

## Part VII

### Fishes

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#### Abstract

A series of fish collections from previously unexplored Rowley Shoals and Scott Reef, off north-western Australia, are reported. A preliminary list is provided containing 688 species in 258 genera and 77 families, including 342 new records for Western Australia. Approximately 380 species collected from these oceanic coral reefs have not been found on coastal reefs of Western Australia, although many are present on the Great Barrier Reef. The overall faunal composition is similar to that of other oceanic reef areas in the tropical Indo-West Pacific, with a strong affinity to the Indonesian fauna.

#### Background and discussion

The coral reefs lying well offshore near the edge of the continental shelf of north-western Australia are poorly known to ichthyologists. The only previous collections in this area were those by J.B. Hutchins of the Western Australian Museum (abbreviated WAM in subsequent text), who collected about 50 specimens belonging to 33 species at Rowley Shoals in October 1973 and by F.H. Talbot who made five small collections at Scott Reef in September 1979. These collections are deposited in the WAM and the Australian Museum respectively. However, those taken by Talbot remain unstudied and are excluded here.

The present paper primarily reports collections made on three WAM expeditions to Rowley Shoals in 1982 and 1983, and Scott Reef in 1984. In addition; a small number of specimens were obtained by the junior author from Scott Reef (South and North Reefs) and Rowley Shoals (Imperieuse Reef) on board the patrol vessel HMAS *Gawler* in February 1984. As a result of these collections 688 species belonging to 258 genera and 77 families are listed below. This total

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includes 342 species not previously recorded from Western Australia, and although a complete analysis has not been completed, many species appear to represent new records for the Indian Ocean.

Details of the 1982 and 1984 expeditions to Rowley Shoals, Scott Reef, and Seringapatam Reef along with descriptions of the habitats that were sampled are presented in Appendix Tables 1, 2, and 3. Collections were made primarily by diving and using a chemical ichthyocide (powdered rotenone), and also by spearing, handnetting (sometimes aided by a torch at night), and angling with hook and line. A series of 17 collections were made by G.R.A. at Rowley Shoals in 1982. Most of the approximately 1600 specimens obtained are deposited in the WAM, although about 200 specimens are lodged in the Australian Museum, Sydney. A total of 29 collections were made by B.C.R. during the 1984 visit to Scott and Seringapatam Reefs. The majority of stations were at various locations at South Reef (17 stations) and adjacent North Reef (11 stations). A single collection was made at nearby Seringapatam Reef. Approximately 2000 specimens were obtained in 1984. These are deposited at WAM and the Northern Territory Museum at Darwin (abbreviated NTM in subsequent text).

Both authors participated in a four-week visit to Rowley Shoals during August 1983. This expedition was organised by the WAM Department of Maritime Archaeology, which was excavating a shipwreck. The 17 collections obtained by the senior author during the first two weeks of the expedition include approximately 500 specimens and are deposited in WAM. Those obtained by the junior author during the latter two weeks are deposited in NTM but remain unstudied. An additional small collection from Imperieuse Reef obtained by the junior author in February 1984 also remains unstudied in the NTM. Both of these collections are therefore excluded from this report.

The list of species presented below is by no means a complete inventory. The brevity of the visits precluded a thorough sampling of all major habitats. Many new records for Western Australia and a high percentage of new species were collected adjacent to the steep outer reef slope. The majority of collecting stations were conducted in relatively protected waters of shallow lagoons at Clerke Reef (Rowley Shoals) and South and North Reefs (Scott Reef). The few stations at other localities resulted in records of a number of fishes not seen elsewhere. On the basis of limited sampling at Rowley Shoals/Scott Reef and from experience at other Indo-West Pacific coral atolls it is estimated that the fish fauna of each reef complex on the outer edge of the North-West Shelf probably numbers in the vicinity of 600-700 species.

The overall faunal composition of the outer shelf coral reefs is similar to that of other reef areas in the tropical Indo-West Pacific (see Table 1) such as Christmas Island (Allen and Steene 1979) and the Capricorn-Bunker Group on the southern Great Barrier Reef (Russell 1983). At the Rowley Shoals/Scott Reef the following 11 genera were particularly speciose (family and number of species indicated

in parentheses): *Chaetodon* (Chaetodontidae; 22), *Apogon* (Apogonidae; 21), *Scarus* (Scaridae; 17), *Gymnothorax* (Muraenidae; 17), *Pomacentrus* (Pomacentridae; 14), *Chromis* (Pomacentridae; 13), *Eviota* (Gobiidae; 13), *Trimma* (Gobiidae; 12), *Sargocentron* (Holocentridae; 11), *Acanthurus* (Acanthuridae; 11), and *Epinephelus* (Serranidae; 10). These genera collectively comprise 23 per cent of the total coral fish fauna of the North-West Shelf. The fauna of the Rowley Shoals/Scott Reef is more similar to that of the islands of eastern Indonesia lying directly north than to the adjacent Australian mainland. This is demonstrated by the large number of new distribution records for Western Australia. Nearly all the fishes in this category have been previously recorded from Indonesia. Several Indonesian species that have not been found in other Australian seas are common at the Rowley Shoals and Scott Reef including the apogonid *Cheilodipterus singapurensis*, the pomacentrid *Chrysiptera hemicyanea*, the blenniid *Ecsenius schroederi*, and several gobiids.

The oceanic atoll habitat of the Rowley Shoals and Scott Reef appears to be unique within Western Australian waters and therefore it is not surprising to encounter numerous species which do not occur elsewhere in the State. Approximately 380 species listed below have not been recorded from coastal reefs of Western Australia. Many of the oceanic reef dwellers, however, are also found on the Great Barrier Reef. For example, the members of the pomacentrid genus *Chrysiptera* are primarily inhabitants of outer reef flats exposed to a continuous influx of clear, oceanic water. The genus is well represented at both the east Indonesian islands and Great Barrier Reef, but is absent along the Western Australian coast. Seven members of this genus are common at the Rowley Shoals and Scott Reef.

A total of 262 species are common to both the Rowley Shoals and Scott Reef. Further collecting will no doubt increase this number. Although the two areas, which are separated by approximately 280 km, share similar fauna, a number of striking differences between the two areas were apparent. The potato cod, *Epinephelus tukula*, and the humphead maori wrasse, *Cheilinus undulatus*, for example, were both common at the Rowley Shoals and notably rare or uncommon at Scott Reef. Conversely several species, notably the banded coral trout *Plectropomus oligocanthus*, the leopard coral trout, *P. leopardus*, and the coral bream *Scolopsis affinis*, were not recorded at the Rowley Shoals, but were relatively common at Scott Reef.

It is premature to make a statement on the extent of the endemism occurring in the Rowley Shoals fish fauna, mainly due to the lack of adequate collections from surrounding regions. Approximately 30-40 species listed below appear to be undescribed. Some of these may prove to be endemic to the shelf area, but it would appear more likely that they will eventually be found elsewhere, particularly on the outer reef areas of the Indonesian Archipelago. The only described species thus far restricted to the Rowley Shoals/Scott Reef region is the

monotypic labrid *Conniella apterygia* Allen.

Most of the species listed herein have not been previously recorded in the literature from the Rowley Shoals or Scott Reef. Exceptions are Dawson's (1985) records of the syngnathids *Choeroichthys brachysoma*, *Corythoichthys amplexus*, *C. flavofasciatus*, *C. intestinalis*, *C. schultzi*, *Cosmocampus banneri*, *Doryhamphus negrosensis negrosensis*, *D. dactyliophorus*, *Halicampus dunckeri*, and *H. nitidus*, all from the Rowley Shoals. Other published records from Rowley Shoals include the labrid *Conniella apterygia* (Allen, 1983), the holocentrid *Sargocentron lepros* (Allen and Cross, 1983), and the plesiopid *Steeneichthys plesiopsus* (Allen and Randall, 1985).

The list of species presented herein is only provisional as a number of identifications remain unconfirmed and, as mentioned previously, the Talbot collection from Scott Reef and those obtained by the junior author in 1983 at Rowley Shoals have not been examined. One of the primary purposes of this list is to draw the attention of specialists to these extensive collections from a previously unsampled area. The authors intend to publish a more detailed annotated checklist and analysis of the shelf coral fish fauna after the completion of the current WAM survey, including an expedition to Ashmore Reef in 1986. In the list which follows G.R.A. is responsible for the fish identifications from the Rowley Shoals and B.C.R. for those from Scott Reef.

## List of fishes

## Key to symbols:

- Numbers = sampling stations (see Part I, Figures 3, 4, 5, 7 and 8; Appendix Tables 1 and 3)
- a-q = sampling stations of G.R.A. at the Rowley Shoals in 1983 (see Appendix Table 2)
- o = new record for Western Australia
- \* = observed only by G.R.A. or B.C.R.
- + = angling report or observation by expedition members other than G.R.A. or B.C.R.
- x = collected at Rowley Shoals by J.B. Hutchins in October 1973
- xx = collected at Scott Reef by B.C.R. in February 1984
- ? = unconfirmed or questionable identification

	Rowley Shoals	Scott/Seringapatam Reefs
HEMISCYLLIDAE		
<i>Chiloscyllium</i> sp.		+
GINGLYMOSTOMATIDAE		
<i>Nebrius ferrugineus</i> (Lesson, 1830)	*7	*8
CARCHARHINIDAE		
<i>Carcharinus amblyrhynchos</i> (Bleeker, 1856)	*4, *14	
<i>Galeocerdo cuvier</i> (Müller and Henle, 1837)	+	
<i>Triaenodon obesus</i> (Rüppell, 1835)	*2	5
DASYATIDIDAE		
<i>Taeniura lymna</i> (Forskål, 1775)	2	+
o <i>T. melanospilos</i> Bleeker, 1853	q	
MYLOBATIDAE		
<i>Rhinoptera neglecta</i> Ogilby, 1912	2*	
MOBULIDAE		
<i>Manta birostris</i> (Walbaum, 1792)	+	
MORINGUIDAE		
o <i>Moringua abbreviata</i> Loveridge, 1925	c	
o <i>Moringua</i> sp.	b, h	1, 2, 14
XENOCONGRIDAE		
o <i>Kaupichthys</i> sp.		1, 15
o <i>K. brachychirus</i> Schultz, 1953	b	
o <i>K. hypoproroides</i> (Stromann, 1896)	15A, k, o	

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	Rowley Shoals	Scott/Seringapatam Reefs
<b>MURAENIDAE</b>		
o <i>Anarchias allardicei</i> Jordan and Starks, 1906	1, b	
o <i>A. seychellensis</i> Smith, 1962	b	
o <i>Enchelycore bayeri</i> (Schultz, 1952)	o	4
<i>Echidna unicolor</i> Schultz, 1953	1, 2, 4	
<i>Gymnomuraena zebra</i> (Shaw, 1797)		*14
<i>Gymnothorax buroensis</i> (Bleeker, 1857)	2.0	
o <i>G. chilospilos</i> Bleeker, 1865		+
o <i>G. enigmaticus</i> McCosker and Randall, 1982		2, 11
o <i>G. fimbriatus</i> (Bennett, 1831)		2
<i>G. flavimarginatus</i> (Rüppell, 1828)	9, 13, a, e	1, 2, 11, 16
<i>G. javanicus</i> (Bleeker, 1859)	13, j	
<i>G. margaritophorus</i> Bleeker, 1865	o	11
<i>G. melanospilos</i> (Bleeker, 1855)		19, 20
<i>G. melatremus</i> Schultz, 1953	4, 6, 8, b, f	
<i>G. monochrous</i> (Bleeker, 1856)	1	
<i>G. picta</i> (Ahl, 1789)	16	2, 11, 14
o <i>G. rueppelliae</i> (McClelland, 1845)		11
<i>G. undulatus</i> (Lacepède, 1803)	2	2
<i>G. zonipectis</i> Seale, 1906	1, 4, b	1, 4, 15, 16
<i>Gymnothorax</i> sp. A		1, 2, 4, 5, 11
<i>Gymnothorax</i> sp. B		2
<i>Gymnothorax</i> sp. C		19
<i>Uropterygius</i> sp.		1, 2, 5
<b>OPHICHTHIDAE</b>		
<i>Brachysomophis crocodilinus</i> (Bennett, 1833)	1, e	7, 18
<i>Callechelys marmoratus</i> Bleeker, 1852	1	
<i>Leiuranus semicinctus</i> (Lay and Bennett, 1839)	e	1, 21
<i>Muraenichthys gymnotus</i> Bleeker, 1864	a	
o <i>Myrichthys maculosus</i> (Cuvier, 1817)		11
o <i>Myrophis uropterus</i> Temminck and Schlegel, 1842	15, 1	
<i>Phylloichthys xendontus</i> Gosline, 1951		1
<b>CLUPEIDAE</b>		
<i>Spratelloides gracilis</i> (Temminck and Schlegel, 1846)		3, 8, 10

	Rowley Shoals	Scott/Seringapatam Reefs
<b>SYNODONTIDAE</b>		
<i>Saurida gracilis</i> (Quoy and Gaimard, 1824)	15, a, d, f, g	1, 8
o <i>Synodus binotatus</i> Schultz, 1953		1
<i>S. englemanni</i> Schultz, 1953	4, 8, f	1, 3
<i>S. jaculum</i> Russell and Cressy, 1979		1, 3, 15, 16
o <i>S. rubromarmoratus</i> Russell and Cressy, 1979		15
<i>S. variegatus</i> (Lacépède, 1803)	14	1, 2, 14, 19, 21
<b>PLOTOSIDAE</b>		
<i>Plotosus lineatus</i> (Thünberg, 1787)	13	16
<b>GOBIESOCIDAE</b>		
<i>Diademichthys lineatus</i> (Sauvage, 1883)	1	3
<b>ANTENNARIIDAE</b>		
<i>Antennarius analis</i> (Gosline, 1957)	1, k	
<i>A. coccineus</i> (Lesson, 1829)	13	
<i>A. dorhensis</i> Bleeker, 1859	1	
<i>Histrio histrio</i> (Linnaeus, 1758)	14	
<b>BROTULIDAE</b>		
<i>Brotula multibarbata</i> (Temminck and Schlegel, 1846)	k	
<b>BYTHITIDAE</b>		
o <i>Brosomphyciops pautzki</i> Schultz, 1953	8, n	
o <i>Dinematichthys</i> sp.		1, 4, 10
<i>Ogilbia</i> sp. 1	8 b	
<i>Ogilbia</i> sp. 2	6, a, g	
<b>EXOCOETIDAE</b>		
o <i>Cheilopogon atrisignis</i> (Jenkins, 1904)		xx
o <i>Cheilopogon</i> sp.		xx
o <i>Cypselurus hexozona?</i> (Bleeker, 1853)	1	
<b>HEMIRAMPHIDAE</b>		
<i>Hyporhamphus quoyi</i> (Valenciennes, 1847)		21
<b>BELONIDAE</b>		
<i>Platybelone argalus</i> (Lesueur, 1821)		14

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	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Strongylura incisa</i> (Valenciennes, 1846)		19, 20
o <i>Tylosaurus appendiculatus</i> (Klunzinger, 1871)		20
<i>T. crocodilus</i> (Lesuer, 1821)	14	20, 21
<b>ATHERINIDAE</b>		
<i>Atherina</i> sp.		14
o <i>Hypoatherina barnesi</i> Schultz, 1953	1	
o <i>H. ovalaua</i> (Herre, 1935)	1	
<i>Pranesus endrachtensis</i> (Quoy and Gaimard, 1824)	1, 1	
o <i>Stenatherina temminckii</i> ? (Bleeker, 1852)		21
<b>HOLOCENTRIDAE</b>		
<i>Myripristis adusta</i> Bleeker, 1853	x, 14	1
o <i>M. berndti</i> Jordan and Evermann, 1902	4, d, k	1, 4, 16
<i>M. kuntee</i> Valenciennes, 1831	1, k	
<i>M. murdjan</i> (Forskål, 1775)	k	
o <i>M. pralinia</i> Cuvier, 1829	1, 4, 6, b, d, k	1, 4, 16
o <i>M. violacea</i> Bleeker, 1851	1, b, i	1
o <i>M. vittata</i> Valenciennes, 1831	d	
<i>Myripristis</i> sp.		1
o <i>Neoniphon argenteus</i> (Valenciennes, 1831)	1, 13, 16	2
o <i>N. opercularis</i> (Valenciennes, 1831)	1, 13	5
o <i>N. sammara</i> (Forskål, 1775)	13	2, 8, 10
o <i>Sargocentron caudimaculatum</i> (Rüppell, 1835)	h	1, 2
o <i>S. cornutum</i> (Bleeker, 1853)	1	10
<i>S. diadema</i> (Lacepède, 1802)	1, a, e, f, j	1, 5, 10
<i>S. lepros</i> (Allen and Cross, 1983)	8	
o <i>S. microstomus</i> (Günther, 1859)	e, k	1
<i>S. punctatissimum</i> (Cuvier, 1829)	2, e, h	1, 2
<i>S. rubrum</i> (Forskål, 1775)		5
<i>S. spiniferum</i> (Forskål, 1775)	1	2, 5
<i>S. violaceus</i> (Bleeker, 1853)		1, 10
<i>S. tiere</i> (Cuvier, 1829)	6, d	
<i>Sargocentron</i> sp.		1
<b>AULOSTOMIDAE</b>		
<i>Aulostomus chinensis</i> (Linnaeus, 1766)	*1, *9, *13	16
<b>FISTULARIIDAE</b>		
<i>Fistularia commersoni</i> Rüppell, 1835		19



	Rowley Shoals	Scott/Seringapatam Reefs
<b>SOLENOTOMIDAE</b>		
<i>Solenostomus paradoxus</i> (Pallas, 1870)	9	
<b>SYNGNATHIDAE</b>		
o <i>Bhanotia fasciolata</i> (Dumeril, 1870)		4
<i>Choeroichthys brachysoma</i> (Bleeker, 1855)	8, 9, 1A	1
<i>Corythoichthys amplexus</i> Dawson and Randall, 1975		3
<i>C. flavofasciatus</i> (Rüppell, 1833)	1	4
<i>C. intestinalis</i> (Ramsay, 1881)	1, a, i	
<i>C. schultzi</i> Herald, 1953	1, 9	
<i>Cosmocampus banneri</i> (Herald and Randall, 1972)	1, n	
<i>Doryhamphus dactyliophorus</i> (Bleeker, 1853)	1, 9, k, n	1, 4
<i>D. negrosensis</i> Herre, 1934	13, a, j	
<i>Halicampus dunkeri</i> (Chabanaud, 1929)	1	
o <i>H. macrorhynchus</i> Bamber, 1915	f	
<i>H. nitidus</i> (Günther, 1873)	1, 9, 13, a, j	1, 5
<b>SCORPAENIDAE</b>		
o <i>Dendrochirus biocellatus</i> (Fowler, 1938)		xx
<i>Pterois antennata</i> (Bloch, 1787)	1, a, b, o	1, 16
o <i>P. radiata</i> Cuvier, 1829	2, o	2
<i>Scorpaena oglinus</i> (Smith, 1947)	4, 6, b, 1	
<i>Scorpaena</i> sp.		3
o <i>Scorpaenodes alabiensis</i> Evermann and Seale, 1907	8, o	1
<i>S. guamensis</i> (Quoy and Gaimard, 1824)	2, 9, 13, 16, a, h, i, j	
<i>Scorpaenopsis diabolus</i> Cuvier, 1829	q	
o <i>S. macrochir</i> Ogilby, 1910	a	
o <i>Sebastapistes albobrunnea</i> (Günther, 1874)		14
<i>S. bynoensis</i> (Richardson, 1845)		11
<i>Sebastapistes</i> sp. A		3
<i>Sebastapistes</i> sp. B		19
<i>Sebastapistes</i> sp. C		4, 19

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	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Taenianotus triacanthus</i> Lacepède, 1802		20
CARACANTHIDAE		
o <i>Caracanthus unipinnis</i> (Gray, 1831)	e	1
PLATYCEPHALIDAE		
o <i>Thysanophrys chiltoni</i> Schultz, 1966	8, 1	16, 21
o <i>T. papillolabium</i> Schultz, 1966	8A, 1	
<i>Thysanophrys</i> sp.		4
SERRANIDAE		
o <i>Aethaloperca rogae</i> (Forskål, 1775)	x	16
o <i>A. lori</i> Randall and Lubbock, 1981	d, g	
o <i>Anthias lori</i> Randall and Lubbock, 1981	6, 14, d, p, q	
o <i>A. pleurotaenia</i> Bleeker, 1857		4
o <i>A. tuka</i> (Herre and Montalban, 1927)	4, 6, 8, 14, b, f, k	4
<i>Anthias</i> sp. A		19
<i>Anthias</i> sp. B		3
<i>Anyperodon leucogrammicus</i> (Valenciennes, 1828)	1	10
<i>Cephalopholis argus</i> Bloch and Schneider, 1801	1, 8, 14	1, 2, 14, 19, 21
<i>C. leopardus</i> (Lacepède, 1802)	4, 6, 8, k, n	1, 5, 16, 23
<i>C. miniata</i> (Forskål, 1775)	8	3, 16
o <i>C. spiloparaea</i> (Valenciennes, 1828)	6	
<i>C. urodota</i> (Valenciennes, 1828)	o	4
<i>Epinephelus fasciatus</i> (Forskål, 1775)	8, k	
o <i>E. faveatus</i> (Valenciennes, 1828)		11
o <i>E. hexagonatus</i> (Bloch and Schneider, 1801)	m	
<i>E. lanceolatus</i> (Bloch, 1790)	9	
o <i>E. melanostigma</i> Schultz, 1953	2	
<i>E. merra</i> Bloch, 1793	1, 13, a, c	2, 11, 14, 19, 21
<i>E. microdon</i> (Bleeker, 1856)	4, e	16
o <i>E. ongus</i> (Bloch, 1790)	1, 13, i	5, 10
o <i>E. spilotoiceps</i> Schultz, 1953		11
<i>E. tukula</i> Morgans, 1959	1, 8, 6, 9, 13	+
o <i>Gracila albimarginata</i> (Fowler and Bean, 1930)	*4, *6, *14	*51

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Liopropoma susumi</i> (Jordan and Seale, 1906)	6, 8, 14, k	
o <i>Liopropoma</i> sp. A	d	
o <i>Liopropoma</i> sp. B	f	
o <i>Plectranthias longimanus</i> (Weber, 1913)		3, 12
<i>Plectropomus areolatus</i> (Rüppell, 1830)	1, 9, j	5, 8
o <i>P. laevis</i> (Lacepède, 1802)	*13	*4, *15
<i>P. leopardus</i> (Lacepède, 1802)		20
o <i>P. oligocanthus</i> (Bleeker, 1854)		*4, *15
GRAMMISTIDAE		
o <i>Belonoperca chabanaudi</i> Fowler and Bean, 1930	14	
<i>Grammistes sexlineatus</i> (Thünberg, 1792)		14
PSEUDOCROMIDAE		
<i>Pseudochromis bitaeniatus</i> (Fowler, 1931)		1, 3, 4
<i>P. fuscus</i> Müller and Throschel, 1849	1, 9, 13, a, b, j	1, 2, 10
o <i>P. paccagnellae</i> Axelrod, 1973	4, 6, 8, 14, d, f, g, 14A, 17A	3
<i>P. tapeinosoma</i> Bleeker, 1853	1, 13, b, e, h, i	1, 2, 4, 11, 19
o <i>Pseudochromis</i> sp. nov.		4
o <i>Pseudoplesiops rosae</i> Schultz, 1943	1, a, b, c, d, e, f, h, i, j, k, o	xx
o <i>P. typus</i> Bleeker, 1858	1, 12, a	xx
o <i>Pseudoplesiops</i> sp. A		4
o <i>Pseudoplesiops</i> sp. B	1, b	
o <i>Pseudoplesiops</i> sp. C	o	
PSEUDOGRAMMATIDAE		
o <i>Aporops bilinearis</i> Schultz, 1943	e	
<i>Pseudogramma polyacantha</i> (Bleeker, 1856)	1, 9, 13, a, b, c, k, o	1, 11, 16, 20
PLESIOPIDAE		
o <i>Plesiops cephalotaenia</i> Inger, 1955	9	
<i>P. coeruleolineatus</i> Rüppell, 1835	2	
<i>Plesiops</i> sp.	e, g, j, k, l	2, 11, 14

	Rowley Shoals	Scott/Seringapatam Reefs
<b>PRIACANTHIDAE</b>		
<i>Priacanthus cruentatus</i> (Lacepède, 1800)	1	
<i>P. macracanthus</i> Cuvier, 1829		4
<b>APOGONIDAE</b>		
o <i>Apogon aroubiensis</i> Hombron and Jaquinot, 1853	4, 6, 8, a, k, n, o	3
<i>A. bandanensis</i> Bleeker, 1854		1, 4, 5, 16
<i>A. coccineus</i> Rüppell, 1835	4, 6, 8, 9, a, k, n, o	1, 2, 20
o <i>A. compressus</i> Smith and Rad- cliffe, 1911	1	16
<i>A. crassiceps</i> Garman, 1903	8	
<i>A. cyanosoma</i> Bleeker, 1853		3, 15
o <i>A. exostigma</i> Jordan and Starks, 1906	1, 13, b	1, 4, 5, 16
<i>A. kallopterus</i> Bleeker, 1856	1, b, i, l	1, 4, 5
o <i>A. leptacanthus</i> Bleeker, 1856	1	5, 16
o <i>A. melas</i> Bleeker, 1848	1, 13	
o <i>A. nigrofasciatus</i> Schultz, 1953	2	2, 14, 19, 21
o <i>A. novemfasciatus</i> Cuvier, 1828	15, 16, l	
<i>A. savayensis</i> Günther, 1871	13, k, o	xx
<i>A. semilineatus?</i> Schlegel, 1846		16
<i>A. taeniophorus?</i> Regan, 1908		4, 5
<i>A. trimaculatus</i> Cuvier, 1828	1, 13, a	5, 8
<i>Apogon</i> sp. A		1
<i>Apogon</i> sp. B		8
<i>Apogon</i> sp. C		5
<i>Apogon</i> sp. D		16
o <i>Apogonichthys ocellatus</i> (Weber, 1913)	2	
<i>Archamia fucata</i> (Cantor, 1850)		3, 18
o <i>A. zosterophora</i> (Bleeker, 1856)		5, 16
<i>Cheilodipterus lachneri?</i> Klausowitz, 1959	1, 13	4, 16
<i>C. lineatus</i> (Linnaeus, 1758)		1, 4, 5, 16
<i>C. macrodon</i> Lacepède, 1802	1, 13, f	10
<i>C. quinquelineata</i> Cuvier, 1828	1, 13, a, f	1, 4, 5, 8, 10, 16, 18, 20
o <i>C. singaporensis</i> Bleeker, 1859	1, a	5
<i>Cheilodipterus</i> sp. A		10
<i>Cheilodipterus</i> sp. B		1
o <i>Fowleria abocellata</i> Goren and Karplus, 1980		

	Rowley Shoals	Scott/Seringapatam Reefs
<i>F. aurita</i> (Cuvier, 1831)	1, 9, a	8, 10
o <i>F. marmorata</i> (Alleyne and Macleay, 1877)	b	
o <i>F. punctulata</i> (Rüppell, 1838)	11, 9, b, i, j	
o <i>Gymnapogon</i> sp.		1
o <i>Neamia octospina</i> Smith and Radcliffe, 1912	b, 1	
o <i>Pseudamia gelatinosa</i> Smith, 1955	1, a, k	4
o <i>Pseudamia</i> sp.		3, 8
<i>Rhabdamia cypselurus</i> Weber, 1909		3, 4
<i>R. gracilis</i> (Bleeker, 1856)	1	
<i>Rhabdamia</i> sp.	1, 13, d	3
o <i>Siphamia tubulata</i> (Weber, 1909)	9	
<i>Siphamia</i> sp.		18
MALACANTHIDAE		
o <i>Hoplolatilus starcki</i> Randall and Dooley, 1974	*m	
<i>Malacanthus brevisrostris</i> Guichenot, 1848		3
<i>M. latovittatus</i> (Lacepède, 1798)	8	
CARANGIDAE		
o <i>Carangoides compressus?</i> (Day, 1870)		4
<i>C. ferdau</i> (Forskål, 1775)	1	*15
<i>Caranx ignobilis</i> (Forskål, 1775)	*4, *6, *14	*16
<i>C. lugubris</i> Poey, 1861	*4, *8	
<i>C. melampygus</i> Cuvier, 1833	*6, *8, *14	*12
<i>Elagatis bipinnulatus</i> (Quoy and Gaimard, 1825)	*14	
<i>Scomberoides lysan</i> (Forskål, 1775)		*18
<i>Seriola dumerili</i> (Risso, 1810)	*8	
CAESIONIDAE		
o <i>Caesio caeruleaurea</i> Lacepède, 1802		16
<i>C. lunaris</i> Cuvier, 1830	4, 8	
o <i>C. xanthonota</i> Bleeker, 1853	6, 8, 14	3
<i>Caesio</i> sp.		10
o <i>Pterocaesio pisang</i> (Bleeker, 1853)		16
o <i>P. tile</i> (Cuvier, 1830)	*4, 6, 8, 14	
LUTJANIDAE		
o <i>Aphareus furca</i> (Lacepède, 1802)	14	*4
<i>Aprion virescens</i> Valenciennes, 1830	14	

## Fishes

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Lutjanus biguttatus</i> (Valenciennes, 1830)		*18
<i>L. bohar</i> (Forskål, 1775)	*1, *4, *6, *8, *9	3
<i>L. decussatus</i> (Cuvier, 1828)	x*1, *4, *8, *9, *14	2, 5, 11
o <i>L. gibbus</i> (Forskål, 1775)	*1, *2, *8	*4
<i>L. kasmira</i> (Forskål, 1775)	1, 9, 13	2, 3
o <i>L. monostigma</i> (Cuvier, 1828)	1, 8	*12, *23
<i>L. quinquelineatus</i> (Bloch, 1790)	*14	
<i>L. rivulatus</i> (Cuvier, 1828)	*9	xx
<i>L. russelli</i> (Bleeker, 1849)		14
o <i>Macolor niger</i> (Forskål, 1775)	*4, *6	
o <i>Paracaesio xanthurus</i> (Bleeker, 1869)		*4
o <i>Symphorichthys spilurus</i> (Günther, 1874)	*1, 13	*8
<b>NEMIPTERIDAE</b>		
<i>Pentapodus emeryi</i> (Richardson, 1843)		*(Feb. 1984)
o <i>Scolopsis affinis</i> Peters, 1876		xx
<i>S. bilineatus</i> (Bloch, 1793)	1, 2, 13, 15, 16, a	20
o <i>S. lineatus</i> Quoy and Gaimard, 1824	1, 13	2, 11, 14, 19
o <i>S. margaritifer</i> (Cuvier, 1830)		20
o <i>S. trilineatus</i> Kner, 1868	16	5
<b>GERREIDAE</b>		
o <i>Gerres oyena</i> (Forskål, 1775)	15, 16	
<b>HAEMULIDAE</b>		
<i>Plectorhinchus chaetodontoides</i> Lacepède, 1800	x, 1, *13	5
o <i>P. orientalis</i> (Bloch, 1793)	b	
<b>LETHRINIDAE</b>		
<i>Gnathodentex aurolineatus</i> (Lacepède, 1802)	x, *14	16
<i>Gymnochranius griseus?</i> (Temminck and Schlegel, 1843)		*16
o <i>Lethrinus mahsena</i> (Forskål, 1775)		2, 5, 8
<i>L. miniatus</i> (Schneider, 1801)	*1, *9	*8
o <i>L. ramak</i> (Forskål, 1775)		*20

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>L. reticulatus</i> Valenciennes, 1830		xx
o <i>L. rubrioperculatus?</i> Sato, 1978		1
<i>Lethrinus</i> sp. A	13	19
o <i>Monotaxis grandoculis</i> (Forskål, 1775)	1, 9, 13	3, 16
MULLIDAE		
o <i>Mulloides flavolineatus</i> (Lacepède, 1802)	*6	16, 21
o <i>M. vanicolensis</i> (Valenciennes, 1831)	16	
o <i>Parupeneus barberinus</i> (Lacepède, 1802)	*13	16
<i>P. bifasciatus</i> (Lacepède, 1801)	*o	2
<i>P. cyclostomus</i> (Lacepède, 1802)	g	
<i>P. multifasciatus</i> (Quoy and Gaimard, 1824)	o	5, 15, 16, 23
<i>Upeneus</i> sp.		*10
PEMPHERIDAE		
<i>Parapriacanthus ransonneti</i> Steindachner, 1870	o	15
<i>Pempheris oualensis</i> Cuvier, 1831	6, d	1, 15
EPHIPPIDAE		
<i>Platax batavianus</i> Cuvier, 1831		*16
o <i>P. orbicularis</i> (Forskål, 1775)		*(Feb. 1984)
<i>P. tiere</i> (Forskål, 1775)	o	
CHAETODONTIDAE		
<i>Chaetodon adierogastos</i> Seale, 1910	*14	*4, *15
<i>C. auriga</i> Forskål, 1775	*1, 13	2, 19
o <i>C. baronessa</i> Cuvier, 1831		1
o <i>C. bennetti</i> Cuvier, 1831	6	*4
<i>C. citrinellus</i> Cuvier, 1831	2	2
<i>C. ephippium</i> Cuvier, 1831	x*14	*4
<i>C. kleinii</i> Bloch, 1790		19
<i>C. lineolatus</i> Cuvier, 1831	*8, 9, 14	
<i>C. lunula</i> (Lacepède, 1803)	*1, 4, 9, 13	19
o <i>C. melannotus</i> Schneider, 1801	12	*12
<i>C. meyeri</i> Schneider, 1801		15
<i>C. ornatissimus</i> Cuvier, 1831	x1, b, c	*4
o <i>C. pelewensis</i> Kner, 1868		xx
<i>C. punctatofasciatus</i> Cuvier, 1831	8, b, k	*4

## Fishes

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>C. rafflesi</i> Bennett, 1830		2
o <i>C. semeion</i> Bleeker, 1855	6, 8, 14, b, c	*(Feb. 1984)
<i>C. speculum</i> Cuvier, 1831	*1, 9	*4
<i>C. trifascialis</i> (Quoy and Gaimard, 1824)	1, 2, 13, 16, 19, a, e	20
<i>C. trifasciatus</i> Park, 1797	2, 4, a	5, 10, 15
<i>C. ulietensis</i> Cuvier, 1831	x*1, *4, *9	*4, *12
<i>C. unimaculatus</i> Bloch, 1787	*6, *14	
o <i>C. vagabundus</i> Linnaeus, 1758		2
<i>Coradion altivelis</i> McCulloch, 1916		*18
<i>Forcipiger flavissimus</i> Jordan and McGregor, 1898	x*1, 6, 8	*12
o <i>Hemitaurichthys polylepis</i> (Bleeker, 1857)	*n	
<i>Heniochus acuminatus</i> (Linnaeus, 1758)	f, n	
<i>H. chrysostomus</i> Cuvier, 1831	x1, 9, 13, b	1
<i>H. singularius</i> Smith and Radcliffe, 1911	*4, *6, *14	
<i>H. varius</i> (Cuvier, 1829)	1, 4	*4, *15
POMACANTHIDAE		
<i>Apolemichthys trimaculatus</i> (Lacepède, in Cuvier, 1831)	k	23
<i>Centropyge bicolor</i> (Bloch, 1798)	*14	3
o <i>C. bispinosus</i> (Günther, 1860)	f, g	*12
<i>C. eibli</i> Klausewitz, 1963	1, 4, a, b, c, e, f, g	
o <i>C. flavicauda</i> Fraser-Brunner, 1933		20
o <i>C. nox</i> (Bleeker, 1853)		5
<i>C. tibicen</i> (Cuvier, 1931)		3
o <i>C. vroliki</i> (Bleeker, 1853)		1, 19
o <i>Genicanthus melanospilos</i> (Bleeker, 1857)	n	
<i>Pomacanthus imperator</i> (Bloch, 1787)		3
<i>P. navarchus</i> Cuvier, 1831	x	*(Feb. 1984)
o <i>P. sexstriatus</i> Cuvier, 1831	*6, *14	*16
o <i>P. xanthometopon</i> (Bleeker, 1853)	*6	*5
<i>Pygoplites diacanthus</i> (Boddaert, 1772)	x6, g	4, 5
POMACENTRIDAE		
<i>Abudefduf saxatilis</i> (Linnaeus, 1758)	*8, *14	*4



	Rowley Shoals	Scott/Seringapatam Reefs
<i>Amblyglyphidodon aureus</i> (Cuvier, 1830)	4, 6, 14, g	1, 3, 12, 16
o <i>A. curacao</i> (Bloch, 1787)	1, 9, 13, a	
o <i>A. leucogaster</i> (Bleeker, 1847)		1, 5, 10, 12, 16, 18
<i>Amphiprion clarkii</i> (Bennett, 1830)	4, 8	3
o <i>A. ocellaris</i> (Cuvier, 1830)		2, 16, 19
<i>A. perideraion</i> Bleeker, 1855	*14	
<i>A. sandaracinos</i> Allen, 1972	b	
o <i>Chromis acares?</i> Randall and Swerdloff, 1973		*15
<i>C. amboinensis</i> (Bleeker, 1873)	4, 14, s, d, f, n	
o <i>C. analis</i> (Cuvier, 1830)	g	
<i>C. atripectoralis</i> Welander and Schultz, 1951	1, 9, 13, b, e	10
<i>C. atripes</i> Fowler and Bean, 1928	4, 6, 14, d, f, g, n	1, 12, 15, 16
o <i>C. elerae</i> Fowler and Bean, 1928	14, f	
o <i>C. lepidolepis</i> Bleeker, 1877	1, 4, 9, 13, 14, o	
<i>C. margaritifer</i> Fowler, 1946	1, 4, 8, o	1, 4, 15, 16, 19
o <i>C. ternatensis</i> (Bleeker, 1856)	1, 4, 14, b	1, 3, 4, 12
o <i>C. vanderbilti</i> Fowler, 1941		3
<i>C. viridis</i> (Cuvier, 1830)	1, 13, a, b	16, 20
<i>C. weberi</i> Fowler and Bean, 1928	4, o	*15
o <i>C. xanthura</i> (Bleeker, 1854)	4, 6, 8, 14	1, 18
<i>Chromis</i> sp.		16
o <i>Chrysiptera biocellatus</i> (Quoy and Gaimard, 1824)	2, 1	2, 14
o <i>C. caeruleolineata</i> (Allen, 1973)	6, d, q	
o <i>C. cyanea</i> (Quoy and Gaimard, 1824)	1, 2, e, i	2, 19, 20, 21
o <i>C. glauca</i> (Cuvier, 1830)	2, 1	
o <i>C. hemicyanea</i> (Weber, 1913)	1, 9, 13, a	8, 10, 15, 16
o <i>C. leucopoma</i> (Lesson, 1830)	2, 16	2, 19
o <i>C. rex</i> (Snyder, 1909)		1
<i>Dascyllus aruanus</i> (Linnaeus, 1758)	1, 9, 13, a, c	1, 2, 5, 10, 16, 20, 21
<i>D. reticulatus</i> (Richardson, 1846)	6, 14, b	1, 12
<i>D. trimaculatus</i> (Rüppell, 1828)	4, 8, 14, b, g	20, 21
o <i>Dischistodus perspicillatus</i> (Cuvier, 1830)	1, b	20
<i>D. prosopotaenia</i> (Bleeker, 1852)	1, 9, 13	*16
<i>Hemiglyphidodon plagiometopon</i> (Bleeker, 1852)	1, 9, a, j	20

## Fishes

	Rowley Shoals	Scott/Seringapatam Reefs
<i>Paraglyphidodon nigroris</i> (Cuvier, 1830)		18
<i>P. melas</i> (Cuvier, 1830)		4
<i>Plectroglyphidodon dickii</i> (Lienard, 1839)	2	1, 4
<i>P. johnstonianus</i> Fowler and Ball, 1924	*14	*12
<i>P. lacrymatus</i> (Quoy and Gaimard, 1824)	*2, 14	1, 2
o <i>P. imparipennis?</i> (Vaillant and Sauvage, 1875)		14, 15
<i>P. leucozona</i> (Bleeker, 1859)		14, 21
<i>Pomacentrus alexanderae</i> Evermann and Seale, 1907		3, 12, 18
<i>P. amboinensis</i> Bleeker, 1868		8, 15, 16, 20
o <i>P. bankanensis</i> Bleeker, 1853	2, 14, e, o	1, 2, 11, 12, 15, 19
o <i>P. chrysurus</i> Cuvier, 1830		2
<i>P. coelestis</i> Jordan and Starks, 1901	*8, 14, e, o	
o <i>P. grammorhynchus</i> Fowler, 1918	1, 9, a	
o <i>P. lepidogenys?</i> Fowler and Bean, 1928		*11
<i>P. molluccensis</i> Bleeker, 1853	1, 9, 13, a, b, c, i	1, 3
o <i>P. nigromarginatus</i> Allen, 1973	6, d, f, g, n, q	
o <i>P. pavo</i> (Bloch, 1787)	1, 13	20
o <i>P. philippinus</i> Evermann and Seale, 1907	1, 9, a, b, c, e	4, 15
o <i>P. reidi?</i> Fowler and Bean, 1928		12
<i>P. vaiuli</i> Jordan and Seale, 1906	1, 9, a, b, c, e	1, 4
<i>Pomacentrus</i> sp.	1, 19, a	10
o <i>Pomachromis richardsoni</i> (Snyder, 1909)	14, m, o	1
o <i>Stegastes albifasciatus</i> (Schlegel and Muller, 1839)		21
<i>S. fasciolatus</i> (Ogilby, 1889)	2, 8, 14, o	
<i>S. lividus</i> (Bloch and Schneider, 1801)	1, 2, 13, 16	5, 6
<i>S. nigricans</i> (Lacepède, 1802)	2, a, b, e, i	2, 10
<i>Stegastes</i> sp. A		10
<i>Stegastes</i> sp. B		1
<i>Stegastes</i> sp. C		1
<i>Stegastes</i> sp. D		1
<b>CIRRHITIDAE</b>		
o <i>Cirrhichthys falco?</i> Randall, 1963		4
o <i>Oxycirrhites typus</i> Bleeker, 1857		4

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Paracirrhites arcatus</i> (Cuvier, 1829)	6, 14	4
<i>P. forsteri</i> (Schneider, 1801)	8, 14, b, e, n, p	1, 15, 16, 19
SPHYRAENIDAE		
<i>Sphyraena barracuda</i> (Walbaum, 1792)	*9	+
LABRIDAE		
<i>Amampses caeruleopunctatus</i> Rüppell, 1828	o	
o <i>A. melanurus</i> Bleeker, 1857		*15
o <i>A. neoguinaicus</i> Bleeker, 1878	b	
<i>Bodianus axillaris</i> (Bennett, 1831)	14, f	*4, *12
o <i>B. diana</i> (Lacepède, 1802)		4
o <i>Cheilinus celebicus</i> Bleeker, 1853	1	5, 8, 16, 18, 20
<i>C. chlorurus</i> (Bloch, 1791)		*(Feb. 1984)
o <i>C. diagrammus</i> (Lacepède, 1802)	1, 9, a	1
<i>C. fasciatus</i> (Bloch, 1791)	1, 9, a	1, 5, 8
<i>C. rhodochrous</i> Günther, 1866	x*6, 14, m	
<i>C. trilobatus?</i> Lacepède, 1802	2	2, 11, 19
o <i>C. undulatus</i> Rüppell, 1835	*4	*4
o <i>Cirrhilabrus cyanopleura</i> (Bleeker, 1851)	9, c, g	4, 15, 16, 20
o <i>C. exquisitus</i> Smith, 1957	c, o	
<i>C. temminckii</i> Bleeker, 1852		16
<i>Cirrhilabrus</i> sp.		23
<i>Conniella apterygia</i> Allen, 1983	6, 14, p, q	3
<i>Coris aygula</i> Lacepède, 1802	x, 4	*4
<i>Coris gaimard</i> (Quoy and Gaimard, 1824)	2	*4, *15
o <i>C. variegata</i> (Rüppell, 1835)		*4
<i>Cymolutes praetextatus</i> (Quoy and Gaimard, 1834)	15, 1	
<i>Epibulus insidiator</i> (Pallas, 1770)	x, 1, a, b, n	1
<i>Gomphosus varius</i> Lacepède, 1802	2, 14, 4, b, e	4
o <i>Halichoeres biocellatus</i> Schultz, 1960	1	*12
o <i>H. chrysus</i> Randall, 1980		*4
o <i>H. hoeveni</i> (Bleeker, 1851)		1
<i>H. hortulanus</i> (Lacepède, 1802)	2, b, e	1, 2, 19, 21
<i>H. margaritaceus</i> (Valenciennes, 1839)	*14	11
<i>H. marginatus</i> Rüppell, 1835	2, 14, e	1, 2, 15, 19
o <i>H. melasmapomus</i> Randall, 1980	6, d, f, g, q	
o <i>H. prosopion</i> (Bleeker, 1853)		4
<i>H. trimaculatus</i> (Quoy and Gaimard, 1834)	1, 12, b, e	2, 14, 19, 20, 21

## Fishes

	Rowley Shoals	Scott/Seringapatam Reefs
<i>Hemigymnus fasciatus</i> (Bloch, 1792)		5
<i>H. melapterus</i> (Bloch, 1791)	1, 2	*5
<i>Labrichthys unilineatus</i> (Guichenot, 1847)	1, a, b, e	5
<i>Labroides dimidiatus</i> (Valenciennes, 1839)	1, b, e	1, 2
<i>L. bicolor</i> Fowler and Bean, 1928	1, 13, k	
o <i>L. pectoralis</i> Randall and Springer, 1975	6	*1
o <i>Labropsis manabei</i> Schmidt, 1930		*(Feb. 1984)
o <i>L. xanthonota</i> Randall, 1981	6, 14, f	
o <i>Macropharyngodon meleagris</i> (Valenciennes, 1839)		3, 11
<i>M. ornatus</i> Randall, 1978	6, b, o	
<i>Novaculichthys taeniourus</i> (Lacepède, 1802)		11
o <i>Pseudocheilinus evanidus</i> Jordan and Evermann, 1902	4, 8, 9, a, d, f, n, q	12
<i>P. hexataenia</i> (Bleeker, 1857)	1, a, b, e, g	1, 12, 15
o <i>P. octotaenia</i> Jenkins, 1899	m	
o <i>Pseudocoris yamashiroi</i> (Schmidt, 1930)	14, q	*12
o <i>Pseudodax moluccanus</i> (Valenciennes, 1840)	*4, 14	3, 4, 15
o <i>Pteragogus cryptus</i> Randall, 1981	1, 9	
<i>Stethojulis bandanensis</i> (Bleeker, 1851)	2	2, 11, 19
<i>S. strigiventer</i> (Bennett, 1832)	1, 9, 13, a	16
<i>Thalassoma amblycephalum</i> (Bleeker, 1856)	14, k	1, 2, 11
o <i>T. fuscum</i> (Lacepède, 1802)	*2, 14	*15
<i>T. hardwickei</i> (Bennett, 1830)	2, e	1, 2, 11, 19
<i>T. lunare</i> (Linnaeus, 1758)		3, 4
o <i>T. quinquevittatum</i> (Lay and Bennett, 1839)	2	*4
o <i>Wetmorella albofasciata</i> Schultz and Marshall, 1954	1, 4, b, q	
o <i>W. nigropinnata</i> (Seale, 1901)	13	4
<i>Xyrichthys</i> sp.	c	
<b>SCARIDAE</b>		
o <i>Bolbometopon muricatum</i> (Valenciennes, 1840)	*4	

	Rowley Shoals	Scott/Seringapata Reefs
o <i>Calotomus carolinus</i> (Valenciennes, 1839)		8, 16
o <i>Cetoscarus bicolor</i> (Rüppell, 1828)	9, a	5, 10
o <i>Hipposcarus longiceps</i> (Bleeker, 1862)	1, j	10
o <i>S. bleekeri?</i> (de Beaufort, 1940)		5
o <i>S. fasciatus</i> Valenciennes, 1839	2, 14	
o <i>S. flavipectoralis</i> Schultz		*16
o <i>S. frenatus</i> Lacepède, 1802	*1, 2, 14	*5, *15, *16
o <i>S. gibbus</i> Rüppell, 1828	1, 2, 8, 14	2, 23
o <i>S. globiceps</i> Valenciennes, 1840	6	
o <i>S. niger</i> Forskål, 1775		5
o <i>S. oviceps</i> Valenciennes, 1839	8, e	
o <i>S. prasiognathus</i> Valenciennes, 1840	*2, 8, 14	
o <i>S. psittacus</i> Forskål, 1775	1, 2, 5, 9	2, 16, 19, 20
o <i>S. rubroviolaceus</i> Bleeker, 1849	*2, 4	*23
o <i>S. scaber</i> Valenciennes, 1840		*16
o <i>S. sordidus</i> Forskål, 1775	1, 9	4, 5, 16
o <i>S. tricolor</i> Bleeker, 1849		23
<b>MUGILOIDIDAE</b>		
o <i>Parapercis clathrata</i> Ogilby, 1910	4, 8, b, e	
o <i>P. polyophtalma</i> (Cuvier, 1829)		4
o <i>P. schauinslandii?</i> (Steindachner, 1900)	6, f, q	
o <i>Parapercis</i> sp.		1, 3, 11, 19
<b>CREEDIIDAE</b>		
o <i>Limnichthys donaldsoni</i> Schultz, 1960	e, k	
<b>BLENNIIDAE</b>		
o <i>Aspidontus taeniatus</i> Quoy and Gaimard, 1834	o	1, 11, 16, 19
o <i>Atrosalarias fuscus</i> (Rüppell, 1835)	1, 9, 12, a, i	2, 5
o <i>Cirripectes castaneus</i> Valenciennes, 1836	1, 6, h, o	
o <i>C. polyzona</i> (Bleeker, 1868)	h	
o <i>Cirripectes</i> sp.		4
o <i>Ecsenius bicolor</i> (Day, 1888)	1, 8, 9, 13, a, b, c, e	1, 3, 4, 15, 16
o <i>E. schroederi</i> McKinney and Springer, 1976	1, 13, a, b, e, j	1, 5, 19
o <i>Ecsenius</i> nov. sp.	1, 6, 8, 9, 13, 14, b, c, e	1, 4, 12, 15

## Fishes

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Enchelyurus kraussi</i> (Klunzinger, 1871)	1	
<i>Exallias brevis</i> (Kner, 1868)		1
o <i>Glyptoparus delicatulus</i> Smith, 1959	e	
o <i>Istiblennius chrysospilos</i> (Bleeker, 1857)	2, m	
<i>I. edentulus</i> Bloch and Schneider, 1801		2
<i>I. periophthalmus</i> (Valenciennes, 1836)	2	2, 11, 14
o <i>Meiacanthus atrodorsalis</i> Günther, 1877	1, i	4, 5, 16
o <i>M. ditrema</i> Smith-Vaniz, 1976	9, a	5, 8, 10
<i>M. grammistes</i> (Valenciennes, 1836)	1, a, j	16
o <i>Nannosalarias nativitatus</i> (Regan, 1909)	e	
<i>Petrosirtes breviceps</i> (Valenciennes, 1836)	j	
o <i>P. xestus</i> Jordan and Seale, 1906	15, a	
o <i>Plagiotremus laudandus</i> (Whitley, 1961)	1, 6, a	xx
<i>P. rhynorhynchos</i> (Bleeker, 1852)	6, 8	3, 15, 16
<i>P. tapeinosoma</i> (Bleeker, 1857)	6, o	12, 19, 20
<i>Salarias fasciatus</i> (Bloch, 1786)	2, 1	2, 11, 14, 19
<i>Salarias</i> sp. A		11
<i>Salarias</i> sp. B		10
TRIPTERYGIIDAE		
o <i>Helcogramma trigloides?</i> (Bleeker, 1858)	e, k, o	1, 3, 4, 15
o <i>Helcogramma</i> sp.		1, 3, 4, 15
o <i>Enneapterygius pusillus?</i> (Rüppell, 1835)	b, e, k	
<i>Enneapterygius</i> sp. A		1, 2, 7
<i>Enneapterygius</i> sp. B	e, k, o	
<i>Enneapterygius</i> sp. C	e	
o <i>Norfolkia springeri?</i> Clark, 1979	k	
o <i>Norfolkia</i> sp.		1
o New genus, new species	a, b, d, e	4
CALLIONYMIDAE		
<i>Callionymus</i> sp. A		11
<i>Callionymus</i> sp. B		21
<i>Diplogrammus xenicus</i> (Jordan and Thompson, 1914)	15, c, i	

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Synchiropus splendidus</i> (Herre, 1927)	1	
o <i>S. stellatus</i> Smith, 1963	h	
<b>GOBIIDAE</b>		
o <i>Amblyeleotris guttatus</i> Fowler, 1938		20
o <i>A. steinitzi</i> Klausewitz, 1974	b, c	
o <i>A. wheeleri</i> (Polunin and Lubbock, 1977)		20
o <i>Amblyeleotris</i> sp.		3
o <i>Amblygobius decussatus</i> (Bleeker, 1855)		5, 10
o <i>A. nocturnus</i> (Herre, 1945)	1, 13, 9, a, j	
o <i>A. phalaena</i> (Valenciennes, 1837)	1, 9, 13	
o <i>A. rainfordi</i> (Whitley, 1940)	1, 1A, j	8, 10
o <i>Asterropteryx semipunctatus</i> Rüppell, 1830	13, j	8, 10
o <i>A. spinosus</i> (Goren, 1981)	a	
o <i>Asterropteryx</i> sp.		10
o <i>Bathygobius padangensis</i> (Bleeker, 1851)	16	
o <i>Bryaninops natans</i> Larson, 1986	9	
o <i>B. yongei</i> (Davis and Cohen, 1968)		5, 8
o <i>Bryaninops</i> sp.		8
o <i>Bryaninops</i> sp. A		10
o <i>Bryaninops</i> sp. B		10
o <i>Callogobius maculipinnis</i> (Fowler, 1918)	a	
o <i>C. plumatus</i> (Smith, 1959)		
o <i>C. sclateri</i> (Steindachner, 1880)	b	
o <i>Callogobius</i> 'sp. 5'	1	
o <i>Callogobius</i> 'sp. 6'	1	
o <i>Callogobius</i> 'sp. 7'	12, a	
o <i>Callogobius</i> 'sp. 11'	12	
o <i>Callogobius</i> sp.		10
o <i>Ctenogobius aurocingulus</i> (Herre, 1935)	9	
o <i>C. crocineus?</i> Smith, 1959		1
o <i>C. feroculus</i> Lubbock and Polunin, 1977	15, i	
o <i>C. pomasticus?</i> Lubbock and Polunin, 1977		10

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	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Discordipinna griessingeri</i> Hoese and Fourmanoir, 1978		1
o <i>Eviota cometa</i> Jewett and Lachner, 1983		12
o <i>E. herrei</i> Jordan and Seale, 1906		
<i>E. infulata</i> (Smith, 1956)	a, j	10
o <i>E. lachdeberiei</i> Giltay, 1933	10A, j	8, 10
<i>E. melasma?</i> Lachner and Kar- nella, 1980		4
o <i>E. nigriventris</i> Giltay, 1933	a, d	1
o <i>Eviota pellucida</i> Larson, 1976	9	
o <i>E. prasites</i> Jordan and Seale, 1906		1, 10, 16
<i>E. sigillata</i> Jewett and Lachner, 1983		1
o <i>E. smaragdus</i> Jordan and Seale, 1906		1
o <i>E. spilota</i> Lachner and Karnella, 1980	a, j	
o <i>Eviota</i> 'sp. A'		1, 4
o <i>Eviota</i> 'sp. B'		1, 3
o <i>Exyrias bellisimus</i> (Smith, 1959)	13	
o <i>Fusigobius duospilus</i> Hoese and Reader, 1985	b, g, o	
o <i>F. neophytus</i> (Günther, 1877)	a, b, c, i	2
o <i>Fusigobius</i> 'sp. 3'	a	
<i>Gnatholepis inconsequens</i> Whitley, 1958	1, 13, a, b	
o <i>Gnatholepis</i> sp.		1, 2, 3, 4, 5, 10, 20
o <i>Gobiodon albofasciatus</i> Sawada and Arai, 1972	9, 13	
o <i>G. okinawae</i> Sawada, Arai and Abe, 1973	1, 13	10, 20
<i>G. quinquestrigatus</i> (Valen- ciennes, 1837)	2, 13	
o <i>Gobiodon</i> 'sp. 3'		4
o <i>Gobiodon</i> 'sp. A'		1
o <i>Gobiodon</i> 'sp. B'		1
o <i>Gobiodon</i> sp.	13	
<i>Istigobius ornatus</i> (Rüppell, 1830)	13	
o <i>I. rigilius</i> (Herre, 1953)	b, h	
o <i>Istigobius</i> 'sp. 6'		2



	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Lotilia graciliosa</i> Klausewitz, 1960	c	
o <i>Macrodontogobius wilburi</i> Herre, 1936	a, j	3, 10, 20
o <i>Nemateleotris magnifica</i> Fowler, 1938	g	4, 15
<i>Paragobiodon echinocephalus</i> Rüppell, 1830	a, b, e	1
o <i>P. melanosomus</i> (Bleeker, 1852)		1, 2
o <i>P. xanthosomus</i> (Bleeker, 1852)		1
o <i>Pleurosicya</i> 'sp. 1'		4, 20
o <i>Pleurosicya</i> 'sp. 12'	2, j	
o <i>Pleurosicya</i> nov. sp.	e, j	
<i>Priolepis cinctus</i> (Regan, 1908)		4
<i>P. semidoliatus</i> (Valenciennes, 1837)	2, 13	
<i>Ptereleotris evides</i> (Jordan and Hubbs, 1925)	14, h, m, o	16
o <i>P. heteroptera</i> (Bleeker, 1855)		15
o <i>P. microlepis</i> (Bleeker, 1849)		15
o <i>P. zebra</i> (Fowler, 1938)	*4, o	
o <i>Trimma emeryi</i> Winterbottom, 1984	n	
<i>T. okinawae</i> (Aoyagi, 1949)	a, b, d, e, f, g, 11A, 14A, 15A, 17A	1
o <i>T. tevegae</i> Cohen and Davis, 1969	d	
o <i>T. winchi</i> Winterbottom, 1983	d	
o <i>Trimma</i> sp. A	1, 3, 13, a, b, i, k	
o <i>Trimma</i> sp. B	d	
o <i>Trimma</i> sp. C	d	
o <i>Trimma</i> sp. D		12
o <i>Trimma</i> sp. E		14
o <i>Trimma</i> sp. '2'		4
o <i>Trimma</i> sp. '4'	f, n	
o <i>Trimma</i> sp. '9'		1
o <i>Trimmatom nanus?</i> Winterbottom and Emery, 1981		15
<i>Valenciennesa longippinis</i> (Lay and Bennett, 1839)	15	
o <i>V. strigata</i> (Broussonet, 1782)		11
o <i>Vanderhorstia</i> sp.	i	
ELEOTRIDAE		
o <i>Calumia profunda</i> Larson and Hoese, 1980	b	

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	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Xenisthmus</i> sp. 1	e	
o <i>Xenisthmus</i> sp. 2	j	
<b>MICRODESMIDAE</b>		
o <i>Gunnellichthys irideus</i> Smith, 1958		11
o <i>G. pleurotaenia</i> Bleeker, 1858	*15	
<b>ACANTHURIDAE</b>		
o <i>A. blochii</i> Valenciennes, 1835	1	19
<i>Acanthurus dussumieri</i> Valenciennes, 1835	*1	*16
<i>A. lineatus</i> (Linnaeus, 1758)	x2, 4, 6, 8	1
<i>A. nigricans</i> Linnaeus, 1758	8, 14, i	4, 5, 15
o <i>A. nigricaudus</i> Duncker and Mohr, 1929		
<i>A. nigrofuscus</i> (Forskål, 1775)	1, 9, 13, e	1, 10, 15, 19
<i>A. olivaceus</i> Bloch and Schneider, 1801	*14	19
o <i>A. pyroferus</i> Kittlitz, 1834		1, 6, 23
o <i>A. thompsoni</i> (Fowler, 1923)	*14	*12, *15
<i>A. triostegus</i> (Linnaeus, 1758)	1, 2, 4, 14, 1	14, 19, 21
o <i>A. xanthopterus</i> Valenciennes, 1835	*14	21
o <i>Ctenochaetus binotatus</i> Randall, 1955	o	xx
o <i>C. striatus</i> (Quoy and Gaimard, 1824)	1, 9, 13, a, b	1, 2, 5, 10
<i>C. strigosus</i> (Bennett, 1828)		xx
<i>Naso brevirostris</i> (Valenciennes, 1835)	*1, 13	*4, *12
o <i>N. hexacanthus?</i> (Bleeker, 1855)	*14	*12
<i>N. lituratus</i> (Bloch and Schneider, 1801)	*1, 2, 14	*5, *15
<i>N. unicornis</i> (Forskål, 1775)	*14	8, 19
o <i>N. vlamingii</i> (Valenciennes, 1835)	p	20
<i>Zebrasoma scopas</i> (Cuvier, 1829)	1, 9, 13	1, 15
<i>Z. veliferum</i> (Bloch, 1797)	1, 13, j	4, 5
<b>ZANCLIDAE</b>		
<i>Zanclus cornutus</i> Linnaeus, 1758	1, 4, 9, 14	
<b>SIGANIDAE</b>		
<i>Siganus doliatus</i> Cuvier, 1830		8
o <i>S. puellus</i> (Schlegel, 1852)	1, 9	*15, *16
o <i>S. punctatissimus</i> Fowler and Bean, 1929		16

	Rowley Shoals	Scott/Seringapatam Reefs
o <i>S. virgatus?</i> Jordan and Seale, 1907	*1	*8, *16
o <i>S. vulpinus</i> (Schlegel and Müller, 1844)	x*14	*4
o <i>Siganus</i> sp. A		8
<b>SCOMBRIDAE</b>		
<i>Acanthocybium solandri</i> (Cuvier, 1831)	+	+
<i>Grammatorcynus bilineatus</i> (Quoy and Gaimard, 1824)		20
<i>Gymnosarda unicolor</i> (Rüppell, 1836)	+	+
<i>Scomberomorus commerson</i> (Lace- pède, 1800)	+	
<i>Thunnus albacares</i> (Bonnotterre, 1788)	+	
<b>ISTIOPHORIDAE</b>		
<i>Istiophorus platypterus</i> (Shaw and Nodder, 1792)	+	
<b>NOMEIIDAE</b>		
o <i>Psenes cyanophrys</i> Valenciennes, 1833	1	
<b>BOTHIDAE</b>		
o <i>Bothus mancus</i> Broussonet, 1782	15	9, 14, 19
<b>PLEURONECTIDAE</b>		
o <i>Samariscus triocellatus</i> Woods, 1960	6, 14, k, n	
<b>SOLEIDAE</b>		
<i>Aesopia heterorhinos</i> (Bleeker, 1856)	1, a, o	
<i>Liachirus whitleyi</i> Chabanaud, 1950	1	
<b>BALISTIDAE</b>		
<i>Balistapus undulatus</i> (Park, 1797)	1, 6, 9	1, 2, 11, 19
o <i>Balistoides conspicillum</i> (Bloch and Schneider, 1801)		*23
o <i>Melichthys niger</i> (Bloch, 1786)	*6, *8	18
<i>M. vidua</i> (Solander, 1844)	*6, *14	*18
o <i>Odonus niger</i> Rüppell, 1836	*6, *14	

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	Rowley Shoals	Scott/Seringapatam Reefs
o <i>Pseudobalistes flavimarginatus</i> (Rüppell, 1828)		16
<i>P. fuscus?</i> (Bloch and Schneider, 1801)	*4, *6	*12
<i>P. viridescens</i> (Bloch and Schneider, 1801)	*1, *12	*15, *20
<i>Rhinecanthus aculeatus</i> (Linnaeus, 1758)	*1, *2	2, 19
<i>R. rectangulus</i> (Bloch and Schneider, 1801)	x, *1, *2	7, 11
<i>Sufflamen bursa</i> (Bloch and Schneider, 1801)	*6, *8, *14, d	12, 15
<i>S. chrysoptera</i> (Bloch and Schneider, 1801)	*14	15
MONACANTHIDAE		
<i>Cantherines dumerilii</i> (Hollard, 1854)		23
<i>C. pardalis?</i> (Rüppell, 1835)		15
<i>Oxymonacanthus longirostris</i> Bloch and Schneider, 1801		5
o <i>Pervagor nigrolineatus</i> (Herre, 1927)	9	8, 10
OSTRACIIDAE		
<i>Ostracion cubicus</i> Linnaeus, 1758	1	20
<i>O. meleagris</i> Shaw, 1796	*1	*4
o <i>O. solorensis</i> Bleeker, 1853	c	
TETRAODONTIDAE		
<i>Arothron hispidus</i> (Linnaeus, 1758)		11
o <i>A. meleagris</i> (Bleeker, 1853)		2
<i>A. nigropunctatus</i> (Bloch and Schneider, 1801)	2	1, 2
<i>Canthigaster janthinoptera</i> (Bleeker, 1855)	1	
o <i>C. solandri</i> Jordan and Seale, 1906	1, 9, a	16
o <i>C. valentini</i> (Bleeker, 1853)	1	16
DIODONTIDAE		
o <i>Diodon hystrix</i> Linnaeus, 1758	*1, *15	2
<i>D. liturosus</i> Shaw, 1806		

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