NOTE ON THE OCCURRENCE IN TASMANIA OF THE FRESHWATER CRAB, HYMENOSOMA LACUSTRIS, CHILTON.

BY CHAS. CHILTON, M.A., D.Sc., C.M.Z.S.,

Professor of Biology, Canterbury College, New Zealand.

(Communicated by Professor T. Thomson Flynn.)

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Professor T. Thomson Flynn, of the University of Tasmania, of Hobart, has been good enough to send me some specimens of a small crab obtained by him in North-West Tasmania, which he thought belonged to the species Hymenosoma lacustris, Chilton, though they appeared to differ from the published descriptions in the shape of the restrum and in some other points. The few specimens he collected were found nestling in the crevices of rotting wood in a very small creek in the middle of an open paddock near Flowerdale.

This species was originally described from specimens obtained in Lake Takapuna, near Auckland, New Zealand, and has since been recorded from other localities in New Zealand, also from Norfolk Island, Lord Howe Island, and from two localities in Victoria, Australia. Its occurrence in Tasmania is additional evidence of its wide distribution, and its antiquity. I have compared the Tasmanian specimens with those from the other localities, and consider that they should be placed in the same species. The rostrum is more sharply depressed than in the Victorian specimens, more truncate at the end, and its lateral margins are more raised, showing prominently in dorsal view. In the Victorian specimens the rostrum is more nearly horizontal, its margins are less prominent, and the end is somewhat narrowly rounded. The Norfolk Island specimens have the rostrum, on the whole, similar to that of the Victorian, but the end is more broadly rounded; in the Lake Takapuna specimens the rostrum is much depressed, and the margins are sharply raised, but the end narrows to a blunt point, instead of being regularly rounded.

Other differences between the specimens then known in the lateral teeth on the carapace, the hairiness of the cara-

pace and appendages, and in the teeth or tuberculations on the chelipeds of the male were pointed out in 1902 by Fulton and Grant. The Tasmanian specimens resemble those from Norfolk Island in having the lateral teeth almost entirely absent, the anterior one being only faintly indicated; in Lake Takapuna specimens both teeth are fairly distinct, the anterior one being prominent, though The Victorian specimens bluntly rounded at the end. show a somewhat intermediate condition. The male specimens from Tasmania are small, and have the chelipeds smooth, but this may be due to immaturity. examining a number of specimens Fulton and Grant found that the various characters mentioned were not constant, and I agree with their statement that a large number of adult males from each locality must be examined before we are in a position to divide them into separate species or sub-species. The special characters of the Tasmanian specimens are, in my opinion, not sufficiently distinct to warrant their separation from the others, and they only help to show how difficult it will be to find constant combinations of characters by which to distinguish the different forms. Any investigation of this kind can, however, be safely left for future solution: the important point at present is that we have the same form of freshwater crab still existing in lands now widely separated. I have drawn attention to the importance of this fact in a previous paper (Trans. N.Z. Inst., Vol. 47, p. 316).

For the convenience of Tasmanian zoologists I give below the chief references dealing with the subject, and also the general description of the crab, which I published in 1915.

HYMENOSOMA LACUSTRIS, Chilton.

Elamena (?) lacustris, Chilton, Trans. N.Z. Inst., vol. 14, p. 172.

Hymenosoma lacustris, Chilton, l.c., vol. 15, p. 69, pl. 1. fig. 2 a to e; vol. 47, p. 316; and P.Z.S. for 1906, p. 703.

Hymenosoma lacustris, Fulton and Grant, Proc. Roy. Soc. Victoria, vol. 15, p. 59, pl. 8.

"Carapace nearly circular, rather broader than long; "flat, naked, or with a few scattered hairs. Rostrum broad, strongly depressed, its upper surface concave from side to side, extremity in form of an obtuse angle."

"Antero-lateral margins of the carapace with 2 obscure teeth. Cheliped of male small, propod only slightly broader than the carpus, hairy. Ambulatory legs some-

"what densely covered with long hairs, tarsi long, slender, compressed, densely haired. Last pair of legs somewhat shorter than the preceding. Abdomen of male of 5 joints subequal in length, 3rd rather narrower than the 1st and 2nd, 4th nearly as wide as the 3rd, last broadly rounded at the end; margin fringed with very short hairs, some longer ones being scattered on the surface. Abdomen of female with slight median ridge along its whole length."