

# Recognizing *Antechinus*, *Sminthopsis*, *Rattus*, *Pseudomys* & *Mus* species in SW Victoria

Rod Bird, May 2014

## Introduction

The casual observer or young naturalist is often hard-pressed to give a positive identification to small mammals that may be found alive or dead in the wild, seen crushed on the road, or presented alive or dead by their pet cat. The aim of the short article is to provide a basic means of identification.

## Is it a House Mouse, a rat or a 'Marsupial Mouse' (Dunnart & *Antechinus*)?

If the specimen is a House Mouse (*Mus musculus*) or a native or introduced rat then it will have a rodents teeth – prominent incisors. A House Mouse has a step-notch in the inside of the upper incisors and the first upper molar is longer than the rest. No native 'mice' or 'rats' have those features.

If the specimen is an *Antechinus* or Dunnart then it will have the following distinguishing features:

- The hind feet have no nails on the big toe (or thumb) [Photo 1] – that is a clear contrast with rodents which all have claws (nails) on all digits
- The teeth are 'cat-like', with no prominent front incisors.

## Distinguishing between species of Dunnarts and *Antechinus*

The species that are likely to be encountered in SW Victoria are:

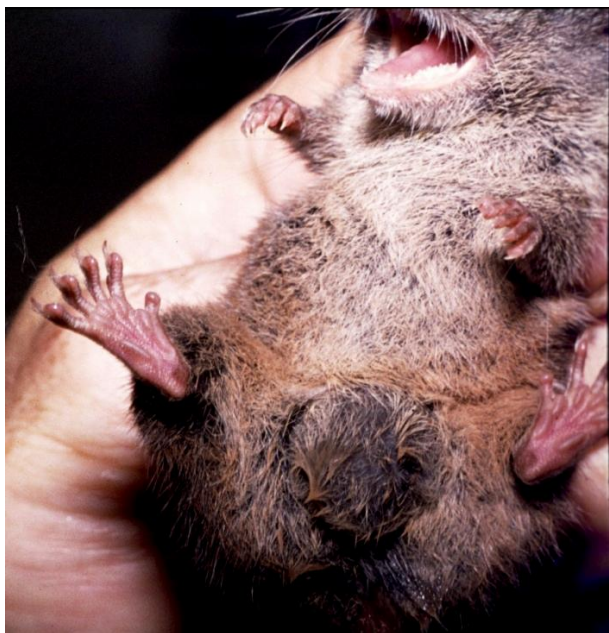
- *Antechinus agilis* Brown *Antechinus* – this is a denizen of forests. It is a very muscular, athletic little creature a little larger than a mouse in size. It is brownish in colour. The foreclaws and hindclaws are about the same length. It is a great climber [Photos 1 & 3].
- *Antechinus flavipes* Yellow-footed *Antechinus* – this species occurs in woodlands or open forests. It has yellowish fur on its feet and flanks [Photo 9]. It is larger than *A. agilis*.
- *Antechinus swainsonii* Dusky *Antechinus* – this species is found in damp forests that have a dense understorey of bracken or other vegetation. Its fur is dark grey on the back and often whitish-grey on the front [Photo 5]. The length of its foreclaws are clearly longer than the hindclaws. Adults of this species are perhaps twice the size of *A. agilis*.
- *Antechinus minimus* Swamp *Antechinus* – this species favours dense wet heathland, more commonly near the coast. It is rarely seen. It has a silvery pelage [Photo 8].
- *Sminthopsis crassicaudatus* Fat-tailed Dunnart – this little, grey, mouse-sized creature has a nest under stones or wood on the ground on farms. It has a 'foxy' face and a plump, silvery-grey tail. It can open its jaws to a wide extent, exposing its sharp little teeth, but that is all threat and it is rather docile in the hand. It has narrow feet, with greyish hair [Photo 2].
- *Sminthopsis murina* Common Dunnart – this delicate little creature is smaller than an adult mouse and it lives in open forests. It is rarely seen. Compared with the Fat-tailed Dunnart it has a slim, brownish tail, is significantly smaller, and has pink and white feet [Photo 4].

## Distinguishing features of rat or mouse species

The rodents one is most likely to encounter in SW Victoria are:

- *Rattus fuscipes* Bush Rat – this is a denizen of forests (it is found near the coast and at Mt Napier but not in the Grampians). This species has light coloured feet and a tail that is no more than the length of its head and body. It is not found on farmlands [Photo 10].
- *Rattus lutreolus* Swamp Rat – this species is widespread on farms, grasslands and forests. It makes long runs in grassland, partly embedded in the ground. Its fur and feet are dark brown in colour. Its dark tail is shorter than the length of its head and body [Photo 11].
- *Pseudomys shortridgei* Heath Mouse – this is a dainty, fluffy-looking rodent that inhabits heathlands. It occurs near the coast and in the Grampians. A feature is the two-toned tail, dark on the top and much lighter below [Photo 12]. The tail length equals about head-body.
- *Pseudomys fumeus* Smokey Mouse – this animal occurs on the peaks of the Grampians and its fur has a bluish tinge that contrasts with the pinkish nose, undertail and feet [Photo 13].
- *Rattus rattus* Black Rat – this is a smelly, pest animal with long guard hairs and a tail much longer than its head and body. The species is widespread, including in forests [Photo 14].
- *Rattus norvegicus* Sewer Rat – this pest is a gross animal with a thick tail not much longer than its head and body. The species is not usually associated with forests [Photo 15].
- *Mus musculus* House Mouse – this pest is common everywhere [Photo 7].

**Photo 1.** *Antechinus agilis*



**Photo 2.** *Sminthopsis crassicaudata*



**Photo 3.** *Antechinus agilis*



**Photo 4.** *Sminthopsis murina*



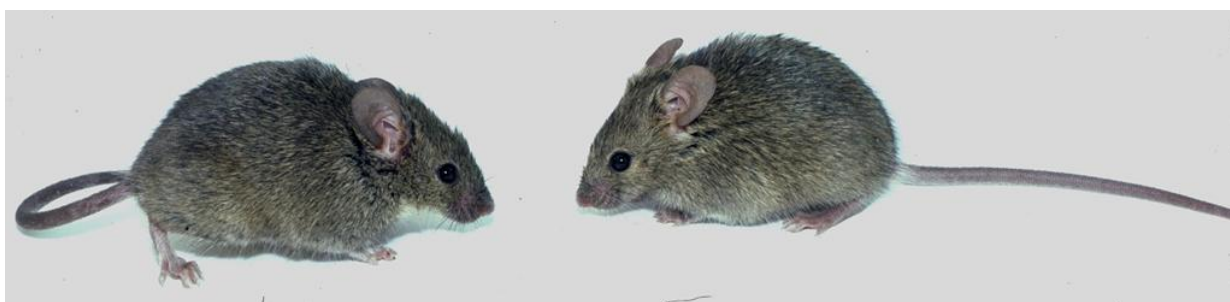
**Photo 5.** *Antechinus swainsonii*



**Photo 6.** *Sminthopsis crassicaudata*



**Photo 7.** *Mus musculus*



**Photo 8.** *Antechinus minimus*



**Photo 9.** *Antechinus flavipes*



**Photo 10.** *Rattus fuscipes*



**Photo 11.** *Rattus lutreolus*



**Photo 12.** *Pseudomys shortridgei*



**Photo 13.** *Pseudomys fumeus*



**Photo 14.** *Rattus rattus*



**Photo 15.** *Rattus norvegicus*

