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.)

(Received 8th July, 1919. Read 11th August, 1919.)

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
rostrum 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 pad-
dock near Flowerdale.

This species was originally described from specimens
obtained in Lake Takapuna, near Auckland, New Zea-
land, 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 Tas-
manian 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 Nor-
folk 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 bluntly rounded at the end. The Victorian specimens show a somewhat intermediate condition. The male specimens from Tasmania are small, and have the chelipeds smooth, but this may be due to immaturity. After 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.


*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.


"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."