

## AEC STANDARD OPERATING PROCEDURES

<b>SOP No:</b>	<b>12</b>
<b>SOP</b>	<b>Dunnart (Fat tailed)</b>
<b>Scientific Name:</b>	<i>Sminthopsis crassicaudata</i>
<b>Category:</b>	<b>2 or 3</b>
<b>Approval Level:</b>	Category 2: School Principal may delegate Category 3: School Principal may <b>NOT</b> delegate
<b>Authority:</b>	<b>Government Schools</b> – Department for Education and Childhood Development Animal Ethics Committee <b>Independent and Catholic Schools</b> – Non-Government Schools Animal Ethics Committee (NGSAEC)
<b>Authority Approval Date:</b>	1 August 2010
<b>Last Update</b>	18 December 2018
<b>Disclaimer:</b>	<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>
<b>Licensing Requirement:</b>	Not applicable
<b>Compliance Requirement:</b>	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:** There are many species of dunnart. The Fat-tailed Dunnart (*Sminthopsis crassicaudata*) and the Striped-faced Dunnart (*Sminthopsis macroura*) are the most wide-spread. The range of the Fat-tailed species extends over much of the southern two thirds of the Australian mainland, while that of the Striped-faced form extends over most of the northern two thirds of the continent ie, their ranges overlap in central Australia.

Dunnarts are basically insectivorous though they have been known to take small lizards and juvenile mice. Both species have the ability to store fat in the tails which helps them survive periods of food shortage. Another adaptation, which helps them survive the scarcity of food in winter, is the ability to enter a temporary torpor and so reduce the energy demands on the body. They take shelter against cold, heat and predators under rocks, stumps, logs or within deep cracks in the soil. In such refuges they usually create a nest of grass or other natural litter. At times a number of them may congregate in a single nest and this serves to conserve body heat.

- Physical Attributes:**
- **Size (adult):** head and body length of approx 90mm and tail length of approx 60mm
  - **Weight (adult):** 12-22gms
  - **Life span:** 30 – 48 month in captivity
  - **Sexual maturity:** approx 5 months in females and 8 months in males
  - **Gestation period:** 13-16 days
  - **Number of offspring:** 6-8

**Behaviour:**

- Environment:**
- **Space:** Typical laboratory housing should consist of a galvanised cage about 50 x 35 x 30cm including a plate-glass front, a removable tray floor and a galvanised mesh top with a hinged flap at the front. Loam is used to cover the floor (sawdust is unsuitable) and a nest-box loosely filled with shredded paper provided for shelter. Water is available via a cagebird seed/water dispenser (sipper tubes are ineffective). A number of hollow logs should be provided for shelter. Mouse exercise wheels are useful.
  - **Cleaning:** Dunnarts tend to have specific toileting areas, this area should be cleaned at regular intervals to maintain hygiene and odour control. Full enclosure cleaning should be done every 4-5 weeks.

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### Feeding:

- **Diet:** Good quality canned cat food (meat variety only NOT fish) eg, Jellymeat Whiskas, is a good basic diet which can be supplemented with mealworms (*Tenebrio larvae*). Dry cat food can be used to a limited extent to provide food over periods of non-attendance. Always supply fresh water with dry cat food.
- **Daily requirements:** The daily rations for *s.crassicaudata* are 10gm Whiskas and mealworms, dry cat food 2 1/2 gm. Double these quantities for *s. macroura*. Please note that dried dog food is usually unacceptable unless soaked first.

### Breeding:

Dunnarts are seasonal breeders with litters born between July and February. Females may raise 2 litters in this period.

The gestation period is 13-16 days with the young attached to the nipples for about 40 days, with weaning occurring at 70 days. *S. crassicaudata* can raise a maximum of 10 young though more may be born than the 10 nipples can accommodate. *S. macroura* has only 8 nipples and only 8 young can be raised. The pouch is well developed in both species.

In the males the testes, covered by a well-furred scrotum, are very prominent and thus the presence/absence of pouch-testes makes sex determination simple.

Females are sexually mature at 5 months and males at 8 months of age in both species.

### Handling:

### Hygiene:

Thoroughly wash hands with soap and running water for at least 10-15 seconds after working with or handling any animals. Dry hands with clean paper, cloth towel or air dryer. Turn off the tap with the paper towel if possible. Follow first aid procedures should a bite occur.

### Signs of illness:

### Treatments:

Assistance from a veterinarian should be sought for confirmation of conditions and treatment options.

### Euthanasia:

When an illness or injury is such that recovery is unlikely then the animal must be euthanased by a veterinarian. Any death must be reported to the Animal Ethics Committee using the appropriate form (see section relating to ADVERSE EVENTS). Forms are available on the relevant websites.

### Disposal/fate planning:

When no longer required dunnarts must be re homed. As a captive species they must NEVER be released into the environment. Bodies must be disposed of correctly in accordance with local council regulations.

### Holiday and weekend care:

Dunnarts generally cope with being rostered to responsible carers. They need to be checked daily and fed regularly over weekends and holiday periods if they remain on site. Records must be kept of 'off site' care. Cages and feeding equipment and supplies must be provided to carers, with contact details for emergencies.

### Approved activities:

Observation

### Resources: