

1. Introduction

This Code of Practice for the Australian Capital Territory (ACT) has been prepared by the ACT Animal Welfare Advisory Committee (AWAC) to outline the welfare needs of rabbits. Its purpose is to provide general guidelines on the minimum standards of accommodation, management and care appropriate to owned rabbits.

A person in charge of rabbits has a legal liability under the *Animal Welfare Act 1992* to ensure that each rabbit receives appropriate and adequate food, water, shelter and exercise.

This Code is divided into two Parts. The first Part of the Code outlines the minimum welfare requirements for the care of rabbits as required by the *Animal Welfare Act 1992*. The second Part of the Code contains animal husbandry techniques for the care of rabbits as recommended by the ACT Animal Welfare Advisory Committee. Adhering to the full implementation of this Code will achieve a high quality of life for a captive animal.

It should be noted that under current Territory legislation rabbits are no longer classified as vermin.

Animal welfare considerations are becoming increasingly important in the keeping of animals. This Code is based on established experience and current scientific knowledge. Practices once considered acceptable are now being reassessed and modified according to new knowledge and changing attitudes.

PART ONE

1.1 General

Rabbits need adequate protection from rain, wind, direct sunlight and extremes of temperature. All rabbits should have an adequate exercise area. Keeping rabbits isolated, in an area without windows, adequate ventilation or contact with humans or other rabbits, is unacceptable. Male rabbits over 3 months of age should be housed individually.

1.2 Housing

The housing should be constructed such that it is predator and vermin proofed and screened against insects. The housing should also be escape proof and situated either inside a building or within observation from a building. The housing should provide an optimum temperature range of between 16⁰C and 25⁰C.

The hutch should be large enough to allow for sufficient exercise for the animal's health and fitness.

See Appendix B for a guide to housing sizes for single rabbits.

An enclosed sleeping area is required. Exposed mesh flooring is not recommended, as it is dangerous and can cause broken legs or injury to the feet.

1.3 Environment

Environmental enrichment is essential for the rabbit's health and well-being and is supplied by such devices as jump boxes, resting boards, and PVC or terracotta tunnels. The addition of these items into the rabbits housing provides the animal with activities to relieve boredom.

1.4 Cleaning

Cleaning is essential for the comfort of the rabbit and the prevention of many diseases. The cage should be thoroughly cleaned weekly.

1.5 Litter trays

Rabbits can be trained to use litter trays for urination, but not always for defecation. Toilet areas and litter trays, need to be cleaned with a solution of dilute bleach and hot water.

1.6 Nutrition

Rabbits should be fed at least once daily, preferably twice, and all stale food scraps removed as a hygiene measure and to discourage vermin. Fresh, clean water should be available at all times.

Rabbits are vegetarian with a high requirement for fibre in their diet. Their diet should consist of:

- fresh commercially prepared rabbit pellets and/or mix;
- fresh uncontaminated lucerne hay; and
- supplemented with fresh fruits, vegetables, grasses, herbs, grains and treats.

1.7 Health

All rabbits, even house rabbits, require an annual vaccination to protect them against the rabbit calicivirus.

Dampness, poor hygiene, draughts and overheating, impose threats to the health of rabbits.

Rabbits should be handled and examined daily to check for the following symptoms, which, if present, require veterinary attention:

- Inactive or sitting hunched over with closed eyes;
- Weepy eyes that persist after cleaning;
- Wetness around the nose, or slobbering around the mouth;
- Sneezing or loud breathing;
- Diarrhoea, especially with a distinct odour;
- Sores on the hocks, or any place on the body;
- Persistent scratching of the ears or any other area of the body;
- Swollen eyes or genitalia;
- Off food for longer than a day;
- Drinking very little or no water;
- Grinding teeth;
- Firm bloated stomach;
- No faecal pellets evident in the hutch;
- Persistent white dandruff with red skin and scabs;
- Head carried to one side; or
- Lump felt below the skin;

A sick rabbit should always be housed separately until completely well.

The teeth of rabbits grow continuously throughout their lives and must be worn down by chewing. Feed a high fibre diet (see Section 2.4.2) and provide a block of untreated timber or unsprayed fruit tree wood. Overgrown teeth cause excessive salivation, difficulty eating, extreme pain and weight loss, any of which indicate the need for prompt veterinary attention.

1.8 Handling

Care should be exercised when handling rabbits, to prevent possible injury and discomfort to the animal and to the handler. It should be noted that rabbits can take fright and lash out with their back legs in defence, inflicting deep scratches on the handler. As a preventative measure all nails should be kept trimmed.

1.9 Transportation

Rabbits can become very stressed during transportation as they are extremely sensitive to heat. Rabbits should not be transported in temperatures above 30°C.

1.10 Breeding

Persons planning to breed rabbits are responsible for finding good homes for the litter, which average 3-8 and may be up to 11 kittens.

1.11 Placement of Kittens

Kittens can be placed in a new home soon after weaning provided that they are healthy and gaining weight. The new owner should be given accurate information about:

- Diet;
- Desexing;
- Vaccination;
- Parasite control;
- Grooming;
- Housing;
- Identification; and
- General health care.

PART TWO

2.1. Responsible Ownership

Since humans can alter or control an animal's environment, animal welfare includes the concept that people have duties and responsibilities towards animals. The greater the level of interference with, or control of, an animal's environment, the greater our responsibility. It is necessary to take into account the rabbit's potential interaction with neighbours and its potential life span, which for rabbits can be 6 – 8 years.

Responsible ownership means looking after the physical and emotional needs of animals, and includes adult supervision of children who have rabbits as pets. Rabbits must not be allowed to escape from the owner's control, as they are susceptible to attack from other animals.

Identification is difficult. However, rabbits purchased from breeders may have a unique leg ring. Ear tattooing and microchipping performed by a veterinary surgeon are options which can be considered by owners.

To reduce the number of rabbits for which homes cannot be found, and to help ensure healthy offspring, breeding should be limited. Owners are responsible for finding suitable homes for all progeny produced by their animals and informing buyers about the animals' requirements for diet, accommodation, management and general health care.

2.2 Unwanted Animals

It is recognised that there will be times when a person will be unable to keep and/or care for their animal(s). If a person can no longer keep or care for an animal, arrangements to pass the animal on to a new owner either privately or through the RSPCA should be made. Some rabbit breeders will take rabbits back if they have been purchased from them. It is illegal under the *Animal Welfare Act 1992* to abandon or release an animal. If efforts to have an animal relocated have been exhausted it may be necessary to have it euthanased. Euthanasia should be performed by a veterinary surgeon.

2.3. General

Rabbits need adequate protection from rain, wind, direct sunlight and extremes of temperature. All rabbits should have an adequate exercise area. Keeping rabbits isolated, in an area without windows, adequate ventilation or contact with humans or other rabbits, is unacceptable. Male rabbits over 3 months of age should be housed individually.

Rabbits are easily stressed by many environmental conditions such as:

- Loud noises: eg screaming; fireworks; loud music, especially at night;
- Handling for long periods of by many different people;
- Rough handling;
- Transportation and living in unfamiliar surroundings; and
- Other family pets.

A rabbit's skeleton, especially the spine, is weak. Fractures can easily occur with unskilled handling or spontaneously if the rabbit is frightened.

Allowing rabbits to free-range or experience unsupervised exercise is not recommended as the rabbit may:

- Be injured or killed by cats, dogs and large birds;
- Contract myxomatosis and/or calicivirus if unvaccinated;
- Escape;
- Not be observed when it requires veterinary assistance;
- Become wild and unmanageable; and
- Eat potentially poisonous plants (refer to Appendix A which lists some of the plants which are hazardous to rabbits.)

All rabbits respond better to their owners, feel more secure, and become closer companions when they are confined to their hutch and receive regular supervised exercise.

Rabbits are territorial by nature. Sexually mature rabbits, especially males, can be aggressive. Therefore, the following should be taken into consideration:

- Males over 3 months should be housed individually;
- Female rabbits can be housed together but should be observed for aggressive behaviour;
- Aggression is more likely when males smell a mature female, another male, or when a hutchmate is reintroduced after a separation;
- A rabbit living in isolation is an acceptable option provided there is daily human interaction; and
- Desexing both male and female rabbits reduces aggressive behaviour and may allow communal living.

2.3.1 Housing

The housing should be constructed such that it is predator and vermin proofed and screened against insects. The housing should also be escape proof and situated either inside a building or within observation from a building. The housing should provide an optimum temperature range of between 16°C and 25°C.

Rabbits can live outdoors all year round if well protected from extreme weather conditions. Insulation of the sleeping quarters will be needed during winter. (See Section 2.5.3) Care should be taken to ensure that hutches are not placed in direct sunlight to avoid overheating during hot weather.

Housing indoors is suitable provided the rabbits have access to indirect sunlight and there is adequate ventilation. It is important to ensure that the rabbit is protected from fumes and vapours (car exhausts, chemicals, ammonia from urine). Rabbits will also chew all items within their reach, therefore it is recommended that care be taken to ensure that all electrical cords and items of value are protected.

2.3.2 Hutch Design

The hutch should be large enough to allow for sufficient exercise for the animal's health and fitness.

See Appendix A for a housing size table.

Each additional rabbit will require an extra 60 cm² of floor space. If a rabbit is kept in accommodation of these dimensions it will need to be released for a minimum of 1 hour per day.

The hutch should have wooden sides and top, a solid non-slip floor and be painted in a weatherproof paint. The design should be simple allowing access to the rabbit and easy cleaning of the hutch. A two door, table height, sloping roof hutch, with as few internal upright struts as possible and doors opening outward with a litter board (a simple removable barrier about 7.5 cm high just behind the hutch door and slotted into grooves), is a good basic design. (See diagram ?) Care should be taken when opening the hutch door to ensure that the rabbit does not fall out. (See Section 2.3 concerning skeletal strength.)

Hutches at ground level are also suitable but may prove more difficult to thoroughly clean. Some ground level hutches have attached grazing areas.

Cages and hutches need to be insect screened to prevent mosquito bite (Myxomatosis) and fly attack (fly strike).

An enclosed sleeping area is required. Exposed mesh flooring is not recommended, as it is dangerous and can cause broken legs or injury to the feet.

The sleeping area should not be more than one third of the total hutch space. It should be raised off the ground, kept clean and dry, provide protection from the weather and offer security if the animal is frightened. Appropriate bedding material will be required to prevent temperature extremes. (See Section 2.3.6 Bedding Materials).

Access to grass or an alternative area to exercise in, can be provided by a movable rectangular 'wooden and wire frame', or triangular 'morant' cage. All exercise cages should be of a sturdy construction, and have an enclosed mesh top, sides and floor to prevent burrowing and escaping or overturning. Having one solid side can provide a protected area for shade and security. This type of cage can be moved around on the ground, enabling the rabbits to graze which is a natural feature of their behaviour. It is not suitable for permanent housing, and periods in an exercise cage should be supervised.

When moving an exercise cage with a wire base, great care should be taken to avoid damage to the animals' legs and feet.

Alternatively, a small corner in the backyard can be fenced off as an exercise area providing the owner access whilst the rabbit is exercising. Exercising rabbits should be supervised. All exercise areas require clean water, shade, some sunlight and shelter from rain and wind. All rabbits need to be returned to their hutch before dusk when flying insects are more likely to be in the environment.

2.3.3 Hutch Accessories

Environmental enrichment is essential for the rabbit's health and well-being and is supplied by such devices as jump boxes, resting boards, and PVC or terracotta tunnels. The addition of these items into the rabbits housing provides the animal with activities to relieve boredom.

When furnishing the rabbit's housing the following points should be observed:

- Plastic materials should not be used within the cage as when chewed they can cause mouth and stomach problems;
- All bowls for food and water should be heavy (earthenware, terracotta) to prevent them being overturned. Where possible a large gravity-fed drinking bottle is a better alternative to a water bowl;
- Hayracks are very useful in keeping hay off the floor and preventing wastage. A wire semi-circle flower hanger attached to the side of the hutch wall makes an ideal hayrack.

2.3.4 Cleaning

Cleaning is essential for the comfort of the rabbit and the prevention of many diseases. The cage should be thoroughly cleaned weekly.

The hutch should be rinsed thoroughly and allowed to dry completely before replacing clean bedding materials and rabbit. Sunlight is a good killer of bacteria. All bowls and bottles need to be cleaned regularly and sterilised. White urine residue may be removed with neat eucalyptus oil and scrubbed with hot water.

2.3.5 The Litter Tray

Rabbits can be trained to use litter trays for urination, but not always for defecation. Toilet areas and litter trays, need to be cleaned with a solution of dilute bleach and hot water.

Wood shavings and other dusty litter products may cause irritations. Some commercial litters may clump and adhere to areas of the body. Do not use deodorised cat litter as many rabbits find it offensive, recycled paper pellet litter can be an excellent alternative. Do not use food based litter products such as lucerne pellets in the litter tray.

Suitable litter includes:

- rice hulls;
- wheaten chaff;
- recycled newspaper pellets; and
- other non-clumping, non-dusty litter products.

2.3.6 Bedding Materials

Rabbits may eat their bedding so uncontaminated dry straw or grass hay makes good bedding materials. Oaten or wheaten chaff can be used under the straw in the hutch or in the litter trays to absorb urine. More chaff can be added on days between cleaning to reduce the

presence of toxic ammonia fumes in the hutch.

2.4 Nutrition

Rabbits should be fed at least once daily, preferably twice, and all stale food scraps removed as a hygiene measure and to discourage vermin. Fresh, clean water should be available at all times.

Water is best provided by a gravity fed water bottle with a metal ball and tube sipper. This is clipped to the mesh wall of the hutch door. The water should be replaced daily and in summer at the end of the day to provide cool water. At least 500 mls of water per dwarf breed a day and more for larger breeds should be provided. The water container should be kept clean, and if a water bottle is used, the spout should be checked daily for correct flow as blockages occur frequently. In very cold temperatures the ball and tube can freeze together.

Rabbits are vegetarian with a high requirement for fibre in their diet. Their diet should consist of:

- fresh commercially prepared rabbit pellets and/or mix;
- fresh uncontaminated lucerne hay; and
- supplemented with fresh fruits, vegetables, grasses, herbs, grains and treats.

Rabbits should not be fed any food that has fine dry powder.

Owners should be aware of the plants within reach of free-ranging rabbits.

2.4.1 Pellets

Pellets are an important part of your rabbit's diet. Purchase fresh, deep green, pellets with as little dust as possible. If dust is present sift the pellets before feeding. Store pellets in an airtight, non-plastic container in a cool area. Only buy quantities that can be used within a few months. A high quality "rabbit mix" may be substituted.

See Appendix A for the pellet feeding guide.

2.4.2 Hay

All hays, lucerne, meadow, and oaten, are good sources of fibre. Hay should be fresh, green, sweet smelling, free from dust, mould, and kept in a dry area away from mice and rats. Hay provides dietary bulk and is a good source of low energy food that a rabbit can consume in large quantities. This aids digestion, helps wear down their teeth, relieves boredom and provides many nutrients required on a daily basis. Top quality lucerne chaff, can be an alternative to baled hay.

Provide a good clump of hay per day, placed in a hay basket or on the hutch floor away from the toilet corner. The green leafy section should be consumed before the next feed time leaving only the bare stalks.

2.4.3 Fresh Foods

Each day a rabbit will appreciate a variety of foods from the list below. Never over feed fresh foods, this can be determined by whether the faecal pellets are firm or loose and how much is left by the end of the day. Fresh foods provide important vitamins, minerals and trace elements in the rabbit's diet.

Quantities of all foods need to be adjusted based on season, age of the rabbit, activity level, and current body weight. In general, feed a little more in cold weather or if the rabbit is losing weight. Feed less if the rabbit is gaining excess weight.

Advice should be sought from a veterinary surgeon as to which plants are safe to feed. All greens should be washed and drained before feeding to remove any chemical spray residues. Too much green food, especially grass in the spring-time, may cause diarrhoea in rabbits not used to fresh foods in their diet. Diarrhoea may also indicate a more serious enteric condition requiring treatment.

See Appendix A for a guide of what to feed and not to feed rabbits.

2.5 Health Care

2.5.1 Vaccinations

All rabbits, even house rabbits, require an annual vaccination to protect them against the rabbit calicivirus.

The first calicivirus vaccination should be administered at 12 weeks of age and from then on, annually. This should be carried out by a veterinary surgeon. Any change in the rabbit's health or condition, occurring within a period of three weeks from the date of their vaccination should immediately be discussed with your veterinary surgeon.

2.5.2 Coprophagy

Rabbits have a unique digestive process that requires coprophagy (dung eating). They produce two different types of scats (dung). One is a dry fibrous scat found discarded in the hutch. The second is a shiny dark clustered, nutrient rich scat that is consumed by the rabbit in order to provide B vitamins and process indigestible fibre in their diet. This scat is consumed immediately. This activity usually occurs at night and should not be prevented.

2.5.3 Seasonal concerns

Dampness, poor hygiene, draughts and overheating, impose threats to the health of rabbits. In general most pet rabbits can remain illness free if the following conditions for each season are met:

Summer -

- Repair any damaged insect screens, and ensure insects are not shut in the hutch after opening the door;
- Clean the toilet corner or litter tray more frequently to remove toxic ammonia fumes;
- Reduce the amount of bedding material and ensure it is always dry;
- Check the sleeping quarters are weather proof and cool, providing good ventilation;
- Ensure the rabbit has access to a shaded area in the hutch or run during the middle of the day;
- Reduce pellet rations and increase fresh foods in very hot weather;
- Provide one or two frozen 1 litre plastic drink bottles to assist with cooling and a wet piece of carpet to lie on during the day in very hot weather; and
- Have available plenty of fresh, cool, free flowing water.

Note: temperatures above 30°C can be life threatening to rabbits.

Rabbits which have become overheated should be moved to a cool but dry and draught-free place. Give fresh foods and water, and moisten their ears and head area until they recover. Never over cool, in serious cases of heat stroke call a veterinary surgeon immediately.

Winter -

- Increase the amount of bedding material as the weather gets colder;
- Provide a warm, weather-proof hutch and sleeping area, with access to sunlight during the day;
- Increase pellet and hay rations as required;
- Check water bottles have not frozen and water flows freely;
- If hutch is in an exposed position to wind and rain, cover with a waterproof cover; and
- Most rabbits will appreciate an old jumper to snuggle into at night.

2.5.4 Daily Observations

Rabbits should be handled and examined daily to check for the following symptoms, which, if present, require veterinary attention:

- Inactive or sitting hunched over with closed eyes;
- Weepy eyes that persist after cleaning;
- Wetness around the nose, or slobbering around the mouth;
- Sneezing or loud breathing;
- Diarrhoea, especially with a distinct odour;
- Sores on the hocks, or any place on the body;
- Persistent scratching of the ears or any other area of the body;
- Swollen eyes or genitalia;
- Off food for longer than a day;
- Drinking very little or no water;
- Grinding teeth;
- Firm bloated stomach;
- No faecal pellets evident in the hutch;
- Persistent white dandruff with red skin and scabs;
- Head carried to one side; or

- Lump felt below the skin;

A sick rabbit should always be housed separately until completely well.

Some antibiotics have a toxic effect on rabbits and any antibiotic should only be used under veterinary prescription.

2.5.5 Parasites

Cheyletiella parasitivorax

The rabbit fur mite, *Cheyletiella parasitivorax* or “walking dandruff”, is a surface dwelling fur mite that may live on the keratin layer of the skin of rabbits. Symptoms of this mite are:

- Thick accumulation of fine, white flakes on the skin surface, most commonly over the shoulders and back; and
- Skin underneath may be red and sore although the condition is only mildly itchy.

The mite may transmit myxomatosis and the parasite is readily transmitted between rabbits. The mites do not affect humans, however an owner of rabbits should thoroughly cleanse hands between handling rabbits that have this parasite to prevent cross infection.

Treatment is with specific insecticides which can be obtained from a veterinary surgeon after examination and diagnosis of the disease.

Coccidiosis

Coccidia are common intestinal parasites of rabbits which live in the liver or intestines and cause:

- Poor weight gain;
- Unthriftiness;
- Stary coat
- Abdominal distension; and
- Diarrhoea and death in young rabbits.

Diagnosis is by faecal examination or post mortem examination by a veterinarian. While specific drugs may aid in treatment, control depends on good husbandry - principally the removal of scats daily to prevent ingestion of the oocysts (eggs).

2.5.6 General

The teeth of rabbits grow continuously throughout their lives and must be worn down by chewing. Feed a high fibre diet (see Section 2.4.2) and provide a block of untreated timber or unsprayed fruit tree wood. Overgrown teeth cause excessive salivation, difficulty eating, extreme pain and weight loss, any of which indicate the need for prompt veterinary attention.

The toenails should be checked regularly and where necessary clipped, care being taken not to clip too close to the blood vessel inside the nail.

Grooming is essential for rabbits to remove parasites and excess fur which if swallowed can cause hair balls which may result in a blockage within their digestive tract. This can prevent the rabbit eating normally and can become life threatening.

Regular grooming should be performed with appropriate combs and brushes to maintain a healthy coat and to enable early detection of lice and mites. All long hair varieties require thorough weekly grooming and short hair varieties should be brushed monthly. Once moulting has commenced more grooming will be required to remove the discarded hair.

Bathing should be avoided unless absolutely necessary, in which case the animal should be dried as quickly as possible afterwards. Use a mild animal shampoo without insecticide unless on veterinary advice.

2.5.7 Handling

Care should be exercised when handling rabbits, to prevent possible injury and discomfort to the animal and to the handler. It should be noted that rabbits can take fright and lash out with their back legs in defence, inflicting deep scratches on the handler. As a preventative measure all nails should be kept trimmed.

Rabbits should never be picked up by their ears. A rabbit's ears are particularly sensitive and this method of handling is cruel and dangerous.

Small breeds of rabbits can be picked up under their armpits with both hands and placed immediately on the chest of the handler placing their head near the handler's chin. One hand supports the rabbit under its back near the tail and the other hand rests near the rabbit's ears at the back of the neck. Once the handler is seated the rabbit can be placed on their lap.

Medium to large breeds can be picked up by the above method or by the loose skin 'the scruff' (behind the neck between the shoulders) with one hand and at the same time supported under the rump by the other hand. From here the rabbit can be placed against the handler's chest or lie with its head tucked under one arm, lying along the forearm. This is a safe way to carry a rabbit for any distance.

The rabbit should be held securely at all times to prevent both jumping out of the handler's arms and unintentional injury.

Rabbits have weak backs and can easily break them by twisting quickly in the handlers arms or by leaping from any height.

(Pictures will be scanned in at this point)

2.6. Transport

Rabbits can become very stressed during transportation and as they are extremely sensitive to heat and should not be transported in temperatures above 30°C.

When travelling with a rabbit in the car in summer, even in an air-conditioned car, either place a frozen water bottle in with the rabbit and/or cover the whole travel cage with a wet towel. Direct sun should be kept off the rabbit at all times.

For short term transport (less than one hour), a strong cardboard box with a secure lid and airholes is acceptable. The temperature in a rabbit box must be kept below 25°C.

For longer journeys, rabbits should be confined in a suitable container, such as a cat carry cage, which is kept level and secured against movement at all times. To prevent stress a suitable container should provide adequate ventilation and security for the animals, whilst enabling the animal to stand, turn around, and lie down. If transporting more than one rabbit at a time, the container should have removable partitions with a separate section for each animal, the whole being lined with straw. This helps prevent injury and ensures the animal's comfort.

If in transit for longer than six hours, adequate drinking water should be provided in a water vessel securely fixed to the side of the container, and a piece of carrot or celery provided in case water spills or is unavailable.

Food and clean bedding needs to be provided at least every 24 hours when travelling. Young rabbits may require more frequent feeding.

Except when rabbits are travelling with their owner in a private motor vehicle, the transport container should have a label both on the top and at least one of the four sides with the name, address, and phone contact number of both the sender and receiver and a label saying LIVE ANIMALS.

2.7 Breeding

Persons planning to breed rabbits are responsible for finding good homes for the litter, which average 3-8 and may be up to 11 kittens. Breeding stock should be in sound health, show no deformities or be too closely related.

Mating of rabbits should not take place until the doe (female) is 5 months old and the buck (male) is at least 4 months of age. Does should not have more than 3 litters per year with the upper breeding age limit of a doe being approximately 3 years.

The doe should be taken to the buck's hutch for mating (joining) to alleviate territorial behaviour. It should be noted that after ejaculation the buck will fall to one side. The doe should not be left with the buck for any extended period, as rabbits can become very aggressive towards each other after mating. The buck can kill the young if left with the doe and will re-mate with the doe directly after she has given birth (kindling). It is better for the buck and doe to be separated directly after mating. All matings should be noted on a calendar along with the due date.

The gestation period is 29 – 34 days. Once pregnancy is established, handling of the doe in her final week should be kept to a minimum to prevent damage to the young. If the doe has not kindled by her 35th day she should be checked by a veterinary surgeon.

The doe will require extra fresh foods and hay whilst she is pregnant. She may stop eating pellets for the days leading up to kindling, but will consume significant quantities of green leafy foods, especially chicory, celery, spinach and other foods which are high in calcium. Do not over feed treats.

The doe will require the following:

- A nesting box large enough for the doe to stretch out and turn around with a dividing wall to ensure that new born young do not fall out;
- Absorbent material like chaff, (not saw dust or unpelleted newspaper); and
- Plenty of straw to build her nest. This is required at least one week before she is due, however there is no harm in providing it earlier.

Three days before the litter is due the hutch needs to be completely cleaned and fresh bedding placed throughout. Do not disturb any nest she may have prepared unless it is heavily soiled. If she has built her nest outside of the nest box place the nest carefully into the box.

Five days before the due date she may pull a little fur from her stomach. This is a normal sign that her fur is loosening. Just before she kindles, she will pull more fur and line the nest for the kittens. Each kitten will be delivered and the doe will eat the foetal sac, clean and nurse each kitten, then place the kitten into the fur-lined nest. After all the kittens are born she will cover them with fur and normally not attend the nest until the next day. Rabbits will not retrieve kittens if they come out of the nest on her teat. The keeper needs to place the kitten back into the nest box if found outside of the nest. Rabbits normally only nurse their young once per day, usually around dawn/early in the morning.

When the kindling process is complete, the keeper should provide the doe with some treats to distract her or remove her from the hutch. With clean hands (no scent of another rabbit) gently check for and remove any dead kittens or left over foetal sacs. The kittens will be born blind, deaf and with no fur. If the litter is over 3 kittens the doe will require additional pelleted feed, hay and greens until weaning the litter.

After one week the nest box should be cleaned with as little disruption to the nest as possible. Place the kittens into a warm clean container, remove the top straw (keeping the shape and fur as intact as possible), clean the box, and replace the wet soiled absorbent material

underneath the nest, with fresh dry absorbent material. Place back the straw, fur and kittens and cover for warmth.

Around the 10th day the kitten's eyes should open and within 2 - 3 weeks they will leave the nest. Ensure plenty of hay is available for the litter. Unless feeding the doe separately, do not feed any fruit until the kittens are weaned, but some greens can be made available if consumed mainly by the doe.

The kittens should not be weaned before 6 – 8 weeks. Does can be left with the mother up to 4 months of age unless the doe has been re-mated. All bucks need to be separated and housed in individual hutches by 3 months of age.

2.7.1 Placement of Kittens

Owners are responsible for finding suitable homes for all kittens produced by their rabbits.

Kittens can be placed in a new home soon after weaning provided that they are healthy and gaining weight. The new owner should be given accurate information about:

- Diet;
- Desexing;
- Vaccination;
- Parasite control;
- Grooming;
- Housing;
- Identification; and
- General health care.

Appendix A

| Feeding Table of Fresh Foods | | |
|--------------------------------------|---------------------------------|--|
| Never Feed | | |
| belladonna | hyacinth | primrose |
| cold food from the fridge | milk weed | rhubarb |
| cooked vegetables | mouldy hay | wax plants |
| daffodil | old or wilting vegetables | weeds from the roadside as these may have been sprayed |
| dogbane | oleander | weeds that may have been urinated or defecated upon |
| foxglove | periwinkles | wet greens |
| grass clippings from a lawn mower | potato | yew |
| Safe Fresh Foods | | |
| apple | chicory | pineapple |
| artichokes leaves | clean grasses | plantain |
| autumn leaves | comfrey | radish leaves |
| banana & peel | corn | raspberry leaves |
| blackberry leaves | dandelion | rose petals & leaves |
| bok choy | endive | shepherds purse |
| brussel sprouts | kale | silverbeet spinach (limited quantities) |
| cabbage (limited quantities) | lettuce (limited quantities) | sprouts |
| carrots | parsley | swede |
| cauliflower | pears | thistles |
| celery | peas | tomatoes |
| chickweed | peel (citrus) | turnips |
| Treat Foods | | |
| barley | dried bread (no mould) | raw peanuts |
| bran flakes | oats | rice cakes |
| crackers | old breakfast cereal | |

Appendix B

| Housing Size Guide for Single Rabbit: | | | |
|--|---------------|--------------|---------------|
| | Length | Depth | Height |
| Small to Medium Breeds | 100 cms | 50 cms | 38 cms |
| Large Breeds | 124 cms | 65 cms | 38 cms |

- Each additional rabbit will require an extra 60 cm² of floor space.
- If a rabbit is kept in accommodation of these dimensions it will need to be released for a minimum of 1 hour / day.