2012 REVISED EDITION

A GUIDE TO

TASMANIAN DAIRY CATTLE WELFARE

This guide was prepared by the Dairy Animal Health & Welfare Action Group as part of the Tasmanian Dairy Industry Strategic Plan.

MAY 2012

Background

The aim of this document is to improve the welfare of dairy cattle in Tasmania. While every effort has been made to ensure the information provided in this document is accurate and up-to-date, welfare standards and guidelines are continuing to be updated. Links to where the latest information on animal welfare standards and guidelines can be found are provided in the appendix.

This revised version (2nd version, 2012) was written by Lesley Irvine (TIA) in conjunction with the Dairy Animal Health and Welfare Action Group, comprising representatives from:

- TIA
- TFGA
- DairyTas
- Fonterra
- DPIPWE
- RSPCA
- Smithton Veterinary Service
- VDL
- Kraft
- TDIA

The Guide to Tasmanian Dairy Cattle Welfare:

Written by

Funded by

Chaired and administered by

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This information has been published for your information only. It is published with due care and attention to accuracy but the Action Group accepts no liability if for any reason the information is inaccurate, incomplete or out of date. The information provided is a guide only.

Foreword

The Tasmanian dairy industry takes its responsibilities for animal welfare seriously and strives to operate at best practice commercial standards. We strongly supported the development of the initial Guide to Tasmanian Dairy Cattle Welfare and we believe it is a valuable resource, providing practical information and guidance for dairy farmers.

The guide was produced by all industry sectors including farmers, processors, lobby groups, welfare groups, veterinarians and government,. This co-operative approach demonstrates the dairy industry's commitment to deliver good animal welfare including continuous improvement where relevant.

The animal husbandry practices used by Tasmanian dairy farmers are intrinsically linked with animal welfare. Most dairy farmers realise to deliver safe, quality dairy products, they must practice sound animal husbandry and keep their animals in peak condition.

The dairy industry does not support bad animal husbandry practices. We need to ensure all interested groups understand that we do deliver good animal welfare through our existing husbandry practices. However, to continue to grow as a competitive, innovative and sustainable industry, it is essential that we are able to objectively demonstrate and communicate our credentials in animal welfare.

As part of our commitment to continuous improvement, we have recently reviewed and updated the Guide. The changes to the Guide made as a result of this review reflect improved knowledge and technology which enable us to deliver better animal welfare outcomes.

It therefore gives me great pleasure to present this revised edition of the dairy industry's *A Guide to Tasmanian Dairy Cattle Welfare*.

Yours sincerely

Andrew Lester

Chairman

Dairy Animal Health & Welfare Committee

Table of Contents

INTRODUCTION

Dairy farmers rely on their animals for their livelihoods. Healthy and contented cows are more productive and are less prone to disease. The Tasmanian *Animal Welfare Act* (1993) states that 'a person who has the care or charge of an animal has a duty to take all reasonable measures to ensure the welfare of the animal.' Animal welfare isn't just about 'the herd', it is about individual animals and the Tasmanian dairy industry is committed to ensure that every animal on the farm is managed to provide good animal welfare.

Those responsible for the care of dairy cattle should be competent, well trained and know their responsibilities under the Tasmanian *Animal Welfare Act (1993)*. Everyone involved in the care and handling of cattle should be able to recognise normal and abnormal behaviour of the animals they are responsible for. Personnel who are inexperienced with animal husbandry should be given formal or on-the-job training with an experienced supervisor. It is also important that there are **enough** people to ensure the appropriate standard of care is given.

The five freedoms

A commonly accepted assessment of animal welfare is the Five Freedoms which states that farm animals should have:

1. **Freedom from thirst, hunger and malnutrition** – by ready access to fresh water and a diet to maintain full health and vigour.
2. **Freedom from discomfort** – by providing a suitable environment including shelter and a comfortable resting area.
3. **Freedom from pain, injury and disease** – by prevention or rapid diagnosis and treatment.
4. **Freedom to express normal behaviour** – by providing sufficient space, proper facilities and company of the animals own kind.
5. **Freedom from fear and distress** – by ensuring conditions that avoid mental suffering.

Farmers who apply these principles of animal welfare will reap the rewards of a healthy and productive dairy herd.

Outline

This guide outlines the key management principles of a dairy herd to ensure that all welfare needs are addressed. It is designed to provide information to dairy farmers about improving the welfare of dairy animals and a checklist to allow for self-assessment.

This guide is divided into sections around the eight key areas of dairy welfare:

- Nutrition
- Cow health
- Young stock management
- Animal husbandry management
- Bull management
- Transport
- Euthanasia
- Stock handling and training

Each section contains information on improving the welfare of dairy animals and a checklist for best practice management. The appendix of this guide contains links to further information.

NUTRITION

This chapter contains information about dairy cow nutrition in the areas of:

- **Cow nutritional requirements**
- **Condition score**

Introduction

The Tasmanian *Animal Welfare Act (1993)* outlines in the cruelty to animals section that animals must be provided with appropriate and sufficient food and drink to meet the nutritional requirements of maintaining the animal in reasonable body condition and, if appropriate, allowing for growth and reproduction. Healthy cows are more efficient and productive. So not only is it a legislative requirement that an animal's nutritional needs are met, it makes business sense as well.

Nutritional requirements

Cows require energy, protein, fibre, vitamins and minerals to remain healthy. In addition to their health, the better their nutritional needs are met, the more productive the cows will be.

Table 1 Daily megajoules of metabolisable energy required for maintenance

MAINTENANCE	
Cow Liveweight (kg)	**Maintenance (MJ ME/day)**
400	54
450	59
500	64
550	69
600	73

Water is also an essential requirement. Cattle must have access to water of suitable quantity and quality. Cattle should not be deprived of water for longer than 24 hours. Lactating cattle or cattle in poor condition should not be deprived of water for longer than 12 hours.

With regards to animal welfare, the most common aspect of malnutrition is lack of energy. Cows require energy to maintain their body (maintenance; Table 1), for pregnancy, milk production (Table 2) and liveweight gain.

Table 2 Energy (megajoules of metabolisable energy) to produce 1 litre of milk at varying milk composition

ENERGY (MJ ME) REQ. TO PRODUCE 1L MILK		PROTEIN %					
		2.6	**2.8**	**3.0**	**3.2**	**3.4**	**3.6**
FAT %	**3.0**	4.5	4.5	4.6	4.7	4.8	4.8
	3.2	4.6	4.7	4.7	4.8	4.9	5.0
	3.4	4.7	4.8	4.9	4.9	5.0	5.1
	3.6	4.9	4.9	5.0	5.1	5.1	5.2
	3.8	5.0	5.1	5.1	5.2	5.3	5.3
	4.0	5.1	5.2	5.3	5.3	5.4	5.5
	4.2	5.3	5.3	5.4	5.5	5.5	5.6
	4.4	5.4	5.5	5.5	5.6	5.7	5.7
	4.6	5.5	5.6	5.7	5.7	5.8	5.9
	4.8	5.6	5.7	5.8	5.9	5.9	6.0
	5.0	5.8	5.8	5.9	6.0	6.1	6.1
	5.2	5.9	6.0	6.0	6.1	6.2	6.3

Cows will require additional energy for pregnancy, weight gain, walking long distances or coping with adverse climatic conditions (Table 3).

Table 3 Additional energy required above maintenance and milk production

Situation	Additional energy required above maintenance & milk production (MJ ME)
Pregnancy	
Month 6	8
Month 7	14
Month 8	25
Month 9	43
Walking	
Flat ground	1 MJ for every kilometre walked
Hilly ground	5 MJ for every kilometre walked
Weight gain	
When lactating	34 MJ/kg liveweight gain
When dry	43 MJ/kg liveweight gain
Daily Temp range 0-10˚C	
CS >3.5, calm day	Add extra 5% to maintenance requirements
CS <3.5, calm day	Add extra 15% to maintenance requirements
CS >3.5, wind 16kph	Add extra 15% to maintenance requirements
CS <3.5, wind 16kph	Add extra 25% to maintenance requirements

Condition score

A good way of monitoring the energy status of cows is through condition scoring. Condition scoring is a visual assessment of the amount of fat (condition) that a cow has on her body. The main points assessed on a cow are around her tail, pins, backbone and short ribs. In Australia a scale of 1 to 8 is used. The ideal range for a cow to be is 4 to 5.5 (1-8 scale). At calving, cows should be in condition score 4.5 to 5.5 with less than 15% of the herd below condition score 4.5. If more than 15% of the herd is below condition score 4.5, it is likely that the herd nutritional requirements are not being met. In order to achieve target condition scores of 4.5 to 5.5 at calving, with a normal dry period of 6 to 8 weeks, cows are generally required to be dried-off in this calving condition. In early lactation it is normal for cows to lose condition (if losses are less than 0.6 of a condition score there will be minimal impact on herd reproductive performance). Some points that should trigger intervention:

- If the herd average drops below condition score 3.8
- If individual cows drop below condition score 3.5
- If the herd loses more than a condition score over a period of 4 weeks

Intervention may include:

- Dry-off individual cows
- Put individual cows, or the herd, on to once-a-day milking
- Preferential feeding
- Check for illness (parasites etc)
- Veterinary advice

A guide to condition scoring is included in Appendix 2. More information can also be found in the InCalf book for dairy farmers (page 58) or the InCalf website (www.incalf.com.au).

CHECKLIST FOR NUTRITION			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
Nutritional Requirements	❑ The nutritional needs of animals are not met	❑ The nutritional requirements of animals are known and animals are fed to meet these requirements ❑ In wet, windy and cold conditions, extra feed is provided	❑ A feed budget/plan is developed and updated regularly ❑ The amount of feed (including pasture) being fed to stock is calculated on a regular basis ❑ Routine feed testing is carried out ❑ The diet of the different classes of stock is balanced for all major nutritional requirements on a regular basis
Condition score	❑ No intervention is made when a cow(s) drops below condition score 3.5	❑ Individual animal condition score is maintained above 3.5 ❑ Cows are dried-off in a condition score that allows them to achieve target condition score 4.5 to 5.5 at calving (at least 85% of the herd above condition score 4.5) ❑ Cows are fed to achieve target condition score at calving ❑ Cows are condition scored eight to ten weeks before drying off, just before calving and two weeks prior to mating start date.	❑ Cows are condition scored on a monthly basis

COW HEALTH

This chapter contains information on cow health in the areas of:

- **Identifying and treating poor health**
- **Calving practices**
- **Lameness**
- **Mastitis**
- **Downer cows**
- **Eye and skin cancers**
- **Photosensitivity**
- **Ingrown horns**

Introduction

Good management practices include proactive measures that minimise the number of cows that suffer from illness. However, as in any population, there are likely to be individual animals that do become ill. This chapter covers the most common health problems encountered on dairy farms. This information should be used as a guide only, and not used to replace veterinary advice.

Identifying and treating poor health

A healthy cow will:

- Be alert and interested in what is happening around it
- Have a shiny coat
- Graze and rest in the general vicinity of herd mates
- Spend about 16 hours standing, 7 hours lying and 1 hour walking (this will be broken into approximately 10 hours grazing and 8 hours ruminating)

Individual, whole-of-cow assessments should be made on a regular basis in order to detect ill health and ailments such as eye or skin cancers that may not be noticed in the normal day-to-day routine.

Cow identification is important in ensuring that cows requiring treatment are treated appropriately. Most commonly, cows requiring treatment will be segregated from the herd at milking time and if individual cow identification is poor, or non-existent, it makes it less likely that this will happen in a timely manner.

Good record keeping is also important in ensuring that cows receive the full course of a prescribed treatment and that withholding periods are kept. Analysis of these records will also help identify if there are health issues that can be reduced or eliminated through preventative management.

Calving practices

Care should be taken to minimise calving difficulties by the adoption of proper management practices such as:

- Selection of heifers for mating only when they have reached the minimum target weight for the breed
- Avoidance of over- or under-feeding of pregnant cows and heifers
- Avoidance of mating heifers to bulls known to sire large birth weight calves
- Close supervision of cows and heifers close to calving to allow early intervention in the event of calving difficulties. Cows and heifers should be checked at least twice daily – factors such as calving pattern, animal health issues and climatic

conditions should be taken into account as more frequent checks may be necessary.

The diet of the pregnant cow or heifer should be maintained at a level that minimises calving difficulties, and favour calf survival.

Calving cows and heifers should be checked frequently but with minimal disturbance. The process of calving in a cow normally takes about 4 hours from start to finish – heifers may take up to 6 hours. If a calving cow or heifer takes longer than this, or progress stops, they should be given assistance as soon as possible.

Cows and heifers should be calved in an area that is as clean and dry as possible.

Lameness

There are many different causes of lameness including bruised soles, laminitis, foot rot, white line disease, axial wall cracks and abscesses. Lameness can cause severe pain to the animal as well as causing reduced milk production, liveweight and reproductive performance.

Identifying and treating

A lame cow will demonstrate tenderness or pain in one or more feet by limping. The cow will most likely spend more time lying down than its herd mates and when being moved, will usually be at the back of the herd. When a lame cow is identified:

- The cause of lameness should be determined by an experienced person
- The appropriate treatment should be carried out by a competent person (rest, trimming, antibiotics, blocking or a combination)
- If more assistance is required a vet should be consulted

Whatever the cause of lameness, the cow should be removed from the main herd and grazed in paddocks close to the dairy to minimise walking distance.

When to seek help

In the first 3 months of lactation if the incidence of lameness is greater than 3-4% in heifers and/or 2-3% in cows, you should seek help.

Further to this, if the incidence of lameness over a lactation exceeds 7%, there will be identifiable problems that can be fixed and help should be sought to deal with this. Good record keeping with regards to the number of lame cows and the type of lameness will help identify if lameness is an issue on your farm and can also be the first step in identifying the cause of the lameness.

If individual cows are not responding to treatment, seek help. Some improvement should be seen within 2-3 days of beginning treatment

Keep in mind that each individual case needs to be resolved – it isn't just about staying below trigger points.

Prevention

In pasture-based grazing systems, the main cause of lameness tends to be due to injury from walking on laneways. Lameness due to injury can be minimised by:

- Using a cow-friendly surface on laneways
- Regular maintenance of laneways
- Moving the cows along the laneway at a speed that allows them to watch where they are putting their feet. As a guide, cows should be able to walk at 2-3 km/hr but if the laneway is in poor condition it may be necessary to let them walk slower than this to avoid injury
- Calm, quiet stock handling, particularly in the dairy yards

Dairy Australia has some web resources available on the topic of lameness (www.dairyaustralia.com.au) plus several Tasmanian veterinary practices offer workshops in preventing and managing lameness – contact your local vet for more information.

Mastitis

Mastitis is a bacterial infection in the udder. It causes discomfort and pain to the cow.

Identifying and treating

A cow with clinical mastitis may have an inflamed quarter(s) and exhibit behaviour changes in the dairy such as restlessness or kicking when the cups are being attached to the teats. Milk from the infected quarter will be lumpy and/or watery. Treatment is with the use of antibiotics, under veterinary advice. Use of elastrator rings or similar for the removal of a cow's teat is not acceptable.

Prevention

Good hygiene practices and teat spraying procedures in the dairy will help reduce the incidence of mastitis in the herd. Regular milking plant maintenance is also important. Further information about preventing, identifying and treating mastitis can be found from the national mastitis program

'Countdown' (www.countdown.org.au).

Downer cows

Downer cows are cows which cannot stand. It is very important that the cause of the problem is identified by a competent person and treated correctly based on that diagnosis. The most common causes are milk fever and calving paralysis but there can be other reasons such as back or hip injuries. If the cause cannot be determined, or if problems persist, a veterinarian should be consulted. For the best chance of recovery, this should be done within 6 hours of the first treatment.

Care of the downer cow

Downer cows should be provided with food, water and protection from adverse weather. A downer cow should be kept on soft ground and in an upright position (i.e. lying on their sternum with legs tucked under them). Cows should be turned on to alternate sides several times during the day. There are lifting devices available and cows can be lifted to a standing position to determine if they can stand. If the cow cannot stand, she should be lowered immediately, not left hanging in the lifting device. If using a cow jack, the cow can be lifted for short periods of time even if she is unable to bear her own weight. If a cow isn't standing within 3 days, it should be assessed by a veterinarian or euthanased. If downer cows cannot be looked after adequately, they should be euthanased to prevent further suffering.

Further information on managing downer cows is available on the Dairy Australia website (www.dairyaustralia.com.au).

Eye and skin cancer

Eye and skin cancers begin as small growths either in the eye, on the eyelid or elsewhere on the body of the cow. Each animal should be checked specifically to identify any growths – a good time to do this is when the animals are being pregnancy tested. In the early stages, some cancers can be treated by a vet. If treatment is not possible, the animal should be sold before the growth causes pain and discomfort. Once the growth is protruding to the point where it is easily bumped and damaged, the animal cannot be transported to an abattoir or sale yard. In the case of eye cancers, the animal should be sold before it gets to the stage where it cannot close the eye over the cancer. An animal that cannot close its eye over the cancer or is effectively blind, cannot be transported and must be euthanased on site.

Photosensitivity

Photosensitisation is a very painful condition and occurs when cattle consume a plant that contains photodynamic compounds or if there is a liver dysfunction. Both of these situations result in chemicals that are sensitive to light accumulating under the skin. When exposed to light, the skin becomes inflamed and cows may lose their hair. If badly affected, the skin will become dry and crusty and peel off the cow.

Cows suffering with photosensitivity should be treated early and if their lesions are severe, or slow to heal, they should be assessed by a vet. Cows should be provided with access to shade during the day. Sun filter creams and rugs are also options to reduce the discomfort caused by this condition. Cows with active, bleeding skin should not be transported.

Ingrown horns

Preventative action must be taken to ensure that horns do not grow into the head.

CHECKLIST FOR COW HEALTH			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
Identifying and treating sick cows	❑ Sick cows are not identified and are left in the main milking herd, untreated. ❑ Personnel are not given the appropriate training in identifying and treating cows ❑ Cows are not individually indentified	❑ Personnel are given the appropriate training to identify sick cows ❑ Sick cows are treated promptly and removed from the main milking herd if necessary ❑ Cows are individually identified in order to make identification and recording of treatments easier ❑ Vet assistance is sought on a regular basis and in a monitored manner	❑ A written animal health policy is developed with vet. It contains standard procedures for dealing with sick cows and is available and used by all personnel. It also includes preventative animal health programs ❑ An individual cow inspection is carried out annually – whole cow e.g. injuries, eye and skin cancers
Calving practices	❑ Cows are not checked frequently enough to allow for early intervention in calving difficulty	❑ Heifers are mated when they reach minimum target weight ❑ Bull selection is appropriate for the size of the cows ❑ Cows and heifers are fed to meet nutritional requirements ❑ Animals close to calving are checked frequently enough to allow for early intervention if there is calving difficulties	
Lame cows	❑ Lame cows are not inspected to determine cause of lameness ❑ Lame cows are left in with the main milking herd and forced to walk long distances to and from the dairy	❑ The herd is regularly assessed and monitored for lameness ❑ Lame cows are inspected to determine cause of lameness ❑ Appropriate treatment is provided ❑ Lame cows are grazed in paddocks close to dairy to minimise walking distance and pain caused by walking ❑ A vet is consulted if problems persist	❑ Lame cows that do not respond to treatment within 3 days are checked by a vet ❑ Milking frequency is reduced to once-a-day to reduce walking

CHECKLIST FOR COW HEALTH			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
		❑ Regular maintenance is conducted on laneways	
Mastitis	❑ No attempt is made to monitor incidence of mastitis in the herd ❑ Bulk milk cell count is regularly higher than 250,000 cells/ml ❑ Cows treated with antibiotics are not clearly marked ❑ Elastrator rings are used to remove a teat	❑ Incidence of mastitis is monitored through the use of bulk milk cell count ❑ Cell count is below 250,000 cells/ml for the majority of the season ❑ Cows treated for mastitis are clearly marked ❑ Preventative strategies are in place	❑ Regular herd recording is carried out and individual cow cell counts are monitored ❑ Cows with mastitis are managed as a separate herd to the main milking herd ❑ Mastitis treatment program developed and followed with a vet
Downer cows	❑ Downer cows are left for longer than 6 hours without providing food, water or shelter ❑ Downer cows are not treated ❑ Downer cows are left on concrete, gravel or wet ground	❑ Downer cows which are not standing after 3 days are regularly assessed by a vet ❑ Downer cows are provided with food, water and shelter within 6 hours ❑ Downer cows are checked frequently and moved onto alternate sides several times during the day ❑ Downer cows are moved on to soft ground or deep soft bedding	❑ Downer cows not responding to treatment within 4 hours are assessed by a vet
Cancer	❑ Cows with cancer are not treated or culled in a timely manner ❑ Cows with advanced cancer are transported rather than being euthanased on-site	❑ Cows with eye or skin cancer are treated or culled before the cancer grows to a size that can be knocked or is causing discomfort to the cow	❑ Cows with growths are assessed by a vet at an early stage
Photo-sensitivity	❑ Cows are not treated in a timely manner	❑ Cows are given access to shade during the day ❑ Severe cases are assessed by a vet	
Ingrown horns	❑ No preventative action is taken	❑ Horns are 'tipped' (no bleeding) before they come in contact with skin or removed by a vet	

Young Stock Management

This chapter contains information on calf and heifer management in the areas of:

- **Birth to weaning**
- **Selling of calves**
- **Weaning**
- **Weaning to calving**

Introduction

All calves born should be provided with the same level of care for their health and welfare regardless of their endpoint.

Good management of young stock will ensure that mortality rates are below 3% from birth to weaning and below 2% from weaning to calving. Mortality rates that are higher than this indicate that improvements to young stock management should be made.

Birth to weaning

Facilities

Acceptable housing facilities that can be used for calf rearing range from indoor to outdoor systems and from individual pens to group pens. The key principles that need to be followed with all of these facilities are:

- The calves should have protection from cold, heat, wind and rain
- The housing should be clean and dry
- There should be adequate light and ventilation (no draughts)
- Flooring should be well drained with adequate dry lying space for each calf
- Flooring and internal surfaces should not cause injury and should allow easy cleaning
- There should be adequate space for the calves – 2 m^2 for calves in individual pens or 1.5-2.0 m^2 per calf for calves in group pens
- The total shed volume should provide at least 6 m^3 for each calf
- Calves in individual pens should have visual contact with at least one other calf
- Calves less than one month old that are moved outside need to be provided with shelter

Calf sheds should be thoroughly cleaned and disinfected between each calf rearing period.

The first 24 hours

Careful management in the first 24 hours of a calf's life is essential. Most importantly, all calves should receive a feed of high quality colostrum within 6 hours of birth (highest quality colostrum comes from the first milking). Calves are born without any antibodies against disease and the colostrum contains antibodies that protect them from disease until they can develop their own immunity. Ensuring that calves drink 2-4 litres of colostrum soon after birth is important because the calf's ability to absorb the antibodies from the colostrum begins to decrease within 6 hours of birth, and virtually stops by 24-36 hours after birth. If calves miss this window of opportunity to gain immunity from colostrum, they are susceptible to becoming sick while they develop their own immunity. Leaving calves on cows for longer periods does not guarantee they will get a drink of colostrum. Calves should be brought into the calf rearing facilities within 24 hours and fed with either fresh or stored colostrum. If the calves will not drink, they should be stomach tubed. The quantity of colostrum required depends on the quality – this can be tested through the use of a refractometer (preferable) or a

colostrometer. Vets are also able to test for transfer of immunity by taking blood samples from several calves – contact your vet for more information.

Before the calves are brought in to the calf rearing facilities, they should be identified. Ear tags should be applied carefully to avoid permanent damage to the ear. Follow the manufacturer's directions to ensure correct eartag placement. Calves should be moved to the calf rearing facilities in a quiet and gentle manner. If they are being transported in a trailer, they should have their navels sprayed with iodine (7% solution). Trailers should be regularly disinfected. If they are being walked, their navels should be sprayed either when they are ear-tagged or when they are placed in their pens – the sooner this is done, the better. Spraying the navel with iodine helps prevent bacteria from entering the calf's blood stream through the umbilical cord.

It should be kept in mind when working with calves in their first few days of life that they are newborns and have no understanding of what we want them to do. All handling should be done in a quiet and gentle manner. Calves should not be carried by the legs, thrown, kicked, beaten, dragged along by their head or prodded by sharp instruments. And at no time should dogs, sticks or electric prodders be used on calves of this age. If calves are transported in a vehicle or trailer, overcrowding should be avoided. The standard for transporting calves for sale is to allow $0.2m^2$ per calf – while calves being transported to the calf rearing facilities are contained in the vehicle or trailer for a much shorter period, this could be used as a guide.

Feed and nutrition

A calf's diet should contain all the nutritional components required for normal growth and health relative to the calf's age and there are many different systems that will achieve this. The basic principles are:

- All calves should be fed at least once daily on colostrum, whole milk or milk replacer
- The quantity of milk fed will depend on the system being used but should be about 10% of the calf's birth weight (this will normally be between 3-6 litres) per day – unless an early weaning system is being used in which case the appropriate nutritional plan should be followed
- All calves should have access to fresh, clean water at all times

Health

Calves that are housed in good facilities, have received good quality colostrum within their first 12 hours and are fed appropriately should have minimal health problems. However, sometimes calves do become sick.

Some possible signs of a sick calf are:

- Less active than their healthy counterparts
- Drink and eat less than normal
- Reluctant to rise
- Distended stomach
- Dehydrated (sunken eyes and skin tents when pinched)
- Lying flat out and panting
- Low temperature (less than 36°C) or elevated temperature (over 39.5°C)

The first step should be to isolate the sick calf to reduce the risk to the rest of the calves. There are many different causes of illness in

calves and if the problem cannot be identified or a large number of calves are affected, veterinary advice should be sought.

One of the most common diseases of calves is scours. This can be caused by many different factors. It is important to isolate the calf or calves and treat them quickly with electrolytes to prevent them from becoming dehydrated. If the calf is sick, passing blood or several deaths occur, a vet should be consulted.

Other common calf diseases include pneumonia, joint ill and abscesses.

Farms should have a system in place to allow for individual calf identification and recording of any treatment.

Calves that do not respond to treatment should be euthanased promptly.

Selling of calves

Calves for slaughter

There are standards for the sale of calves for slaughter. In order to transport and sell calves less than 30 days of age for slaughter they must:

- Be at least 4 days old i.e. in their 5th day of life (or 3 weeks old in the case of artificially induced calves)
- Weigh at least 23 kg
- Have been fed on colostrum, milk or milk replacer
- Be free from drug residues
- Have a navel cord which is wrinkled, withered and shrivelled and not pink or red coloured, raw or fleshy
- Have hooves that are firm and worn flat and not bulbous with soft unworn tissue
- Be in good health, alert and able to rise from a lying position; they should not be listless and unable to protect themselves
- Be strong enough to be able to withstand the stress of travel and have been adequately fed; not obviously diseased, malformed, blind or disabled in any way; and not be wet or cold

The calves must also have been fed their normal feed within 6 hours prior to transport. There must be auditable and accessible records identifying that this has happened.

Loading of calves on to the transport vehicle should be done in a way that minimises stress and avoids injury, bruising or unnecessary suffering.

Polythene pipe, sticks, electric prodders and dogs should not be used when handling calves, nor should they be hit, kicked, dragged or thrown.

Calves destined for slaughter must not be fed with any milk that contains antibiotics from treated cows.

Any calves, including calves destined for slaughter, that become sick should be isolated and treated, or euthanased using the method outlined in the Euthanasia chapter of this guide.

Calves that are treated with drugs that have a withholding period should be clearly identified and kept until the withholding period has expired.

Calves for on-rearing

Calves that are being sold for on-rearing can be transported when they are less than 5 days old provided that special provisions are met. Calves less than 5 days old travelling without their mother must only be transported directly to a calf rearing facility and must:

- Be fed a liquid feed within 6 hours before loading
- Be provided with thick bedding and room to lay down
- Be protected from heat and cold
- Not be consigned through saleyards
- Not be transported for longer than 6 hours

Calves bought through saleyards may be more prone to illness so extra care and attention to their health should be taken.

Weaning

Weaning from milk should only take place when the calves' ruminant digestive system has developed sufficiently to enable them to maintain growth and wellbeing. To develop the ruminant digestive system, calves must be fed solid food in addition to milk. Concentrates will help develop the rumen faster than the addition of hay or straw to the diet.

Weaning to calving

In the period of weaning to calving, there are two main aspects that need to be considered in the area of animal welfare: nutrition and mating.

Nutrition

From weaning to calving, heifers need to grow at a consistent rate. As a guide, Friesian heifers need to grow at a rate of 0.7 kilograms per day and Jerseys need to grow at 0.45 kilograms per day to reach optimum target weights. More information about target weights can be found in the herd assessment pack (heifer rearing tool) on the InCalf website (www.incalf.com.au). To achieve target growth rates, the heifers will require 16% crude protein in their diet, plus the appropriate amount of energy for their age.

Heifers should not be allowed to lose weight for any significant period of time (greater than a month) as this indicates that their nutritional needs are not being met.

Mating

Heifers should reach the target weight for their breed prior to being mated. Extra care should be taken with heifers that are below target weight with respect to bull selection.

Heifers should not be joined to bulls that, because of incompatibility of size of breed, are likely to cause mating injuries or predispose the cow to calving difficulties.

Artificial insemination should be performed only by trained artificial inseminators, and in such a way that causes minimal stress to the animal.

Preventative animal health

A preventative animal health plan should be in place that covers procedures such as vaccinations and parasite control.

CHECKLIST FOR YOUNG STOCK MANAGEMENT			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
Facilities	❑ No shelter provided ❑ Shelter is draughty and calves cannot stay dry ❑ Sheds or pens are overcrowded ❑ Poor ventilation and/or a strong smell of ammonia ❑ Facilities not cleaned and disinfected between batches	❑ Shelter is provided that protects calves from wind and rain ❑ Shed has adequate light and ventilation ❑ Calves have a minimum of 1.5 m^2 floor space in individual pens and 1.5 m^2-2.0 m^2 in group pens ❑ The total shed volume provides at least 6m^3 per calf ❑ Flooring and internal surfaces do not cause injury and are easy to clean	❑ Calf rearing facilities are a pleasant place for animals and staff ❑ Ideally no more than 20 calves per pen
First 24 hours	❑ Calves are left in paddock for longer than 24 hours after birth ❑ Calves are not fed colostrum ❑ Calves are not identified ❑ Calves are treated in a rough manner	❑ Calves are moved to the calf rearing facilities within 24 hours of birth ❑ Calves receive colostrum (10% of their bodyweight) within 6-12 hours of birth ❑ Heifer calves are individually identified ❑ Navels are sprayed with 7% iodine solution prior to the calves entering the calf rearing facilities ❑ Calf handling is carried out in a quiet and gentle manner ❑ Vehicles used for transporting calves are washed on a regular basis	❑ Calves are moved to the calf rearing facilities within 12 hours of birth ❑ Calves are fed colostrum for 3-5 days ❑ Heifer calves are individually identified and breeding recorded ❑ Navels are sprayed with 7% iodine as soon after birth as possible ❑ Vehicles used for transporting calves are washed and disinfected as needed and at least on daily basis
Selling calves	❑ Standards for selling of calves are not met	Calves less than 5 days old and travelling without their mother are: ❑ Only transported to a calf rearing facility ❑ Not consigned through saleyards	

CHECKLIST FOR YOUNG STOCK MANAGEMENT			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
		❑ Provided with liquid feed within 6 hours before loading ❑ Provided with thick bedding and room to lie down ❑ Protected from cold and heat ❑ Not transported for longer than 6 hours Calves that are being sold for slaughter (5-30 days old) are: ❑ In their 5th day of life ❑ Protected from cold and heat ❑ In good health, alert and able to rise from a lying position ❑ Adequately fed milk or milk replacer on farm within 6 hours of transport	
Weaning	❑ Calves are weaned from milk too early	❑ Calves are provided with solid food in addition to milk or milk replacer ❑ Calves are weaned only when their digestive system is developed sufficiently to enable them to maintain growth and wellbeing	❑ Friesian calves are consuming at least 1 kg /day of concentrates; Jersey calves are consuming at least 0.75 kg/day of concentrates
Feed and nutrition	❑ Calves nutritional needs are not met	❑ Calves have access to clean, fresh water at all times ❑ Calves are fed to meet their nutritional demands	❑ Calves are fed according to a feed plan that has been developed to achieve target growth rates ❑ Calves and heifers are weighed on a regular basis to ensure targets are being met and if any animal is below target they are separated and

CHECKLIST FOR YOUNG STOCK MANAGEMENT			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
			preferentially fed
Health	❑ Sick calves are not isolated and treated when ill	❑ Calves are checked twice daily ❑ Sick calves are isolated and treated ❑ Calves are vaccinated with 7-in-1 and other vaccines e.g. Salmonella at the appropriate times ❑ Mortality rates from birth to weaning are in the range of 4-6% or lower	❑ Calves are checked a minimum of twice daily ❑ A health plan is developed with advice from a veterinarian ❑ Sick calves are isolated, treated and treatment is recorded ❑ Calves are vaccinated and wormed according to a health plan ❑ Cows are vaccinated pre-calving to improve immunity of calves
Heifers	❑ Put on the run-off block and forgotten about until mating time	❑ Heifers are checked at least weekly ❑ Heifers are fed to meet their nutritional needs ❑ Sick heifers are treated ❑ Mortality rates are 2% or less from weaning to calving.	❑ Heifers are checked on a daily basis ❑ Heifers are rotationally grazed ❑ Heifers are fed according to a feed plan based on achieving target weights ❑ Heifers are weighed regularly to ensure target weights are being met
Mating	❑ Using mating practices that are likely to predispose towards calving difficulty	❑ Heifers are at target weight before mating ❑ The appropriate bulls or semen are selected making sure the size of the bull is appropriate and the breed is unlikely to cause calving difficulties ❑ AI is carried out by trained artificial inseminators and in a way that causes minimal stress to the animals	❑ The appropriate bulls or semen are selected making sure the size of the bull is appropriate and the breed is unlikely to cause calving difficulties ❑ The correct number of bulls are used ❑ AI is carried out by trained artificial inseminators and in a way that causes minimal stress to the animals

Animal Husbandry Management

This chapter contains information on procedures that are carried out on dairy animals including:

- **Disbudding and dehorning**
- **Tail docking**
- **Calving inductions**
- **Castration**

Introduction

Procedures that are carried out on animals should be done in a manner to minimise pain and stress.

Disbudding and dehorning

Horns on cattle can be dangerous to other cattle and people, especially on a dairy farm where the cattle are yarded and handled on a daily basis.

To minimise stress:

- It is preferable to dehorn dairy cattle as young as possible
- Calves can be disbudded as soon as the horn buds are detectable.
- Calves should be adequately restrained while being disbudded to ensure the procedure is carried out quickly and cleanly.

There are two main methods of disbudding:

- Hot iron – causes little or no bleeding
- Disbudding knife or scoop dehorner

Cattle that are older than 6 months of age may only be dehorned by a veterinarian with the use of a local anaesthetic. Cattle should be observed closely for 24 hours after the procedure to ensure the bleeding stops and checked for the next week for any infection. Dehorning should be done at a time of year when dust and flies are at a minimum.

Tipping of horns (cutting off the tip) can be carried out in adult cattle to prevent ingrown horns or injury to other cattle – this should not cause bleeding.

Tail docking

Tail docking should only be done under veterinary advice to treat injury or disease. Alternatives such as switch trimming, effective dairy design and fly control programs should be used to facilitate cow and operator comfort.

Calving inductions

Inducing a cow to calve earlier than her predicted calving date is usually carried out in order to keep a tight calving pattern. Cows are also sometimes induced to calve if letting them go to full-term is going to be detrimental to their health. Calving inductions should always be done under the supervision of a vet.

Cows that are to be induced to calve in order to shorten the calving spread should be:

- Aged 3-8 years
- Body condition score of 4.5-5.5 (1-8 scale)
- In good health
- Between 6-13 weeks before their predicted calving date
- Have had a dry period of at least 7 weeks

- Pregnancy tested and evaluated by a vet immediately prior to injection

Cows that are induced should be monitored closely.

Induced calves that are not viable should be euthanased immediately. Any viable induced calves that are kept will need extra care.

Castration

Bull calves that are to be castrated should be castrated as young as possible. Rubber rings are not recommended on animals over 3 months of age. Animals over 6 months of age must only be castrated by a veterinarian using analgesia/anaesthetic.

CHECKLIST FOR ANIMAL HUSBANDRY MANAGEMENT			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
Dehorning & disbudding	❑ Cattle older than 6 months are dehorned without anaesthetic	❑ Calves are disbudded by 8 weeks of age ❑ Cattle older than 6 months are dehorned by a veterinarian using anaesthetic	❑ Calves are disbudded as soon as horn buds appear ❑ Poll dairy breeds are used in the breeding program
Tail docking	❑ Animals have their tails docked other than by a veterinarian for medical reasons	❑ Alternatives to tail docking are used	❑ Tail docking is not carried out except by a veterinarian for medical reasons ❑ Tail switches are trimmed regularly
Calving induction	❑ No records of predicted calving dates are kept	❑ Calving inductions are carefully planned with veterinary supervision ❑ Cows are healthy and in target condition score ❑ Non-viable calves are euthanased immediately ❑ Viable induced calves that are being kept are given extra care	❑ Alternatives to calving inductions are used to manage calving spread
Castration	❑ Animals over 6 months of age are castrated without use of analgesic/anaesthetic and without veterinary supervision	❑ Animals requiring castration are castrated by 6 months of age ❑ Animals over 6 months of age are castrated with the use of analgesic/anaesthetic by a vet	❑ Animals requiring castration are castrated by 3 months of age

Bull Management

This chapter includes information on the management of bulls in the areas of:

- **Nutrition**
- **Health**
- **Handling**

Introduction

Bulls have the same welfare requirements as all other classes of stock. Information about bull management can also be found in the InCalf Book for dairy farmers or on the InCalf website (www.incalf.com.au).

Nutrition

Bulls do not have milk production or pregnancy requirements but they do have minimum maintenance requirements in order to keep them healthy. The energy requirements of bulls can be seen in Table 4. Any growth or condition improvement will require additional energy.

Table 4 Maintenance requirements of stock at varying liveweights

BODYWEIGHT (kg)	MAINTENANCE REQUIREMENTS (MJ ME/head)
500	54
550	59
600	63
650	67
700	72
750	77
800	81
850	86
900	90
950	95
1000	99

Health

Probably the two most common health issues affecting the welfare of bulls are lameness and injury caused through fighting/bullying.

Bulls can become lame quite easily when they are put in with the milking herd. Firstly, because they are not used to frequent walking on the laneways (as cows are) and secondly, because they spend a lot of their time trying to mount cows rather than watching where they are walking. Lame bulls should be rested until they are fully recovered. It needs to be kept in mind that if bulls suffer an infection it can affect their fertility. Rotating bulls in and out of the herd can help minimise lameness due to walking.

Lameness and injury can also be reduced by keeping the bulls out of concrete yards as much as possible.

Injury from fighting is difficult to eliminate but it can be minimised by:

- Ensuring bulls have room to get away from each other, especially when introducing a new bull(s) to the bull herd
- Regularly checking the bulls and segregating a bull if it is being overly bullied by the others
- Ensuring bulls are run together 1-2 months prior to mating

Bulls that suffer from broken legs or backs should be euthanased immediately.

A preventative health program which includes vaccinations and drenches should be in place.

Handling

In general bulls are bigger, stronger and handled less often than the cows which can make the handling of them challenging and potentially dangerous. Treat bulls with care and respect and remember bulls in mating condition are going to be more aggressive.

- Handle bulls in facilities that are strong enough to hold them and high enough to prevent them from trying to jump out.
- Set-up before yarding the bulls to minimise waiting time in the yard.
- Split the bulls into smaller groups in the yards to reduce the potential for fighting and injuring themselves or the people trying to handle them
- Keep a barrier between you and the bulls and use a paddle, or polypipe, and voice to encourage them in the direction you want them to go
- Excessive use of an electric prod is unacceptable

CHECKLIST FOR BULL MANAGEMENT			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
Nutrition	❑ The nutritional requirements of bulls are not met	❑ Bulls are fed to meet nutritional requirement ❑ Individual bull condition score does not drop below 3.5 ❑ Water supply is checked every 2-3 days	
Health	❑ Bulls are checked infrequently	❑ Bulls are checked every 2-3 days and their health status assessed ❑ Injuries or illness are treated immediately, including immediate euthanasing of bulls with broken legs or back ❑ During mating, bulls are rotated in and out of the herd and bulls that become lame are rested ❑ The appropriate number of bulls are used in the herd to prevent overwork ❑ Preventative health plan is in place	❑ Lame or sick bulls are isolated to prevent them being bullied ❑ Bulls are kept off concrete as much as possible
Handling	❑ Bulls are handled aggressively	❑ Movements and yarding of bulls is planned in advance to minimise contact and stress to the bulls	❑ Paddocks and facilities are designed to handle bulls

Transport

This chapter contains information about transporting livestock:

- **Fitness to transport**
- **Curfew**
- **Transport vehicle**
- **Yarding**
- **Loading**
- **Care while transporting**

Introduction

There are many reasons why cattle may need to be transported. If done properly, stress will be minimised and injuries avoided.

There are specific requirements for cattle that are being transported across Bass Strait. See Appendix 1 for where to find this information.

It is a requirement that cattle are correctly identified before leaving their property of birth.

Fitness to transport

Any animal to be transported must be able to stand and bear weight on all four legs and be fit enough to withstand the journey and be fit for purpose on arrival. Cows that are likely to calve on the journey should not be transported. Calves being sold for slaughter must be in their 5th day of life and meet all other requirements for sale (see chapter on young stock management for more details). More information can be found in "Is it fit to load?" produced by Meat and Livestock Australia and available on their website (www.mla.com.au).

Curfew

Adult cattle should be yarded prior to transport to allow them to empty out. As a minimum standard, adult cattle should have no access to green feed for at least 12 hours prior to loading. Animals that are crossing Bass Strait should be provided with hay during the curfew period.

Transport vehicle

Any vehicles used for the transport of livestock, whether on the farm or outside the farm gate, need to be appropriately designed and maintained (e.g. free from protrusions that may cause injury, have a floor designed to minimise slipping, have adequate ventilation and be of a height or with a roof that will prevent the livestock from escaping or injuring itself in attempting to escape).

Yarding

Cattle should be yarded in a way that minimises stress. Different classes of stock should be yarded and loaded separately.

If cattle are to be yarded for longer than 24 hours, they need to be provided with food and water.

Young calves should be provided with shelter/shade in inclement weather.

Loading

The use of dogs and implements such as electric prodders and sticks should be carried out in a manner appropriate to the class of stock. The purpose of these implements is to provide a safer working environment for the people handling the animals so they do not have to put themselves in physical danger – implements are not to be used to 'punish' the animals. The use of electric prodders or dogs on calves is not allowed.

Loading facilities should be fit for purpose.

Care while transporting

Livestock should be observed during transport and the appropriate action taken if animal welfare is compromised. Problems can be minimised by keeping different classes and unfamiliar or aggressive animals in separate pens and by ensuring that animals are fit to be transported prior to loading.

If stock are unfit to transport, transporters have the right and responsibility to refuse to load them. Truck drivers should not be pressured to load and transport unfit animals. Similarly stock owners should not allow stock to be loaded onto vehicles that are substandard and would cause injury to stock in transit.

CHECKLIST FOR TRANSPORT		
	Unacceptable Industry Practice	**Acceptable Industry Practice**
Fitness to transport	❑ Animals that are lame or sick when transported	❑ Animals are fit and healthy for transport
Transport vehicle	❑ Animals are transported in a vehicle that is unsuitable ❑ Animals are overcrowded	❑ Animals are transported in a vehicle that minimises stress and injury ❑ Transport vehicles are designed to allow stock to be given optimum space
Yarding	❑ Various classes of livestock are yarded together ❑ Unfamiliar and aggressive bulls are yarded together ❑ Stock are not provided with appropriate shelter and water	❑ Livestock are yarded according to their class ❑ Aggressive animals are yarded separately ❑ Stock are provided with appropriate shelter and water
Loading	❑ Excessive force and noise in loading animals causing pain and distress	❑ Stock are handled quietly and with minimum use of force ❑ All handlers are trained in safe stock handling practices
Care while transporting	❑ Animals are not checked during transport ❑ Problems during transport are not dealt with	❑ Animals are checked during transport ❑ Any problems are dealt with appropriately

Euthanasia

This chapter contains information about the appropriate method of euthanasing dairy cattle.

Introduction

The decision of whether and when to euthanase an animal can be subjective. Key principles should be kept in mind:

- If an animal is ill or injured and is suffering pain but an attempt is to be made to rehabilitate, it should be attended by a veterinarian as soon as possible to give appropriate advice and treatment
- If an animal has suffered a severe injury from which it cannot recover, it should be euthanased immediately
- Unviable calves should be euthanased immediately
- Do not leave animals to suffer once the decision has been made to euthanase
- Animals should be euthanased by a competent person following the correct procedures.
- Ensure that immediate loss of consciousness followed by death while unconscious is the result – whichever humane killing method is used
- Confirm death in every animal, every time by observing for the signs of death outlined in Figure 1

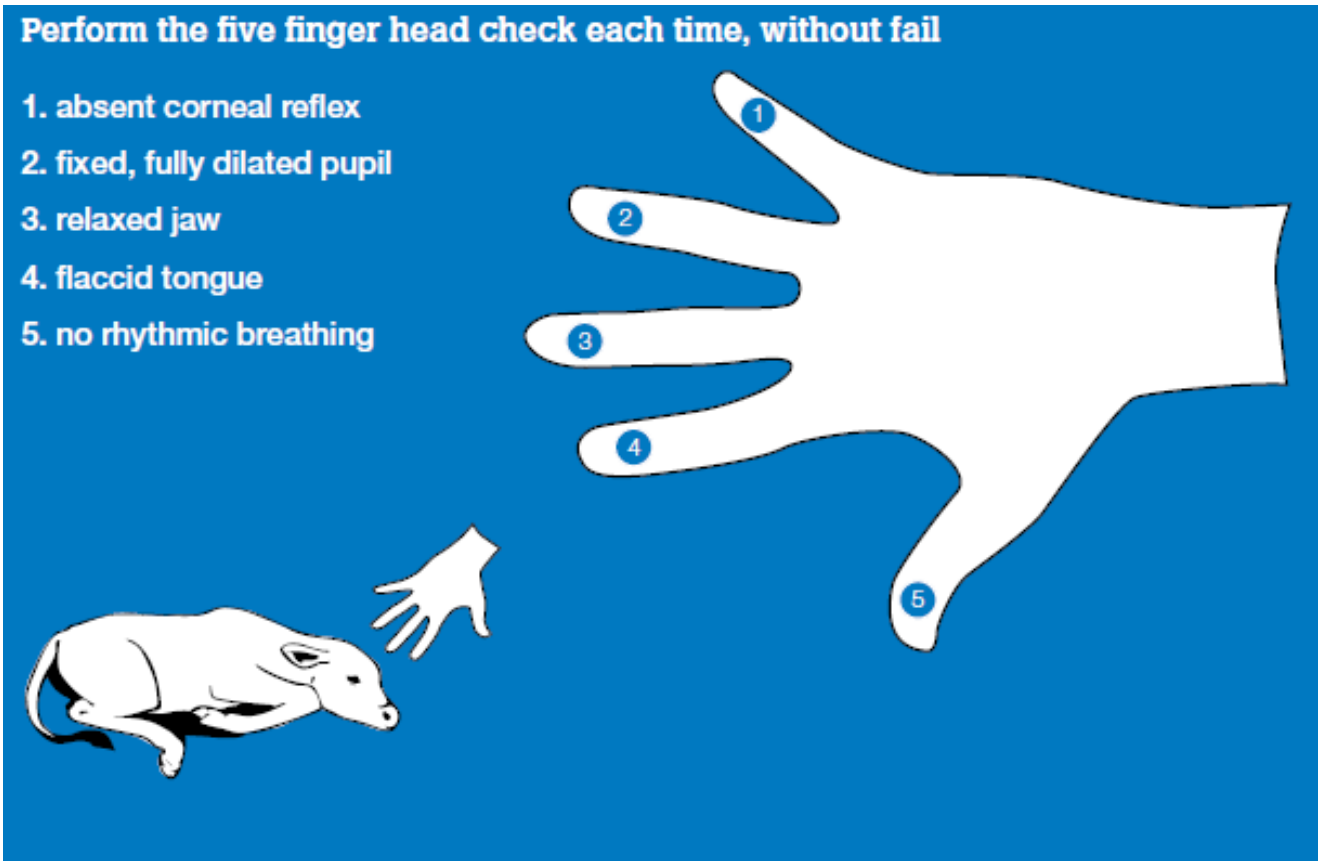


Figure 1 Signs of death (Source: Rearing Healthy Calves, Dairy Australia)

Use of firearms

Animals to be euthanased should be restrained or immobile and an appropriate calibre rifle (based on the class of stock and distance from animal) or humane killer pistol (captive bolt) used for euthanasing.

Only people licensed and trained in the use of firearms should euthanase cattle using this method.

To provide maximum impact, the rifle should be fired from as close as possible to the animal (but do not press the rifle against the animal's head). The recommended position to aim for can be seen in Figure 2.

A check must be made to ensure that the animal is dead and not merely stunned (bleeding of the animal is recommended).

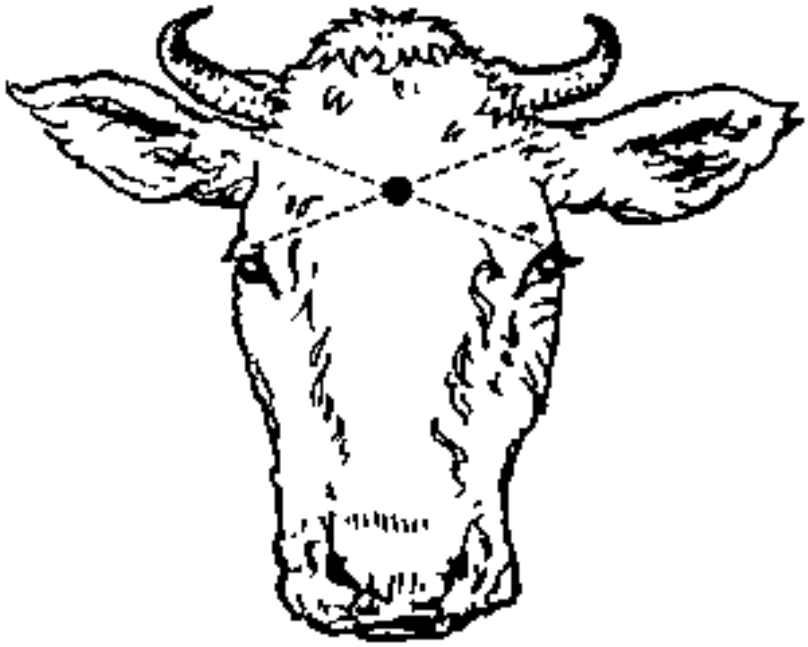


Figure 2 Humane destruction of cattle. Recommended position (centre of forehead where lines intersect) for frontal method (suitable for firearm or captive bolt pistol). Taken from: *Animal Welfare Guideline – Animals in Saleyards.*

Use of captive bolt pistols

A captive bolt pistol contains a blank cartridge and is held against head of the animal (in the position shown in Figure 1). Once the animal is stunned by the captive bolt, it should be bled out as soon as it has fallen to the ground by severing the major blood vessels in the neck. Manufacturers' recommendations for the type of blank cartridge to use and maintenance of the pistol should be followed to ensure the animal is killed humanely.

Euthanasing calves

Calves should be euthanased in the same manner as adult cattle. This is the preferred method of euthanasia. If a firearm is not available, calves that are less than 24 hours old can be euthanased by the delivery of a blow to the head with a blunt instrument - however this is undesirable. The blow needs to be of sufficient strength to produce unconsciousness. The calf should then be bled by severing the blood vessels in the neck.

CHECKLIST FOR EUTHANASIA			
	Unacceptable Industry Practice	**Acceptable Industry Practice**	**Best Practice**
Euthanasia	❑ Animals that are sick or injured are not euthansed in a timely manner ❑ There is no plan in place on farm for the euthanasia of animals	❑ There is a plan in place with regards to the euthanasia of animals and all people involved with the care of animals are aware of the plan and procedures ❑ Anyone who is, or may be, required to carry out the euthanasia of animals is properly trained and has the appropriate licenses ❑ The appropriate firearm or captive bolt pistol is used to euthanase animals and checks are made to ensure that the animal is dead ❑ If a firearm or captive bolt is not available, a vet is called in to carry out the euthanasia ❑ Cattle are bled after being shot to ensure they are dead	❑ A firearm and licensed operator is available on the property

Stock Handling and Training

This chapter contains information about stock handling and training in the areas of:

- **General stock handling principles**
- **Importance of training**
- **Responsibilities of owners, managers and employees**

Introduction

A good stockperson will handle livestock in a compassionate and humane manner. A good stockperson has the ability to recognise the normal behaviour traits of the animals that they work with and identify early any issues that may impact on their welfare. A good stock person has high animal welfare standards and expects the same from others.

General stock handling principles

Some general principles for handling livestock are:

- Work quietly and confidently around livestock, avoid sudden loud noises and quick movements. Be patient.
- When moving stock through yards or the dairy, try and look at the area from the animals point of view to identify obstructions or distractions. Removing a coat hanging on the fence that is distracting the cows will improve cow flow more than yelling at them to keep them moving. Shadows and reflections are other causes of poor cow movement.
- Dairy cattle spend a lot of time walking to and from the dairy. Cows should be moved at a comfortable walking pace (2-3 km/hour). Using a bike or dog to push the cows faster than this increases the incidence of lameness.

Importance of training

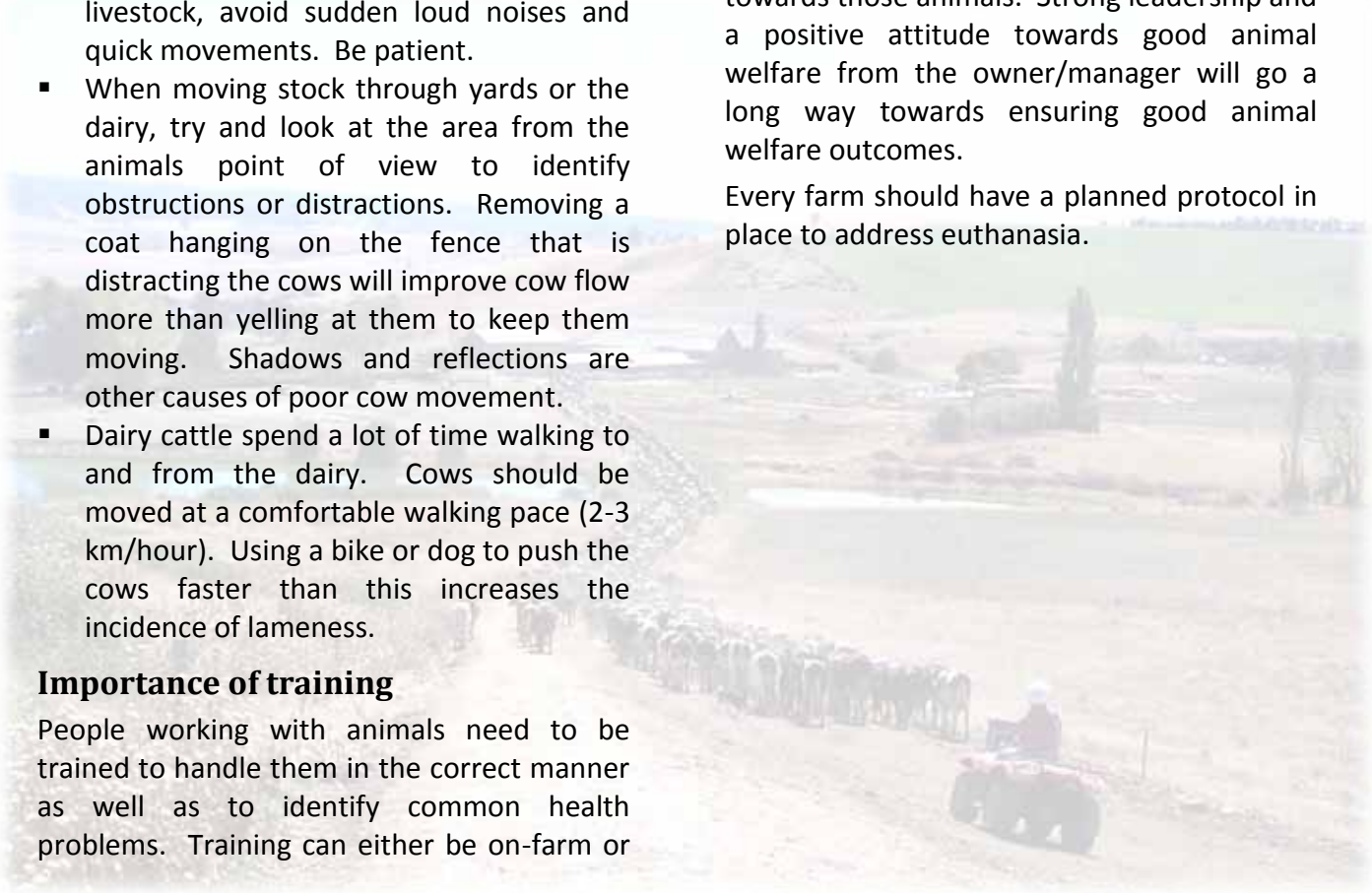
People working with animals need to be trained to handle them in the correct manner as well as to identify common health problems. Training can either be on-farm or through a training organisation. For a list of contacts for training see the appendix.

Responsibilities of owners, managers and employees

Under the *Animal Welfare Act*, those that have the care or charge of animals have a legal "duty of care" for those animals. This includes owners, managers, sharefarmers and employees.

A good owner/manager will have a farm policy for the management of animal welfare and ensure that all people involved in working with animals are aware of their responsibility towards those animals. Strong leadership and a positive attitude towards good animal welfare from the owner/manager will go a long way towards ensuring good animal welfare outcomes.

Every farm should have a planned protocol in place to address euthanasia.



CHECKLIST FOR STOCKHANDLING AND TRAINING

	Unacceptable Industry Practice	Acceptable Industry Practice	Best Practice
Stock handling and training	❑ No training is provided to staff in the handling of animal or identifying sick or injured animals ❑ Animals are handled in a manner that causes unnecessary stress and/or pain	❑ All people working with animals are given the appropriate training in stock handling and identifying sick or injured animals ❑ Staff are given the required support to ensure animal welfare needs are met ❑ The procedures for the euthanasia of animals is known by everyone involved with caring for animals	❑ A written animal health and welfare policy is developed with advice from a vet. It outlines the standard of care for animals on the property and contains standard procedures for dealing with sick cows. This policy is available and used by all personnel

Appendix 1 - Further Information

Animal welfare standards and guidelines

Tasmanian animal welfare standards and guidelines are available from: www.dpipwe.tas.gov.au

Legally enforceable standards are those in the *Animal Welfare Regulations* which are available from www.thelaw.tas.gov.au

Australian animal welfare standards www.animalwelfarestandards.net.au

Information on the Australian Standards and Guidelines for the Welfare of Animals – Land Transport of Livestock is available at www.livestockwelfarestandards.net.au

Assistance or information on animal health and welfare issues

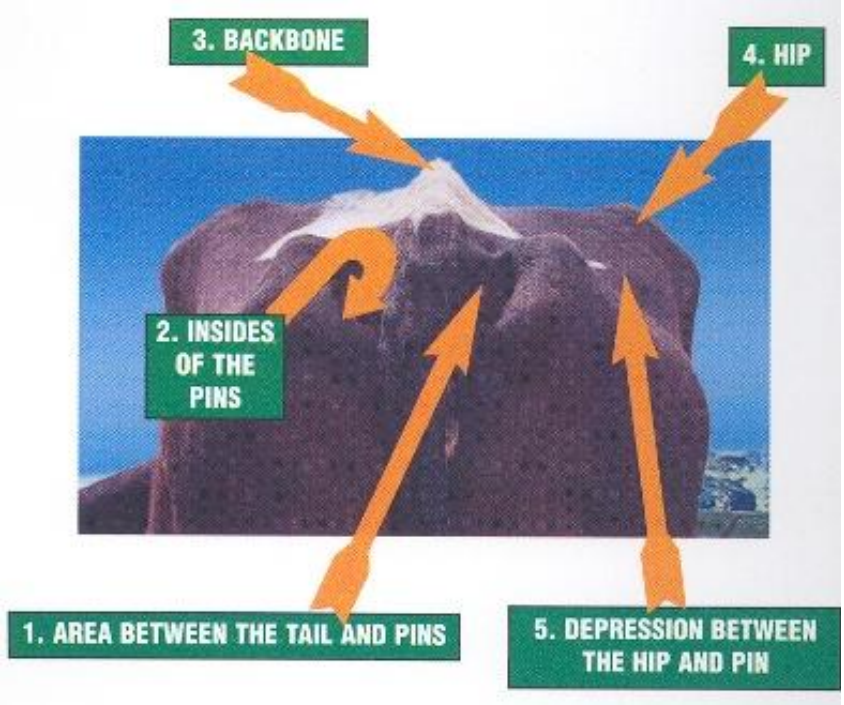
- Local veterinarian
- DPIPWE Animal Welfare Branch (Phone 1300 368 550)
- RSPCA
- TFGA (Phone 1800 154 111)
- TIA (Phone 6430 4953)

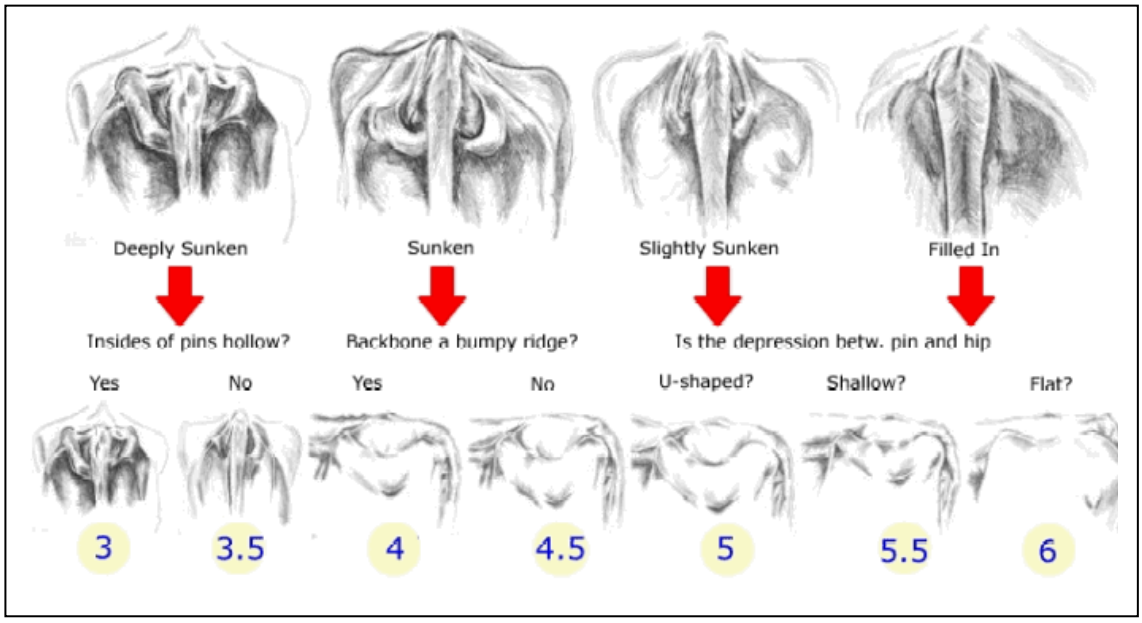
Information and training

- CowTime (stock handling) www.cowtime.com.au
- Countdown (mastitis control) www.countdown.org.au
- DairyTas (lameness workshops and animal health seminars) email: tasdairy@bigpond.com or contact your local vet
- InCalf (nutrition, condition scoring, bull management) www.incalf.com.au
- Low stress stock handling www.lss.net.au
- Rearing healthy calves www.dairyaustralia.com.au
- ProHand Dairy Cows: Animal Welfare Science Centre or Dairy Australia
- General animal welfare information and fact sheets www.dairyaustralia.com.au including:
    - Switch trimming not tail docking
    - Reducing calving inductions
    - Managing downer cows
    - Management in wet conditions
- The Skills Institute
    - Cups On Cups Off (mastitis management)
    - Livestock welfare program
- Meat and Livestock Australia www.mla.com.au – Is it fit to load?

Appendix 2 – Condition Scoring

Source: The Condition Magician (2003), C Robins, R Stockdale, J Crosby, & J Morton.





Notes