

AEC STANDARD OPERATING PROCEDURES

SOP No:	06	
SOP	Rabbits	
Scientific Name:	<i>Oryctolagus cuniculus</i>	
Category:	2 only	
Approved activities:	Activity	Category
	a. Breeding of rabbits in the classroom	2
	b. The appropriate care of classroom pet rabbits	2
	c. Capture, restraint and handling of rabbits	2
	d. Measurement of body weight, body condition, growth and body proportions (non-invasive) in rabbits	2
	e. Administration of oral and topical treatments to rabbits	2
	f. Coat care and grooming	2
	g. Observation of particular rabbit behaviours	2
Approval Level:	Where an activity is not listed in this SOP, approval must be sought from the Animal Ethics Committee and confirmed before it can be undertaken.	
Authority:	Government Schools – Department for Education and Childhood Development Animal Ethics Committee Independent and Catholic Schools – Non-Government Schools Animal Ethics Committee (NGSAEC)	
Authority Approval Date:	1 August 2010	
Last Update:	21 April 2020	
Disclaimer:	<i>This document may be updated at any time. You should check the web site regularly to ensure that you are meeting the most recent recommendations. If you note any concerns with the information provided (inadequate, incorrect) please contact the relevant AEC.</i>	
Licensing Requirement:	Not applicable. Wild rabbits cannot be kept as pets.	
Compliance Requirement:	The keeping of this species requires approval from the School Principal. It is recommended that this Standard Operating Procedure be followed as a minimum in the provision of appropriate care and housing for this species.	

General Information:

Approximately 50 varieties of rabbits have been developed from original wild rabbits of Europe and they now come in many different sizes and colours. Fossils and Stone Age paintings in Spain suggest they originated in the Mediterranean and were spread to many countries by the ancient Romans who liked their meat. Queen Elizabeth raised them as pets and started a fad. They came to Australia with the first fleet, were abundant in Tasmania by 1822 and were released near Geelong in 1859 for 'sporting purposes'. Unfortunately, due to their pest status they have contributed to the extinction of a number of South Australian mammals. Note: **it is illegal to keep wild rabbits as pets.**

Rabbits are generally divided into three main groupings: long haired Angora rabbits, large sized rabbits (2-5kgs) bred for meat and research (e.g. New Zealand White) and the smaller breeds (< 2 kgs) (e.g. Netherland Dwarf) used as pets and for research. Unlike wild rabbits, the domesticated ones appear to be able to breed all year round. Adult females are called does and males called bucks. Baby rabbits are called kits. Rabbits have teeth that grow rapidly and an extra-long gut and special caecum to digest cellulose.

Physical Attributes:

- **Size (adult):** Species dependant
- **Weight (adult):** Species dependant (Small < 2 kgs, large 4-6 kgs, giant breeds > 8kgs).
- **Life span:** Average 6-8 years in captivity
- **Sexual maturity:** Can breed from approx. 3-6 months till 3 years of age. Breeding from rabbits over 6 years of age is not recommended.
- **Body temperature:** 38 -39°C
- **Heart rate:** 180 beats per minute

Behaviour:

Normal: Normal rabbit behaviour includes hopping, leaping, playing, grooming, exploring, stretching out and being alert when potential danger is

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sensed. Rabbits undertake coprophagy where the rabbit eats its own faeces to aid with gut health and digestion. Over-crowded hutches place unwanted stress on the rabbits and may lead to fighting and injury. Cages should be able to provide environmental enrichment not just the minimum space requirements for housing. Inadequate mental stimulation can lead to rabbits becoming stressed and this is unacceptable. Items that can be used for enrichment include pine cones, toys designed for rabbits, toilet rolls, logs, tree roots and twigs.

Socialisation: As social animals, rabbits prefer to live in groups of 2 or more. However, if does (females) are included only one buck can be kept in the group.

Activity levels (e.g. hibernation): They will be most active in the early morning and late afternoon resting during the day.

Environment:

Housing/Space: Minimum housing requirements for 2 rabbits are an area of 2 square metres. The cage must have a minimum length in one direction of 2 metres (3 hops). For every additional rabbit add 0.5 sq. metres of space. The height must allow them to stand up on their back legs with ears outstretched with a standard minimum height of 50cm but preferably 90cms especially for large and giant rabbit breeds. In general young rabbits need more space than adults to allow for playing space.

Rabbits housed outdoors can graze on grass underfoot so the cage should have a part solid, part mesh base. The cage can then be moved around a yard. It is important to use wire mesh bases that are woven or flat mesh with 19 x 19mm squares (or 13 x 13 mm squares for kittens). Otherwise rabbits can get their nails caught or injure their feet. Solid bases can include wood in hutches (remember it will get wet) or soil in outside enclosures. Bedding can be made from layers of straw, coarse sawdust or softwood shavings, newspaper or peat moss. Rabbits require an enclosed sleeping area that has more than one entrance. Wicker baskets should not be used as rabbits will gnaw on them.

Movement: Rabbits move by hopping and they need adequate space to hop around and exercise. If they are kept in small cages they need access to exercise pens. Such pens must ensure rabbits cannot dig out and predators cannot get in.

Water: Fresh water must be provided daily through sipper bottles or water bowls.

Temperature: Rabbits are more susceptible to hot rather than cold weather. In hot weather, if housed outside, cover hutch with shade cloth or bring under verandas or inside. An effective way of cooling rabbits is to place frozen 2 litre bottles of water bottles in the cage. In periods of cold they need sheltered cages with places to hide provided. Optimum temperatures are between 10-25°C. Avoid wetting rabbits down as they can go from too hot to too cold very quickly and this can result in death.

Ventilation: Adequate ventilation is important to maintain healthy rabbits. They should be protected from draughts, fumes and direct sunlight. If indoors they should be kept away from direct cooling and heating appliances.

Lighting: A natural source of light is essential but they should not be placed in direct hot sun outdoors or near windows and glass doors if kept indoors.

Covering: There must be a cover over the hutch to protect rabbits from predators and to prevent them from escaping. Cages ideally would be locked especially overnight. A mesh top or part solid/ part mesh top is essential providing good cage coverage and helps with ventilation and weather exposure. Mosquito protection should also be considered as mosquito transmit the disease Myxomatosis that can be deadly to rabbits.

Shelter: The enclosure must provide areas to shelter from the weather, retreats and hiding places serving as "burrows". Cardboard boxes, wooden boxes, large pipes and hollow logs are items that can be used. A shade covering – shade cloth or trees, must be provided.

Cleaning: As the output of urine and faeces is high, cages must be cleaned at least every second day. Straw and newspaper should be replaced and pellet and water containers kept clean. Any uneaten food materials should be removed. Rabbits can be trained to use a litter tray lined with sawdust to absorb the urine and faeces. Hutches should be scrubbed weekly with mild

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detergents only, and should be completely dry before rabbits are placed back into the cage. Bedding and refuse removed from cages should be burnt or disposed of in rubbish bins

When breeding rabbits, cleaning should be put on hold when a new litter is born. The doe and kittens should not be disturbed for one week after they are born to prevent the doe from eating her young.

Feeding:

Diet: Rabbits are herbivores and need to include a source of fibre in their diet. Fibre aids with dental wear by encouraging 'chewing' for long periods of time and helps to maintain gut health. The fibre content of your pet rabbit's diet should be greater than 18-20%. Many commercial 'rabbit' foods do not contain enough fibre. Hay or grass should comprise 80% of their diet. Sources of fibre should be in constant supply and include good quality fresh grass or grass hay (e.g. Timothy, Oaten or Ryegrass hays). Lucerne and clover hays are too high in protein and calcium and are not recommended to be fed. Commercial rabbit pellets, vegetables and fruit can also be fed to supplement the diet. Rabbits are also naturally 'coprophagic', meaning they eat some of their own droppings. They need to do this in order to keep themselves and their digestive tract healthy. Does in the last stage of pregnancy should have their food and water increased to align with increasing energy demands.

Daily requirements: Daily feeding (1-2 x a day) and fresh water are essential. If using a dish of water, place it off the floor of the cage. Roughage (e.g. hay) should be at least 80% of the daily diet. Pellets should make up no more than 20% of the daily diet. The other 10% can be fed as fresh vegetables or other supplementary feed types.

Supplementary feeding: Fresh fruits, branches and leaves from fruit trees, vegetables (turnip or rhubarb family are toxic), nuts and seeds can be fed in moderation. Untreated timber or wood from fruit trees can be used for chewing and gnawing.

Equipment: Sipper bottles, small hay basket and heavy feeding bowls.

Breeding:

- **Gestation period:** 30 days
- **Number of offspring:** 4 - 10 kits, up to 4 litters per year. Litter size is determined by birth weight
- **Weaning age:** 6 - 8 weeks
- **Weight at birth:** 30 -100gms

Mating: If not wanting to breed, schools should keep females together or keep a desexed male with a female. Mating occurs again one to two days after the birth of a litter. Rabbits are sexually mature at 5-8 months of age. The young doe should be introduced into the buck's hutch at 8-9 months (not vice versa as she will be territorial). Monitor rabbits wherever initially introduced for fighting. Placing them in cages side by side before putting them into the same cage together can aid with introductions.

Pregnancy: A doe's oestrus cycle is 16 days and gestation 30 days long. For several days before and after birth it is important not to disturb the doe. Fresh straw and a dry nest box should be provided. When you notice the doe begin to pull hair away from her nipples exposing them and then using the hair to line the nest, this is a sign that she may be pregnant. The young must not be exposed to bright light due to their highly sensitive eyes. Young are weaned at 6-8 weeks. They will drink 1:1 water and milk and eat pellets. Baby rabbits (kits) are often only fed once a day by the mother.

Handling:

Humans: Adults should handle rabbits with children only doing so under staff supervision. For children petting is preferable to holding. Pick up gently but firmly with both hands, one around the chest and under its front legs supporting the head while using the other hand to support its bottom. Never pick rabbits up by their ears or back legs. Rabbits will not usually urinate while held but may scratch or bite if they feel insecure. Rabbits have a light bone structure and must be handled gently to avoid fractures particularly of the spine.

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Equipment: Make sure they are handled in an enclosed area to avoid losing the rabbit. Difficult rabbits may be wrapped in a towel to assist with handling and nail trimming. Longhaired rabbits will need regular clipping and someone experienced in handling and clipping rabbits should do this.

Transport: Use small carry cages with a solid bottom and no holes or wire that can cause injuries. Bedding materials or towels or blankets can be placed into the bottom of the cage to prevent slipping during transport. Cages should be covered with a towel when transporting rabbits to reduce stress and should be big enough that rabbits can lie down, stand up and change position during transport. Handle cages with care when moving them and ensure they are placed onto a flat surface when travelling. More than one rabbit can be transported in a cage providing they are familiar to each other and the cage size is adequate. Do not leave rabbits in transport cages for long periods in hot or cold conditions. Do not transport on days that are over 32 degrees. Air-conditioned vehicles should be used when transporting rabbits as they are susceptible to hot more than cold weather.

Hygiene:

Thoroughly wash hands with soap and running water for at least 15 seconds after working with or handling rabbits. Dry hands with clean paper towel or an air dryer. Turn off the tap with the paper towel if possible. Follow first aid procedures should a bite occur.

Signs of illness:

Indicators of illness:

- Skin lesions or irritation
- hair loss, sometimes in patches
- abnormal growths
- diarrhoea, or minimal to no faecal production
- weight loss
- excessive scratching
- lameness
- listless and lethargic
- dribbling
- coughing, gasping or panting
- poor appetite
- eye injuries
- reduced movement
- head shaking or scratching at the ears
- fighting wounds
- parasites
- long or ingrown nails and teeth

Common conditions seen in rabbits include ear infections seen as head shaking or ear-scratching, dental disease where inappropriate diets are fed resulting in inadequate teeth wear, presenting as drooling, inadequate grooming or a reduced appetite.

Treatments:

Schools are encouraged to develop relationships with Veterinarians and Animal industry representatives familiar with rabbits. These contacts can be used for disease diagnoses, treatment options including annual vaccinations, dietary and husbandry and welfare advice. Veterinarians can also assist with advice for activities that may illicit pain where pain relief is required and for emergencies, particularly where euthanasia is needed. Treatments must be documented in the appropriate records.

Rabbits should be vaccinated by a Veterinarian against Calicivirus and given regular parasite prevention. Ensure only appropriate products are used as some can be toxic to rabbits. Desexing can also be undertaken and is recommended when housing large groups to prevent unwanted breeding and to prevent cancer in individual female rabbits. It is illegal to treat rabbits for Myxomatosis. Mosquito prevention should be used to prevent disease transmission to rabbits.

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Euthanasia: When an illness or injury is such that recovery is unlikely then the rabbit must be euthanised by a Veterinarian. Schools should contact their local Veterinarian to discuss emergency treatment options prior to an event occurring when keeping rabbits. Any adverse event including death must be reported to the AEC using the ADVERSE EVENTS form. Forms must be returned to the AEC within 7 days of the event occurring.

Disposal/fate planning: When no longer required rabbits must be rehomed. Rabbits can be desexed by a Veterinarian to aid rehoming. They must NEVER be released into the environment. Bodies must be disposed of correctly in accordance with local council regulations.

Holiday and weekend care: Rabbits can be sent home for weekends or holiday care with students providing consent is received from the school Principal and the parents. Staff should provide carers with animal care and record-keeping instructions, emergency contacts and provide appropriate equipment and food. Rabbits must be checked daily, records kept and any problems reported to the school immediately whether kept onsite or taken offsite.

Approved activities: **Where an activity is not listed in this SOP, approval must be sought from the Animal Ethics Committee and confirmed before it can be undertaken.**

a. BREEDING OF RABBITS IN THE CLASSROOM

Activity:

Category 2

Category:

To demonstrate the methods of breeding rabbits to students

Objective:

Schools should consult with an Animal industry representative or Veterinarian before undertaking this activity. There are several resources listed in the Resources section of this document that can show rabbit birthing via videos instead. Schools must also ensure they have planned for the additional animals as a result of breeding with regards to resources and rehoming. Rabbits may not be bred for dissection or for feeding to reptiles.

Activity:

b. THE APPROPRIATE CARE OF CLASSROOM PET RABBITS

Category:

Category 2

Objective:

To demonstrate the appropriate care of rabbits as classroom pets to students

Handling should be kept to a minimum where possible.

Activity:

c. CAPTURE, RESTRAINT AND HANDLING OF RABBITS

Category:

Category 2

Objective:

To demonstrate the appropriate methods for capture, restraint and handling of rabbits.

Staff must be competent in capture, restraint and handling methods and rabbit behaviour prior to undertaking this activity. To capture a rabbit move in a calm and confident manner. Student numbers should be small when handling rabbits. Improper handling methods can cause injuries and stress to the rabbits, compromising their welfare. Back injuries are not uncommon in rabbits handled inappropriately. Towels can be used to aid with handling and support. Rabbits should not be picked up by their ears or limbs.

Activity:

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Category:	d. MEASUREMENT OF BODY WEIGHT, BODY CONDITION, GROWTH AND BODY PROPORTIONS (NON-INVASIVE) IN RABBITS <hr/>
Objective:	Category 2 To demonstrate the methods for measuring weight, condition, growth and body proportions of rabbits to students. All equipment must be ready prior to capturing and restraining rabbits. Handling should be kept to a minimum. Staff should use rabbits accustomed to handling. Towels can be placed on surfaces to reduce slipping and potential injury to rabbits being weighed. A tape measure can be used to measure length and girth of rabbits.
Activity:	
Category:	e. ADMINISTRATION OF ORAL AND TOPICAL TREATMENTS TO RABBITS <hr/>
Objective:	Category 2 To demonstrate the correct methods for administering oral and topical treatments to rabbits Handling should be kept to a minimum. Some products are not safe for rabbits so talk to your Veterinarian or Animal Industry expert (e.g. pet shop staff) prior to administration. Towels can be used to aid with restraint to reduce the risk of scratches.
Activity:	
Category:	f. COAT CARE AND GROOMING <hr/>
Objective:	Category 2 Rabbits familiar with handling should be chosen for participation in this activity. Handling should be restricted to short time periods. Towels can be used to aid with handling. Use appropriate grooming brushes specific for rabbits and ensure that if housing Angora rabbits these are brushed more regular to avoid matting of their coat. Nail clipping should only be undertaken by experienced operators. Nails can bleed severely and cause pain to rabbits if trimmed inappropriately.
Activity:	
Category:	g. OBSERVATION OF PARTICULAR RABBIT BEHAVIOURS <hr/>
Objective:	Category 2 Regularly handled rabbits will cope well with short periods of handling. Feeding and grooming behaviours can be observed by students in a quiet environment fairly easily. Ensure that escape routes are closed and children should not attempt to carry or lift the rabbit when observing them.
Resources:	Pet care - Rabbit care and feeding – Sydney Exotics and Rabbit Vets www.exoticvet.com.au/pet-care Caring for rabbits - House Rabbit Society https://rabbit.org/ Rabbit body condition scoring and weight management www.therabbithouse.com/diet/rabbit-weight.asp Agriculture Victoria - Rabbit information handouts Toxic foods and plants for rabbits agriculture.vic.gov.au/pets/other-pets/rabbits/owning-a-rabbit/toxic-foods-and-

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plants-for-rabbits

Guidelines on keeping pet rabbits

agriculture.vic.gov.au/pets/other-pets/rabbits/guidelines-on-keeping-pet-rabbits

Your rabbit's welfare needs

agriculture.vic.gov.au/pets/other-pets/rabbits/your-rabbits-welfare-needs

Owning a rabbit

agriculture.vic.gov.au/pets/other-pets/rabbits/owning-a-rabbit

Myxomatosis

agriculture.vic.gov.au/pets/other-pets/rabbits/myxomatosis-in-pet-rabbits

Calicivirus

agriculture.vic.gov.au/pets/other-pets/rabbits/calicivirus-in-pet-rabbits

Code of Practice for the Housing and Care of Laboratory Mice, Rats, Guinea Pigs and Rabbits

agriculture.vic.gov.au/agriculture/animal-health-and-welfare/animal-welfare/animal-welfare-legislation/victorian-codes-of-practice-for-animal-welfare/code-of-practice-for-the-housing-and-care-of-laboratory-mice,-rats,-guinea-pigs-and-rabbits

Guidelines for the Housing of rabbits in scientific institutions

www.animaethics.org.au/__data/assets/pdf_file/0013/222511/housing-rabbits-scientific-institutions.pdf

Rabbit videos

Rabbit giving birth to young– The 10 Acre Woods Rehoming Centre

www.youtube.com/watch?v=ztHjevSRv8

Newborn babies from 0 – 14 days old

www.youtube.com/watch?v=mJlawWLTfr4

Handling of rabbits

www.youtube.com/watch?v=vP1EZSugKPc