

Some Helmet-Shells (Cassididae) From My Collection

(Plate 1, figs. 6 and 8)

BY GERTRUDE THORNLEY

Two years ago I received from Mrs. Lowery of Tuncurry a remarkable Helmet Shell which she had picked up on Tuncurry Beach after a gale. When I showed it to Mr. Tom Iredale he immediately identified it as *Casmaria perryi* Ire. (Pl. 1, fig. 8) which he had discovered in the Kermadec Islands. We immediately compared it with his figure in the Proceedings of the Malacological Soc. of London (x, 1912, p. 227, pl. ix, fig. 17) and confirmed this identification. The one before me is therefore the first specimen of this shell yet to be found in Australia.

It is a glossy yellow shell $1\frac{1}{2}$ inches long by $\frac{7}{8}$ inch wide, with a blunt apex. It has five adult whorls, mottled with chestnut at the sutures, with four bands of square light brown spots on the body whorl. The columellar and lip are white. Compared with *C. vibex* or *C. erinacea*, its nearest relations in Australia, this lip is only slightly thickened, not extended as they are into a heavy fold. The interior is light brown.

While at Eden, I collected a specimen, trawled off Tathra in 10 fathoms, of *Antecephalum semigranulosum* Lam. so this species may also be added to the N.S.W. Check List. It has so often been illustrated and is so well known, that I do not include a figure here.

From Mr. Knight of Sinclair Bay, Gloucester Island, near Bowen, Queensland, I received a fine shell which differs on sight from *Xenogalea angasi* Iredale (Rec. Aust. Mus. Vol. XV, No. 5, 1927, p. 350, pl. xxxii, fig. 15) of which it is a sub-species.

I describe it here as follows:—

Xenogalea angasi knighti, sub-species nov.

(Pl. 1, fig. 6)

Shell small, roundly ovate, thin, spire acuminate, and slightly shorter than that of *angasi*; mouth ovate; a protoconch of two and a half whorls; four adult whorls, the first two cancellate, less heavily so than *angasi*, and more rounded; on penultimate whorl are three fine ridges, the lowest hardly to be seen even with a glass. The body whorl is smooth and more rounded than that of *angasi*.

Colour a pale pink with a few slight brown blotches at the suture on the body whorl, yellow on back of recurved edge.

The canal and columellar are like that of *angasi*, with the characteristic double twist wrinkled throughout.

The shell differs in colour, and it is more rounded and not shouldered while it is smoother everywhere, and the ridging and cancellation of the upper whorls are less prominent.

The operculum is narrowly fan shaped, pale horn coloured and translucent. DIMENSIONS: L. 40mm., B. 25mm.

HABITAT. "Sandy flats exposed to strong tidal currents, and only uncovered by a minus tide, Gloucester Passage. "The animal," Mr. Knight says, "is similar to that of *Phalium glaucum*. It burrows deeply (4in. to 6in.) and is seldom found dead." I must thank Mr. Knight warmly for the above data, and for the specimens he has made available to me. It is indeed providential that so keen and observant a collector should be living in such an interesting place, and I hope that further species may be found there. The holotype will be presented to the Australian Museum, also specimens of the other shells mentioned in this article. I would like to thank Mrs. Lowery, who has sent me many fine shells from Tuncurry, and Mr. Iredale for the help he so freely extends at all times.

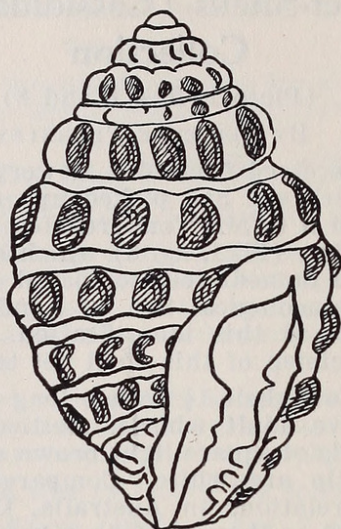
Plate I.



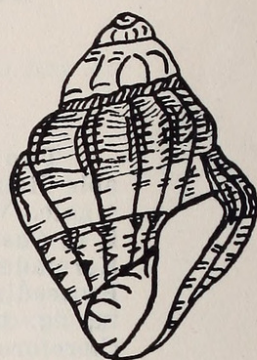
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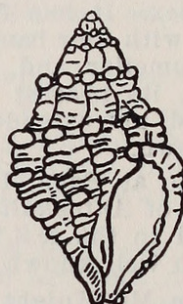
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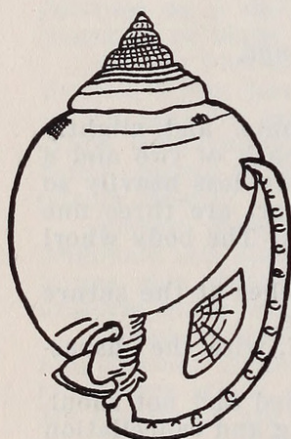
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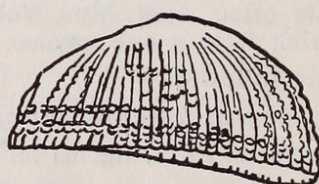
3.



4.



6.

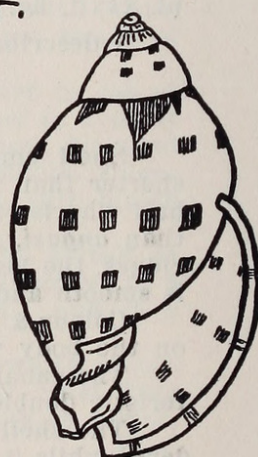


a.

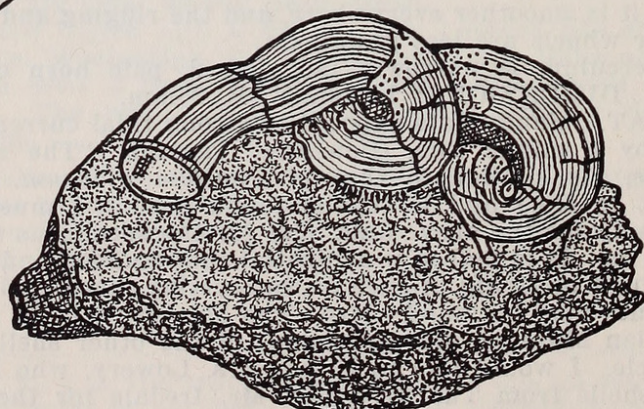


b.

7.



8.



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(Explanation on next page)

Explanation of Plate I

Gastropod Shells from New South Wales and Queensland.

1. *Morula anaxeres*.
2. *Morula biconica*.
3. *Morula margariticola*.
4. *Morula ochrostoma*.
5. *Morula uva*.
6. *Xenogalea angasi knighti*.
7. *Elegidion ticaonica*.
8. *Casmaria perryi*.
9. *Bivona constrictor*.

G. Thornley del.

Albinism in Volutes

(Plate II)

BY NATASHA JACKSON

Melo amphora knighti, subsp. nov.

Last year I was able to send a specimen of *Livonia mamilla leucostoma* Mayblom to my friend, Mr. Charles Knight, Sinclair Bay, Gloucester Is., near Bowen.

He was delighted and wrote a letter of appreciation, adding cryptically, that he hoped one day to be able to reciprocate in a like manner.

I was mystified at the time, but this year he sent along two specimens of *Melo amphora* which had the same marked albino characteristics distinguishing *Livonia mamilla leucostoma*.

Hence, if *Livonia mamilla leucostoma* Maybloom, *Umbilia hesitata howelli* Iredale and *Zoila thersites contraria* Verco, have been given sub-specific rank, I think that the albino of *Melo amphora* (Solander) which exhibits similar differential features may also be given sub-specific rank.

Mr. Knight was also good enough to provide very interesting data concerning this shell. He writes:

"I do not know of any specimens other than those collected by me.
Habitat:

All specimens taken, have been found early in the collecting season, i.e. May-June, in sandy recesses of coral reefs, at the extreme edge of the tide or even beyond, at low spring tides that would give an approximate depth of 12 to 18 feet below water.

The reef here dips sharply at a little distance beyond low water, to a depth of about 7 fathoms.

This would suggest that, unlike the ordinary *Melo amphora*, which can be gathered all the year round, on sandy or muddy-sandy, weed covered flats, in comparatively shallow water, 6 feet or less, the "white" *Melo* is a deep water variety that gets caught unawares by the first low tides and then retreats into deeper water. All specimens taken by me have followed this pattern, and all have been taken from the fringing reef in Gloucester Passage, on the eastern side of Cape Gloucester.

Animal:

I have not been able to find any difference in the animal from that of the usual *Melo amphora*. It is not until the removal of the animal commences that one realises that one has found a "white" one.

Incidence:

Over a period of eight years, during which I have systematically worked Cape Gloucester's beach, flats, banks and reefs, I have only found four live specimens, and never more than one in any year until this year, when I found the two now in your possession.



Thornley, Gertrude. 1954. "Some Helmet-Shells (Cassididae) from my collection." *Proceedings of the Royal Zoological Society of New South Wales* 1952-53, 33-33.

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