NEW RECORDS OF MARINE MOLLUSCA FROM TASMANIA

BY

JULIA F. GREENHILL

Tasmanian Museum and Art Gallery, Hobart.

ABSTRACT

Recent collecting in southern Tasmania has produced three interesting species of marine molluscs not previously recorded from Tasmania. Two of these, *Maoricolpus roseus* (Quoy & Gaimard), and *Paphirus largillieri* (Philippi 1849), were previously known only from New Zealand. The third, *Speciellina donacioides* Reeve 1857, occurs in southern Australia. Except where otherwise stated, the specimens were collected by the author.

CLASS: GASTROPODA

Family: TURRITELLIDAE

*Maoricolpus roseus* (Quoy & Gaimard)

*(Pl. fig. 1.)*


This distinctive species, previously thought to be restricted to New Zealand, has been found in large numbers in the *D'Entrecasteaux Channel*, Southern Tasmania.

Localities:

(i) Two dead shells from the Macquarie Harbour area, West Coast, Tas., collected by A. M. Olsen. (Miss J. H. Macpherson-pers. comm.)


(iii) One worn specimen from Brabazon Point (locally known as One Tree Point) (T.M. 18399; E2864), and one from Randall's Bay, both in the Huon Estuary, collected in 1963 by R. C. Robertson.

(iv) Numerous live specimens dredged from *D'Entrecasteaux Channel*, from August to October, 1964 by Mr. John Farnell, Kettering. (Many of these specimens have been given to the Tasmanian Museum and the National Museum of Victoria by Mr. Farnell and Mr. Robertson. Live specimens have been kept under observation at the latter Museum.)

Remarks:

Powell (1961) states that the species is common in New Zealand, on sandy or muddy bottoms, in inter-tidal or shallow water. He mentions that where conditions are favourable, such as at Devonport, Auckland Harbour, the mollusc occurs in vast beds, in 6 to 8 fathoms, with several hundred individuals to each square yard.

Similarly Mr. Farnell, who has dredged for scallops in the *D'Entrecasteaux Channel* for many years, says that he has dredged this species from sandy or muddy bottoms throughout the Channel, in depths ranging from 2 to 10 fathoms, and in large quantities. However, no inter-tidal specimens have been recorded.

Dimensions of the Tasmanian specimens compare well with those of New Zealand specimens of *Maoricolpus roseus* given by Powell (1931, p. 100), and differ from those of Mr. *roseus manukauensis* Powell 1931.

<table>
<thead>
<tr>
<th>Species from <em>D'Entrecasteaux Channel</em>, Tas.</th>
<th>Height</th>
<th>Diameter</th>
<th>Spire Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>M. roseus roseus</em> (New Zealand, various localities, from Powell, 1931).</td>
<td>41.6 mm</td>
<td>14.0 mm</td>
<td>21 degrees</td>
</tr>
<tr>
<td></td>
<td>60.0 mm</td>
<td>17.8 mm</td>
<td>19 degrees</td>
</tr>
<tr>
<td></td>
<td>66.5 mm</td>
<td>21.4 mm</td>
<td>22 degrees</td>
</tr>
<tr>
<td></td>
<td>75.5 mm</td>
<td>23.2 mm</td>
<td>21 degrees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><em>M. roseus manukauensis</em> (Holotype)</th>
<th>Height</th>
<th>Diameter</th>
<th>Spire Angle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>59.00 mm</td>
<td>13.00 mm</td>
<td>14 degrees</td>
</tr>
</tbody>
</table>

The colouring also is similar to that given by Suter (1913, p. 271) for New Zealand specimens—"yellowish or reddish-brown, faintly marbled with dark brown, the raised cinguli usually of darker brown".

*M. roseus* probably became established in the Channel from 20-40 years ago, since Mr. Farnell has specimens collected over 20 years ago, and the species was not recorded by W. M. May, who dredged for molluscs in the Channel in the 1920's. Judging by the number of specimens taken in his scallop dredges, Mr. Farnell believes that the species is rapidly increasing in numbers.

It is interesting that despite its abundance in relatively shallow water, dead shells are very rare on beaches. This may be due to the action of small hermit crabs which are common in dredged material from this area, and inhabit *Maoricolpus* and similar shells.
CLASS: PELECYPODA

Family: VENERIDAE

Paphirus largillierti (Philippi 1849)  
(PL., figs. 2, 3.)

Venus intermedia Q. & G. 1835, Voy. Astrolabe (iii),  
p. 526, pl. 84, f. 9, 10.

Paphia intermedia Q. & G. 1835: Suter 1913,  
Manual N.Z. Moll., p. 995, pl. 61, f. 6a.

Venus largillierti Philippi 1847, Zeitsch. Malak.,  
p. 87.

Paphirus largillierti (Phil.), Finlay 1927, Trans.  

Mus., p. 182. (For full synonymy see Suter  
1913.)

This New Zealand species, described by Powell  
(1961) as being common on sandy beaches, has  
recently been found in southern Tasmania. It  
occurring on several sandy beaches in the Derwent  
Estuary, and is very common on the Spit, behind  
Gellibrand Point, Ralphs Bay. Sometimes large  
numbers are washed ashore at Long Point, Sandy  
Bay.

The first specimens brought to my notice were  
collected at Blackmans Bay by the Rev. P. Noonan  
in early 1963.

Localities:

(i) Blackmans Bay, Derwent Estuary. Several  
specimens collected in early 1963 and on 27th  
18326/E2802, 18736/E31301).

(ii) Richardson's Beach, Ralphs Bay, Derwent  
Estuary. Collected in early 1963 by Miss E. J.  
Howard.

(iii) Pirates Bay, Eaglehawk Neck. A single  

(iv) Beaches at Sandy Bay, near Hobart,  
Derwent Estuary. Various dates from 14th December,  
1963. Collected by Misses E. Aves and E. J.  
Howard, and the author. (T.M. collection).

(v) Mary Ann Beach, Derwent Estuary, October,  
1964.

(vi) The Spit, Gellibrand Point, Ralphs Bay,  
Derwent Estuary. Numerous specimens collected  

(All these specimens were dead shells.)

Remarks:

The colouring of the Tasmanian specimens agrees  
with that described for New Zealand shells by  
Suter (1913, p. 995), but there is considerable  
variation among the specimens. A fairly large shell  
from Eaglehawk Neck resembles young shells from  
other areas in being rather lightly built and having  
brown zig-zag markings, as described by Suter for  
young N.Z. specimens. The large shells from Sandy  
Bay and Ralphs Bay, however, are very robust,  
coarse shells with no zig-zag markings, but often  
with an olive-green epidermis. (It is interesting  
that Suter (p. 996) remarks that “specimens from  
the Auckland Islands are brown, very large and  
solid.”).

Suter (1913) and Powell (1961 pl. 15) give 57 mm.  
x 41 mm. as the dimensions of P. largillierti. This  
agrees with the local specimens, one from Sandy  
Bay measuring 59.3 mm. x 42.9 mm. The largest  
shell collected is 61.3 mm. x 44.0 mm.

The numbers of P. largillierti present, and their  
size and wide distribution in the Derwent Estuary  
indicate that the species has been established for  
some time. The approximate age of the largest  
shells, estimated by counting annual growth rings  
(Powell 1961, p. 197), varies from 8 to 10 years.

The robust specimens common at Sandy Bay bear  
a superficial resemblance to Katelysia rhytiphora  
Lamy 1857, and this may be the reason they have  
been overlooked by recent workers. However, they  
are oval-oblong in shape, rather than the wedge- 
shape of typical K. rhytiphora. Young specimens  
also may resemble Pullastria fabagella (Deshayes  
1853), a species with which they have been  
confused in New Zealand (Macwick 1927, p. 633), and  
which occurs at the same localities in Tasmania.  

Kershaw (1958, p. 68) says “Katelysia scalarina  
is generally found, and at Sandy Bay near Hobart  
itis a robust shell associated with K. corrugata”  
(= K. rhytiphora). Again he says (p. 80) “near  
the entrance to Pipe Clay Lagoon a typical sandy  
exposed beach fauna was obtained . . . . A similar  
fauna exists at Sandy Bay near Hobart, and here  
Katelysia scalarina and K. corrugata are robust  
shells.”

May (1923) lists K. scalarina as very common in  
sheltered inlets, and K. rhytiphora as common in  
sheltered bays, and Nielsen (1963, p. 224) says K.  
scalarina is usually found in quiet, sheltered sandy  
bays. Kershaw also describes K. scalarina as a  
“sheltered” bivalve (p. 79) and in Table 2 (p. 92),  
lists both K. scalarina and K. corrugata (=-K.  
rhytiphora) as occurring only in sheltered areas  
in the south. It is therefore surprising that he  
includes these species in a “typical sandy exposed  
beach fauna” such as he states exists at Sandy  
Bay.

The writer has found no specimens of Katelysia  
spp. at Sandy Bay, and these facts suggest that  
Kershaw may have mistaken specimens of P.  
largillierti for Katelysia spp.

Family: SANGUINOLARIIDAE

Soletellina donacoides Reeve 1857.  
(Pl., Fig. 4.)

Soletellina donacoides Reeve 1857, Conch. Icon., 10,  
pl. 3, sp. 11.

Flevomala donacoides Reeve 1857: Macpherson &  
p. 153.

This species, previously known from Victoria and  
South Australia, has been found to be common at  
Sandy Bay, particularly at Nutgrove Beach and  
Derwentwater Beach (also known as West Point  
Beach). Live specimens are sometimes washed  
ashore.

Localities:

(i) Sandy Bay, near Hobart, Derwent Estuary,  
Tas. Various dates from 26th January, 1963. (T.M.  
Collection).

Remarks:
Specimens from this area show some variation in colouring. Some are purple, as described by Macpherson & Gabriel (1962) for Victorian specimens, but others are predominantly cream, both internally and externally, with varying amounts of purple. The epidermis also varies from the typical semi-transparent horn colour, some specimens having the epidermis thick and blackened towards the edges, while in others it is reddish-brown.

The largest specimen collected measures 44 mm. x 24 mm.

ACKNOWLEDGMENTS
My thanks are due to Miss J. Hope Macpherson National Museum of Victoria, for advice and help with identification and to Mr. Ralph Robertson, of Hobart (formerly of Cygnet), who supplied information about Maoricolpus roseus included in this paper, and who has also generously provided me with many specimens. I am also grateful to Misses Joyce Howard and Elizabeth Aves, and to Rev. P. Noonan and Mr. J. Farnell, who have all supplied information and specimens which are included in the Tasmanian Museum collection.

ADDENDUM
Since this paper went to press, another New Zealand species which is established in southern Tasmania has been found.

Family: NUCULANIDAE.

Neilo australis (Quoy & Gaimard 1835)
Neilo australis (Q. & G.); Smith, 1874, "Ereb. & Ter.", p. 6, pl. 2, f. 13.
Malletia australis (Q. & G.); Suter 1913, Man. N.Z. Moll., p. 837, pl. 58.


A series of bottom grabs was made across the Derwent Estuary from Howrah to Long Point, Sandy Bay. Living and dead specimens were obtained from the mud bottom, from depths of 20 to 80 feet. The only other live molluscs taken in the grab were a few specimens of Scaeoleda crassa (Hinds 1843). Numerous dead specimens of N. australis were also obtained from a single haul with a dredge off Long Point, in about 20 feet.

Remarks:
The habitat is similar to that given by Powell (1961, pl. 10) for New Zealand specimens—"deep water, mud bottom". However, as Powell (1961) and Suter (1913) both describe the species as rare or very rare, it is surprising that in the section of the Derwent Estuary investigated Neilo australis was present in large numbers. The largest shell collected was 32.7 mm. x 17.0 mm. This is smaller than the type, which is 36 mm. x 18 mm. (Suter, op. cit.) Local specimens agree with Suter's description.

ACKNOWLEDGEMENT
I am grateful to Dr. E. R. Guiler, Zoology Dept., University of Tasmania, for the use of the "Neotrigonia", and for assistance in obtaining specimens of N. australis.

REFERENCES.


—, 1888.—Ibid., Vol. 14, pl. 11, sp. 59.

Fig. 1.—Maoricolpus roseus (Q. & G.).

Fig. 2.—Paphirus largillieri (Phil.).

Fig. 3.—Paphirus largillieri (Phil). Young specimen. 27.4 mm. x 21.0 mm.

Fig. 4.—Soleteilla donacioides, Reeve 1857.

F.P.79.