfare standards, the welfare of livestock must be the first consideration unless there is an occupational health and safety requirement.

¹ <http://www.daffa.gov.au/animal-plant-health/welfare/export-trade/v2-1>

Interpretation

This document has two parts:

- *Part A* — general standards and guidelines that apply to all major livestock species
- *Part B* — specific standards and guidelines for each species.

There is also a glossary containing definitions and other relevant information.

Each chapter in Parts A and B contains the following information:

- *Heading*
- *Objective* — the intended outcome(s) for each section of the standards and guidelines.
- *Standards* — the acceptable animal welfare requirements designated in this document. The requirements that must be met under law for livestock welfare purposes.

The standards are intended to be clear, essential and verifiable statements; however, not all issues are able to be well defined by scientific research or are able to be quantified. Standards use the word ‘must’.

- *Guidelines* — the recommended practices to achieve desirable animal welfare outcomes. The guidelines complement the standards. They should be used as guidance. Guidelines use the word ‘should’. Noncompliance with one or more guidelines will not in itself constitute an offence under law.
- *Notes* — Explanations of the context of the standards and guidelines (the notes are advisory statements for selected background information).

Principles relating to the transport of livestock

Transport can be stressful to livestock; it is therefore essential that effective management practices are in place to minimise any risks to livestock welfare.

Livestock can be transported more effectively and with lower risk to livestock welfare if:

- the preparation of livestock before transport is adequate for the intended journey
- competent selection of livestock is done before loading
- livestock are handled correctly at all times using well-designed and maintained facilities
- livestock are managed and handled by competent livestock handlers
- road and rail transport facilities and vehicles are designed and maintained for safe transport of livestock
- the journey is planned to ensure prompt delivery of livestock, and undertaken to ensure appropriate timing of arrival with consideration of situations that may affect the welfare of the livestock
- consideration is given to feed and water requirements, provision of adequate shelter, and protection from, or treatment of, injury and disease.

The risk of adverse livestock welfare outcomes is related to:

- competency of personnel involved in any phase of livestock transport
- selection and preparation of the livestock for the journey
- journey duration
- food and water-deprivation time
- timing of water, feed and rest before transport and at unloading
- species and class of the livestock being transported
- road conditions and terrain
- weather conditions
- vehicle and facility design and maintenance
- space allowance on the vehicle
- ability to observe the livestock en route and take action to remedy any problem.

These risk factors can be cumulative and they apply across all stages of land transport as defined in the standards, from assembly before the journey to unloading at the destination.

From an animal welfare perspective, land transport of livestock is a process that begins before the physical journey on either road or rail, and only ends some time after this physical journey is complete.

Managing these risk factors is a shared responsibility between all the people involved, including owners, managers, handlers, agents and drivers. The risk factors for livestock welfare during land transport also need to be managed within and across state and territory borders. At the start of the journey, the owner or agent should communicate to the driver accurate information on water provision, to ensure appropriate water management throughout the journey. The pre-transport phase has an important impact on the successful management of livestock during transport.

The provision of water is a key requirement for livestock welfare; the transport process means that livestock are often deprived of water. The livestock transport process includes activities from the time that livestock are first deprived of water before loading, until the time that livestock have access to water at the end of the journey.

From a livestock welfare perspective, the stages in the transport process and the responsibilities of persons can be described clearly, as follows:

- mustering, assembling, handling and preparation of livestock, including selection as 'fit to load', feed and water provision, and holding periods (consignor)
- loading, transport and unloading, including additional inspections of livestock and spelling periods (transporter)
- after unloading (receiver).

When livestock are transported on land, a competently operated and suitably designed vehicle should be used. At all times, livestock must be handled to prevent injury and minimises stress. These principles apply to all journeys involving livestock.

**Part A General standards and guidelines
for the transport of livestock**

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1 Responsibilities and planning

Objectives

People responsible for the care and management of the livestock at all stages of the livestock transport process are identified, are aware of and are accountable for their responsibilities.

Adequate planning is carried out and contingency measures are in place to minimise risks to livestock welfare.

Standards

- SA1.1 A person in charge must exercise a duty of care to ensure the welfare of livestock under their control and compliance with the livestock transport standards.
- The responsibility for livestock welfare in the transport process is:
- i) the consignor for the:
- mustering and assembling of livestock
 - handling
 - preparation, including selection as 'fit for the intended journey'
 - feed and water provision
 - holding periods before loading
- ii) the transporter for the journey and for (except for rail):
- the loading
 - the loading density (excluding poultry)
 - unloading, including
 - final inspection as 'fit for the intended journey' during loading
 - additional inspections of livestock
 - spelling periods during the journey
- iii) receiver after unloading:
- the rail authority is responsible for the livestock during the rail journey
 - the master of the marine vessel is responsible for the livestock on roll-on/roll-off livestock transport vehicles during a sea journey.

SA1.2 For a journey reasonably expected to exceed 24 hours, there must be one or more documents that accompany the livestock and that specify:

- i) the date and time that the livestock last had access to water
- ii) the date and time of livestock inspections and any livestock welfare concerns and actions taken
- iii) emergency contacts

A person in charge who is transferring responsibility for livestock to be further transported for longer than 24 hours must provide a document with this information to the next person in charge.

Guidelines

Responsibilities of all people involved in livestock transport

GA1.1 All people involved in planning a journey and mustering, assembling, handling, selecting, loading and transporting livestock have a responsibility for livestock welfare. They should communicate effectively to support those with key responsibilities, and should ensure that management systems are in place to minimise risks to livestock welfare.

Note

Many people and many tasks are involved in successfully transporting livestock.

Responsibilities of livestock consignors (suppliers)

GA1.2 The livestock consignor is responsible for the livestock until they are to be loaded onto the transport vehicle. This responsibility should include but is not restricted to:

- i) selecting livestock to make sure that they are fit for the intended journey
- ii) providing feed, water and rest before curfew or loading, as appropriate
- iii) providing suitable holding and loading facilities that do not predispose livestock to injury
- iv) handling livestock according to these standards and guidelines
- v) communicating feed, water provision times and other relevant information
- vi) completing required documentation accurately for each livestock consignment, including transferring the responsibility for livestock welfare
- vii) making sure that any livestock that are unsuitable for loading following preloading inspection at the assembly point are appropriately managed, treated or humanely destroyed.

Note

Livestock consignors may include owners, agents, drivers and transport companies, poultry pick-up crews and personnel from properties, saleyards, feedlots, depots and livestock-processing plants who handle livestock to be transported. There is a 'chain of responsibility' for those managing livestock

welfare. In some parts, the responsibility for livestock welfare is clearly shared; for example, during loading between the consignor and the driver. Responsibility exists but is less clear when the impact of earlier decisions affects the welfare of livestock at a later time.

Responsibilities of drivers and transporting companies

GA1.3 The driver or transporting company is responsible for the livestock from the point of loading of livestock (including inspection and assessment of livestock during loading), to the point of unloading and notifying the receiver of the livestock at the destination. This responsibility should include but is not restricted to:

- i) being competent in their tasks and key activities to meet the provisions of these standards and guidelines
- ii) taking action to determine the time that livestock were deprived of water (and, for unweaned livestock, liquid feed), from the previous owner or person responsible, including time without water during assembly, holding, loading or previous transport
- iii) inspecting and assessing livestock at loading to ensure that they are fit for the intended journey
- iv) inspecting livestock during the journey as required and taking action if a problem arises that affects the welfare of the livestock
- v) making sure that the management, care or humane destruction of any livestock that are judged as weak, ill or injured during the journey is appropriate
- vi) informing the livestock consignor and receiver of any problem encountered during the journey in relation to the welfare of the livestock, including where livestock may not have met the specified fitness requirements for loading
- vii) completing required documentation accurately for each livestock consignment transported, including journey plans, as specified in these standards
- viii) making sure that the plan for the journey takes into consideration the condition, species and class of the livestock, nature of the journey, weather conditions and the provisions in these standards, such as water-deprivation time, spelling and loading density
- ix) driving in a manner that minimises impact on the welfare of the livestock, including appropriate driving techniques for the road conditions, managing livestock during weather that may predispose livestock to heat or cold stress, and considering rest-stops and the nature of the journey
- x) recording and communicating to the person(s) responsible when there are inappropriate holding, loading or unloading facilities at the property of origin or destination, so that corrective action can be taken
- xi) having the contact details of owners or agents and customers at the source and destination for assistance as required

- xii) notifying and transferring the responsibility for the livestock to the responsible person at the destination on unloading, including after-hours arrangements for receiving livestock.

Note

If the time livestock were deprived of water is unknown at the time of loading, or if it differs across the consignment, this should be noted on the documentation.

Transporting companies are mentioned because they may provide general or specific policy direction to their employed drivers in these areas; hence they bear a responsibility for livestock welfare.

Responsibilities of receivers (persons and companies at destination)

GA1.4 The person at the destination is responsible for the livestock from the point of unloading and notification of livestock being received. This responsibility should include but is not restricted to:

- i) providing drivers, transport companies, agents, pick-up crews and carriers with contact details of relevant personnel at the destination, including personnel to be available out of hours, should a problem arise during the transport journey or assistance be needed on arrival
- ii) communicating with the transport company or driver and providing effective instructions on the practices and arrangements for unloading and managing livestock if arriving out of hours
- iii) handling and managing livestock in accordance with the provisions specified in these standards and guidelines
- iv) providing water, feed and other requirements during holding as required
- v) providing suitable unloading or loading and holding facilities that do not predispose livestock to injury
- vi) informing the transport company, driver and livestock consignor of any adverse impacts on livestock welfare from the journey that are first observed after arrival
- vii) making sure that any livestock that are weak, ill or injured at unloading are identified, managed, treated or humanely destroyed at the first opportunity
- viii) removing dead stock from the vehicle.

Note

Persons at destination are responsible for receiving the livestock; they may include owners, operators and staff of properties, feedlots, saleyards, depots and livestock-processing plants. There is also a responsibility for livestock welfare that extends to company management at the destination.

Responsibilities of the railway authority and associated personnel

GA1.5 The railway authority should be responsible for:

- i) completing required documentation accurately for each livestock consignment transported, including journey plans (as specified in these

- standards) that contain details of water-deprivation times, inspections and contact details
- ii) providing an agent to inspect livestock at railway loading points, scheduled stops and destinations
 - iii) ensuring that the journey is planned and managed with consideration of:
 - the condition, species and class of the livestock
 - route and duration of the journey, including railway stop locations for shunting, inspection or delays due to high-priority freight
 - weather conditions
 - the provisions in these standards, such as water-deprivation time, spelling and loading density
 - iv) having the contact details of owners or agents that are responsible for loading the livestock at the railway loading point and the customers at the destination property(s) for assistance, as required
 - v) notifying and transferring the responsibility for the livestock to the responsible person at the destination on unloading
 - vi) making sure that there are arrangements in place with the agent(s) at railway stop points and the destination for providing feed and water, and carrying out humane destruction as required.

Responsibilities of people who plan journeys

GA1.6 People responsible for planning journeys should:

- i) take into consideration
 - the nature of the intended journey
 - the class and condition of livestock
 - the weather and road conditions anticipated during the journey
 - the time that livestock are deprived of feed and water
 - planned rest stops and spells
- ii) make sure that a sufficient number of personnel are available for each stage of the journey and at the planned time
- iii) make sure, when planning the transport of livestock as a salvage operation, that the journey enables quick and direct transport, and avoids saleyards or holding depots, unless spelling is appropriate.

GA1.7 Planning should ensure that livestock are transported to their destination as quickly as possible and via the most suitable route within legal limits.

GA1.8 Where information is not provided on water and feed provision for livestock being transported, the transport company, driver or agent should take action to obtain these times. This will allow determination of:

- the total time off feed and water, including mustering
- when the livestock have to be spelled or fed.

- GA1.9 If interstate crossing points have fixed times of operation, the journey should be planned to accommodate these times, but should also meet the other requirements for welfare of the livestock.

Note

People responsible for planning the transport of livestock may include owners, agents, transport companies and drivers, and feedlot, livestock-processing plant, depot and saleyard personnel.

Specific planning guidelines for railway authorities

- GA1.10 Livestock railway wagons should be marshalled to avoid unnecessary shunting or delays. Priority should be given to trains carrying livestock consignments, to prevent lengthening any journey time so that it exceeds the maximum water-deprivation times.
- GA1.11 If unexpected delays occur, train crews should report to their train controllers for priority consideration.
- GA1.12 The supervisor should be given authority to minimise delays for livestock trains, and should give priority to these consignments.

Contingency arrangements

- GA1.13 As part of the planning for each journey, arrangements to manage any delay, breakdown or other emergency should be established to minimise risks to livestock welfare during all transport. Contingency arrangements may involve written arrangements, journey plans, and details on consignment sheets or arrangements that are in place for rest stops, particularly for long-distance journeys.
- GA1.14 Contingency arrangements should include, but are not restricted to, actions, contacts and other written procedures relating to the following situations:
- breakdown or mechanical failure
 - delays and lengthened journeys, where this will affect arrangements for feeding and watering
 - adverse weather — specifically, climatic conditions that predispose livestock to heat or cold stress
 - poor road conditions
 - illness or injury
 - other issues specific to the journey or livestock being transported.
- GA1.15 For all journeys, the transport company and driver should have the relevant contact details of owners or agents and customers at the origin and destination.
- GA1.16 The transport company or driver should ensure that there are contingency arrangements in place for humane destruction. Such arrangements may include one or more of the following:
- people competent in humane destruction are available
 - equipment for humane destruction is maintained and operational

- instructions on the recommended procedures for humane destruction are in the vehicle for reference
 - contact details of competent persons that may assist in humane destruction are available
 - contingency arrangements are in place at locations along the journey or at the destination for assistance with humane destruction.
- GA1.17 If unexpected delays occur, such as vehicle breakdown, the driver should make every reasonable effort to minimise the delay and ensure that water is provided within the times specified in the standards.
- GA1.18 Essential mechanical maintenance during the journey of a routine nature should be possible to prevent undue delays and minimise the risk to the welfare of livestock (eg tyre changes).
- GA1.19 A maintenance logbook or record of servicing should be kept for the vehicle.

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2 Stock-handling competency

Objective

Persons responsible for handling, managing or transporting livestock are competent.

Standard

SA2.1 A person involved in handling, selection, loading, transporting and unloading livestock must be competent to perform their required task, or must be supervised by a competent person.

Guidelines

- GA2.1 Elements of competency for each phase of the livestock transport process should include:
- i) understanding responsibilities for livestock welfare
 - ii) planning journeys that satisfy the welfare standards and address contingencies that may arise, with consideration of extremes of weather, nature of the journey, class and condition of livestock, and time off feed and water
 - iii) contingency procedures and the ability to carry out the activities required to maintain the welfare of livestock during delay, breakdown or other emergencies
 - iv) maintaining records and taking action to determine the time livestock were deprived of water and food and calculating total time off for water and food
 - v) livestock handling and, where necessary, using handling aids and other equipment appropriately
 - vi) inspecting and assessing livestock for their fitness for the intended journey, and determining whether livestock meet the specified requirements
 - vii) identifying weak, injured or ill livestock and other behavioural signs of distress, that are relevant for assessment as being fit for the intended journey and taking the appropriate remedial action as relevant
 - viii) humane destruction by the choice of appropriate methods or the actions that need to be taken to contact or advise people who are competent
 - ix) vehicle operation and basic maintenance.
- GA2.2 Supporting evidence of competency should include any of the following:
- records of on-the-job training
 - relevant experience
 - recognised training and staff training registers

- induction training
- supervisor sign-off for specific tasks.

Note

Further details relevant to elements of stock-handling competency are covered in other chapters, including those in Part B.

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3 Transport vehicles and facilities for livestock

Objective

Livestock transport vehicles and facilities for holding, loading and unloading are constructed, maintained and operated to minimise risks to livestock welfare.

Standard

- SA3.1 In relation to livestock transport vehicles and holding, loading and unloading facilities must be constructed, maintained and operated in a way that minimises risk to the welfare of livestock.
- Vehicles and facilities must:
- i) be appropriate to contain the species
 - ii) have effective airflow
 - iii) have flooring that minimises the risk of injury or of livestock slipping or falling
 - iv) be free from internal protrusions and other objects that could cause injury
 - v) have sufficient vertical clearance for livestock to minimise the risk of injury.

Guidelines

- GA3.1 Facilities, vehicles, crates and containers should provide a suitable environment to minimise the risk to the welfare of livestock from extremes of temperature, weather and humidity
- GA3.2 Materials used in the construction of vehicles, crates and containers should be able to be cleaned effectively. There should be a cleaning program for livestock crates and containers between journeys.
- GA3.3 Internal sheeting should be smooth to reduce the risk of pressure points and bruising.
- GA3.4 Vehicle gates and facilities should be sufficiently wide to ensure easy movement of livestock and to minimise injuries.
- GA3.5 Vehicle exhaust gases should not significantly pollute the livestock crate, to avoid respiratory distress
- GA3.6 The livestock crate should be designed to ensure that livestock, excluding poultry, can rise from lying in a normal manner without contacting overhead deck structures.

- GA3.7 Limbs of livestock should not protrude from the livestock crate. Limbs should be contained within the livestock crate using an appropriate crate design, sound side panelling and appropriate loading densities.
- GA3.8 Flooring and surfaces should be designed to maximise grip and minimise slipping and falling. Strategies to improve grip include slats or grooves in the surface. If livestock are seen to be slipping and falling, the floor surface and handling of livestock should be examined and appropriate action taken to prevent the problem.
- GA3.9 The floor of multideck vehicles, excluding poultry vehicles, should be constructed and maintained in a way that prevents the soiling of livestock on lower decks.
- GA3.10 Appropriate bedding should be provided for certain classes of livestock.
- GA3.11 Fixed partitions should be available in the livestock crate for use when travelling in hilly or high-traffic areas or when carrying small numbers of livestock, to prevent livestock being thrown around or injured. Partitions should also be used for segregation when required.
- GA3.12 For livestock that are susceptible to cold (such as young livestock and poultry), transport vehicles should have either fully enclosed fronts or the ability for the vehicle front, roof or canopy to be covered to prevent windchill and cold stress.
- GA3.13 Solid yard extensions should be used to cover any gaps between the loading ramp floor and the floor of the vehicle through which an animal or part of an animal might go down
- GA3.14 Railings on ramps and raceways should be of appropriate height, with the gaps sufficiently narrow at the bottom to prevent livestock being caught, slipping through or becoming injured.
- GA3.15 Ramps need to be wide enough to ensure easy movement and should be of an appropriate slope for the species and class of livestock.
- GA3.16 Avoidable visual or noise distractions to livestock should be removed or reduced.

Note

Further details relevant to species are presented in Part B.

4 Pre-transport selection of livestock

Objective

Livestock prepared and selected for transport, are fit for the intended journey.

Standards

Fit-to-load requirements for each species are detailed in Part B.

- | | |
|-------|--|
| SA4.1 | Livestock must be assessed as fit for the intended journey at every loading. An animal is not fit for a journey if it is: <ul style="list-style-type: none">• unable to walk on its own by bearing weight on all legs• severely emaciated• visibly dehydrated• showing visible signs of severe injury or distress• suffering from conditions that are likely to cause increased pain or distress during transport• blind in both eyes• known to be, or visually assessed to be within 2 weeks of parturition, unless the water-deprivation time and journey is less than 4 hours duration to another property. |
| SA4.2 | Any livestock assessed to be not fit for the intended journey must only be transported under veterinary advice. |
| SA4.3 | The consignor must only supply livestock that are assessed as fit for the intended journey. |
| SA4.4 | Where livestock are assessed to be not fit for the intended journey before loading, the person in charge must make effective arrangements for the care, appropriate treatment or humane destruction of weak, ill or injured livestock at the first opportunity. |

Note

Livestock being 'fit for the intended journey' is an important issue for livestock welfare. Many factors may affect livestock's fitness for the intended journey at different stages of a journey. The species requirements are further set out in Part B. Selection of fit livestock is a responsibility shared between the consignor and the driver. Loading includes vehicle-to-vehicle transfers.

Guidelines

Selection of livestock for transport

- GA4.1 Before loading livestock, the consignor should notify the driver of any concerns about fitness of livestock to be transported. Any special

requirements for a livestock consignment should be agreed between the consignor of the livestock and the driver.

- GA4.2 Records should be maintained of any livestock that are transported under special circumstances.
- GA4.3 Effective management options for livestock considered not fit for the intended journey should include, but is not restricted to:
- effective containment in a suitable holding area
 - rest
 - provision of shelter, feed and water
 - veterinary treatment
 - humane destruction.
- GA4.4 Livestock with broken limb bones should be humanely destroyed unless veterinary advice recommends alternative measures.

Feed, water and rest considerations

- GA4.5 Pre-transport spell (water and rest) periods should be provided for the following classes of livestock, excluding poultry, if the travel time is expected to be of a long duration and approaching the maximum water-deprivation time for the livestock category:
- livestock that are pregnant, have recently given birth, are lactating or with young at foot
 - immature livestock as defined for each species
 - livestock that are unaccustomed to handling
 - livestock that are stressed or fatigued from mustering or handling
 - weak livestock.

Note

Water and feed curfews can be an important part of livestock management for transport, depending on the species and pasture conditions. Issues include faecal and urine contamination of livestock, vehicles and roads, and slipping and falling of livestock in wet livestock crates. Water curfews must be managed in the context of the total time off water.

- GA4.6 Where water is provided, it should be easily accessible to all livestock and livestock should be able to drink with normal posture.
- GA4.7 Livestock should be monitored to determine whether they are drinking as expected and, if they are not drinking, action should be taken to encourage water intake. Actions may include:
- ensuring livestock can access the water facilities (eg through stocking density, trough size and space)
 - checking observable water quality (eg by flushing water lines, keeping troughs clean)
 - adding electrolyte or molasses, providing water on the ground or providing feed.

Where there is a general problem with livestock from many sources not drinking, water chemistry should be examined.

- GA4.8 Where food is provided, it should be of adequate quality and amount for the species. Where food offered during the transport process is different from normal rations, food intake should be encouraged during a period of familiarity training.

Note

Providing water is a key determinant of livestock welfare during transport. Water provision times and spell periods are defined for each species in Part B.

Time off water is calculated as the total time that livestock are not provided with water, further specified in the Glossary, Chapter 5 and in Part B. The elements of this calculation may include:

- mustering (away from water)
- assembly in holding areas and yards (where water is not provided)
- curfews
- time on the vehicle, either moving or stationary (where water is not provided)
- time for unloading into new holding areas at the destination until water is provided.

A pre-transport spell period is recommended for the best welfare of the livestock and may be required to ensure periods for water provision are not exceeded. A minimum acceptable spell period is defined as four hours of access to water with space to lie down and rest. Food and shelter should also be considered. Further details are provided in Part B.

5 Loading, transporting and unloading livestock

Objective

Livestock are handled, loaded, transported and unloaded in a manner that minimises risks to livestock welfare.

Standards

Water, food and rest provisions and handling requirements for each species are detailed in Part B.

- SA5.1 If the maximum permitted time off water is reached, livestock must be provided with water, food and rest before continuing the current journey or before starting another journey.
- SA5.2 Time off water must be managed to minimise risk to the welfare of the livestock according to:
- i) the increased risk to livestock welfare of longer journeys close to the permitted maximum time off water
 - ii) assessed fitness of the livestock for the remainder of the intended journey
 - iii) predicted climatic conditions, especially heat or cold
 - iv) class of livestock, especially if weak, pregnant, recently having given birth, lactating or immature
 - v) nature of the intended journey.
- SA5.3 If no documentation is provided indicating the last time the livestock had access to water, livestock at a saleyard, spelling facility or staging point must be provided with reasonable access to water after 24 hours at the facility.
- SA5.4 Loading density must be assessed for each pen or division in the livestock crate or each container, based on average liveweight of the intended livestock loading, and must be managed to minimise risk to the welfare of the livestock.
- Determination of loading density must consider all of the following factors:
- i) species and class
 - ii) size and body condition
 - iii) wool or hair length
 - iv) horn status
 - v) predicted climatic conditions
 - vi) nature of the intended journey
 - vii) design and capacity of the vehicle.
- SA5.5 Drivers (except for train drivers and drivers of poultry) must have the final decision on the loading density. Poultry pick-up crews loading poultry into containers must

have the final decision on the loading density.

SA5.6 Livestock must be segregated by sufficient internal partitions to minimise risk to the welfare of other livestock.

Determination of segregation must consider all the following factors:

- i) species, class and size
- ii) level of fitness
- iii) level of aggression
- iv) nature of the intended journey.

SA5.7 Livestock must be handled in a manner that is appropriate to the species and class, and minimises pain or injury. Specifically:

- livestock (excluding poultry) must not be lifted by only the head, ears, horns, neck, tail, wool, hair or feathers
- livestock must not be lifted off the ground by a single leg, except in the case of all poultry, and sheep, goats and pigs if they are less than 15 kilograms live weight
- mechanical lifting of livestock (excluding poultry) must ensure that the livestock is supported or secured as necessary
- livestock must not be thrown or dropped
- livestock must not be struck in an unreasonable manner, punched or kicked
- downer livestock must not be dragged, except in an emergency to allow safe handling, lifting, treatment or humane destruction.

SA5.8 Electric prodders must not be used :

- i) on genital, anal or facial areas
- ii) on livestock under three months old
- iii) on livestock that are unable to move away
- iv) excessively on an animal.

SA5.9 Dogs must be under control at all times during loading, transporting and unloading livestock. Dogs must not be transported in the same pen as livestock, with the exception of bonded guardian dogs. Dogs that habitually bite; deer, goats, horses, pigs, poultry, sheep and ratites must be muzzled.

SA5.10 Drivers must ensure that the ramp and the vehicle are properly aligned, and that any gap between the ramp and the vehicle is sufficiently narrow to minimise the risk of injury during loading and unloading.

SA5.11 The driver (excluding rail) must:

- i) inspect the livestock crate immediately before departure, to ensure that doors are closed
- ii) inspect the receival yard immediately before unloading, to ensure that there is free access and sufficient space for the livestock intended to be unloaded
- iii) take reasonable steps to notify a responsible person of the arrival of the livestock at the destination

- SA5.12 The driver (excluding rail) must inspect livestock:
- i) on the vehicle before departure
 - ii) except poultry or when livestock travels on roll-on/roll-off livestock transport vehicles during a sea journey, within the first hour of the journey and then at least every three hours or at each rest stop, whichever comes first
 - iii) at unloading
 - iv) at each driver or vehicle change over stop.
- SA5.13 Upon identifying a distressed or injured animal at an inspection, the driver including the rail authority (through the agency of the stockcare attendant) must provide or seek assistance at the first opportunity. Weak, ill or injured livestock must be identified to the person receiving the livestock.
- SA5.14 The person receiving the livestock must make arrangements at the first opportunity for separating weak, ill or injured livestock for rest and recovery, appropriate treatment, or humane destruction and disposal of dead stock.
- SA5.15 The driver or rail authority must make arrangements or take action during extreme hot or cold conditions to minimise the risk to the welfare of livestock.

Guidelines

Loading livestock

- GA5.1 Before loading, the driver should inspect the condition of the livestock crate and ensure it is correctly set up and fully operational. If inspecting the vehicle at night or where light is insufficient, a portable source of lighting should be available.
- GA5.2 Livestock and containers of poultry should be loaded and unloaded from the transport vehicle in a calm and quiet manner to ensure that stress and injuries are minimised.
- GA5.3 The driver should ensure that limbs of the livestock are not protruding from the crate before each departure.

Loading density

- GA5.4 Where the area available on the vehicle or in the livestock container is small and the effective space available to the livestock is reduced by irregularly shaped boundaries, loading density should be reduced.
- GA5.5 Livestock on the vehicle or in livestock containers should not be loaded either too loosely or too tightly because this may increase the risk of injury. In general, over-loading is the greater risk to livestock welfare. The numbers per pen or container should be sufficient to provide stability for the class of livestock and the intended journey. Internal gates should be closed during transport to ensure stock density is evenly spread. When not in use, internal gates should be secured.

Note

Species loading densities and segregation arrangements are defined in Part B.

Livestock handling

- GA5.6 Livestock should be handled in a manner that minimises stress. Livestock with no room to move should not be forced, prodded, pushed or excessively handled. Where excessive handling effort occurs, facility design should be examined. Excessive yelling, noise making and sudden movements should be avoided.
- GA5.7 Stock handlers should ensure that bystanders or items that may cause livestock to balk do not impede the smooth loading and unloading of livestock. Avoidable distractions should be minimised.
- GA5.8 Calves, lambs, small deer, foals, weaner pigs, and weak or injured livestock may be carefully lifted and placed on or off the vehicle if they cannot negotiate loading ramps. Poultry should be lifted with care, either manually or mechanically, and placed in transport containers.
- GA5.9 Livestock should not be pushed or pulled by the ears, tail or wool.

Note

Most herd livestock have a strong following instinct and all livestock have a 'flight zone' that must be understood and used for efficient livestock handling.

Handling aids

- GA5.10 Handling aids should be used that are suitable for the species and class of livestock being handled. Handling aids should be used with care. Aids for moving livestock may include electric prodders, polypipes, sticks, flappers, backing boards, rattlers and canes with flags attached; hand, arm or body of the stock handler; and dogs.

Electric prodders

- GA5.11 Electric prodders should not be used repeatedly on a single animal.
- GA5.12 Electric prodders should be used sparingly and as a last resort. Alternative handling aids and methods should be selected first.
- GA5.13 Electric prodders should not be used on livestock under 6 months old.

Dogs

- GA5.14 Dogs should be appropriately trained to move livestock and be responsive to commands. Dogs should be provided with water and rest after working.

Special classes of livestock

- GA5.15 Transport arrangements (including spells) should be appropriate for the class and condition of the livestock. In all circumstances, transport of the following classes of livestock should be carefully managed to minimise risk to animal welfare:
- livestock in third trimester of pregnancy
 - livestock that have recently given birth
 - livestock that are lactating and with young at foot
 - immature livestock

- weak livestock.

- GA5.16 Young, recently weaned livestock, poultry and weak livestock should be handled carefully and transported directly to their destination.
- GA5.17 If livestock are born in transit, special arrangements should be made to protect the newborn livestock as soon as possible. These arrangements may include separate penning with the mother in the livestock crate, unloading at a spell stop, or humane destruction of the newborn.

Note

Requirements for the transport of special classes of livestock are detailed in the species standards in Part B.

Weak, ill or injured livestock

- GA5.18 Weak, ill or injured livestock should be managed to minimise risks to their welfare. Management may include shortening the journey by transporting directly to the destination, providing additional spells, protecting from extreme weather, not mixing with stronger livestock and not consigning to saleyards.
- GA5.19 Weak, ill or injured livestock that are able to walk, do not have broken limbs and are not in pain should be assessed individually.
- GA5.20 Weak, ill or injured livestock that are able to walk, do not have broken limbs and are not in pain but have a higher risk of poor livestock welfare should be transported only if necessary for the better management of the animal.
- GA5.21 Where there is concern about the assessment of fitness to load, veterinary advice should be sought.

Segregation during transport

- GA5.22 Mixing unfamiliar groups and aggressive livestock should be avoided, unless appropriately managed through handling and segregation arrangements.
- GA5.23 Livestock that are particularly susceptible to disease, stress or injury, or that are being transported for veterinary treatment, should be penned separately on the vehicle, and either loaded last or first, to minimise any adverse welfare effects.

Driving management

- GA5.24 Drivers should use smooth driving techniques, without sudden turns or stops, to minimise excessive movements of livestock and to prevent injuries, bruising, slipping and falling of livestock.
- GA5.25 Care should be taken while shunting loaded livestock railwagons to prevent livestock falling.
- GA5.26 Airflow should be appropriate at all times, including when the vehicle is stopped.
- GA5.27 Where there is any road accident involving the transport vehicle, all livestock should at the first opportunity be:
- assessed, in the standing position if possible

- ii) removed for treatment, or
- iii) humanely destroyed at the accident site.

Weather conditions

- GA5.28 Weather conditions should be taken into consideration when transporting livestock if there is a risk of heat or cold stress.
- GA5.29 Weather conditions during a stop should be considered and action taken to ensure livestock are not subject to heat or cold stress.
- GA5.30 In hot weather, the journey should be managed to minimise the risk of heat stress. This may include loading and transporting susceptible livestock during the cooler parts of the day, not stopping, and providing shade and other cooling strategies.
- GA5.31 In extremely hot or humid weather, careful attention should be paid to the airflow of the transport unit; the speed of travel; the number, location and conditions of planned stops; loading density; and the condition of the livestock being carried.
- GA5.32 During cold weather, care should be taken to avoid cold stress and windchill, particularly for recently shorn sheep and goats, and weaner pigs, lambs, poultry and calves. This might include providing cover for the vehicle, enclosing the front of the vehicle, providing food before loading, avoiding colder weather or avoiding loading wet livestock, or stopping the vehicle.

In-transit inspections

- GA5.33 A source of lighting should be available to carry out inspections at night or in poor light.
- GA5.34 Drivers should inspect livestock as soon as practical after any unusual or difficult road or weather conditions.
- GA5.35 If a problem with the livestock is identified during transit, even when the problem is rectified, additional checks should be made as necessary to ensure the welfare of the consignment. Drivers should notify ahead for assistance if necessary.

Railway transport

- GA5.36 Rail consignments should be inspected at every planned stop. Particularly for rail journeys that are or contain:
- greater than 12 hours duration
 - consignments of livestock in weak condition
 - pregnant livestock
 - livestock with young at foot
 - weak and young livestock.

Note

Train drivers are not able to conduct inspections during the journey; the responsibility for this lies with the livestock agents.

Feed, water, rest, stops and spells during or after the journey

GA5.37 During a voluntary spell, in addition to water and space to lie down, livestock should be provided with the following additional provisions:

- access to appropriate food if the spell is greater than 12 hours
- enough space for exercise
- separation appropriate to the travel group.

GA5.38 Drivers and transport companies should be flexible when determining timing and length of stops and spells in transit, to achieve the best possible welfare outcomes.

GA5.39 The timing and quality of spells for livestock that are to be transported on multiple, consecutive journeys should be carefully considered to maximise fitness for travel.

Note

If a journey is broken by unloading for short periods, such as occurs at a saleyard or en route to an livestock processing establishment, care should be taken that livestock are not deprived of feed and water beyond the limits specified.

GA5.40 Where livestock have been transported for extended periods, or are special classes of livestock, longer spell periods should be provided.

GA5.41 Where there is doubt about an animal's fitness to resume a journey, the spell period should be extended, veterinary advice sought, and action taken to care for any livestock that are rejected.

GA5.42 Water should be easily accessible to all livestock and livestock should be able to drink with normal posture.

GA5.43 Livestock at a saleyard, spelling facility or staging point should be provided with reasonable access to water after 12 hours, and to feed after 36 hours at the facility.

GA5.44 During spells, livestock should be monitored to determine whether they are drinking as expected, and if they are not drinking, action should be taken to encourage water intake.

Actions may include ensuring livestock can access the water facilities (through appropriate stocking density, trough size and space), checking observable water quality (by flushing water lines and keeping troughs clean), adding electrolyte or molasses, and providing water on the ground or providing feed. Where there is a general problem with livestock from many sources not drinking, water chemistry should be examined.

Note

A spell is a rest period for livestock and is a mandatory requirement when maximum water-deprivation times are reached before starting a further journey. The terms 'spell' and 'mandatory spell' are further defined in the definitions. Each species has requirements for spelling, included in Part B.

During a voluntary spell at any other time, livestock must be unloaded, allowed access to water and space to lie down, if this is not able to be provided on the vehicle. Feeding is not recommended during short spells of

less than 12 hours. Livestock must be inspected for fitness for the remainder of the intended journey before reloading.

Driver rest stops are different from spells. During a driver rest stop, livestock are generally not unloaded. No water provision time credit is given for a driver rest stop. Livestock are inspected on the vehicle. Weather conditions during any stop or spell can have an important impact on livestock welfare.

Unloading livestock

- GA5.45 Before unloading, the driver should check the condition of the receival area and make sure appropriate pens and water supplies are available. When inspecting the yard at night or where light is insufficient, a portable source of lighting should be available.
- GA5.46 At unloading, if the facility is unmanned or out-of-hours arrangements are to be followed, drivers should make sure that unloaded livestock have access to water.
- GA5.47 Livestock and poultry in containers should be unloaded promptly on arrival at the destination.
- GA5.48 Livestock (except caged poultry) should be allowed to walk quietly and calmly off the vehicle to minimise stress and injury. Particular care should be taken during unloading as livestock will be fatigued from the journey.
- GA5.49 At night, lighting should be positioned to give even illumination over ramps, races, yards and inside the transport vehicle, and should not shine into the eyes of livestock moving in the desired direction.

Note

Requirements relating to handling, loading facilities and inspections apply to the unloading of livestock.

Livestock that are not fit for the intended journey

- GA5.50 In the case of an emergency, where an unexpected substantial delay has arisen during the journey, time off water may be extended, provided that:
- it is in the best welfare interests of livestock to be transported
 - the reason, location, date, start and finish times of the delay is recorded.
- GA5.51 Effective arrangements for livestock considered not fit to travel should include, but are not restricted to:
- effective containment in a suitable holding area
 - rest
 - provision of shelter, feed and water
 - veterinary treatment
 - humane destruction.

Identifying weak, ill or injured livestock on arrival

- GA5.52 Livestock (except poultry) that cannot walk from the vehicle ('downers') should be destroyed humanely on the vehicle, where practical. Alternatively,

facilities, equipment and sufficient personnel should be available for the humane unloading of these livestock and their humane destruction at the first opportunity.

- GA5.53 Following the journey, feedback on livestock welfare should be provided by the driver to the consignor of the livestock.

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6 Humane destruction

Objective

Where it is necessary to destroy livestock, it is done promptly, safely and humanely.

Standards

- | | |
|-------|--|
| SA6.1 | Humane destruction methods must result in immediate loss of consciousness followed by death while unconscious. |
| SA6.2 | Humane destruction must be carried out: <ul style="list-style-type: none">i) on moribund livestockii) by a competent person or under direct supervision of a competent personiii) using a recommended method for the speciesiv) at the first opportunity. |
| SA6.3 | Where a competent person is not immediately available to humanely destroy an animal, a competent person must be contacted to carry out the procedure at the first opportunity. |
| SA6.4 | A person humanely destroying an animal must take reasonable action to confirm the animal is dead or to ensure death. |
| SA6.5 | Firearm use must be in the frontal or poll positions, except for cattle and pigs. |
| SA6.6 | Captive bolt use must be: <ul style="list-style-type: none">i) in the frontal or poll positionsii) accompanied by appropriate restraintiii) applied in contact with the skull. |
| SA6.7 | Blunt trauma to the brain must only be used on piglets up to 15 kg liveweight or the following species if less than 24 hours old — alpacas, camels, cattle, deer, goats and sheep. |
| SA6.8 | Bleeding-out by neck cut must be done only by a competent operator or under the direct supervision of a competent operator, but only in situations where there is no firearm or captive bolt available, and only for deer, goats or sheep. |

Note

Points of aim for firearms and captive bolts are shown in a diagram for each species, as relevant.

Guidelines

Humane destruction methods

- GA6.1 Humane destruction should be done with the minimum number of people present, and other distractions should be minimised.

- GA6.2 The animal should be handled carefully and be appropriately restrained so that it is not unnecessarily distressed or alarmed. Where livestock are able to walk, they should be handled in a race or crush.
- GA6.3 Livestock (excluding poultry) should be brain-shot by rifle or captive bolt in the approved positions, according to the species standards.

Note

The primary consideration in humane destruction is to prevent the animal from suffering further pain or distress. Part B defines recommended methods for humane destruction for each species and class of livestock.

In the context of the transport process, humane destruction is an emergency procedure. Many practical, safety and legal considerations will influence the choice of a humane destruction method. In the context of transport, it is accepted that livestock to be destroyed will be appropriately restrained for close handling. The most prompt, approved method to relieve suffering is recommended.

Observing livestock after humane destruction

GA6.4 Following use of a humane destruction method, livestock should be monitored for at least three minutes to ensure that death has occurred.

GA6.5 To determine whether humane destruction has caused death, two or more of the following signs should be observed (the first four signs are usually the most useful):

- loss of consciousness and deliberate movement (this sign alone is not sufficient, as the animal may just be stunned; involuntary movements may occur in a dead animal)
- absence of rhythmic respiratory movements (this sign alone is not sufficient, as there may be temporary respiratory failure)
- absence of corneal 'blink' reflex when the eyeball is touched
- maximum dilation of the pupil, nonresponsive to light
- absence of response to painful stimuli (although the withdrawal reflex is not reliable)
- absence of intentional vocalisation (animal may gasp but this should not be in a consistent pattern)
- tongue becomes limp (in some species) and absence of jaw muscle tension (may be difficult to judge)
- absence of heartbeat (requires expertise to detect; heartbeat may persist for some minutes in an animal that is brain dead)
- absence of a pulse (requires expertise to detect, as for heartbeat)
- loss of colour in the mucous membranes, which become pale and mottled
- glazing of the eyes, where the cornea becomes opaque, dry and wrinkled (onset after some time, therefore not immediately useful)
- rigor mortis (onset after several hours, therefore not immediately useful).

- GA6.6 Return of rhythmic breathing, corneal reflex, vocalisation or deliberate movement are the main signs that an animal is only stunned and requires the application of an approved method to ensure death.
- GA6.7 If it is not certain that an animal is dead, then an approved method should be used immediately to ensure death in a rapid and humane manner. If necessary, bleeding-out or another technique should be used to ensure death in unconscious livestock.

Note

The confirmation of an animal's death following a humane destruction procedure can be a difficult task to judge, and requires training and experience of species differences in responses. It is important that an animal is monitored in the three minutes immediately following the humane destruction procedure.

Recommended methods and procedures for humane destruction

Note

The following guidelines provide information on the recommended methods for humane destruction. Further detail on specific practices and applying methods to particular species is presented in Part B.

Firearms

- GA6.8 Firearms should be cleaned regularly and maintained in optimal working condition.
- GA6.9 To ensure maximum impact and the least possibility of misdirection, projectiles should be fired at the shortest range possible, but not with the barrel in contact with the animal's head.
- GA6.10 Suitable projectiles and propellant charges (loads) for the species and class of livestock and situation should be used to always achieve humane destruction with reasonable personal safety if carried out correctly.

Note

In general, firearms are the most acceptable method of humane destruction for livestock. In transport situations, the distance between the end of the firearm barrel and the animal is expected to be between 10 and 100 cm. The only approved target organ is the brain. There are three effective aiming points at the head: frontal, poll and temporal. These positions are covered in the species standards in Part B. Before firing, the animal's head must be still.

For the frontal method, the firearm or captive bolt should be directed at a point in the middle of the forehead where two lines from the topside of the base of the ears and top of the eyes intersect (pigs — from the bottom side of the ears to the eyes). The line of fire should be aimed into the skull towards the imagined centre of the brain or spinal cord as indicated in the diagrams.

For the poll method, the animal is shot through the skull just behind the base of the antlers or horns. The line of fire should be in line with the animal's muzzle. Generally, the poll method is preferred for horned livestock, such as goats and sheep.

For the temporal method (firearm only), the animal is shot from the side of the head so that the projectile enters the skull at a point midway between the eye and the base of the ear on the same side of the head. The projectile

should be directed horizontally into the skull. This method is an option for adult livestock due to the heavier bone structure of the front of the skull but should be avoided if horn structures interfere with the aim point. A firearms safety consideration is that projectiles may exit the skull.

Firearms energy specifications are as follows:

- the standard 0.22-long rifle cartridge means the use of any 0.22 rim fire cartridge that produces in excess of 100 foot pounds of energy at the muzzle
- the standard 0.22-magnum cartridge means the use of any 0.22 rim fire magnum cartridge that produces in excess of 300 foot pounds of energy at the muzzle
- the centre fire cartridge means the use of any centre fire cartridge that produces in excess of 1000 foot pounds of energy at the muzzle.

Captive bolt devices

- GA6.11 The captive bolt stunner should be pressed firmly on the head before being discharged, and should be positioned as described in the approved positions for each species of livestock. The temporal position is not an option.
- GA6.12 For penetrating captive bolt stunners, the cartridge power and length of bolt should be appropriate to the species and class of livestock. Non-penetrating captive bolt stunners are not recommended.
- GA6.13 Operators should make sure that charges intended for use are appropriate for the species and class of livestock.
- GA6.14 Captive bolts should be regularly cleaned and maintained in optimal working condition according to the manufacturer's instructions.

Note

Two types of captive bolt stunners powered by an explosive cartridge are available:

- the *concussion stunner* (non-penetrating) has a wide mushroom-shaped head that delivers a blow to the skull, causing unconsciousness
- the *penetrating captive bolt stunner* has a narrow bolt that is driven a short distance into the brain.

Both types of stunner only cause a stun, or loss of consciousness, that may be temporary and not lead to death. The penetrating captive bolt stunner is recommended because it is more reliable at delivering an effective stun in livestock. The concussion stunner is not recommended for destruction of livestock during transport. Captive bolt stunning should be followed by an effective procedure to cause death, such as bleeding-out.

Anaesthetic overdose

- GA6.15 Veterinarians or approved persons should perform anaesthetic overdose as appropriate.

Note

Anaesthetic overdose depresses the central nervous system causing deep anaesthesia, leading to respiratory and cardiac arrest. Many different drugs are available, but only for use by veterinarians. The method is appropriate for all species that can be handled.

Stunning by blunt trauma to the head

GA6.16 A single, sharp blow should be delivered to the centre of the forehead.

Note

Blunt trauma to the brain using a hammer or other suitable solid, heavy object may be used to render unconscious small and easily controlled piglets (up to 15 kilograms liveweight), or other livestock less than 24 hours old, as permitted in Part B. Blunt trauma must be applied properly to be effective and humane; therefore, the training and skill of the operator is essential. A follow-up procedure, such as bleeding-out or pithing, must be used immediately after stunning to ensure death.

Bleeding-out (exsanguination)

GA6.17 Bleeding-out of deer, goats and sheep without prestunning using the neck cut should only be done as a last resort by a skilled person using a suitable, sharp knife and adequate restraint of the animal. The cut should transect both the carotid arteries and both the jugular veins.

GA6.18 The animal should be monitored to ensure that death has occurred from effective blood loss.

Note

Bleeding-out of stunned livestock is a method to cause death. Bleeding-out (exsanguination) is performed by cutting the main blood vessels; at the top of the heart via the thoracic inlet (chest stick), in the neck (neck cut) or in other locations. The neck cut is the only method to be used where permitted in conscious livestock.

Pithing

GA6.19 Pithing should be done to ensure death after stunning, particularly where blood loss is to be avoided.

Note

Pithing is permitted only after an effective stunning method has been used and animals have been assessed to be unconscious.

Pithing is the process of destroying nervous tissue in and around the brainstem to ensure death. Pithing is carried out by inserting a metal or plastic rod through a hole made with a captive bolt pistol in the animal's head. The rod is pushed down through the foramen magnum and into the spinal cord. Pithing can also involve severing the spinal cord between the atlas and axis (the first and second bones of the neck). The pithing process can stimulate violent involuntary movements of the animal's legs and head.

Pithing is not permitted at a registered livestock processing establishment. Any livestock dispatched in this manner must not be used for human consumption.

**Part B Species standards and guidelines
for the transport of livestock**

DRAFT FOR ENDORSEMENT 2009

B1 Specific requirements for the land transport of alpacas

Standards

General standards in Part A also apply to minimise risks to the welfare of alpacas during transport.

SB1.1	Time off water must not exceed the time periods given below:														
	<table><thead><tr><th>Class</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Non-pregnant females, wethers and males over 12 months old</td><td>24</td></tr><tr><td>Alpacas 6–12 months old</td><td>8</td></tr><tr><td>Alpacas known to be up to 7.5 months pregnant</td><td>8</td></tr><tr><td>Alpacas known to be more than 7.5 months pregnant, excluding the last 4 weeks</td><td>4</td></tr><tr><td>Lactating alpacas with crias up to 6 months old</td><td>4</td></tr><tr><td>Crias up to 6 months old</td><td>4</td></tr></tbody></table>	Class	Maximum time off water (hours)	Non-pregnant females, wethers and males over 12 months old	24	Alpacas 6–12 months old	8	Alpacas known to be up to 7.5 months pregnant	8	Alpacas known to be more than 7.5 months pregnant, excluding the last 4 weeks	4	Lactating alpacas with crias up to 6 months old	4	Crias up to 6 months old	4
Class	Maximum time off water (hours)														
Non-pregnant females, wethers and males over 12 months old	24														
Alpacas 6–12 months old	8														
Alpacas known to be up to 7.5 months pregnant	8														
Alpacas known to be more than 7.5 months pregnant, excluding the last 4 weeks	4														
Lactating alpacas with crias up to 6 months old	4														
Crias up to 6 months old	4														
SB1.2	Journey time may be extended to 72 hours for all alpacas only under the following conditions: <ul style="list-style-type: none">i) alpacas must have constant provision of water and feed on the vehicleii) there must be space for all alpacas to sit down or ‘cush’iii) alpacas must be assessed every three hours or at every stop to see whether they are fit for the remainder of the intended journeyiv) alpacas must have a mandatory a spell of 24 hours before starting another journey.														
SB1.3	If alpaca wethers have been off water for 36 hours, they must have a mandatory spell for 24 hours before starting another journey. If alpacas over 12 months old have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.														
SB1.4	Alpacas known to be in the last 4 weeks of pregnancy must be transported under veterinary advice unless the journey is less than 4 hours in duration.														
SB1.5	Young and newly shorn alpacas (8–10 days off shears) are susceptible to windchill and must be transported in vehicles with enclosed fronts or provided with protection during weather that could cause heat or cold stress or sunburn.														
SB1.6	Electric prodders must not be used on alpacas.														
SB1.7	Dogs must not be used to move alpacas.														

Note

Usually, alpacas are watered on transport vehicles for long-distance journeys. Unloading for spells should be avoided for welfare and biosecurity reasons. However, spells longer than 4 hours can be deducted from the total water-deprivation time. A spell less than 4 hours is not recommended or recognised for water-deprivation time calculation, but can be taken as necessary.

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of alpacas during transport

Fitness

GB1.1 Additional considerations for alpaca welfare should be made for long-distance travel:

- for alpaca wethers over 12 months old after 24 hours off water
- for non pregnant females and males over 12 months old after 12 hours off water.

These considerations should include:

- i) that the alpaca are considered fit for the remainder of the intended journey
- ii) adverse weather conditions are not prevailing or predicted
- iii) additional spell times during the journey
- iv) a longer spell time at the end of the journey
- v) the recent management of the alpaca before first loading.

GB1.2 Conditions that could adversely affect alpaca welfare during transport should be considered in the assessment of fitness for the intended journey. Such conditions might include lethargic alpacas, alpacas with profuse diarrhoea, disease, wounds or abscesses. A decision to transport an alpaca with the above conditions should be made only after considering the welfare, treatment and management options of the animal concerned.

GB1.3 Alpacas less than 3 months pregnant and crias less than 7 days old (unless accompanied by their mothers) should not be transported unless necessary, and should be provided with food and water during the journey and on arrival at the destination. Pregnant alpacas in their first trimester are prone to pregnancy loss through stressful events such as transport.

GB1.4 Alpacas in their third trimester of pregnancy (beyond 7.5 months) should not be transported unless for treatment purposes. Alpacas in the third trimester of pregnancy should not be deprived of water for more than 2 hours and they should be spelled for 12 hours before starting another journey.

Food and water

GB1.5 Spells should be avoided due to the risks associated with unloading and reloading.

- GB1.6 Alpacas should be watered and fed dry hay or fibre before or during transport to sustain them for the journey. Care should be taken to avoid colic.
- GB1.7 Alpacas destined for transport longer than 24 hours should be fed and watered during the journey and as soon as possible after unloading.
- GB1.8 Lactating alpacas and crias should be inspected throughout the journey as appropriate, to ensure that crias are suckling, unless the vehicle is fitted with a surveillance device that enables continuous inspection throughout the journey.
- GB1.9 When transporting lactating alpacas with crias, regular stops should be made as appropriate to allow suckling, unless alpacas are observed to be comfortably feeding during transit.

Loading density

- GB1.10 The following space allowances (based on the standing position) should be provided:

Mean liveweight (kg)	Minimum floor area (m²/head)^a
20	0.4
30	0.5
40	0.6
50	0.7
60	0.8
80	1.0

^a The estimated area for an alpaca to cush (sit with their legs folded underneath them) is approximately 0.55 m² for a 40–50 kg alpaca. Where alpacas are penned on the vehicle, there should be space for most to lie down (they may not all lie at once), move or turn around, and access feed and water facilities.

- GB1.11 Alpacas should have enough space to be able to cush during transport.
- GB1.12 For longer journeys, space to access feed and water should be provided, as well as bedding (straw or other suitable material) for comfort.
- GB1.13 Alpacas should be segregated on the vehicle, with lactating alpacas with cria and young alpacas penned separately from adults. Where necessary, males should be penned separately from females.

Note

Alpacas may travel in trucks, vans, covered trailer or horse float. Alpacas will tend to cush during the journey and travel best in the company of another alpaca.

Vehicles and facilities

- GB1.14 Where possible, vehicles should also have covered roof and sides for protection during transport, or be able to be covered as needed.
- GB1.15 Flooring should be a nonslip surface of either rubber or old carpet. In addition, straw provides extra comfort and absorbs faeces and urine on long trips. Apart from providing a nonslip surface, the rubber or carpet provides insulation. Alpacas thermo regulate through their underside, and an alpaca cushing on a metal surface can be predisposed to hypothermia.

- GB1.16 Vehicles should contain pens or partitions and feed or water facilities for longer journeys. Penning arrangements should allow alpacas to turn around and to cush during the journey.

Handling

- GB1.17 Halters should be made from materials that will not predispose the animals to injury. Precautions should be taken to ensure the animals do not become injured or caught during the journey. Halters or ties should not remain on alpacas during transport.
- GB1.18 Handling alpacas in small groups, particularly young or pregnant alpacas, will minimise injury and stress.

Humane destruction

- GB1.19 Recommended methods of humane destruction include:
- i) for adult alpacas — firearm or captive bolt
 - ii) for crias — firearms, captive bolt, or blunt trauma; however, blunt trauma should only be used when there is no other recommended option for humane destruction, and can only be used on crias that are less than 24 hours old.
- GB1.20 The frontal position should be the preferred aiming point for the humane destruction of alpacas.
- GB1.21 A firearm should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.
- GB1.22 If necessary, use of blunt trauma on newborn young of alpacas less than 24 hours old should be followed by bleeding-out or another technique while the animal is unconscious, to ensure death.

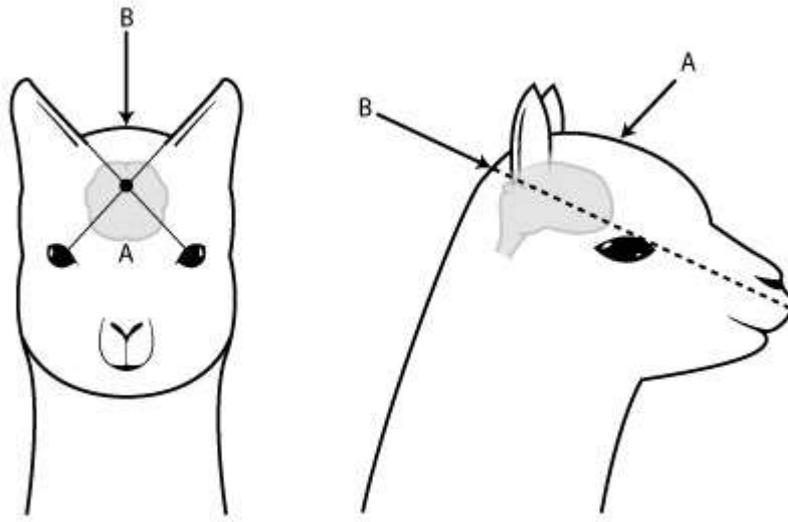


Figure B1.1 Humane destruction of alpacas.

Note: (A) indicates the frontal method and (B) indicates the poll method. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions.

DRAFT FOR ENDORSEMENT

B2 Specific requirements for the land transport of buffalo

Standards

General standards in Part A also apply to minimise the risk to the welfare of buffalo during transport.

SB2.1	Time off water must not exceed the time periods given below:								
	<table><thead><tr><th>Class</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Adult buffalo over 6 months old</td><td>36</td></tr><tr><td>Buffalo 1–6 months old</td><td>24</td></tr><tr><td>Buffalo known to be more than 7 months pregnant excluding the last 4 weeks and lactating buffalo with calves at foot</td><td>24</td></tr></tbody></table>	Class	Maximum time off water (hours)	Adult buffalo over 6 months old	36	Buffalo 1–6 months old	24	Buffalo known to be more than 7 months pregnant excluding the last 4 weeks and lactating buffalo with calves at foot	24
Class	Maximum time off water (hours)								
Adult buffalo over 6 months old	36								
Buffalo 1–6 months old	24								
Buffalo known to be more than 7 months pregnant excluding the last 4 weeks and lactating buffalo with calves at foot	24								
SB2.2	If buffalo over 6 months have been off water for 36 hours, they must have a mandatory spell for 24 hours before starting another journey, If cows known to be more than 7 months pregnant (excluding the last 4 weeks of pregnancy), lactating cows, calves and young buffalo have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.								
SB2.3	Buffalo known to be in the last 4 weeks of pregnancy must be transported under veterinary advice, unless the journey is less than 4 hours' duration.								
SB2.4	Electric prodders must only be used on buffalo after reasonable actions to cause movement have failed.								
SB2.5	Dogs must not be used to move buffalo.								
SB2.6	Buffalo that suffer heat stress during transport must be cooled at the first opportunity by water spray.								

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of buffalo during transport.

Fitness

- GB2.1 Additional considerations for buffalo welfare should be made for long-distance travel:
- for buffalo over 6 months old after 24 hours off water
 - for calves, lactating cows and cows in the third trimester of pregnancy after 12 hours off water.

These considerations should include:

- i) that the buffalo are considered fit for the remainder of the intended journey
- ii) adverse weather conditions are not prevailing or predicted
- iii) additional spell times during the journey
- iv) a longer spell time at the end of the journey
- v) the recent management of the buffalo before first loading.

GB2.2 Conditions that could adversely affect buffalo welfare during transport should be considered in the assessment of fitness for the intended journey. This might include lethargic buffalo, and buffalos with profuse diarrhoea, disease, or wounds or abscesses. A decision to transport a buffalo with the above conditions should be made after considering the welfare of the animal concerned and the treatment and management options.

GB2.3 Handling and transporting female buffalo in the last half of pregnancy should be avoided, because they are particularly prone to abortion if stressed.

GB2.4 Buffalo in the third trimester of pregnancy should not be deprived of water for more than 12 hours and they should be spelled for 12 hours before starting another journey.

GB2.5 Buffalo more than 9 months pregnant should be transported under the following provisions:

- water-deprivation time should not exceed 8 hours
- feed and water should be provided immediately before loading and upon unloading
- additional space should be provided on the vehicle
- different classes of buffalo should be separated
- veterinary advice should be sought.

Food and water

GB2.6 Buffalo should be monitored carefully when reintroducing them to water following transport. Dehydrated buffalo may gorge themselves when reintroduced to water, with adverse effects on their welfare.

GB2.7 Buffalo should be fed and watered as soon as possible after unloading.

Loading density

GB2.8 The following minimum space allowances should be provided:

Mean liveweight (kg)	Minimum floor area (m ² /head)	Number of head per 12.5 m x 2.4 m deck
200	0.69	43
250	0.77–0.79	
300	0.86–0.89	
350	0.98–1.01	
400	1.05–1.09	
450	1.13–1.18	
500	1.23–1.28	
550	1.34–1.40	
600	1.47–1.55	
650	1.63–1.73	18–17

Note

Loading density targets provided above are based on animals with blunt horns that are no longer than the spread of ears. Additional space is required for untrimmed horns.

Vehicles and facilities

GB2.9 Ramp slopes for adult buffalo should be 20 degrees and contain a level area of at least one body length at the top with a slide gate to prevent reversal.

GB2.10 In cooler weather, buffalo should be protected from cold stress. Transport vehicles should contain enclosed fronts or be able to be enclosed for shelter against windchill, for buffalo that are not adapted to the cold, or when transporting buffalo less than 6 months old.

GB2.11 If transported on dirt roads, buffalo should be inspected hourly for the first three hours. Particular attention should be paid to animals on the last trailer.

Handling

GB2.12 Buffalo should be mustered or assembled in the cooler parts of the day, especially if the temperature exceeds 32 degrees centigrade.

GB2.13 During particularly hot weather, buffalo should be transported at night.

GB2.14 After mustering in hot or humid weather, buffalo should be cooled using a sprinkler system and given access to drinking water.

GB2.15 All reasonable steps should be taken to minimise the effects of climatic extremes, especially for buffalo being transported from warmer areas to cooler areas.

GB2.16 If animals become agitated during transport, loading or unloading, or are held stationary on the vehicle for an extended time period, they should be sprayed with water for cooling and to reduce stress levels.

GB2.17 Electric prodders should not be used, because buffalo may become aggressive.

GB2.18 Aggressive bulls should be segregated or restrained by a head rope (or both).

GB2.19 Buffalo should be left on the vehicle during rest or watering stops, and parked under shade, where possible, when conditions are hot.

Note

Buffalo are susceptible to heat stress, because they have a poor ability to sweat. Signs of overheating in buffalo include:

- increased reddening of the hide on the brisket, under the belly and between the legs
- the tongue hanging from the mouth
- panting
- bloodshot eyes
- skin that is hot to touch.

Humane destruction

GB2.20 Recommended methods of humane destruction include:

- i) for buffalo — firearms
- ii) for calves — firearms or captive bolts.

GB2.21 The preferred method for humane destruction of buffalo is a firearm in the frontal position. Powerful 0.30-calibre centre fire cartridges with hard projectiles are recommended for larger animals and bulls, and not captive bolts. For calves, a rifle should deliver the muzzle energy of at least a standard 0.22-long rifle cartridge. For young buffalo, 0.22 magnum cartridges may be suitable.

Note

Operators should consider the angle of impact, because buffalo tend to lift their nose when looking directly at the shooter. Horns in adults make the temporal aim point impractical.

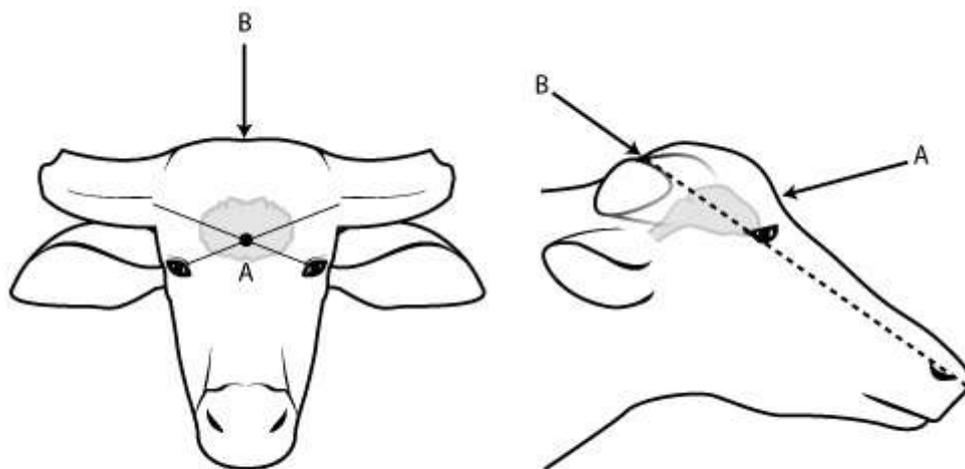


Figure B2.1 Humane destruction of buffalo

Note: (A) indicates the frontal method and (B) indicates the poll method. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions.

DRAFT FOR ENDORSEMENT

B3 Specific requirements for the land transport of camels

Standards

General standards in Part A also apply, to minimise risks to the welfare of camels during transport.

SB3.1	Time off water must not exceed the time periods given below:										
	<table><thead><tr><th>Class</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Camels over 6 months old</td><td>48</td></tr><tr><td>Calves 1–6 months old</td><td>24</td></tr><tr><td>Lactating cows with calves at foot</td><td>24</td></tr><tr><td>Camels known to be more than 9 months pregnant, excluding the last 4 weeks</td><td>24</td></tr></tbody></table>	Class	Maximum time off water (hours)	Camels over 6 months old	48	Calves 1–6 months old	24	Lactating cows with calves at foot	24	Camels known to be more than 9 months pregnant, excluding the last 4 weeks	24
Class	Maximum time off water (hours)										
Camels over 6 months old	48										
Calves 1–6 months old	24										
Lactating cows with calves at foot	24										
Camels known to be more than 9 months pregnant, excluding the last 4 weeks	24										
SB3.2	Journey time for camels over 6 months old, excluding camels known to be in the final month of pregnancy, may be extended to 72 hours only under the following conditions: <ul style="list-style-type: none">i) camels must be watered and fed on the vehicle every 24 hoursii) there must be space for all camels to lie down on their sternumsiii) regular assessments must be made that the camels are fit for the remainder of the intended journeyiv) camels must have a mandatory spell of 24 hours before starting another journeyv) if camels over 6 months old have been off water for 48 hours, they must have a mandatory spell for 36 hours before starting another journey.										
SB3.3	If camels under 6 months old or camels known to be more than 9 months pregnant, excluding the last 4 weeks, or lactating cows with calves at foot, or calves 1–6 months old, have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.										
SB3.4	Camels known to be in the last 4 weeks of pregnancy must be transported under veterinary advice unless the journey is less than 4 hours.										
SB3.5	When standing at rest camels must have a minimum of 100 mm clearance between the top of their hump and the livestock crate.										
SB3.6	Electric prodders must only be used on camels after reasonable actions to cause movement have failed.										
SB3.7	Dogs must not be used to move camels.										
SB3.8	Camel bulls in rut must be segregated during transport.										

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of camels during transport.

Fitness

GB3.1 Conditions that could adversely affect camel welfare during transport and should be considered in the assessment of fitness for the intended journey might include lethargic camel, and camels with chronic diarrhoea, disease, or wounds. A decision to transport a camel with the above conditions should be made after considering the welfare of the animal concerned and the treatment and management options.

Food and water

GB3.2 Camels should be fed and watered as soon as possible after unloading. Camels should be trained by progressive extension of water-deprivation time before going without water for longer periods.

GB3.3 Camels should be monitored carefully when reintroducing them to water following transport. Dehydrated camels may gorge themselves when reintroduced to water, but adverse effects on their welfare are rare. Severely dehydrated camels should rehydrate over several hours.

GB3.4 Camels in the third trimester of pregnancy, lactating camels with calves at foot, and calves under 6 months old should not be deprived of water for more than 12 hours, and they should be spelled for 12 hours before starting another journey.

GB3.5 Camels more than 12 months pregnant should be transported under the following provisions:

- water-deprivation time should not exceed 8 hours
- feed and water should be provided immediately before loading and on unloading
- additional space should be provided on the vehicle
- different classes of camels should be segregated
- veterinary advice should be sought.

Loading density

GB3.6 The following space allowances should be provided:

Mean liveweight (kg)	12.2 m x 2.4 m (deck) ^a
Fewer than 250	30–32
250–300	28
300–350	26
350–400	24
400–500	20
500–600	18
600–700	16

^a Based on standing room only. Camels need additional space to sit down on long journeys.

Vehicles and facilities

- GB3.7 Yards should have race walls with a height of 1.8 m, and metal loading races should be covered with dirt to avoid excessive noise and foot damage. Yards should be large enough to allow all camels to sit down on their sternums at the same time.
- GB3.8 Camels should spend as little time as possible on hard surfaces that can cause injury to foot pads, or that wear the pedestal and kneeling pads of the animal. Cross cleats must either be removed from trucks or totally covered with a generous layer of hay, straw or sand. Surface bedding should be checked during a long trip.
- GB3.9 Camels should be loaded up ramps with solid earthen floors. The incline should be as low as possible, preferably 10–20 degrees. Hollow-sounding ramps make camels disinclined to load. Camels are best end-loaded into a truck. Side loading of camels can also be difficult because they do not perceive that there is enough room to enter or move in the crate.
- GB3.10 Livestock crate floors should be smooth and free from tread mesh to facilitate sternal recumbency. Carpet or damp sand is recommended as a floor covering for long-distance transport.
- GB3.11 Livestock crate walls should have small gaps to prevent entrapment of foot pads.
- GB3.12 Camels under 12 months old should not be transported in the same pen as adult camels.
- GB3.13 Livestock crates should allow a resting hump clearance for land transport of 100 mm. When moving, the highest part of the camel is the hump, while the head is generally lowered. Walking hump height is 100 mm–200 mm lower than resting hump height. The gates and stays may be lower than the bows of a crate, provided that hump height clearance is appropriate.
- GB3.14 Large camels should be transported in single-deck vehicles or a crate with a vertical clearance of 2 m, unless the crate construction allows for hump height clearance as specified above. Yearling camels may be transported in double decks provided they do not contact overhead structures.

Handling

- GB3.15 Camels should be left on the vehicle during rest or watering stops and should be parked under shade in hot conditions, where possible.
- GB3.16 Camels may be temporarily tied in sternal recumbency to prevent injury. If camels are to be tied in sternal recumbency, they should be released and allowed to stand at least every four hours.
- GB3.17 Camels should not be tied to trees or other structures by ropes or halters that are attached to the neck unless sufficient rope and low tying of the rope is provided. Camels tied to structures by ropes should not be left unattended.
- GB3.18 Electric prodders should only be used on camels as an absolute last resort.

Humane destruction

- GB3.19 Recommended methods of humane destruction for camels include:
- i) for camels less than 6 months old — firearm, captive bolt, or blunt trauma; however, blunt trauma should only be used when there is no other recommended option for humane destruction, and can only be used on calves that are less than 24 hours old
 - ii) for camels over 6 months old — firearm or captive bolt.
- GB3.20 Trained camels should be sat down before humane destruction.
- GB3.21 For adult camels, a firearm should deliver at least the muzzle energy of a standard 0.22 magnum cartridge and, for calves; a firearm should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.
- GB3.22 For mature bull camels and especially bulls in rut, the captive bolt, if used, should only be applied to the poll position. Bulls in rut develop thick glands at the top of the head that prevent the effective use of the captive bolt by the frontal method.
- GB3.23 If necessary, use of blunt trauma on newborn young of camels less than 24 hours old should be followed by bleeding-out or another technique while unconscious to ensure death.

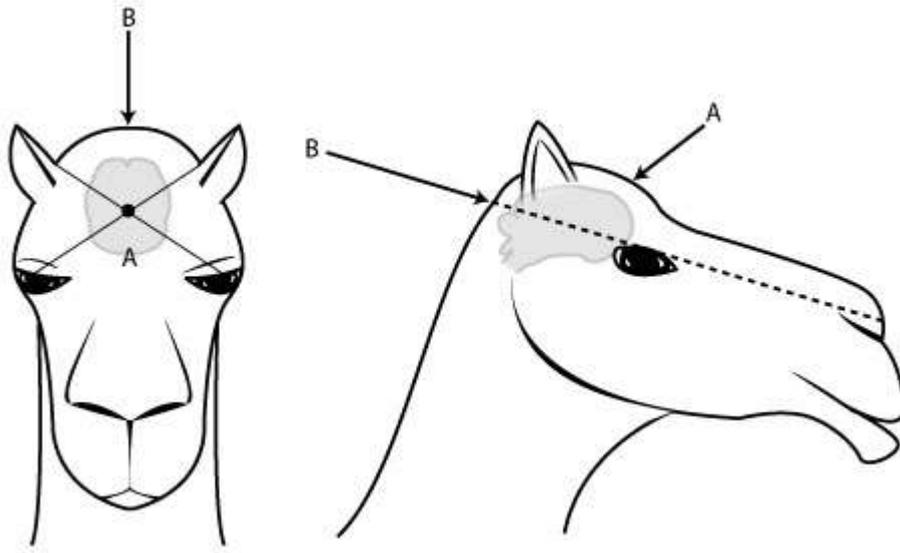


Figure B3.1 Humane destruction of camels

Note: (A) indicates the frontal method and (B) indicates the poll method. The arrows indicate the direction of aim for the positions.

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B4 Specific requirements for the land transport of cattle

Standards

General standards in Part A also apply to minimise risks to the welfare of cattle during transport.

SB4.1 Time off water must not exceed the time periods given below:

Class	Maximum time off water (hours)
Cattle over 6 months old	48
Calves 30 days to 6 months old	24
Lactating cows with calves at foot	24
Calves 5–30 days old travelling without mothers	18
Cattle known to be more than 6 months pregnant, excluding the last 4 weeks	24

SB4.2 If cattle over 6 months old have been off water for 48 hours, they must have a mandatory spell for 36 hours before starting another journey.

If cows known to be more than 6 months pregnant excluding the last 4 weeks, lactating cows with calves at foot or calves 1–6 months old have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.

SB4.3 Cattle known to be in the last 4 weeks of pregnancy must be transported under veterinary advice unless the journey is less than 4 hours duration.

SB4.4 Bobby calves less than 5 days old travelling without mothers must only be transported directly to a calf-rearing facility and must:

- i) be fed a liquid feed within 6 hours before loading
- ii) be provided with thick bedding and room to lie down
- iii) be protected from cold and heat
- iv) not be consigned through saleyards
- v) not be transported for longer than 6 hours.

SB4.5 Bobby calves between 5 and 30 days old travelling without mothers must:

- i) be protected from cold and heat
- ii) be in good health, alert and able to rise from a lying position
- iii) have been adequately fed milk or milk replacer on the farm within 6 hours of transport
- iv) be prepared and transported to ensure delivery in less than 18 hours from last feed with no more than 12 hours spent on transports
- v) have an auditable and accessible record system that identifies the calves were last fed within 6 hours of transport unless the journey is between rearing properties and is less than 6 hours' duration.

SB4.6 Bobby calves less than 30 days old travelling without mothers must not be consigned

across Bass Strait.

- SB4.7 Bobby calves born earlier than a normal pregnancy term (including induced calves) must be at an equivalent stage of fitness when transported, compared with normal, full-term calves.
- SB4.8 Bobby calves under 30 days old must all have sufficient space in the livestock crate to lie down on their sternums.
- SB4.9 Dogs must not be used to move bobby calves less than 30 days old.

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of cattle during transport.

Fitness

- GB4.1 Additional considerations for cattle welfare should be made for long distance travel:
- for cattle over 6 months old after 36 hours off water
 - for calves, lactating cows and cows in the third trimester of pregnancy after 12 hours off water.

These considerations should include:

- i) that the cattle are considered fit for the remainder of the intended journey
 - ii) adverse weather conditions are not prevailing or predicted
 - iii) additional spell times during the journey
 - iv) a longer spell time at the end of the journey
 - v) the recent management of the cattle before first loading.
- GB4.2 A decision to transport cattle with one of the following conditions should be made after considering the welfare of the animal concerned and the treatment and management options. The conditions include lethargy, profuse diarrhoea, disease, wounds or abscesses.
- GB4.3 Calves should be transported for the shortest time possible. Efficient aggregation practices for bobby calves between 5 and 30 days old should be used to reduce journey times to final destinations. Direct marketing should be used when possible. Calves should not be consigned through saleyards that do not have holding facilities suitable for calves.
- Note*
Refer to GB4.10 for additional calf fitness guidelines.
- GB4.4 Bobby calves less than 30 days old to be transported should:
- be of minimum liveweight of 23 kg
 - have hooves that are firm and worn flat, and that are not bulbous with soft unworn tissue

- have a navel cord that is wrinkled, withered and shrivelled and not pink or red coloured, raw or fleshy.
- GB4.5 Cows in the sixth and seventh month of pregnancy should not be deprived of water for more than 12 hours and they should be spelled for 12 hours before reloading.
- GB4.6 Cows in their eighth month of pregnancy or later, excluding the last two weeks of pregnancy, should be transported under the following provisions:
- water-deprivation time should not exceed 4 hours
 - feed and water should be provided immediately before loading and on unloading
 - additional space should be provided on the vehicle
 - they should be segregated from other classes of cattle
 - veterinary advice should be sought.

Food and water

- GB4.7 Cattle should be fed and watered as soon as possible after unloading.
- GB4.8 Calves between 5 and 30 days old travelling without mothers should be given a liquid feed as soon as possible after unloading, unless they are slaughtered within 18 hours of commencing transport.

Loading density

GB4.9 The following space allowances should be provided:

Mean liveweight (kg)	Minimum floor area (m ² /head) standing	Number of head per 12.25 m x 2.4 m deck
100	0.31	44
150	0.42	70
200	0.53	55
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

Vehicle and facilities

- GB4.10 Bobby calves less than 30 days old to be transported should:
- have protection from excess heat, sun, wind and rain, in a vehicle that has an enclosed front and that provides effective airflow
 - be kept clean and dry

- have bedding.

- GB4.11 During cold weather, additional actions should be taken to protect calves from cold stress and windchill during transport.
- GB4.12 Ramps for adult cattle and calves should be designed so that animal welfare is not compromised. Ramp slopes for adult cattle should be 20 degrees and for calves should be 12 degrees.

Handling

- GB4.13 All calves under 30 days old should be unloaded with care as they may not have developed following behaviours and may also become easily fatigued.
- GB4.14 Cattle have a high level of herding instinct; therefore, handling techniques should use strategies to make best use of this fact for low-stress stock handling.
- GB4.15 Horned bulls should have the nonvascular horn tip removed to a diameter of 3 cm.
- GB4.16 Dogs should not be used on bobby calves under 6 months old.

Humane destruction

GB4.17 Recommended methods of humane destruction include:

- i) for adult cattle — firearms (including the temporal position) or captive bolt
- ii) for calves — firearms, captive bolt, or blunt trauma; however, blunt trauma should only be used when there is no other recommended option for humane destruction, and can only be used on calves that are less than 24 hours old.

GB4.18 The preferred option for humane destruction is a firearm in the frontal position. For adult cattle, a rifle should deliver at least the muzzle energy of a standard 0.22 magnum cartridge. For larger animals and bulls, 0.30-calibre high-power cartridges are recommended. For calves, a rifle should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.

GB4.19 If necessary, use of blunt trauma on newborn young of cattle less than 24 hours old should be followed by bleeding-out or another technique while the animal is unconscious, to ensure death.

GB4.20 Cattle should be bled out using the chest stick method in preference to slitting the throat (neck cut).

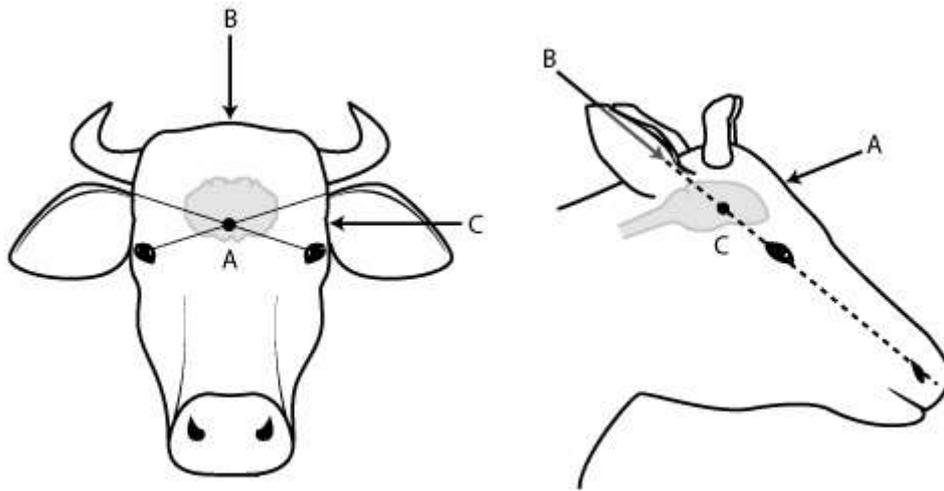


Figure B4.1 Humane destruction of cattle

Note: (A) indicates the frontal method, (B) indicates the poll method and (C) indicates the temporal method. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions. Position A and B for firearms and captive bolt, position C for firearms only.

DRAFT FOR ENDOUSEMENT

B5 Specific requirements for the land transport of deer

Standards

General standards in Part A also apply to minimise risks to the welfare of deer during transport.

SB5.1	Time off water must not exceed the time periods given below:								
	<table><thead><tr><th>Class</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Deer over 6 months old</td><td>48</td></tr><tr><td>Weaned fawns or calves under 6 months old</td><td>28</td></tr><tr><td>Deer known to be more than 5 months pregnant, excluding the last four weeks</td><td>24</td></tr></tbody></table>	Class	Maximum time off water (hours)	Deer over 6 months old	48	Weaned fawns or calves under 6 months old	28	Deer known to be more than 5 months pregnant, excluding the last four weeks	24
Class	Maximum time off water (hours)								
Deer over 6 months old	48								
Weaned fawns or calves under 6 months old	28								
Deer known to be more than 5 months pregnant, excluding the last four weeks	24								
SB5.2	If deer over 6 months old have been off water for 48 hours, they must have a mandatory spell for 36 hours before starting another journey. If fawns or calves have been off water of 28 hours, they must have a mandatory spell for 12 hours before starting another journey. If deer known to be more than 5 months pregnant excluding the last 4 weeks have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.								
SB5.3	Deer known to be in the last 4 weeks of pregnancy and lactating deer with fawns or calves must only be transported under veterinary advice unless the journey is less than 4 hours' duration.								
SB5.4	Electric prodders must only be used on deer after reasonable actions to cause movement have failed.								
SB5.5	Deer with antlers in velvet greater than 4 cm must not be transported. Deer must not be transported for 7 days after velvet antler removal.								
SB5.6	Where hard antler removal cannot be done, deer with hard antlers greater than 4 cm must not be transported unless they are separated from all other deer and have adequate clearance above the antlers.								

Note

Deer are generally not watered on transport vehicles. Unloading for spells should be avoided for welfare and biosecurity reasons. However, spells longer than 4 hours can be deducted from the total water-deprivation time. A spell less than 4 hours is not recommended or recognised for water-deprivation time calculation, but can be taken as necessary.

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of deer during transport.

Fitness

GB5.1 Additional considerations for deer welfare should be made for long-distance travel:

- for deer over 6 months old after 36 hours off water
- for fawns under 6 months old after 20 hours off water
- for lactating deer and deer in the third trimester of pregnancy after 12 hours off water:

These considerations should include:

- i) that the deer are considered fit for the remainder of the intended journey
- ii) adverse weather conditions are not prevailing or predicted
- iii) additional spell times during the journey
- iv) a longer spell time at the end of the journey
- v) the recent management of the deer before first loading.

GB5.2 Conditions that could adversely affect deer welfare during transport and that should be considered in the assessment of fitness for the intended journey might include lethargy, and profuse diarrhoea, disease, or wounds or abscesses. A decision to transport a deer with the above conditions should be made only after considering the welfare of the animal concerned and the treatment and management options.

GB5.3 Deer with antlers in velvet greater than 4 cm should not be transported. Deer should not be transported for 7 days after velvet antler removal.

GB5.4 Deer with hard antlers greater than 4 cm should not be transported. Where hard antler removal cannot be done, they must be separated from all other deer.

GB5.5 Deer that are due to calve within one month or with young at foot (less than one month old) should not be transported unless in an emergency for the welfare of the deer, and special provisions (as advised by a veterinarian) are in place to ensure that transport does not result in adverse welfare outcomes.

GB5.6 Deer in the last trimester of pregnancy should not be deprived of water for more than 12 hours and they should be spelled for 12 hours before starting another journey.

GB5.7 Deer in the last month of pregnancy should be transported under the following provisions:

- water-deprivation time should not exceed 8 hours
- feed and water should be provided immediately before loading and on unloading
- additional space should be provided on the vehicle

- deer should be segregated from other classes of deer
- veterinary advice should be sought.

Note

Transport should be managed to ensure the welfare of deer, particularly those not accustomed to handling, those in a weak condition, pregnant females, and adult males during and immediately after the rutting season.

Food and water

GB5.8 Deer should be fed and watered as soon as possible after unloading.

GB5.9 Deer are particularly susceptible to heat stress. A supply of suitable water should be provided before loading.

Loading density

GB5.10 The following space allowances should be provided:

Deer weight range	Floor area per animal (m ²)	Number of head per 12.5 m x 2.4 m deck
50 kg	0.3	100
75 kg	0.4	75
100 kg	0.50	60
150 kg	0.75	40
200 kg	1.0	30

GB5.11 Extra floor space should be available for deer to lie down during journeys that are anticipated to last longer than 24 hours.

Vehicles and facilities

GB5.12 When loading the vehicle, deer of different species and category should be penned separately to avoid injury or aggression towards each other.

GB5.13 Deer should be transported in crates that are fully sided with sufficient gaps for airflow, and that have high side walls to prevent deer escaping and provide sufficient vertical clearance. Where weather requires, tarp or shade cloth should cover the vehicle front and roof; otherwise a transport vehicle that is fully enclosed should be used. Single animal crates should be darkened and light entry should be at low levels.

GB5.14 Crates should be of sufficient height so that deer have good head clearance and air moves freely through the crate. A cover is essential in any vehicle used to transport deer.

GB5.15 Only fit and healthy animals should be selected for transport. Those most susceptible to stress or injury during transport should be loaded last, and unloaded first. When loading the vehicle, deer of different species and category should be penned separately to avoid injury or aggression towards each other.

GB5.16 Transporting deer during extremely hot weather (above 35°C) should be avoided, especially if deer are unaccustomed. If the deer show signs of heat stress or dehydration (panting, dry mouth, reduced response to normal

stimuli) the crate should be placed in the shade or the deer hosed with water. The temperature in the crate should not exceed 30°C.

Handling

- GB5.17 Deer brought into yards for loading should be moved as quietly and carefully as possible.
- GB5.18 Deer in hard antler should not be yarded with other deer.
- GB5.19 Electric prodders should not be used on fawns or calves.

Humane destruction

- GB5.20 Recommended methods of humane destruction include:
 - i) for deer over 6 months old — firearm, captive bolt, lethal injection or bleeding-out
 - ii) for fawns or calves — firearm, captive bolt, lethal injection, bleeding-out or blunt trauma; however, blunt trauma should only be used when there is no other recommended option for humane destruction, and can only be used on calves that are less than 24 hours old.
- GB5.21 A rifle shot by the frontal method (Figure B5.1) is the preferred method of humanely destroying deer. For adult deer, a firearm should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge and this cartridge should be 0.22 magnum for sambar deer. For fawns, a firearm should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.
- GB5.22 If necessary, use of blunt trauma on newborn young of deer less than 24 hours old should be followed by bleeding-out or another technique while the animal is unconscious to ensure death.

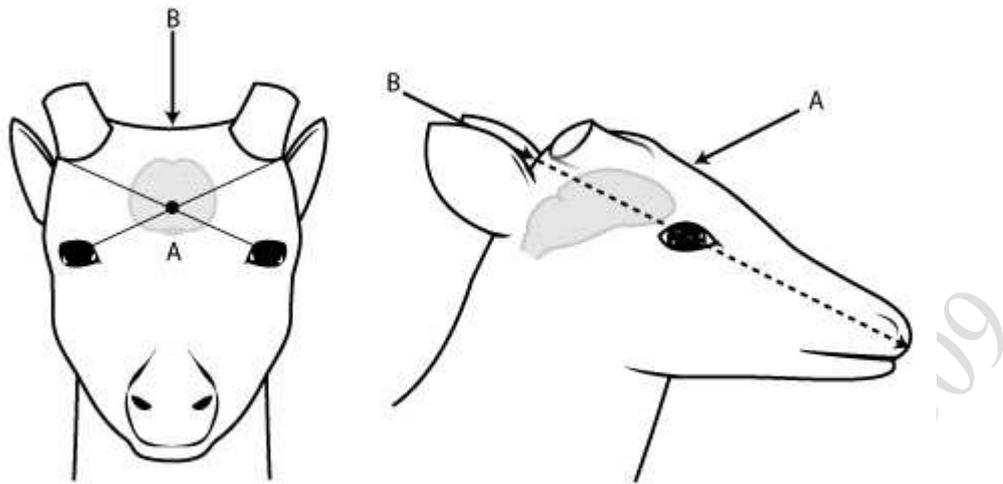


Figure B5.1 Humane destruction of deer

Note: (A) indicates the frontal method and (B) indicates the poll method. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions.

DRAFT FOR ENDORSEMENT

B6 Specific requirements for the land transport of emus and ostriches (ratites)

Standards

General standards in Part A also apply, to minimise risks to the welfare of ratites during transport.

SB6.1	Time off water must not exceed the time periods given below:								
	<table><thead><tr><th>Class</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Adult birds</td><td>36</td></tr><tr><td>Young birds day 5–90</td><td>24</td></tr><tr><td>Chicks up to 4 days old</td><td>60^a following take off^b</td></tr></tbody></table>	Class	Maximum time off water (hours)	Adult birds	36	Young birds day 5–90	24	Chicks up to 4 days old	60 ^a following take off ^b
Class	Maximum time off water (hours)								
Adult birds	36								
Young birds day 5–90	24								
Chicks up to 4 days old	60 ^a following take off ^b								
	<p>^a Normal allowable time off water is 72 hours, allowing 12 hours for hatching time before removal (take off) from the hatchery.</p> <p>^b Water-deprivation time allowed can be up to 72 hours following take-off if provided with hydrating material in the transport container.</p>								
SB6.2	Ratites must be fed within the 24 hours before assembly for transport.								
SB6.3	Young birds must be fed every 12 hours.								
SB6.4	Young birds must not be held in containers for more than 12 hours, unless provided with feed, water and shelter.								
SB6.5	If adult birds have been off water for 36 hours, they must have a mandatory spell for 24 hours before starting another journey.								
SB6.6	Containers of ratite chicks must: <ul style="list-style-type: none">i) be lifted and placed with careii) be positioned on the vehicle in an upright position without excessive tiltingiii) not be dropped or throwniv) be securely attached to the vehiclev) be suitable for the intended purpose.								
SB6.7	Legs of ratites must not be tied together.								
SB6.8	Electric prodders must not be used on ratites.								

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of ratites during transport.

Fitness

GB6.1 A decision to transport ratites should be made after considering the welfare of the animal concerned and the treatment and management options. Ratites that

are lame or have obvious disease or painful conditions should not be transported.

GB6.2 Additional considerations for bird welfare should be made for long-distance travel:

- for birds after 24 hours off water
- for young birds 5–90 days old after 18 hours off water.

These considerations should include:

- i) that the birds are fit for the remainder of the intended journey
- ii) that adverse hot weather conditions are not prevailing or predicted
- iii) a longer spell time at the end of the journey
- iv) the recent management of the birds before first loading.

GB6.3 Rest stops during transport journeys, with the exception of inspections as required, are undesirable when transporting ratites.

GB6.4 All people involved in ratite chick transport should have the relevant consignment details, including the numbers of chicks, the date and time of dispatch, anticipated time of arrival and contact details for the relevant person(s).

GB6.5 Records of birds found dead on arrival should be collected and maintained, and the information communicated to the consignor and transporter.

Note

General standards in Chapters 4 and 5 provide background on the selection of ratites to ensure that ratites are fit for the intended journey. The selection of ratites occurs in the weeks before transport, and culling practices should be in place to ensure that any birds found unsuitable for transport are treated or humanely destroyed before the day of pick-up.

Food and water

GB6.6 Ratites should be fed and watered as soon as possible after unloading. Food is not recommended at meat-processing establishments.

GB6.7 Additional considerations for bird welfare should be made for long-distance travel:

- for birds after 24 hours off water
- for young birds 5–90 days after 18 hours off water.

These considerations should include:

- i) that the birds are fit for the remainder of the intended journey
- ii) that adverse hot weather conditions are not prevailing or predicted
- iii) a longer spell time at the end of the journey
- iv) the recent management of the birds before first loading.

GB6.8 Ratites chicks should be brooded within 24 hours of hatching.

Loading density

- GB6.9 When determining the numbers of birds to be loaded, the operator should consider bird liveweight, available floor space, weather conditions and journey conditions.
- GB6.10 During hot weather, depending on the humidity and air flow, the number of birds per pen or container should be reduced to keep load temperatures and humidity within an acceptable range.
- GB6.11 All birds should be able to stand upright in the vehicle to avoid being clawed, unless sufficient space is available for birds to sit without being clawed by other birds.
- GB6.12 Chicks up to 12 weeks old should be transported in groups of no more than 30 birds with partitions placed between adjacent groups.
- GB6.13 Juvenile and adult birds should be transported in groups of no more than 17 birds with partitions placed between adjacent groups.
- GB6.14 The following minimum space allowances should be provided:

Emus (age in months)	Minimum space per bird (m ²)
Up to 2	0.10–0.21
2–4	0.21
4–6	0.23
6–9	0.26
9–12	0.32
12–14	0.38
More than 14	0.41
Ostrich (weight in kg)	Minimum space per bird (m ²) ^a
Day old	0.10
35	0.19
95	0.41
+110	0.48

Note

General standards in Chapter 5 apply to ratites to ensure that the loading density is appropriate and to minimise the risk to the welfare of birds.

Vehicle, containers and facilities

- GB6.15 Yards should have solid, enclosed walls. Where portable yards are used, the partitions should be well constructed and yard flooring should be firm to avoid injury to birds and birds being clawed by other birds.
- GB6.16 Fencing should be at least 1.5 m high in yards.
- GB6.17 Yards should contain adequate shade to prevent heat stress and feeding or watering facilities should be well positioned off the ground with adequate space to avoid aggression between birds. Where possible, misters should also be available.
- GB6.18 Ratites should be conditioned to use yards before being assembled for transport and avoid stress during herding.

- GB6.19 Vehicle compartments should be appropriately designed to minimise injury, with sufficiently high sides where birds are to stand. The crate height on the vehicle should be higher than the birds being transported, so that birds can stand comfortably.
- GB6.20 The transport vehicle should provide fresh air but chicks especially should be protected from chilling and extremes in temperature.
- GB6.21 Ratites should be transported in dimly lit conditions or at night.
- GB6.22 Ramp slopes should be no more than 25 degrees.
- GB6.23 Transport vehicles should have a nonslip, moisture-draining floor to ensure that birds maintain footing during transport. Bedding that can be ingested is not recommended for chicks less than 3 weeks old.

Note

Injury can occur when ostriches and emus panic, run or trample each other and rub against yard fences or partitions. Air-sprung trucks reduce the impact of the road surface during transport and the possibility of birds falling or slipping.

Temperature

- GB6.24 Birds being transported in cold conditions may be affected by windchill, particularly if they are wet. Birds, both at the front and the back of the vehicle, should be protected from the extremes of the weather while being transported, as the temperature between the top and bottom and front and back of the vehicle can differ significantly.
- GB6.25 Suitable covers that allow sufficient natural airflow should be used to protect birds in containers from wind and rain, and from excessively cold conditions.
- GB6.26 If temperature exceeds 30°C when transporting ratites or while waiting to unload, vehicles should not be left stationary, without shade, fans, misters, or other cooling being provided. During temperatures greater than 35°C, transport of ratites should be avoided, unless actions are taken to minimise heat stress.
- GB6.27 Where facilities are not available for protection from the weather, birds in transit or waiting unloading for slaughter should not be left in a parked vehicle for more than 2 hours.
- GB6.28 Transport and slaughter processes should minimise the time the birds remain in containers (from pick up to processing), particularly in hot weather.

Note

Time spent in containers for chicks should be calculated from the time of placement into the container, not the time transport begins. Stops are undesirable when transporting ratites. Providing feed and water during transport can reduce the impact of weather conditions. Ratites are often calmer when transported at night during summer months.

Airflow during transport

- GB6.29 Airflow in fully enclosed vehicles should be monitored and adjusted as necessary.

- GB6.30 Containers for chicks should be stacked to maximise airflow during transport. Vehicle compartments should allow effective air exchange for juvenile and mature birds being transported.

Handling

- GB6.31 Small birds should be picked up by supporting the body and not lifted solely by the legs.
- GB6.32 When birds are herded, actions should be taken to ensure birds remain calm and injuries, aggression and stress are minimised. This may include darkening the yard entrance by covering raceways or the use of corrals or partitions. Darkening the crate on the transport vehicle may encourage birds to sit down.
- GB6.33 ‘Hooding’ of the head is recommended as a safe and reliable method of aiding restraint for ostrich over six months of age. Hooded birds should be restrained and attended at all times when they are outdoors and when they are indoors in the presence of ostrich that are also hooded. Hooded birds can still kick and move about.
- GB6.34 Experienced handlers can use the wings and pressure on the rump to help guide emus. Care should be taken with handling by the wings as the limbs are easily damaged.
- GB6.35 Ratites should only be picked up by supporting the body.

Note

Effort should be made to reduce stress while ratites are being loaded, transported or unloaded. Ratites can be frightened easily. If allowed to panic and run at high speeds, they can be injured by colliding with fences, vehicles and other items. Farmed ratites may be accustomed to handling and are used to being handled in groups. Flocking behaviour means groups are more easily handled than individuals.

Humane destruction

- GB6.36 Recommended methods for humane destruction include:
- i) for adult birds — a firearm, or sedation followed by captive bolt or decapitation
 - ii) for young birds — stunning by blunt trauma followed by decapitation or bleeding to ensure death.
- GB6.37 A shotgun is the preferred firearm for humane destruction where close restraint is not possible.

Note

Ratites can be shot by firearm using the temporal method: the projectile is aimed to enter the skull midway between the eye and the base of the ear on the same side of the head. The projectile should be directed horizontally (position A in Figure B6.1 and Figure B6.2).

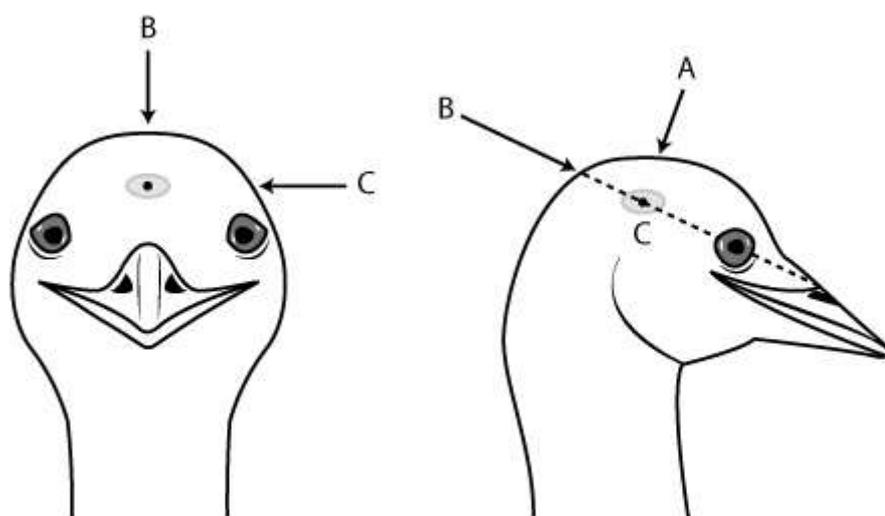


Figure B6.1 Humane destruction of emu

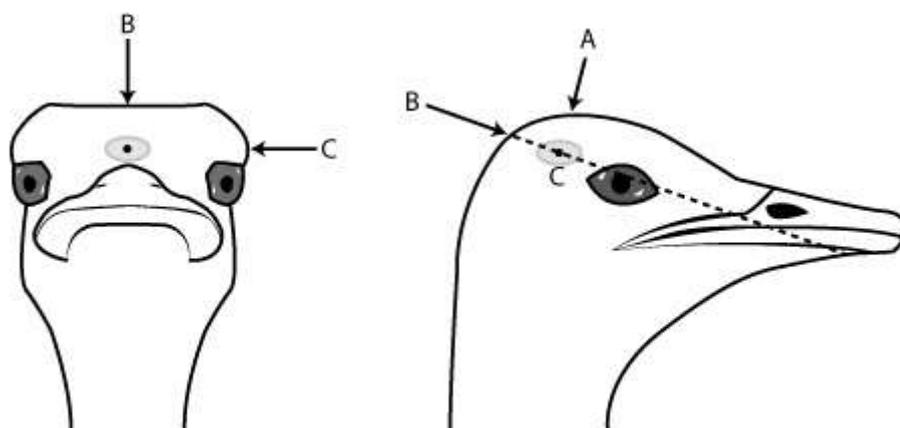


Figure B6.2 Humane destruction of ostrich

B7 Specific requirements for the land transport of goats

Standards

General standards in Part A also apply to minimise risks to the welfare of goats during transport.

SB7.1	Time off water must not exceed the time periods given below:								
	<table><thead><tr><th>Goats</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Goats over 6 months old</td><td>48</td></tr><tr><td>Kids under 6 months old</td><td>28</td></tr><tr><td>Goats known to be more than 14 weeks pregnant, excluding the last 2 weeks</td><td>24</td></tr></tbody></table>	Goats	Maximum time off water (hours)	Goats over 6 months old	48	Kids under 6 months old	28	Goats known to be more than 14 weeks pregnant, excluding the last 2 weeks	24
Goats	Maximum time off water (hours)								
Goats over 6 months old	48								
Kids under 6 months old	28								
Goats known to be more than 14 weeks pregnant, excluding the last 2 weeks	24								
SB7.2	If goats over 6 months old have been off water for 48 hours, they must have a mandatory spell for 36 hours before starting another journey. If kids have been off water for 28 hours, they must have a mandatory spell for 12 hours before starting another journey. If goats known to be more than 14 weeks pregnant excluding the last 2 weeks have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.								
SB7.3	Electric prodders must not be used on goats known to be pregnant.								

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of goats during transport.

Fitness

GB7.1 Additional considerations for goat welfare should be made for long-distance travel:

- for goats over 6 months old after 36 hours off water
- for goats under 6 months old after 20 hours off water
- for goats in the third trimester of pregnancy after 12 hours off water.

These considerations should include:

- i) that the goats are considered fit for the remainder of the intended journey
- ii) that adverse weather conditions are not prevailing or predicted
- iii) a longer spell time at the end of the journey

- iv) the recent management of the goats before first loading.
- GB7.2 A decision to transport a goat with one of the following conditions should be made after considering the welfare of the animal concerned and the treatment and management options. The conditions include unwell, lethargy, profuse diarrhoea, disease, wounds or abscesses.
- GB7.3 Weak goats should be transported directly to the nearest available destination.

Food and water

- GB7.4 All goats particularly lactating and weak goats should be fed dry hay or fibre before transport, allowing for curfew periods as appropriate, to sustain them for the journey.
- GB7.5 Goats to be transported longer than 24 hours should be fed and watered within 5 hours before loading.
- GB7.6 Between mustering and loading, water and feed should be provided for goats if:
- goats are to remain in the yards for more than 24 hours
 - goats are expected to be off water for 24 hours or more during travel
 - goats are weak, lactating, pregnant or with kids at foot
 - goats are fatigued from mustering, have been mustered over a long distance from pastoral country, or have been mustered by helicopter.
- GB7.7 Goats should be fed and watered as soon as possible after unloading.
- GB7.8 Unmanaged goats should be kept in yards or paddocks for at least 3–4 days, and should be drafted and fed water and hay, so that they become accustomed to lot-feeding before transport to a feedlot or depot.
- GB7.9 Goats in the third trimester of pregnancy, lactating goats and kids younger than 7 days should not be deprived of water for more than 12 hours. They should be provided with food and water on arrival and should be spelled for at least 12 hours before starting another journey.
- GB7.10 Goats more than 4 months pregnant should be transported under the following conditions:
- water-deprivation time should not exceed 8 hours
 - feed and water should be provided immediately before loading and on unloading
 - additional space should be provided on the vehicle
 - different classes of goats should be segregated
 - veterinary advice should be sought.
- GB7.11 Under cold conditions in southern Australia, time off water should only be extended under the following conditions:
- weather conditions are considered to be a welfare risk due to windchill hypothermia

- goats are assessed to be fit for the remainder of the intended journey
- the additional time off water is spent on a stationary vehicle or in a facility
- a document states the location, date, start and finish times of the delay.

Loading densities

General standards in Chapter 5 apply to goats to ensure that the loading density is appropriate and is managed to minimise the risk to the welfare of livestock.

GB7.12 The following space allowances should be provided:

Mean liveweight (kg)	Minimum floor area (m ² /head)	Number of head per 12.5 m x 2.4 m deck
20	0.15	200
30	0.17	176
40	0.22	136
50	0.25	120
60	0.28	107

Vehicles and facilities

GB7.13 Kids and newly shorn goats (8–10 days off shears) are susceptible to windchill and should be transported in vehicles with enclosed fronts or provided with protection during weather that could cause heat or cold stress or sunburn.

GB7.14 Ramp slopes for goats should ideally be 20 degrees. Inclines should be no more than 30 degrees for permanently installed ramps, and 45 degrees for portable or adjustable ramps.

Handling

GB7.15 Goats should be handled in small groups, particularly kids and heavily pregnant does, to minimise injury.

GB7.16 Goats should be picked up by supporting the whole body.

GB7.17 Bucks should be segregated from does and young stock with groups of bucks penned separately from all other animals.

GB7.18 Horned goats may be restrained by holding the horn at its base, not at its tip, as this may cause the horn to break.

GB7.19 Where disbudding is applied for dairy goats, this should be carried out at least 7 days before transport.

GB7.20 Horn trimming or removing sharp horn points is recommended to minimise injury to other goats. Where tipping is applied for bucks, horns should be tipped within 2.5–5 cm from the tip (no further down than 2 cm diameter of horn) and for does less than 2 cm from tip to avoid sensitive zones. Tipping, where applied, should be done at least 7 days before transport.

GB7.21 Collars, ropes and chains used to halter goats should be made from materials that will not predispose the animals to injury. If they remain on the animal during transport, precautions should be taken to prevent animals from injury.

Humane destruction

GB7.22 Recommended methods of humane destruction include:

- i) for goats over 6 months old — firearm, captive bolt, lethal injection, bleeding-out
- ii) for kids — firearm, captive bolt, lethal injection, bleeding-out or blunt trauma; however, blunt trauma should only be used when there is no other recommended option for humane destruction, and can only be used on kids that are less than 24 hours old.

GB7.23 The poll method is the preferred method of humane destruction for goats (see Figure B7.1, below). A firearm should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.

GB7.24 If necessary, use of blunt trauma on newborn young of goats less than 24 hours old should be followed by bleeding-out or another technique while the animal is unconscious, to ensure death.

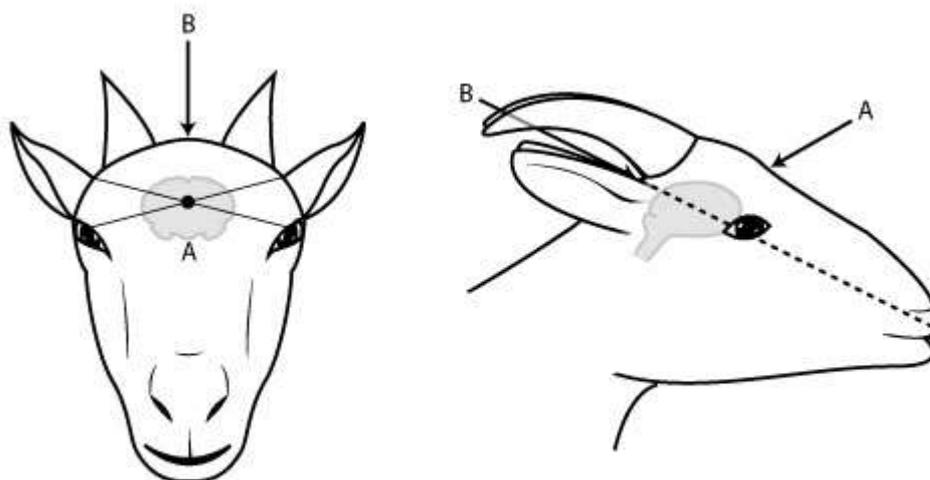


Figure B7.1 Humane destruction of goats using the poll position

Note: (A) indicates the frontal method and (B) indicates the poll method. The dots indicate the point of aim and the arrows indicate the direction of aim for the positions.

B8 Specific requirements for the land transport of horses

Standards

General standards in Part A also apply to minimise the risk to the welfare of horses during transport.

SB8.1	Time off water must not exceed the time periods given below:										
	<table border="1"> <thead> <tr> <th>Class</th> <th>Maximum time off water (hours)</th> </tr> </thead> <tbody> <tr> <td>Horses over 6 months old</td> <td>24</td> </tr> <tr> <td>Lactating mares</td> <td>12</td> </tr> <tr> <td>Foals less than 6 months old</td> <td>12</td> </tr> <tr> <td>Mares known to be more than 7.5 months pregnant, excluding the last 4 weeks</td> <td>12</td> </tr> </tbody> </table>	Class	Maximum time off water (hours)	Horses over 6 months old	24	Lactating mares	12	Foals less than 6 months old	12	Mares known to be more than 7.5 months pregnant, excluding the last 4 weeks	12
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Horses over 6 months old	24										
Lactating mares	12										
Foals less than 6 months old	12										
Mares known to be more than 7.5 months pregnant, excluding the last 4 weeks	12										
SB8.2	Journey time may be extended for horses to 36 hours only under the following conditions: <ul style="list-style-type: none"> i) horses must be watered and fed on the vehicle every 5 hours ii) horses are not exposed to the natural elements iii) there must be sufficient space to allow a comfortable standing position iv) flooring must be suitable including drainage to remove urine v) regular assessments must be made that the horses are fit for the remainder of the intended journey vi) horses must have a mandatory spell for 24 hours before starting another journey. 										
SB8.3	If horses have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey. If lactating mares, foals and pregnant mares known to be more than 7.5 months pregnant excluding the last 4 weeks have been off water for 12 hours, they must have a mandatory spell for 12 hours before starting another journey.										
SB8.4	Mares known to be in the last 4 weeks of pregnancy must be transported under veterinary advice unless the journey is less than 4 hours.										
SB8.5	Horses kept in yards for more than 12 hours or that will be transported for more than 12 hours must be provided with water and feed and space to lie down before loading.										
SB8.6	Foals and young horses being transported for more than 5 hours must have sufficient space to suckle and lie down.										
SB8.7	Moderate to severely lame horses of lameness score 4 and 5 (see below) must not be transported unless veterinary advice is obtained.										
SB8.8	All vehicles must be constructed in a way that ensures each horse stall or pen can be accessed easily for feeding, watering and visual inspection. All vehicles must contain nonslip flooring and walls of sufficient strength to withstand										

	horse activity.
SB8.9	Fully enclosed, environmentally controlled vehicles must have effective airflow, with fans and other equipment providing at least 12 air changes per hour.
SB8.10	A vertical clearance of at least 2.2 m between the livestock crate floor and overhead structures must be provided in any vehicle used for horse transport.
SB8.11	Unbroken stallions must be segregated from other horse categories.
SB8.12	Electric prodders must not be used on horses.
SB8.13	Dogs must not be used to move horses in livestock-handling facilities.
SB8.14	Horses travelling across Bass Strait must be individually stalled, except for mares with foals at foot, which must be stalled together.

Note

Horses are able to be fed and watered on many vehicles.

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of horses during transport.

Fitness

- GB8.1 Additional considerations for horse welfare should be made for long-distance travel:
- for horses over 6 months old after 12 hours off water
 - for lactating mares after 8 hours off water
 - for foals under 6 months old after 8 hours off water
 - for mares in the third trimester of pregnancy after 5 hours off water.

These considerations should include:

- i) that the horses are fit for the remainder of the intended journey
 - ii) that prevailing or predicted weather conditions are favourable
 - iii) additional spell times during the journey
 - iv) a longer spell time at the end of the journey
 - v) the recent management of the horses before first loading.
- GB8.2 Conditions that could adversely affect horse welfare during transport and should be considered in the assessment of fitness for the intended journey. Such conditions might include any signs of colic, raised or lowered body temperature, lethargy, and profuse diarrhoea, disease, or wounds or abscesses. A decision to transport a horse with the above conditions should be made only after considering the welfare of the animal concerned and the treatment and management options.
- GB8.3 Mares in the last trimester of pregnancy and those in early lactation should not be transported for periods longer than 8 hours to reduce the risk of metabolic disease and herpes virus related abortions. They should be spelled for 12 hours before reloading.

- GB8.4 Mares in the last month of pregnancy should not be transported unless under veterinary advice, which should include the following provisions:
- water-deprivation time should not exceed 5 hours
 - feed and water should be provided immediately before loading and on unloading
 - additional space should be provided on the vehicle to enable the mare to lie down
 - the mare should be separated from other horses
 - veterinary advice should be sought.
- GB8.5 Mares that have given birth should not be transported within 7 days of foaling except when under veterinary advice or travelling for treatment. In this case, adequate space for lying down, and bedding, feed and water should be provided. Horses should also be able to be inspected.
- GB8.6 Horses should be at least a body condition score of 2 before transport, as described in the table below. Horses below condition score 2 should only be moved after veterinary advice and for the shortest distance necessary.

Score		Description
0	Very poor	Very sunken rump, deep cavity under tail, skin tight over bones, very prominent backbone and pelvis, marked ewe neck
1	Poor	Sunken rump, cavity under tail, ribs clearly visible, prominent backbone and croup, ewe neck (narrow and slack)
2	Moderate	Flat rump either side of backbone, ribs just visible, narrow but firm neck, backbone well covered
3	Good	Rounded rump, ribs just covered but easily felt, no crest, firm neck
4	Fat	Rump well rounded, gutter along back, ribs and pelvis hard to feel, slight crest
5	Very fat	Very bulging rump, deep gutter along back, ribs buried, marked crest, fold and lumps of fat

Source: Carroll CL and Huntington PJ (1988). Body condition scoring and weight estimation of horses. *Equine Veterinary Journal* 20(1):41-45.

GB8.7 Lameness assessment should be made using the lameness scoring system described in the table below.

Score	Lameness assessment
0	Lameness not perceptible under any circumstances
1	Lameness difficult to observe, not consistently apparent regardless of circumstances (eg weight carrying, circling, inclines, hard surface)
2	Lameness difficult to observe at a walk to trot in a straight line (eg weight carrying, circling, inclines, hard surface)
3	Lameness consistently observable at a trot under all circumstances
4	Lameness obvious, marked nodding, hitching and/or shortened stride
5	Lameness obvious, minimal weight bearing in motion or rest, inability to move

Source: American Association of Equine Practitioners Scale of Lameness Grading (1984)

Food and water

GB8.8 Adult horses should be fed and watered at floor level every 5 hours and as soon as possible after unloading, with a suitable quality and quantity of feed and water to minimise colic risk.

Loading density

General standards in Chapter 5 apply to horses to ensure that the loading density is appropriate and is managed to minimise the risk to the welfare of livestock.

GB8.9 The following minimum space allowances should be provided:

Class of livestock	Floor area (m ² /head) ^a
Adult horses	1.2
Horses 18–24 months	1.0
Horses 12–18 months	0.9
Horses 5–12 months	0.7

^a Figures may increase by up to 10% for adult horses and up to 20% for young horses and foals.

GB8.10 The number of bays provided on the vehicle should be selected according to the duration of travel; the airflow capacity of the vehicle; the size, class and condition of the horses; and whether feed and water is to be provided during the journey.

GB8.11 Mares with foals at foot and young horses should be provided with additional space to allow the foal to suck, and both foals and young horses to lie down as required.

Vehicle and facilities

GB8.12 Pens or stall partitions should be strong and safe, allow air flow and be removable if an animal collapses.

GB8.13 Stalls should be at least 700 mm wide and 2350 mm long to accommodate

larger horses and those over 15 hands tall

- GB8.14 Walls should be padded or constructed using a suitable material to avoid rubbing or injury, from a level of 75 cm above the floor to a height level with the animal's back. Padding may be required to protect the animals' head.
- GB8.15 Bows on body trucks and single-deck semitrailers should be at least 2 m high and padded to their full length to a thickness of 2 cm of soft material.
- GB8.16 A mechanical means of forcing air circulation should be installed for enclosed vehicles, unless vents with natural airflow are provided and are effective. Effective airflow may reduce the impact of heat during transport and travel sickness in horses.
- GB8.17 For controlled environment vehicles, temperature gauges and the airflow system should be checked before transport and every 3 hours during transport. Alarms or a monitoring system should be fitted to alert the driver to any problem.
- GB8.18 Horses may balk from hollow sounds caused by walking on ramps. This can be alleviated by using matting or providing earth, sand or sawdust on the floor of the ramp and vehicle.
- GB8.19 Flooring should be cleaned before transport. Floors should be drained, absorbent or covered with material to absorb urine when transporting for longer durations.

Two-horse trailers

- GB8.20 Where a single horse is being transported in a two-horse trailer, the horse should be placed on the driver's side of the trailer or float.
- GB8.21 Where two horses are travelling in a two-horse trailer, the larger or heavier horse should be penned on the driver's side.

Handling

General standards in Chapter 5 apply to horses to ensure that the loading density is appropriate and is managed to minimise the risk to the welfare of livestock.

- GB8.22 Horses that are unfamiliar to each other may become aggressive or stressed during the journey and should be segregated. The group should be assessed before loading to determine likely aggressive behaviour and whether segregation is needed.
- GB8.23 All stallions should be segregated.
- GB8.24 Unbroken horses, pregnant mares, mares with foals at foot and animals that have health conditions should be segregated.
- GB8.25 Horses should not be routinely sedated for travel. If sedation is necessary, it should be administered by a veterinarian. Sedated horses should be stabilised if possible, segregated and not unduly affected by the motion of the vehicle. Action should be taken immediately on identifying a recumbent horse to separate it from other horses to avoid injury.
- GB8.26 Where horses are rugged, airflow should be appropriate so that horses do not overheat and become dehydrated. Fitted hoods, blinkers, knee or hock caps, pads and bandages may protect horses during transport.

- GB8.27 Where there are no partitions on the vehicle, or where horses are travelling in groups, hind shoes should be removed.
- GB8.28 Manual lifting of foals is permitted for animals that may have difficulty in negotiating ramps.
- GB8.29 Unbroken horses should be trained in basic handling practices before transport.
- GB8.30 Horses should be unloaded during spells to allow exercise.
- GB8.31 Dogs should not be used to move horses.

Humane destruction

- GB8.32 The recommended methods for humane destruction of horses include:
- i) for horses over 6 months old — a firearm aimed in the frontal position or lethal injection
 - ii) for foals under 6 months old — a firearm aimed in the frontal position or lethal injection.
- GB8.33 A rifle shot by the frontal method (see Figure B8.1) is the preferred method of humanely destroying horses. For adult horses, a rifle should deliver at least the muzzle energy of a standard 0.22 magnum cartridge. For foals, a rifle should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge.

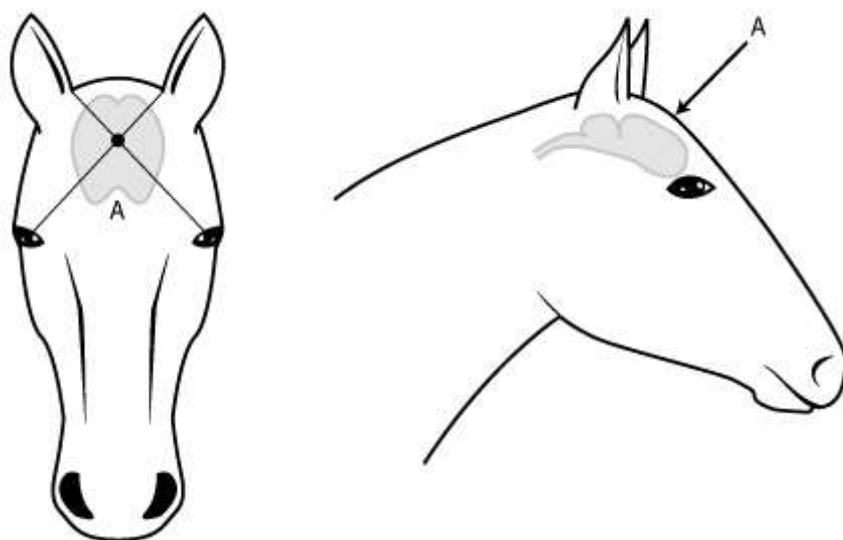


Figure B8.1 Humane destruction of horses using the frontal method

Note: (A) indicates the frontal method. The dot indicates the point of aim and the arrow indicates the direction of aim.

B9 Specific requirements for the land transport of pigs

Standards

General standards in Part A also apply to minimise risks to the welfare of pigs during transport.

SB9.1	Time off water must not exceed the time periods given below:								
	<table><thead><tr><th>Class</th><th>Maximum time off water (hours)</th></tr></thead><tbody><tr><td>Pigs</td><td>24</td></tr><tr><td>Lactating sows and piglets</td><td>12</td></tr><tr><td>Weaners</td><td>12</td></tr></tbody></table>	Class	Maximum time off water (hours)	Pigs	24	Lactating sows and piglets	12	Weaners	12
Class	Maximum time off water (hours)								
Pigs	24								
Lactating sows and piglets	12								
Weaners	12								
SB9.2	Journey time may be extended to 72 hours only under the following conditions: <ul style="list-style-type: none">i) pigs must have access to water and food on the vehicle within every 24 hoursii) there must be space for all pigs to lie downiii) pigs must be assessed regularly to be fit for the remainder of the intended journeyiv) pigs must be provided with water, food and rest for 24 hours before starting another journey.								
SB9.3	If pigs have been off water for the maximum time permitted, they must be provided with water, food and rest for 12 hours before starting another journey.								
SB9.4	Electric prodders must not be used on pigs.								

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of pigs during transport.

Fitness

- GB9.1² Health conditions that could cause pig welfare to decline during transport and should be considered unfit for transport include any of the following:
- i) lameness conditions where a pig is able to walk on its own by bearing weight on all legs
 - ii) tail bite wound
 - iii) fresh rectal, vaginal or perineal prolapse

² This information is based on a yet unpublished, pictorial, fit-to-load guide from Portec Australia, which will be used as a reference once published.

- iv) umbilical, scrotal or traumatic hernias that are ulcerated or injured or of a size greater than 30 cm in diameter should not be loaded and should be destroyed on-farm.
- GB9.2 Transporting sows about to farrow or more than 80 days pregnant should be avoided. Transport of sows should be over short distances. Additional care should be provided, and may include space to lie down on the vehicle, and appropriate feed and water.
- GB9.3 Transport of lactating sows with piglets should be avoided. If transported, the lactating sows should be segregated from all other pigs and the piglets protected appropriately. Additional care should be provided, and may include space to lie down on the vehicle, and appropriate feed and water.

Food and water

- GB9.4 Additional considerations for pig welfare should be made for long-duration travel:
- for pigs after 12 hours off water
 - for lactating sows, piglets and weaners after 8 hours off water
 - for pregnant sows after 8 hours off water.

These considerations should include:

- i) that the pigs are fit for the remainder of the intended journey
 - ii) that adverse hot weather conditions are not prevailing or predicted
 - iii) a longer spell time at the end of the journey
 - iv) the recent management of the pigs before first loading.
- GB9.5 On unloading, pigs should be fed and watered within 24-hour intervals in accordance with the relevant standards for production, saleyard and processing sectors.
- GB9.6 Spells during transport of pigs should be avoided due to the risks of poor welfare associated with unloading and reloading and for biosecurity reasons. For rest stops or unexpected stops, arrangements should be made to protect pigs from the extremes of heat and cold, and provide them with water and feed as necessary.

Loading densities

GB9.7 The following space allowances based on the standing position specified in the table below should be provided:

Average liveweight (kg)	Space allowance (m ² /head) ^a	Number of head per 12.5 m x 2.4 m deck
5	0.04	750
15	0.09	333
25	0.12	250
50	0.22	136
75	0.29	103
100	0.35	85
125	0.42	71
150	0.48	62
175	0.55	54
200	0.61	49
225	0.68	44
250	0.74	40
275	0.81	37
300	0.87	34

^a Based on the standing position

GB9.8 Care should be taken to provide adequate space so that pigs can lie down on transport, particularly when planning for extended journeys.

Vehicles and facilities

GB9.9 In hot weather, strategies should be considered to minimise heat stress and avoid windburn and sunburn. Strategies should include, but are not restricted to, deferring loading or travel during cooler times of the day or at night; using tarpaulins and shade cloth, hoses, sprays, misters; wetting bedding in accordance with biosecurity regulations, providing water; and making sure vehicles transporting pigs are not stationary. As a guide, 5% fewer pigs should be loaded in very hot weather.

GB9.10 In cold weather, loading strategies that minimise cold stress should be considered for classes of pigs that are likely to be more at risk (eg piglets). These strategies should include, but are not restricted to, using vehicles with enclosed fronts; covering sides of the vehicle with tarpaulins or other cover; and providing bedding according to biosecurity regulations. Pigs should not be fed before transport as they often get motion sickness and nausea resulting in vomiting.

GB9.11 Appropriate flooring should be provided when transporting pigs longer than 24 hours. This should include, but is not restricted to, rubber matting, bedding or other material as may be appropriate. There should be a cleaning program for livestock crates in accordance with biosecurity regulations.

GB9.12 The loading ramp should be appropriate to the vehicle and allow optimal movement of pigs. Ideally, ramps should be 900–1000 mm wide and 20 degrees or less in slope.

- GB9.13 The space between the pig and the roof or upper deck should be sufficient to allow clearance at the top of the rump.

Handling

- GB9.14 Pigs should be handled quietly at all times. Pigs should be managed as far as is reasonably possible to ensure that aggression between pigs does not lead to injury or stress during assembly, mixing, loading, penning on the vehicle, transport and unloading.
- GB9.15 When handling or moving pigs, stockpersons should use moving boards, flappers and canes.

Humane destruction

- GB9.16 Recommended methods for humane destruction include:
- i) for pigs — a firearm aimed in the frontal or temporal position, captive bolt aimed in the frontal position
 - ii) for piglets less than 15 kilograms — blunt trauma, firearm and captive bolt.
- GB9.17 For adult pigs, a rifle should deliver at least the muzzle energy of a standard 0.22 magnum cartridge and should be aimed in the frontal or temporal positions for older boars and sows, a 0.30-calibre firearm should be used. For piglets, a rifle should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge and should be aimed in the frontal or temporal positions. Figure B9.1 shows the optimum position for humane destruction of pigs. Blunt trauma is the preferred method for piglets less than 15 kg.
- GB9.18 The chest stick should be used as the preferred method of bleeding-out.
- GB9.19 Pithing of pigs is dangerous and is not recommended.
- GB9.20 If necessary, use of blunt trauma on newborn young of pigs less than 24 hours old should be followed by bleeding-out or another technique while the animal is unconscious, to ensure death.

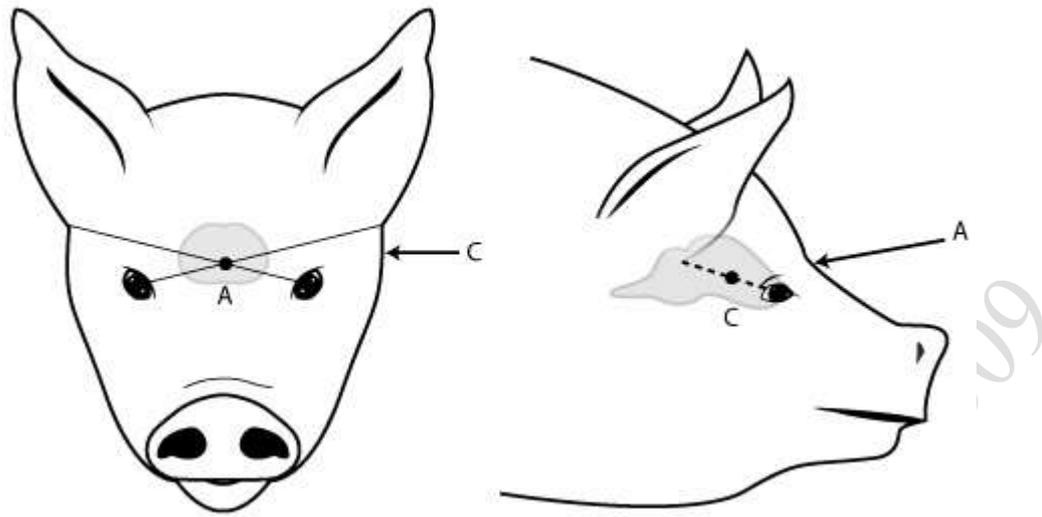


Figure B9.1 Recommended positions for humane destruction of pigs

Note: (A) indicates the frontal method for firearm and captive bolt and (C) indicates the temporal method suitable for firearm only. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions. The aim point for the frontal position is low on the forehead. The positioning lines go from the outside base of the ears to the eyes.

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B10 Specific requirements for the land transport of poultry

Standards

General standards in Part A also apply to minimise risks to the welfare of poultry during transport.

SB10.1 Time off water must not exceed the time periods given below:

Class	Maximum time off water (hours)
Poultry	24
Chicks	60 ^a following take off ^b

^a Normal allowable time off water is 72 hours, allowing 12 hours for hatching time before removal (take off) from the hatchery.

^b Water-deprivation time allowed can be up to 72 hours following take-off if provided with hydrating material in the transport container.

SB10.2 Poultry, excluding chicks, must have access to food within the 12 hours before assembly for transport.

SB10.3 Poultry, excluding chicks, must not be held in containers for more than 24 hours, unless provided with feed, water and shelter.

SB10.4 Containers must:

- i) be lifted and placed with care
- ii) be positioned on the vehicle in an upright position without excessive tilting
- iii) not be dropped or thrown
- iv) be securely attached to the vehicle
- v) be suitable for the intended purpose.

SB10.5 Poultry with broken legs or poultry that are unable to walk must not be transported.

SB10.6 Poultry must not be lifted or carried by the head, neck, wings, feathers or tail feathers unless otherwise supported by the breast. Exceptions are permitted for:

- i) chicken breeder birds and adult geese, which may be lifted and carried by the base of both wings
- ii) turkeys, which may be lifted by the tail feathers and neck or by a leg and a wing
- iii) ducks, which may be lifted and carried by their necks or by the base of both wings.

SB10.7 Legs of poultry must not be tied together.

SB10.8 The transporter must take reasonable action to minimise the risk to the welfare of chicks from chilling and overheating and chicks must be placed in a suitable brooding environment after arrival and within 72 hours of take-off.

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of poultry during transport.

Fitness

- GB10.1 A decision to transport poultry should be made after considering the welfare of the animal concerned and the treatment and management options.
- GB10.2 Stops during transport journeys should be avoided when transporting poultry. Birds should be inspected as far as practical during any stop that has to be made.
- GB10.3 All parties involved in chick transport should have the relevant consignment details, including the numbers of chicks, the date and time of dispatch, anticipated time of arrival and contact details for the relevant person(s).
- GB10.4 Numbers of birds found dead on arrival should be recorded and the information communicated to the consignor and transporter.

Note

Selection of poultry occurs in the weeks before transport as part of the on-farm culling practices by the grower. Effective culling procedures should be in place to ensure that any birds found unsuitable or unthrifty for transport are managed on farm or humanely destroyed before the day of pick-up.

Food and water

- GB10.5 Additional considerations for bird welfare should be made for long-duration travel:
- for breeder birds, pullets and layer hens after 20 hours off water
 - or broilers after 15 hours off water
 - for chicks after 36 hours from take off.
- These considerations should include:
- i) that the birds are fit for the remainder of the intended journey
 - ii) that adverse hot or cold weather conditions are not prevailing or predicted
 - iii) a longer spell time at the end of the journey
 - iv) the recent management of the birds before first loading.
- GB10.6 Poultry, excluding chicks, should have access to food within the 12 hours before assembly for transport, and within 12 hours of removal from their transport containers.
- GB10.7 Birds held in containers in holding for slaughter should be slaughtered as soon as possible.
- GB10.8 Where poultry are sold at auctions, markets or saleyards, they should be unloaded without delay. Poultry should be placed in pens or containers at appropriate densities and provided with food and water as required.

Loading density

- GB10.9 Bird liveweight, available floor space per container, weather conditions and journey conditions should be taken into account when determining the number of birds per container.
- GB10.10 During hot and cold weather, depending on the humidity and air flow, the number of birds per container should be adjusted to keep load temperatures and humidity within an acceptable range.
- GB10.11 All birds should be able to sit on the floor at the same time.
- GB10.12 The following space allowances should be provided:

Category	Floor space
Day-old chicks ^a	455 chicks per m ² (≥22 cm ² floor space)
Poultry up to 1.6 kg	40 birds per m ²
Poultry 1.6–2.2 kg	36 birds per m ²
Poultry 2.2–3.0 kg	28 birds per m ²
Poultry 3.0–5.0 kg	20 birds per m ²
Turkeys 3.0–5.0 kg	25 birds per m ²
Poultry more than 5.0 kg	100 cm ² per kg
Adult pigeons	450 cm ² /bird
Squabs	200 cm ² /bird

^a Chicks in hot weather should have the density reduced and in cold weather this density may be increased to 472 chicks/m² (21 cm² per chick). Heavier meat chicks (≥50 g) should have more area.

Note

General standards in Chapter 5 apply to poultry to ensure that the loading density is appropriate and to minimise the risk to the welfare of birds.

Vehicle and facilities

Temperature

- GB10.13 Birds being transported in cold conditions may be affected by windchill, particularly if they are wet. Birds, both at the front and the back of the vehicle, should be protected from the extremes of the weather while being transported, as the temperature between the top and bottom and front and back of the vehicle can differ significantly.
- GB10.14 Suitable covers that enable sufficient natural airflow should be used to protect birds in containers from wind and rain, and from cold conditions. Careful consideration should be given to the use of side covers, as these can significantly reduce air flow through the load, and prevent adequate airflow.
- GB10.15 The air temperature in a load of live poultry, other than day-old chicks should be maintained between 10–30°C. For chicks, temperatures should be maintained between 25–35°C.
- GB10.16 If temperature exceeds 30°C when transporting poultry (excluding chicks), or while waiting to unload at the processing plant, vehicles should not be left stationary, without shade, fans, misters, or other cooling being provided.
- GB10.17 Delays in transport should be minimised for chicks.
- GB10.18 Chicks that cannot be brooded within 72 hours of take-off should be

humanely destroyed.

- GB10.19 Where facilities are not available for protection from the weather, birds in transit or waiting unloading for slaughter should not be required to remain in a parked vehicle for more than 2 hours.
- GB10.20 Arrangements made for the pick up, transport and slaughter should ensure that the time the birds remain in containers from pick-up to processing is minimised, particularly in hot weather.

Note

Stops during transport journeys are undesirable when transporting poultry. Routine inspections when transporting poultry are also not advised as stationary vehicles may not have optimal airflow and temperature levels for poultry being transported.

Time spent in containers is calculated from the time of placement into the container, not the time transport begins. Travel, including the time catching and unloading, must be completed within 24 hours for poultry, excluding chicks, unless feed and water is provided.

Vehicles

- GB10.21 Airflow in fully enclosed vehicles should be monitored and adjusted as necessary.
- GB10.22 Containers and boxes for chicks should be stacked in a way that facilitates airflow during transport.
- GB10.23 Birds should be carried in properly designed containers to prevent toe and foot damage when they are moved or stacked, and the containers should be strong enough to prevent the possibility of collapse when stacked.
- GB10.24 Container doors should be as large as practical, and openings for meat chickens are recommended to be 20 cm wide and 22 cm high or greater. The following transport container heights are recommended:

Category	Minimum height (cm)
Chicks, turkey poults, ducklings	12
Squabs	15
Meat chickens	23
Pullets, ducks, end-of-lay hens, meat and layer breeder birds	25
Turkeys	32

- GB10.25 Turkey containers should be appropriately designed to minimise injury if birds are allowed to stand.

Handling, catching and loading (pick-up)

- GB10.26 Care should be taken when carrying meat chickens to reduce the risk of injury and to keep birds calm. For meat chickens weighing less than 1.7 kg loaded by hand, the maximum carried should be 11 birds, with 5–6 chickens in each hand.

- GB10.27 For meat chickens weighing more than 1.7–2 kg, the maximum number of birds carried should be 4–5 birds at a time in each hand, depending on their liveweight.
- GB10.28 Layer or breeder hens may be carried in a manner that allows up to 4 or 5 birds to be carried at a time in each hand, depending on their liveweight.
- GB10.29 When removed from cages, end-of-lay hens should be held either firmly around the body or by both legs, not by a single leg, which could cause injuries. A breast support slide should be used for end-of-lay hens.
- GB10.30 During assembly and pick-up of caged end-of-lay hens, transport containers should be placed as close as possible to the cages to minimise handling and carrying birds, subject to biosecurity arrangements.
- GB10.31 When loose housed birds are assembled, actions should be taken to ensure birds are calm and smothering is prevented. This may include adjusting light intensity, or the use of corrals or partitions.
- GB10.32 Conveyors should not be on steep angles or operated at speeds that cause birds to smother.
- GB10.33 Where possible, food troughs, drinkers and moveable perches should be removed from the catching area before catching begins.

Note

Particular care needs to be taken with end-of-lay hens and meat chickens to reduce the risk of injury and to keep birds calm.

Humane destruction

- GB10.34 The recommended methods for humane destruction of poultry include cervical dislocation of birds less than 6 kg or decapitation.
- GB10.35 Cervical dislocation should only be performed when competent operators can guarantee success at the first attempt.

Note

Cervical dislocation involves partial separation of the head or brain from the spinal cord. The resulting damage to the nervous system leads to cardiac and respiratory arrest and death. The method requires a high degree of skill to be humane.

B11 Specific requirements for the land transport of sheep

Standards

General standards in Part A also apply to minimise risks to the welfare of sheep during transport.

SB11.1 Time off water must not exceed the time periods given below:

Class	Maximum time off water (hours)
Sheep over 4 months old	48
Lambs under 4 months old	28
Ewes known to be more than 14 weeks pregnant, excluding the last 2 weeks	24

SB11.2 If sheep over 4 months old have been off water for 48 hours, they must have a mandatory spell for 36 hours before starting another journey.

If lambs under 4 months old have been off water for 28 hours, they must have a mandatory spell for 12 hours before starting another journey.

If ewes known to be more than 14 weeks pregnant excluding the last 2 weeks have been off water for 24 hours, they must have a mandatory spell for 12 hours before starting another journey.

Guidelines

General guidelines are also recommended in Part A to minimise the risk to the welfare of sheep during transport.

Fitness

GB11.1 Additional considerations for sheep welfare should be made for long-distance travel:

- for sheep over 4 months old after 36 hours off water
- for lambs under 4 months old after 20 hours off water
- for ewes in the third trimester of pregnancy after 12 hours off water.

These considerations should include:

- i) that the sheep are considered fit for the remainder of the intended journey
- ii) that adverse weather conditions are not prevailing or predicted
- iii) a longer spell time at the end of the journey
- iv) the recent management of the sheep before first loading.

- GB11.2 A decision to transport a sheep with one of the following conditions should be made only after considering the welfare of the animal concerned and the treatment and management options. The conditions include unwell, lethargy, profuse diarrhoea, disease, wounds, abscesses, flystrike or pizzle rot.

Food and water

- GB11.3 Sheep should be fed dry hay or fibre before transport to sustain them for the journey, particularly if they are lactating or weak. Consideration should be given to the impact of seasonal conditions and feed type when determining the appropriate water-deprivation time(s) for sheep.
- GB11.4 Between mustering and loading, taking into account curfew requirements, water and feed should be provided for sheep if:
- sheep are to remain in the yards for more than 24 hours
 - sheep are expected to be off water for 24 hours or more during travel
 - weak sheep, ewes with lambs at foot or pregnant ewes are travelled
 - sheep are fatigued from mustering, have been mustered over a long distance from pastoral country, or have been mustered by aircraft.
- GB11.5 Sheep more than 3 months pregnant (third trimester) should be transported under the following provisions:
- additional space should be provided on the vehicle
 - different classes of sheep should be segregated
 - feed and water should be provided at the destination
 - veterinary advice should be sought.
- GB11.6 Sheep should be fed and watered as soon as possible after unloading.
- GB11.7 Under cold conditions in southern Australia, time off water should only be extended under the following conditions:
- i) weather conditions are considered to be a welfare risk due to windchill hypothermia
 - ii) sheep are assessed to be fit for the remainder of the intended journey
 - iii) the additional time off water is spent on a stationary vehicle or in a facility
 - iv) a document states the location, date, start and finish times of the delay.

Loading densities

General standards in Chapter 5 apply to sheep to ensure that the loading density is appropriate and is managed to minimise risks to the welfare of livestock.

GB11.8 The following minimum space allowances should be provided:

Mean liveweight (kg)	Minimum floor area (m ² /head) ^a	Number of head per 12.5 m x 2.4 m deck
20	0.17	176
30	0.19	157
40	0.22	136
50	0.25	120
60	0.29	103

^a Based on average liveweight, wool of 25 mm length, and no horns.

GB11.9 The above stocking densities represent the minimum area that should be allowed for a group of sheep or lambs that have an average live weight as specified and in half wool. As wool length increases, the floor area allowed for each animal should increase, or decrease for newly shorn sheep. An increased area per animal should also be allowed where sheep are horned.

GB11.10 Care should be taken to ensure that an adequate number of sheep are included in each pen so as to provide an appropriate level of stability throughout the journey and reduce the likelihood of injury due to movements of the vehicle.

Vehicle and facilities

GB11.11 Ramp inclines should be no more than 30 degrees for permanently installed ramps, and 45 degrees for portable or adjustable ramps.

GB11.12 Lambs and newly shorn sheep (up to 10 days off-shears) are susceptible to windchill and should be transported in vehicles with enclosed fronts or provided with protection during weather that could cause heat or cold stress or sunburn.

Handling

GB11.13 Sheep have a high level of herding instinct and handling techniques should use this behaviour to handle sheep with minimal stress.

Humane destruction

GB11.14 Recommended methods of humane destruction include:

- i) for sheep over 6 months old — firearm, captive bolt, lethal injection or bleeding-out
- ii) for lambs — firearm, captive bolt, lethal injection, bleeding-out or blunt trauma; however, blunt trauma should only be used when there is no other recommended option for humane destruction, and can only be used on lambs that are less than 24 hours old.

GB11.15 A firearm should deliver at least the muzzle energy of a standard 0.22-long rifle cartridge. The poll method is the preferred method for sheep (see Figure B11.1).

GB11.16 If necessary, use of blunt trauma on newborn young of sheep less than 24 hours old should be followed by bleeding-out or another technique while unconscious to ensure death.

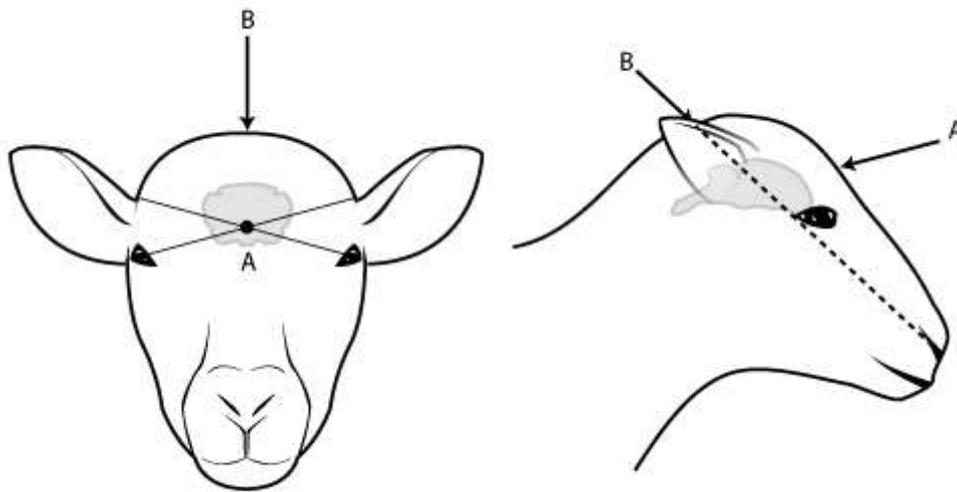


Figure B11.1 Recommended position and direction of fire for humane destruction of sheep

Note: (A) indicates the frontal method and (B) indicates the poll method. The dots indicate the point of aim and the arrows indicates the direction of aim for the positions.

Glossary

access to water	A reasonable opportunity for livestock to be able to drink water of a suitable quality and quantity to maintain their hydration.
agent	A person involved in the buying and selling of livestock for production, sale or slaughter. A person who acts on behalf of someone else. Includes a livestock buyer.
airflow	Natural or mechanically induced air movement sufficient to provide oxygen and remove excessive heat load and noxious gases.
alpaca	<i>Vicugna pacos</i> . A domesticated South American camelid. Alpacas begin life as crias and grow into tuis (adolescents), hembras (adult females) and machos (adult males).
animal	Synonymous with livestock. In these standards, animals include all classes of cattle, sheep, goats, pig, horses, poultry, emus, ostrich, alpaca, deer, camel and buffalo.
animal welfare	The wellbeing of the livestock under discussion, collectively, or as a single species or animal.
arrangement	An agreement with another person to take reasonable action to deal with a problem.
assembly	The process of bringing livestock together in a yard, shed, container or cage before loading for transport. Assembly includes mustering or capture, handling, drafting or selection, restraint and all procedures on livestock that might take place in preparation for transport.
at the first opportunity	Means that the appropriate action for livestock is undertaken without delay except where a reasonable delay is caused by a significant reason relating to resources, skills, safety or the immediate welfare of other livestock.
bleeding-out	Loss of blood caused by cutting the major blood vessels, usually in the neck or at the base of the heart via the thoracic inlet.
blunt trauma	A single blow to the forehead, causing immediate loss of consciousness.
boar	An uncastrated male pig over 9 months of age.
bobby calf	A calf not accompanied by its mother, less than 30 days old, weighing less than 80 kg liveweight, and usually a dairy breed or cross.

bonded guardian dog	Bonded guardian dogs are those dogs that live and are accepted within a flock or herd of another species on a permanent basis.
buck	A mature, entire male goat.
buffalo	<i>Bubalus bubalis</i> , the Asian swamp buffalo.
calf	Cattle less than 6 months old.
calf feed	A liquid feed for a calf between 5 and 30 days old providing whole milk or milk replacer in quantities appropriate for the size, age and frequency of feeding.
camel	<i>Camelus dromedarius</i> .
carrier	A person who is contracted to transport livestock.
category	Means the same as 'class'.
cattle	Genus <i>Bos</i> .
changeover	A change of driver or vehicle during a journey.
chicks	Poultry under 72 hours old, commonly known as 'day-old chicks'.
class	A group of a livestock species defined by age, size or sex. Lactating livestock with young at foot are considered as a single class. Means same as 'category'

competency A person is judged competent for a task when they can demonstrate the knowledge, skills, attitude and behaviour to undertake the requirements of these standards to transport livestock in a manner that does not compromise livestock welfare.

Elements of competency for livestock transport include:

- i) livestock handling
- ii) inspecting and assessing livestock
- iii) maintaining records
- iv) planning
- v) contingency procedures
- vi) humane destruction
- vii) understanding responsibilities.

Supporting evidence of competency includes any of the following:

- i) records of on-the-job training
- ii) relevant experience
- iii) recognised training and staff training registers
- iv) induction training
- v) supervisor sign-off for specific tasks.

consignors Consignors of livestock are usually the owners of the livestock but may also include agents, drivers and transport companies, poultry pick-up crews and personnel from properties, saleyards, feedlots, depots and livestock-processing plants, who handle livestock to be transported.

construction Nature of facilities or equipment includes the design, layout, installation, assembly of the facilities and vehicles and the materials of which they are made.

container(s) Crates, boxes or cages for transporting poultry.

cria Young alpaca under 6 months old.

crate Any construction on or attached to a vehicle intended for transporting livestock, including trailers.

curfew The withdrawal of access to water and sometimes feed before another procedure, such as weighing, leading to transport. This dry period is included in the total water-deprivation time. This dry period is not part of a spell.

cush The act of sitting down on the sternum with legs underneath the body.

deer	Species of deer include <i>Crevus timorensis</i> (rusa or sambar), <i>Dama dama</i> (fallow), <i>Cervus elapus</i> (red), <i>Cervus Canadensis</i> (elk) and any crosses.
depot	Facilities or yards where livestock may be rested between journey(s) or holding facilities in a particular region where livestock are delivered from farms for assembly before a journey.
document	<p>A document for livestock movements is any written record. It may be, but is not restricted to:</p> <ul style="list-style-type: none"> • an existing document, such as a consignment sheet, health certificate, national vendor declaration or equivalent, an invoice, a waybill, a diary entry or other documentation • another record that shows the person(s) in charge responsible for livestock during the transport process, including yards.
doe	Female goat.
downer	An animal that is lying down and appears unable to rise.
driver	<p>A person who transports livestock on a vehicle and is self employed, or employed by a livestock transport company or another business, including a livestock business.</p> <p>Any operator of a livestock transport vehicle.</p>
duty of care	The responsibility for livestock welfare expected by a person in charge of livestock. It applies to any person who is charge of livestock at any time and is in the position to take reasonable action to minimise the risk to livestock welfare. This person will be held accountable.
emaciated	Extremely thin body condition due to starvation or disease.
emergency cold conditions	Chilling conditions that develop en route and that are considered by the driver to present a risk to the welfare of susceptible livestock (especially sheep and goats). Appropriate actions may include stopping the vehicle until warmer conditions prevail or unloading the livestock into a shed.
emu	<i>Dromaius novae-hollandiae</i> .
end-of-lay hens	Hens that are removed from commercial egg production and usually destined for slaughter.

equine lameness score	<p>The American Association of Equine Practitioners 1984 has a Scale of Lameness Grading, as follows:</p> <ul style="list-style-type: none"> • Score 0 — Lameness not perceptible under any circumstances • Score 1 — Lameness difficult to observe, not consistently apparent regardless of circumstances (eg weight carrying, circling, inclines, hard surface) • Score 2 — Lameness difficult to observe at a walk to trot in a straight line (eg weight carrying, circling, inclines, hard surface) • Score 3 — Lameness consistently observable at a trot under all circumstances • Score 4 — Lameness obvious, marked nodding, hitching and/or shortened stride • Score 5 — Lameness obvious, minimal weight bearing in motion or rest, inability to move.
extremes of weather	Temperature and climatic conditions (eg rain, hail, snow, wind, humidity and heat) that — individually or in combination — are likely to predispose livestock to heat or cold stress.
facilities	<p>See <i>Livestock-handling facility</i>.</p> <p>Yards, depots, saleyards, lairage, portable yards and ramps.</p>
fawn	Young deer under 6 months of age, also known as a calf.
feed	Cattle, sheep, goats, horses and deer require 2% of body weight of hay per day suitable for the species or equivalent weights of alternative feed sources. Pigs require 3% of body weight of a formulated ration per day.
firearms energy specifications	<p>The standard 0.22-long rifle cartridge means the use of any 0.22-rim fire cartridge that produces in excess of 100 foot pounds of energy at the muzzle (135.6 joules).</p> <p>The standard 0.22-magnum cartridge means the use of any 0.22-rim fire magnum cartridge that produces in excess of 300 foot pounds of energy at the muzzle (406.7 joules).</p> <p>The centre-fire cartridge means the use of any centre fire cartridge that produces in excess of 1000 foot pounds of energy at the muzzle (1355.8 joules).</p>

fit or fit for the intended journey

Livestock are of sufficient health, vigour and condition if they can withstand the intended journey.

Elements of fit include:

- able to walk on their own by bearing weight on all legs
- not severely emaciated
- not be visibly dehydrated
- not showing visible signs of severe injury or distress
- free from conditions that are likely to cause increased pain or distress during transport
- not blind in both eyes
- not known to be, or visually assessed not to be within 2 weeks of parturition unless the water-deprivation time and journey is less than 4 hours' duration.

Following the intended journey, they can recover their normal biological state in a reasonable time.

foal

Young unweaned horse under 6 months old.

gestation lengths

Species	Gestational range (days)	Gestation average (days)	Gestation average (months)	Third trimester begins at (months)
Alpaca	315–345	335	11.2	7.4
Buffalo	320–340	325	10.8	7.3
Camel	370–440	400	13.3	9
Cattle	279–290	285	9.5	6
Deer (Sambar)		240	8	5.3
Others		230–255		
Goat	144–151	150	5	3.3
Horse	310–365	340	11.3	7.5
Pig	112–117	115	3.8	2.5
Sheep	144–152	150	5	3.3

goad

Handling aid.

goat

Capra aegagrus hircus and other members of the genus *Capra*.

guidelines

The guidelines complement the standards, are advisory, and are intended to provide a basis for good livestock welfare practices.

See *Standards*.

handling aid

A device to move livestock, including electric prodders, flappers, flags, moving boards, rattles or noise makers.

heat stress	When the response by animals to hot conditions above their thermo-neutral limit exceeds the ability of their behavioural, physiological or psychological coping mechanisms.
horse	<i>Equus caballus</i> (all breeds), as well as <i>Equus asinus</i> and its many breeds. Horses also include mules, which is a hybrid of a male ass (jack) and a mare, and a hinny, which is the less common hybrid of a female ass (jenny) and a stallion.
humane destruction	The activity that results in immediate loss of consciousness and then death of the animal. The primary consideration is to prevent the animal from suffering further pain or distress.
inspection of livestock	The visual appraisal of the health of each animal at rest including the ability to walk when they are not on a vehicle or in a container.
journey	The movement of livestock from loading to unloading at a destination.
journey time	The time that animals are loaded in a container or on a vehicle, until they are unloaded.
kid	Young, unweaned goat under 6 months old.
lairage	Abattoir holding yard and facilities.
lamb	Young sheep under 4 months old.
lame	A condition where an affected animals is able to put little, if any, weight on one or more of its legs. Horses have a lameness grading system (see <i>Equine lameness score</i>).
lethal injection	An overdose of a recognised anaesthetic or analgesic agent delivered by a veterinarian or a person approved to do so, leading to a loss of consciousness and or death. An injection of an agent to cause death in an unconscious animal.
lift	Lifting off the ground. Handling of the head, neck, horns, ears, tail or wool to control or steady an animal in a supported lift or other manoeuvre, is permitted where the major effort is whole body support, and not using one or a combination of the above body parts for the major effort.
livestock	The species as defined under <i>Animal</i> .
livestock consignor	Means the same as ‘consignor’.
livestock crate	A structure on a vehicle used for transporting livestock, excluding poultry that are transported in containers.

livestock-processing plant	Abattoir or premises used for the slaughter of livestock and production of meat or meat products.
livestock-handling facility	Any yard, raceway, ramp, crush, building or enclosure used for the purposes of handling livestock for holding, loading and unloading, including a saleyard, depot, lairage and portable facilities. Does not include a paddock or laneway with conventional wire fencing.
loading	Placing of livestock onto a vehicle; includes pick-up of caged poultry and vehicle-to-vehicle transfers.
loading density	The amount of space provided for an animal in a crate or container, or the number of animals per area provided in a crate or container.
moribund	A downer animal that is unable to stand, exhibits signs of distress or insensibility, and is assessed to have little chance of regaining the capacity to stand and walk unassisted after reasonable attempts have been made to assist it.
nature of the journey	Includes duration, distance, route, road conditions, terrain, traffic, prevailing weather and any other factors that could affect a journey for livestock.
ostrich	<i>Struthio camelus</i> .
owner	A person or company who owns livestock.
persons at destination	Means the same as 'receiver'.
person in charge	The person who is responsible for the welfare of the livestock at the times they are in charge for each stage of each journey, including before loading and after unloading. Responsibility for duty of care for livestock welfare may extend to the person's employer.
pick-up	The assembly and loading of poultry into containers and onto the transport vehicle.
pick-up crew	Personnel collecting poultry for transport or transporting poultry.
pig	<i>Sus scrofa domestica</i> and all other members of the genus <i>Sus</i> .
piglet	Young, unweaned pig.
pithing	The process of destroying nervous tissue in and around the brainstem to ensure death by either inserting a rod into the hole created by a projectile or transecting the spinal cord at the foramen magnum.
poultry	Domestic fowls, turkeys, geese, ducks, guinea fowls, quails, pigeons and pheasants and partridges reared or kept in captivity for breeding; and the production of meat or eggs for consumption or for restocking supplies of game park enterprises.

ramp	A stockyard structure used for loading and unloading livestock.
ratite	Any bird species that cannot fly because its smooth or raftlike sternum (breastbone) lacks a keel to which flight muscles can be anchored. In these standards, ratites refer to the emu and ostrich.
reasonable action	Those actions regarded as reasonable to be done by an experienced person in the circumstances to address a problem. Can be further determined by a process of arbitration (the final process of arbitration being in a court of law).
receiver	A person(s) at the destination who is/are responsible for receiving the livestock. They may include consignee's, owners, operators and staff of properties, feedlots, saleyards, depots and livestock-processing plants. There is also a responsibility for livestock welfare that extends to company management at the destination.
record	A written document or an accessible electronic record.
rest period or rest stop	A driver rest stop, where the vehicle is stationary and animals usually remain on the vehicle without access to water or food. Livestock are inspected on the vehicle but it is not recognised as a spell for livestock.
risk to welfare of livestock	The potential for a factor to affect the welfare of livestock in a way that causes pain, injury or distress to livestock. The outcome could include sunburn, hypothermia, heat stress, dehydration, exhaustion, abortion, injury, metabolic disease or death. These risks can be managed by undertaking reasonable actions to prevent or reduce the risk.
saleyard	Premises where livestock are gathered and ownership of livestock is exchanged; that is, livestock are bought and sold.
salvage operation	A rescue operation where livestock are required to be moved to slaughter, treatment or better circumstances.
sea journeys	The master of the marine vessel is responsible for the welfare of livestock on roll-on/roll-off livestock transport vehicles that are not able to be attended by their drivers during the sea journey.
segregate	To separate by physical and/or visual means.
selection of livestock	The process of inspection to ensure that livestock are assessed to be fit for the intended journey and the actions taken during the inspection to present the livestock for loading and transport.
sheep	<i>Ovis aries</i> and other members of the genus <i>Ovis</i> .
southern Australia	That part of Australia south of latitude 26 degrees south.
sow	An adult female pig that has had one or more litters.

spell — mandatory	<p>A spell is a mandatory requirement when maximum time off water is reached before starting a further journey, as defined by standards for each species.</p> <p>A mandatory spell is where a standard requires an animal to be spelled.</p> <p>Water, food and space to lie down must be provided to all livestock, on a stationary vehicle or off a vehicle. Where animals are unloaded, a spell starts from the time all animals are unloaded and ends when animals are handled for reloading. Handling of animals should be kept to a minimum.</p>
spelling, spell or spelling period — voluntary	<p>A spell may occur voluntarily before loading, mid-journey or at the completion of a journey.</p> <p>Water and space to lie down must be provided to all livestock, on a stationary vehicle or off a vehicle. Food and shelter may also be provided. A spell must be a minimum of 4 hours to be recognised for the provision of water and rest.</p> <p>Where animals are unloaded, a spell starts from the time all animals are unloaded and ends when animals are handled for reloading.</p> <p>The time used for spells of longer than 4 hours during the journey will not be included in the calculation of the total time off water. A spell less than 4 hours duration is not recommended or recognised for water-deprivation time calculation, but can be undertaken as necessary.</p> <p>Where livestock are spelled for 24 hours, any subsequent journey can be considered as a new water deprivation period.</p> <p>A spell does not include time spent in curfew.</p>
standards	<p>The acceptable animal welfare requirements that are designated in the standards section of this document. The requirements that must be met under law for livestock welfare purposes.</p>
stock handler	<p>A person who handles or moves livestock. A stockman or stockperson.</p>
stop	<p>Any time that a livestock transport vehicle is stationary for any purpose. It may be an opportunity to inspect livestock but is otherwise irrelevant for the management of livestock transport. Care may need to be taken with the impact of prevailing climatic conditions on livestock. Same as driver rest stop.</p>
stress	<p>A response by animals that activates their behavioural, physiological or psychological coping mechanisms.</p>
stun	<p>To make an animal unconscious.</p>

supplier	See <i>Livestock consignor</i> .
time off water	When water is not reasonably accessible for livestock. Equivalent to <i>Water-deprivation time</i> . Time off water is cumulative from the last time the animals were provided with water during the transport process this minimum reasonable access period is 4 hours.
transporter or transport operator	The driver of the vehicle. A person who transports livestock on a vehicle and is self employed or employed by a livestock transport company or another business (including a livestock business). Any operator of a livestock transport vehicle.
unbroken horse	A horse that has not been handled and cannot be led or restrained by a halter.
under control	In relation to working dogs, ‘under control’ means that they are fully responsive to the commands of a stockperson at all times while mustering livestock.
vehicle	The moving conveyance in which the animal is transported, including the means of propulsion. For example, the prime mover, livestock crate, container, and wagon or locomotives, ancillary trailer, rigid body truck or other road transport.
velvet	Velvet is the skin covering the highly vascular spongy tissue that later matures into calcified hard antler. Deer are said to be ‘in velvet’ if the antler is >4 cm of velvet or >4 cm of hard antler.
veterinary advice	Advice from a veterinarian registered in Australia. A veterinarian offering advice or services has a responsibility to ensure that they are competent on the subject in question.
water	Water of sufficient quality as defined by the <i>Australian and New Zealand Water Quality Guidelines 2000</i> (Chapter 4.3) and presented in a manner such that animals will drink enough to maintain health and hydration. Issues include temperature, salinity, and method of presentation, previous experience, taste and smell. See http://www.mincos.gov.au/pdf/anz_water_quality/wqg-ch4.pdf

water-
deprivation time

The total time animals are deprived of water, including during mustering away from water, yarding and water curfew time before transport, loading, time on the vehicle whether moving or stationary unless reasonable access to water is provided, and time during unloading and holding at the destination until reasonable access to water is provided, and time during unloading and holding at the destination until reasonable access to water is provided.

Where a voluntary spell exceeds four hours, the time that water is provided to livestock during the spell can be used to extend the total time of the trip within the permitted maximum time off water if the livestock meet the fit requirements.

See *Time off water*

Where a voluntary spell exceeds four hours, the time that water is provided to livestock during the spell can be added to extend the total time of the trip if the livestock meet the fitness requirements.

See *Time off water*

weak

Livestock that are sufficiently affected so they do not meet the 'normal' criteria for the journey but are able to be managed for successful transport without further compromising the welfare of the livestock.

weaner pig

A pig that has been weaned from the sow up to 30 kilograms liveweight.

Prepared by:



On behalf of:

Australian and jurisdictional governments, livestock industries and related organisations.
www.animalwelfarestandards.net.au