Additions and Revisions to the Checklist of Fishes of the Capricorn-Bunker Group Great Barrier Reef Australia

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ADDITIONS AND REVISIONS TO THE CHECKLIST OF FISHES OF THE CAPRICORN-BUNKER GROUP GREAT BARRIER REEF AUSTRALIA

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SUMMARY

Additions to the checklist of fishes of the Capricornia Section of the Great Barrier Reef Marine Park, Australia, bring the total number of species recorded from the area to 920. These include 60 species and 11 families not previously reported, and 3 species are new records for Australia. The new records are the result of recently published work, additional field collecting, underwater observation, photographs, and previously unpublished spearfishing records. Four species which were previously reported are removed from the checklist. Most of the additions to the checklist (41 species) are the result of commercial fishing by scallop and deepwater prawn trawlers, or were collected during exploratory bottom fishing on commercial prawn grounds in and adjacent to the Capricornia Section, between Saumarez Reefs (Lat. 22° S) and the southern end of the Bunker Group (Lat. 24° S). Trawl-fishes comprise a small but distinctive component of the fish fauna (8.5% of the total species), the remainder consisting of coral reef (90%) and oceanic-pelagic species (1.5%).

KEYWORDS: Capricornia Section, Great Barrier Reef Marine Park, additions to checklist of fishes

Technical memoranda are of a preliminary nature, and represent the views of the authors, not necessarily those of the Great Barrier Reef Marine Park Authority.

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INTRODUCTION

Since the Annotated Checklist of the Coral Reef Fishes in the Capricorn-Bunker Group Great Barrier Reef Australia, was published in 1983, ongoing taxonomic studies have necessitated a number of revisions. Underwater observations, as well as collecting by trawling and other methods, have resulted in additional new records. In addition, several unpublished records of spearfished species are included.

Much of the previous collecting effort in the Capricorn-Bunker Group was directed at the reef-dwelling and reef-associated fishes. Knowledge of the vast and comparatively shallow surrounding areas, as well as the deeper shelf waters within the boundaries of the Capricornia Section is scanty. Likewise, little is known of the inshore reefs and shoals. Many of these areas, particularly in the more remote sections, remain largely uncharted and are known only to commercial anglers or to trawler operators as 'rough bottom' to be avoided. There has not been extensive sampling of fishes by trawling in the Capricornia region, and much of our previous knowledge of the fish fauna from areas between reef systems comes from collections made by the F.I.S. Endeavour in 1910.

Since the mid 1970s trawlers have seasonally worked the inter-reef and surrounding areas of the Capricorn-Bunker Group for the saucer scallop, Amusium balloti. In more recent years trawlers also have fished the continental shelf waters off the Bunker Group for eastern king prawns, Peneus plebejus, and blue-leg king prawns, Peneus latisulcatus. Both fishing operations produce large fish by-catches, but unfortunately, apart from a few specimens occasionally forwarded to institutions by trawler operators, little is known of the bottom fishes of the area.

Present additions of trawled fish records to the Capricornia checklist are the result mainly of commercial trawling in the area by scallop or deepwater prawn trawls. These methods yielded many previously unrecorded species. A survey carried out by the Southern Intruder (Dredge and Gardiner, 1984) of commercial prawning grounds adjacent to the Capricornia Section, between Saumarez Reefs (Lat. 22° S) and the southern end of the Bunker Group (Lat. 24° S) also included 2 trawl shots in deeper water within the marine park boundaries (10 miles N.E. of Lady Musgrave I. in 335 m; and 11.5 miles E.N.E. of Fitzroy Reef in 238 m), resulting in further new records for the area. Other trawls by the Southern Intruder, although outside the Capricornia Section, were conducted in depths similar to those within the park and yielded a total of more than 250 fish species. Undoubtedly, many of these species will eventually be recorded also from within the marine park boundaries, but are excluded from the present report.

Additions to the checklist bring the total number of species recorded from the Capricornia Section of the Great Barrier Reef Marine Park to 920. These include 60 species and 11 families not previously reported, and 3 species are new records for Australia. The remaining records are revisions of previously included species, based on re-identifications and nomenclatural changes. Four species which were previously recorded are removed from the checklist. Most of the additions to the checklist (41 species) are deepwater fishes caught between reefs. These mostly trawl-caught fishes comprise a small but distinctive component of the fish fauna (8.5% of the total species), the remainder consisting of coral reef (90%) and oceanic-pelagic species (1.5%).
METHODS OF PRESENTATION

The additions and revisions which follow are intended as a supplement to the checklist of Russell (1983); presentation and format follows that work. New species and family records for the Capricornia area are marked with an asterisk. Revised names are followed by an abbreviated synonomy which includes the original citation and any other names under which the species was previously recorded from the area (reference indicated by a dash between the species name and author).

Museum registration numbers referred to herein are prefixed by institution and abbreviated as follows: AMS - Australian Museum, Sydney; QM - Queensland Museum, Brisbane.
ADDITIONS AND REVISIONS TO THE CHECKLIST

HEXANCHIDAE ... SIX AND SEVEN-GILLED SHARKS

_Hexanchus griseus_*
*Squalus griseus* Bonnaterre, 1788: 9 (Mediterranean Sea).

SQUALIDAE ... DOGFISH SHARKS

_Dalatias licha_*
*Squalus licha* Bonnaterre, 1788: 12 ("Le cap Bretan").
Rare? A deepwater species. Trawled in 262 m, 8 miles E.N.E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM I.20169). Cosmopolitan, in warm-temperate and tropical seas.

RHINOBATIDAE ... SHOVELNOSE AND SHARK RAYS

_Rhina ancylostoma_*
*Rhina ancylostomus* Bloch and Schneider, 1801: 352, pl.72. (Coromandel; Indian Sea).
Uncommon? Trawled in 22-28 m, 10 miles S.W. of Lady Elliott Island. Specimen not retained, photographic record only. Widespread in the tropical Indo-W. Pacific.

DASYATIDIDAE ... STINGAREES

_Urolophus sp._
Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM I.21350) is not identifiable and possibly represents an undescribed species (P. Last pers. comm., 1986).

GYMNURIDAE ... RAT-TAILED RAYS

_Gymnura australis_*
*Pteroplatea australis* Ramsay and Ogilby, 1886: 575 (Cape Hawke, N.S.W.).

CHIMAERIDAE ... GHOST SHARKS

_Hydrolagus sp._
Rare? Trawled in 335 m, 10 miles N.E. of Lady Musgrave Island. Three specimens in the Queensland Museum (QM I.21646, I.21647) possibly represent a new species according to Dr G. Hardy (National Museum of New Zealand) who is revising this genus.

MURAENIDAE ... MORAY EELS

_Gymnomuraena zebra_*
*Gymnothorax zebra* Shaw in Shaw and Nodder, 1797: pl.322 (Sumatra).
Uncommon. Recorded on the basis of an underwater photograph taken by R. Turnbull on the reef flat at Heron Island in 0.5-1 m. Widespread in the tropical Indo-W. Pacific.
Gymnothorax elegans*
Gymnothorax elegans Bliss, 1883: 60 (Mauritius).
Rare? Hook and line in 73 m, 9 miles E. of Lady Elliott Island. A single specimen in the Queensland Museum (QM I.21335). Previously known only from the W. Indian Ocean. A new record for Australia.

SYNODONTIDAE ... LIZARDFISHES

Synodus dermatogenys
Synodus dermatogenys Fowler, 1912: 566, fig. 3 (Hawaiian Is).
Synodus variegatus - Woodland and Slack-Smith, 1953: 23 (Heron I.).
This species was previously recorded as Synodus variegatus, but Waples and Randall (1988) have shown that the species commonly known as S. variegatus is S. dermatogenys Fowler, and the name S. variegatus (Lacepède) properly applies to S. englemani Schultz. Widespread in the tropical Indo-W. Pacific.

Synodus houlti
Synodus houlti McCulloch, 1921: 167 (Capricorn Group).
This species was previously included as a synonym of S. variegatus (= dermatogenys). The holotype of S. houlti, however, differs from Hawaiian specimens of S. dermatogenys in having only 4 1/2 scale rows above the lateral line and a larger head (30.1% of SL) (Waples and Randall, 1988), and is here recognised as a distinct species. It is known thusfar only from the Great Barrier Reef.

Synodus variegatus
Salmo variegatus Lacepède, 1803: 157 (Mauritius).
Synodus englemani - Allen et al., 1976: 380 (One Tree I.).
This species was previously recorded as S. englemani Schultz, but Waples and Randall (1988) have shown that the name S. variegatus Lacepède properly applies to this species and that S. englemani is a junior synonym. Widespread in the tropical Indo-W. Pacific.

GONORHYNCHIDAE ... RAT FISHES*

Gonorrhynchus greyi*
Rhynchana greyi Richardson, 1845: 44 (W. Australia). Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. Two specimens in the Queensland Museum (QM I.21324). Temperate and subtropical Australia, and New Zealand.

LOPHIIDAE ... GOOSE FISHES*

Lophiomus setigerus*
Lophius setigerus Vahl, 1797: 214, pl.3, figs 5,6 (China Sea).
Common in deeper trawls. Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. An exclusively benthic species found at depths between 70-250 m. A single specimen in the Queensland Museum (QM I.21353). Widespread in the temperate and tropical Indo-W. Pacific.

OGCOCEPHALIDAE ... HANDFISHES*

Halieutaea brevicauda*
Halieutaea brevicauda Ogilby, 1910a: 138 (off Cape Moreton, Queensland).
Common in deeper trawls. Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. Six specimens in the Queensland Museum (QM I.21358). Temperate-tropical Australia.
MELANODIDAE ... MELANODIDS*

*Euclichthys polynemus*
*Euclichthys polynemus* McCulloch, 1926: 174, pl.44, fig.2 (Great Australian Bight). Rare? Trawled in 335 m, 10 miles N.E. of Lady Musgrave Island. Two specimens in the Queensland Museum (QM I.21648). Our placement of this genus in the Melanodidae rather than the Moridae follows the suggestion of Paulin (1983). Tropical-subtropical Australia and New Zealand.

HOLOCENTRIDAE ... SQUIRRELISHES

*Myripristis melanostictus*

Sargocentron cornutum
*Holocentrum cornutum* Bleeker, 1853: 240 (Seram).
*Sargocentron* sp.- Russell, 1983: 31 (One Tree Island).
This species was previously recorded as *Sargocentron* sp. Widespread in the tropical W. Pacific.

CAPROIDIDAE ... BOARFISHES

*Antigonia rhomboidea*
*Antigonia rhomboidea* McCulloch, 1915: 111, pl.18, fig.1 (Between Gabo I. and Cape Everard, Vic.). Rare? Trawled in 195-205 m, E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM 1.21325). Previously recorded only from southern and western Australia.

SYNGNATHIDAE ... PIPEFISHES

*Halicampus dunckeri*
*Micrognathus dunckeri* Chabanaud, 1929: 167 (Amboina).
This species was previously recorded as *Micrognathus dunckeri*. Dawson (1985) placed it in the genus *Halicampus*.

*Halicampus spinirostris*
*Micrognathus spinirostris* Dawson and Allen, 1981: 65 (Western Australia; Sri Lanka).
This species was previously recorded from One Tree Island as *Micrognathus spinirostris*. Dawson (1985) placed it in the genus *Halicampus* and also recorded it from Heron Island.

*Trachyrhamphus bicoarctatus*
*Syngnathus bicoarctata* Bleeker, 1857a: 99 (Amboina).
*Yozia bicoarctata* - Woodland and Slack-Smith, 1963: 26 (Heron I.).
This species was previously recorded as *Yozia bicoarctata*. Dawson (1984) placed it in the genus *Trachyrhamphus*.

SCORPAENIDAE ... SCORPION FISHES

*Neosebastes incisipinnis*
*Neosebastes incisipinnis* Ogilby, 1910a: 104 (Cape Moreton, Queensland).
Parascorpaena aurita*
Scorpaena aurita Riippell, 1838: 106, pl.37, fig.2 (Red Sea).
Rare? Trawled in 46-55 m, S.E. of Lady Elliott Island. A single specimen in the Queensland Museum (QM I.21339). A new record for Australia.

TRIGLIDAE ... GURNARDS

Lepidotrigla sp*
Rare? Trawled in 340 m, 10 miles N.E. of Lady Musgrave Island. A single unidentified specimen in the Queensland Museum (QM I.21649). The specimen has a prominent spine at the angle of the rostrum and 8-9 smaller spines along the inner medial edge of the rostrum; the lateral-line scales are spinous; the pectoral fins are relatively short (reaching to about fourth anal ray); and the pectoral fins are dusky with a darker spot near the base.

PERISTIDIIDAE ... ARMoured SEARobINS*

Satyrichthys welchi*
Peristodon welchi Herre, 1925: 292, pl.1 (Dumaguete, Philippines).
Uncommon? Trawled in 100-200 m, between Lady Musgrave and Lady Elliott Island. A single specimen in the Queensland Museum (QM I.21342). Widespread in the tropical W. Pacific.

APLOACTINIDAE ... VELVETFISHES

Erisphex aniarus*
Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. Three specimens in the Queensland Museum (QM I.21327). Queensland and W. Australia.

PEGASIDAE ... SEA MOTHS*

Eurypegasus draconis*
Pegasus draconis Linnaeus, 1766: 418 (India).

ACROPOMATIDAE ... SPLIT FINS

Synagrops japonicus*
Melanostoma japonicum Steindachner and Döderlein, 1884: 5, pl.1, fig. 2 (Tokyo, Japan).

SERRANIDAE ... GROUPERS

Aethaloperca rogaa*
Perca rogaa Forsskål, 1775: 38 (Djedda, Red Sea).
Rare. A single specimen speared on Boul Reef but not retained. A rather secretive species, often found in the vicinity of caves and crevices. Widespread in the tropical Indo-W. Pacific.

Anyperodon leucogrammicus*
Serranus leucogrammicus Valenciennes in Cuvier and Valenciennes, 1828: 347 (Molluccas and Seychelles).
Centrogenys vaigiensis*  
*Scorpaena vaigiensis* Quoy and Gaimard, 1824: 324 (Waigiou).  

Cephalopholis argus*  
*Cephalopholis argus* Schneider in Bloch and Schneider, 1801: 311, pl.61 (E. Indies).  

Cephalopholis boenack  
*Bodianus boenack* Bloch, 1790: 43, pl.266 (Japan).  
*Cephalopholis pachycentron* - Woodland and Slack-Smith, 1963: 29 (Heron I.).  
This species was previously recorded as *C. pachycentron*, a junior synonym of *C. boenack* (Heemstra and Randall, 1984). Widespread in the tropical Indo-W. Pacific.

Cephalopholis sonnerati*  
*Serranus sonnerati* Valenciennes in Cuvier and Valenciennes, 1828: 299 (Pondicherry and Ceylon).  
This species was previously misidentified as *C. aurantius* (Valenciennes). J.E. Randall has examined the specimen on which the record of *C. aurantius* was based, and re-identified it as *C. sonnerati*. Widespread in the tropical Indo-W. Pacific.

Cephalopholis urodeta*  
*Serranus urodetus* Valenciennes in Cuvier and Valenciennes, 1828: 306 (Tahiti).  

Epinephelus cyanopodus  
*Serranus cyanopodus* Richardson, 1846: 233 (China).  
*Epinephelus kohleri* - Burgess and Axelrod, 1976: pl.323 (Heron I.).  
This species was previously recorded as *E. kohleri* by Burgess and Axelrod (1976) and *E. hoedtii* by Russell (1983), both names of which are regarded by Randall and Whitehead (1985) as junior synonyms of *E. cyanopodus*.

Epinephelus lanceolatus  
*Holocentrus lanceolatus* Bloch, 1790: 92 (E. Indies).  
*Epinephelus lanceolatus* - Woodland and Slack-Smith, 1963: 28 (Heron I.).  
*Promicrops lanceolatus* - Grant, 1972: 168 (Heron I.).  
This species was previously recorded as *Promicrops lanceolatus* by Russell (1983). J.E. Randall (pers. com., 1987), however, writes that he and P. Heemstra have not been able to find a single character to define the genus *Promicrops*, and consequently they place this species in the synonymy of *Epinephelus*.

Epinephelus sexfasciatus*  
*Serranus sexfasciatus* Valenciennes in Cuvier and Valenciennes, 1828:360 (Java).  
Uncommon? Occasionally trawled. Specimens not retained. This species generally inhabits bottoms between reefs in moderately deep water (60-70 m). Widespread in the tropical W. Pacific.

Epinephelus septemfasciatus*  
*Perca septemfasciata* Thunberg, 1793: 56, pl.1 (Nagasaki).  
Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM 21354). Widespread in the tropical Indo-W. Pacific.
PSEUDOCHROMIDAE ... PYGMY GROUPERS

Cypho purpurascens  
Nesiotes purpurascens De Vis, 1884: 453 (South Seas).  
Pseudochromis mccullochi perpulcher - Whitley, 1959: 313 (Heron I.)  
This species was previously recorded as Pseudochromis mccullochi Myers by Russell (1983), but A.C. Gill (pers. comm., 1989), who is revising the family, regards mccullochi as a synonym of Cypho purpurascens. Distributed throughout the tropical S.W. Pacific.

Ogilbyina novae-hollandiae  
Pseudochromis novae-hollandiae Steindachner, 1880: 160 (Port Denison, Queensland).  
Pseudochromis novae-hollandiae - McCulloch, 1915a: 494 (Masthead I.).  
This species was previously recorded as Pseudochromis novae-hollandiae by Russell (1983), but A.C. Gill (pers. comm., 1989) places it to the genus Ogilbyina. Known only from S. Queensland.

Ogilbyina queenslandiae  
Polyacanthus Queenslandiae Saville-Kent, 1893: 308, pl. xvi, fig. 8 (Adolphus I., Cape York).  
Ogilbyina longipinnis - Woodland and Slack-Smith, 1963: 30 (Heron I.).  
This species was previously recorded as Pseudochromis longipinnis (Ogilby) by Russell (1983), but A.C. Gill (pers. comm., 1989) regards longipinnis as a synonym of Ogilbyina queenslandiae. Known only from the Great Barrier Reef.

Ogilbyina velifera  
Pseudochromis veliferus - Lubbock, 1980: 831 (Great Barrier Reef - One Tree I.).  
This species was previously referred to the genus Pseudochromis, but A.C. Gill (pers. comm., 1989) places it in the genus Ogilbyina. Known only from the Great Barrier Reef.

Pseudochromis cyanotaenia  
Pseudochromis cyanotaenia Bleeker, 1857b: 72 (Buru).  
Pseudochromis (Assiculus) cyanotaenia - Woodland and Slack-Smith, 1963: 30 (Heron I.)  
This species was previously misidentified as P. tapeinosoma Bleeker by Russell (1983), who regarded P. cyanotaenia as the male colour form of P. tapeinosoma. However, P. tapeinosoma is a closely related species that does not occur on the Great Barrier Reef (A.C. Gill pers. comm., 1989). Distributed throughout the tropical W. Pacific.

Pseudochromis quinquidentatus*  
Pseudochromis (Leptochromis) quinquidentatus McCulloch, 1926: 190, pl.1 (off Cape Capricorn, Queensland).  
Uncommon? Trawled in 36-42m, between reefs in the Capricorn Group.  
This species occurs mainly in deep water (to 80m) between reefs. Three specimens in the Queensland Museum (QM I.21378) were identified by A.C. Gill (pers. comm., 1989). Known only from northern Australia.

Pseudopleisiops howensis*  
Pseudopleisiops howensis Allen, 1987: 250 (Lord Howe I.; Capricorn Group).  
Pseudopleisiops sp. 2 - Russell, 1983: 45 (One Tree I.; Fairfax Reef).  
This species was previously recorded as a possibly undescribed species. Allen (1987) recently described it as P. howensis, recording it from Lord Howe I. and the Capricorn Group (Heron and One Tree Is).
**Pseudoplesiops rosae***
*Pseudochromis rosae* Schultz, 1943: 117, fig. 11 (Rose I., Samoa).
*Pseudochromis* sp. 1 - Russell, 1983: 45 (One Tree I.).
This species was previously recorded as *Pseudochromis* sp. 1. Additional specimens collected at Heron Island (AMS I.15486-018) and at One Tree Island (AMS I.19338-029) have been subsequently identified by A.C. Gill (pers. comm., 1989) as *P. rosae*. Rare. Occurs in outer reef slope habitats in depths to 10m. Previously known only from Samoa. Distributed throughout the tropical W. Pacific.

**Pseudoplesiops typus***
*Pseudoplesiops typus* Bleeker, 1858: 217 (Goram, Indonesia).
Rare? A single specimen (AMS IB 4065) collected at Heron I. by R.J. Slack-Smith has been identified by A.C. Gill (pers. comm., 1989) as *P. typus*. Widespread in the tropical W. Pacific, including N.W. Australia and Indonesia.

**PRIACANTHIDAE ... BULLSEYES**

*Cookeolus boops***
*Anthias boops* Bloch and Schneider, 1801: 308 (Atlantic Ocean near St. Helena).
Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM I.21322). Circumtropical.

**APOGONIDAE ... CARDINAL FISHES**

*Apogon fleurieu*
*Ostorhinchus fleurieu* Lacepède, 1802: 23 (Pacific Ocean).
*Apogon aureus* - Woodland and Slack-Smith, 1963: 31 (Heron I.).
This species was previously recorded as *A. aureus* (Lacepède), but Gon (1987) recently has shown that *A. fleurieu* is a senior synonym an older name. Widespread in the tropical Indo-W. Pacific.

*Apogon kallopterus*
*Apogon kallopterus* Bleeker, 1856: 33 (Celebes, Manado).
*Apogon kallopterus* - Fraser and Lachner, 1985: 8 (One Tree I.).
Rare? Occurs in a range of habitats from tidepools to depths of 60 m. Widespread in the tropical Indo-W. Pacific.

*Pseudamia gelatinosa*
*Pseudamia gelatinosa* Smith, 1955: 690, pl.18A (Aldabra).
*Pseudamia polystigma* (non Bleeker).- Russell, 1983: 52 (One Tree I.; Wistari Reef).
*Pseudamia gelatinosa* - Randall, Lachner and Fraser, 1985: 9 (One Tree I.).
This species was previously misidentified as *P. polystigma*. In a recent revision of the genus *Pseudamia*, Randall, Lachner and Fraser (1985) clarified the previous confusion surrounding the name *P. polystigma*, and have identified specimens from One Tree I. as *P. gelatinosa*. Widespread in the tropical Indo-W. Pacific.

**CARANGIDAE ... JACKS & TREVALLY**

*Carangoides equula***
*Caranx equula* Schlegel in Temminck and Schlegel, 1844: 111, pl.lx, fig.1 (Japan).
Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. Two specimens in the Queensland Museum (QM I.21356). Widespread in the subtropical and tropical Indo-W. Pacific.
LUTJANIDAE ... SNAPPERS

*Lutjanus adetii*
*Diacope adetii* Castelnau, 1873: 111 (Noumea, New Caledonia).
*Lutjanus amabilis* - Ogilby, 1915: 21 (North West I).
This species has been widely known as *L. amabilis*, under which name it was previously recorded from the Capricorn-Bunker Group. Allen and Talbot (1985), in a recent revision of the genus *Lutjanus*, however, have resurrected *L. adetii* (Castelnau) as an older name. Tropical-subtropical E. Australia, Lord Howe Island and New Caledonia.

*Lutjanus rivulatus*
*Diacope rivulata* Cuvier in Cuvier and Valenciennes, 1828: 414, pl.38 (Coromandel and Malabar coasts and Pondicherry, India; Java; Red Sea).
 Occasionally speared in the Capricorn-Bunker Group, but specimens not retained. Widespread in the tropical Indo-W. Pacific.

*Lutjanus erythropterus*
*Lutjanus erythropterus* Bloch, 1790: 115, pl.249 (Japan).
Uncommon. Occasionally observed underwater with *L. malabaricus* swimming high over bommies at the base of reefs. Specimens speared but not retained. Widespread in the tropical Indo-W. Pacific.

*Lutjanus vitta*
*Serranus vitta* Quoy and Gaimard, 1824: 315, pl.58, fig.3 (Waigiu).

HAEMULIDAE ... SWEETLIPS

*Plectorhinchus lineatus*
*Perca lineata* Linnaeus, 1758: 293 (no locality given).
Uncommon. Occurs in sheltered outer reef slope habitats, in 5-10 m. A specimen speared at Llewellyn Reef is in the Queensland Museum (QM 1.11322). Widespread in the tropical Indo-W. Pacific.

MULLIDAE ... GOATFISHES

*Mulloidichthys flavolineatus*
This species was previously referred to the genus *Mulloidichthys*. However, Bauchot *et al.* (1985) have recognised the genus *Mulloidichthys* as valid and relegate *Mulloidichthys* to its synonymy. Widespread in the tropical W. Pacific.

*Mulloidichthys vanicolensis*
*Upeneus vanicolensis* Valenciennes in Cuvier and Valenciennes, 1831: 521 (Vanicolo).
Uncommon? Occasionally speared. Two specimens in the Queensland Museum, from Fairfax Island (QM I.21302) and Hoskyn Island (QM I.21303). Widespread in the tropical W. Pacific.

EPHIPPIDAE ... BATFISHES

*Platax batavianus*
*Platax batavianus* Cuvier in Cuvier and Valenciennes, 1831: 225 (Batavia).
Moderately common in outer reef slope habitats over large bommies, particularly at cleaning stations. Occasionally speared. This species was identified by Dr G.R. Allen (W.A. Museum) from an underwater photograph taken at Boult Reef. N. Australia and Indo-Malay archipelago.
Platax tiera*
*Chaetodon tiera* Forsskål, 1775: 60 (Lohaja, Red Sea).
Moderately common in outer reef slope habitats, especially around bommies. Recorded on the basis of an underwater photograph taken at Heron I. by B.C.R. Widespread in the tropical Indo-W. Pacific.

CHAETODONTIDAE ... BUTTERFLYFISHES

*Chaetodon guentheri* *
Chaetodon güntheri* Ahl, 1923: 99 (Manado, Celebes).

*Chaetodon rafflesii*
*Chaetodon rafflesii* Bennett, 1830: 689 (Sumatra).
Rare. A single specimen observed at Wreck I. and at Fitzroy I. in about 15 m by A.M. Ayling. Widespread in the tropical W. Pacific.

POMACANTHIDAE ... ANGELFISHES

*Chaetodontoplus duboulayi* *
*Chaetodontoplus duboulayi* Günther, 1867: 67 (N.W. Coast of Australia).

POMACENTRIDAE ... DAMSELFISHES

*Chromis viridis*
*Pomacentrus viridis* Ehrenberg in Cuvier and Valenciennes, 1830: 420 (Massaua, Red Sea; Guam).
*Chromis caeruleus* - Woodland and Slack-Smith, 1963: 41 (Heron I.).
This species has been previously recorded as *C. caerulea* (Cuvier in Cuvier and Valenciennes). However, Randall, Bauchot and Dessouter (1985) have shown that *C. caerulea* is the pomacentrid fish long identified as *C. tertatensis* (Bleeker), and the valid name for *C. caerulea* is *C. viridis* (Cuvier in Cuvier and Valenciennes). Randall, Bauchot and Dessouter (in press) have petitioned the International Commission on Zoological Nomenclature to suppress the name *caerulea* in order to retain *tertatensis*. Widespread in the tropical Indo-W. Pacific.

LABRIDAE ... WRASSES

*Choerodon frenatus*
*Choerodon frenatus* Ogilby, 1910a: 99 (Off Double I. Point, Queensland).
SCARIDAE ... PARROTISHES

**Scarus altipinnis**
*Pseudoscarus altipinnis* Steindachner, 1879: 18 (Kingsmill Is).
*Scarus chlorodon* (non Jenyns).- Goedon, 1974: 13 (Heron I.).
*Scarus brevifilis* - Russell, 1983: 104 (Heron I.).
*Scarus altipinnis* - Choat and Randall, 1986: 198 (Heron I.).
This species was previously recorded as *S. brevifilis* (Günther). Choat and Randall (1986) regard *S. brevifilis* as a synonym of *S. altipinnis* (Steindachner). Widespread in the tropical W. Pacific.

**Scarus chameleon**
*Scarus lunula* (non Snyder).- Goedon, 1974: 13 (Heron I.).
*Scarus* sp.1.- Russell, 1983: 107 (Heron I.).
This species was previously recorded as an undescribed species of *Scarus*. Widespread in the tropical W. Pacific and W. Australia.

**Scarus forsteni**
*Pseudoscarus forsteni* Bleeker, 1861: 238 (Celebes and Moluccas).
*Scarus lepidus* (non Jenyns).- Choat and Robertson, 1975: 264 (Heron I.).
*Scarus tricolor* (non Bleeker).- Russell, 1983: 106 (Heron I.).
*Scarus forsteni* - Choat and Randall, 1986: 204 (One Tree I.).
This species was previously recorded as *Scarus tricolor* (Bleeker). Choat and Randall (1986) regard *S. tricolor* as distinct from *S. forsteni* (Bleeker) and use the latter name for Great Barrier Reef specimens. Widespread in the tropical W. Pacific.

**Scarus frontalis**
*Scarus frontalis* Valenciennes in Cuvier and Valenciennes, 1840: 280 (Caroline Is).
*Scarus frontalis* - Choat and Randall, 1986: 206 (Heron I.).

MUGILOIDIDAE ... GRUBFISHES

**Parapercis nebulosa**
*Percis nebulosus* Quoy and Gaimard, 1825: 349 (Sharks Bay, W. Australia).
Uncommon? Trawled in 26-42 m, between reefs in the Bunker and Capricorn Groups. A single specimen in the Queensland Museum (QM 1.21347). This species inhabits sedimentary substrata often near reefs, usually in depths of 15-58 m (Randall and Stroud, 1985). Eastern and western Australia. Records of this species from elsewhere represent misidentifications of *P. robinsoni* Fowler (Randall and Stroud, 1985).

URANOSCOPIDAE ... STARGAZERS

**Uranoscopus sp.**
Rare? Trawled in 195-200 m, 10 miles E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM 1.21355) appears to be an undescribed species of *Uranoscopus* (H. Kishimoto pers. comm., 1986).
BLENNIIDAE ... BLENNIES

* Cirripectes chelomatus

*Cirripectes chelomatus* Williams and Maugé, 1983: 1140 (E. Australia; Lord Howe I.; New Caledonia; Loyalty Is; Tonga Is; Vanuatu; Papua-New Guinea; Fiji).


This species was previously recorded as an undescribed species of *Cirripectes*. The holotype (AMS I.21495-027) was collected from Lady Musgrave Reef and several paratypes were also collected from Heron Island and One Tree Island. Occurs in depths to 16 m. Widespread in the tropical S.W. Pacific.

*Ecsenius stictus*

*Ecsenius stictus* Springer, 1988: 74, fig. 38, pl. 9 (One Tree I., Great Barrier Reef).


This species was previously recorded as *Ecsenius yaeyamensis* (Aoyagi), but in a recent paper, Springer (1988) describes Great Barrier Reef specimens as a new species, *E. stictus*. Restricted to the Great Barrier Reef.

*Parablennius tasmanianus*

*Blennius tasmanianus* Richardson, 1849: 129 (Van Dieman's Land).

*Blennius intermedius* - Whitley, 1926: 234 (North West I.).


*Parablennius tasmanianus intermedius* - Bath and Hutchins, 1986: 179 (Masthead I.)

This species was previously recorded as *Parablennius intermedius* (Ogilby). Bath and Hutchins (1986), however, relegate *intermedius* to a subspecies of *P. tasmanianus* (Richardson). Widespread in E. Australia from Torres Strait to Victoria.

TRIPTERYGIIDAE ... TRIPLE FINS

*Helcogramma springeri*

*Helcogramma springeri* Hadley Hansen, 1986: 345, Fig. 16 (Indonesia; Philippines; New Guinea; New Hebrides; Solomon Is; Queensland).

*Helcogramma* sp. - Russell, 1983: 119 (One Tree I.).

This species was previously recorded as an undescribed species of *Helcogramma*. Hadley Hansen (1983) included several paratypes from One Tree I. in her description of *H. springeri*. Widespread in the tropical W. Pacific.

CHAMPSODONTIDAE ... SABRE GILLS*

*Champsodon arafurensis?*

*Champsodon arafurensis* Regan, 1908: 245 (Arafura Sea; Ki Is).

Rare? Trawled in 195-205 m, 10 miles E. of Lady Musgrave Island. Two specimens in the Queensland Museum (QM I.21357) are provisionally identified as *C. arafurensis* Regan. The specimens measure 121 and 134.5 mm SL and are characterised by having a naked belly, premaxillary with a shallow double notch anteriorly, indistinct dark blotches midlaterally, and a dark blotch at the base of the caudal fin. Arafura Sea and Indonesia.

CALLIONYMIDAE ... DRAGONETS

*Synchiropus rameus*

*Callionymus (Calliurichthys) rameus* McCulloch, 1926: 201, pl.3 (Off Cape Capricorn, Queensland).

Rare? Trawled in 46-55 m, S.E. of Lady Elliott Island. A single specimen in the Queensland Museum (QM I.21340). N. Australia.
GOBIIDAE ... GOBIES

*Amblyeleotris wheeleri*
*Cryptocentrus wheeleri* Polunin and Lubbock, 1977: 88, fig.16 (Seychelles; Aldabra; Andaman Sea).

*Amblyeleotris fasciata* (non Herre).- Russell, 1983: 126 (One Tree I.)
This species was previously recorded as *A. fasciata* (Herre). Polunin and Lubbock (1980) pointed out the similarity of *A. fasciata* and *A. wheeleri*, and regarded the latter as a junior synonym. D.F. Hoese (pers. comm., 1986), however, regards *A. wheeleri* as a distinct species. Widespread in the tropical Indo-W. Pacific.

*Asterropteryx spinosus*
*Oplopomus spinosus* Goren, 1981: 96, fig.2 (New Caledonia).
*Asterropteryx* sp.- Russell, 1983: 127 (One Tree I.).
This species was previously identified as an undescribed species of *Asterropteryx*. Goren (1981) has referred it to the genus *Oplopomus* and described it as *O. spinosus*. New Caledonia and the southern Great Barrier Reef.

*Bryaninops amplus*
*Tenacigobius* sp.2.- Russell, 1983: 138 (One Tree I.).
This species was previously recorded as *Tenacigobius* sp.2, Larson (1986) recorded it also from Wistari Reef. *B. amplus* is a commensal species, occurring in pairs or small groups on gorgonian seawhips (*Junceella*) in depths to 30 m (Larson, 1986). N. Australia, Hawaii, and the Philippines.

*Bryaninops isis*
*Tenacigobius* sp.1.- Russell, 1983: 137 (One Tree I.).
This species was previously recorded as *Tenacigobius* sp.1. Lives on the gorgonian seawhip genus *Isis* and is almost parasitic in its mode of life, feeding on the polyps of its host as well as taking copepods (Larson, 1986). Occurs in depths to about 15 m. Great Barrier Reef, Papua New Guinea and the Philippines.

*Callogobius flavobrunneus*
*Mucogobius flavobrunneus* Smith, 1958: 145, fig.6 (E. Africa; Seychelles).
*Callogobius* sp.3.- Russell, 1983: 129 (One Tree I.).
This species, previously included as an undescribed species of *Callogobius*, is provisionally identified as *C. flavobrunneus* (D.F. Hoese pers. comm., 1986). Widespread in the tropical Indo-W. Pacific.

*Callogobius hasseltii*
*Eleotris hasseltii* Bleeker, 1851: 253 (Anjer, Java).
*Callogobius hasseltii* - McCulloch and Ogilby, 1919: 217 (Masthead I.).
*Callogobius* sp.1.- Russell, 1983: 128 (One Tree I.).
This species was previously recorded as *Callogobius* sp.1, but D.F. Hoese (pers. comm., 1986) indicates that it represents the true *C. hasseltii*, and that specimens previously referred to the latter name are an undescribed species of *Callogobius*. Widespread in the tropical Indo-W. Pacific.

*Callogobius* sp.1
This species was previously referred to as *C. hasseltii* (Bleeker). According to D.F. Hoese (pers. comm., 1986) this fish represents an undescribed species. The species previously referred to as *Callogobius* sp.1 is *C. hasseltii*. 
**Eviota albolineata**

*Eviota albolineata* Jewett and Lachner, 1983: 783, fig.1,2 (E. coast of Africa to Tuamotu Archipelago).

*Eviota* sp.1.- Russell, 1983: 132 (One Tree I.).

This species was previously recorded as an undescribed species. Widespread in the tropical Indo-W. Pacific.

**Eviota sparsa**

*Eviota sparsa* Jewett and Lachner, 1983: 802, fig.11 (Indonesia; Philippines; Palau; Great Barrier Reef; Samoa).

*Eviota* sp.2.- Russell, 1983: 132 (One Tree I.).

This species was previously recorded as an undescribed species. Widespread in the tropical W. Pacific.

**Fusigobius duospilus**

*Fusigobius duospilus* Hoese and Reader, 1985: 2, fig.1 (E. Africa to Society Is).

*Fusigobius* sp.3.- Russell, 1983: 133 (Heron I.).

This species was previously referred to as *Fusigobius* sp.3 by Russell (1983). Widespread in the tropical Indo-W. Pacific.

**Fusigobius signipinnis**

*Fusigobius signipinnis* Hoese & Obika, 1988: 282, fig.1, 2 (Japan, Philippines, Caroline Is, New Guinea, Great Barrier Reef).

This species was previously referred to as *Fusigobius* sp.2 by Russell (1983). Widespread in the tropical W. Pacific.

**Istigobius decoratus**

*Rhinogobius decoratus* Herre, 1927: 181, pl.13, fig.3 (Leyte, Philippines).

*Acentrogobius ornatus* (non Rüppell).- Woodland and Slack-Smith, 1963: 53 (Heron I.).


This species was previously misidentified as *Acentrogobius ornatus* by Woodland and Slack-Smith (1963), and included as a undescribed species by Russell (1983). Murdy and Hoese (1985) have identified it as *Istigobius decoratus*. Common on sand close to coral in depths of 1-18 m. It usually occurs singly (Murdy and Hoese, 1985). Widespread in the tropical Indo-W. Pacific.

**Istigobius rigilius**


*Istigobius* sp.2.- Russell, 1983: 134 (One Tree I.).

This species was previously recorded as a possibly undescribed species, but was identified as *Istigobius rigilius* by Murdy and Hoese (1985). *I. rigilius* apparently is uncommon in the Capricorn-Bunker Group, and occurs in sandy areas close to living coral and coral rubble in depths of 1-30 m (Murdy and Hoese, 1985). Widespread in the tropical W. Pacific.

**Oplopomops diacanthus**

*Oplopomus diacanthus* Schultz, 1943: 242, fig. 21 (Canton I.).

*Oplopomops atherinoides* - Russian, 1983: 134 (One Tree I.).

This species was previously recorded as *O. atherinoides* on the basis of five specimens collected at One Tree I. D.F. Hoese (pers. comm., 1986) has re-identified these specimens as *O. diacanthus* (Schultz). Previously known only from Canton I. in the Central pacific. A new record for Australia.
**Parioglossus formosus**

*Herrea formosa* Smith, 1931: 40 (Koh Chula, Chantabun R., Gulf of Siam, Siam).

*Herreolus formosus* - Whitley, 1954: 23 (Heron I.).


This species was previously misidentified as *P. taeniatus* (Regan). In a recent revision of the genus *Parioglossus*, however, Rennis and Hoese (1985) reconfirm Whitley's (1954) original identification of a specimen from Heron I. as *P. formosus*. Widespread in the tropical W. Pacific.

**Psilogobius prolatus**

*Psilogobius prolatus* Watson and Lachner, 1985: 649 (One Tree I.; Cocos-Keeling Is).


This species was previously misidentified as *P. mainlandi*. Known elsewhere only from the Cocos-Keeling Is.

**Ptereleotris monoptera**

*Ptereleotris monoptera* Randall and Hoese, 1985: 24 (Taiwan, Great Barrier Reef, Indonesia, Seychelles).

*Ptereleotris* sp.- Russell, 1983: 139 (One Tree I.).

This species was previously recorded as *Ptereleotris* sp. It occurs mainly in outer reef slope habitats in depths between 6-15 m, often in aggregations above coral rock or sand, escaping into burrows in the substrate when threatened (Randall and Hoese, 1985). Widespread in the tropical Indo-W. Pacific.

**Trimma macrophthalmus**

*Eviota macrophthalmus* Tomiyama, 1936: 47, fig.6 (Japan).

*Priolepis necopinnis* Whitley, 1959: 316 (Heron I.).


This species was previously recorded as *T. necopinnis* (Whitley), a junior synonym of *T. macrophthalmus* (D.F. Hoese pers. comm., 1986). Widespread in the tropical Indo-W. Pacific.

**Trimma okinawae**


*Trimma* sp.1.- Russell, 1983: 138 (One Tree I.).

This species was previously recorded as an unidentified species of *Trimma*, but it was pointed out that it might possibly prove identical with *T. okinawae*. D.F. Hoese (pers. comm., 1986) has confirmed this identification. Widespread in the tropical W. Pacific.

**Valenciennea immaculata**


*Valenciennea* sp.1.- Russell, 1983: 139 (Heron I., One Tree I.).

This species was previously recorded as an undescribed species of *Valenciennea*. Dr D.F. Hoese (pers. comm., 1986) re-identified Capricorn-Bunker Group specimens as *V. immaculata* (Ni). Previously known only from China.

**ACANTHURIDAE ... SURGEONFISHES**

**Acanthurus blochii**

*Acanthurus blochii* Valenciennes in Cuvier and Valenciennes, 1835: 209 (Mauritius).

*Acanthurus mata* - Woodland and Slack-Smith, 1963: 51 (Heron I.).

This species was previously referred to as *A. mata*, but Randall (1988) has shown that *A. mata* of most authors is a misidentification of *A. blochii* Valenciennes, and the species previously referred to as *A. bleekeri* is the true *A. mata*. Widespread in the tropical Indo-W. Pacific.
Acanthurus albipectoralis*
Rare. A single specimen of this recently described species observed in 15 m at Wreck I. by A.M. Ayling (pers. comm., 1986). Other specimens have been collected the outer Swain Reefs and Herald Cay in the Coral Sea. Great Barrier Reef and Coral Sea.

Acanthurus mata
*Chaetodon meta* (sic) Cuvier, 1829: 224 (no locality given).
This species was previously referred to as *A. bleekeri* Günther, but Randall (1988) has shown that this species is a junior synonym of *A. mata* Cuvier, and that the species generally referred to as *A. mata* is a misidentification of *A. blochii* Valenciennes. Widespread in the tropical Indo-W. Pacific.

Prionurus microlepidotus*
*Prionurrs microlepidotus* Lacepède, 1804: 211 (New Holland).
Uncommon. Occasionally seen close to drop-offs on exposed reef slopes. Epipelagic, schooling. Speared (a Queensland spearfishing record of 10.43 kg was taken at Fairfax Island in 1968). Specimens were not retained and identification was from photographs. E. Australia.

Prionurus maculatus*
*Prionurus maculatus* Ogilby, 1887: 395 (Port Jackson, New South Wales).
Uncommon. Occasionally seen close to drop-offs on exposed reef slopes. Epipelagic, schooling. Speared (a Bundaberg spearfishing record of 5.44 kg was taken at Hoskyn Islands in 1972). Specimens not retained, and identification was from photographs. E. Australia and Lord Howe Island.

BOTHIDAE ... LEFT HANDED FLOUNDERS

*Engyprosopon* sp.*
Rare? Trawled in 46-55 m, S.E. of Lady Elliott Island. A single unidentifed specimen in the Queensland Museum (QM I.21321). This specimen is characterised by having about 53 pored lateral-line scales and a very broad interorbital space.

*Pseudorhombus diplospilus*
*Pseudorhombus diplospilus* Norman, 1926: 226, fig.1 (Hervey Bay, Queensland).
Rare? Trawled in 30 m, N. of Masthead Island. A single specimen in the Queensland Museum (QM I.21300). Known from northern Australia and Indo-China.

*Samaris cacatuae*
*Arnoglossus cacatuae* Ogilby, 1910a: 130 (Queensland).
Rare? Trawled in 46-55 m, S.E. of Lady Elliott Island. Two specimens in the Queensland Museum (QM I.21320). A moderately deep-water species (45-70 m). According to Norman (1926, 1934) this species may be identical with *S. cristatus* Gray. Widespread in the tropical Indo-W. Pacific (Norman, 1934).

PLEURONECTIDAE ... RIGHT HANDED FLOUNDERS

*Poecilopsetta* sp.*
Rare? Trawled in 335 m, 10 miles N.E. of Lady Musgrave Island. Two unidentified specimens in the Queensland Museum (QM I.21467).
OSTRACIIDAE ... BOXFISHES

*Lactoria fornasini*  
*Lactoria fornasini* Bianconi, 1846: 115 (Mozambique).  

TETRAODONTIDAE ... PUFFER FISHES

*Canthigaster rivulata*  
*Canthigaster rivulata* Schlegel in Temminck and Schlegel, 1850: 285, pl.124, fig.3 (Nagasaki Bay, Japan).  
Rare? Trawled in 36-42 m, between reefs in the Bunker Group. A single specimen in the Queensland Museum (QM I.21346). A relatively deepwater species, occurring in depths to 100 m. Widespread in the tropical Indo-W. Pacific.

*Torquigener hicksi*  
*Torquigener hicksi* Hardy, 1983: 25 (N.E. of Cape Moreton, Queensland).  
Rare? Trawled in 335 m, 10 miles N.E. of Lady Musgrave Island. A single specimen in the Queensland Museum (QM I.21770). Apparently a deepwater species. Previously known only from the holotype, trawled 33 km N.E. of Cape Morton.
RECORDS WITHOUT BASIS

*Corythoichthys haematopterus* (non Bleeker).- Russell, 1983: 32 (Capricorn-Bunker Group). *C. haematopterus* (Bleeker) was recorded on the basis of a misidentification of *C. fasciatus* (non Risso) by Woodland and Slack-Smith (1963). Dawson (1985) points out that *C. haematopterus* is often confused with *C. intestinalis* (Ramsay) and since he records only the latter from the Great Barrier Reef, the record of *C. haematopterus* from the Capricorn-Bunker Group is removed.

*Cephalopholis* sp.- Russell, 1983: 39 (North West I.). J.E. Randall has re-examined this specimen (QM I.17815) upon which this record was based, and identified it as *C. cyanostigma*, a species previously included as an unconfirmed record.


*Pseudochromis aureus* Seale.- Russell, 1983: 43 (Heron I.). This species is a junior synonym of *P. fuscus* Müller and Troschel (A.C. Gill pers. comm., 1983) and accordingly is placed in the synonymy of that species.
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