



**AUSTRALIAN CAPITAL TERRITORY**

**ANIMAL WELFARE ACT 1992**

**NO. 96 OF 1995**

**CODE OF PRACTICE - APPROVAL**

Under section 22 of the Animal Welfare Act 1992, I approve the document entitled the **Code of Practice for the Welfare of Farmed Deer** as a Code of Practice.

Date: *30<sup>th</sup> June 1995*

A handwritten signature in black ink, appearing to read 'Gary Humphries', written over a horizontal line.

**GARY HUMPHRIES**  
Minister for the Environment, Land and Planning

# **A.C.T. CODE OF PRACTICE FOR THE WELFARE OF FARMED DEER**

## **Table of Contents**

	<b>Page</b>
<b>1. Introduction</b>	<b>1</b>
<b>2. Food and Water</b>	<b>2</b>
2.1 Food	2
2.2 Water	2
2.3 Drought	2
<b>3. Protection from Climatic Extremes and Predation</b>	<b>3</b>
<b>4. Protection from Disease and Injury</b>	<b>3</b>
<b>5. Accommodation and Handling</b>	<b>4</b>
<b>6. Management Practices</b>	<b>5</b>
6.1 General	5
6.2 Removal of Antlers	5
6.3 Identification	5
6.4 Castration	5
<b>7. Transportation</b>	<b>5</b>
<b>8. Humane Destruction of Deer</b>	<b>7</b>
8.1 General	7
8.2 Firearms	7
8.3 Captive bolt penetrating stunner	7
8.4 Recommended position and direction of fire	8
<b>9. Appendix 1: Antler Removal in Deer</b>	<b>9</b>

## **Introduction**

**This model code of practice is intended as a guide for persons responsible for the welfare and husbandry of farmed deer. The code should be read in conjunction with other endorsed codes of animal welfare practice. It should not be inferred that any husbandry practice not mentioned has automatic acceptability.**

**Deer farmed for commercial purposes are kept in various situations ranging through small enclosures on fauna parks, intensive deer farms and those utilising extensive grazing at low stocking rates on unimproved pastures. Regardless of the type of husbandry, owners, managers or handlers of deer are responsible for the care of animals under their control.**

**Sound animal husbandry practices are essential for the welfare of farmed deer. This cannot be over emphasised. An important skill of the competent stockperson is the ability to recognise early signs of distress or disease so that the cause can be identified and prompt remedial action taken. Experience and research have shown that husbandry practices which take account of animal welfare lead to improvement in productivity.**

**The basic behavioural, anatomical and physiological characteristics of deer vary considerably between species and from other farm livestock and this should be taken into account.**

**Deer have the following basic requirements:**

- (i) food and water to sustain good health and vitality.**
- (ii) protection from extremes of climate.**
- (iii) protection from predators.**
- (iv) provision of appropriate management to allow for the establishment of herd social hierarchy and social interaction.**
- (v) protection from disease, injury and pain.**
- (vi) protection from the effects on natural disasters through provision of firebreaks and fodder storage.**

**This model code is based on knowledge and technology at the time of publication and may need to be revised in the light of future knowledge.**

**Further advice on husbandry and disease control procedures should be obtained when required from advisers in private or government employment.**

## **2. Food and Water**

### **2.1 Food**

Deer have a typical ruminant digestive system requiring similar nutrient and micronutrients to other ruminant animals such as cattle and sheep.

The quality and quantity of the diet of farmed deer should be adequate to maintain health and meet the requirements of growth, pregnancy, lactation and cold stress appropriate to the species and environment.

In cold climates the appetite of deer is markedly depressed in winter, and substantial weight loss normally occurs, particularly in mature males. Deer should be well fed in summer and autumn so that they are in good body condition by the end of autumn for the winter period.

Deer should be protected as far as possible from toxic plants and foreign materials deleterious to their health.

Changes to diet should be gradually introduced over several days.

### **2.2 Water**

Deer require free access to an adequate supply of good quality water.

Water reticulation systems should be inspected regularly for normal function preferably daily during summer and at least weekly during winter. Under extensive grazing systems, storage systems should be large enough to facilitate less frequent inspections.

Where dams or waterholes are the main water source of drinking water measures should be taken to minimise faecal contamination.

Water requirements vary widely according to species, body weight, temperature and type of diet. As a guide, lactating animals on dry summer pasture require up to 10 litres (Fallow deer) or 20 litres (Red deer) daily.

### **2.3 Drought**

Drought conditions may be defined as a severe rainfall shortage resulting in a lack of paddock feed and/or drinking water resulting in excessive weight loss or death.

During drought supplementary feeding should be offered at least every third day and the herd observed carefully for weak or recumbent animals which may need to be segregated for special treatment.

Deer too weak to stand and walk should be slaughtered on site or provided with emergency veterinary care. Methods of humane destruction are given in Section 8.

Where the requirements of food or water to sustain health and vitality cannot be met, deer should be moved, agisted, sold for slaughter or slaughtered on site.

### **3. Protection from Climatic Extremes and Predation**

In general deer are less capable of maintaining their body temperature in the face of climatic extremes than cattle and sheep. Tropically derived species such as Rusa deer are particularly prone to cold stress.

Farmed deer should have access to sufficient shelter and shade to prevent cold stress or heat stress. Bush or other shelter in paddocks can minimise climatic stress.

Newborn deer have a poor thermoregulatory mechanism. Therefore, deer calving in winter in cold climates should have access to paddocks with long grass or shelters. In summer, calving deer may require shade.

Protection from predation by dog packs may be required. Fencing abutting or buried in the ground for 25 cm or electrified out-rider wires may be useful.

In the event of fire or flood, deer should be attended to promptly to minimise injury and pain.

### **4. Protection from Disease and Injury**

Persons responsible for the care of farmed deer should familiarise themselves with the signs of ill health and the common diseases affecting deer in that area.

Because some species of deer have a nervous disposition, caution and good stockmanship is required to prevent injury. Sick, injured and diseased deer should be given prompt and appropriate treatment or slaughtered immediately.

Appropriate preventative treatments should be administered to deer to prevent disease conditions that are common in the district or are occurring in the herd. Veterinary help should be sought to diagnose the disease and initiate proper treatment.

Projectile syringe equipment should only be used by trained and experienced operators. They should not be used routinely as an alternative to properly designed handling facilities. Small deer may be injured by projectile syringes discharged from firearms, particularly at short ranges. Where possible, alternative delivery systems such as blow guns or pole syringes should be used for small deer.

## **5. Accommodation and Handling**

Facilities for deer should be designed with due regard to the behavioural patterns of deer as a prerequisite for ease of handling and reducing risk of injury.

There should be enough paddocks to permit animals of similar age, sex, size and compatibility to be grouped and to allow separation of incompatible groups where necessary at certain times of the year.

Overcrowding of deer results in competition for food, water and space which may lead to fighting and the risk of injury. Aggressive behaviour is mainly a problem with male deer in the 'hard antler' cycle. Care should be taken to either avoid handling deer at this time of the year or to use facilities that decrease the risk of injury from fighting.

Deer require social interactions with members of their own species. Single animals should not be confined alone for more than a short period except for quarantine or management purposes.

Fencing should be high enough to prevent escape and of a design which minimises the risk of injury. Good fencing adequately maintained also minimises the risk of predation.

Gateways and passage ways should be free of internal projections which might cause injury and gates should have fastening devices to prevent escape.

The provision of subdued light in the drafting pens and handling facility may reduce stress and assist the handling of deer.

To avoid risk of injuries deer should be handled quietly so they do not panic and seek escape from a yard or other restraining facility.

## **6. Management Practices**

### **6.1 General**

A high degree of competence in the performance of farm management practices should be sought to minimise injury and maintain health and vitality.

Restraint used on deer should be only that necessary to efficiently carry out a procedure.

Practices that cause pain must not be carried out on deer if painless and practical methods of husbandry can be adopted to achieve the same result.

### **6.2 Removal of antlers**

Antlers of male deer should be removed annually, preferably before development of 'hard antler', to protect handlers, other deer and the farming facilities. Deer in 'hard antler' in most species should not be yarded with other deer and should be penned singly in facilities which limit movement or space.

Removal of 'velvet antlers' should be performed by a registered veterinary surgeon or performed by a trained operator under the direction of a registered veterinary surgeon. Further details are provided in Appendix 1. Importantly, the procedure should only be performed when the animal has been made insensitive to pain with an appropriate analgesic drug.

Proper facilities to safely restrain the deer are essential to avoid injury to deer and operators during the harvesting procedure.

### **6.3 Identification**

The preferred methods of individual identification of deer include ear tagging, ear marking and ear tattooing. Hot iron and chemical branding should not be used. Freeze branding may be used but this has limited application.

### **6.4 Castration**

Because of the late descent of testicles, some deer cannot be castrated at a young age. Castration, if carried out, should be performed by a competent person and if the animals are over 6 months of age appropriate anaesthesia or analgesia administered by or under the supervision of a veterinary surgeon is required.

## **7. Transportation**

Where possible the deer should be segregated into groups of the same species, sex and age during transport. Only fit and healthy animals should be transported with other animals. Deer of grossly different sizes other than dam and progeny, should not be transported together.

Deer should be transported in properly designed crates or trailers which are well ventilated. Single-animal crates should be darkened and light access should be only at low levels.

Floor space should be adequate to allow deer to lie down during transport for journeys in excess of 2 hours. As a guide a preferred floor space required for the small species such as fallow and chital deer is 0.3 m<sup>2</sup> per animal, for Rusa deer 0.4 m<sup>2</sup> and Red deer 0.5 m<sup>2</sup> per animal. Strains of species with larger than average body weight may require more space. Injury during transport can occur if too little or too much space is provided.

Transport of deer during hot weather should be conducted with caution. In hot climates, deer are preferably transported at night. Adequate ventilation is essential to control the temperature within the transport facility especially during the period immediately following loading and unloading stops.

Ventilation is essential and should be adjustable to remove gases and excessive moisture.

Floors should be non-slip preferably with a bedding of straw or wood shavings to absorb moisture.

Water should be provided for journeys greater than 8 hours. Feed to which the deer are accustomed should be supplied for journeys in excess of 24 hours.

Inspection of the crate should be carried out within 30 minutes of commencing the journey and thence at about 4-hourly intervals, or more frequently on rough roads or in adverse conditions. Inspection ports located at strategic positions in the crate will assist inspection.

Deer should have antlers removed prior to transport. If this is not possible, deer with hard antlers should be transported individually.



## **8. Humane Destruction**

### **8.1 General**

Effective and humane methods of euthanasia for deer which cause a quick and painless death include either shooting with a firearm, electric stunning or stunning with a captive bolt pistol followed by bleeding.

### **8.2 Firearms**

A suitable firearm for euthanasia is a .22 calibre rifle used at short range or a .32 calibre humane killer pistol, but not placed directly on the head.

The direction for the line of fire is shown in Figure 1.

Disadvantages of a firearm are the hazards to human safety and the possibility of not being legal on public property.

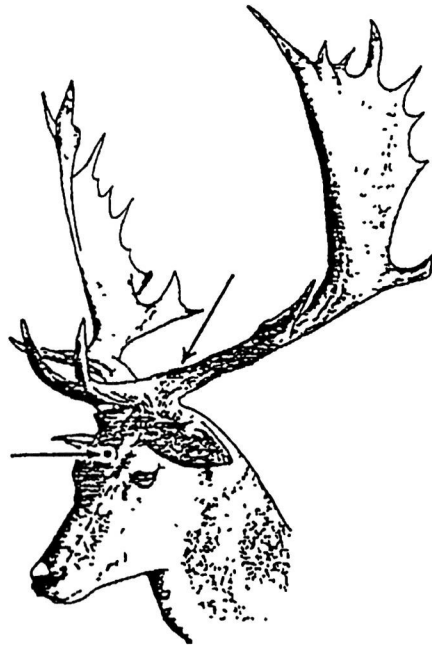


Figure 1. Recommended positions and direction of fire for captive-bolt pistol or firearm

### **8.3 Captive bolt penetrating stunner**

A suitable weapon is a captive bolt penetrating stunner which uses blank cartridges coded for the amount of power required for the species of animal being destroyed. The stunner is placed firmly against the skull before firing. The concussion stunner (non-penetrating) is not recommended.

The direction of the line of fire is the same as for a firearm and shown in Figure 1.

Deer stunned with a captive bolt pistol must be bled out immediately.

The main advantage of the captive bolt stunner is the human safety factor.

#### **8.4 Recommended position and direction of fire**

Using a firearm there are 2 options:

- (a) From the front using the intersection point of lines taken from the base of each ear to the opposite eye and firing horizontally into the forehead.
- (b) When deer have been disturbed it is equally effective to fire through the skull just behind the base of the antlers in the direction of the animals muzzle.

Using a captive bolt pistol the front position as for a firearm is used.

## **Appendix 1 - Antler Removal in Deer.**

Removal of antlers from farmed deer is essential for their own safety and for the safety of farmers. Methods for the removal of antlers include surgical polling, castration, velvet antler removal and removal of antlers after maturation.

Farmed deer are kept for venison and velvet production. Most velvet production is from herds of stags kept specially for this purpose. However, there is also a need to remove antlers from all breeding male deer and from young deer raised for venison production. Velvet antler is an important product of the Australian and New Zealand deer industries.

Males of all species of deer in Australia cast their antlers annually and regrow them from permanent bony projections on the skull (the pedicles).

During its development the antler is covered by skin ("velvet") which carries blood and nerves to and from the antler. A strong sensory nerve output ensures that the deer is aware of the fragile growing antler and protects it from damage.

Maturation processes occur during which the velvet is shed from the now hard antler which is composed of insensitive bone. The growth and maturation cycle takes about 120 days.

Commercial "velvet" (antler in velvet) harvesting involves cutting the growing antler about 2 cm above the pedicle, usually with a saw. This procedure takes about 15 seconds and is accompanied by haemorrhage which is easily controlled by a tourniquet. Infection of the wound is virtually unknown due to the specialised anatomy of the antler-pedicle junction.

Where the velveting procedure is undertaken without analgesia or anaesthesia, the behaviour of the deer indicates that the cutting is associated with significant pain.

Existing requirements for the use of analgesia for this procedure are based on:

- \* the painful nature of the procedure,
- \* the existing requirement for analgesia for other surgical procedures conducted on adult animals,
- \* the procedure being primarily conducted for economic return; and
- \* the procedure being repeated annually.