

Part IV

Molluscs

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Abstract

A total of 389 macromollusc species, all of which are widespread Indo-West Pacific forms, are recorded from Scott and Seringapatam Reefs and the Rowley Shoals. The fauna is distinct from that of the adjacent continental mainland, as is indicated by the 70 new records for Western Australia. In addition many species rare along the continental coastline are common on the offshore reefs. There is a considerable overlap in the mollusc faunas of the Rowley Shoals and Scott and Seringapatam Reefs. Differences found can be attributed to variations in habitats sampled in the two systems and human influences.

Background and discussion

Molluscs were collected in as many habitats as possible using a variety of techniques: intertidal and beachdrift collecting, scuba diving and snorkelling. Limited dredging was done around Bedwell I. at the Rowley Shoals.

In all, 389 macromollusc species are recorded here from collections made on the two expeditions. Many of these species were collected at one station only. All are widespread Indo-West Pacific species. The fauna clearly differs from that previously recorded along the continental mainland (Hedley 1916; Wells, in press; Wells 1978; Wells and Bryce 1986; Wilson and Gillett 1979; Wilson 1985), as is demonstrated by the fact that 70 species are new records for Western Australia. This figure will probably increase when the unidentified species have been fully analysed. In addition many of the species common on the offshore islands have been recorded only as isolated records along the mainland coast. There was a considerable overlap in the molluscan faunas of Scott/Seringapatam Reefs (279 species) and Rowley Shoals (260 species), with 150 species being common to both areas. Of the 239 species found only at one of the reef systems 138 were

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found only at a single station. Despite the similarities, several important differences were noted between the faunas of Scott Reef and Rowley Shoals. The presence of sand dwelling species such as *Strombus luhuanus*, *Cassis cornuta* and *Chicoreus brunneus* on rocks at Scott Reef and their absence at Rowley Shoals is probably a natural phenomenon. Giant clams were abundant at Rowley Shoals, with *Hippopus hippopus* and *Tridacna squamosa* common on the reef flats. Even *T. gigas* was encountered in several localities. These species were all present at Scott Reef, though in much lower numbers. They are a preferred group among Indonesian fishermen who regularly visit Scott Reef, and fishermen were observed collecting giant clams at the southern end of the reef during our field trip. Indonesian fishermen are prohibited by the Australian government from fishing at Rowley Shoals, and there giant clams are much more numerous.

The richest area for molluscs on the Rowley Shoals was the lower intertidal on the east side of Bedwell Island on Clerke Reef and on Sandy Islet at Scott Reef. The lower intertidal zone at both areas was a gradually sloping sandflat with some rocks, many of which were small enough to be overturned. The sandy habitat was dominated by cones, terebrids and ceriths while the rocky area was dominated by thaids and cones. There were also species of nerites, mitres, cowries, and buccinids collected in the rocks.

The area dredged around Bedwell I. was essentially a subtidal continuation of the intertidal sand habitat. Little dredging was carried out and that was with a dredge of approximately 2 cm mesh size. Only 23 molluscan species were recorded, 16 of which were also recorded at non-dredging stations. Nassariids were the most commonly represented group in the dredged material.

A diverse molluscan fauna was present on the reef flat of both systems. Many species not previously or only rarely recorded in Western Australia were common there. The most spectacular was the large species of giant clam, *Tridacna squamosa*, while other species of tridacnids were also abundant. The vase shell *Vasum turbinellus*, a new record for Western Australia, was one of the most abundant on the reef flat. The related *V. ceramicum* was rare. *Conus miles* was abundant on many areas but has been previously recorded in Western Australia only at North West Cape. *Lambis truncata* collected at Rowley Shoals was the first Western Australian record and was later found at Scott Reef. *L. chiragra* was recorded at all of the reef flat stations. The dominant groups on the reef flats, in terms of numbers of species, were cones, cowries, thaids, mitres, and ceriths.

The macromolluscan fauna of the lagoons consisted of few species although some of these were abundant. The most spectacular species were the largest of the giant clams, *Tridacna gigas*, the gryphaeid oyster, *Hyotissa hyotis*, and the cockscomb oyster, *Lopha cristigalli*. Most of the species recorded on the patch reefs and coral pinnacles also occurred on the reef flat and the sand dwellers were recorded on the intertidal sandflat at Bedwell Island. Macromolluscs did not appear to be common on the outer reef slope though there was little opportunity to investigate that habitat.

Overall the most diverse molluscan families recorded were cones (32 species), cowries (23 species), mitres (20), thaids (19) and ceriths (15). All of these are diverse groups and the large numbers of species recorded were not unexpected. However, many groups that might be expected to occur were absent. Not a single volutid and only two muricid species were collected. At the same latitude on the mainland coast and inshore islands the dominant intertidal chitons are *Acanthopleura gemmata* and *A. spinosa*. Neither species was found at Rowley Shoals or Scott Reef and in fact, only two chiton species were collected there.

Two factors are probably responsible for the limitation of molluscan diversity at Rowley Shoals and Scott Reef. These are the restricted areas of habitat types favoured by molluscs, and isolation from similar habitats. Presumably the former factor is responsible for the absence of many common Indo-Pacific species typical of oceanic localities, such as the widespread intertidal coral-rock oyster *Saccostrea cucullata*. The latter factor could account for the absence of forms that do not have a long pelagic larval life, such as volutes. However the fauna of some similarly isolated reefs in the Western Pacific is known to include such forms, e.g. *Cymbiolacea thatcheri* at the Chesterton Reefs.

Wilson (1985) collected 42 species of molluscs at Seringapatam, and representatives of all are deposited in the Western Australian Museum.

Molluscs

List of molluscs

Key to symbols:

Numbers = sampling stations (see Part I, Figures 3, 4, 5, 7 and 8; Appendix Tables 1 and 3)

o = new records for Western Australia

W = two species collected by B. Wilson and not by the Western Australian Museum in 1984.

	Rowley Shoals	Scott/Seringapatam Reefs
AMPHINEURA		
CRYPTOPLACIDAE		
<i>Cryptoplax</i> sp.	5	3
CHITONIDAE		
<i>Chiton</i> sp.		1
GASTROPODA		
HALIOTIDAE		
<i>Haliotis asinina</i> Linnaeus, 1758	7, 10	
<i>Haliotis ovina</i> (Gmelin, 1791)	1, 5, 10, 11	1, 14
o <i>Haliotis planata</i> Sowerby, 1833	2	
o <i>Haliotis crebrisculpta</i> Sowerby, 1914		15
PATELLIDAE		
<i>Patella flexuosa</i> (Quoy and Gaimard, 1834)		2, 3, 15
TROCHIDAE		
<i>Angaria delphinus</i> (Linnaeus, 1758)		2, 3, 6, 7, 14, 22
<i>Clanculus atropurpureus</i> (Gould, 1849)	7, 10, 12	
<i>Clanculus</i> sp. (juvenile)		2, 3
<i>Euchelus instrictus</i> (Gmelin, 1791)		2, 3
<i>Tectus niloticus</i> (Linnaeus, 1767)	2, 5, 10	1, 2, 3, 4, 14, 22
<i>Tectus pyramis</i> (Born, 1778)	1, 2, 5, 8, 10	1, 3, 6, 7, 9, 11,
	11, 12	14, 15, 16, 21
o <i>Tectus ?triserialis</i> (Lamarck, 1822)	6, 10	
<i>Trochus histrio</i> Reeve, 1842	5, 10	3
<i>Trochus maculatus</i> Linnaeus, 1758	2, 7, 10, 12, 16	1, 2, 7, 13, 14, 15,
		21, 22
STOMATIIDAE		
<i>Stomatia phymotis</i> (Helbling, 1779)	7, 10	
<i>Stomatella varia</i> A. Adams, 1850		18

	Rowley Shoals	Scott/Seringapatam Reefs
TURBINIDAE		
○ <i>Astraea rhodostoma</i> (Lamarck, 1822)	2	
<i>Turbo argyrostomus</i> Linnaeus, 1758	2, 5, 8, 10	1, 3, 15
<i>Turbo chrysostomus</i> Linnaeus, 1758	1, 2, 5, 6, 7, 10, 11, 12	3, 7, 9, 11, 12, 14, 15, 22
<i>Turbo petholatus</i> Linnaeus, 1758		15
<i>Turbo ?radiatus</i> Gmelin, 1791 (juvenile)	7, 10, 11, 12	
MODULIDAE		7
<i>Modulus tectum</i> (Gmelin, 1791)		
NERITIDAE		
<i>Nerita albicilla</i> Linnaeus, 1758	15, 16	2, 3, 7, 14, 22
<i>Nerita plicata</i> Linnaeus, 1758	15, 16	2, 3, 7, 14
<i>Nerita polita</i> Linnaeus, 1758	15, 16	7, 14
LITTORINIDAE		
<i>Littorina undulata</i> Gray, 1839	15, 16	2, 3, 22
ARCHITECTONICIDAE		
<i>Philippia radiata</i> (Röding, 1798)	15	2, 3, 22
VERMETIDAE		
Vermetid sp.		2, 3, 7
CERITHIIDAE		
<i>Cerithium alveolus</i> Hombron and Jacquinot, 1854	7	
<i>Cerithium atromarginata</i> Dautzen- berg and Bouge, 1933	7, 12	2, 3
<i>Cerithium columna</i> Sowerby, 1831	7, 12, 16	1, 2, 3, 14, 16
<i>Cerithium echinatum</i> Lamarck, 1822	14	W
<i>Cerithium egenum</i> Gould, 1849	12	
<i>Cerithium nesioticum</i> Pilsbry and Vanatta, 1905	7, 10	2, 3
<i>Cerithium nodulosus</i> Bruguiere, 1792	2	1, 2, 3, 7, 9, 11, 14, 22
<i>Cerithium salebrosum</i> Sowerby, 1855		16
<i>Cerithium trailli</i> (Sowerby, 1855)		8
<i>Hypotrochus</i> sp.		14
<i>Rhinoclavis articulatus</i> (Adams and Reeve, 1850)	15	2, 3, 6, 22
○ <i>Rhinoclavis asper</i> (Linnaeus, 1758)	7, 10, 16	1, 6, 16
<i>Rhinoclavis fasciatus</i> (Bruguiere, 1792)	14	2, 3, 16
<i>Rhinoclavis sinensis</i> (Gmelin, 1791)	2, 10, 16	1, 2, 3, 13, 14, 17, 21, 22
<i>Rhinoclavis vertagus</i> (Linnaeus, 1767)	16	

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	Rowley Shoals	Scott/Seringapatam Reefs
TRIPHORIDAE		
<i>Triphora</i> sp.	7, 10	1
EULIMIDAE		
sp. 1	7	1
<i>Stylifer</i> sp.	5	
<i>Thyca crystallina</i> (Gould, 1846)		17
VANIKORIDAE		
<i>Vanikoro cancellata</i> (Lamarck, 1822)		14
HIPPONICIDAE		
<i>Hipponix conicus</i> (Schumacher, 1817)	2, 5, 7, 10, 11 12, 14, 16	14, 22
STROMBIDAE		
<i>Lambis chiragra</i> (Linnaeus, 1758)	2, 5, 7, 10, 11, 12, 16	2, 3, 4, 6, 9, 11, 14, 16, 22
<i>Lambis lambis</i> (Linnaeus, 1758)		2, 3, 22
<i>Lambis truncata</i> (Humphrey, 1786)	11	5
○ <i>Strombus dentatus</i> Linnaeus, 1758		3
<i>Strombus gibberulus</i> Linnaeus, 1758	16	6, 16, 22
○ <i>Strombus latissimus</i> Linnaeus, 1758		3
<i>Strombus lentiginosus</i> Linnaeus, 1758	16	2, 3, 5, 14, 21, 22
<i>Strombus luhuanus</i> Linnaeus, 1758		2, 3, 4, 6, 7, 13, 14, 22
<i>Strombus mutabilis</i> Swainson, 1821	16	2, 3, 6, 21
NATICIDAE		
○ <i>Natica bougei</i> Sowerby, 1908		2, 3
<i>Natica gualteriana</i> (Recluz, 1844)	16	2, 3
<i>Natica robillardii</i> Sowerby, 1843	16	
<i>Polinices melanostomus</i> (Gmelin, 1791)	16	22
<i>Polinices powisiana</i> (Recluz, 1844)		14
<i>Polinices tumidus</i> (Swainson, 1840)	16	1, 2, 3, 6, 15, 22
LAMELLARIIDAE		
<i>Chelynotus tonganus</i> (Quoy and Gaimard, 1832)	5, 8, 10, 12	
CYPRAEIDAE		
<i>Cypraea annulus</i> Linnaeus, 1758	1, 22	1, 2, 3, 7, 9, 11
<i>Cypraea arabica</i> Linnaeus, 1758		2, 3, 7, 13, 14, 21
<i>Cypraea asellus</i> Linnaeus, 1758	10	
<i>Cypraea caputserpentis</i> Linnaeus, 1758	2, 10, 16	2, 3, 9, 11, 14, 15, 16
<i>Cypraea carneola</i> Linnaeus, 1758	2, 7, 10, 12, 14	21
<i>Cypraea chinensis</i> Gmelin, 1791		13
○ <i>Cypraea depressa</i> Gray, 1824	10	13, 14, 21

	Rowley Shoals	Scott/Seringapatam Reefs
<i>Cypraea erosa</i> Linnaeus, 1758	2, 7, 16, 22	1, 2, 3, 6, 13, 14, 21, 22
<i>Cypraea helvola</i> Linnaeus, 1758	16	
<i>Cypraea hirundo</i> Linnaeus, 1758	15	13
<i>Cypraea histrio</i> Linnaeus, 1758	12, 16	2, 3, 6, 21
<i>Cypraea isabella</i> Linnaeus, 1758	7, 10, 12, 22	2, 3, 13, 15, 21, 22
<i>Cypraea kieneri</i> Hidalgo, 1906		17
<i>Cypraea labrolineata</i> Gaskoin, 1848		2, 3, 6, 13, 15
<i>Cypraea lynx</i> Linnaeus, 1758	7, 10	7, 13, 15
<i>Cypraea moneta</i> Linnaeus, 1758	7, 10, 16	1, 2, 3, 14, 16
<i>Cypraea nucleus</i> Linnaeus, 1758	15	
<i>Cypraea poraria</i> Linnaeus, 1758	10	
<i>Cypraea staphylaea</i> Linnaeus, 1758		3, 13, 17
<i>Cypraea talpa</i> Linnaeus, 1758		2, 3
<i>Cypraea testudinaria</i> Linnaeus, 1758		14
<i>Cypraea tigris</i> Linnaeus, 1758	2, 5, 7, 10, 11, 12	1, 2, 3, 7, 9, 11, 15, 22
<i>Cypraea vitellus</i> Linnaeus, 1758	2, 10	3, 13
OVULIDAE		
○ <i>Calpurneus lacteus</i> (Lamarck, 1810)	10	
<i>Phenacovolva</i> sp.		1
TRIVIIDAE		
<i>Trivia oryza</i> (Lamarck, 1810)	7	
CASSIDAE		
<i>Casmaria erinacea</i> (Linnaeus, 1758)	10, 12, 16, 22	2, 3, 13, 14, 21
<i>Cascis cornuta</i> (Linnaeus, 1758)		6, 22
<i>Cassis fimbriata</i> Quoy and Gaimard, 1833	7	
○ <i>Cassis rufa</i> (Linnaeus, 1758)		21
TONNIDAE		
<i>Malea pomum</i> (Linnaeus, 1758)	15	2, 3, 6, 7, 22
<i>Tonna perdix</i> (Linnaeus, 1758)		3
CYMATIIDAE		
<i>Charonia tritonis</i> (Linnaeus, 1758)		2, 3
○ <i>Cymatium aquatile</i> (Reeve, 1844)	7, 10	3
<i>Cymatium clandestinum</i> (Lamarck, 1816)	11	3
<i>Cymatium gemmatum</i> (Reeve, 1844)	7, 10, 12	
<i>Cymatium hepaticum</i> (Röding, 1798)	11, 14	
<i>Cymatium rubecula</i> (Linnaeus, 1758)	2	5, 10, 16
○ <i>Distorsio anus</i> (Linnaeus, 1758)	10	2, 3
<i>Gutturnium muricinum</i> (Gmelin, 1791)	12	2, 3
<i>Septa gemmata</i> (Reeve, 1844)	2, 14	2, 3, 13, 14
<i>Septa hepatica</i> (Röding, 1798)		13

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	Rowley Shoals	Scott/Seringapatam Reefs
BURSIDAE		
○ <i>Bursa bufonia</i> Gmelin, 1791	7, 12, 22	7, 14, 17, 21, 22
○ <i>Bursa cruentata</i> (Sowerby, 1841)	5, 10, 11, 12, 14, 16, 22	3, 7, 13, 17, 21
<i>Bursa granularis</i> (Röding, 1798)	7, 12, 16	
<i>Colubrellina granularis</i> (Röding, 1798)		2, 3, 7, 14, 21
<i>Tutufa bubo</i> (Linnaeus, 1758)		2, 3, 14
<i>Tutufa rubeta</i> (Linnaeus, 1758)		17
COLUBRARIIDAE		
<i>Colubraria</i> sp.		21
MURICIDAE		
<i>Chicoreus brunneus</i> (Link, 1807)		2, 3, 7, 9, 11, 15, 21,
<i>Muricid</i> sp.	12	22
THAIDIDAE		
<i>Drupa grossularia</i> (Röding, 1798)		1, 2, 3, 7, 9, 11, 14, 16, 21, 22
<i>Drupa morum</i> (Röding, 1798)	16	2, 3, 7, 13, 14, 16
<i>Drupa ricinus</i> (Linnaeus, 1758)	2, 10, 16	1, 2, 3, 7, 9, 11, 16, 21
<i>Drupa rubusidaeus</i> Röding, 1798	2, 16	1, 2, 3, 7, 14, 16, 21
<i>Drupella cornus</i> (Röding, 1798)	2, 9, 13, 16	1, 2, 3, 7, 9, 11, 14, 15, 21
○ <i>Maculotriton serriale</i> (Deshayes, 1834)	7	2, 3, 21
<i>Mancinella tuberosa</i> (Röding, 1798)	11	13, 15, 16, 22
<i>Morula biconica</i> Blainville, 1832	10	2, 3, 7
○ <i>Morula fiscella</i> (Gmelin, 1790)	16, 22	2, 3, 6, 14, 17, 22
<i>Morula granulata</i> (Duclos, 1832)	16	2, 3, 7, 14, 16
<i>Morula nodicostata</i> (Pease, 1868)	16	2, 3, 14, 21
<i>Morula</i> sp.	10	
<i>Morula spinosa</i> (H. and A. Adams, 1835)	2, 10, 16	14, 21
<i>Morula triangulata</i> (Pease, 1868)	10, 16	
<i>Morula uva</i> (Röding, 1798)	2, 7, 10, 16	9, 11, 21
<i>Muricodrupa funiculus</i> (Wood, 1828)	A	
○ <i>Nassa serta</i> (Bruguiere, 1789)		2, 3, 7
<i>Thais aculeata</i> (Deshayes, 1844)		2, 3
○ <i>Thais armigera</i> (Link, 1807)		2, 3, 7, 14, 22
CORALLIOPHILIDAE		
<i>Coralliphila costularis</i> (Lamarck, 1816)	14	
○ <i>Coralliphila ?craticulatus</i> (Linnaeus, 1758)	2	

	Rowley Shoals	Scott/Seringapatam Reefs
○ <i>Coralliphila erosa</i> (Röding, 1798)	12	
<i>Coralliphila stearnsii</i> Pilsbry, 1895		2, 3
<i>Coralliphila violacea</i> (Kiener, 1836)	2, 9, 14	1, 9, 11, 14, 15, 16, 17
<i>Rapa rapa</i> (Gmelin, 1791)	7, 12	
COLUMBELLIDAE		
<i>Pyrene punctata</i> (Bruguiere, 1789)		1, 6
<i>Pyrene testudinaria</i> (Link, 1807)	10	
<i>Pyrene turturina</i> (Lamarck, 1822)		4, 15
<i>Pyrene varians</i> Sowerby, 1832	7, 10, 11	4, 15
BUCCINIDAE		
<i>Cantharus undosus</i> (Linnaeus, 1758)	7, 10, 16	2, 3, 7, 13, 14, 15, 21
<i>Engina alveolata</i> (Kiener, 1836)	16	
○ <i>Engina lineata</i> (Reeve, 1846)	10, 16	3, 14, 17, 21
<i>Engina mendicaria</i> (Linnaeus, 1758)		2, 3, 14
<i>Engina zaticum</i> Melvill, 1893	7, 10	
<i>Nassaria</i> sp.		1
NASSARIIDAE		
<i>Nassarius albescens</i> (Dunker, 1846)	7, 10, 16	2, 3, 21
<i>Nassarius gaudiosus</i> (Hinds, 1844)	10	21
○ <i>Nassarius graniferus</i> (Kiener, 1834)	16	
○ <i>Nassarius horridus</i> (Dunker, 1847)	16	
○ <i>Nassarius papillosus</i> (Linnaeus, 1758)	14	
FASCIOLARIIDAE		
<i>Fusinus undatus</i> Gmelin, 1791		2, 3
<i>Latirolagena smaragdula</i> (Linnaeus, 1758)	5, 10, 12	1, 2, 3, 9, 11, 14, 16
○ <i>Latirus craticulatus</i> (Linnaeus, 1758)	2, 5	1
○ <i>Latirus nodatus</i> (Gmelin, 1791)	7, 10	1, 3, 22
<i>Latirus polygonus</i> (Gmelin, 1791)	2, 5, 11	
<i>Latirus</i> sp.	5	
<i>Latirus turritus</i> (Gmelin, 1790)	14, 16	2, 3, 4, 16, 17
<i>Peristernia fastigatum</i> (Reeve, 1847)	10	2, 3, 7
<i>Peristernia nassatula</i> (Lamarck, 1822)	2, 7, 10, 12, 16	13, 16, 17, 21
<i>Peristernia ustulatus</i> (Reeve, 1847)		1
<i>Pleuroploca filamentosa</i> (Röding, 1798)	2	7, 13, 14, 17
OLIVIDAE		
<i>Oliva annulata</i> (Gmelin, 1791)	16	1, 2, 3, 5, 14, 22
<i>Oliva caerulea</i> (Röding, 1798)		5, 22
○ <i>Oliva cf. panniculata</i> Duclos, 1835		22
○ <i>Oliva tessellata</i> Lamarck, 1811		21, 22
○ <i>Oliva textilina</i> Lamarck, 1811		22

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	Rowley Shoals	Scott/Seringapatam Reefs
MITRIDAE		
○ <i>Cancilla filaris</i> (Linnaeus, 1758)	14, 16	
○ <i>Imbricaria olivaeformis</i> (Swainson, 1821)		3
<i>Imbricaria punctata</i> (Swainson, 1821)	7, 16	1
○ <i>Mitra acuminata</i> Swainson, 1824	5, 10	2, 3, 7, 13, 14, 17
○ <i>Mitra coffea</i> Schubert and Wagner, 1829	10	
<i>Mitra chrysalis</i> Reeve, 1844		14
○ <i>Mitra chrysostoma</i> Broderip, 1836		1
○ <i>Mitra cucumerina</i> Lamarck, 1811		17
○ <i>Mitra decurtata</i> Reeve, 1844		2, 3
<i>Mitra eremitarum</i> Röding, 1798	10	
<i>Mitra imperialis</i> Röding, 1798		2, 3
<i>Mitra litterata</i> Lamarck, 1811	16	2, 3
<i>Mitra mitra</i> (Linnaeus, 1758)	16	2, 3, 6, 14, 21, 22
○ <i>Mitra paupercula</i> (Linnaeus, 1758)	15	2, 3, 7, 14
<i>Mitra retusa</i> Lamarck, 1811		3
○ <i>Mitra cf. rubritincta</i> Reeve, 1844		1
<i>Mitra stictica</i> (Link, 1807)		17
<i>Neocancilla papilio</i> (Link, 1807)	16	6, 22
○ <i>Pterygia dactylus</i> (Linnaeus, 1767)		14
○ <i>Pterygia nucea</i> (Gmelin, 1791)		2, 3
COSTELLARIIDAE		
<i>Vexillum cadaverosum</i> , Reeve, 1844		1
○ <i>Vexillum consanguineum</i> (Reeve, 1845)		17
<i>Vexillum deshayesi</i> Reeve, 1844		16
○ <i>Vexillum exasperatum</i> Gmelin, 1791		1, 15, 21
○ <i>Vexillum granosum</i> Gmelin, 1790		17
<i>Vexillum cf. rosea</i> Broderip, 1836		12, 16
○ <i>Vexillum sanguisugum</i> Linnaeus, 1758		21
○ <i>Vexillum semicostatum</i> Anton, 1839		?
<i>Vexillum cf. semifasciatum</i> Lamarck, 1811 (juvenile)		16
<i>Vexillum speciosum</i> (Reeve, 1844)		2, 3
○ <i>Vexillum cf. turrigerum</i> (Reeve, 1845)	5	16
<i>Vexillum zelotypum</i> (Reeve, 1845)		15
VASIDAE		
<i>Vasum ceramicum</i> (Linnaeus, 1758)	2, 5, 7, 10, 11, 12	7, 9, 11, 14, 15, 16, 21, 22
○ <i>Vasum turbinellus</i> (Linnaeus, 1758)	1, 10	1, 3, 7, 9, 11, 14, 21
HARPIDAE		
<i>Harpa amouretta</i> Röding, 1798		13

	Rowley Shoals	Scott/Seringapatam Reefs
TURRIDAE		
○ <i>Daphnella botanica</i> Hedley, 1918	14	
cf. <i>Eucithara funiculata</i> (Reeve, 1846)		16
○ cf. <i>Eucyclotoma albomacula</i> Kay, 1979	10	
○ <i>Lienardia rubida</i> (Hinds, 1844)	7	
○ <i>Pseudodaphnella pulchella</i> (Pease, 1860)	7	
sp. 1	16	21
CONIDAE		
<i>Conus arenatus</i> Hwass in Bruguere, 1792		2, 3, 4, 6, 14
<i>Conus balteatus</i> Sowerby, 1833		
<i>Conus capitaneus</i> Linnaeus, 1758		2, 3, 4, 17, 21, 22
<i>Conus catus</i> Hwass in Bruguere, 1792	7, 10, 12, 16	2, 3, 7, 13, 17, 21
<i>Conus ceylanensis</i> Hwass in Bruguere, 1792	5, 10, 16	
<i>Conus chaldeus</i> (Röding, 1798)	10	2, 3, 7, 13, 14
<i>Conus coronatus</i> Gmelin, 1791	10, 16	2, 3, 6, 7, 13, 14, 16, 21
<i>Conus distans</i> Hwass in Bruguere, 1792	10, 12	2, 3, 7, 13, 14, 17
<i>Conus ebraeus</i> Linnaeus, 1758	12	2, 3, 7, 14
<i>Conus eburneus</i> Hwass in Bruguere, 1792	11	2, 3, 14
<i>Conus flavidus</i> Lamarck, 1810	10, 12	14
<i>Conus glans</i> Hwass in Bruguere, 1792	10, 11, 12	
<i>Conus imperialis</i> Linnaeus, 1758	16	2, 3, 7, 13, 14, 17
○ <i>Conus legatus</i> Lamarck, 1810		15
<i>Conus leopardus</i> (Röding, 1798)	16	16
○ <i>Conus litoglyphus</i> Hwass in Bruguere, 1792		16
○ <i>Conus litteratus</i> Linnaeus, 1758		22
<i>Conus lividus</i> Hwass in Bruguere, 1792	10, 12, 16	2, 3, 14, 17, 21
<i>Conus marmoreus</i> Linnaeus, 1758		1, 2, 3, 4, 7, 14, 22
<i>Conus miles</i> Linnaeus, 1758	2, 5, 7, 10, 11, 12, 16	1, 2, 3, 7, 9, 11, 16, 16, 17
○ <i>Conus miliaris</i> Hwass in Bruguere, 1792		16
○ <i>Conus musicus</i> Hwass in Bruguere, 1792		2, 3, 4
<i>Conus omaria</i> Hwass in Bruguere, 1792	5	
<i>Conus pulicarius</i> Hwass in Bruguere, 1792	14, 16	2, 3, 6, 14, 16, 22
○ <i>Conus quercinus</i> Solander, 1786		6, 21
<i>Conus rattus</i> Hwass in Bruguere, 1792	7, 10	3, 13, 21
<i>Conus sponsalis</i> Hwass in Bruguere, 1792	16	2, 3, 14, 15
<i>Conus striatus</i> Linnaeus, 1758		2, 3, 7, 14, 22
<i>Conus sugillatus</i> Reeve, 1844		1, 14
<i>Conus tessulatus</i> Born, 1780		6
<i>Conus vexillum</i> Gmelin, 1791		15, 21
<i>Conus vitulinus</i> Hwass in Bruguere, 1792	10, 12	7, 16, 22

Molluscs

	Rowley Shoals	Scott/Seringapatam Reefs
TEREBRIDAE		
○ <i>Hastula albula</i> Menke, 1843		22
<i>Terebra affinis</i> Gray, 1834	16	1, 3, 6, 16, 17, 22
<i>Terebra areolata</i> (Link, 1807)		21
<i>Terebra crenulata</i> (Linnaeus, 1758)	2, 16	1, 3, 6, 16, 22
<i>Terebra dimidiata</i> (Linnaeus, 1758)	16	
<i>Terebra felina</i> (Dillwyn, 1817)	16	2, 3, 6, 22
○ <i>Terebra guttata</i> (Röding, 1798)		22
<i>Terebra maculata</i> (Linnaeus, 1758)	2, 16	3, 6, 16, 21, 22
<i>Terebra nebulosa</i> (Sowerby, 1825)	11, 16	2, 3, 21
<i>Terebra undulata</i> Gray, 1934		6, 17
BULLIDAE		
<i>Bulla ampulla</i> Linnaeus, 1758		6
<i>Bulla</i> sp.	16	
SCAPHANDRIDAE		
<i>Cylinchna</i> sp.	15	
AGLAJIIDAE		
<i>Chelidonura amoena</i> Bergh, 1905		9, 11
sp. 1		2, 3
sp. 2	2	
sp. 3	16	
PYRAMIDELLIDAE		
cf. <i>Otopleura mitralis</i> A. Adams, 1855	16	
sp. 1	16	
ELYSIIDAE		
<i>Elysia</i> sp.		2, 3
CHROMODORIDIDAE		
<i>Glossodoris</i> sp.		14
<i>Chromodoris</i> sp.		2, 3
<i>Chromodoris lineolata</i> (Hasselt, 1824)	2	
<i>Chromodoris quadricolor</i> (Rüppell and Leuckart, 1831)	10	
PHYLLIDIIDAE		
sp. 1		2, 3, 14, 22
sp. 2		1, 3
sp. 3		14
sp. 4		4, 17
sp. 5		2, 3
sp. 6		2, 3, 9, 11
sp. 7		21
sp. 8		1
sp. 9	2	

	Rowley Shoals	Scott/Seringapatam Reefs
AEOLIDACEA		
sp. 1		21
ONCHIDIIDAE		
<i>Onchidium</i> sp.	2, 10	2, 3
BIVALVIA		
ARCIDAE		
<i>Anadara antiquata</i> (Linnaeus, 1758)		16
<i>Arca avellana</i> Lamarck, 1819	10, 11, 12	
<i>Arca ventricosa</i> Lamarck, 1819	2, 7, 10, 11	2, 3, 4, 7, 14
<i>Barbatia fusca</i> (Bruguière, 1792)	6, 9, 10, 11, 14, 15	1, 2, 3, 14, 15, 16, 21
<i>Barbatia plicata</i> (Dillwyn, 1817)	5, 8, 12, 14	2, 3, 5, 9, 11, 14
○ <i>Barbatia</i> sp.	9, 14	
<i>Barbatia tenella</i> (Reeve, 1844)	7, 10, 12	
GLYCYMERIDIDAE		
<i>Glycymeris amboinensis</i> (Gmelin, 1791)	7, 10, 11, 12	1, 2, 3, 6, 13, 22
MYTILIDAE		
<i>Botula</i> cf. <i>fusca</i> (Gmelin, 1791)	15	
<i>Lithophaga</i> cf. <i>nasuta</i> (Philippi, 1846)	10, 11, 12, 14, 15	15 .
<i>Modiolus auriculatus</i> Krauss, 1848	16	W
<i>Septifer bilocularis</i> (Linnaeus, 1758)		1, 3, 8
PINNIDAE		
<i>Atrina pectinata</i> (Linnaeus, 1767)	Beachdrift	
<i>Atrina vexillum</i> (Born, 1778)		8
<i>Streptopinna saccata</i> (Linnaeus, 1758)	8	21
PTERIIDAE		
<i>Electroma alacorvi</i> (Dillwyn, 1817)	11, 5, 9	
<i>Electroma</i> cf. <i>ovata</i> (Quoy and Gaimard, 1834)		1, 6
<i>Pinctada albina</i> (Lamarck, 1819)	5, 7, 10, 15, A	
<i>Pinctada maculata</i> (Gould, 1850)		3, 17
<i>Pinctada margaritifera</i> (Linnaeus, 1758)	2, 3, 6, 7, 10, 11, 12	2, 3, 7, 16
<i>Pteria</i> sp.	14	
<i>Pteria chinensis</i> (Leach, 1814)		3
ISOGNOMONIDAE		
<i>Isognomon isognomum</i> (Linnaeus, 1758) (juvenile)	16	
<i>Isognomon legumen</i> (Gmelin, 1791)	7	2, 3, 14
<i>Isognomon perna</i> (Linnaeus, 1758)	9, 16	2, 3, 7, 14

Molluscs

	Rowley Shoals	Scott/Seringapatam Reefs
PECTINIDAE		
○ <i>Chlamys ?cookei</i> Dall, Bartsch and Rehder, 1938	6	
<i>Chlamys funebris</i> (Reeve, 1853)	7, 11, 16	
<i>Chlamys cf. pacifica</i> Broderip, 1835		2, 3, 5, 14
<i>Chlamys pallium</i> (Linnaeus, 1758)	8	3, 15, 21, 22
<i>Chlamys speciosus</i> (Reeve, 1853)	8	
<i>Chlamys squamosus</i> (Gmelin, 1791)	7, 9, 10, 11	3, 8, 11, 15, 18
<i>Pedum spondyloideum</i> (Gmelin, 1791)	6, 11	
<i>Semipallium spectabilis</i> (Reeve, 1853)		3
<i>Semipallium tigris</i> (Lamarck, 1819)	2, 8, 11	
<i>Semipallium radulum</i> (Linnaeus, 1758)		8
○ <i>Semipallium</i> sp. 1	8, 11	
○ <i>Semipallium</i> sp. 2	8	
SPONDYLIDAE		
<i>Spondylus ducalis</i> (Röding, 1798)	2, 5, 6, 7, 9, 10, 11, 12, 14	
○ <i>Spondylus pacificus</i> Reeve, 1856	9	
<i>Spondylus</i> sp.		7, 21
PLICATULIDAE		
<i>Plicatula australis</i> (Lamarck, 1819)	7, 9, 11, 12	
ANOMIIDAE		
<i>Anomia</i> sp. (juvenile)	9	
LIMIDAE		
<i>Limaria fragilis</i> (Gmelin, 1791)	7, 9, 10	2, 3, 7, 14, 21
<i>Lima</i> sp.		3
<i>Ctenoides annulata</i> (Lamarck, 1819)	9	
GRYPHAEIDAE		
<i>Hyotissa hyotis</i> (Linnaeus, 1758)	1, 9, 14	18
<i>Hyotissa numisma</i> (Lamarck, 1819)	2, 5, 7, 10, 11, 12	2, 3, 7, 9, 11, 14
OSTREIDAE		
<i>Lopha cristigalli</i> (Linnaeus, 1758)	9	
<i>Dendostrea</i> sp.	9, 13	
CHAMIDAE		
<i>Chama cf. iostoma</i> Conrad, 1837	2, 3, 7, 8, 9, 10, 15	7, 17
<i>Chama lazarus</i> (Linnaeus, 1758)	9	
<i>Chama pacifica</i> Broderip, 1835	7, 10, 12	
LUCINIDAE		
<i>Codakia punctata</i> (Linnaeus, 1758)	D, F, 3, 11, 15, 16	1, 2, 3, 6, 16, 22

	Rowley Shoals	Scott/Seringapatam Reefs
<i>Ctena bella</i> (Conrad, 1837)	F, 15	
<i>Linga</i> sp.	15	
○ <i>Wallucina gordoni</i> (Smith, 1886)	6	
<i>Wallucina</i> sp.	F	
LASAEIDAE		
? <i>Radobornia</i> sp.		22
GALEOMMATIDAE		
? <i>Scintilla</i> sp.		1
FIMBRIIIDAE		
<i>Fimbria fimbriata</i> (Linnaeus, 1758)	7, 11, 16	3, 4, 5, 16
CARDITIDAE		
<i>Beguina semiorbiculata</i> (Linnaeus, 1758)		2, 3, 8
<i>Cardita variegata</i> (Bruiguere, 1792)	7, 10, 16	2, 3
CARDIIDAE		
<i>Acrosterigma orbita</i> (Broderip and Sowerby, 1833)	6, 8, 11	1, 7, 15, 16
<i>Acrosterigma</i> sp. (juvenile)	D	
○ <i>Corculum cardissum</i> (Linnaeus, 1758)	7, 10, 11	
<i>Fragum fragum</i> (Linnaeus, 1758)	A, C, D, 3, 7, 11, 12, 15	2, 3, 6, 14, 22
TRIDACNIDAE		
<i>Hippopus hippopus</i> (Linnaeus, 1758)	2, 7, 10, 12	2, 3, 9, 11, 14, 16, 21, 22
○ <i>Tridacna crocea</i> Lamarck, 1819	1, 2, 5, 6, 7, 8, 10, 11, 12	2, 3, 9, 11, 14, 15, 16, 21, 22
○ <i>Tridacna gigas</i> (Linnaeus, 1758)	1, 13	5
<i>Tridacna maxima</i> (Röding, 1798)	1, 5, 10	4, 7, 14, 22
<i>Tridacna squamosa</i> Lamarck, 1819	1, 2, 6, 8, 10, 11	1, 5, 9, 11, 15, 16, 21, 22
MESODESMATIDAE		
<i>Atactodea glabrata</i> (Lamarck, 1818)	D, 16	
TELLINIDAE		
<i>Arcopagia linguafelis</i> (Linnaeus, 1758)	9	
<i>Arcopagia scobinata</i> (Linnaeus, 1758)	7, 8, 10, 11, 12	1, 2, 3, 14, 21
<i>Exotica obliquaria</i> (Deshayes, 1854)	F, 15	
<i>Exotica rhomboides</i> (Quoy and Gaimard, 1833)	D, 3, 7, 8, 16	
<i>Quadrans gargadus</i> (Linnaeus, 1758)	C, 11, 12, 16	
<i>Tellina crassiplicata</i> Sowerby, 1758	A, 10, 16	
<i>Tellina perna</i> Spengler, 1798		22
<i>Tellina remies</i> Linnaeus, 1758		2, 3

Molluscs

	Rowley Shoals	Scott/Seringapatam Reefs
<i>Tellina robusta</i> Sowerby, 1867	C, 3, 7, 8, 15	
<i>Tellina semitorta</i> Sowerby, 1867	11, 15	
<i>Tellina virgata</i> Linnaeus, 1758		2, 3, 4
<i>Tellina</i> sp.	Beachdrift	
SEMELIDAE		
<i>Semele</i> sp.	11	
<i>Abra</i> sp.	Beachdrift	
<i>Leptomya psittacus</i> (Hanley, 1853)	Beachdrift	
TRAPEZIIDAE		
<i>Trapezium oblongum</i> (Linnaeus, 1758)	8, 9	
VENERIDAE		
<i>Dosinia</i> sp.		1
<i>Lioconcha ornata</i> (Dillwyn, 1817)	Beachdrift	3, 4, 6, 22
<i>Lioconcha</i> cf. <i>tigrina</i> (Lamarck, 1816)		8, 21
<i>Periglypta resticulata</i> (Sowerby, 1853)	3, 8, 11	1, 3, 6
<i>Periglypta reticulata</i> (Linnaeus, 1758)	2, 5, 10, 11, 12	
<i>Pitar</i> cf. <i>prora</i> (Conrad, 1837)	Beachdrift	8
<i>Pitar</i> sp.		12
<i>Timoclea</i> sp. 1	D	
<i>Timoclea</i> sp. 2	Beachdrift	
<i>Timoclea</i> sp. 3	A	
<i>Timoclea</i> sp. 4	Beachdrift	
<i>Ventricolaria toreuma</i> (Gould, 1846)	11	
GASTROCHAENIDAE		
<i>Gastrochaena ?cuneiformis</i> (Spengler, 1783)		14, 15
CEPHALOPODA		
NAUTILIDAE		
<i>Nautilus pompilius</i> Linnaeus, 1758	P Beachdrift	Beachdrift at 2, 3, 14
SPIRULIDAE		
<i>Spirula spirula</i> (Linnaeus, 1758)		Beachdrift 5
SEPIIDAE		
○ <i>Sepia latimanus</i> Quoy and Gaimard, 1832	P Beachdrift	Beachdrift at 2, 3
<i>Sepia pharaonis</i> Ehrenberg, 1831	Beachdrift	Beachdrift at 2, 3
<i>Sepiella inermis</i> (Ferussac and d'Orbigny, 1835-1838)	Beachdrift	
OCTOPODIDAE		
<i>Octopus</i> sp.	15	1

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