

## HANDLING AND YARDS



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### General

#### *Quality Assurance*

The Australian Deer industry has developed an industry Quality Assurance (QA) Program that sets out the minimum requirements for the transport and handling of deer.

The Deer Industry QA Board manages the QA program. The Board ensures that industry assessors are appropriately trained, issues QA accreditation certificates, amends and updates industry QA manuals as necessary and deals with industry related QA issues.

Management and transport practises described by the QA program aim to:

- Minimise carcass bruising
- Minimise hide damage
- Ensure welfare requirements of deer are maintained
- Encourage safe management and handling practices
- Minimise carcass, hide and co-product contamination (bacteria, chemicals, etc)
- Reduce reliance on costly 'end point' inspection of carcasses in abattoirs
- Provide consumer confidence in products supplied by the Australian Deer industry to all markets
- Maximise returns to producers

The program encourages the Deer Industry's conformation to accepted international quality assurance programs and standards. It provides market protection for products by guaranteeing the quality of its products, in particular food products.

The program recognises the vital, inescapable, role farmers have in the food quality chain and its adoption of the Deer Industry QA Program by all Australian deer farmers is strongly encouraged.

Management considerations described below are based on QA principles that encourage the production of consistently high quality products.

#### *Handling Principles*

There are a multitude of deer yard designs used for Red deer, and most have good and bad features. Most yard systems have a series of progressively smaller pens, with or without swinging gates to assist in drafting. Once in pens, animals can be moved with minimum stress into the crush for most operations

- drenching, ear tagging, vaccinating and velvet removal. Various types of crush or cradle are available commercially and the inclusion of scales is important for many management programs. A well-designed crush reduces risk of injury to operators.

A handling shed should:

- Utilise light strategically to facilitate the movement of the deer
- Have either forcing or sliding gates leading to the crush so deer cannot push back past the gate
- Have smooth walls to meet quality assurance requirements. Plywood or conveyor belting can be used
- Provide adequate ventilation and controlled lighting
- Facilitate efficient flow of stock through the facility and the ability to draft animals from the mob
- Have a cradle or crush set on a set of scales. The cradle or crush should have a collapsible floor and/or adjustable sides to allow the animal to be immobilised and handled safely and efficiently
- Hard or concrete floors should be covered in sand, wood chips or saw dust to minimise injuries that can occur when deer slip on exposed hard floors

Animals become accustomed to their environment and animals born on a property quickly become familiar with the property. Moving herds around paddocks is relatively easy. In most cases because of their curious nature, stock will be waiting at the gate for it to be opened. They can be easily trained to respond to a manager's call by simply calling out during supplementary feeding.

It is usually easier to yard and handle deer early or late in the day. If possible avoid windy days for handling deer, as it creates unease in most groups. A system of wide lanes simplifies the movement of Red deer. If the deer are moved quietly and without fuss by people with whom they are familiar, it is possible to move and yard them without any great difficulty, a system with a central laneway linking all paddocks to the handling facility is simple and convenient.

Yard weaning along with hand feeding in the handling facilities will educate young deer to the facilities. Move the calves/fawns from pen to pen and through the drafting system daily for five days. Then they can be let into an adjacent paddock during the day and yarded each night for up to 10 days. This also gives the opportunity to identify those deer in poor temperament that should be culled.

When handling deer in the yards the herd should be split into small groups for ease of handling. Generally:

- Mature males should not be held in the same pen as fawns/claves or females due to their aggressive behaviour, particularly when in the restricted area of a pen
- Mature males and females should not be yarded during the mating season when males are aggressive
- If fawns/calves are yarded with their mothers, care must be taken to ensure they are not trampled.
- Males in hard antler should never be yarded. Male deer should be velveted or have their antlers removed when velvet begins to strip.
- Male deer give warning of aggression by grinding their teeth, lolling tongue and rolling eyes and flattening their ears against their head.

### ***Red Deer***

Handling of Red deer requires good 'stock sense' involving plenty of patience, an understanding of animal behaviour and good powers of observation.

Whilst Red deer cannot be regarded as fully domesticated they quickly adapt to the establishment of a routine of regular handling and hand feeding. It is possible to yard large mobs of deer with very little labour, given the correct farm layout. Deer can be trained to come for feed when called, and this is the easiest way of moving stock from one paddock to another. Gentle pressure from people on foot or on motorbikes will encourage deer movement, but patience and caution is necessary, particularly if one or two obstinate animals baulk in gateways. Deer pushed too closely will often panic and injuries may occur, even in quiet mobs of deer.

### ***Fallow Deer***

Fallow deer are wary and alert, reacting to events and stimuli that would pass other farmed species without reaction. They can be handled successfully after a process of hand feeding, active training and regular contact.

A system of laneways is required that leads directly from each paddock to the yards and handling facility. Laneways with long, straight parallel fences should be avoided. Designs that curve or have other structures constructed as part of the laneway and create the illusion for the deer of being able to escape around a blind corner work more effectively. Laneway fences should be at least 2.0 metres high. Experience suggests the lane should narrow to 2.0-3.0 metres wide to form the race at the entrance to the yards. It is generally accepted that loading races should be almost 1.0 metre wide, enabling two to three animals to run up together for loading.

Ideal yards should include a covered area, as Fallow deer are much quieter in dimmed light. The area should be light enough to allow both deer and operators to easily see each other. Artificial or natural light sources can be used to encourage Fallow deer to move through the handling facility as they will naturally move towards the light. Yards can be simple but should integrate well with the handling facility and minimise stress on both the deer and the operator.

### ***Wapiti/Elk***

Like Red deer, Wapiti handling requires good 'stock sense' involving patience, an understanding of animal psychology and good powers of observation.

Early pioneers of Wapiti farming quickly realised that putting these animals through yards designed for smaller deer was like using sheep yards to handle cattle.

Elk/Wapiti are much larger and heavier than Red deer and people can be intimidated by their size. However, with the establishment of a regular handling and hand-feeding routine, it is possible to yard large mobs of these animals with very little labour, given the correct farm layout. Wapiti can be trained to come for feed when called, and this is the easiest way of moving stock from one paddock to another. Gentle pressure from persons on foot or on motorbikes will hasten the process, but in general it is necessary to exercise great patience in moving deer, particularly if one or two obstinate animals baulk in gateways. If the deer are pushed too closely then panic will be an almost certain result, and injuries may occur, even in fairly quiet mobs of deer.

The animals are extremely intelligent and have a curious nature. They appear to be relaxed and friendly in paddock situations and respond quickly to human contact. Although they can be friendly and untroubled by human pressure in paddocks they can be difficult to handle in inappropriate yards. Wapiti don't usually like to be in small confined areas but can be trained with good management in well designed and sited yards.

Wapiti can be handled in any reasonably constructed yards that are strong and robust. Walls on handling complexes should be a minimum of 2 metres high and a 'flow through system' provided that does not allow animals to be boxed in blind corners.

In complex facilities (in particular yards) that are small and do not allow animals the impression of a simple flow, some animals become extremely nervous. Nervousness can lead to absolute stubbornness demonstrated by the animal just standing in the middle of a pen or backing into a corner and refusing to move.

An ideal system for Wapiti provides operators with swing gates that lead onto one another, and allows animals to be simply walked through the yards to a circular pen. The major factor of this system is that the operator is always behind doors and can use them to apply pressure to keep the animals moving.

Overhead walk way systems are not recommended for Wapiti as animals will only stand and look at the operator in a very stubborn way. A Hydraulic Crush is highly recommended for Wapiti as it will not only ease the handling situation, it will save farmers a lot of time and money during Velvet harvesting. Where farmers are using a small number of Wapiti Bulls in a Terminal Sire program, veterinary work is usually carried out when the animal is anaesthetised.

- NB
1. Experienced operators strongly suggest that dogs should not be allowed near these animals.
  2. New born animals should be viewed cautiously as Wapiti/Elk cows can be very protective of their calves for the first few days after birth.

It is recommended that new farmers wishing to build or alter the handling complex consult an experienced Wapiti farmer regarding designs before proceeding.

### ***Rusa Deer***

Rusa deer, particularly those in larger herds, are generally quiet and placid in the paddock. While they will move well from paddocks into yarding and handling facilities (easier handling with larger mob size), management is simplified if prerequisites of adequate layout and facility design, stock skills, patience and adequate deer education of yard set-up and procedures are met.

With education and training, Rusa deer are considered readily tractable, that is, able to be confidently handled and managed. Stags in hard antler may be aggressive when under stress in yards, particularly in mixed mobs. They should be quickly segregated to avoid injury to other animals. Conventional 'drop floor' V or Y-shape crushes appear suitable for individual Rusa deer restraint, and ideally would incorporate a set of weigh scales for monitoring live weight.

Hard antler removal from stags is considered an essential procedure to ensure safe animal handling and management practices, and is a requirement prior to stock transport and slaughter. While aggression towards human handlers is considered rare, it must be appreciated that common to all deer species, stags in the mating season must be respected and not handled unless necessary. Castration is not currently considered a routine husbandry procedure to control aggression in pre-pubertal male Rusa deer as mature males subjugate the juveniles. However culling of stags on temperament is encouraged.

### **Facilities**

A major consideration in the design of handling facilities is to provide a facility that can be used effectively with other species. Handling facilities should allow multi-purpose use and therefore remain a saleable asset if in the future a property is sold for use with stock other than deer.

Handling facilities for deer should be located as centrally as possible while allowing easy all-weather access for trucks that will transport stock. Consideration should also be given to siting the handling facility as close as possible to roads so that transporter access time is minimal. Avoid low trees on access roadway to allow non-restricted truck access.

Handling facilities do not need to be expensive and elaborate, but it is equally true that it is unwise to cut corners and build a facility that does not allow deer to be easily, quietly and quickly processed. It may be better to spend a little more to have a good facility than to be too frugal and be forever frustrated by the inability to work deer in the facility.

All deer species benefit from regular access to the facility. Familiarity with the yards reduces stresses associated with handling.

In designing a handling facility, principles that should be considered include:

- Deer like moving around the outside of a circle (similar to sheep and cattle)
- Handling of deer usually involves taking large groups and separating them into small groups or individuals
- A generally accepted concept that deer in sheds should not have visual contact with animals leaving the shed
- Sheds should be well ventilated and have good lighting
- The site should be well drained

### ***Receival Yards***

Receival yards construction should ensure that there are no protrusions that can injure or bruise deer (quality assurance). Ideally they should be separate from the shed so deer can settle away from the noise of the shed after mustering and before they enter the shed.

The receival yards should be large enough to hold the largest mob on the property and allow them to be separated into smaller groups before they enter the handling shed.

Deer settle a lot more quickly if they can see operators moving around yards.

***Laneway Access***

As previously discussed laneways need to be wide enough (about four metres) to provide easy movement of machinery into and between paddocks. However wide lanes can make control of deer in the laneway difficult as the deer may be reluctant to turn into a gate way opening into the receival yards.

Ideally wide lanes should narrow at the yards to encourage the deer to turn into the receival yards. Some farmers build 'V' extensions in the race opposite the receival yard access gate. Deer are forced to turn at the extension and move easily into the receival yard.

***Yards***

Handling yards usually are covered to reduce direct light and to protect deer and operators from weather. Although some species of deer are quieter and easier to handle in subdued light, the facility does not need to be dark as original information suggested.

In fact, most experienced deer handlers report deer are more easily handled if the facility is as well lit as possible and deer can see the operators all the time.

***Design***

There are as many designs for handling facilities, as there are deer farms.

Designs should consider principals described above and take account of requirements for Quality Assurance Accreditation.

Several designs are presented in the Australian Deer Industry Manual titled "Fencing and Handling Yards" that is available from the Australian Deer Industry Bookshop. Although the designs are known to work well, the inclusion of the designs in this manual should not be taken as a promotion for the companies whose designs are provided.

Choice of design will depend on breed type, budget, available resources, local recommendations etc. Specialists in the industry should be consulted for design advice to meet particular needs.

There is no best design for a handling facility because a design needs to take account of factors like number of deer managed, species of deer, cost and deer handling experience.

Factors that should be considered in design are:

- Deer like to move around corners
- A deer crush is essential
- A set of scales is essential and can often be incorporated into a crush
- The design must provide adequate ventilation and air movement without drafts
- The design must allow adequate lighting
- The site should have electric power and running water
- Gate latches should be designed to minimise opportunity for injury to stock
- Ideally the main work area should have concrete floors, covered with sand or similar material, that are sloped to allow drainage and ease of cleaning

Walls inside the shed are usually 2.0 to 2.5 metres high. The bottom 1.2 to 1.5 metres are constructed of solid panelling or similar product. Above the solid panelling boards are spaced to provide horizontal viewing slits for the deer.

The viewing slits provide deer with an ability to retain visual contact with other deer and operators as they move in and out of pens.

***Crush***

Commercially available crushes vary in their general type and style.

The older, more common, style is the drop floor crush that is only suitable for smaller species of deer. A drop floor crush is simply a 'V' or 'Y' section of race. Once an animal enters the crush the floor is dropped and the animal remains suspended by its shoulders and pin (pelvic) bones with its feet off the floor.

It is held in the crush by its own weight. The animal is released when one of the sides is moved away from the other, gently lowering the animal to the floor.

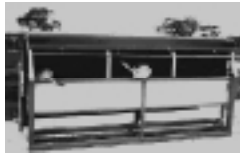
Newer crushes are essentially a small race with hydraulically controlled, padded walls. Animals are restrained between the walls while the operator undertakes the management practice on the animal and then it is released.

An advantage of drop floor crushes is their cost, an advantage of hydraulic crushes is their ability to safely and effectively restrain animals of any size.

Irrespective of the crush chosen it should incorporate a set of electric scales for easy regular weight measurement of all stock. Figures 22, 23 and 24 are provided by and copyright to Farm Pro [14].



*Figure 21: Typical drop floor crush*



*Figure 22: Typical manually operated walk through crush*



*Figure 23: Typical hydraulically operated walk through crush*

### ***Holding Yards***

Holding yards are similar in design to receival yards and are used for holding animals prior to loading into transport vehicles.

They may be the same yards as the receival yards.