

AUSTRALIAN MUSEUM SCIENTIFIC PUBLICATIONS

Waite, Edgar R., 1895. The skull of *Dendrolagus dorianus*, Ramsay. *Records of the Australian Museum* 2(6): 85–87, plate xviii–xix. [30 September 1895].

doi:10.3853/j.0067-1975.2.1895.1201

ISSN 0067-1975

Published by the Australian Museum, Sydney

nature culture **discover**

Australian Museum science is freely accessible online at
<http://publications.australianmuseum.net.au>
6 College Street, Sydney NSW 2010, Australia



THE SKULL OF *DENDROLAGUS DORIANUS*, Ramsay.

BY EDGAR R. WAITE, F.L.S.

(Zoologist to the Australian Museum.)

[Plates XVIII., XIX.]

WHEN examining the Tree Kangaroos in the Museum Collections for the purposes of my paper on *Dendrolagus bennettianus*, de Vis,* I was somewhat puzzled by a mounted specimen. As however it did not throw light upon the species under investigation, it was placed aside for future study.

Having once more taken it in hand, I found that it agreed with *D. dorianus*† in all described particulars except the non-reversal of the hair. A search among the duplicate collections revealed two other skins, received along with the specimen mentioned; these presented the aspect of the hair peculiar to *D. dorianus*. Another look at the mounted specimen showed‡ that the hair had been brushed in the orthodox manner, namely from head to tail.

These skins were purchased from a Sydney firm of importers in December, 1891, the locality given being the Astrolabe Range, British New Guinea, whence also the types were obtained. One of the skins is headless, but the other contained the skull, from which, however, the occipital region had, as usual, been cut for the purpose of cleaning the cavity.

Dr. Ramsay stated‡ that in the three original specimens, in the Macleay Museum, "The teeth and all the bones of the skull are in a very bad state, being corroded by the liquid in which the skin was preserved." Baron N. de Miklouho-Maclay§ supplemented the original description by a more detailed account of the direction of the hair, and by a notice of the teeth as far as could be ascertained from a stuffed specimen.

These further particulars enabled Mr. Oldfield Thomas|| to draw up a sufficiently comprehensive synopsis of the cranial

* Proc. Linn. Soc. N.S.W. (2)ix., p. 571.

† " " (1) viii., p. 17.

‡ " " " footnote.

§ " " (1) ix., p. 1154.

|| B.M. Cat. Marsupialia, 1888, pp. 94 & 98.

characters; still, in his Catalogue of Marsupials he had to write against the species—"Skull unknown." That this remark may be no longer applicable, is the object of the present paper. Although I have only one skull at my disposal, and that damaged, the mutilation is not of such a character as to interfere with features necessary for comparative purposes.

Dimensions.

Basal length	...	...	...	127.7	mm.
Greatest breadth	...	...	...	78.	"
Nasals, length	...	...	...	54.	"
" greatest breadth	...	...	...	25.	"
" least breadth	...	...	...	16.2	"
Constriction, breadth	...	...	...	18.	"
Palate, length	...	...	...	75.	"
" breadth outside M ²	...	...	...	37.	"
" " inside M ²	...	...	...	24.	"
Palatal foramen	..	...	...	6.8	"
Diastema	...	...	...	14.	"
Basicranial axis	...	...	...	41.7	"
Basifacial axis	...	...	...	84.5	"
Facial index	...	...	...	206.17	"
Teeth, length of I ³	...	...	...	5.	"
" " P ⁴	...	...	...	10.5	"
" " M ¹⁻³	...	...	...	21.	"

Description.—Skull stout and heavy, sides of muzzle slightly convex. Nasals somewhat expanded behind, their lateral edges concave, narrowest in the middle, posterior suture forming an obtuse backwardly directed angle. Ascending processes of premaxillæ greatly and suddenly broadened above, otherwise the premaxillo-maxillary suture not greatly inclined. Naso-premaxillary somewhat less than the naso-maxillary suture. Frontal region narrow, immensely swollen, the supraorbital edges sharp and well defined; they are coincident with the fronto-parietal sutures, coalescing where joined by the median frontal suture, thence forming a single prominent sagittal crest to the interparietal. Intertemporal area narrow, little more than the narrowest breadth of the nasals combined, and equal to their anterior breadth. Posterior palate without vacuities. In consequence of the interparietal and occipital bones having been removed, their condition, and also that of the foramen magnum cannot be described.

Teeth.—The peculiarities already recorded are generally borne out by this example. I¹ descends much below I² and I³; the two latter are equal in length, I³ being much the broader. The canine is about three-quarters the length of the smaller incisors and proportionately strong. The premolar has no external ledge and the posterior ridge is deeply notched. The molars are perhaps

larger than usual, the cusps very prominent and sharp. The premolar and molar series of the two sides converge before and behind; the curve continued forward would fall within the anterior teeth. The mandibular premolar inclines very slightly outward. In *D. tumholtzi* the incisor lies in a line with the inferior edge of the mandible, whereas in *D. dorianus* it is tilted greatly upwards. Unlike what is found in other species, the ascending rami, and more especially the coronoid processes, converge rapidly above, and are thus accommodated to the very narrow intertemporal area.

A comparison shows that the skull is by far the largest representative of the genus; the intertemporal breadth and the diastema are, however, actually less than in other species.

These points together with the peculiar teeth, the bulging frontals—indefinitely more marked than in *D. tumholtzi*—the sagittal crest and other features, show that the cranium is as distinct as the external aspect of the animal. The examination of an immature skull only, can show the amount of development the crest undergoes during the lifetime of the animal.

The aggregate characters of the skull indicate a further stage than has been reached by other species in the progress of differentiation from a radical stock.

NOTE ON A SEMI-ALBINO SPECIMEN OF *DACELO GIGAS*.

BY ALFRED J. NORTH, F.L.S.

(Ornithologist to the Australian Museum.)

ONE of the most interesting of the recent additions to the Ornithological Collection is a semi-albino example of *Dacelo gigas* procured at "Thirribir," Boggabri, New South Wales, by Mr. F. J. Parks during the month of June, and which has been presented by that gentleman to the Trustees. As the bird was received in the flesh and is in perfect plumage, I have taken the opportunity of describing it.

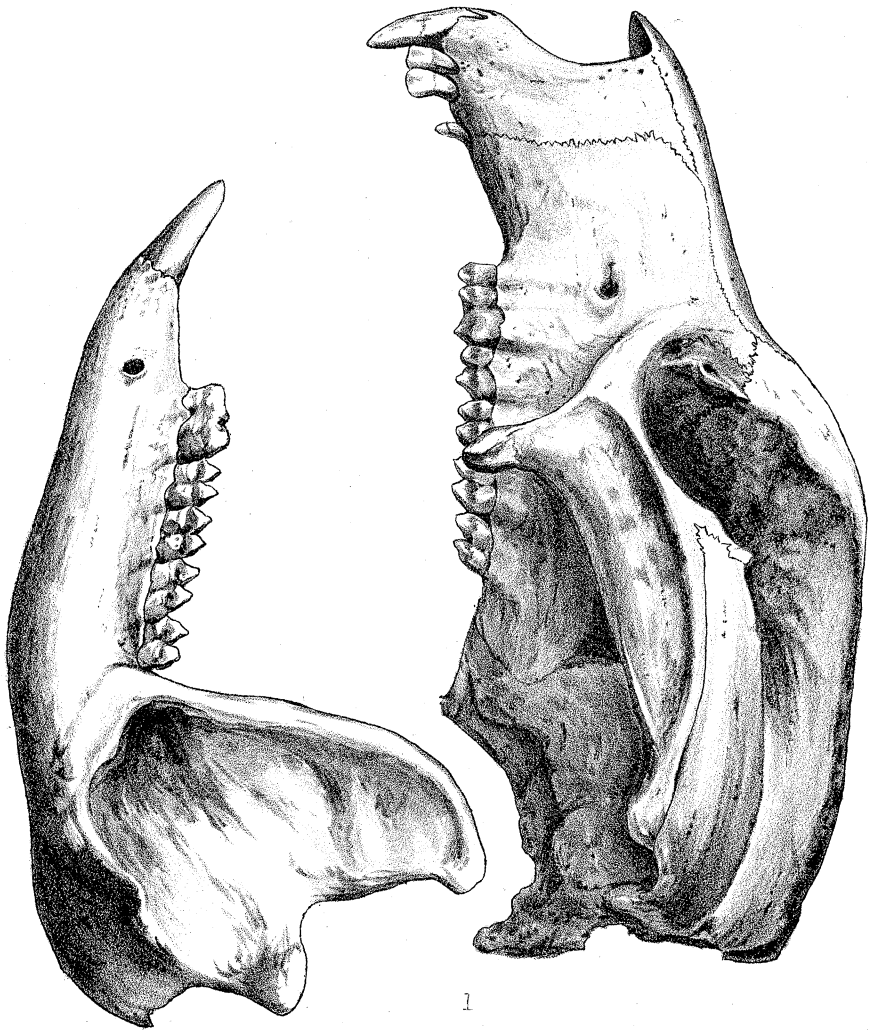
General colour above and below pure white; a spot in front of the eye, and a broad line extending from the gape to the ear-coverts, dull rufous; ear-coverts rufous-brown with white shaft-lines; median portion of the lengthened crest-feathers and an indistinct nuchal spot, dull rufous; scapulars and interscapular region slightly washed with brown, the lower back faintly barred with brown; rump and upper tail-coverts dull rusty-rufous, the

EXPLANATION OF PLATE XVIII.

Dendrolagus dorianus, Ramsay.

Fig. 1. Skull in profile. Natural size.

[From drawings by the Author.]



1

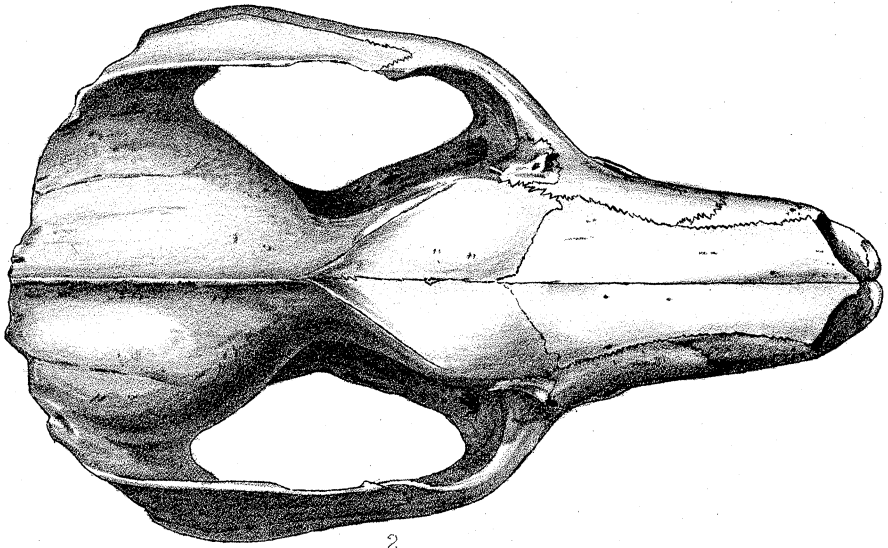
EXPLANATION OF PLATE XIX.

Dendrolagus dorianus, Ramsay.

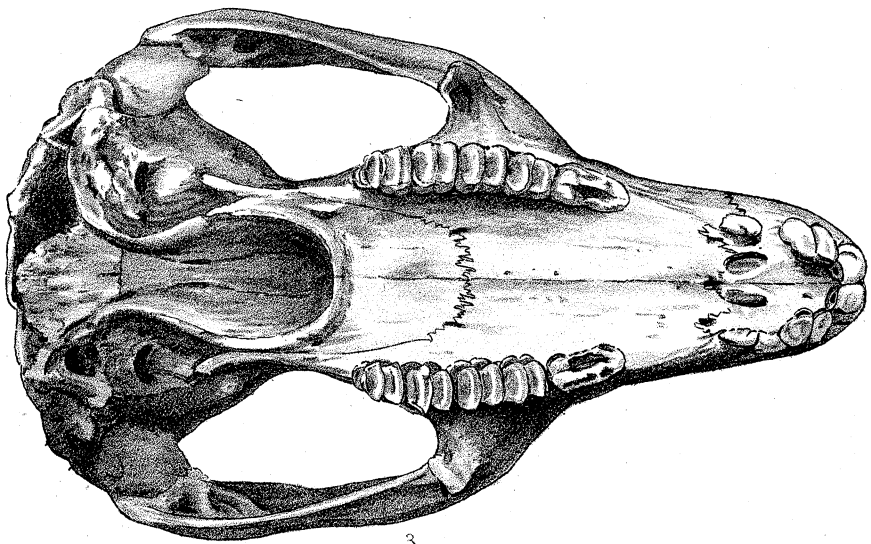
Fig. 2. Skull from above; reduced.

„ 3. The same from below; reduced.

[From drawings by the Author.]



2



3