

**THE MAMMALS  
OF  
SOUTH AUSTRALIA**



By  
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FAMILY II.—**DASYURIDAE.**

This Family is most conveniently divided into two Sub-Families.

(A) Medium sized animals ; in general form like the Martens or smaller Felidae among the Monodelphia. Carnivorous. Upper premolars 2-2.

Sub-family 1. *Dasyurinae*.

(A<sup>1</sup>) Small animals ; in general form like the Shrews and Tree Shrews among the Monodelphia. Insectivorous. Upper premolars 3-3.

Sub-family II *Phascogalinae*.

SUB-FAMILY I.—**DASYURINAE.**

Division of the Sub-Family into Genera.

(A) Fur not spotted. Skull with the brain case small and muzzle broadened.  
Genus 1. *Sarcophilus*.

(A<sup>1</sup>) Fur spotted. Skull with the brain case relatively large and the muzzle elongated.  
Genus. 2. *Dasyurus*.

GENUS 1. **SARCOPHILUS** (F. Cuvier, 1837).

This Genus contains only a single living species—the so-called Tasmanian Devil. The animal formerly ranged over continental Australia, but is now confined to Tasmania, where it maintains a rather precarious foothold in the wilder parts of the country.

In 1912 a Tasmanian Devil was captured in Victoria, and another was reported as having been seen (*see* Kershaw, *Vict., Nat.* xxxix., 1912, p. 76). In the absence of any additional evidence it is perhaps prudent to regard these animals as being specimens escaped from captivity, rather than as survivors of the ancient race which inhabited continental Australia ; nevertheless, this possibility must not be overlooked.

GENUS 2. **DASYURUS** (Geoffroy, 1796.)

The animals embraced within this Genus roughly resemble small Cats, and they are known as Tiger Cats or Native Cats. The rhinarium is naked and grooved. The ears are long and somewhat pointed. The body fur marked with white spots. Tail long and uniformly hairy. The soles and palms naked, or nearly so ; granular in texture. Hallux reduced or absent. Digits armed with strong claws. Pouch present, opening downwards. Nipples 6-8 ; arranged in two curved rows. Active animals, capable of climbing ; but most species not truly arboreal. Often living in rocky and treeless areas. Carnivorous and insectivorous. Dentition—I.  $\frac{4-4}{3-3}$  C.  $\frac{1-1}{1-1}$  PM.  $\frac{2-2}{2-2}$  M.  $\frac{4-4}{4-4}$ .

Three species are recorded from South Australia.

## KEY TO THE SOUTH AUSTRALIAN SPECIES.

## I. External characters—

(A) Size large. Tail spotted. Pads of feet striated. Hallux present. *D. maculatus.*

(A<sup>1</sup>) Size medium. Tail not spotted. Pads of feet tuberculated.

(B). Hallux absent. Tail (in typical colour form) becoming paler at tip. *D. viverrinus.*

(B<sup>1</sup>) Hallux present. Tail becoming darker at tip. *D. geoffroyi.*

## II. Cranial characters—

(A) Bullae obliquely oval. Molars 1-3 18mm. or more. *D. maculatus.*

(A<sup>1</sup>) Bullae spherical. Molars 1-3 less than 18mm.

(B) Posterior part of palate comparatively perfect. *D. viverrinus.*

(B<sup>1</sup>) Posterior part of palate with large vacuities. *D. geoffroyi.*

## (1) Tiger cat. Spotted-tailed native cat.

*DASYURUS MACULATUS* (Kerr, 1792).

The name Tiger cat which is usually bestowed upon this animal is a somewhat flattering one; for, although a particularly well equipped carnivore, its comparatively small size hardly justifies its comparison with the true Tiger Cats of the genus *Felis*.

Specimens are said to have been seen as large as a common fox; but a head-and-body length of about two feet may be regarded as a fair average size.

In general build it is like the Martens of the northern hemisphere, and Captain Phillip, who saw the animal in Tasmania, and was the first to record its existence, named it the "spotted marten."

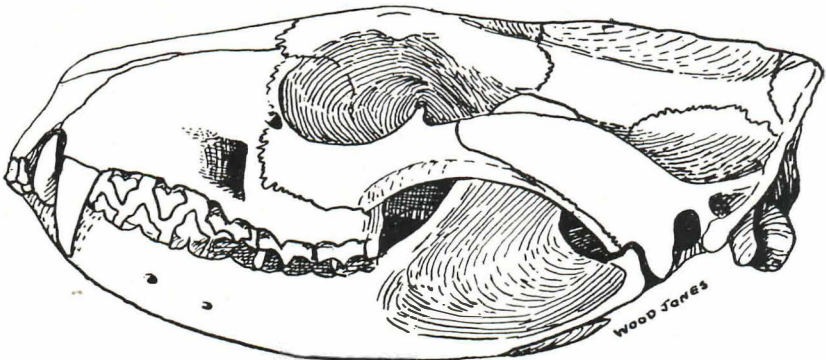


FIGURE 49.—Skull of *Dasyurus maculatus*. Natural size.

The fur is thick, harsh, and rather short. Beneath the stiffer surface hairs of the coat is an abundant soft brown under fur. The general colour of the dorsal surface of the body varies from a rich rufous brown to dark brown. The inner side

of the limbs, and the ventral surface of the body, are paler, and vary from pale yellow to sandy. The face is paler than the general colour of the dorsal surface of the body, and the short hairs which clothe the face and head are somewhat grizzled.

The manus and pes, like the inner surface of the limbs, are pale in colour. The tail is clothed with rufous brown hair which is of the same colour as that of the general dorsal body surface. The body and tail are spotted with white patches; but the spotting varies considerably in different specimens. For the most part the spots are confined to the sides of the body, the outer sides of the limbs, and the tail. Upon the face the spots are either small and inconspicuous, or else are entirely absent. Upon the body the spots are irregular in size and shape, and they vary from a mere dot to patches as large as a shilling. The presence of spots upon the tail distinguishes it at once from the smaller *D. viverrinus*. The tail is long, in most examples being about one sixth shorter than the total length of head and body. It is uniformly clothed with rather long harsh hairs. The ears are short, the inner surfaces are pubescent with short yellow hairs, and a tuft of pale hair covers the basal portion of the inner surface. The outer surface is clothed with hair of the general body colour. The rhinarium is dark flesh-coloured, granulated and cleft in the mid line. The eye is brown. The vibrissae are well developed,

the mystacial set reaching upwards of 90mm. in length. All facial bristles present. Ulnar carpal and medial antibrachial sets well developed. The manus with naked palm and five well developed pads with small striated areas. Digital formula  $3 > 4 > 2 > 5 > 1$ . Claws strong and curved. The pes with naked sole, save posteriorly, where hair from the margins clothes the immediate neighbourhood of the heel. Hallux very small and clawless. Five prominent striated pads. Digital formula  $3 > 4 > 2 > 5 > 1$ . The pouch is shallow. The nipples are 6 in number, and are arranged in two crescentic lines.

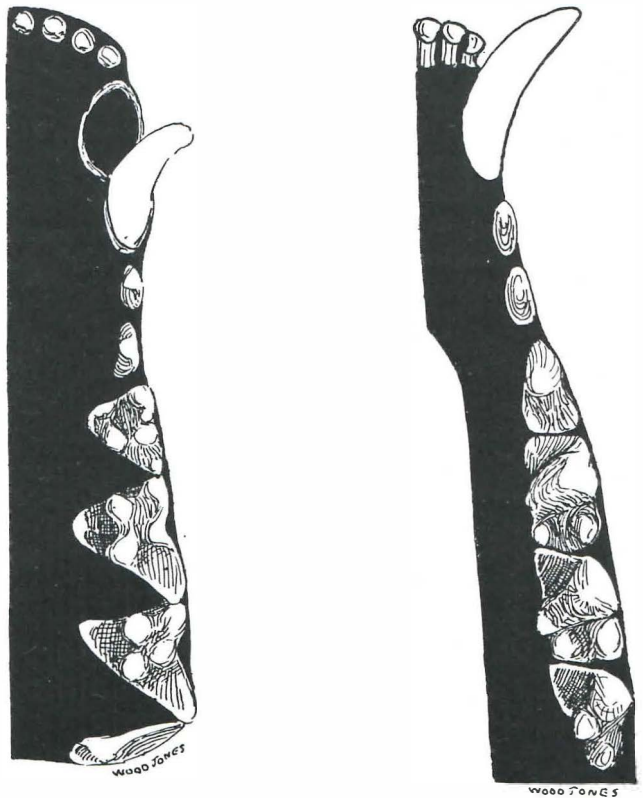


FIGURE 50.—Left upper and right lower teeth of *Dasyurus maculatus*. Twice natural size.



The skull is powerfully built, and all the muscular ridges are highly developed (see Figure 49). In proportion to the general size of the skull, the brain case, as was pointed out in Figure 35, is remarkably small, though not so disproportionately so as in the Tasmanian Devil. The teeth are large and powerful (see Figure 50), and the distance from the front of the first molar to the back of the third molar measures 18mm. or more. The *bullae*, or swellings of the base of the skull beneath the bony cavity for the ear, are elongated, and they are about twice as long as they are broad; their characteristic features are shown in Figure 51. They differ markedly from the bullae of other members of the Genus.

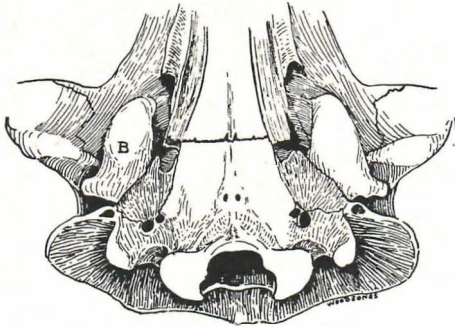


FIGURE 51.—Underside of the posterior end of the skull of *Dasyurus maculatus*. The Bulla on the left side of the figure is marked B. Natural size. Compare with Fig. 55.

## DIMENSIONS.

	Ogilby's Catalogue. Skin.	Queensland Mus. Skin. ♂	Brit. Mus. Cat. Skin. ♂	Waterhouse. Skin. ♂	Queensland Mus. Skin. ♂	Waterhouse. Skin. —
Head and body . . .	635	620	620	610	590	432
Tail . . . . .	480	500	470	507	480	381
Hind foot . . . . .	—	80	76	With claw, 89	80	With claw, 50
Ear . . . . .	—	—	C. 24	28	—	25

## DIMENSIONS OF SKULL.

	Australian Mus. Krefft.	Tasmanian Specimen.	Queensland Mus. ♂	Queensland Mus. —	Queensland Mus. —	Tasmanian Specimen. Brit. Mus.	Queensland Mus. —	South Australian Specimen.	Queensland Mus. ♂	Queensland Mus. ♀	Waterhouse.	Queensland Mus. ♂	Queensland Specimen. Brit. Mus.	Waterhouse.	Queensland Mus. ♂
Basal length . . .	115	109	108	107	105	104	101	98	94	93	88	86	84	—	70
Breadth . . . . .	—	70	70	70	66	67	—	64	57	57	53	—	58	—	47
Nasals, length . . .	—	41	—	—	—	37	—	35	—	—	—	—	35	—	—
Palate, length . . .	—	—	59	58	58	54.5	57	—	52	55	—	51	51	—	49
Length of molar series . . . . .	—	—	24	23	23	—	22	—	23	23	—	23	—	—	22

By Krefft the animal is described as being "not only very ferocious, but also exceedingly stubborn," and many accounts of its carnivorous habits, and its pluck as a fighter, are to be met with in works dealing with the earlier days of Australian colonisation. As would be imagined from its striated foot pads, and from the presence of the hallux, it is a tree-haunting species, and seems always to have been most numerous in the more wooded districts of the coast. Probably never abundant in South Australia, the stronghold of the species was in the south-eastern portion of the State. It is possible that some few still exist in the less closely settled areas of the South-East.