



Fowlers Gap Biodiversity Checklist Small Mammals

The most obvious mammals on the Station are the four species of large kangaroos and so we have produced a separate guide for these. However, the diversity of mammals is much greater but most are rarely seen because they are small and exclusively night-active. In the day the most likely small native mammal that you may see is the Echidna (or spiny ant-eater). This is a member of the monotremes, egg-laying mammals that millions of years ago were quite diverse but became eclipsed by the marsupials and placentals. The monotremes are now only found here (the Echidna and Platypus) and in New Guinea (two species of long-beaked Echidnas).

At night your most likely encounter is with one or more species of bats flying overhead, attracted to the insects that in turn are attracted to the lights around the homestead. The most common of these are Gould's Wattled Bat (*Chalinolobus gouldii*), the Lesser Long-eared Bat (*Nyctophilus geoffroyi*) and the Southern Freetail-bat (*Mormopterus planiceps*). Usually the bats are fast flying and silent (calling in a frequency range above our hearing) and it is difficult to make out any detail of their form. Other insect-eaters amongst the mammals are small terrestrial marsupial carnivores that would rarely venture into the homestead complex. You will need to take a powerful torch and look for them by spotlighting across the ground. Their density is typically very low and so encounters are rare and fleeting but not improbable. Biologists have caught Fat-tailed Dunnarts (*Sminthopsis crassicaudata*) for study by finding them with a spotlight and then leaping off a vehicle to run them down. However, your best chance of seeing these small mammals is to join

a trapping programme as part of biodiversity monitoring where they are harmlessly caught in small aluminium box traps laced with peanut butter and oats or in a pitfall with a soft landing on pillow stuffing.

The oldest component of the small mammal fauna is the Monotremes. Marsupials are the most diverse of the terrestrial species. Our fauna had a southern origin and the first possum-like ancestors entered Australia at least 45 million years ago while South America, Antarctica and Australia were connected by land bridges. The placental mammals, bats and rodents, are more recent arrivals from the north about 10 million years ago. Most of the genera are found in New Guinea and Southeast Asia. The small mammal fauna of the Australian arid zone is unusual relative to other continents in having a relatively low diversity of seed-eating rodents. This niche is occupied by a much more diverse fauna of seed-eating ants than elsewhere since the latter have a much older and longer association with the Australian continent.

The Station unfortunately does support some non-native mammals that were introduced through past human activities. These include the House Mouse (*Mus musculus*), the European rabbit (*Oryctolagus cuniculus*), the Red Fox (*Vulpes vulpes*), the cat (*Felis catus*), the goat (*Capra hircus*) and the pig (*Sus scrofa*). The larger species are actively managed to suppress their populations on the Station.

The far west region is bounded on the north and west by the 'Dog Fence' which excludes dingoes and other wild-living dogs from the sheep rangelands which encompass Fowlers Gap. However, the fence is not insurmountable and some wild-living dogs may enter the region and be rarely encountered. The dogs you may see are unlikely to be pure-bred dingoes as feral dogs can arise anywhere from human settlements and interbreed with dingoes, threatening their genetic integrity and causing stock losses.



Fat-tailed Dunnart



Forrest's Mouse

Checklist of small mammals.

Scientific name	Common name	✓
Subclass MONOTREMATA	Monotremes	
Family Tachyglossidae	Echidnas	
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna	<input type="checkbox"/>
Subclass MARSUPIALIA	Marsupials	
Family Dasyuridae	Carnivorous marsupials	
<i>Sminthopsis crassicaudata</i>	Fat-tailed Dunnart	<input type="checkbox"/>
<i>Sminthopsis macroura</i>	Stripe-faced Dunnart	<input type="checkbox"/>
<i>Planigale tenuirostris</i>	Narrow-nosed Planigale	<input type="checkbox"/>
<i>Planigale gilesi</i>	Paucident Planigale	<input type="checkbox"/>

Scientific name	Common name	✓
Subclass EUTHERIAa	Placental Mammals	
Family Muridae	Rats and mice	
<i>Leggadina forresti</i> †	Forrest's Mouse	<input type="checkbox"/>
<i>Pseudomys hermannsbergensis</i> †	Sandy Inland Mouse	<input type="checkbox"/>
<i>Mus musculus</i> ⊗	House mouse	<input type="checkbox"/>
Family Canidae	Dogs	
<i>Canis lupus dingo</i>	Dingo	<input type="checkbox"/>
<i>Vulpes vulpes</i> ⊗	Fox	<input type="checkbox"/>
Family Felidae	Cats	
<i>Felis catus</i> ⊗	Cat	<input type="checkbox"/>
Family Leporidae	Rabbits and hares	
<i>Oryctolagus cuniculus</i> ⊗	Rabbit	<input type="checkbox"/>
Family Suidae	Pigs	
<i>Sus scrofa</i> ⊗	Pig	<input type="checkbox"/>
Family Bovidae	Horned ruminants	
<i>Capra hircus</i> ⊗	Goat	<input type="checkbox"/>
Family Emballonuridae	Sheath-tail-bats	
<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-Bat	<input type="checkbox"/>
Family Molossidae	Freetail-bats	
<i>Mormopterus planiceps</i>	Southern Freetail-Bat	<input type="checkbox"/>
<i>Nyctophilus australis</i>	White-striped Freetail-Bat	<input type="checkbox"/>
Family Vespertilionidae	Vespertilionid bats	
<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat	<input type="checkbox"/>
<i>Nyctophilus timoriensis</i>	Greater Long-eared Bat	<input type="checkbox"/>
<i>Chalinolobus gouldii</i>	Gould's Wattle Bat	<input type="checkbox"/>
<i>Chalinolobus picatus</i>	Little Pied Bat	<input type="checkbox"/>
<i>Scotorepens balstoni</i>	Inland Broad-nosed Bat	<input type="checkbox"/>
<i>Scotorepens greyii</i>	Little Broad-nosed Bat	<input type="checkbox"/>
<i>Vespadelus baverstocki</i>	Inland Forest Bat	<input type="checkbox"/>

† - threatened fauna

⊗ - introduced exotic



Narrow-nosed Planigale



Striped-faced Dunnart



Echidna

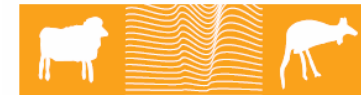
Guides:

Churchill, S. 1998. *Australian Bats*. New Holland Publishers, Sydney.

Strahan, R. 1998. *The Mammals of Australia*. New Holland Publishers, Sydney.

This guide is part of a UNSW research project in collaboration with the Cooperative Research Centre for Sustainable Tourism and NSW National Parks and Wildlife Service. The aim of this project is to develop and implement products to support a vibrant wildlife tourism industry in the rangelands of the Outback. Some more information can be found at our web site <http://www.bios.unsw.edu.au/rootourism/>.

THE UNIVERSITY OF
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Fowlers Gap

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