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THE
SUBANTARCTIC ISLANDS
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REPORTS
ON THE
GEO-PHYSICS, GEOLOGY, ZOOLOGY, AND BOTANY OF THE
ISLANDS LYING TO THE SOUTH OF NEW ZEALAND,
BASED MAINLY ON
OBSERVATIONS AND COLLECTIONS MADE DURING AN EXPEDITION IN THE GOVERNMENT
STEAMER "HINEMOA" (CAPTAIN J. BOLLONS) IN NOVEMBER, 1907.

EDITED BY
CHAS. CHILTON,
M.A., D.Sc., F.L.S.,
PROFESSOR OF BIOLOGY, CANTERBURY COLLEGE, UNIVERSITY OF NEW ZEALAND.

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ARTICLE XXVII.—ON LAND PLANARIANS FROM AUCKLAND AND ENDERBY ISLANDS.

By ARTHUR DENDY, D.Sc., F.R.S., F.Z.S., Sec. Linn. Soc., Professor of Zoology in King's College
(University of London).

I RECEIVED from Professor Benham four specimens of land planarians—two from Auckland Island and two from Enderby Island—unfortunately without any notes of the colours in life. I understand that Mr. George Marriner also collected a few land planarians on Campbell Island in November, 1907. I have received his notes on the colours of these, but have not seen the specimens themselves, which I am therefore unable to report upon.

The only land planarian hitherto described from the subantarctic islands appears to be *Geoplana moebiusi*, Graff,* of which four specimens were collected by Krone in the Auckland Islands.

Geoplana subquadrangulata, Dendy, var., *enderbyensis*, n. var.

A single specimen of this variety of a widely distributed and very variable New Zealand species comes from Enderby Island.

The specimen (in spirit) measures 14 mm. in length by 3·4 mm. in maximum breadth (about the middle). The body is much flattened above, and only slightly convex below, not distinctly quadrangular, but with rather sharply angulated margins; tapering fairly gradually in front and behind, but with the posterior tip broken off. The peripharyngeal aperture is at about the middle of the ventral surface and the genital aperture about half-way between it and the posterior extremity. Eyes numerous, distinct, and arranged as usual.

The dorsal surface is pale yellow, with three longitudinal stripes of brown—a median and a pair.† The median stripe is narrow, rather pale, slightly discontinuous, and evidently composed of numerous small round specks of varying size and intensity. Each paired stripe lies midway between the median stripe and the margin of the body; it is about twice as wide as the median stripe and much darker, and also made up of numerous confluent round specks of brown pigment. The much wider bands of ground-colour between the median and the paired stripes, and again between the paired stripes and the margins of the body, are sparsely flecked with small round specks of dark-brown pigment similar to those of which the paired stripes are composed.

The ventral surface is almost colourless, pale yellow, with a faintly marked submarginal band of a very light uniform brown colour on either side, which probably represents the ill-defined lateral surface. On the inner side of each of these submarginal bands is a faint trace of mottling on the ventral surface, absent in the median region.

* "Monographie du Turbellerien," ii: *Tricladida terricola* (Landplanarien), Leipzig, 1899, p. 386.

† In the living animal the paired stripes are reddish-brown.—W. B. B.

***Geoplana antarctica*, n. sp.**

Body (in spirit) about 12 mm. in length by 2.5 mm. in maximum breadth (in the middle). Strongly convex, but evenly rounded above; rather more flattened below; tapering fairly gradually behind, but rather more bluntly than usual in front. Lateral margins well rounded. Eyes numerous, and arranged as usual. Peripharyngeal aperture about in the middle of the ventral surface, and genital aperture at about one-third of the distance from it to the posterior extremity.

Dorsal surface almost colourless; very pale greyish-yellow, and without any markings. There is, however, a distinct rather broad marginal band of olive-grey.

Ground-colour of ventral surface like that of dorsal, but with a narrow light-grey stripe on either side of the mid-ventral line, and traces of pale-grey mottling submarginally.

The specimen (in spirit) is strongly flexed ventrally, almost forming a circle. It contains a large egg-capsule, which causes a great bulge on the dorsal surface above the genital aperture.

The single specimen is not mentioned in the list sent to me by Dr. Benham, but was found in a tube numbered 10, which also contained a land nemertine from Enderby Island. The presumption is that the planarian came from Enderby Island also.

***Geoplana aucklandica*, n. sp.**

Body (in spirit) considerably elongated, about 41 mm. in length by 4.5 mm. in greatest breadth; broader behind than in front; tapering very gradually to the horseshoe-shaped anterior extremity, rather more suddenly behind.

Dorsal surface strongly convex. Ventral surface flat, or even concave, separated from the dorsal surface by very pronounced narrow lateral margins, which may be slightly crenate.

Eyes numerous, and arranged as usual. Peripharyngeal aperture well behind the middle of the ventral surface. Genital aperture rather nearer to the peripharyngeal aperture than to the posterior extremity.

Ground-colour of dorsal surface pale yellow or orange, with numerous short dashes or specks of brown arranged in discontinuous and ill-defined longitudinal stripes. Of these stripes, at least four may be recognised, arranged in two pairs, and dividing the ground-colour into five approximately equal bands. The outer stripe on each side contains more numerous and more darkly coloured specks than the inner one. There are faint traces of another pair of stripes (or, better, bands of specks), one on each side of the mid-dorsal line, in the median band of ground-colour.

The ventral surface is pale-yellowish, without markings.

The body in spirit becomes strongly curved ventralwards, so that the extremities approach one another, and the integument of the dorsal surface has a strong tendency to wrinkle transversely.

There are two specimens of this species from Auckland Island,* closely resembling one another. Their shape and general appearance in spirit remind me strongly of *Geoplana fletcheri*, Dendy,† a Victorian and South Australian species, to which it is probably closely related.

* Other specimens were obtained under logs on Auckland Island and on Enderby Island. In life the stripes are bright reddish-brown.—W. B. B.

† Figured in Proc. Roy. Soc. Victoria, 1893, pl. x.