



Mammals of Tasmania

Tasmania is the final refuge for a long list of species that have recently disappeared from the mainland.

Such animals include the eastern quoll, bettong and pademelon. Other animals, such as the barred bandicoot, occur in good numbers in Tasmania, but are on the verge of extinction on the Australian mainland.

There are three major groups of mammals — **monotremes, marsupials and placentals** — and all are found in Tasmania. Australia and New Guinea are the only countries in the world where all three groups occur naturally.

Threats to our mammals

Tasmania, in stark contrast to all other States and Territories, has lost only one species of mammal since white settlement—the Tasmanian tiger.

However, our native mammals do face problems. Some are under threat from the same processes that have led to their extinction on the mainland — habitat loss and fragmentation of the habitat, predation and competition from introduced animals such as cats, dogs, foxes and rabbits.

The fox, which has played a large role in the demise of many animals on the mainland, has recently been introduced to Tasmania.

Monotremes

Monotremes are egg-laying mammals — a reproductive feature which does not occur in any other mammal.

The monotremes are represented by only three animals, two of which—the platypus and echidna—are found only in Australia, and the third is a different species of echidna, found only in New Guinea.

Although most active at dusk and dawn, the **platypus** is occasionally seen during daylight hours, in streams and creeks.

The platypus feeds on the muddy river/stream bottoms, locating crustaceans and worms through the remarkable ability to detect the electric fields that surround its prey.

The platypus, is one of the few mammals in the world which is venomous. The male has a spur on the inside of

its hind leg. It is thought that the device is used by males during territorial disputes.

The **short-beaked echidna** is commonly seen by visitors along the margins of roads during the summer months. The female echidna has a pouch into which she deposits her single egg. The young hatches within this pouch, using an egg-tooth to break out of the shell, similar to those found in birds' beaks. The young suckles milk which is extruded from glands within the pouch — monotremes do not possess teats as do other mammals. Pouch life lasts for two to three months — the age at which spines develop.



Echidna. Image © Adam Holbrook

Marsupials

The majority of land mammals in Tasmania (and Australia in general) are marsupials. They are characterised by the presence of a pouch in the female, although in some species the pouch may not be obvious, or only present during the breeding season. Marsupials give birth to extremely small, embryo-like young, which suckle within the pouch. Twenty types of marsupial occur in Tasmania.

The **Tasmanian devil** is a well known carnivorous marsupial which is confined to Tasmania. The animal once occurred on mainland Australia, but became extinct there 3-4,000 years ago, possibly due to predation or competition with the dingo. The devil is primarily a scavenger.

It undertakes wide ranging forays in search of carrion. It is widespread across a number of habitats throughout the State.



Tasmanian devil. Photo: Ingrid Albion

The strikingly beautiful spotted-tail quoll and its close relative, the eastern quoll, are predatory marsupials. They are also known as the 'tiger cat' and 'native cat', respectively. These names, however, are somewhat illogical — the tiger cat is spotted, not striped, and they are definitely not cats! The eastern quoll has in recent years become extinct on the Australian mainland, largely due to habitat loss, competition and predation by introduced animals such as the fox and cat.

The smallest marsupials

The dusky antechinus and its relative, the swamp antechinus, as well as the little-known white-footed dunnart, occur in Tasmania. These are the smallest of the carnivorous Tasmanian marsupials.

Another common marsupial often seen is the **Tasmanian pademelon**. The rather unusual common name is derived from the Aboriginal word for the animal. Like a number of Tasmanian marsupials, the pademelon, until relatively recently, occurred on mainland Australia but has become extinct there due to loss of habitat and predation by introduced animals. For the pademelon, and a number of other species, Tasmania acts as a refuge.

The **Bennetts wallaby** is a common species and is often inaccurately referred to as a kangaroo. The only kangaroo in Tasmania — the Forester kangaroo — does not occur widely throughout the state. The **potoroo** is a small macropod (macropod meaning *big footed*) which is also found quite commonly.

Tasmania has two species of **bandicoot**: the brown bandicoot which occurs in wetter regions, and the barred bandicoot which is restricted to the drier, eastern half of the State. Both species are omnivorous — that is, they eat both plant and animal matter.

The **ringtail possum**, the **brushtail possum** and the **eastern pygmy possum** have been recorded throughout the State. The pygmy possum, as its name implies, is tiny, weighing less than a hundredth the weight of the better known brushtail possum. Like many of our native mammals, they make their homes in the hollows of trees in old-growth forest.

Placental mammals

The third group of mammals — and the group to which we ourselves belong — known as placentals, a reference to the physiology which supports the nourishment of the developing embryo. The only native placental mammals to occur in Tasmania are **rodents and bats**.

Two rodents, the swamp rat and the beautiful long-tailed mouse, are regular inhabitants of rainforest and other such damp areas. Water rats occur around streams and wet habitats. The broad-toothed mouse occurs in the moorlands and drier areas. Tasmania has eight species of bat, but unfortunately little work has been done on this poorly understood group of mammals.

Victims of the highway

When travelling Tasmanian roads, you may encounter a distressingly high number of dead mammals.

In many cases, deaths can be avoided by driving more slowly at night.

Rangers regularly remove carcasses from the road in an effort to prevent scavenging Tasmanian devils, or animals such as the endangered wedge-tailed eagle, from becoming the next casualty. Often, female marsupials will have young in their pouch which have survived the accident and may be hand-raised — and eventually released back into the wild. For further information refer to the Parks and Wildlife Notesheet *Roadkill*.

Further Information

Watts, D. (1987). *Tasmanian Mammals: A Field Guide*. Tasmanian Conservation Trust, Hobart.

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