Department of Primary Industries and Water

Hobart GPO Box 44, Hobart, Tasmania, 7001
Launceston PO Box 46, Kings Meadows, Tasmania, 7249
Devonport PO Box 303, Devonport, Tasmania, 7310
Ph 1300 368 550
Web www.dpipwe.tas.gov.au

Tasmanian Government

Animal Welfare Guidelines - Sheep

Approved under Section 44B of the *Animal Welfare Act 1993* by the then Minister for Primary Industries and Water – October 2008.
Replaces Animal Welfare Standard No 1 – Sheep.

For further information contact:

Animal Biosecurity and Welfare Branch
13 St Johns Avenue, New Town, 7008
Telephone 03 6165 3777
E-mail: AnimalWelfare.Enquiries@dpipwe.tas.gov.au

ANIMAL WELFARE GUIDELINES

Animal welfare considerations are becoming increasingly important in the keeping and farming of animals, both in Australia and internationally. Practices which may have once been deemed acceptable or justifiable, are now being reassessed in the light of new knowledge and changing attitudes. High standards of welfare are not only important legally and ethically, but also have direct economic benefits and are becoming increasingly necessary for continued market access.

Tasmania's Animal Welfare Guidelines are approved by the Minister for Primary Industries and Water, after consultation with the Animal Welfare Advisory Committee, in accordance with section 44B of the *Animal Welfare Act 1993.*

Under the Animal Welfare Act, Animal Welfare Guidelines are to include guidelines for the education and guidance of persons involved in the care and management of animals. Animal Welfare Guidelines are therefore advisory in nature. They are intended to help people involved in the care and management of animals adopt high standards of husbandry.

The Animal Welfare Guidelines may be based on the *Australian Model Codes of Practice for the Welfare of Animals*, or the *Australian Animal Welfare Standards and Guidelines*, endorsed by the Primary Industries Ministerial Council (PIMC). Alternatively, where there is no suitable national model, Animal Welfare Guidelines may be developed in Tasmania, in consultation with industry and animal welfare groups.

Animal Welfare Guidelines will be revised to take into account changes in animal management practices and knowledge of animal welfare.

The *Animal Welfare Guidelines – Sheep* are based on the *Model Code of Practice for the Welfare of Animals – The Sheep, (2nd edition 2006).*

CONTENTS

1. SCOPE AND INTENTION OF THESE GUIDELINES

These guidelines set out recommended practice for the welfare of sheep under extensive production (grazing) conditions. Guidelines for sheep managed under intensive or minimal grazing systems will be developed as the need arises.

These guidelines should be followed by all people who handle and manage sheep. They take account of significant differences in production practices on grazing properties, which are determined principally by climate and environment.

Notwithstanding the wide range of different production practices, the owners and handlers of sheep are responsible for the health and well-being of the animals in their control.

The behaviour, attitude and consistency of handlers are key factors in determining welfare in a flock. Competent handlers must be able to anticipate situations in which welfare may be at risk and to recognise early signs of distress or ill-health animals, so that appropriate preventative or remedial action may be taken.

The basic requirements for the welfare of grazing sheep are:

- An adequate level of nutrition to sustain health and well-being at all times.
- Access to sufficient water of suitable quality to meet physiological needs.
- Arrangements, in advance, to ensure that food and water can be made available to them in emergencies.
- Social contact.
- Protection from predation.
- Protection from unnecessary pain and injury.
- Protection from and treatment of diseases.
- Protection from extremes of climate which may be life threatening.
- Handling facilities which, under normal usage, cause neither injury nor distress.

2. DUTY OF CARE

Under the Animal Welfare Act, persons who have the care or charge of animals have a legal "duty of care" for the welfare of those animals, and must take all reasonable measures to ensure their welfare.

In the case of sheep, persons with this legal duty of care include the owner, the person with control or custody, the operator or manager of the premises where the sheep are kept and the manager or director of a body corporate which owns them.

Where sheep are under agistment, the legal duty of care rests with the owner or manager of the land on which the sheep are agisted, unless there is a written agreement otherwise.

People providing agistment are advised to formally establish their responsibilities by legal agreement.

3. FOOD AND WATER

Under the Animal Welfare Act it is an offence to fail to provide animals in your care with appropriate and sufficient food.

3.1. Food

In all systems of management, an on-going assessment should be made of the needs in relation to the amount, quality and continuity of feed supply.

Sheep should have available a diet which is nutritionally adequate to maintain health and meet the specific requirements of growth, pregnancy and lactation.

Sheep being fed for survival should be examined regularly. Less thrifty sheep should be segregated for special treatment.

Where an adequate level of nutrition cannot be met, sheep should be moved to other areas where adequate feed is available. Alternatively, they should be sold, or humanely slaughtered.

Sheep should be protected, as far as possible, from plants and foods deleterious to their health.

3.2 Water

Under the Animal Welfare Act it is an offence to fail to provide animals in your care with appropriate and sufficient water.

Except when there is adequate moisture obtained from pasture, sheep require access to water. An on-going assessment should be made in relation to the amount, quality and quantity of water supply.

Watering points should be located within the normal travel range of sheep.

Water provided for sheep should be of suitable quality to meet physiological needs.

Where sufficient water to maintain health cannot be provided, the sheep should be moved to other areas where an adequate supply is available, sold or humanely slaughtered.

4. PROTECTION FROM CLIMATIC EXTREMES, NATURAL DISASTERS AND PREDATION

Under the Animal Welfare Act it is an offence to fail to provide animals in your care with appropriate and sufficient shelter.

All reasonable steps should be taken to minimise the effects of weather that produces either heat or cold stress in sheep. Recently shorn sheep and new born lambs are particularly susceptible.

Plans should be made to ensure that, as far as practicable, sheep can be attended to promptly in the event of fire, injury or disease.

Where predation is known to occur, reasonable means should be used to protect sheep.

5. SHEEP HANDLING FACILITIES

Well-designed sheep handling facilities and the ease with which animals flow through them, have important implications for the welfare of the sheep. When new sheep yards are to be constructed, or existing yards modified, advice should be sought from advisory services.

Sheds and yards should be constructed and maintained so as to minimise the risk of injury. The floors of sheep sheds and yards should have surfaces that minimise the risk of injury and disease and allow sheep to stand and walk normally.

Where sheep are held in yards for extended periods their requirements for food, water and shelter should be met.

6. MANAGEMENT PRACTICES

6.1. General

Practices that cause pain should not be carried out on sheep if painless and practical methods can be adopted to achieve the same results.

Sheep should not be allowed to suffer painful conditions for want of attention.

Management procedures carried out on sheep should be performed by competent persons.

Relevant hygienic precautions should be undertaken for all surgical operations.

Restraint used on sheep should be the minimum necessary to efficiently carry out the required procedures.

Protection against tetanus is recommended prior to any operation, and in particular before castration or tail docking with rubber rings.

6.2. Supervision

The frequency and level of inspection should be related to the likelihood of risk to the welfare of the sheep. Owners and managers including absentee owners and managers have a responsibility to ensure that sheep are inspected sufficiently often to prevent development of health and welfare problems.

Sheep grazing under more extensive conditions require variable supervision, according to the density of stocking, availability of suitable feed, reliability of water supply, age, pregnancy, climatic conditions and management practices.

6.3. Handling and Movement

It is essential that the catcher handle sheep gently, with the minimum of stress to the individual sheep and to other sheep nearby.

Sheep should not be dragged or lifted by a leg or by the wool.

Sheep should be moved through the yards with the minimum of forcing by dog or man. Gates should not be slammed against sheep to block movement.

The excessive use of prodding, goading or biting dogs, especially on sheep which have little or no room to move, exposes the operator to the cruelty provisions of the Animal Welfare Act.

6.4. Use of Dogs

The use of dogs and goading devices for handling sheep should be limited to the minimum needed to complete the procedures.

Dogs that bite should be effectively muzzled while working and restrained when not working.

6.5. Shearing

Sheep must be shorn annually. Sheep with more than one year's wool growth are highly susceptible to heat stress and disease. Allowing sheep to grow excessively long fleeces may expose the operator to the cruelty provisions of the Animal Welfare Act.

Crutching, wigging and ringing may be required at other times of the year for hygienic reasons or to minimise impairment of vision or the risk of fly-strike.

Shearing is stressful. Shearing stress can be reduced by avoiding lengthy handling, avoiding exposure to adverse weather and by returning the sheep to food and water as soon as possible after shearing.

6.6. Dipping and Jetting

Plunge and shower dips and spray races should be constructed, maintained and operated in a manner that minimises injury and stress to sheep.

6.7. Paring of Feet

Sheep with poor hoof conformation, or those kept on soft ground, may require regular foot trimming to prevent lameness.

Sheep affected with footrot may need to have diseased tissue pared away by a sharp instrument. This should remove only as much tissue as is necessary to complete the operation and should not cause excessive pain or bleeding.

6.8. Horns

Long horns may need to be cut back to avoid injury to other sheep and to allow free movement through handling races. The amount of horn removed should be minimum needed to achieve these results and should not cause bleeding.

During horn branding care should be taken to ensure that soft horn tissue is not entered.

7. MINOR SURGICAL PROCEDURES

7.1. General

Minor surgery usually causes little stress if carried out efficiently and with minimal restraint. Strict attention should be paid to:

- the suitability of the work area in which the operation is to be performed.
- the catching facilities.
- the type and amount of restraint.
- the selection and maintenance of instruments.
- hygiene.
- after- care of the animals.
- protection against tetanus prior to any operation is recommended particularly when rings are to be used.

A veterinarian or other competent operator should be employed where management is not conversant with the procedure.

7.2 Ear Marking

Ear marking instruments should be sharp and the cutting edges complete so as not to cause tearing of the ear.

7.3 Tail-Docking

Tail-docking, where it is considered necessary, should be performed on lambs as early as management practices will allow.

Acceptable methods of tail docking, without anaesthesia, are:

- cutting with a sharp knife.
- rubber rings applied according to the manufacturer's recommendation.
- a heated searing iron used according to the manufacturer's recommendations.

Tail-docking without anaesthetic should be done as early as possible, preferably before 12 weeks and should not be carried out on lambs older than six months.

The docked tail should be long enough to cover the vulva of the ewe lamb and be of similar length in the male lamb. This recommendation may be varied, in the case of certain breeds, when experience has shown that shorter tail length is not associated with undesirable effects.

7.4 Castration

Castration should be performed on lambs as early as management practices will allow.

Castration may be unnecessary if lambs are to be marketed for slaughter prior to puberty, which generally occurs at an age of 3-6 months. (Note: The age of puberty is extremely variable, according to breeds and conditions).

Acceptable methods of castrating male lambs, without anaesthesia, are by:

- Cutting. The lamb should be properly restrained and the knife (cutting instrument) kept clean and sharp. Good post-operative drainage of the wound is required.
- Rubber rings applied according to the manufacturer's recommendation.
- Emasculators or spermatic cord crushing instruments used according to the manufacturer's recommendations.

Castration, vasectomy or the induction of cryptorchidism (the repositioning of the testicles into the abdomen) of rams over six months of age should not be performed without the use of a anaesthetic.

7.5. Mulesing

See Appendix 1. Mulesing

7.6. Identification

It is a legal requirement to earmark all sheep (except certain stud sheep) with a registered earmark before attaining the age of six months. Stud sheep whose pedigrees have been kept for three or more generations are exempt.

In horned sheep, the horn may be branded with a registered brand provided care is taken to ensure that the branding does not predispose the animal to infection and does not burn sensitive tissue.

7.7. Pizzle Dropping

This operation is sometimes performed to reduce wetting of belly-wool by urine. This can reduce the possibility of fly-strike in the region of the pizzle, and decrease the amount of unscourable, urine-stained wool. The operation is not generally recommended.

If considered necessary, it is recommended that it be performed in conjunction with other lamb marking operations and only on lambs less than three months of age. Lambs should be checked regularly for signs of fly-strike of the wound, and infested wounds should be treated without delay.

7.8. Dental Procedures

There is no published scientific evidence that either teeth grinding or trimming have any positive effect on the health, well-being or productivity of individuals.

In aged sheep, corrective procedures such as the removal of loose teeth, particularly incisors, may prove beneficial.

8. PROTECTION FROM DISEASE

Under the Animal Welfare Act it is an offence to have possession or custody of a sick or injured animal and fail to provide veterinary or other appropriate treatment.

Sick, injured or diseased sheep should be given prompt and appropriate treatment or humanely slaughtered.

Slaughter should be performed according to an approved method. (See Section 12)

Appropriate preventive treatment should be administered to the sheep for diseases that are common in a district or are likely to occur in a flock.

Internal medication, such as vaccines and worm drenches, and external medication, such as dips, should be used in strict accordance with the manufacturer's instructions.

9. DROUGHT

Drought may be defined as a lack of paddock feed and/or drinking water, resulting in the potential for excessive weight loss and/or death. A seasonal shortage of food is not considered to be drought, but may lead to unacceptable weight loss in sheep.

Drought feeding of sheep should start 14-21 days before feed runs out. As paddock feed conditions deteriorate, strategies for drought management should be prepared. Owners or managers with limited or no previous experience of drought management should seek up-to-date advice.

Experienced owners should confirm that their drought management strategies are up-to-date. Where survival feeding cannot be arranged sheep should be moved, sold or humanely slaughtered on site.

Drought-affected sheep required particular care and protection from cold, wet weather and from stresses occurring during road transportation.

Provided they are fit to transport, drought-affected sheep in poor condition and for which supplementary feed or agistment is neither available nor planned, should be sent directly to a slaughtering plant as near as possible to their current location or disposed of on site. They should not be consigned to saleyards.

Sheep suffering from drought conditions which go down after limited exercise can be considered to be at their minimum survival weight and not fit to travel.

Sheep which go down and are unable to rise and sheep which are likely to do down from starvation or dehydration before they are again checked should be destroyed humanely on site.

10. LAMBING

Lambing ewe flocks under grazing conditions should be disturbed as little as possible during the lambing period. However, the flocks should be under frequent surveillance. At least once daily is suggested to ensure cast ewes and cases of dystocia are attended to without delay. It is recommended that lambing ewe flocks have access to areas of shelter.

11. ORPHAN LAMBS

Where available, colostrum, or colostrum substitutes are recommended for the orphan lambs' first feed. An adequate milk or milk substitute should be provided, as well as warmth and shelter.

Orphan lambs should be humanely destroyed unless they are to be hand-reared or cross mothered.

12. EMERGENCY DESTRUCTION OF SHEEP

These Guidelines have drawn attention to those circumstances when, for humane reasons, sheep may need to be destroyed.

The method of slaughter should be effective and humane, causing sudden and painless death for the animal. The animal must be handled quietly beforehand to ensure it is not unnecessarily distressed or alarmed.

The methods recommended are those which are considered most suitable for a farm situation.

12.1 Use of Firearms and Captive-bolt Stunners

The use of firearms and captive-bolt pistols is subject to the provisions of the Firearms Act 1996.

The most efficient and widely available method of humanely destroying sheep is a gunshot to the brain from close range. There may be legal restrictions on the use of firearms other than on private property, in which case assistance should be sought from veterinarians, the RSPCA or the Police.

The effectiveness of shooting is dependent upon the destruction of major centres at the back of the brain near the spinal cord. A common mistake is to direct the bullet too low, damaging frontal areas. Partial recovery may then occur.

The following aspects of firearms safety should be borne in mind:

- A .22 caliber rifle or .31 caliber humane killer pistol is adequate for humane destruction of sheep.
- Any use of firearms is potentially hazardous.
- Persons other than the marksman and a handler should be cleared from the area or should stand well behind the marksman.
- Never fire while the animal is moving its head; wait for a quiet interval before firing.
- To provide maximum impact and the least possibility of misdirection, the range should be as short as circumstances permit.
- Whilst the humane killer pistol and captive-bolt stunner are designed to be pressed firmly on the head before being discharged, it is not desirable to do this with a standard rifle or pistol.

The **captive-bolt stunner** is safer since a blank cartridge is used. The operator does not have to be a marksman as the instrument's muzzle is firmly pressed against the sheep's skull before firing. It must, however, be assumed that the animal has only been stunned and a follow-up method of ensuring death, such as bleeding out, is required.

Blank cartridges for the captive-bolt stunner are colour-coded according to the amount of charge they contain. The manufacturer's directions should be followed on the most appropriate blank cartridge for sheep. Regular maintenance of the captive-bolt stunner is essential for efficient stunning.

Two types of captive-bolt stunner are available. The concussion stunner has a wide mushroom shaped head which delivers a knock-out blow to the skull. The penetrating stunner has a narrow bolt which is driven a short distance into the brain.

The penetrating type of captive-bolt stunner is recommended, since it is more reliable at delivering an effective stun.

12.2. Method

Hornless sheep and rams

Using a firearm: Two approaches are illustrated in Figure 1. The firearm I aimed (a) just behind the poll in the direction of the animal's muzzle, or (b) from the side of the head at a point midway between the eye and the base of the ear.

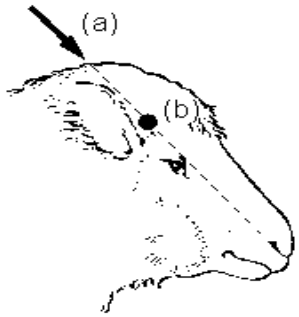


Figure 1: Recommended position and direction of fire for the firearm - hornless sheep and rams.

Using a captive-bolt stunner: Two approaches are illustrated in Figure 2. The captive-bolt stunner is placed firmly (a) on top of the head before firing, or (b) behind the poll in line with the animal's muzzle. The animal should be bled out immediately following collapse.

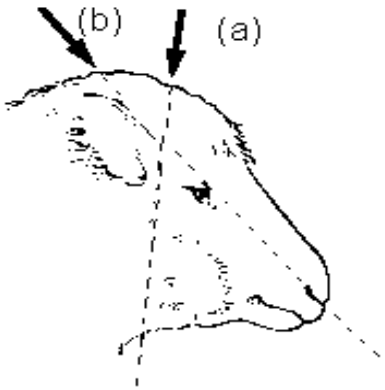


Figure 2 Recommended position and direction of fire for the captive-bolt stunner - hornless sheep and rams.

Horned sheep and rams:

Using a firearm: Shoot at a point in the middle of the face just above the level of the eyes whilst aiming along the neck as shown in Figure 3. The head may be steadied by an assistant who keeps out of the line of fire.

Figure3v Recommended position and direction of fire for firearm - horned sheep and rams.

Using a captive-bolt stunner: In horned sheep and rams, the top of the head position may not be suitable, in which case the instrument may be placed behind the poll and aimed in the direction of the animal's muzzle (see Figure 3). The animal should be bled out immediately following collapse.

Figure3 Recommended position and direction of fire for captive-bolt pistol - horned sheep and rams.

12.3 Clubbing or Stunning

In all circumstances, it is preferred that the animals be destroyed using a firearm or captive-bolt stunner.

A hammer, or other blunt but heavy object, may be used to make a blow to the skull of lambs only to render them unconscious. The blow should be aimed at the back of the poll. The unconscious lamb should be IMMEDIATELY bled-out to ensure death.

12.4 Bleeding-out Without Pre-stunning

Bleeding out without pre-stunning is a humane alternative method of slaughter for sheep and goats only, provided it is done by a skilled person using a suitable, sharp knife.

The animal should be laid on its side and the head drawn back. The neck is quickly cut transversely completely through to the spine just behind the jaw bone. Do not dislocate the neck.

APPENDIX 1 - MULESING

1. INTRODUCTION

A. Background

The mulesing procedure involves the removal of wool-bearing skin from the tail and breech area of sheep. It is intended for prevention of flystrike injury. The procedure is performed as a part of integrated approach to fly strike management including crutching and shearing, good worm control, strategic use of chemicals, genetic selection and paddock grazing management. It provides a high degree of lifetime protection against fly strike in the breech area.

B. Phasing out of mulesing

The wool industry has proposed that surgical mulesing will be phased out by 2010. Until mulesing can be phased out, the standards for the conduct of the procedure as outlined in this code must be adhered to.

C. Values and Principles Underlying the Mulesing Code

Underpinning this code is the commitment of the sheep industries to the following essential values and principles in relation to sheep husbandry and to mulesing in particular:

1. Animal welfare is recognised and pursued as an essential component of animal husbandry and productivity
2. Mulesing will be carried out only in circumstances in which it is clearly in the best interests of the long-term welfare of the animals
3. A comprehensive and audited training and accreditation process is available and mandatory for anyone who perform the mulesing procedure.
4. New technology including analgesic treatment will be adopted promptly after approval, to minimise pain associated with the procedure.
5. There are resourced and coordinated for research and education programs to find and apply alternatives to mulesing.

D. Legislation

Legislation in States and Territories covering regulation of veterinary procedures and/or animal welfare must be complied with.

E. Indications for mulesing

Sheep producers should carefully consider all options for breech strike prevention in flocks before undertaking mulesing. Mulesing may not be necessary on properties in specific low risk regions, with improved selection and breeding for 'fly and worm resistance', where crutching is conducted 2–3 months before shearing, or where other strategies can effectively prevent breech flystrike.

Key indicators for use of mulesing are;

- The property on which the stock is farmed is regularly subject to a high risk of breech flystrike.
- The breed is Merino or Merino derivative.
- The sheep have significant wrinkle or wool cover in the breech area.

- The majority of the lambs to be mulesed are intended to be farmed as adult sheep...
- The sheep are likely to be sold and kept as adults in areas prone to breech flystrike.

2. OPERATOR COMPETENCY

AWI is supporting the development of a range of national accreditation programs.

3. SELECTION OF SHEEP

A. Health and condition

Animals in poor condition or showing signs of disease must not be mulesed. Poor health and condition increase the risk of post-operative complications and death.

A pre-operative evaluation of sheep must be conducted.

B. Age

The recommended age for mulesing is 2 to 12 weeks. Mulesing should be done in conjunction with lamb marking to minimise stress and handling. In exceptional circumstances, such as proclaimed drought or other conditions in which mulesing is not practicable, lambs can be mulesed over 12 weeks of age. Mulesing of sheep over 6 months must be done with anaesthesia.

Additional monitoring should be done for sheep mulesed over 12 weeks of age and any sheep showing signs of infection or ill health should be treated promptly.

Sheep must not be mulesed after 12 months of age.

4. PREPARATION

A. Weather

Choose a fine, mild day.

Weather extremes should be avoided. Cold weather places an additional stress on lambs. Wet or dusty conditions increase the risk of wound contamination. Windy conditions may interfere with mothering up. Excessively hot conditions can increase bleeding and stress on lambs.

B. Time of day

Marking and mulesing should be done at a time which minimises the separation of lambs and ewes and allows mothering up to occur as quickly as possible.

Mulesing should be done when fly activity is expected to be minimal.

C. Stock handling/facilities

Do not drive or stress lambs before mulesing. Let them cool down before starting. This will reduce blood loss and aid recovery.

Mulesing must be carried out on clean, well-grassed areas in paddocks that have sufficient feed and water for at least four weeks after mulesing to avoid the need to move mulesed sheep. Wet, muddy, manure laden or dry dusty areas must be avoided to reduce the risk of wound contamination.

Use of temporary or portable yards is recommended to ensure:

1. The procedure can be carried out in an appropriate paddock.
2. The sheep do not have to be moved far immediately after the procedure.
3. The sheep can drift away slowly on release from the yards.

5. EQUIPMENT

A. Cradles

A mulesing cradle must be designed to:

1. Hold the lamb securely in a symmetrical position.
2. Position the hind legs close enough together so that folds of skin can easily be picked up.
3. Expose the rear end of the lamb in a more horizontal than vertical position.
4. Release the lamb on its feet to prevent contact of the wound with the ground to prevent contamination.
5. Enable effective cleaning and disinfection.

Cradles must be maintained in good working order and be operated with minimal risk of injury to the operator or lamb, especially when loading and unloading.

B. Shears

Shears used for mulesing must be properly prepared and maintained. Shears may be either curved or straight and must be sharpened and set correctly to allow straight-edged cuts to be made efficiently. .

To allow sufficient time for used shears to be cleaned, disinfected and sharpened between batches of lambs, at least three pairs of shears should be used.

C. Equipment NOT to be used

The following equipment must NOT be used:

- “Dunking” containers must not be used for insecticide application to the animal because the solution becomes contaminated with blood, faeces and urine, which can then be transferred to subsequent animals.
- Paint brushes must not be used for application of insecticide dressings because they gather and transfer blood, faeces and urine to subsequent animals.

6. HYGIENE

- Shears must be thoroughly cleaned and disinfected before initial use and each time they are changed for sharpening.
- Dirty shears must be washed to remove all blood, wool or faeces to permit the disinfectant to work effectively.
- Most disinfectants also have a detergent effect, which will assist with washing. However, if disinfectant is used in the washing process, this must NOT be regarded as having disinfected the equipment.
- At least two containers should be used, one for cleaning dirty shears **before** immersing them in disinfectant and one for disinfecting shears that have been cleaned.
- Containers must not be chipped, dirty or of a design that harbours bacteria.
- Registered surgical disinfectant must be used, according to label instructions.
- The disinfectant must be changed frequently because it will quickly become contaminated with blood and possibly faeces, urine and soil.
- It is not recommended to dip shears in disinfectant between lambs unless the disinfectant is changed prior to it becoming contaminated. If shears become visibly contaminated they should be cleaned and then dipped in clean disinfectant solution.

7. FLYSTRIKE PROTECTION AFTER MULESING

Mulesing should be done when fly activity is expected to be minimal. In rare cases, despite use of insecticides, mulesing wounds may still become struck.

The following measures should reduce the risk of flystrike and the need to use chemicals following mulesing:

- Avoid mulesing when conditions are ideal for flies.
- Sharp, clean equipment must be used for mulesing.
- Encourage rapid wound healing, by removing the minimum amount of wool bearing skin to achieve the desired bare area.
- Ensure lambs are not disturbed, mustered or handled for at least four weeks after mulesing to assist wound healing. However, voluntary movement to adjacent areas is acceptable to allow access fresh feed.
- If an insecticide wound dressing is necessary, spray equipment should be used to apply a registered product according to label instructions immediately after completion of the procedure and before releasing the lamb from the cradle. Dry powder dressings should not be used as they may delay healing.

8. TECHNIQUE

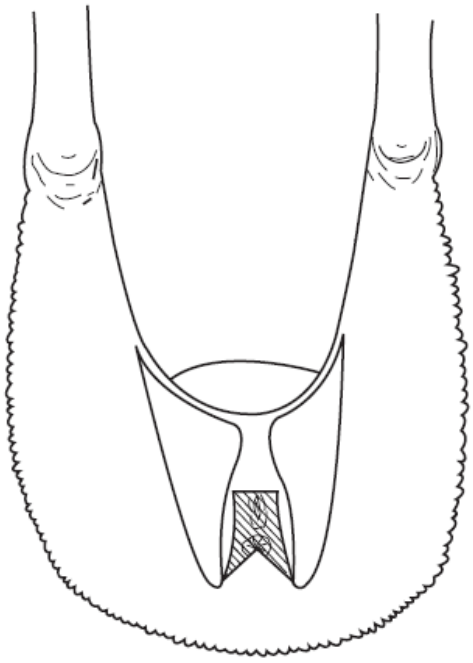
The approved mulesing technique is described in detail in the National Mulesing Accreditation Program.

The principles are:

- Allow the sheep to cool down before operating in order to minimise blood loss.
- The inside edges of the cuts should closely follow the line of the natural bare area. It is critical that no bare skin is removed.
- A thin strip (approximately 2mm) of wool bearing skin should be left between the mules and natural bare area.
- The breech cuts on either side of the vulva must not join each other. A strip of skin from below the vulva to the udder must remain intact.
- The minimum number of cuts should be used to achieve the desired result and this will depend on the conformation of the sheep.

- The size of the wound should be the minimum to achieve sufficient flystrike protection.
- The 'V' of the woolled skin left on top of the tail must be within the range of one third to two thirds of the docked tail length.
- The tail of the lamb should be removed as described in section 10.2 of this Code but without the use of rubber rings.
- The cuts should not have any jagged edges. Cuts with jagged edges become a focus of potential infection and flystrike and delay healing of the mulesing wound.
- Both sides must be symmetrical to avoid distortion of the vulva or tail.
- Only wool bearing skin is removed during the mulesing process. No other tissues such as selvage (muscle fascia – membrane overlying the muscle), muscle, or other underlying tissue are to be removed or cut. Cutting or removing these tissues will cause:
    - Delayed healing
    - More pain
    - More scarring
    - Possible distortion of tissues during healing.
    - Possible distortion of the function of tissues after healing.

Figure 1 mulesing incisions for breech area.



Recommended position of mules

9. POST-MULESING MANAGEMENT

Upon release from the cradle, the lamb should be landed on its feet to avoid contact of the wound with the ground to prevent contamination. Operators should continually evaluate their technique by checking wound symmetry and position as lambs are released.

A. Mothering Up

- After release, the lambs should be allowed to immediately "mother up" to the ewes. It recommended that ewes be held in a temporary fenced yard next to where lambs are released after the procedure.

B. Movement

- If it is unavoidable, ewes and lambs may be moved IMMEDIATELY after completing the operation. They should only be moved quietly over short distances taking less than half an hour.
- Lambs should then not be moved for four weeks after mulesing or until mulesing wounds are healed. However, voluntary movement to adjacent areas is acceptable to allow access fresh feed.

C. Monitoring

- Stock should be observed without disturbance at least every 3 days during the healing process. More frequent inspections should occur where the threat of flystrike or other risks are likely.
- Lambs which are abandoned and/or unable to stand up and walk should be given immediate treatment or humanely destroyed whilst minimising disturbance to the remainder of the mob.