

# THE OCCURRENCE OF THE NEW GUINEA TURTLE (*CARETTOCHELYS*) IN THE MIOCENE OF PAPUA.<sup>1</sup>

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(Plate x, and Figure 1.)

*Introduction.*—The fossil forming the subject of the present note was discovered in October, 1940, in a quarry on the road leading from the left bank of the Vailala River (Papua, Gulf Division) near the mouth of Kariava Creek to the drilling site of Australasian Petroleum Company's first exploration well in Papua. The fossil was sent to Port Moresby and handed to the writer by Dr. K. Washington Gray, chief geologist to Australasian Petroleum Company. The quarry was situated 800 feet E. 7° S. from the mouth of Kariava Creek. The writer visited the locality in May, 1941. No further vertebrate fossils were found, but mollusca, corals and foraminifera occur in the same beds the age of which is Upper Miocene.

The fossil remains consisted of the external mould, in medium-grained dark tuffaceous sandstone, of a single highly sculptured bone with a fragment of the bone,  $1\frac{1}{2} \times 2$  inches in size, still adhering to the matrix. About one-third of the mould was apparently lost in collecting, but it is likely that only this single detached bone was originally embedded in the rock.

Preliminary examination of the fossil made it clear that it was a fragment of the nuchal plate of a turtle, belonging apparently to the Trionychia but suggesting by its outline the presence of marginal plates in the species. Thus the fossil could not belong to the family Trionychidae, but appeared to be related to the more primitive family Carettochelyidae. The only living representative of this family is the New Guinea Turtle, *Carettochelys insculpta* Ramsay.<sup>2</sup>

*Description.*—A plaster cast of the mould was made (Pl. x, fig. 1). It shows that the bone was irregularly pentagonal in outline, much wider than long, with a widely arched posterior and postero-lateral margin, a lateral angle of about 120°, shorter, slightly concave, antero-lateral margins and an almost straight long anterior margin which is very slightly concave in outline for about one-fourth of its length on either side of the median line. The preserved bone fragment (Pl. x, fig. 2a, b) belongs to the posterior median part of the plate. On its well-preserved sutural margin we recognize the small, rectangular, median excavation into which the anterior margin of the first neural plate must have been fitted. The arched postero-lateral margins of the nuchal plate were joined to the anterior margins of the costal plates. The well-defined lateral angles and antero-lateral margins indicate the presence of well-developed marginal plates.

<sup>1</sup> Published by permission of the Directors, Australasian Petroleum Company, Proprietary, Limited, Melbourne, Victoria.

<sup>2</sup> Ramsay.—*Proc. Linn. Soc. N.S.W.*, (2), i, 1886, p. 158. Waite.—*REC. AUSTRALIAN MUS.*, vi, 1905, p. 110. Ogilby.—*Proc. Royal Soc. Queensland*, xix, 1905, p. 1. Longman—*Mem. Queensland Mus.*, ii, 1913, p. 39. de Rooij.—*The Reptiles of the Indo-Australian Archipelago. Part i. Lacertilia, Chelonia, Emydosuchia.* Leiden, 1915. Walther.—*Nova Guinea*, xiii, 1922, p. 607.