

NOTES ON THE MOST COMMON MACRO-GASTROPODS IN THE ROSS RIVER ESTUARY

Telescopium telescopium

This large mud whelk is found mainly in tidal drains that do not have a strong current in them. The substrate is usually firm mud and some water is often tamed in the drains. Often the whelks can be found in areas that receive a lot of light. This species is found at the very top end of drains. These congregation spots are often characterised by a lot of dead shells that have been killed by either desiccation or fresh water. *T. telescopium* can occur in quite heavy population densities in favoured areas. Usually, *telescopium* is found in association with two other species of mud whelks *Terebralia semitrisulcata* and *Terebralia palustris*.



Terebralia semitrisulcata* & *T. palustris

These two whelks have much the same habitat as *Telescopium telescopium*, except that they are not found in the upper reaches of drains and they seem to prefer the slightly drier grounds away from the edge of the drain. *Terebralia palustris* is not as common as *T. semitrisulcata*. The two species can be distinguished by the siphonal canal that is fully closed in *T. semitrisulcata*.

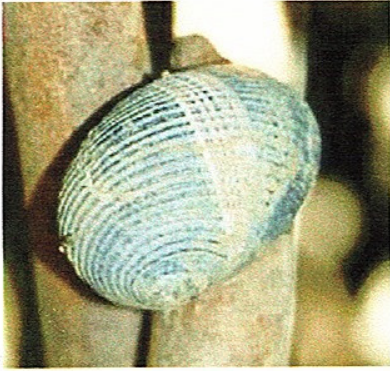
Cassidula angulifera

This species is one of the most common macro-gastropods in the Ross River estuary, in its favoured habitat. It is found on firm mud and on the trunks and aerial roots of mangroves away from the main annals and drains. It is often, but not always found in association with the mangroves *Ceriops tagal*, *Avicennia marina* and *Aegialitis anulata*, which form a dense canopy above the humid substrate on which *C. angulifera* prefers to live.



Cerithidea anticipata

This species is most often encountered on the trunks of *Avicennia marina* in a similar habitat as *Cassidula angulifera*. It has been observed in close association with *C. angulifera* on trunks 1 to 2 m above the mud. This is not a common encountered species but that may be because it is easily overlooked due to its often high position on trunks.



Nerita articulata

Neritas have a thick and round shell and are often found on or at the base of *Rhizophora stylosa* (roots) near channels which don't have a soft floor. It also occurs in other habitats and seems to have a very patchy distribution, so it is not easy to outline its habitat preference.



***Littorina scabra* (species complex)**

What first was described as a highly variegated species is now considered to be a complex of 12 closely related and hardly distinguishable species. The gastropods all live on the leaves (and branches) of most mangrove species, often in areas of high light intensity. *Littorina*'s are most common on *Avicennia marina* trees that are inundated at high tide or splashed by waves at the seaward side of estuaries.

... AND OTHER MOLLUSC CRAWLERS

Onchidium daemellii

Onchidium species have not been encountered in sufficient numbers to determine their habitat preferences. These warty greyish nudibranchs blend in perfectly with the structures of the muddy soil. They have only been spotted in the cooler months and they may spend the summer time buried in the soft mud – they are excellent diggers.



Enigmonica aenigmatica

This mobile bivalve, moving around with the help of its foot and byssus, is part of a very special genus of the family Anomiidae. It is a filter feeder tolerant to emersion and salinity changes, including episodic fresh water. It is mainly an Indo-Malayan species. Its occurrence in the Ross River Estuary is probably near the southern limit of the latitudinal extension of the genus. And the species is here almost restricted to *Rhizophora* trunks and roots.



Table IG-02: **Distribution and Density** (no's recorded per site in 2 x 20 min search periods) **of the most common Macro-gastropods in the Ross River estuary.**

Site No	Site Name	Most common macro-gastropods								Total Species Count
		<i>Nerita articulata</i>	<i>Cassidula angulifera</i>	<i>Telescopium telescopium</i>	<i>Cerithidea anticipata</i>	<i>Littorina scabra</i>	<i>Onchidium deamellii</i>	<i>Terebralia semitrisulcata</i>	<i>Terebralia palustris</i>	
1	Archer / Benwell Street	1				8				2
2	South Bank		255	12	100	36		7	1	12
3	Bumphead Creek	5	97	77	12	9	9	2		7
4	Goondi Creek E, Samphire Drv	15	87	23	4	2	1	13		8
5	Goondi Creek W, Samphire Drv	7	26	13	11			48		5
6	8th Street, Railway Estate	5	12							3
7	Grid 2	9	36	50	3		2	44	19	9
8	Grid 3	2	59	29	12	1	10			6
9	Grid 4	9	65	190	8	4	6		27	7
10	Desmond Street	71	56		12	1			6	7
11	Ooonoonba Park - tidal drains	25	2	3		1	1			7
12	Carmody Street	11			1	3				4
13	Tyack St / Ross River Bridge	2		30						3
14	Love Lane Park									1
15	Aplins Weir									0
16	Causeway	1					5			4
<i>No. of sites the species occurs</i>		13	10	9	9	9	7	5	4	
<i>Total recorded per species</i>		163	695	427	163	65	27	114	53	

Table IG-03: **Percentage of the Individuals found in Trees for the most common Macro-Gastropods in the Ross River Estuary.**

Macro-Gastropod	Total	% in trees	Height	Preferred tree (pref.)
<i>Littorina scabra</i>	65	86.2%	96	<i>Avicennia marina</i> (84%)
<i>Nerita articulata</i>	163	54.0%	88	<i>Rhizophora stylosa</i> (58%)
<i>Cerithidea anticipata</i>	163	16.6%	81	<i>Avicennia marina</i> (89%)
<i>Cassidula angulifera</i>	897	13.7%	89	<i>Avicennia marina</i> (63%)
<i>Onchidium deamellii</i>	34	5.9%	25	
<i>Terebralia palustris</i>	85	1.2%		
<i>Terebralia semitrisulcata</i>	124	0.8%		
<i>Telescopium telescopium</i>	527	0%		
Total = number of each species recorded so far; Height = average height of individuals found in trees, (pref.) = percentage of individuals that were found on this tree species				

Figure IG-01: Survey sites of the Invertebrate Group along the Ross River and its tributaries

Site No	Site Name
1	Archer / Benwell Street
2	South Bank
3	Bumphead Creek
4	Goondi Creek W, Samphire Drv
5	Goondi Creek E, Samphire Drv
6	8th Street, Railway Estate
7	Grid 2
8	Grid 3
9	Grid 4
10	Desmond Street
11	Ooononba Park - tidal drains
12	Carmody Street
13	Tyack St / Ross River Bridge
14	Love Lane Park
15	Aplins Weir
16	Causeway

