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GOOD PRACTICE GUIDELINES

Safe Deer Handling

OCTOBER 2015

New Zealand Government

WORKSAFE NEW ZEALAND | MAHI HAUMARU AOTEAROA

This good practice guide will help farmers improve safety around farmed deer by providing practical guidance on their safe handling.

ACKNOWLEDGEMENTS

This guideline was prepared by WorkSafe New Zealand, with assistance from a sector working group comprising representatives from:

> ACC
> Landcorp
> New Zealand Council of Trade Unions (NZCTU)
> Dairy Women's Network
> Deer Industry New Zealand
> Rural Women New Zealand
> Federated Farmers of New Zealand
> Primary ITO
> FarmSafe
> Ministry for Primary Industries
> Beef and Lamb New Zealand
> Horticulture New Zealand
> Rural Contractors New Zealand
> New Zealand Dairy Workers Union
> University of Otago
> Lincoln University
> Auckland University.

SAFE DEER HANDLING KEY POINTS:

Always take special care around stags

Antlers should be removed

Use the right personal protective equipment

Ensure yards and handling areas are well designed

Practise good hygiene and maintain a vaccination/pest control programme

TABLE OF CONTENTS

01/

INTRODUCTION

IN THIS SECTION:

This guideline to safe deer handling provides advice on common health and safety problems, and responsibilities around disease control.

1.1 PURPOSE

This guideline outlines common hazards involved in handling deer and provides recommendations on how to eliminate, isolate and minimise those hazards. WorkSafe NZ accepts these recommendations as current industry good practice. They will help you comply with the Health and Safety in Employment Act 1992 (the HSE Act).

This guide deals specifically with health and safety considerations for farming deer. It offers advice on:

> handling
> suitable accommodation
> stocking rates.

It also outlines responsibilities around disease control. The guide does not apply to the management of wild deer.

1.2 SCOPE

This guide applies to anyone handling deer. This includes farmers, farm employees, contractors, deer transport drivers, stockmen, sale yard workers and deer slaughter plant workers.

1.3 DEVELOPMENT

Industry experts helped WorkSafe NZ develop this guide. WorkSafe NZ also conducted a thorough review of accident statistics and published academic literature, and looked at how overseas health and safety regulators manage the same issues.

WorkSafe NZ has taken every effort to make sure the guide's recommended hazard controls reflect current good practice.

For further information about making your farm a safer place for everyone see the Safer Farms website – www.saferfarms.org.nz. It includes guidance on all aspects of farm safety and an easy-to-use toolkit.

02/

DEER HANDLING TIPS

IN THIS SECTION:

A well designed system for mustering, yarding and handling deer will enable tasks to be carried out safely and efficiently, with minimal stress to the deer.

Most stress and risk occurs when too many deer are kept in one pen.

Deer need to be yarded into a handling area for certain husbandry tasks. During yarding there is a risk of injury to stock handlers by being knocked over, kicked, bitten or gored. Take precautions to ensure efficient, low stress handling.

Gates should be positioned so paddocks open onto a raceway system leading to the deer yards. This will avoid the need to move deer through a series of gates and paddocks.

2.1 WEAR THE RIGHT GEAR

Leather boots with steel toe-caps are the best footwear. Gumboots should have toe-caps. A strong pair of trousers and leggings will soften the severity of kick injuries. These should never be tucked into your gumboots.

Consider using a cricket box or equivalent to protect genitals from kicks. Remove wrist watches and loose jewellery, and roll your sleeves down in case you are rubbed against fences or timber.

Provide body shields and safety helmets (made to European Standard "EN 397: 1995 Specification for industrial safety helmets") to stock handlers handling deer. Protective shields should be made of 12 mm plywood, polycarbonate or an equivalent material with a strong, comfortable grip.

Shields are useful for personal protection, but more often used to guide and direct or draft out individual deer. They also add some confidence and predictability for both deer and handler. Using a shield does not make you invincible – stags in the rut may challenge the shield.

2.2 HANDLING WEANERS, STAGS AND HINDS

The age of the deer you are handling will impact on management and handling techniques. Handle young, freshly weaned deer with care. Stress-related health issues are common in weaner deer, so handle them with minimum stress.

Key recommendations when moving young deer:

> Be patient. Sometimes it is necessary to walk away and leave gates open for deer to find their own way, rather than persist in stock movements that cause elevated stress levels in the deer and handler.

> It can be useful to let deer do a couple of quiet laps around the paddock to let off excessive steam, but keep them moving as one mob. If individual deer break away, let the group reform quietly.

> It may be necessary to run young deer with a couple of older deer and move them through the yards and raceways a couple of times. This allows younger deer to adjust to handling, and the facilities. Consider using three or four "aunty hinds" (weaned or dry, older, typically quiet adult hinds) per mob when moving weaners, to provide leadership.

- Stress when yarding is quickly heightened by overcrowding in raceways, receiving yards and pens. If you see deer piling into pens, climbing on one another and seeking to come back, you as handler are either reacting too quickly or there are too many deer in the group.

  It is better to have a breaking-down yard or keyhole leading into a raceway and larger receiving pen, and to handle smaller groups. This is particularly important for hinds and fawns at first yarding, and for handling stags in the velvet growth season.
- Do not transport freshly weaned deer. A minimum of 10 days is recommended before transporting, to minimise impact on weaner health, welfare, and productivity.

  Refer to the *DeerQA Transport Programme* that allows weaners to be weaned and transported to a new farm, provided the whole operation can be performed within six hours.
- Deer are creatures of habit and prefer routine and familiar surroundings. It is important that young deer are familiar with their handler and their handler's dog (if used). Keep the number of staff used to handle weaner deer to a minimum. Only very well controlled dogs should be used.

2.3 STRESS

Stressed deer can be hazardous to their handlers. Stress is also one of the biggest killers of deer in New Zealand. A handler's ability to recognise signs of stress in deer and manage stress risk is key to efficient deer husbandry. Stress in deer negatively impacts on their production, so it makes financial sense to have the necessary tools and skills to manage deer without causing them undue stress.

Signs of stress include:

- excessive fence pacing by individuals or mobs
- panting or being aggressive to other deer
- individuals constantly showing agitation within a group in yards.

Do not handle deer one-on-one, unless separating them for confinement in a raceway leading to a crush, weigh box or specialist handling equipment (which has been purpose built). For safe handling, the recommended group size is 3-5. Where this is not practical, 5-15 in a group is acceptable. However, breaking that number down for ease of some operations (eg TB Testing) is good practice, especially with larger and older deer.

One or two deer in a pen can quickly become stressed – more so in a one-on-one situation.

2.4 MUSTERING

When mustering deer in the paddock, be in control of the mob at all times. Control deer in a calm and patient manner, but also be firm and confident so individuals do not break away from the mob.

Deer mobs have a clear flight distance response, which is the distance a handler can comfortably exert pressure on the group and create quiet controlled movement, without individual deer breaking from the mob or splitting the group. This will vary from breed type, group size, stock class, time of year and farm.

Typically the flight distance starts at 40-60 m; but with quiet, calm and predictable handling, that distance can quickly reduce. As a rule, deer will move, then stop and reassess the situation and mustering pressure, before moving again. It is useful to move when they move, and stop and maintain quiet pressure when they stop.

To muster deer efficiently, set up and fence the farm to facilitate deer movement. Placing of strong well-maintained raceways is key to successful deer movement towards and into deer yards. Successful mustering is retrieving an entire mob of deer from a paddock, through the yards, and back grazing without any stress for the operator, or the deer.

2.5 IN THE YARDS

It is critical to have good knowledge of yard capacity and flow, and match the group size to suit the facility's capacity.

Bringing deer into the yards usually involves running them down a central race from their paddock into the yards, then following them and closing the yard gate behind them.

Before bringing deer into the yards, set the gates up to allow the mob to enter. Look around the yards and shed for any foreign objects that may spook deer, eg a jacket hanging up in a pen. Deer will react to any object that is different to the norm, until they are sure it is harmless. Running deer directly into low sun or trying to yard in bad weather (particularly windy weather) can be demanding for both deer and handler.

Make sure all equipment is ready at the shed before deer are brought in. Any extra noise (eg banging doors, talking with loud voices, excessive noise when preparing gear for operation) is not good for deer stress levels.

Draft off large mobs in the yards into smaller mobs (5-15 deer at a time – depending on internal pen size) before they enter the shed. This reduces stress on deer, and can reduce aggression within the shed.

Fence pacing, and therefore stress, is encouraged by having groups of deer on adjacent fence lines (where these allow deer to deer contact). Deer to deer contact through fences should be avoided.

2.6 IN THE SHED

Strangers in the shed or yards can cause stress and unsettle deer. Make sure visitors to the shed are out of sight until deer are penned up. Any extra distraction will increase deer stress levels, unless deer are familiar with them. Contact between children and deer should be avoided, particularly when in close quarters.

Sort deer in the shed quietly and calmly. Talk to deer in a quiet voice. Always move amongst deer at close quarters to prevent kick injuries. Steer deer by gently pushing their hips or turning their necks in the direction you want them to move. Do not move deer by grabbing their tails and trying to steer them.

When sorting deer in the shed and establishing smaller groups, do not use the gate/door as part of the drafting process. This slows things down and prevents the whole mob moving smoothly through the shed and can increase stress and the possibility of injury.

It is less confrontational to work deer by moving around the walls, rather than approaching a group head on. Deer try to move as a group, often in a circling pattern, and are constantly watching. They quickly learn a calm quiet routine if actions and approaches are consistent.

Pens should not be overcrowded.

See the *Animal Welfare (Deer) Code of Welfare 2007*, Sections 5.2 and 5.3 for more information on overcrowding.

Do not enter a stag pen unless fully confident you can exit safely. Even normally harmless stags can show aggression during the rut (approximately February to May). Adult stags can show aggression right through until button drop (generally in August), especially when their space is compromised.

Ideally, no yarding should occur with stags during the rut, but if required (eg for semen collection or injury treatment) extreme caution is required.

Do not mix adult stags with other stags, as they will fight. Stags will be unaware of handlers and surroundings. A single stag may be better yarded with a small group of hinds to provide some distraction, but they are still naturally aggressive and unpredictable.

Do not yard stags during the rut.

Good observation skills are essential in a handler. It is crucial to consciously monitor how deer are reacting. When an individual deer is showing signs of nervousness it can quickly spread to the rest of the deer. Calming or removing the agitated deer can reduce nervousness for the rest of the mob. Never leave a nervous or agitated deer alone in a pen, however.

Plan carefully when bringing hinds and fawns in at the same time, to reduce injury to the fawns. Separate the fawns from the hinds once they are in the shed, as fawns can be easily injured or trampled by hinds. Plan where the fawns will be drafted out to before bringing the mob in.

Consider avoiding mustering and yarding on excessively windy days, because deer are already agitated.

Effective stress risk management is:

> being able to recognise stress signs in deer
> being able to mitigate a stressful situation
> having the necessary facilities and farm set-up to allow efficient and safe deer handling.

2.7 THE VELVETTING PROCESS

Velvetting is the removal of the growing velvet antler which contains an abundant blood and nerve supply, and covers the skin with fine soft hair. Surgically removing the velvet antler without some form of anaesthesia will cause the deer pain and distress. Handlers may be injured by distressed deer if correct procedures are not followed.

Removing deer velvet without anaesthesia and veterinary supervision or approval is a contravention of the Animal Welfare Act 1999.

Deer velvet removal may only be performed by:

> a veterinarian
> a supervised veterinarian undergraduate
> an approved owner of stags/an approved employee.

Removing antlers in velvet must take place under veterinary supervision to:

> ensure that the animal's welfare is protected – removal must comply with the *Animal Welfare Act 1999*, which classifies deer velvet removal as a 'controlled surgical procedure'
> ensure that restricted veterinary medicines used are administered in accordance with the *Agricultural Compounds and Veterinary Medicines Act 1997 ('ACVM Act')*
> ensure the safety of people involved in the procedure.

It is important to follow transport requirements as per the *Animal Welfare (Transport within New Zealand) Code of Welfare 2011*.

Also see Deer Industry New Zealand's DeerQA Transport Quality Assurance Programme.

For more information regarding velvetting procedures see the Animal Welfare Advisory Committee's ***Code of Recommendations and Minimum Standards for the Welfare of Deer During the Removal of Antlers***.

03/

SPECIFIC HAZARDS AND CONTROLS

IN THIS SECTION:

This section outlines common hazards and controls for deer farming.

The hazards identified in this section are not an exhaustive list. There is a requirement to identify, eliminate, isolate and minimise hazards in a workplace.

For more information see *WorkSafe NZ's Managing Health and Safety: A Guide for Farmers*.

3.1 STAGS

Male deer (stags), in particular adult stags, should always be handled with respect and should only be handled by experienced veterinarians and/or farmers. From late January onwards, the nature (temperament) of stags tends to change with a move toward increased aggressiveness. By the beginning of March (beginning of the 'rut') they can be very dangerous and unpredictable. As such, antlers should be removed early, before they are 'Hard Antler' (before the velvet is completely shed), to ensure the safety and welfare of the deer and their handlers.

Most stags show warning signs before becoming aggressive. The handler should be fully aware of these signs and act accordingly, in case the stag attacks. Behavioural signs include:

- grinding teeth
- lolling tongue (and dribbling/blowing saliva)
- rolling eyes and flared nostrils
- raised hair on necks and rump patches
- flattening their ears against their head
- holding head erect
- slow lifting of front legs and stamping
- backing into a corner on the pen and confronting the handler
- lowering their head to charge.

MANAGING THE HAZARD:

Never enter a pen containing stags unless you are confident they are of a placid nature (this may change depending on the season).

To ensure stags are handled as safely as possible, a rigorous culling policy for poor temperament, aggression, flightiness or unpredictability should be practised.

It is safer to work with stags from outside the pen, regardless of their nature or the season. If you need to enter a stag pen it is important to have an escape route planned (via escape doors) and/or have a shield to protect yourself. Deer are very unpredictable animals, so forward planning about what happens once the deer are in the yards or shed (eg which deer go in which pens) is a must.

Make sure contingency plans for all possible scenarios are in place when handling stags within the yards and sheds. Make sure plans are understood by all people working in the shed at the time, and can be applied quickly enough to keep everyone safe.

Key recommendations related to stag groupings and age:

- Compatibility of individuals within a mob – key to reducing stress and aggression during handling. Avoid mixing different stag ages within a mob during handling activities or transportation, and do not combine stags that have been run in separate mobs in the paddock. Aggressive behaviour between stags is very likely in these situations, especially when they have been brought together in a confined space.

- Take extreme care when handling stags in the roar – only stags less than two years old can be transported to a deer slaughter plant during the roar. Further information and regulatory requirements of deer transport can be found in the codes of practice.
- Do not keep mature stags in the same pen as fawns and hinds due to their aggressive behaviour in confined spaces.
- Yard stags with hard antler, or trophy stags, with extreme care, and do not hold them in paddocks with other stags, as the risk of fighting and injury is much higher. Remove farmed males' velvet or antlers once the velvet has begun to strip.

Minimum Standard 10 (Code of Welfare (Deer) 2007) requires that:

a. stags with hard antler must be separated from stags without hard antler, especially during the rut, to avoid risk of injury and to allow easy access to feed and water
b. farmers must develop management practices to cater for the welfare needs of stags farmed with hard antler.

When yarded, pen stags with hard antler singly in facilities that limit movement or space. Only enter their paddocks when necessary, ie:

- for feeding
- for vet examination
- if they must be moved to another group of hinds.

When entering a paddock with a rutting stag inside, use a vehicle that will provide protection from an attack, eg a cabbed tractor. Two people should be on hand.

Outside the rut, stags are generally less aggressive; but some can be unpredictably aggressive, so be vigilant at all times. Hand-reared deer can be the most dangerous, and should not be kept in hard antler.

Never work with stags on your own, or enter a paddock with stags on foot during the rut.

3.2 REMOVING ANTLERS

Remove hard antlers/regrowth of every stag by 1 March to ensure the safety, welfare and health of the deer and their handlers. In most situations antlers can be safely removed without using tranquillizers, provided the operation is carried out as soon as possible after the velvet has been shed and the antlers have hardened. The stags will be easier to handle at this stage.

However, tranquillizers are recommended whenever antler removal is carried out, for the safety and welfare of deer and handler.

Once the stag's temperament is affected by the onset of the rut, it is not safe to remove the antler without using a tranquillizer. This can be administered to the stag while it is restrained in the deer crush.

Only an experienced veterinarian or person under the supervision of one should tranquillize deer in hard antler.

During the rut, stags should only be yarded if absolutely necessary. Do not work alone when handling hard antlered stags.

MANAGING THE HAZARD:

When removing antlers, use a deer crush with suitable head and antler restraint. Use a tranquillizer during the rut.

Tranquillizers can be dispensed under an individual veterinary operating instruction or the National Velvetting Standards Body (NVSB) programme. The Veterinary Council of New Zealand (VCNZ) recommends they are dispensed under NVSB, which provides for dispensation of tranquillizers.

Take care to support the head of adult stags when tranquillized, as they cannot adequately support the antler weight. If a crush is not used they must be maintained in sternal recumbency (lying on the belly). Wry neck, breathing restrictions and distress can quickly result otherwise. Seek veterinary advice if there are any concerns regarding the use of tranquillizers.

Take special care when cutting through hard antler if the stag is only lightly tranquillized, even if restrained in a purpose built crush. Any quick, slight movement of the stag's head can be dangerous to the head and arms of anyone close by. Ropes attached to the stag's pedicles when in a crush should be considered as additional restraint. This will limit any sudden head movement.

3.3 HINDS

Hinds can become protective and aggressive at calving time and should be disturbed as little as possible. Hinds with young, that have become so tame as to permit close approach, can be dangerous to anyone handling their calves.

MANAGING THE HAZARD:

Take special care if you are going to tag calves at birth.

Use a vehicle that provides suitable protection when carrying out routine herd inspection at calving time. When leaving the vehicle to inspect or tag a calf, park the vehicle so that the hind cannot approach from behind.

Outside calving season most hinds are reasonably docile if handled properly. However, some individuals, especially hand-reared deer, can show aggression. Be aware of these hinds and take special precautions as appropriate. If possible, cull these deer as soon as possible.

3.4 OCCUPATIONAL INFECTIONS AND ZOONOSES

Zoonoses are serious diseases that can be transferred from animals to humans and between animals. They can cause life-threatening health problems in humans. People working with livestock may be exposed to these diseases, by or through:

- direct contact with animal blood, urine or faeces if splashed in your eyes, nose, or mouth
- bacteria entering your bloodstream through cracked skin or open cuts
- inhaling dust or micro-organisms in the air
- eating or drinking infected animal products or smoking during animal handling
- transmission from an infected animal to a human via fly, mosquito, tick, or flea bites.

YERSINIOSIS

Yersiniosis is a common zoonosis in farmed deer, caused by Yersinia pseudotuberculosis. It can cause abdominal pain, nausea and dehydration, and occasional permanent joint pain.

BOVINE TUBERCULOSIS

Tuberculosis is a bacterial disease that may be present in deer herds, although it only exists in a few deer herds nationally, and at very low levels.

TETANUS

The organism that causes tetanus is widespread and can enter the body through cuts, abrasions or puncture wounds made by splinters and thorns. The disease can be fatal, and immunisation before infection is the only certain way of dealing with it. Check with your doctor regarding immunisation and subsequent boosters.

LEPTOSPIROSIS

Leptospirosis is caused by bacteria that multiply in the kidneys of animals, and are shed in their urine. People can be mildly or severely affected or may be asymptomatic (show no symptoms). It is a serious disease, and can be fatal, although this is rare.

Many animals can carry the bacteria including cattle, pigs, sheep, goats and deer. Rats and possums can also spread the disease. Leptospirosis bacteria can survive for weeks in moist environments and days after an animal has been killed. Humans can catch Leptospirosis when they are exposed to urine of infected animals, which enters through cuts and cracks in the skin or through membranes of the eyes, nose and mouth. Deer urinate frequently in confinement.

Deer present a greater chance of risk of exposure to Leptospirosis than when working with other animals.

Leptospirosis has many symptoms; but normally starts like a very bad case of the flu, with headaches, fever and general weakness. Leptospirosis will make some people seriously ill, needing hospital treatment. Some people may be off work for several months, and have lasting kidney or liver damage.

Deer handlers (including farmers, staff, transport operators and deer processing plant staff) who experience severe flu symptoms need to tell their doctor Leptospirosis may be a cause of their symptoms. They should be tested accordingly if flu-like symptoms persist.

MANAGING THE HAZARD:

Manage zoonoses through good health and hygiene practices, when working with deer, and in animal areas.

> Maintain a robust vaccination and parasite control programme (especially for Leptospirosis – refer to *Good Practice Guidelines for Prevention and Control of Leptospirosis* for more information).
> Provide hand washing facilities for workers and keep them clean.
> Provide other facilities, like:
  - running water
  - liquid soap
  - hand drying facilities (paper towels).

  Buckets or troughs of water that are reused by several people are not suitable. Waterless alcohol-based hand rubs can be used to sanitise visibly clean hands.
> Wash hands:
  - after contact with deer
  - after removing Personal Protective Equipment (PPE, eg gloves, overalls)
  - on leaving animal areas
  - before eating, drinking, or smoking
  - following accidental contamination with deer blood, urine and bodily substances.
> Thoroughly dry your hands after washing.
> Make sure children wash their hands properly.
> Provide eating areas away from animal areas and stop workers from eating, drinking and smoking in animal areas.

- Keep yards clean and hygienic, and reduce manure build-up.
- Use PPE to protect clothing, exposed skin and face from contact with animal blood and bodily substances (eg wear disposable gloves to examine a deer's wound).
- If using veterinary sharps such as needles and syringes, carefully dispose the sharps in a rigid-walled, puncture–resistant sharps container.
- Discourage contact with areas such as the muzzle where saliva or nasal secretions can transfer to a worker's face.
- Cover cuts and abrasions with a water-resistant dressing. If people are injured at work, thoroughly clean the wound and cover it with a water-resistant dressing.
- If injured, seek medical advice, particularly for a serious and/or tetanus-prone injury, or a health condition that makes them prone to infection.
- Isolate deer showing signs of illness from people and other animals.
- Carry out a pest control program to discourage rats and other pests.

When handling deer entrails or any infected tissues, wear disposable protective gloves. Consult a vet for a safe way of submitting samples for analysis.

3.5 RISKS TO THE PUBLIC

Stags of any species or breed should always be regarded as hazardous if they:

- have lost their fear of humans
- are readily approachable
- have cleaned the velvet from their antlers.

MANAGING THE HAZARD:

Keep deer in securely fenced paddocks.

Regardless of age, once deer are in hard antler, do not keep them in paddocks with a public right of way or which are known to be used by children, the elderly or disabled.

In other situations, when public access may reasonably be expected, display safety signs at access points to the paddocks.

Avoid pasturing hinds that have recently, or are about to, give birth in these paddocks. If this is not possible, manage the stocking rate so hinds can easily occupy positions where they will not feel threatened.

Display signs at paddock access points bearing a suitable warning, eg 'Unsafe Deer – Keep to Path'.

3.6 VETERINARY MEDICINE PRODUCTS

Many veterinary medicine products can be harmful to your health if not used as directed.

MANAGING THE HAZARD:

Always use veterinary medicine products as directed.

04/

DEER YARDS

IN THIS SECTION:

A well designed deer yard will cut down on injuries to deer and handler and assist smooth efficient handling.

4.1 THE SITE

The site should be level and positioned on a raised area. The prevailing wind may carry strange smells and noises, making handling more difficult. Good drainage for working areas is preferable.

To make the site safe:

> Clear overhanging trees and relocate telephone/power lines.

> Make sure there is good access and space for trucks and trailers to move right off the road safely, turn and back into the race.

> Make sure there is enough space to handle stock safely.

> When relocating yards, choose a site with a slight uphill slope, good drainage and dry ground, and put down a good layer of gravel or other all-weather surface.

To improve drainage:

> For vehicle accessways and stock areas have a 100-150 mm layer of course metal laid over a raised, well-drained base.

> Install field or plastic drains. Otherwise, dig a drainage trench and fill it loosely with rubble.

> Make sure drains are below the surface to avoid trips and slips.

A circular yard works very well. Deer (having a longer flight distance than most other farmed animals) will move better in circular yards, as they try to get away by disappearing round a corner. This design also provides many pens, gates and options for sorting deer.

For public safety, and to minimise the escape risk, do not build deer yards and their exits (eg people access, load out ramps) on boundary fences. Build yards within a deer fenced area that allows good access for transport vehicles, but can be enclosed securely when handling deer.

ORIENTATION

Think about the main flow of the yard. A good design will 'draw' livestock through smoothly. It is better if deer are not moved with low sun shining directly into their eyes.

LOADING

Ensure the loading race is wide enough to allow deer to walk side-by-side during loading and unloading, ideally a minimum of 1.2 metres wide. The sides should be solid with no distractions to forward movement, and high enough to stop deer climbing out.

Put down non-slip scored or stepped surfaces so deer do not slip. Grain on rough sawn timber should run towards the front of the race.

RACEWAY

Make sure the raceway is bordered by suitable fencing at least 1.8 m high by 3.8 m wide. Mask the area with timber or similar material to give a solid appearance. Connect the holding paddock to the working yard, situated near the shed.

Some cover, such as shade cloth or shrubby trees on the outside of the race, can make the race look like an escape corridor and helps keep deer flowing. Shrubs should be evergreens and non-toxic. Double fencing may be needed to prevent deer from grazing.

A strong, well-hinged 2 m high by 3.7 m long, diamond mesh, galvanised steel gate with treated plywood riveted on the inside, makes a safe, quick closing yard gate. Ensure the gate latch is strong, quick and self-latching. Reverse the top hinged dog to prevent the gate being lifted off its hinges.

4.2 HANDLING AREA

In the closed confines of the handling area, stock handlers risk being butted or kicked by stags and large hinds. Deer may also rear up and strike downwards with their front hooves in a scissor-type kick.

Design the handling system so large mature stags can move through without direct contact with stock handlers. Provide body shields for stock handlers, especially when handling stags, and aggressive hinds. Shields need to protect most of the body below the neck and be made from 12 mm plywood, polycarbonate or an equivalent material. Wear safety helmets.

The handling area can be a permanent facility or consist of portable equipment. In either case, design it carefully so deer are handled safely and efficiently. Build walls solidly without projections.

A handling shed should:

- use light strategically to assist with the deer movement
- have either forcing or sliding gates leading to the crush so deer cannot push back past the gate
- have smooth walls – plywood or conveyor belt material is best
- provide adequate ventilation and controlled lighting
- ensure an efficient flow of stock through the facility and be able to draft deer from the mob
- have a cradle or crush set on a set of scales, with adjustable sides, so the animal can be immobilised and handled safely and efficiently.

Deer tend to move to higher ground when disturbed, so the handling area should be located to take advantage of this.

Where subdued lighting is used to calm deer, it must be sufficient enough for stock handlers to work safely. This is generally a minimum of 50 lux.

Cover the internal race and working part of the handling shed and shelter it from the weather, to keep it dry.

Housed deer should be able to see deer in neighbouring pens. Failure to do this may result in unnecessary stress and handling difficulties.

Cover hard or concrete floors in rubber matting, sand, woodchips or sawdust to minimise injuries and disease that can occur when deer slip on exposed hard floors.

4.3 DEER RESTRAINT

Restraint systems will need to be used at certain times to enable specific treatments to occur safely, eg velvetting, drenching, tuberculosis testing, vaccinating, etc. Only experienced operators should use deer restraint systems. Others should be supervised by an experienced operator.

Sometimes deer can become agitated when handled in the shed or race, so it is important the handler is confident operating the restraint system.

The collecting area must have a properly designed deer crush. Design the pen so deer are easily encouraged to enter the crush. Both 'drop floor' crushes and 'squeeze crates' (with collapsing padded sides) are suitable. Crush facilities should be able to deal with all types of deer including mature stags with full antlers. It needs to protect stock handlers from injury, and allow good access to deer. A simple form of head restraint is recommended.

Forcing or sliding gates are often used in the race leading to the restraint system, so deer cannot push back down the race and escape.

RESTRAINT SYSTEM REGULATIONS

Sections 5.4 and 5.5 of the Animal Welfare (Deer) Code of Welfare 2007 provides specific regulatory detail regarding restraint system design and use. Minimum standards are listed below; however, more detail and information can be found in the Code.

- Restraint equipment used must be maintained in good working order.
- Restraint equipment must be used appropriately in order to minimise the risk of injury or unnecessary pain or distress to deer.
- Restraint equipment used must be suitable for the class, age and type of deer being handled.
- Operators must be comfortable with safe operating procedures of the restraint equipment.
- Deer must not be held in a restraint for more than the time required to carry out the procedures for which they are being restrained.
- Deer must be able to be rapidly released from restraint equipment.

05/

TRAINING REQUIREMENTS

IN THIS SECTION:

People handling deer must be well trained so they can care for the deer, maintain animal welfare and production standards, and avoid being hurt.

Handling deer safely is a skill that comes with time and experience. Skilled deer handlers understand how deer behave and react, and know where to stand and how to move. They work together to get the deer to do what they want – quietly, smoothly and safely.

5.1 GENERAL REQUIREMENTS

Farm owners/managers and employers must ensure that anyone handling deer has enough experience, or are trained and supervised, so they do not put themselves or others at risk.

5.2 CHILDREN

Children are at much greater risk than adults because they do not have the skills and experience to understand risks or hazards.

Children will mainly learn safe animal handling practices through helping their parents or other competent adults. The risk must be controlled, and children must be under direct supervision.

Very young children should not enter yards or paddocks without an adult. Never put a child at risk with deer.

5.3 TRAINING FOR HEALTH AND SAFETY REPRESENTATIVES

The Health and Safety in Employment Act 1992 gives employees the right to be involved in workplace health and safety matters. Provide opportunities for workers to participate effectively in improving health and safety. This can be achieved by electing a health and safety representative. This is someone employees can go to with concerns or suggestions regarding workplace health and safety. The representative will work with the employer in good faith to find a solution.

A representative is entitled to two days paid leave per year to undergo approved health and safety training.

06/

APPENDICES

IN THIS SECTION:

6.1 GLOSSARY

TERM	DEFINITION
All practicable steps	The steps taken to achieve the result that it is reasonably practicable to take in the circumstances, having regard to: 1. the nature and severity of harm that may be suffered if the result is not achieved; and 2. the current state of knowledge about the likelihood and severity of harm that will be suffered if the result is not achieved; and 3. the current state of knowledge about harm of that nature; and 4. the current state of knowledge about the means available to achieve the results and about the likely effectiveness of each of those means; and 5. the availability and cost of each of those means. To avoid doubt, a person required by the Health and Safety in Employment Act 1992 to take all practicable steps is required to take those steps only in respect of circumstances that the person knows or ought reasonably to know about.
Button drop	When the calcified pedicle (or hard antler) naturally drops off the stag to allow for the new season's antler growth. This generally occurs in August.
Crush	A sturdy device designed to hold and immobilise an animal while animal handling or veterinary tasks are undertaken.
Flight distance	The area around the deer which the flight zone extends.
Flight zone	The area surrounding a deer which if you enter will cause them to move.
Hind	A female deer of more than two years of age.
Lairage	A place for keeping livestock temporarily.
Lux	International measure of light intensity (not to be confused with watts).
Pedicles	Stalk-like structures on a stag's head where the antlers grow from.
Rear race gate	A gate at the rear of the race that prevents stock from escaping the race.
Rut	The mating season.
Stag	A male deer of more than two years of age.
Sternal recumbency	A position where an animal is lying on its belly.
Velvet	The immature (non-calcified) antler of male deer.
Velvetting	The process of harvesting velvet antler from male deer.
Weaning	The permanent separation of an offspring from its mother.
Zoonosis	An infectious disease that is transmitted between species (sometimes by a vector) from animals other than humans to humans or vice versa.

6.2 BIBLIOGRAPHY

Animal Welfare (Deer) Code of Welfare 2007 *National Animal Welfare Advisory Committee 2007.*

Animal Welfare (Transport within New Zealand) Code of Welfare *National Animal Welfare Advisory Committee 2011.*

Baseline Incidence of Ill Health in Agriculture in Great Britain Hilary Cowie *[et al.]. Hse, 2005 (Research Report 370).*

Deer QA Quality Assurance Programme *Deer Industry NZ.*

Health And Safety (Web Page) (NN) *Deer Industry NZ.*

The Farming of Deer (Model Code of Practice for the Welfare of Animals) (Australia) *Standing Committee on Agriculture, Animal Health Committee, 1991. (Primary Industries Report Series 30).*

National Velvet Accreditation Scheme: A Manual for Farmers and Veterinarians on the Velveting of Deer in Australia (Australia) *Deer Industry Association Of Australia, 2002.*

Deer Farming (UK) *Health and Safety Executive, 1996. (Ais 7(Rev)).*

Gamekeeping and Deer Farming: A Guide to Safe Working (UK) *Health And Safety Executive, 2013. (Indg177(Rev2)).*

Deer Farming: Health and Welfare (UK) *Department for Environment, Food & Rural Affairs, 2013.*

Deer Farming Handbook (Australia) *Tuckwell, C. (2003) Rural Industries Research & Development Corporation.*

The Farming of Deer (Model Code of Practice for the Welfare of Animals) (Australia) *Standing Committee on Agriculture, Animal Health Committee, 1991. (Primary Industries Report Series 30).*

Notes

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ISBN: 978-0-908-33604-3 (print)
ISBN: 978-0-908-33605-0 (online)

Published: October 2015 Current until: 2017

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New Zealand Government

WORKSAFE NEW ZEALAND | MAHI HAUMARU AOTEAROA