

NEW LOCALITY FOR THE ENDANGERED SHEATHTAIL BAT, *TAPHOZOUS TROUGHTONI* TATE, 1952. *Memoirs of the Queensland Museum* 45(2): 284. 2000: - *Taphozous trougtoni* was first described by Tate (1952). Subsequently, the taxon was considered a subspecies (McKean & Price, 1967) but was re-established as a full species by Chimimba & Kitchener (1991). It is known from only six specimens, four of which are lodged in the Australian National Wildlife Collections in Canberra (Chimimba & Kitchener, 1991). The three known localities are all in the vicinity of Mount Isa in NW Queensland. The species has not been recorded for 34 years.

We have identified a specimen of *T. trougtoni* among specimens in the Queensland Museum collection. This specimen, registration number QMJ17608, was originally registered as *Tadarida australis*, but was later re-identified as *Taphozous australis*. We examined QMJ17608 while verifying identifications of *Taphozous australis* specimens outside of the species' known distribution (Churchill, 1998).

QMJ17608 is an adult female. It is in spirit (70% alcohol) and in fair condition, although the back of its head has been badly damaged. We identified it as an emballonurid by its tail protruding from the upper surface of the uropatagium, and in the genus *Taphozous* by its wing pouches and lack of throat pouch. We determined QMJ17608 to be *T. trougtoni* on the basis of lengths of its forearm, metacarpal III, and skull dimensions. Its forearm was slightly longer than the four *T. trougtoni* (76.2 vs 72.7–75.6mm) specimens of Chimimba & Kitchener (1991), and did not overlap with any other *Taphozous* (Table 1).

It can be difficult to distinguish between *Taphozous georgianus* and *T. trougtoni* from external characters. Examination of morphometric data in Chimimba & Kitchener (1991: 211, table 1b) indicate that the external character with the least overlap between these species is the size of the digit III metacarpal. The length of this character in the specimen we examined was 68.0mm, 0.1mm below the range of *T. trougtoni* (68.1–70.2mm, n=4), and 2.1mm above that of *Taphozous georgianus* (52.7–65.9mm, n=302) (Chimimba & Kitchener, 1991).

The locality recorded for QMJ17608 is 'two miles S.E. Cloncurry' (20°43'S, 140°32'E). It was collected on 15 September 1969, although the identity of the collector was not recorded. The 1971 edition of the Cloncurry 1:100,000 map (PCC 7056) indicates the probable locality is south of the North Western Highway, close to Mount Avarice, with quarries and numerous mines within five kilometres. This record is around 60–65km to the east of existing locality records for *T. trougtoni*, and so extends its known range. The three other locality records for this species are close to each other (50km) around Mt Isa.

An additional specimen and collection locality for this species is noteworthy as only six specimens of this species have been collected from three localities (Tate 1952; Chimimba & Kitchener 1991). This species has not been seen since 1967 (Duncan et al., 1999). The national conservation status of *T. trougtoni* determined by the Action Plan for Australian Bats (Duncan et al., 1999) is 'endangered', while its conservation status in Queensland is 'endangered' (*Nature Conservation Act 1994 (and amendments)*). A management recommendation determined by Duncan et al. (1999) is to examine museum specimens of *Taphozous georgianus* from

TABLE 1. Dimensions of morphological characters of QMJ17608, *T. georgianus* and *T. trougtoni* (from Chimimba & Kitchener, 1991). All measurements in mm.

Character	QMJ17608	<i>T. georgianus</i>	<i>T. trougtoni</i>
Body length	77.1	61.6–80.0	79.4–86.3
Tail length	33.8	22.9–39.4	31.5–36.9
Ear length	24.7	16.5–24.1	22.4–27.1
Ear width	12.1	11.8–25.6	16.2–19.9
Tragus length	7.0	4.9–8.9	7.7–9.4
Forearm length	76.2	61.1–73.4	72.7–75.6
Tibia length	32.3	24.2–30.8	30.6–31.8
Pes length	15.7	9.8–14.7	13.8–15.5
Digit II metacarpal length	65.1		
Digit III metacarpal length	68.0	52.7–65.9	68.1–70.2
Digit III phalanx I	23.3	17.7–23.7	22.2–24.6
Digit III phalanx II	26.1	19.8–29.1	25.4–28.4
Digit IV metacarpal length	54.8		
Digit IV phalanx I	15.9		
Digit IV phalanx II	11.6		
Digit V metacarpal length	47.3		
Digit V phalanx I	15.9		
Digit V phalanx II	71.8		
Inter upper canine distance	4.5	3.4–4.5	4.5–4.8
Inter lower canine distance	3.2	2.6–3.3	3.2–3.4
Zygomatic width	14.7	12.1–14.4	14.7–14.9

northwest Queensland for additional records of *T. trougtoni*. Our findings indicate that examination of presumed *Taphozous australis* specimens may also result in further records of *T. trougtoni*.

Literature Cited

- CHIMIMBA, C.T. & KITCHENER, D.J. 1991. A systematic revision of Australian Emballonuridae (Mammalia: Chiroptera). *Records of the Western Australian Museum* 15: 203–265.
 CHURCHILL, S. 1998. *Australian Bats*. (New Holland: Sydney).
 DUNCAN, A., BAKER, G.B. & MONTGOMERY, N. (eds) 1999. *The Action Plan For Australian Bats*. (Environment Australia: Canberra).
 MCKEAN, J.L. & PRICE, W.J. 1967. Notes on some Chiroptera from Queensland, Australia. *Mammalia* 31: 101–119.
 TATE, G.H.H. 1952. Results of the Archbold Expeditions No. 66. *Mammals of Cape York Peninsula, with notes on the occurrence of rain forest in Queensland*. *Bulletin of the American Museum of Natural History* 98: 563–616.

M.P. Rhodes, *Queensland Parks and Wildlife Service, PO Box 155, Albert Street, Brisbane 4001*; A.P. Amey, *Queensland Museum, PO Box 3300, South Brisbane 4101, Australia*; 10 April 2000.



Rhodes, M P and Amey, Andrew P. 2000. "New locality for the endangered Sheathtail Bat, *Taphozous trougtoni* Tate, 1952." *Memoirs of the Queensland Museum* 45, 284–284.

View This Item Online: <https://www.biodiversitylibrary.org/item/125117>

Permalink: <https://www.biodiversitylibrary.org/partpdf/71230>

Holding Institution

Queensland Museum

Sponsored by

Atlas of Living Australia

Copyright & Reuse

Copyright Status: Permissions to digitize granted by rights holder.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.