SOME RECENT MAMMAL RECORDS FROM THE LAKE PEDDER AREA, SOUTH-WEST TASMANIA

Bу

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(With two text figures)

ABSTRACT

Between 6 and 24 February 1967, an opportunity was provided for zoologists from the Tasmanian Museum, Hobart and the Queen Victoria Museum, Launceston, to conduct a biological survey in the Lake Pedder area, south-west Tasmania. The survey was conducted in three separate localities totalling about ten square miles in all. During October and November of the same year the Lake Pedder site was again visited by staff from the Tasmanian Museum in two field trips of one week each.

The areas are briefly described physically and the methods and results of the survey are outlined. The material collected is housed in either the Tasmanian Museum or the Launceston Museum, the relevant specimen numbers being given in the text.

When compared with more fertile areas of the State, the south-west area seems generally poor in both numbers and species of mammals although almost all indigenous Tasmanian groups are represented to some extent. The sparseness of the animal fauna would seem to be indicated by the low quality of the soils and vegetation and the few varieties of habitat.

A systematic list of the mammals collected is included, but owing to the short period of time available in the area, no information regarding the status and distribution is available.

INTRODUCTION

Lake Pedder, situated 24 miles south-west of Maydena, Tasmania, is a shallow fresh water lake at the south-eastern end of a flat, button grass plain drained by the Serpentine River. Although the lake has apparently been visited many times in the past and at present is a popular tourist attraction, no extensive biological survey work has apparently been done in the area. Records of any of the mammal groups from the area are noticeably absent from both the Tasmanian museums.

In February 1967, an opportunity was provided by the Hydro-Electric Commission of Tasmania, for zoologists from the Tasmanian Museum, Hobart and the Queen Victoria Museum, Launceston, to spend three weeks examining the area and making collections of the fauna for the museums. From what little is known of the mammals of the area it seemed that the publication of any new material would be desirable.

AREAS AND METHODS

Three separate areas were considered during the February survey—

- (1) Lake Pedder and the adjacent areas as far east as Mt Solitary.
- (2) Scotts Peak and the areas around the upper Huon River.
- (3) The north-western end of the Serpentine River plain through to the Gordon Road construction camp (see map).

Ten days were spent in the Lake Pedder area and all available methods of collecting were used. Both "snap-back" type and Sherman box traps were used in suitable areas where runways were found. Night spot-lighting and shooting was employed for Macropodidae, Phalangeridae and Dasyuridae. Daylight observations were made and representative areas were traversed on foot. Steel leg traps were set along some of the larger runways and in small clearings with baits suspended over them. Pit traps were dug on the beach but were unsuccessful owing to the tendency to become filled with water. Small "islands" of scrub in the button grass plains were examined and patches of typical rainforest investigated.

Five days were spent examining Scotts Peak and the surrounding areas. Large traverses were made across the country to the east and south, and night spot-lighting was used to establish visual records. Owing to the drier, more rocky nature of the plains, small ground level traps were only successful in the low scrub bordering the watercourses. In the upper Serpentine area the party was housed in the Gordon Road construction camp and road workers were questioned regarding the local fauna. In addition, the area was surveyed on foot; shooting and night spot-lighting from vehicles was employed, and traps were set in and around the camp. Much useful information was collected from road workers and several "road casualties" were brought in by them. During October and December of the same year, the Lake Pedder site was again surveyed by the author and the same methods employed as in February.

SYSTEMATIC ACCOUNT OF MAMMALS OBSERVED AND COLLECTED

The nomenclature used is taken from Iredale and Troughton's "Checklist of the Mammals Recorded from Australia" (1934) and the supplement to this by Ride (1964).



The present locality of all specimens collected has been provided, those held by the Tasmanian Museum, Hobart, are prefixed by the letter "A", the specimens at the Queen Victoria Museum, Launceston, are prefixed by the letters "QVM". In the case of a species observed but not collected, all efforts were made to identify the species with reasonable accuracy by visual observations. Fortunately most of the species in this category were distinctive and unlikely to be mistaken for anything else.

ORDER MONOTREMATA

The Platypus (Ornithorhynchus anatinus) was observed in the canal draining Lake Maria into the north-east corner of Lake Pedder. This is a narrow waterway approximately a quarter of a mile long and about 25 yards across with steeply sloping sand banks on either side. At least two individuals were seen in February, both in the late afternoon and one (A775) male, was collected. Although the stomach contents were removed almost immediately after killing, digestion had proceeded too far for any of the contents to be identified. The species was again observed at the same site in December, but no specimens were collected.

TASMANIA



Only one Echidna (*Tachyglossus setosus*) was observed during the entire survey, although reports from road construction workers would seem to indicate that the species may be more abundant than was recorded. The one specimen observed was found on a grassy slope to the south-west of Scotts Peak by the author in the late afternoon during February, but unfortunately the specimen could not be collected nor a photographic record obtained.

ORDER MARSUPIALIA

Family Dasyuridae

The Dasyuridae were the most numerous marsupials found on the survey and altogether four species were recorded. The Little Tasmanian Marsupial Mouse (*Antechinus minimus*) was found at all three localities and with the exception of those from the Gordon Road site all specimens were caught in traps, set on runways at ground level. The two from the Gordon Road camp were caught by spotlighting from vehicles along the road at night, and the species was also observed by the author in the scrub clearing alongside the road in the late afternoon.

It is interesting to note that an albino *Antechinus swainsoni* was also obtained from the Gordon Road area and appears to be the first record in Tasmania of albinism in this species.

The specimens are as follows:----

- Antechinus swainsoni—A777 (male), Gordon Road.
- Antechinus minimus—QVM 1967:1:14 (male), QVM 1967:1:12 (male), Scotts Peak; QVM 1967:1:13 (male), Serpentine; QVM 1967:1: 11 (male), A801 (male), A802) (male), Lake Pedder; A767 (male), A769 (male), Gordon Road.

The name Antechinus minimus has been used here, but in a review of Antechinus Wakefield and Warneke (1963) have denoted the Tasmanian species by the name Antechinus minimus minimus.

The native cat (*Dasyurus viverrinus*) was found at Lake Pedder in February where at least two were occasional nocturnal visitors to the camp, and at the Gordon Road site. They were frequently observed on the beach at Lake Pedder by night spot-lighting during February and an adult female was collected by shooting in December. A conspicuous feature of the December trip was the large number of juvenile native cats observed in the late afternoon and evening.

Two males were collected from the Gordon Road site in February, Nos. A766 and A765 and one female from Lake Pedder in December (A812).

The Tasmanian Devil (Sarcophilus harrisii) on the evidence of tracks and droppings appeared to be present at all three sites but were only observed at Lake Pedder in February. Two males were collected, one by spot-light and the other by a bait suspended over leg traps—(A774) and (A776) respectively. In both cases the animals were caught at night and were examined for ectoparasites.

Family Phalangeridae

Two representatives of this group were collected. The Tasmanian Ringtail Possum (*Pseudocheirus convolutor*) was found in the eucalypt timber bordering Lake Pedder and two specimens were taken by night spot-lighting. These were the only live specimens observed although the typical nests of the species were found in similar vegetation at all three sites. Specimens—QVM 1967:1:2 (female) and A773 (male).

The only other possum found was a single specimen of the Tasmanian Pygmy Possum (Eudromicia Lepida) which was caught by the author while night spot-lighting from a vehicle along the Gordon Road near the camp site (No. A772 male). Although the name Eudromicia has been used here, Wakefield (1963) has included both the Tasmanian Pygmy Possums in the single genus Cercartetus. No Phalangeridae were collected during the October-December trips.

Family Vombatidae

Although live wombats were only observed at the Lake Pedder site, evidence of tracks, droppings and burrows was abundant at all three localities. Many of the small "islands" of scrub and eucalypt timber between Lake Pedder and Mt. Solitary were found to contain active wombat burrows and holes were found in many of the patches of scrub on the slopes of Mt. Solitary and Scotts Peak. The animals were observed by spot-light on the beach at Lake Pedder and at night could be heard in the scrub near the camp site. No specimens were collected as the species could be readily identified and facilities for preserving larger animals were limited. The species was observed at Lake Pedder on all three survey trips.

Family Macropodidae

The only member of the kangaroo family recorded was the Scrub Wallaby or Bennetts Wallaby. As the species could be identified with reasonable accuracy by visual observation no specimens were taken although a road casualty at the Gordon Road site was examined by the author. At least three were observed at Lake Pedder, and a pair at Scotts Peak appeared to be almost tame, and accepted apples left for them by the party. Frequent evidence was found in the areas of scrub surrounding Lake Pedder and characteristic footprints of the group were found on the soft mud left by the evaporation of small pools.

ORDER RODENTIA

Despite quite intensive trapping and examination of likely areas, only three species of the rodent group were found in the area. The low scrub and button grass bordering rivers and small watercourses was almost invariably found to have an underlying network of small runways, but although upwards of 20 traps were set in areas on some occasions, yields were comparatively low. Some time was also spent examining and trapping in rainforest areas but with negative results.

Family Muridae

The eastern swamp rat (*Rattus lutreolus*) was obtained along the eastern border of Lake Pedder

using both "snap-back" and box traps. The species appeared to share the same runways with *Antechinus* and *Mastacomys* and in one locality all three species were trapped within an area of about 20 yards diameter. Altogether four specimens of *Rattus lutreolus* were collected in February— QVM 1967:1:4 (female), QVM 1967:1:15 (male), A771 and A768. Nos. A799 (female) and A811 (male) were collected in October-December.

During the October trip a single specimen of the Long-tailed rat (*Pseudomys higginsi*) was collected from the Lake Pedder site, No. A800 (male). *Rattus lutreolus* was obtained on the same trap site in both October and December, but no further specimens of *Pseudomys* were obtained.

The Brcad-toothed Rat (*Mastacomys fuscus*) was trapped at Lake Pedder and the Serpentine. Three specimens in all were collected, all were from fairly widely separated areas and in each case *Rattus lutreolus* was found on the same trap site. The locations were as follows:--QVM 1967:1:16 (female), Serpentine; QVM 1967:1:13 (female), Lake Pedder; and A770, Lake Pedder.

TABLE 1

List of Mammals Collected and Observed in the Area.

ORDER MONOTREMATA

Family:---Ornithorhynchidae

(1) Ornithorhynchus anatinus (Shaw and Nodder, 1799) (Platypus)

Family:-Tachyglossidae

(2) Tachyglossus setosus (Geoffroy, 1803) (Echidna)

ORDER MARSUPIALIA

Family:-Dasyuridae

- (3) Antechinus swainsoni (Waterhouse, 1840) (Dusky Marsupial Mouse)
- (4) Antechinus minimus (Geoffroy, 1803) (Little Tasmanian Marsupial Mouse)
- (5) Dasyurus viverrinus (Shaw, 1800) (Eastern Native Cat)
- (6) Sarcophilus harrisii (Boitard, 1841) (Tasmanian Devil)

Family:-Phalangeridae

- (7) Eudromicia lepida (Thomas, 1888) (Tasmanian Pygmy Possum)
- (8) Pseudocheirus convolutor (Oken, 1816) (Tasmanian Ringtail Possum)

Family:---Vombatidae

(9) Vombatus spp. (Wombat)

Family :--- Macropodidae

(10) Wallabia spp. (Scrub Wallaby)

ORDER RODENTIA

- (11) Rattus lutreolus (Gray, 1841) (Velvet Furred Rat)
- (12) Pseudomys higginsi (Trouessant, 1899) (Long Tailed Rat)
- (13) Mastacomys fuscus (Thomas, 1882) (Broad Toothed Rat)

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