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Notes on Australian animals in New Guinea with description of a new species of fresh water tortoise belonging to the genus *Euchelymys* (Gray), by GERARD KREFFT C. M. Z. S., Curator of the Australian Museum, Sydney New South Wales.

I am indebted to signor L. M. D'Albertis for the privilege of examining a rare species of tortoise from the Amana River S. E. New Guinea, which I think is new to science and I propose to name it provisionally:

***Euchelymys subglobosa.***

The thorax is oblong, convex and high, slightly narrower behind than in front. The first vertebral shield is the broadest; the second is narrower and not quite as long as the first; the third is slightly smaller again and almost square; the fourth is hexagonal with the lower margin narrower than the others. — The shell is much elevated about the centre and as the sternum is also bulged out in a corresponding manner, the form becomes subglobular. A slightly interrupted groove runs through the middle of the second, third and fourth vertebral plates. All these centre plates are slightly rugose and the markings run in a longitudinal direction.

The nuchal plate is distinct but narrow, the caudals are of equal size, rather broad and not forked and they measure nearly two inches in width by half an inch high. — The upper shell and sternum meet on the side without forming a margin or turned up rim. The four costal plates are of regular size; the second the largest, the fourth the smallest.

The sternum is much rounded about the centre shewing off flat towards the gular and anal plates. The former are three in number. The preanals and anals have raised outer edges;

a wide semicircular notch forms the lower margin of the anal plates.

The head is rather large covered with a rugose skin; skull slightly depressed, zygomatic arch wanting and with a large tympanic opening.

The neck is rather thick, slightly warty above and rugose below, with two very small beards.

The fore legs have large transverse scales in front; the hind ones are granular. — The claws are long and sharp and the space between the toes is fully webbed.

The specimen is a female from which M.<sup>r</sup> D'Albertis took a number of rather large eggs. The male is no doubt furnished with a much larger tail than the female and I mention this, more particularly, because the late D.<sup>r</sup> Gray was of opinion that several tortoises (which I had forwarded to him from the Burnett River and which I had examined and found to be males) were distinct species. The colour of these reptiles is as uniform as that of our Landshells — olive green above and straw yellow below. The yellow is relieved in the present species by scarlet (in young specimen) about the centre of the sternum and a deep orange streak runs from the eye to the tympanum. Australian examples of the long necked kind when just hatched are always bright brick-red below, but the spots soon fade.

Total length of upper shell  $9 \frac{1}{2}$  inches; across the centre at narrowest part 8 inches. Total length of sternum  $7 \frac{1}{2}$  inches; across the sternum narrowest part 7 inches.

All round the body highest part 15 inches. The measurements are taken curves included.

The discovery of so true an Australian form in New Guinea bears out D.<sup>r</sup> Sclater's supposition that the great island is part of Australia proper and whatever novelties there may yet be discovered in Papua so much is certain all will bear the Australian stamp — a sort of « natural history trade mark » which true observers understand, but which as a rule is overlooked by the species mongers.

Even in this case I should prefer to find that the tortoise in

question would prove identical with *Euchelymys sulcifera* (Gray) than that it would be accepted as a real new species — but this doubtfulness cannot be decided till more specimens come to hand. The genus *Euchelymys* was established by D.<sup>r</sup> J. E. Gray in 1871. *Euchelymys* (part.) Gray, Ann. and Mag. Nat. Hist. 1871, VIII, pag. 118. The definition of the genus given in the Zool. Soc. Proceedings for 1872, p. 508, corresponds with the specimen under discussion and the specific characters differ but slightly from D.<sup>r</sup> Gray's example obtained by the late M.<sup>r</sup> Stutchbūry in 1856 from north Australia. — The white streak mentioned by D.<sup>r</sup> Gray extending from the angle of the mouth to beneath the ear is orange in D'Alberis's specimen and with the experience I have had with the reptiles of the Australian Region I could easily trace the scarlet markings on the now uniform yellow sternal plate.

I regret very much that I have not had an opportunity to obtain a look at the many new species of snakes and frogs Signor D'Alberis obtained at New Guinea because a good many of our ordinary species are (of course more or less modified) represented in the big island. I only mention the highly variable Lead-coloured snake (*Diemenia superciliosa*) known under a dozen different names in various stages of growth. — The Death Adder (*Acantophis antarctica*) smaller in size — but, as D.<sup>r</sup> Günther himself thinks, identical with ours. The Black snake (*Pseudechis porphyriacus*) and its brown orange bellied variety. — A Green Treesnake (*Dendrophis punctulata*) and a brown one (*Dipsas fusca*) differing but little from ordinary Australian species — the Treesnakes extend as far as the Solomons Group. Of frogs we have to mention *Pelodryas coeruleus* the ordinary big Green Tree Frog who announces the coming rain from its sheltered hiding place in Australian dwelling houses up country. A variety of the fern-loving *Hyla phyllochroa*, a species of *Platymantis* and the mouse-eating *Chiroleptes australis* (?) as occurring in New Guinea. Of higher vertebrata we find *Antechini*, *Phascogales*, *Dactylopsilas* and other small Australian insectivorous forms well represented on the other side of Torres Straits, not to

mention the « Bandicoots » and ordinary Wallabies, which as far as their dentition is concerned differ in nothing from the great Genus *Halmaturus* whereof *H. walabatus* is the best known representative. Some years ago I paid special attention to the Wallabies of this country and after the examination of many thousand skulls I arrived at the conclusion that such species as *Halmaturus walabatus*, *H. Mastersi*, *H. Bennetti* and *H. dorsalis* differ little from one another. Without referring to my Manuscript on the subject (to which I have at present no access) it would of course be impossible to go fully into the matter; but as M.<sup>r</sup> D' Albertis has informed me that ordinary Wallabies *not* of the genus *Dorcopsis* exist in New Guinea and as he was kind enough to leave with me a lower jaw which cannot be distinguished from the many varieties of the ordinary Black Wallaby, I beg to state my conviction that this New Guinea representative is a true Australian form. I have not even a specimen of a Wallaby's skull nor a book in which one is figured at hand, but the shape of the ordinary black Wallaby's jaw is so deeply impressed upon my mind, that I submit a sketch of M.<sup>r</sup> D' Albertis' discovery for examination, believing that it will be found very much like it.

Naturalists will agree with me at all events that the form is *Australian* and belongs to the ordinary *Halmaturus* kind. The variation of the common Black Wallaby, the manner in which the species interbreed and the way in which they adapt themselves to change of climate is not so well understood abroad as it is in this country. — *Halmaturus walabatus* has a wide range, inhabits chiefly the scrub of the coast district and in the southern part it is of a rather dark colour with long fur. Near the borders of Queensland it is considerably lighter and on the Burnett River (which is inhabited by fresh water tortoises of the genus *Euchelymys*, and by the *Ceratodus Forsteri* (Kreff)) has assumed a greyish and much thinner fur in consequence of which variation it has been described by me some years ago as *Halmaturus Mastersi*. I find, however that it is but a variety of the true Black Wallaby of the south. It is not impossible therefore that the newly discovered New Guinea Wallaby may prove to

be allied to this form, skins of which I believe have been dispatched by M. D'Albertis to Italy for examination (\*).

As signor D'Albertis has carefully observed the birds found on the Banks of the Fly River during his last trip in the « Ellan-gowan » he will probably supplement these few remarks with an account of his own observations.

Sydney February 17 1876.

(\*) È già noto come il grande invio di D'Albertis, frutto di un anno di assiduo lavoro all'Isola Yule e sulla costa vicina della N. Guinea, sia andato smarrito in un'avaria toccata al vapore che lo trasportava da Somerset a Batavia: tale irreparabile infortunio accadde presso l'Isola di Flores. In un precedente invio il D'Albertis aveva già fatto pervenire al Museo Civico una pelle con cranio di un giovane *Macropus* che fu descritto nel Vol. VII, pag. 544 di questi stessi Annali col nome di *M. papuanus*. Questo individuo sarà figurato in un prossimo Vol. di questa pubblicazione. E esso appartiene senza dubbio alla stessa specie di cui tratta il Signor G. Kreffft nella presente comunicazione e della quale egli spedì uno schizzo del mascellare inferiore, che essendo incompleto, non fu riprodotto.

G. DORIA.