

FIXATION OF THE HABITAT, AND EXTENDED DESCRIPTION,
OF *PTEROPUS TUBERCULATUS*, PETERS.

By

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(Figure 1.)

During July and August, 1926, Mr. A. A. Livingstone and myself were fortunate enough to visit Vanikoro Island, when, for five weeks spent collecting in the Santa Cruz Group on behalf of the Trustees of the Australian Museum, we had the pleasure of being the guests of Mr. N. S. Heffernan, then District Officer of the Group. Considerable interest attaches to Vanikoro as the scene of the loss of La Perouse's two ships the "Boussole" and "Astrolabe" in 1788, the fate of the intrepid navigator remaining a mystery for nearly forty years until Captain Peter Dillon discovered relics at Vanikoro in 1826.

Enhancing the interest of the fauna was the visitation in 1828 by a French expedition in a new "Astrolabe" commanded by Dumont D'Urville and having on board the famous naturalists Quoy and Gaimard, the first to make scientific observations and collections in this region. Their collections were naturally very incomplete and also subject to much confusion; so that it is very satisfactory to be able to clear up, after a lapse of nearly one hundred years, the mystery surrounding the habitat of the smaller of the two fruit-bats occurring at Vanikoro.

History of the two species.—In 1830 Quoy and Gaimard based their *Pteropus vanikorensis*, the large light-mantled fruit-bat of Vanikoro, upon two mounted skins and an odd skull said to have been obtained during the voyage of the "Astrolabe" and now in the Paris Museum. In 1912 Andersen, after examination of this material, retained the name *vanikorensis* for the species represented by the two skins, but decided that the odd skull (Paris Mus. Reg. No. 6746), erroneously described by Quoy and Gaimard and figured by Blainville as the skull of *vanikorensis*, represented a totally different species.

In 1869 Peters had described *Pteropus tuberculatus* based upon an adult female of unknown locality (Reg. No. A. 40) in the Paris Museum. Comparison of Blainville's figure of the odd skull from Vanikoro with Matschie's figure of the skull of Peter's type convinced Andersen of "the perfect identity of the characters of the skull and teeth." He refused, however, to regard the habitat of *tuberculatus* as established owing to the odd Vanikoro skull proving identical with that species, and arrived at the somewhat strained conclusion that "since Quoy and Gaimard were mistaken in referring the skull to *vanikorensis*, they may also have erred in stating that it was from Vanikoro," and that "So much only is sure, that Vanikoro and Guam are the only places visited by the 'Astrolabe' in which it can have been obtained."

On the contrary, in my opinion, it would have been more reasonable to assume that the odd skull had actually come from Vanikoro, since it was associated with skins also said to be from there, and that Quoy and Gaimard's ignorance of the existence of a second species, coupled with their failure to make a critical examination of the material, had led them to refer the odd skull of a second species to the much larger *vanikorensis*. The latter interpretation has proved correct, as we secured eight specimens at Vanikoro, three being collected by Mr. Heffernan, agreeing in all details with the description of *tuberculatus*, and enabling me to record the habitat of the species, unknown since its description, as Vanikoro in the Santa Cruz Group, and not the Marianne Islands, as Andersen suggested. Described by him as "this rare species" and hitherto known only by the unlocalised type and the odd skull, it is satisfactory to report the species as plentiful at Vanikoro, and to amplify the description and list of dimensions supplied by Andersen in his remarkable catalogue of Megachiroptera.

PTEROPUS TUBERCULATUS *Peters.*

(Fig. 1.)

Pteropus vanikorensis (part), Quoy & Gaimard, Voy. "Astrolabe" Zool. 1, 1830, p. 77 (skull, excl. skins and pl. ix), Vanikoro; *Id.*, Temminck, Mon. Mamm., ii, 1837, p. 78 (pt. skull, not specimens), Vanikoro; *Id.*, Blainville, Ostéogr. Mamm., Atl. Chéiropt., 1840 p. 100, pl. vi, fig. 3 (skull), Vanikoro.

Rousette de Vanikoro, Jourdan, Echo du Monde Sav.—iv, 1837, p. 156 (dentition compared with that of *Acerodon*).

Acerodon vanikorensis (part), Lesson, N. Tabl. R. Anim., Mamm., 1842, p. 14, No. 194, Vanikoro.

Pteropus tuberculatus, Peters, M.B. Akad. Berlin, 1869, p. 393 (habitat unknown); *Id.*, Dobson, Cat. Chir. B.M., 1878, p. 58 (habitat unknown); *Id.*, Trouessart, Cat. Mamm., i, 1897, p. 82 (hab. unknown); *Id.*, Matschie, Megachir., 1899, pl. viii, figs. 3, 3a-b (skull; hab. unknown); *Id.*, Andersen, Cat. Chir. B.M., i, 1912, p. 309 (? Vanikoro or Marianne Is.).

Pteropus (Spectrum) tuberculatus, Matschie, Megachir., 1899, p. 29 (hab. unknown); *Id.*, Trouessart, Cat. Mamm., Suppl., 1904, p. 54.

Diagnosis.—Similar in skull and dentition to *Pt. pselaphon* and *pilosus*, but with a small cusp-like projection on the hinder trenchant margin of the upper canine about the middle of the tooth. Fur shorter than in *pilosus*, mantle not paler but actually darker than the head and back. Size considerably smaller: forearm 119·5-124·5 mm. Hab. Vanikoro, Santa Cruz Group.

Dentition.—Examination of the teeth of my crania shows them to agree perfectly with Andersen's very complete description which is as follows:—

"Essentially as in *Pt. pselaphon* and *pilosus* but some of the chief characters of the dentition in these species (strong development of cingulum in upper incisors, upper and lower canines; enlargement of i_2 and p_1 ; tendency in longitudinal ridges of cheek-teeth to break up into tubercles) still more pronounced.—Upper incisors large; cingulum