


Assessing Burnt Livestock

A guide for assessing burnt
stock after a fire event

 **WARNING:** This document contains information, images, and descriptions related to livestock injuries which some readers may find distressing. The content is intended to assist farmers and animal handlers in the humane assessment and management of burnt livestock following fire events.



Department of Primary Industries and Regions
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Assessing Burnt Livestock

A guide for assessing burnt stock after a fire



Department of Primary Industries and Regions
Animal safety in an emergency

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1800 675 888

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Food and Fibre, 2002, Guidelines for Assessment of Burnt Stock. South Australian Department of Primary Industries and Resources. Adelaide.

NSW Department of Primary Industries, Agfact A0.9.46 Assessing Bushfire Burns in Livestock, John Bowler. Wilson, B., Robinson, R. and Brownrigg, 1984.

Assessment, Treatment and Disposal of Burnt Livestock. South Australia. Department of Agriculture. Adelaide.

Disclaimer

While Primary Industries and Regions South Australia (PIRSA) have tried to make the information in this publication as accurate as possible, it is intended as a guide only. The agency will not accept any liability in any way arising from information or advice that is contained in this publication.

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Annette Radford, Ray Butler, Jeremy Rogers, Annabel Cox

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How to use this guide

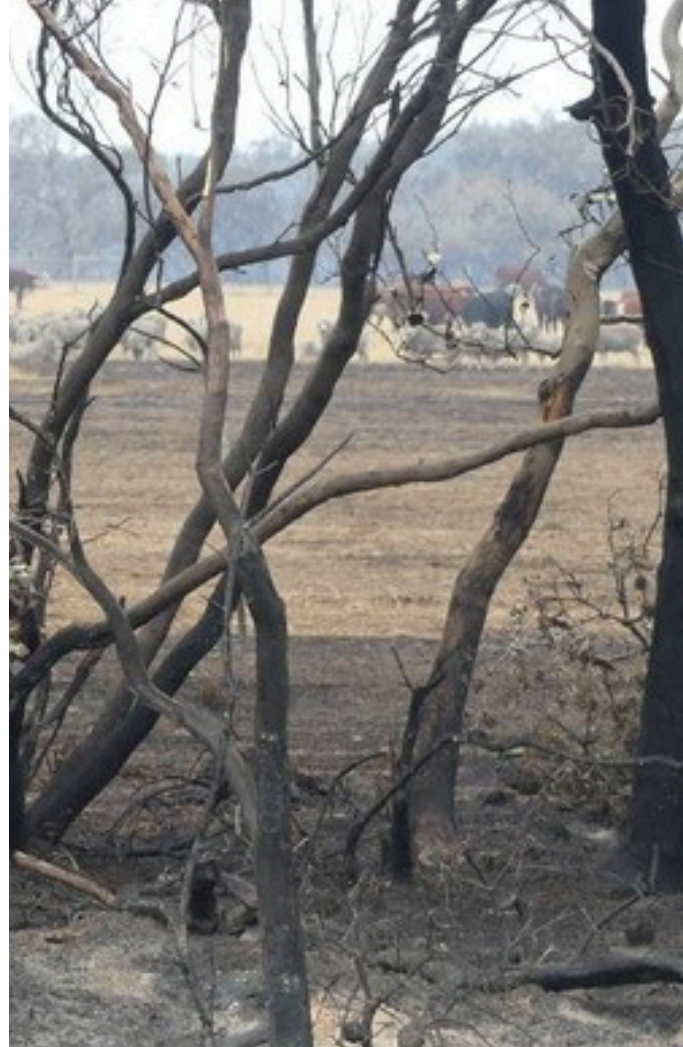
Bushfires can cause devastating injuries to livestock and so timely, humane assessment is essential to reduce suffering and make informed decisions. This booklet provides practical guidelines to assist farmers and responders in evaluating burnt animals safely and effectively.

Whenever possible, assessments should be carried out in consultation with the stock owner or their agent, especially if a veterinarian is not available. Burnt livestock are often in shock, so the process should be completed quickly and with minimal stress.

Timely decisions are critical, not only for animal welfare but also for biosecurity, food safety and farm recovery. Consider the following before starting an assessment:

- **Personal safety:** Ensure the fireground is secure and hazards such as unstable structures, smoke and hot spots are managed.
- **Animal handling:** Use calm, low-stress techniques; injured animals may be unpredictable.
- **Record keeping:** Document decisions for insurance, compliance and herd management.
- **Legal and ethical obligations:** Humane destruction must comply with animal welfare legislation and accepted industry standards.

These guidelines aim to support practical, compassionate choices under challenging conditions.



Key to assessing burn levels

The following indicators can help identify the severity of burns and guide assessment of livestock after a fire.

First degree burns

- superficial in nature, effects only the epidermis
- evidenced by reddening of the skin, without blisters

1



Second degree burns

- moderate burning with blister formation
- soft swelling of the skin
- skin splitting/weeping
- leathery appearance of skin

2



Third degree burns

- severely charred skin, may appear black or white
- damage to the full skin layer including underlying tissues (e.g. tendons, muscles, bone).

Deep burns require immediate destruction

3

Introduction to assessing burnt stock

When assessing burnt livestock, you must take several factors into account when determining their future.

These include:

- the availability of personnel to provide adequate animal care
- the facilities and costs involved available for animal care, and weather conditions
- whether the type of land permits intensive care of stock
- the quality and quantity of feed and water available
- the general body condition of the stock
- the age of the stock
- any concurrent illnesses the stock may have
- whether or not the stock are heavily pregnant or nursing young
- whether the stock will be viable breeders in the longer term.

After a fire event, simple livestock examination procedures are divided into two phrases:

1. Emergency Phase

2. Delayed Phase



Livestock Examination Phases

Emergency Phase

The emergency phase occurs during or immediately after a fire. Destruction of stock at this time is based on humane grounds, with only severely injured animals that are either unconscious or in obvious pain being destroyed. If the animals appear reasonably alert and can walk, it is usually best to leave them for a closer examination later.

Young animals are more susceptible to fire injury than adults, an examination of young may provide an early indication of the intensity of the fire event.

Emergency destruction is warranted in the following cases:

- Animals with severe charring of limbs, muscles or facial tissues
- Animals suffering from smoke or flame inhalation, resulting in acute respiratory distress, as evidenced by laboured breathing, frothing at the nose, mouth and/or coughing and very swollen heads
- Animals which are down and unable to rise because of burn injuries.

Delayed Phase

The delayed phase usually commences a day or so after the fire and may continue for some time afterwards. Wherever possible, confine the stock so that each animal can be examined closely. Use temporary yards if necessary.

The areas that require close examination on each animal include the head, the legs, inside the shoulder and thighs, genitals and teats and around the tail. Sheep must be turned up for close inspection.

If animals are scorched only on the underside, do not destroy them. Most will survive with good care.

In **males and castrates**, pay special attention to the sheath, this area is particularly prone to severe burns resulting in scab formation. Scabs can lead to urinary obstruction and subsequent death.

In **females**, burns to the udder and teats are common. This is generally not sufficient reason for immediate destruction unless associated with other severe burns. Many will survive. Sometimes, the udder and teats are found to be functional after a period, but these animals should be checked.

Nursing burnt stock

Animals that were not destroyed during the 'Emergency Phase' should be placed in a 'hospital' paddock or yard where they can be inspected regularly and nursed well.

When nursing stock that may have been exposed to fire or smoke you should:

- re-examine and re-assess stock daily for at least 14 days and destroy animals as necessary.
 - where possible, position stock on soft, shaded ground (especially if feet are burnt) with shelter from rain and wind
 - provide ready access to good-quality hay and water. Burnt animals are reluctant to move and usually do not feed for a few days but should be eating again within 7 days after fire event. They should be given high-protein feeds such as good lucerne, meadow hay or a cereal legume hay, to aid healing.
 - inspect animals regularly to ensure that they are able to move to water and drink. Animals that are unable to drink should be destroyed.
 - examine males and castrates about 4-7 days after the fire to monitor urination.
- monitor pregnant or nursing females, checking teats to see if milk can flow from them. If not, the offspring may need to be hand reared and you may need to cull the mother. Check for mastitis.
 - check all animals regularly for signs of flystrike, both on burnt areas of the body and on the feet.
 - inspect and treat for parasites and other infectious diseases that may spread more readily in confined conditions, such as pinkeye and campylobacter abortions. Obtain veterinary advice on treatments and vaccinations that may assist with treatment and alleviating pain/discomfort.
 - consult your veterinarian who may supply long-acting antibiotics and/or anti-inflammatories immediately, especially for the more severely burnt animals as this may help prevent secondary infection.
 - Withholding periods (WHP) and export slaughter intervals (ESI) should be observed if stock are to be retained for subsequent slaughter and accurate records and identification of treated animals should be kept.

Additional considerations when assessing stock

Owners/livestock manager mental health

Recovering after a bushfire is very stressful to the livestock owners and staff. They could be dealing with multiple factors at once such as loss of stock and pets, loss of home, loss of infrastructure or human life.

Before assessing stock, confirm with the stock owner if a hospital mob is an option. They simply may not have the mental capacity or resources to check injured stock daily and provide ongoing treatment.

Alternatively, another person might be able to attend to stock. It might be worth considering other options such as salvaged for slaughter or the humane destruction as an alternative to having them suffer without regular treatment or care.

Consult with stock owners to identify animals of particular economic, breeding or sentimental value as these may warrant more detailed assessment prior to any decision about destruction.



Additional considerations when assessing stock

Feasibility of treatment

Successful treatment of burnt stock requires daily monitoring for at least the first 10 days.

Treatment is likely to be a long process with no guarantee of success. Where a number of animals are involved, sufficient human resources must be available to carry out treatment, hand feeding and care. Sufficient feed, water, shelter and facilities must be available.

If these conditions cannot be met and treatment is not feasible, these animals should be destroyed.

Body Conditions

Age, degree of burns and stage of pregnancy will influence chances of recovery and salvage value. Aged or heavily pregnant or very young animals may be less likely to survive treatment.

Valuable stock

Although costly and time consuming, intensive veterinary care can save valuable animals.

Horses, stud cattle, stud sheep, working dogs and family pets may be worth the expense and time needed for intensive treatment. Because they may have high value (genetic, emotional or financial), saving them may be of increased significance.

When assessing stock for destruction, the decision to treat or destroy animals should be made in consultation with the owner.

Lactating or late-stage pregnant cows should be assessed as to the likelihood of being able to rear a calf. Qualified veterinary opinion should be used in these cases.

Additional considerations when assessing stock

Insurance

Whether affected animals are insured should be considered by the stock owner/manager but should not be the overriding influence in the assessor's judgment, which should be based primarily on humane criteria.

Where insured stock are destroyed, the following should be recorded:

- Date and approximate time of destruction
- Location (property name, paddock, GPS if possible)
- Herd and flock animals — owner, number destroyed, age, breed and sex
- Stud or individually insured animals — name, brands, ear mark tattoo and electronic identification(eID) numbers
- Method used - firearm, captive bolt or other approved method
- Person responsible - name and contact information
- Photographic evidence (where practical) - to support insurance claims and compliance

The insurance company will require verified records and the owner should be advised to retain copies of these.



Grouping categories

To guide decision-making, burnt stock are grouped into four categories:

1. Immediate destruction	animals with injuries incompatible with survival or welfare.
2. Salvage by slaughter	where humane slaughter for salvage is possible (though not always viable or available).
3. Retain for treatment	animals with injuries that can be managed effectively.
4. Return to paddock	animals with minor injuries that can recover without intervention.

1. Stock Requiring Immediate Destruction

Stock that should be considered for immediate destruction include those showing any of the following:

- **Burns covering more than 15 per cent of their body**, where skin is destroyed, split or sloughing. Show severe charring of limbs, muscles or facial tissues.
- **Extensive burn damage to legs and feet**, including destruction of underlying tissues:
 - Legs swollen, skin dry and leathery (these animals will eventually go down and die).

- **Loss of hooves**, even if other burns are minor
- **Obvious fractures**
- **Unconscious, immobile or unable to rise** due to pain from injuries
- **Severe distress from smoke or flame inhalation**, with signs such as:
 - Laboured breathing (rattles, heaves, panting)
 - Frothing at nose or mouth.
 - Heavy nasal discharge and/or coughing
 - Very swollen head

Not all injuries require immediate destruction. Some may heal or need monitoring:

- **Burns to anal region in sheep**: often heal satisfactorily, but loss of anal control can lead to breech wool soiling and increased flystrike risk.
- **Bare or muled areas in sheep**: more prone to burns.
- **Burns to feet**: Destruction is not always necessary. If separation at the coronet is observed, reinspect the animal after several days.
- **Severe burns to face and eyes**: May take weeks to heal. If the animal cannot eat or breathe properly, destruction is necessary.
- **Secondary infections**: Pneumonia or local tissue infections may develop post-burns. Some cases can be treated, seek veterinary advice.

Grouping categories

2. Salvage by slaughter at an abattoir

This option could be considered where there is little evidence of carcass damage, treatment is impractical or culling of pregnant animals unlikely to be able to rear offspring is necessary.

In all cases, the manager of the abattoir should be contacted to establish under what conditions the abattoir will accept burnt stock and how many.

The abattoir must be aware that the stock are to be slaughtered within 24 hours of their arrival. Any conditions imposed by the works manager (i.e., the class and price of stock) must be relayed to the owner or agent.

Transport availability and type should be considered as well as the distance the stock would need to be transported.

Meat & Livestock Australia 'Is it fit to load?' Guide



All livestock must satisfy “Fit to load” requirements for salvage slaughter.

Animals that should **not be considered** for salvage by slaughter include those with:

- Severe burns to more than 15–20% of the body surface
- Leg skin severely burnt, becoming dry, hard or swollen, causing immobility
- Severe burns to vital areas: udder, prepuce, lips, nostrils, eyes, anus
- Soft swelling under the jaw, belly line and unprotected limb-body junctions, restricting movement
- Moderate respiratory distress: rapid breathing, nasal discharge
- Blindness in both eyes



Grouping categories

3. Retain for treatment

Included in this category are animals with:

- severe burns to less than 10–15% of body surface
- superficial to moderate burns over a large area
- severe burns to teats and prepuce, providing there will be follow up/individual inspections of these animals
- burns to feet only (not lower leg skin)
- no obvious respiratory distress

This option should only be considered where the owner is willing to undertake the necessary treatment regime and the following are available:

- suitable holding yards with a soft, even surface to facilitate observation and treatment
- adequate supply of feed and ready access to water, shelter and shade
- daily attention

Remember, rain often follows a severe fire event.

4. Return to paddock

Include animals with superficial burns only (i.e., wool scorched and no lameness or evidence of respiratory or other distress).



Additional species information

Sheep

Sheep are often the most severely affected stock after a bushfire. However, the categories of assessment described here should also be used when assessing other animals.

The degree of scorching of the wool often indicates the worst affected sheep although wool does have very good insulating qualities. In full wool animals the feet may be the only damaged tissue and are easily overlooked.

Hooves may drop off a week later, so monitoring over multiple days is important.

Burns are not always visible since they are most likely to be underneath, in between front and back legs. For this reason, individual sheep should be tipped and thoroughly examined.

Detailed examination of individuals may not be possible at first, due to lack of facilities (yards) and personnel, but it is essential that each animal receives an individual assessment.

In a largely mobile mob, walking them through a race and drafting the worst and most obviously injured is a great help in the yard management of the rest of the mob.

Yarding sheep for assessment

Burnt sheep should not be driven long distances to holding yards. Portable yards should be taken to the stock to enable quick assessment.

If portable yards are not available sheep can be mustered into a temporary yard constructed of cyclone wire and droppers.

When yarding sheep, consider the location and placement of the yards regarding ease of removal and disposal of those animals that need to be destroyed.



Additional species information

Cattle

Generally, cattle are less severely affected by burns than sheep because of their height and ability to escape, but they can be severely burnt if trapped.

Assessment criteria and the categories for assessment are similar to those for sheep, but damage to teats and udders may be more serious, difficult to see and difficult to treat.

If cows have calves, check teats to see if milk can flow from them and rear the calves if necessary.

Cows with moderate to severe burns to teats and udders may be possible for salvage slaughter, provided “Fit to Load” requirements are met. Where salvage slaughter is not an option, teats should be re-inspected three or four weeks later.

Decisions to cull pregnant cows that may not be able to successfully rear a calf is best made before pregnancy is too advanced.



Additional species information

Goats

Goats generally tolerate stress poorly, compared with cattle and sheep. They are therefore very susceptible to shock if burnt and may be more susceptible to heat radiation and direct burns. Therefore, the coats of burnt goats should always be parted and the skin examined.

Due to the loose hanging nature of the skin around the udder in milking goats, secondary mastitis is a possible complication.

Goats are generally more vocal and expressive than sheep, and this should be differentiated from their usual objection to bodily restraint.

Milking goats may be assessed in the same manner as dairy cows and other goats assessed in the same manner as sheep noting that salvage slaughter is generally not an option.



Horses

Horses often escape all but the more severe fires unless trapped in stables or yards.

Burnt horses usually require intensive care under the direction of a veterinarian.

In some cases, destruction is required, with the permission of owners. First aid may ease suffering until the veterinarian arrives, but only experienced people should attempt this.



Additional species information

Pigs

Pigs are very poorly insulated and protected. Most will be housed in buildings and small yards and are likely to die from heat stress, suffocation or inhalation before or during the fire.

Any burnt survivors are best destroyed.

Salvage for slaughter is usually not appropriate.

Inexperienced people should not attempt examination, handling or assessment of pigs.



Poultry

Poultry are usually confined in or near buildings and die before or during the fire.

Smoke causes the birds to panic and deaths result from smoke inhalation and suffocation from smothering.

Most survivors show little ill effect, but declining birds should be removed and destroyed, preferably at night to avoid additional stress.

Salvage for slaughter is usually not appropriate.



Additional species information

Pets and wildlife

The extent of burns encountered by pets and wildlife will vary depending on the type of animals involved and their proximity to the fire.

Commonly, household pets (dogs, cats) suffer burnt feet due to walking on hot surfaces after the fire has passed.

They should be referred to a veterinary surgeon for treatment and rehabilitation. In some cases of obvious pain and distress, the animal should be euthanised with permission of owners.



Destruction of stock

Selecting a destruction method

When choosing a destruction method, the safety of people directly involved and those around them must be the priority. It is important to involve personnel who are experienced in destroying livestock.

To determine the most appropriate method of destruction you should consider factors including:

- the reason the animal needs to be euthanised
- the distance between you and the animal
- what type of firearm you possess
- where the animals are located
- the type and class of animal

Destruction methods chosen should result in the most humane and quickest death possible for the animal as per the Australian Animal Welfare Standards and Guidelines.

The most common methods of destruction are:

1. firearm
2. captive bolt - stun gun
3. bleeding out (exsanguination)

For pros and cons of firearm and captive bolt (see Table 1).

Firearm destruction method

The optimal method is to direct the bullet through the base of the brain. The appropriate shooting site and angle of trajectory for each species is shown on the following pages, inexperienced people may shoot too low.

Consider the use of a hollow point projectile for the destruction of sheep at close range, as it is less likely to exit the head.

Take particular care when destroying horned stock or stock penned in yards fenced with steel pipe as animal movement incurring a miss can cause the projectile to ricochet.

Do not shoot for a longer period than you are comfortable with, as concentration may lapse and misses may occur.

Table 1:

Captive bolt		Firearms	
<p>Two colour-coding systems are used to classify captive bolt cartridges in Australia.</p> <p>Check manufacturer charts for your specific cartridges and always confirm the cartridge colour and power level against the animal category before use. Using the wrong size can lead to ineffective stunning or excessive force.</p>		<p>Sheep/goats: ≥ 0.22 long rifle calibre</p> <p>Large animals (e.g. bull): ≥ 0.30 high power calibre</p>	
Pros	Cons	Pros	Cons
<ul style="list-style-type: none"> Doesn't require licence (as per SA <i>Firearms Act</i>) Safer and easier to handle Multiple people can work in one area 	<ul style="list-style-type: none"> Animal needs to be restrained Needs to be firmly placed against animal May need multiple shots or exsanguination once stunned Not readily accessible 	<ul style="list-style-type: none"> Can euthanise animals at a distance Better on bigger animals, i.e. cattle More efficient death, if done correctly 	<ul style="list-style-type: none"> Not as safe Not as easy to handle Needs to be sighted in One person shooting per area Need firearms licence

Table 1: Demonstrates difference in using captive bolt versus firearms for euthanasia.

Destruction of stock

Consider the area you are planning to destroy stock in and avoid euthanising large numbers in larger pens. This not only causes undue stress for those animals destroyed last but can also complicate removal of the carcasses.

Captive Bolt stunner

Operators should follow manufacturer's instructions and ensure that charge settings and procedures for their captive bolt are appropriate and effective for the individual species and class of animal.

In Australia, two colour-coding systems are used to classify captive bolt cartridges; animal weight system (green-blue-yellow-red) and grain (pellet) weight system (pink-purple-green). Colours should not be substituted across systems.

Cartridge Coding System		Animal (examples)
Animal weight	Grain (pellet) weight	
Green <100kg	Pink 1.25gr	calves/lambs/piglets
Yellow	Purple 2.5gr	sheep/sml cattle/goats/ young pigs
Blue <600kg	Green 3gr	med cattle/adult pigs
Red		bulls/boars

NOTE: This table is provided as a GUIDE ONLY, refer to specific manufacturer's instructions for cartridge selection and usage.

It should be assumed that the animal has only been stunned and a follow-up method such as bleeding-out used in addition.

Captive bolts should be regularly cleaned and maintained in line with manufacturer's instructions.

Bleeding out (exsanguination)

Bleeding out is done by cutting the main blood vessels in the neck (neck cut).

Bleeding out an animal without prior stunning is not recommend.

Bleeding out alone should only be used when there is no firearm or captive bolt reasonably available, however, this method is unsuitable for calves due to the secondary vertebral artery supplying blood to the brain.

Confirmation of death

Once euthanasia has concluded it is important to confirm that the animal is deceased. The five main signs to confirm death are:

- no blink reflex when eyeball touched
- maximum dilation of pupil
- no rhythmic heartbeat after 5 minutes
- flaccid tongue
- no jaw tone

If the animal is not showing at least two of these signs, repeat the process until death can be confirmed.

Destruction Guide

Cattle

The preferred method of humane killing of cattle is by firearm or captive-bolt pistol in the frontal method, in the direction of the arrow as indicate in Figure 1.

Firearms or captive-bolts should be directed at the point of intersection of lines taken from the base of each ear to the opposite eye (see Figure 1).

The use of shotguns is not recommended for destruction of cattle, a firearm with a calibre above or equal to 0.30 power is recommended.

The distance between the end of the firearm and the cattle expected to be between 10 and 100cm.

The only approved target organ is the brain.

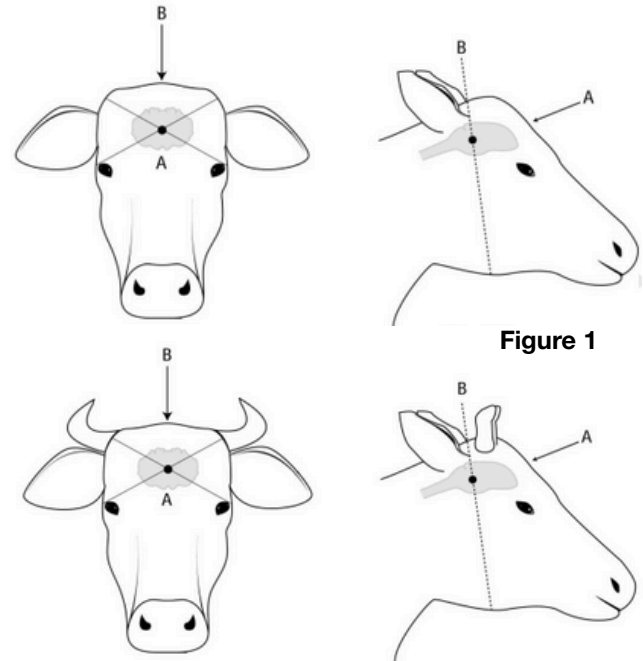


Figure 1

- (A) Position for frontal method - firearms or captive-bolt pistol
- (B) Position for poll method - firearms only.

Source: *Australian Animal Welfare Standards and Guidelines for Cattle*

Destruction Guide

Horses

A .22 calibre rifle is adequate for the humane destruction of most horses.

There is one recommended method for the humane destruction of horses, the frontal method as indicated in Figure 2.

With the frontal method, the firearm or captive-bolt pistol should be directed at the point of intersection of diagonal lines taken from the base of each ear to the opposite eye.

The bullet should be directed horizontally to ensure the brain is damaged, in the direction of the arrow shown.

Poll shots may also be used to ensure death if needed.

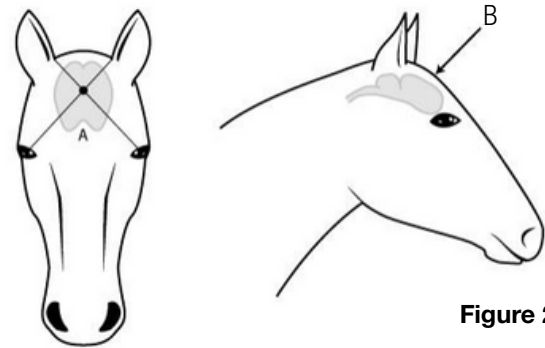


Figure 2

- (A) Position for frontal method - firearms or captive-bolt pistol.
- (B) Indicates direction (shown by arrow) in which bullet should be fired at target area.

Source: *Australian Animal Welfare Standards and Guidelines*

Destruction Guide

Pigs

Because of the thickness of bone in the front of the skull, pigs can be difficult to kill.

A .22 calibre rifle or captive bolt is adequate for the destruction of most pigs under 6 months of age.

Where large boars or sows are to be destroyed, rifles larger than a .22 are recommended.

Frontal method or the temporal method can be used (see Figure 3). With the frontal method the firearm or captive-bolt pistol should be aimed horizontally into the skull (as indicated by the arrows in Figure 3) at a point midway across the forehead and, for adult pigs, about 2cm above the level of the eyes.

With the temporal method the pig is shot from the side of the head so that the bullet enters the skull at a point midway between the eye and the base of the ear on the same side.

The bullet should be directed horizontally into the skull.

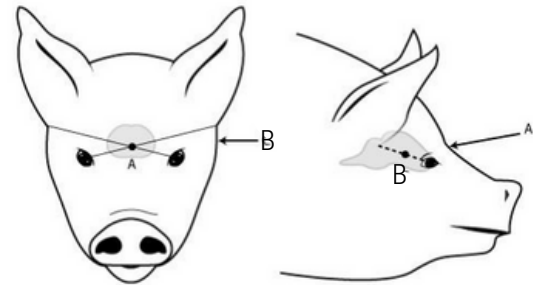


Figure 3

- (A) Position for frontal method - firearms or captive-bolt pistol.
- (B) Position for temporal method - suitable for firearms only.

Source: *Australian Animal Welfare Standards and Guidelines*

Destruction Guide

Sheep / Goats

A .22 calibre rifle or captive bolt are adequate for humane destruction of sheep and goats. Low power hollow point bullets are recommended.

Goats may be humanely destroyed using the behind-the-horns (poll) method. The captive-bolt or firearm should be directed to the skull behind the horns in line with the animal's mouth (see goat Figure 5).

There are two recommended methods for the destruction of sheep: the frontal method or the poll method (see Figure 4 to the right). With the frontal method, aim the firearm at a point in the middle of the face just above the level of the eyes while aiming along the neck. For the poll method, aim the firearm or captive-bolt pistol just behind the poll in the direction of the animal's muzzle.

Due to the danger of the bullet coming out through the back of the head the poll method of shooting from behind is safer and therefore preferable.

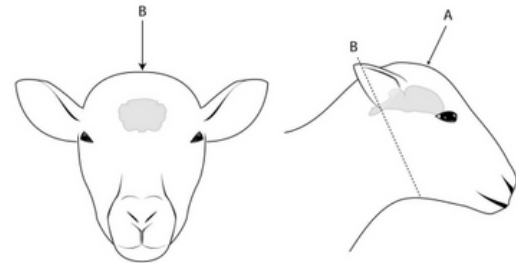


Figure 4

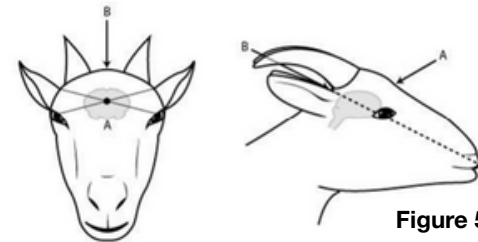


Figure 5

(A) Position for frontal method - firearm only.

(B) Position for poll method - firearms or captive-bolt

Source: *Australian Animal Welfare Standards and Guidelines for Sheep and Goats*

On-farm stock disposal

Selecting a disposal method

Choosing a disposal method and site should be in accordance with Environmental Protection Authority (EPA) guidelines.

Environmental factors such as soil type (clay preferable), water table depth (>2m from trench base) and distance from surrounding properties and water courses (>250 m from nearest residence) need to all comply.

Weight, volume and number of animals should also be considered.

Full consultation with and approval by the Country Fire Service (CFS) is essential and declared Fire Bans must be observed.

The site should be well hidden from public view and downwind of any sensitive areas and houses if possible.

Possible options for disposal include:

1. leaving in-situ
2. composting
3. shallow burial
4. trench burial

Option 1: Leave in situ

This can be considered if there are isolated carcasses (1/ha) and they are not within 250m of built up areas or residence. However, burial should be considered in the first instance as this method will emit odour and attract flies and scavengers.

Option 2: Composting

This burial method involves leaving the carcass at ground level and putting soil and organic matter (straw, wood chips, manure) over the top until the whole carcass is completely covered.

Composting is a viable method for a small or large number of carcasses, but it requires a large amount of organic matter. As a rough guide, work on 1.5 tonnes of organic matter to 1 tonne of soil.

On-farm stock disposal

Option 3: Shallow burial

This is where carcasses are buried in a single layer about 30cm deep on a 30cm layer of organic matter (wood chips, straw or hay/manure) and re-covered with the top soil. The addition of organic matter will absorb liquids and speed up decomposition.

This method is simple and economical as it can be done with a small front-end loader and it may be the best option on hard or rocky ground.

This could still be a viable option for large numbers.

Option 4: Trench burial

This is a viable option when there is a large number of stock to bury and machinery is available to dig suitable trenches.

The depth of trench may depend on soil type, the width will depend on earthmoving equipment, and the length will depend on the number and size of animals to be buried.

In circumstances where multiple trenches must be made, trenches should be at least 10 metres apart from one another.



On-farm stock disposal

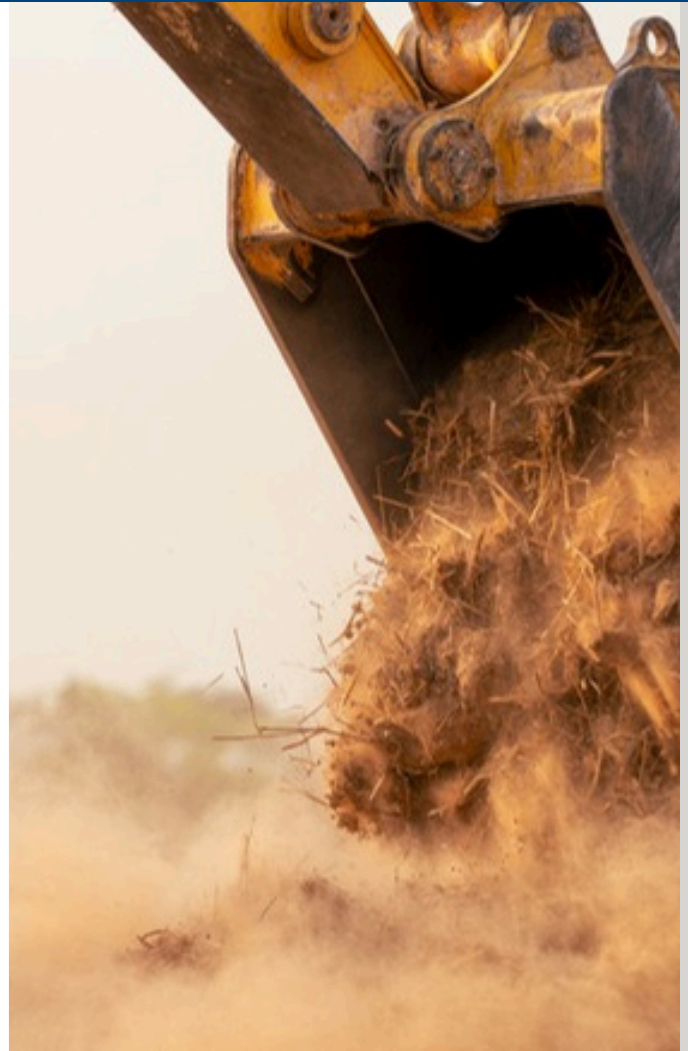
Other considerations

Fence off areas where carcasses are being disposed of to stop access of other livestock and animals.

Providing livestock with access to restricted animal material (RAM), including carcass contact or ingestion, is strictly prohibited. It can potentially cause the transmission of diseases and pose significant risks to the Australian agriculture industry.

If opting to do composting or the shallow burial method, consider covering the area to avoid strong odour and scavengers.

If using earthmoving equipment or services always adhere to the safety guidelines.



Supporting resources

- **Australian Animal Welfare Standards and Guidelines Department of Agriculture, Fisheries and Forestry**
www.agriculture.gov.au/agriculture-land/animal/welfare/standards-guidelines
- **Bushfire and Burn Damage Disposal - Environmental Protection Authority**
www.epa.sa.gov.au/environmental_info/waste_recycling/burn_damage
- **Meat & Livestock Australia's National Guide to the pre-transport and management of livestock**
Fit to Load guidelines
www.mla.com.au/extension-training-and-tools/resource-hubs/fit-to-load/
- **Crisis Helplines and Support**
www.sa.gov.au/topics/emergencies-and-safety/crisis-helplines-and-support

Photographic Examples

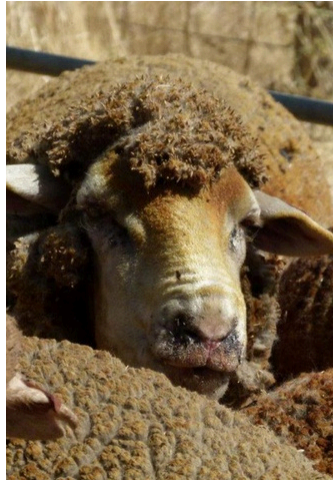
These photographs give an indication of some of the specific types of injuries to look for when assessing burnt stock.

However, the condition of the whole animal must be assessed before a determination can be made.

Injuries requiring immediate destruction



Severe burns to legs and separation of hooves.



Respiratory system damage with nasal and oral discharge.



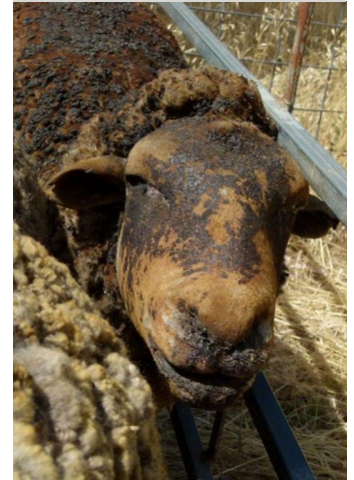
Swelling to prepuce, legs and discharge from eyes.



Lying down, unable to rise with severe burns to legs.



Severe burns to udder and hind legs.



Extensive burns and swelling.

Photographic Examples Stock for salvage for slaughter or treatment



Burns to scrotum and prepuce, retain for treatment.



Mild burns around feet, retain for treatment.



Burnt teats before treatment.



Burnt teats after treatment.



Healed burns in the groin area, retain for treatment.



Burns around genitals/anus, salvage for slaughter.



Mild burns around nose and mouth, retain for treatment



Mild burns around vulva, retain for treatment.

Assessment matrix

Assessment matrix for Individual Animals

	Immediate Destruction	Treatment and reassessment	Salvage by slaughter	Return to paddock
Unconscious	Yes			
Immobile	Yes			
Respiratory distress	Yes			
Distressed through pain	Yes			
Severe charring of limbs, muscles or facial tissues	Yes			
Hooves are lost	Yes			
Burns to >15% of body	Yes			
Severe burns to eyes, udder, anus, prepuce, lips, nostrils	Yes			
No severe respiratory distress		Yes*	Yes	
Mobile with no lameness		Yes*	Yes	
No burnt bare skin		Yes*	Yes	
Severe burns to <10% of body		Yes*		
Superficial to moderate burns over a large area		Yes*		
Burns to teats and prepuce		Yes*		
Burns to feet only (not lower leg skin)		Yes*		
No obvious respiratory distress		Yes*		
Superficial burns only, no concurrent disease and no respiratory dysfunction				Yes

*This is only an option where daily follow-up inspections and treatment are available

Useful contacts and quick links

Emergency Animal Disease Hotline	1800 875 888
RSPCA SA (Welfare)	1300 477 722
Livestock SA	08 8297 2299

Local PIRSA Animal Health Offices (bolded offices normally have PIRSA veterinarians)	Glenside	08 8207 7900
	Clare	08 8842 6222
	Kingscote	08 8553 4949
	Mt Gambier	08 8735 1300
	Murray Bridge	08 8539 2112
	Naracoorte	08 8762 9100
	Nuriootpa	08 8568 6400
	Pt Lincoln	08 8688 3400

Animal Welfare Standards and Guidelines

animalwelfarestandards.net.au/



Is the animal fit to load?' Guide

Meat & Livestock Australia
mla.com.au



Department of Primary Industries and Regions(PIRSA)

pir.sa.gov.au/animals-in-emergencies

