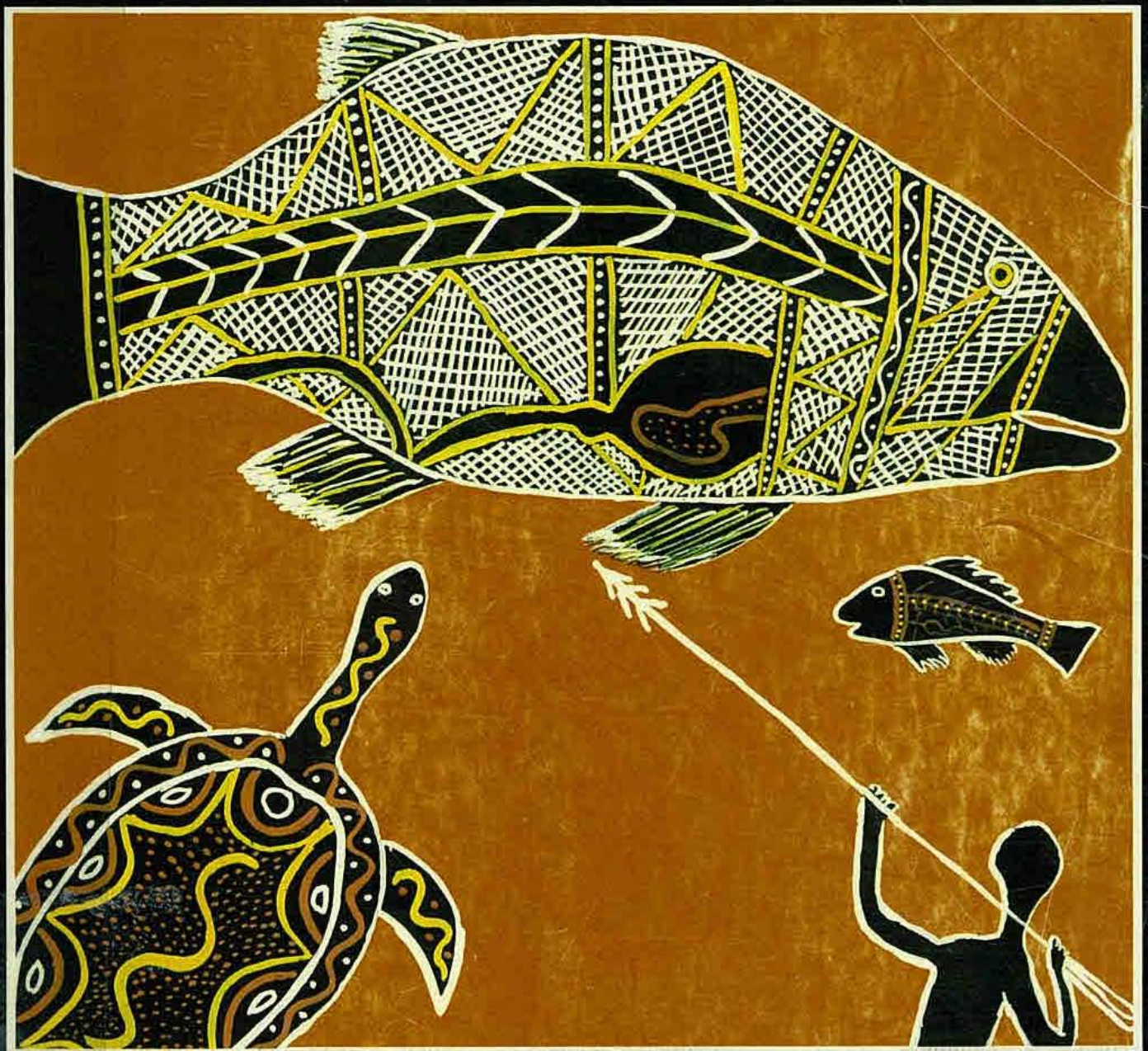


CHECKLIST OF FISHES

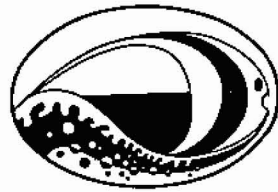
GREAT BARRIER REEF MARINE PARK
CAPRICORNIA SECTION



GREAT BARRIER REEF MARINE PARK AUTHORITY
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Author
Barry C. Russell

**ANNOTATED CHECKLIST OF
THE CORAL REEF FISHES
IN THE
CAPRICORN-BUNKER GROUP
GREAT BARRIER REEF
AUSTRALIA**



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Barry C. Russell

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ABSTRACT

The Capricorn-Bunker Group lies at the southern end of the Great Barrier Reef of Australia (23° - 24°S, 151° 31' - 152° 30'E) and forms part of the Capricornia Section of the Great Barrier Reef Marine Park. The first record of fishes was in 1893 and since then the area has been extensively collected. Comprehensive collecting by the Australian Museum at One Tree Island between 1966-76 has added considerably to the previously known ichthyofauna. The present annotated checklist is a collation of previously published records and recent collecting work, and contains 859 species, including 271 species previously unreported for the Capricorn-Bunker Group, of which 82 are new records for Australia. The fish fauna consists primarily of coral reef species which are widely distributed throughout the tropical Indo-W. Pacific (46.3%) or tropical W. Pacific (19.7%). Remaining species include a small but distinctive subtropical-temperate element.

FOREWORD

One of the main attractions of the Great Barrier Reef is the diverse and colourful array of fishes. To the fisherman the attraction may be the larger carnivorous reef fish such as coral trout, sweetlip and red emperor. To the diver the attraction may include the small brightly coloured butterflyfishes, surgeon fishes and other colourful creatures. To the scientist it may be the curious behaviour of a particular fish that is of interest, and to the layman with no specialist interest it may be a combination of all of these things.

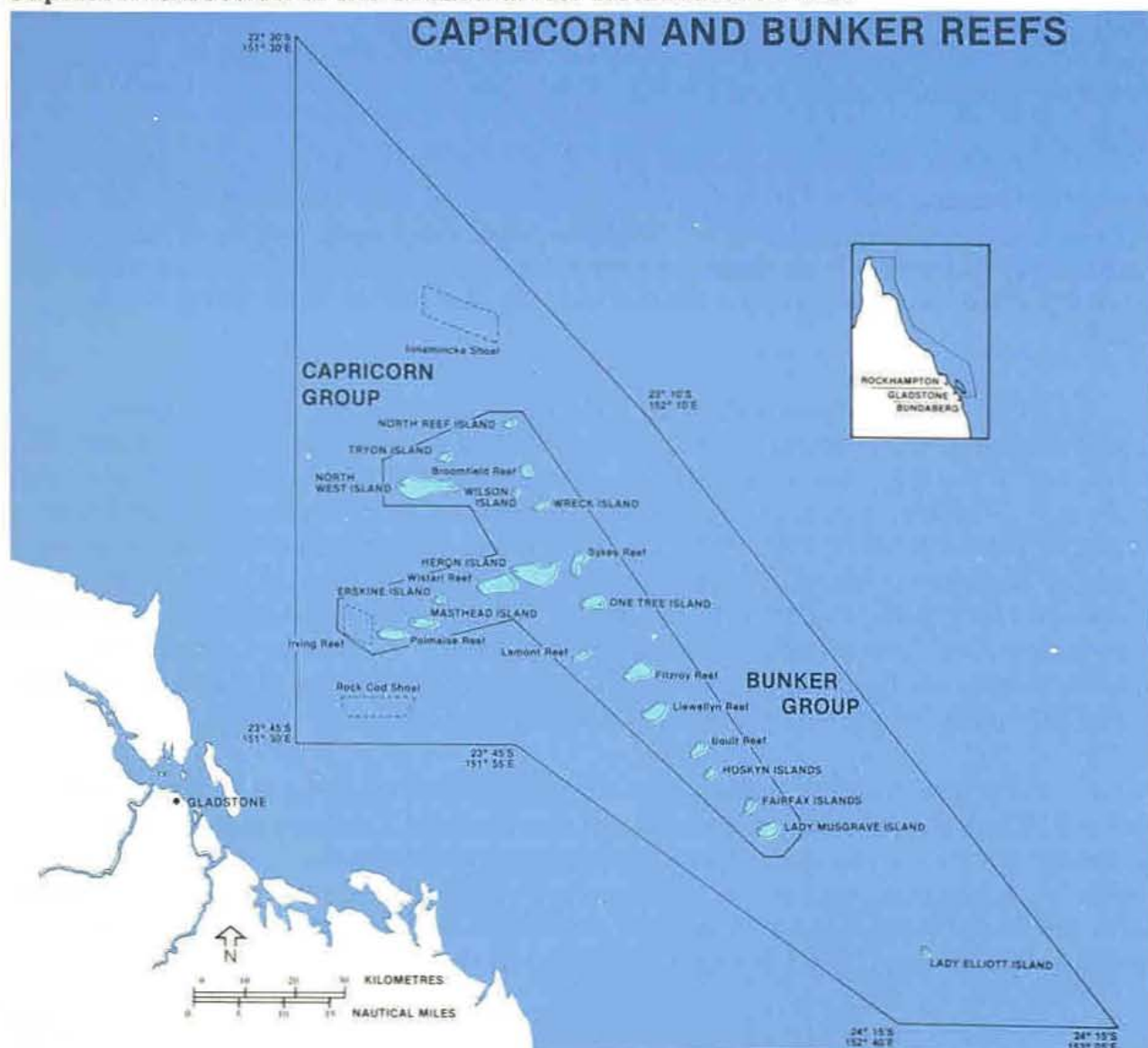
In the Great Barrier Reef Region new fish species are being discovered constantly, and without regular reviews it is difficult to keep abreast of the fish fauna. As a starting point, the Great Barrier Reef Marine Park Authority commissioned Dr. Barry Russell, then of The Australian Museum, to compile existing information on fishes in the first section of the Marine Park — Capricornia — into a single annotated list. It is hoped that this will be the first of a series of checklists, one for each section of Marine Park.

The checklist should be of particular use to the scientific community, but it is also intended to be of value to fishermen, divers and other interested citizens, both of Australia and overseas.

INTRODUCTION

The Capricorn-Bunker Group includes some 21 coral reefs lying on the southern end of the Great Barrier Reef of Australia between latitudes $23^{\circ} 00'S$ and $24^{\circ} 00'S$ and longitudes $151^{\circ} 31'E$ and $152^{\circ} 30'E$. Together with a number of banks, patches and shoals, and Lady Elliott Island to the south, the reefs and islands of the Capricorn-Bunker Group comprise the newly-declared Capricornia Section of the Great Barrier Reef Marine Park (Fig. 1).

Figure 1. Map of the Capricorn Bunker Group and boundary of the Capricornia Section of the Great Barrier Reef Marine Park.



For many years the area has been the focus of studies on coral reefs in Australia, and now is perhaps the best known scientifically of any area of the Great Barrier Reef. The present faunal list of the fishes of the Capricorn-Bunker Group is a compilation of literature records over the past 90 years as well as recent collecting work carried out by the Australian Museum chiefly at One Tree Island. As a result of this work, there are now 859 species and 110 families of fishes known from the Capricorn-Bunker Group. The list includes 271 species previously unrecorded from the area, and 82 species are new records for Australia.

HISTORICAL REVIEW

The earliest recorded visit by naturalists to the Capricorn-Bunker Group was that of J. Beete Jukes and John MacGillivray on board *H.M.S. Fly* accompanied by the cutter *H.M.S. Bramble* in 1842. Earlier, in 1839, the survey vessel *H.M.S. Beagle* passed through the Capricorn-Bunker Group and later, in 1848, T.H. Huxley on board *H.M.S. Rattlesnake* also passed by. It was not until 1893, however, that the first report of fishes from the area was made. In that year W. Saville-Kent, who had earlier visited Lady Elliott Island in his capacity as Commissioner of Fisheries for Queensland (1889-90) listed five species, including two which he described as new (Saville-Kent, 1893).

In 1910, the Federal investigation ship *Endeavour* trawled extensively along the Queensland coast and collected fishes from near the Bunker Group and in deep water off North Reef. A few of these fishes were described by J. Douglas Ogilby (1910a), and others subsequently were dealt with in the scientific reports upon the *Endeavour* collections (McCulloch, 1914b, 1915b, 1916, 1926; Norman, 1926).

Visits to Masthead Island in 1912 and 1913 by Allan R. McCulloch, ichthyologist at the Australian Museum, provided some of the first collections of coral reef fishes from the area. McCulloch's successor at the Australian Museum, Gilbert P. Whitley, collected additional specimens of fishes during an expedition to North West Island in 1925 (Whitley, 1926), and other notable collections were made by Melbourne Ward in November 1927 at Hoskyn Island, Lady Musgrave Island and Fairfax Island (Whitley, 1928b). The American philanthropist George Vanderbilt also visited Lady Musgrave Island briefly in 1935 and obtained a small collection of fishes (now in the collection of the Academy of Natural Science of Philadelphia) which were later described by Henry Fowler (1957).

The first comprehensive collecting effort was made by D.J. Woodland and R.J. Slack-Smith of the University of Queensland. During 1956-57 they collected extensively around Heron Island using ichthyocides, trapping, handlining, spearing and beach seining. As a result of this work, 330 species were recorded from Heron Island (Woodland and Slack-Smith, 1963). This list was added to by Goeden (1974), bringing the total to 457 species for Heron Island.

In 1966 major investigation of the fishes of One Tree Island was begun by Dr Frank H. Talbot and co-workers at the Australian Museum, including the present author. Although primary emphasis was on quantitative ecological collections of fishes from various reef habitats using small explosive charges, other methods of collection included ichthyocides, handlining, spearing and netting. This work continued until 1976 when the lease for One Tree Island was transferred from the Australian Museum to the University of Sydney, and has resulted in very large and comprehensive collections of fishes (more than 20,000 specimens in 3,000 lots in the Australian Museum and a similar number collected

by Dr Victor G. Springer in the United States National Museum of Natural History, Washington D.C.)

Preliminary identification of One Tree Island fishes was made by Dr F.H. Talbot, Dr B. Goldman, and Dr J.H. Choat, these being incorporated along with Woodland and Slack-Smith's (1963) Heron Island records into a draft computer listing of Capricorn-Bunker Group fishes. Updating of this list by Goldman and the present author in 1974 resulted in the inclusion of nearly 800 species. A more recent draft list of Capricorn-Bunker Group fishes was prepared separately by Dr. D.F. Hoese in 1978 on the basis of various literature sources and specimens in the Australian Museum and contained some 810 species. These unverified lists formed the basis of publication of a preliminary list of the fishes of Heron Island and adjacent reefs (Mather and Bennett, 1978). The present checklist is a collation of much of this unpublished data of Talbot, Goldman, Choat and Hoese. Other records have been gleaned from the literature, including popular books which contain a number of photographic records.

FISH COLLECTIONS

Most of the fishes collected from the Capricorn-Bunker Group and surrounding marine park area, are held in the Australian Museum, Sydney or the Queensland Museum, Brisbane. Woodland and Slack-Smith's important Heron Island collection, originally held in the Department of Zoology, University of Queensland, has since been transferred to the Queensland Museum, with a few specimens being deposited also in the Australian Museum. Unfortunately many of their specimens have been lost. Other specimens collected by T.C. Marshall and E.M. Grant and previously in the collection of the Queensland Fisheries Service, have been transferred to the Queensland Museum. A sizeable collection of fishes from One Tree Island is in the United States National Museum of Natural History, Washington D.C., and other, smaller but significant collections of Capricorn-Bunker fishes are held in the Academy of Natural Sciences of Philadelphia; Bernice P. Bishop Museum, Honolulu; California Academy of Sciences, San Francisco; CSIRO Division of Fisheries Research, Cronulla; and the Western Australian Museum, Perth.

**TABLE 1
TWENTY MOST SPECIOSE FAMILIES OF FISHES FROM THE
CAPRICORN-BUNKER GROUP**

FAMILY	NUMBER OF GENERA	NUMBER OF SPECIES	PERCENTAGE OF TOTAL
Gobiidae	35	104	12.1
Labridae	27	69	8.0
Pomacentridae	15	69	8.0
Blenniidae	19	40	4.7
Apogonidae	9	33	3.8
Serranidae	10	32	3.7
Chaetodontidae	6	32	3.7
Acanthuridae	5	25	2.9
Muraenidae	6	23	2.7
Scaridae	4	22	2.6
Scorpaenidae	13	21	2.4
Carangidae	13	21	2.4
Pomacanthidae	4	15	1.7
Lutjanidae	5	14	1.6
Monacanthidae	12	13	1.5
Syngnathidae	5	12	1.4
Pseudochromidae	3	12	1.4
Balistidae	8	11	1.3
Holocentridae	3	11	1.3
Tetraodontidae	4	11	1.3

SPECIES COMPOSITION AND ZOOGEOGRAPHY

The fish fauna of the Capricorn-Bunker Group comprises mostly reef-associated species. The most abundant families are summarised in Table 1. The 20 most speciose families together account for about 68 percent of the total fauna. These families are typically abundant throughout the Indo-W. Pacific region (Allen *et al.*, 1976; Allen and Steene, 1979).

A zoogeographic analysis of the fish fauna is presented in Table 2. Categories in the Table are mutually exclusive, i.e. a given species occurs in only one category. The largest categories consist of species that are widely distributed throughout the tropical Indo-W. Pacific region (46.3%) or the tropical W. Pacific (19.7%). Only four species (*Neoaploactis tridorsalis*, *Apogonichthys ahimsa*, *Amblyeleotris* sp. 1, *Cantheschenia grandisquamis*) are 'endemic' to the Capricorn-Bunker Group, and comparatively few species (3.0%) are restricted to the Queensland-Great Barrier Reef region. Subtropical and temperate species comprise a small but distinctive element. These include a number of species distributed also in southern Queensland (4.1%), the south-western Pacific — including Norfolk Island, Lord Howe Island and New South Wales (4.3%), tropical-subtropical Australia (1.9%), and eastern Australia-New Zealand (0.7%). This element is characteristic of the fish fauna of the Capricorn-Bunker Group and is largely absent in northern reefs of the Great Barrier Reef.

Direct comparison of the diversity of fishes of the Capricorn-Bunker Group with other coral reef fish faunas is difficult because of the general paucity of collecting elsewhere and our imperfect knowledge of the taxonomy of many families. The present estimate of 859 species for the Capricorn-Bunker Group is very similar to that recorded so far for the northern Great Barrier Reef (807 species in the vicinity of Lizard Island — J.R. Paxton, D.F. Hoese, H.K. Larson unpublished data, 1980). However, collections in the latter area are far from complete or comprehensive, and in particular do not include many of the larger pelagic and roving demersal species which are difficult to sample. Consequently, the number of species from Lizard Island might be expected to be increased. A comparison of 6 families (Table 3 — Gobiidae, Pomacentridae, Labridae, Chaetodontidae, Pomacanthidae, and Syngnathidae) which have been reasonably comprehensively collected and subject to detailed taxonomic study, shows between 6.3-50.0 percent more species at Lizard Island, with an average increase in numbers of species of 25.0 percent. This very preliminary analysis suggests there may be as many as 1,100 species on northern Great Barrier Reefs compared with 859 recorded for the Capricorn-Bunker Group. In part at least, the greater number of species in the north is probably due to the much wider range of habitats present (from outer barrier reefs to inshore coastal reefs). Comparison of within-habitat diversities supports this general conclusion: species-area curves (Fig. 2) for similar typical 'leeward' reef habitats sampled quantitatively using explosives at One Tree Reef and Yonge Reef, near Lizard Island (Talbot, Russell, Anderson, unpublished data) are virtually identical and do not indicate any great differences in within-habitat diversity.

Faunistic differences between Capricorn-Bunker Group reefs and Lizard Island reefs are more marked. For the six families compared in Table 3, the number of species in common as a percentage of the combined total number of species in each family varies between 30.6-74.3 percent, with an average of 52.0 percent. Thus, about 24 percent of species in the southern Great Barrier Reef do not occur in the north and vice versa, although with further collecting in the vicinity of Lizard Island this figure might be reduced. Given a local 'endemism' of 24 percent in the northern and southern parts of the Great Barrier Reef we might estimate a total of about 1,300 species of coral reef fishes for the whole of the province. This figure is close to Marshall's (1964) estimate of 1,500 species (including freshwater and coastal marine fishes) for Queensland, and is comparable with the number of species known from New Guinea (1,533 — Munro, 1958, 1964; Kailola, 1973, 1974a, 1974b), although substantially less than the number of species recorded for the central Indo-Malay archipelago (Philippines with 2,177 species — Herre, 1955a).

TABLE 2
ZOOGEOGRAPHIC ANALYSIS OF THE FISH FAUNA OF THE
CAPRICORN-BUNKER GROUP

DISTRIBUTION	NUMBER OF SPECIES	PERCENTAGE OF TOTAL
Tropical Indo-W. Pacific	398	46.3
Tropical W. Pacific	169	19.7
Uncertain	51	5.9
S.W. Pacific (1)	37	4.3
S. Queensland (2)	35	4.1
Tropical W. Pacific-E. Indian Ocean	33	3.8
Tropical Australia (3)	31	3.6
Queensland-Great Barrier Reef (4)	26	3.0
Tropical-subtropical Australia (5)	16	1.9
Japan-Philippines	13	1.5
Circumtropical	12	1.4
Indian Ocean	12	1.4
Indo-Malay region	8	0.9
Cosmopolitan	8	0.9
E. Australia-New Zealand	6	0.7
Capricorn-Bunker Group	4	0.5

(1) Includes New South Wales, Lord Howe Island and Norfolk Island.

(2) Includes some species which extend also into northern New South Wales

(3) Includes some species which occur in New Guinea.

(4) Includes some species which occur in New Caledonia and Lord Howe Island.

(5) Includes a few widely distributed species which occur also in temperate Australia.

In summary, the fish fauna of the Capricorn-Bunker Group is basically composed of widespread Indo-W. Pacific species and, except for a small but significant subtropical-temperate element and overall fewer (about 25%) species, is similar to that of the northern part of the Great Barrier Reef. The more impoverished fauna of the Capricorn-Bunker Group compared to northern Great Barrier Reefs appears to be primarily due to a lowered diversity of habitats rather than to any marked differences in within-habitat species diversity.

Figure 2. Cumulative species area curves for quantitative explosive samples of fishes taken in similar 'leeward' reef habitats at One Tree Reef, Capricorn Bunker Group, and at Yonge Reef, Lizard Island area. Data from Goldman, Talbot and Russell (unpublished) and from Talbot, Russell and Anderson (unpublished).

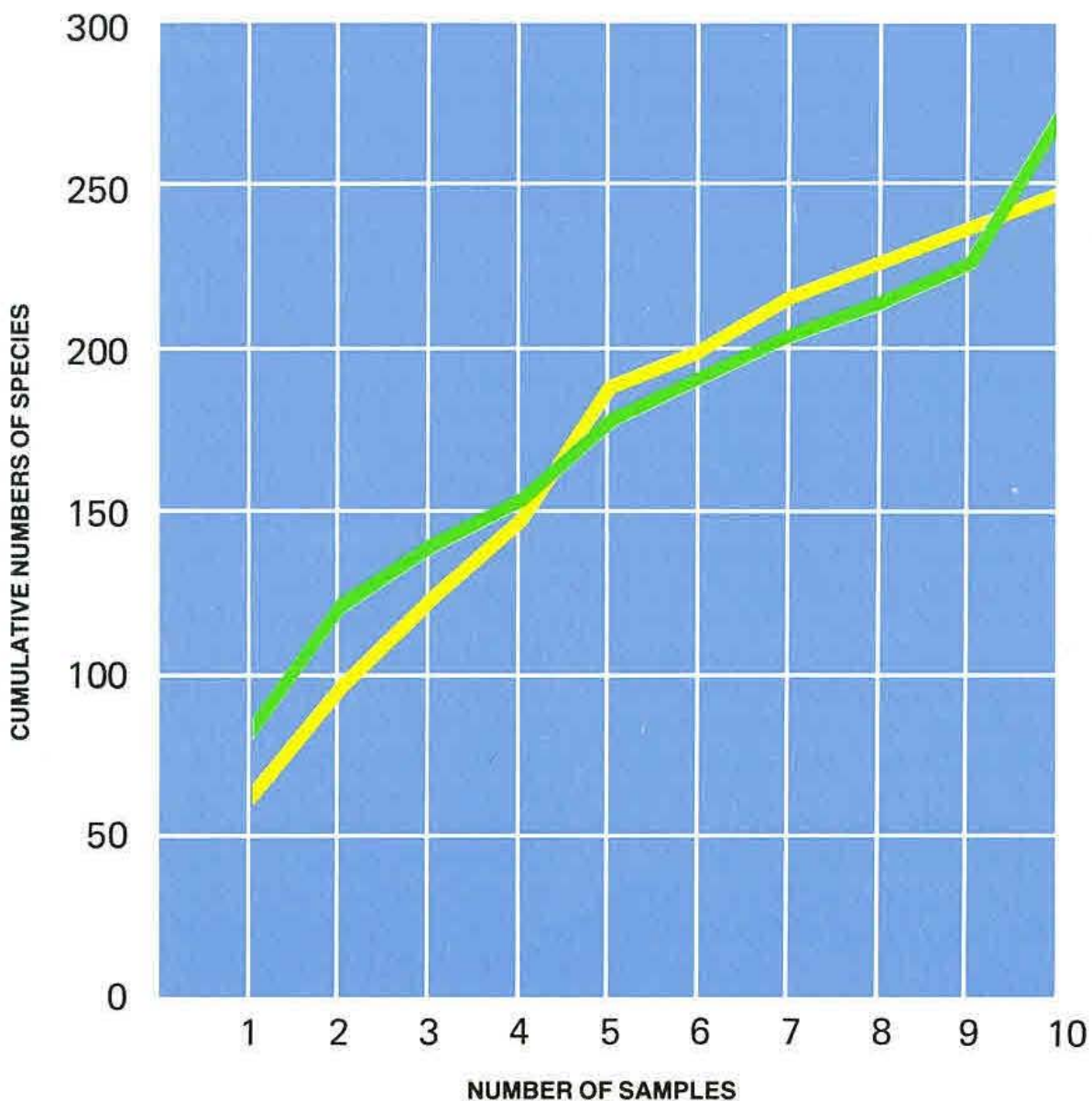


TABLE 3
COMPARISONS OF THE NUMBERS OF SPECIES OF SIX FAMILIES
FROM THE CAPRICORN-BUNKER GROUP AND LIZARD ISLAND
AREAS OF THE GREAT BARRIER REEF

Family	Capricorn- Bunker Group	Lizard Island	Total Spp.	Number of Species Increased	Percentage*	Number of Species Shared	Percentage of Total
Gobiidae	104	159	185	50	48.1	78	42.2
Pomacentridae	69	82	94	13	18.8	57	60.6
Labridae	69	81	95	14	20.3	54	56.8
Chaetodontidae	32	36	39	2	6.3	29	74.3
Pomacanthidae	15	16	21	1	6.7	10	47.6
Syngnathidae	12	18	23	6	50.0	7	30.6

* Increased number of species at Lizard Island as a percentage of the number of species in the Capricorn-Bunker Group.

METHODS OF PRESENTATION

The following checklist adheres to the phylogenetic arrangement proposed for elasmobranch fishes by Compagno (1973) and for the teleosts by Greenwood *et al.* (1966), except in a few cases where recent work indicates inclusion (e.g. Synancejidae in Scorpaenidae) or separation (e.g. Hemirhamphidae from Exocoetidae, Pomacanthidae from Chaetodontidae) of families. Spelling of family names has been emended following Steyskal (1980). For a general discussion on the various families the reader is referred to Nelson (1976).

The accepted Australian common name appears immediately after the scientific name for each family. Under the family heading the species are arranged alphabetically by genus and species. Every attempt was made to verify previous literature records and wherever possible specimens were re-examined. In some cases, where specimens were lost or where the record was based only on a sight observation, this was not possible and a question mark after the species name indicates an unconfirmed record. Similarly, where a specimen was unable to be positively identified, it is included as a queried record. An asterisk after the species name indicates a new record for the Capricorn-Bunker Group. Synonymies are abbreviated and include the original name, and where previously recorded the first recorded name and any other names under which the species has been recorded (reference indicated by a dash between species name and author). Literature citations following each species name include the author, year of publication, page number (or plate or figure number), and locality (for localities within the Capricorn Marine Park see Fig. 1). Complete references are listed at the end of the paper in the References section. The literature citations are followed by a brief paragraph containing information (where known) on relative abundance, habitat, depth distribution, taxonomic problems and geographic distribution. Relative abundances are semiquantitative and based partly on numbers of specimens in collections and partly on the author's experience in collecting and observation in the field over more than 5 years: Rare (1-3 specimens), Uncommon (4-9 specimens), Common (10-100 specimens), Very Common (>100 specimens). In the case of some undescribed species diagnostic features are given; for some new species and new records the number of specimens and their museum registration numbers also are given. Registration numbers are prefixed by institution and abbreviated as follows: AMS — Australian Museum, Sydney; ANSP — Academy of Natural Sciences of Philadelphia; BPBM — Bernice P. Bishop Museum, Honolulu; CAS — California Academy of Sciences, San Francisco; CSIRO — CSIRO Division of Fisheries Research, Cronulla; USNM — National Museum of Natural History, Smithsonian Institution, Washington D.C.; WAM — Western Australian Museum, Perth.

ANNOTATED CHECKLIST

BRACHAELURIDAE . . . BLIND SHARKS

Brachaelurus colcloughi

Brachaelurus colcloughi Ogilby, 1908a: 4 (Moreton Bay, Queensland).

Brachaelurus colcloughi — Woodland and Slack-Smith, 1963: 18 (Heron I.).

Rare. Occurs in shallow water. Known only from southern Queensland.

ORECTOLOBIDAE . . . WOBEGONGS

Eucrossorhinus ogilbyi

Orectolobus ogilbyi Regan, 1909b: 529 (Torres Strait, Queensland).

Eucrossorhinus ogilbyi — Power, 1969: 74, 75 (Wistari Reef).

Uncommon. Recorded on the basis of a photograph by Power (1969) taken at Wistari Reef. Distributed throughout tropical Australia.

Orectolobus ornatus

Crossorhinus ornatus De Vis, 1883: 289 (Moreton Bay, Queensland).

Orectolobus ornatus — Whitley, 1940a: 81 (Bunker Group).

Uncommon. Occurs in lagoons and reef flat habitats. Distributed throughout Australia.

HEMISCYLLIDAE . . . LONG-TAILED CARPET SHARKS

Chiloscyllium punctatum

Chiloscyllium punctatum Müller and Henle, 1838-41 (1838): 18 (Java).

Chiloscyllium punctatum — Whitley, 1926: 227 (North West I.).

Hemiscyllum punctatum — Woodland and Slack-Smith, 1963: 18 (Heron I.)

Uncommon. Occurs in lagoon and reef flat habitats. Distributed throughout tropical Australia and Indonesia.

Hemiscyllum ocellatum

Squalus ocellatum Bonnaterre, 1788: 8 (South Seas).

Chiloscyllium ocellatum — Ogilby and McCulloch, 1909: 293 (Masthead I.).

Hemiscyllum ocellatum — Woodland and Slack-Smith, 1963: 18 (Heron I.).

Uncommon. Occurs in lagoons and reef flat habitats. Distributed throughout tropical Australia and New Guinea.

GINGLYMOSTOMATIDAE . . . NURSE SHARKS

Nebrius concolor

Nebrius concolor Rüppell, 1835-38 (1835): 62 (Red Sea).

Nebrius concolor — Goeden, 1974: 2 (Heron I.).

Recorded from Heron Island by Goeden (1974). No specimens from the Capricorn-Bunker Group exist in either the Australian or Queensland Museums. Distributed throughout tropical Australia, New Guinea and the Indian Ocean.

STEGOSTOMATIDAE . . . ZEBRA SHARKS

Stegostoma varium

Squalus varius Seba, 1758: 105 (Red Sea).

Stegostoma tigrinum — Goeden, 1974: 2 (Heron I.).

Recorded from Heron Island by Goeden (1974). No specimens from the Capricorn Group exist in either the Australian or Queensland Museums. Distributed throughout the tropical Indo-W. Pacific.

HEMIGALEIDAE . . . WEASEL SHARKS

Hemigaleus microstoma

Hemigaleus microstoma Bleeker, 1852b: 46 (Batavia)

Hemigaleus microstoma — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Open waters. Known from Queensland and Indonesia.

CARCHARHINIDAE . . . WHALER SHARKS

Carcharhinus brachyurus

Carcharias brachyurus Günther, 1870: 369 (New Zealand).

Carcharhinus ahenea — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Open waters. Distributed in southern Queensland, New South Wales and New Zealand.

Carcharhinus obscurus

Squalus obscurus LeSueur, 1818: 223 (North America).

Carcharhinus macrurus — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Open waters. Cosmopolitan.

Carcharhinus melanopterus

Carcharias melanopterus Quoy and Gaimard, 1824: 194 (Waigou).

Carcharhinus melanopterus — Ogilby, 1916b: 81 (North West I.).

? *Carcharhinus spallanzani* (*non* LeSueur) — Williams, 1979: 139 (Tryon I.).

Common in lagoons and reef flat habitats. A sight record of *C. spallanzani* by Williams (1979) probably refers to *C. melanopterus*. Widespread in the tropical Indo-W. Pacific.

Carcharhinus plumbeus

Squalus plumbeus Nardo, 1827: 477 (Adriatic).

Carcharias stevensi Ogilby, 1911: 38 (Bustard Bay and North West I., Queensland).

Open waters. Cosmopolitan.

Galeocerdo cuvier

Squalus cuvier LeSueur, 1822: 351 ('New Holland').

Galeocerdo cuvier — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Uncommon. Open water. Widespread in the tropical Indo-W. Pacific.

Negaprion acutidens

Carcharias acutidens Rüppell, 1835-38 (1835): 65 (Red Sea).

Negaprion acutidens — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Open waters. Widespread in the tropical Indo-W. Pacific.

Rhizoprionodon acutus

Carcharias acutus Rüppell, 1835-38 (1835): 65 (Red Sea).

Scoliodon walbeehmi — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Springer (1964) regards *S. walbeehmi* (Bleeker) as a junior synonym of *R. acutus*. Woodland and Slack-Smith's (1963) record from Heron Island was on the basis of a well developed foetus (not kept), and is unconfirmed. Widespread the tropical Indo-W. Pacific.

Triaenodon obesus

Carcharhinus obesus Rüppell, 1835-38 (1835): 64 (Djedda, Red Sea).

Triaenodon apicalis — Woodland and Slack-Smith, 1963: 21 (Heron I.).

Triaenodon obesus — Williams, 1979: 139 (Tryon I.).

Moderately common in outer reef slope habitats, entering lagoons. Widespread in the tropical Indo-W. Pacific.

SPHYRNIDAE . . . HAMMERHEAD SHARKS

***Sphyrna* sp.**

Sphyrna sp. — Woodland and Slack-Smith, 1963: 22 (Heron I.).

Uncommon. Woodland and Slack-Smith (1963) record an unidentified hammerhead shark from Heron I.

RHYNCHOBATIDAE . . . GUITARFISH

Rhynchobatus djiddensis

Raja djiddensis Forsskål, 1775: 18 (Djedda, Red Sea).

Rhynchobatus djiddensis — Ogilby, 1916b: 84 (North West I.).

Rare. Widespread in the tropical Indo-W. Pacific.

RHINOBATIDAE . . . SHOVELNOSE RAYS

Rhinobatos batillum

Rhinobatus batillum Whitley, 1939: 245 (Shark Bay, W. Australia).

Rhinobatus armatus (non Gray) — Whitley, 1926: 228 (North West I.).

Rhinobatus typus (non Bennett) — Woodland and Slack-Smith, 1963: 22 (Heron I.).

Moderately common in shallow sandy lagoon and reef flat areas. Distributed throughout tropical Australia.

HYPNIDAE . . . ELECTRIC RAYS

Hypnos monopterygium

Lophius monopterygius Shaw and Nodder, 1795: pl. 202, 203 (Australian Seas).

Hypnos subnigrum — Woodland and Slack-Smith, 1963: 22.

Uncommon, seen occasionally in reef flat and leeward reef slope habitats. Known from Queensland, New South Wales and Western Australia.

RAJIDAE . . . SKATES

Raja polyommata

Raja polyommata Ogilby, 1910a: 86 (North Reef and Cape Moreton, Queensland).

A deep water species. Several specimens trawled by the *Endeavour* in 70 fathoms (127m) on sand and mud, northeast of North Reef. Known only from southern Queensland.

DASYATIDIDAE . . . STINGAREES

Dasyatis fluviorum?

Dasyatis fluviorum Ogilby, 1908a: 6 (Brisbane River, Queensland).

Dasyatis brevicaudata (non Hutton) — Power, 1969: 110, 111 (North West I.).

Included as a queried record on the basis of a photograph by Power (1969) of a large stingaree from North West Island. The row of prominent spiny tubercles

on the back of the photographed specimen clearly indicate it is not *D. brevicaudata*, but is probably *D. fluviorum*, a Queensland species more typical of inshore and estuarine waters. Known from southern Queensland and New South Wales.

Dasyatis kuhlii

Trygon kuhlii Müller and Henle, 1838-41 (1841): 164 (Vanikoro, Santa Cruz Is; New Guinea).

Dasybatis kuhlii — Ogilby, 1916b: 87 (North West I.).

Uncommon. Inhabits sandy lagoons and outer reef habitats to 36m. Widespread in the tropical Indo-W. Pacific.

Himantura granulata

Trygon granulata Macleay, 1883: 598 (Port Moresby district).

Dasyatis granulatus — Woodland and Slack-Smith, 1963: 22 (Heron I.).

Himantura granulata — Williams, 1979: 139 (Tryon I.).

Uncommon. Inhabits lagoons and outer reef slope habitats. Known from Queensland and New Guinea.

Himantura uarnak

Raja uarnak Forsskål, 1775: ix (Loheia, Red Sea).

Hymantena narnak — Goeden, 1974: 2 (Heron I.).

Rare. Goeden's (1974) record of '*Hymantena narnak*' from Heron Island appears to be a misspelling of *Himantura uarnak*. Widespread in the tropical Indo-W. Pacific.

Taeniura lymna

Raja lymna Forsskål, 1775: 17 (Loheia, Red Sea).

? *Myliobatus australis* (non Macleay) — Saville-Kent, 1893: 103 (Lady Elliott I.).

Taeniura lymna — Whitley, 1926: 228 (North West I.).

Taeniura lymnia halgani — Whitley, 1931b: 97 (North West I.).

Very common in shallow lagoon habitats, sheltering under ledges by day. Widespread in the tropical Indo-W. Pacific.

Taeniura melanospila?

Taeniura melanospilos Bleeker, 1853c: 513 (Batavia).

Dasyatis (Pastinachus) sephen (non Forsskål) — Burgess and Axelrod, 1976: 1675, fig. 21 (Wistari Reef).

Included as a queried record on the basis of a photograph in Burgess and Axelrod (1976) of a stingaree at Wistari Reef. The disc of the photographed specimen is too rounded to be *D. sephen* and probably is *T. melanospila* (L. Campagno, personal communication 1981). Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Urogymnus africanus?

Raja africana Schneider in Bloch and Schneider, 1801: 367 (African seas).

Urogymnus africanus — Power, 1969: 113 (North West I.).

Included as a queried record on the basis of a photograph and brief description by Power (1969) of a stingaree from North West Island. Ogilby (1916b) has previously recorded this species from north Queensland waters. Widespread in the tropical Indo-W. Pacific.

MYLIOBATIDIDAE . . . EAGLERAYS

Aetobatus narinari

Raja narinari Euphrasen, 1790: 217 (Brazil).

Aetobatus narinari — Woodland and Slack-Smith, 1963: 22 (Heron I.).

Moderately common in lagoons and open water habitats. Often seen in the harbour at Heron Island. Circumtropical.

MOBULIDAE . . . MANTA RAYS

Manta alfredi

Deratoptera alfredi Krefft, 1868: 3, 9 (Port Jackson, New South Wales).

Manta alfredi — Marshall, 1964: 47 (between North West I. and Tryon I.).

Uncommon. Occasionally seen in open waters. Distributed in tropical and subtropical Australia.

MORINGUIDAE . . . WORM EELS

Moringua microchir?

Moringua microchir Bleeker, 1853a: 124 (E. Indies).

Uncommon. Two specimens (AMS I.20200-019) collected at One Tree Island are provisionally identified as *M. microchir*. Both specimens possess 66-67 lateral line pores before the vent, and correspond with Castle's (1968a) description of *M. microchir*. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Moringua ferruginea?

Moringua ferruginea Bliss 1883: 57 (Mauritius).

Uncommon. Occurs in shallow water associated with sand. An active sand-burrower. Several specimens in the Australian Museum collected at One Tree Island. This species possesses 76-80 lateral line pores before the vent, and is provisionally identified as *M. ferruginea*. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

XENOCONGRIDAE . . . REEF EELS

*Kaupichthys atronasmus**

Kaupichthys atronasmus Schultz in Schultz *et al.*, 1953: 65 (Marshall Is.).

Rare. A single specimen (AMS I.20547-003) collected in shallow water (3m) at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific and E. Indian Ocean (Allen and Steene, 1979). A new record for Australia.

MURAENIDAE . . . MORAY EELS

*Anarchias allardicei**

Anarchias allardicei Jordan and Starks in Jordan and Seale, 1906: 204 (Pago Pago, Samoa).

Rare. Two specimens (AMS I.20206-017, I.20559-001) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Echidna nebulosa

Muraena nebulosa Ahl, 1789: 5 (E. Indies).

Echidna nebulosa — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Uncommon. Two specimens collected at One Tree Island (AMS I.15644-002, I.20202-011) and a single specimen from Lady Musgrave Island (QM I.12184) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Echidna polyzona*

Muraena polyzona Richardson, 1844: 112 (no locality given).

Rare. A single specimen (AMS I.15640-001) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Gymnothorax buroensis*

Muraena buroensis Bleeker, 1857b: 79 (Nova-Selma; Buro; Amboina; Ceram).

Uncommon. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Gymnothorax chilospilus*

Gymnothorax chilospilus Bleeker, 1865: 52 (Benkulen).

Moderately common in outer reef slope habitats in 2-12m. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Gymnothorax criboris

Gymnothorax criboris Whitley, 1932b: 330 (North West I.).

Gymnothorax criboris — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Common in reef flat and outer reef slope habitats in 1-15m. Known only from the Great Barrier Reef.

Gymnothorax eurostus

Thyrsoidea eurosta Abbott, 1861: 478 (Hawaiian Is.).

Gymnothorax meleagris (*non* Shaw) — Woodland and Slack-Smith, 1963: 24 (Heron I.).

? *Gymnothorax punctatus* (*non* Bloch and Schneider) — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Gymnothorax eurostus — Randall and McCosker, 1975: 27 (Heron I.; One Tree I.).

Common in reef flat and outer reef slope habitats in 1-15m. This species has previously been reported incorrectly as *G. meleagris* by Woodland and Slack-Smith (1963). *Gymnothorax punctatus* also recorded from Heron Island by Woodland and Slack-Smith (1963) probably is a misidentification of the juvenile color phase of this common species. Widespread in the tropical Indo-W. Pacific.

Gymnothorax favagineus

Gymnothorax favagineus Bloch and Schneider, 1801: 525 (Tranquebar, India).

Gymnothorax favagineus — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Lycodontus favagineus — Williams, 1969: 108 (North West I.).

Moderately common in reef flat and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Gymnothorax fimbriatus*

Muraena fimbriata Bennett, 1831: 168 (E. Indies).

Uncommon in outer reef slope habitats. Several specimens (AMS I.20202-010, I. 20479-009) collected at One Tree Island and Tryon Island (QM I.11444) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Gymnothorax flavimarginatus

Muraena flavimarginata Rüppell, 1828-31 (1828): 119 (Red Sea).

Gymnothorax flavimarginatus — Woodland and Slack-Smith, 1963: 24 (Heron I.)

Rare. Occurs in outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Gymnothorax javanicus*

Muraena javanica Bleeker, 1859b: 347 (Java)

Rare. A single specimen (QM I.9460) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Gymnothorax kidako*?

Muraena kidako Temminck and Schlegel, 1842-1850 (1846): 266 (Nagasaki, Japan).

Rare? A single specimen (AMS I.15644-001) collected at One Tree Island is tentatively identified as *G. kidako*, and is a new record for the Capricorn-Bunker Group. Previously known from Japan and the Philippines. A new record for Australia.

Gymnothorax margaritophorus*

Gymnothorax margaritophorus Bleeker, 1865: 53 (Amboina).

Rare. A number of specimens (AMS I. 20547-004) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Gymnothorax melanospilos*

Muraena melanospilos Bleeker, 1855: 279 (Sumatra; Booro).

Rare. A single specimen (AMS I.20200-010) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in tropical W. Pacific.

Gymnothorax nudivomer*

Muraena nudivomer Playfair in Playfair and Günther, 1866: 127 (Zanzibar).

Rare. A single specimen (QM I.3551) collected in the Capricorn Group represents the first record of this species from the Capricorn-Bunker Group. Previously known only from the W. Indian Ocean and Hawaiian Islands. A new record for Australia.

Gymnothorax pindae*

Gymnothorax pindae Smith, 1962: 430 (Mozambique).

Rare. Four specimens (AMS I.20547-005) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. This species is distinct from *G. moluccensis* (Bleeker) with which it has been confused (Randall and McCosker, 1975). Widespread in the tropical Indo-W. Pacific. A new record for Australia.

***Gymnothorax pseudothyrsoides*?**

Muraena pseudothyrsoides Bleeker, 1852e: 778 (Macassar).

Uncommon. Several specimens from Masthead Island (QM I.854, I.8975-77) and One Tree Island (AMS IA.4031) are provisionally identified as *G. pseudothyrsoides*. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Gymnothorax rueppelliae*

Dalophis Rüppelliae McClelland, 1845: 213 (replacement name for *M. reticulata* Rüppell).

Rare. A single specimen (AMS I.20200-015). Collected from One Tree Island represents the first record of his species from the Capricorn-Bunker Group. This species has been previously recorded from Australia as *G. petelli* (Bleeker) a junior synonym of *rueppelliae* (see McCosker and Rosenblatt, 1975). Widespread in the tropical Indo-W. Pacific.

Gymnothorax undulatus

Muraenophis undulata Lacepède, 1803a: 629, 644 (no locality given).

Gymnothorax undulatus — Whitley, 1926: 228 (North West I.).

Uncommon. Occurs in outer reef slope habitats. It seems likely that *G. undulatus* recorded as 'the dominant moray' at Heron Island by Woodland and Slack-Smith (1963) in part at least is based on a misidentification, probably of *G. criboris* Whitley. Widespread in the tropical Indo-W. Pacific.

***Gymnothorax* sp. 1**

Gymnothorax thrysoides (non Richardson) — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Uncommon. Randall (1973) has pointed out that *G. thrysoides* (Richardson) is distinct and that the species from the Pacific generally treated under this name probably is a new species.

Rhinomuraena quaesita*

Rhinomuraena quaesita Garman, 1888: 114 (Marshall Is.).

Rare. A single specimen observed by the author in 36m amongst coral rubble off the windward side of One Tree Island. A new record for the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Sideria picta

Muraena picta Ahl, 1789: 6 (E. Indies).

Gymnothorax pictus — Woodland and Slack-Smith, 1963: 24 (Heron I.)

Rare. Occurs in reef crest and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Uropterygius micropterus*

Muraena micropterus Bleeker, 1852: 298 (Indonesia).

Rare. Two specimens (AMS I.20479-010) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific and E. Indian Ocean. A new record for Australia.

NETTASTOMATIDAE . . . WIRE EELS

Saurenhelys finitimus*

Chlopsis (Dietrichthys) finitimus Whitley, 1935: 220 (Whitsunday Passage, Queensland).

Rare. Inhabits deeper water? A single specimen (AMS I.21870-001) collected in midwater (6m) at Wistari Reef, represents the first record of this species from the Capricorn-Bunker Group. Known only from Queensland.

CONGRIDAE . . . CONGER EELS

Ariosoma scheelei

Leptocephalus scheelei Strömman, 1896 (in part): 21 (Indonesia).

Arisoma anago (non Schlegel) — Woodland and Slack-Smith, 1963: 23 (Heron I.).

Rare. Reported by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. Castle (1968b) indicates that *A. anago* recorded by Woodland and Slack-Smith (1963) is a misidentification of *A. scheelei*. Widespread in the tropical Indo-W. Pacific.

Conger cinereus

Conger cinereus Rüppell, 1828-31 (1828): 115 (Red Sea)

Conger cinereus — Woodland and Slack-Smith, 1963: 23 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

OPHICHTHIDAE . . . SNAKE EELS

Callechelys melanotaenia*

Callechelys melanotaenia Bleeker, 1864: 66 (Ambon).

Rare. A single specimen (AMS I.15564) taken from the stomach of a *Lethrinus* specimen captured at Fairfax Island, represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia (previously recorded from Lord Howe Island).

Leiuranus semicinctus

Ophisurus semicinctus Lay and Bennett, 1839: 66 (Oahu, Hawaiian Is.).

Leiuranus semicinctus — Woodland and Slack-Smith, 1963: 25 (Heron I.).

Uncommon. Inhabits sand in lagoons. Widespread in the tropical W. Pacific.

Malvoliophis pinguis*

Ophichthus pinguis Günther in Brenchley 1873: 430 (Solomon Is.).

Rare. Two specimens taken by night light at the surface near One Tree

Island (AMS I.15383-001), and Heron Island (AMS I.15388-001) represent the first record of this species from the Capricorn-Bunker Group. Known also from New South Wales, Lord Howe Island and the Solomon Islands.

Muraenichthys gymnotus

Muraenichthys gymnotus Bleeker, 1864: 33 (Amboina).

Muraenichthys gymnotus — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Rare. Recorded from Heron Island by Woodland and Slack-Smith (1963). No specimens in either the Australian or Queensland Museums. Widespread in the tropical W. Pacific.

Muraenichthys iredalei*

Muraenichthys iredalei Whitley, 1927b: 5 (Michaelmas Cay, Queensland).

Uncommon. Inhabits sand in lagoons. Several specimens (AMS I.20212-018, I.20463-037) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known only from the Great Barrier Reef.

Muraenichthys laticaudatus*

Myropterura laticaudata Ogilby, 1897: 247 (Fiji).

Uncommon. Inhabits sand in lagoons. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Muraenichthys macropterus

Muraenichthys macropterus Bleeker, 1857a: 91 (Amboina).

Muraenichthys macropterus — Woodland and Slack-Smith, 1963: 24 (Heron I.).

'Common in sand on reef flat' according to Woodland and Slack-Smith (1963) who record this species from Heron Island. No specimens in either the Australian or Queensland Museums. Widespread in the tropical W. Pacific.

Muraenichthys* sp

Uncommon. A number of specimens in the Australian Museum collected at One Tree Island key out to *M. chilensis* McCosker using McCosker's (1970) key to *Muraenichthys*. *M. chilensis*, however, is a temperate species described from Chile, and the One Tree Island specimens probably represent an undescribed species.

Myrichthys semicinctus*

Ophisurus fasciatus var. *semicincta* Bleeker, 1864: 64 (E. Indies).

Rare. A single specimen (AMS I.20200-011) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Ophichthys cephalozona*

Ophichthys cephalozona Bleeker, 1864: 49 (E. Indies).

Rare. A single specimen (QM I.6586) collected at North West Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

CLUPEIDAE . . . SPRATS

Spratelloides delicatulus

Clupea delicatulus Bennett, 1831: 168 (Mauritius).

Stolephorus robustus — Whitley, 1926: 228 (North West I.).

Spratelloides delicatulus — Woodland and Slack-Smith, 1963: 23 (Heron I.).

Very common in lagoons and outer reef slope habitats, schooling near the surface. Widespread in the tropical Indo-W. Pacific.

*Spratelloides gracilis**

Spratelloides gracilis Temminck and Schlegel, 1846: 238 (Japan).

Uncommon. Occurs in outer reef slope habitats, schooling near the surface. Several specimens in the Australian Museum collected from near Heron Island and One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

ENGRAULIDIDAE . . . ANCHOVIES

Engraulis australis

Atherina australis White, 1790: 296 (New South Wales).

Engraulis australis — Whitley, 1926: 228 (North West I.).

Uncommon. Occurs in lagoons and outer reef slope habitats, usually in large schools. Known from southern Queensland, New South Wales, Lord Howe Island and New Zealand.

SYNODONTIDAE . . . LIZARDFISHES

Saurida gracilis

Saurus gracilis Quoy and Gaimard, 1824: 224 (Sandwich Is.).

Saurida gracilis — Woodland Slack-Smith, 1963: 23 (Heron I.).

Moderately common in lagoon and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Saurida filamentosa

Saurida filamentosa Ogilby, 1910a: 88 (S.W. of Cape Moreton, Queensland).

Saurida tumbil (non Bloch) — Fowler, 1957: 65 (Lady Musgrave I.).

Apparently rare. A single specimen (ANSP 82658), reported from Lady Musgrave Island by Fowler (1957) as *S. tumbil* is a misidentification of *S. filamentosa*. Known only from S. Queensland.

Synodus doaki

Synodus doaki Russell and Cressey, 1979: 166 (New Zealand; Norfolk I; Lord Howe I; Great Barrier Reef — One Tree I; Hawaii; W. Indian Ocean).

Uncommon. Occurs in outer reef slope habitats on sandy bottoms close to coral outcrops in 9-35m. Widespread in the tropical Indo-W. Pacific.

Synodus englemani

Synodus englemani Schultz in Schultz *et al.*, 1953: 41 (Marshall Is.).

Synodus englemani — Allen *et al.*, 1976: 380 (One Tree I.).

Common in lagoon and outer reef slope habitats, associated with coral. Widespread in the tropical Indo-W. Pacific.

Synodus jaculum

Synodus jaculum Russell and Cressey, 1979: 169 (Great Barrier Reef — One Tree I; New South Wales; South China Sea; Christmas I; Ceylon; Line Is; Comores Is; New Guinea; New Britain).

Uncommon. Inhabits outer reef slope habitats in moderately deep water. Widespread in the tropical Indo-W. Pacific.

Synodus rubromarmoratus

Synodus rubromarmoratus Russell and Cressey, 1979: 172 (Great Barrier Reef).

Uncommon. Occurs in moderately deep water (>15m). Recorded from One Tree Island by Russell and Cressey (1979) on the basis of a sight observation by Russell. Known so far only from the Great Barrier Reef.

Synodus similis

Synodus similis McCulloch, 1921: 167 (Capricorn Group).

Rare. Trawled in 25-30 fathoms (45-55m). Known from the Great Barrier Reef, Lord Howe Island, N.E. New Zealand, and S.E. Oceania (Cressey, 1981).

Synodus variegatus

Salmo variegatus Lacepède, 1803a: 157 (no locality given).

Synodus houlti McCulloch, 1921: 165 (Capricorn Group).

Synodus variegatus — Woodland and Slack-Smith, 1953: 23 (Heron I.).

Common in lagoons, associated with sandy bottoms close to patch reefs. According to Cressey (1981), *Synodus houlti* McCulloch is a junior synonym of *S. variegatus*. Widespread in the tropical Indo-W. Pacific.

CHANIDAE . . . MILKFISH

Chanos chanos

Mugil chanos Forsskål, 1775: 74 (Djedda, Red Sea).

Chanos chanos — Woodland and Slack-Smith, 1963: 23 (Heron I.).

Uncommon. Widespread in the tropical Indo-W. Pacific.

PLOTOSIDAE . . . MARINE CATFISHES

Paraplotosus albilabrus*

Plotosus albilabrus Valenciennes in Cuvier and Valenciennes, 1840: 427 (Batavia).

Rare? A single specimen (AMS I.15623-001) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

BATRACHOIDIDAE . . . FROGFISHES

Halophryne diemensis

Batrachoides diemensis LeSueur, 1824: 402 (Coasts of Van Dieman's Land).

Halophryne diemensis — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Uncommon. Occurs under coral blocks in reef flat habitats. Widespread in the tropical W. Pacific and Christmas Island (Hutchins, 1976).

GOBIESOCIDAE . . . CLING FISHES

Aspasmodes briggsi

Aspasmodes briggsi Smith, 1957a: 399 (Aldabra Atoll, W. Indian Ocean).

Aspasmodes briggsi — Briggs, 1969: 464 (One Tree I.).

Rare? Recorded from One Tree Island by Briggs (1969) on the basis of specimens in the U.S. National Museum collected by Dr. V.G. Springer. No specimens in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Lepadichthys frenatus

Lepadichthys frenatus Waite, 1904: 180 (Lord Howe I.).

Lepadichthys frenatus — Whitley, 1928b: 304 (Hoskyn I.).

Common in coral in lagoons and outer reef slope habitats. Widespread in the tropical W. Pacific.

ANTENNARIIDAE . . . FROGFISHES

Antennarius coccineus*

Chironectes coccineus Lesson, 1830: 143 (Mauritius).

? *Lophiocharon* sp. — Gillette and McNeill, 1959: pl. 112 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats. Several specimens in the Australian Museum collected at Heron Island and One Tree Island represent the first record of this species from the Capricorn-Bunker Group. A photograph taken at Heron Island of a beach-wash specimen and identified as *Lophiocharon* (Gillette and McNeill, 1959) probably is a black phase *A. coccineus*. Widespread in the tropical Indo-W. Pacific.

Antennarius pictus

Lophius pictus Shaw in Shaw and Nodder, 1794: pl. 176 (no locality given).

Antennarius phymatodes (non Bleeker) — Whitley, 1959: 321 (Heron I.).

Rare. Known only from a single specimen (AMS IB.3906) previously recorded from Heron Island (Whitley, 1959) as *A. phymatodes*. Widespread in the tropical Indo-W. Pacific.

Histiophryne bougainvilli

Chironectes bougainvilli Valenciennes in Cuvier and Valenciennes, 1837: 431 (no locality given).

Histiophryne bougainvilli — Whitley, 1941: 47 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats. Known from southern Queensland, New South Wales and South Australia.

BYTHITIDAE . . . CUSK EELS

***Dinematichthys?* (3 species*)**

? *Dinematichthys iluocoetodoides* — Woodland and Slack-Smith, 1963: 48 (Heron I.).

? *Ogilbia cayorum* (non Evermann and Kendall) — Heron Island Research Station Board, 1980: 6 (Heron I.).

The taxonomy of ophidiid fishes belonging to the tribe Dinematichthyini (Cohen and Nielsen, 1978) is in a confused state, and Dr D.F. Hoese who has examined a wide range of Australian specimens recognises at least 3 species collected from the Capricorn-Bunker Group which are tentatively assigned to the genus *Dinematichthys*. *D. iluocoeteoides* Bleeker and *O. cayorum* Evermann and Kendall are names that have previously been applied to species belonging to this group. The 3 species from the Capricorn-Bunker Group, however, probably are undescribed. All 3 species are common amongst coral in lagoons and outer reef slope habitats.

Microbrotula* sp.

Rare? A single specimen (AMS I.20206-019) collected at One Tree Island represents the first record of a species of *Microbrotula* from the Capricorn-Bunker Group. This species will be described by Dr. D.M. Cohen who is revising the genus.

***Monothrix mizolepis*?**

Dinematichthys mizolepis Günther, 1867b: 66 (Cape York, Queensland).

Dinematichthys mizolepis — Whitley, 1926: 236 (North West I., Masthead I., Lady Musgrave I.).

Moderately common? A number of specimens in the Australian Museum collected at North West Island, Masthead Island and Lady Musgrave Island were identified by Whitley (1926) as *D. mizolepis*. Cohen and Nielsen (1978) assign this species to the genus *Monothrix*. Known from tropical Australia.

CARAPIDAE . . . PEARLFISHES

Carapus homei*

Oxybeles Homei Richardson, 1844-48 (1846): 74 ('Tasmania' — probably New Caledonia).

A single specimen (QM I.14285) trawled between the Capricorn and Bunker Groups, and tentatively identified as *C. homei* using Arnold's (1956) key to the Carapidae, represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Carapus* sp.

A pearlfish specimen (AMS IB. 4130) collected at Heron Island probably is an undescribed species of *Carapus* (D.F. Markle, personal communication 1980).

Encheliophis gracilis*

Oxybeles gracilis Bleeker, 1856d: 105 (Banda).

Two specimens (AMS IB.5244-5) collected at Heron Island and labelled *Carapus houlti* appear to be *E. gracilis*, according to D.F. Markle who has examined them. A new record for the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Onuxodon margaritiferae*

Fierasfer margaritiferae Rendahl, 1921: 5 (Cape Jaubert, N.W. Australia).

A single specimen (AMS I.19221-001) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

EXOCOETIDAE . . . FLYING FISHES

Cypselurus spilonopterus

Exocoetus spilonopterus Bleeker, 1866b: 113 (Sumatra).

Cypselurus behienseis — Woodland and Slack-Smith 1963: 25 (Heron I.).

Occurs in open waters between reefs. Use of the name *spilonopterus* for this species follows Parin (1960). Previously recorded from Heron Island by

Woodland and Slack-Smith (1963). Two juvenile *Cypselurus* (AMS I.20735-001), collected off One Tree Island, may also be *C. spilonotopterus*. A neritic species widespread in the tropical W. Pacific (Parin, 1960).

Exocoetus volitans?

Exocoetus volitans Linnaeus, 1758: 316 (Europe and America).

Exocoetus volitans — Williams, 1979: 139 (between Tryon I. and North West I.).

This species is included on the basis of an unconfirmed sight record (Williams, 1979) of two flying fish seen between Tryon Island and North West Island. Widespread in the tropical W. Pacific.

*Hirundichthys oxycephalus**

Exocoetus oxycephalus Bleeker, 1852e:771 (Macassar; Batavia).

Two small specimens (AMS I.15388-003) captured by nightlighting 2 miles west of Heron Island are identifiable as *H. oxycephalus*. A new record for the Capricorn-Bunker Group. Widespread in the tropical W. Pacific (Parin, 1960).

HEMIRAMPHIDAE . . . GARFISHES

Arrhamphus sclerolepis

Arrhamphus sclerolepis Günther, 1866: 276 ('New Zealand'-Australia?)

Arrhamphus sclerolepis — Fowler, 1957: 66 (Lady Musgrave I.).

Apparently rare. A single specimen (ANSP 93163) supposedly collected from Lady Musgrave Island and reported by Fowler (1957) is in the collection of the Academy of Natural Sciences of Philadelphia. Common inshore in northern Australia (Collette, 1974).

Euleptorhamphus viridis

Hemiramphus viridis van Hasselt, 1823: 131 (India).

Euleptorhamphus longirostris — Marshall, 1964: 102 (off Lady Elliott I.).

Euleptorhamphus viridis — Grant, 1972: 63 (off Lady Elliott I.).

Apparently rare. An oceanic species widespread in the Indo-W. Pacific (Parin, 1964), with only a few scattered Australian records (Collette, 1974: fig. 6).

Hyporhamphus dussumieri

Hemiramphus dussumieri Valenciennes in Cuvier and Valenciennes, 1846b: 24 (Seychelles).

Hyporhamphus dussumieri — Collette, 1974: 86 (Heron I., One Tree I.).

Moderately common in lagoons and outer reef slope habitats at the surface. Widespread in the tropical Indo-W. Pacific.

BELONIDAE . . . LONG TOMS

Strongylura incisa

Belone incisa Valenciennes in Cuvier and Valenciennes, 1846a: 335 (Indian Ocean).

Tylosurus incisus — Woodland and Slack-Smith, 1963: 24 (Heron I.).

Apparently rare. Parin (1967) refers this species to the genus *Strongylura*. Widespread in the tropical Indo-W. Pacific.

Tylosurus crocodilus

Belone crocodila Peron and LeSueur in LeSueur, 1821: 129 (Réunion).

Tylosurus crocodilus — Woodland and Slack-Smith, 1963: 25 (Heron I.).

Tylosurus giganteus — Woodland and Slack-Smith, 1963: 25 (Heron I.).

Common in lagoons and outer reef slope habitats at the surface. Parin (1967) has synonymised *T. crocodilus* and *T. giganteus*. Widespread in the tropical Indo-W. Pacific.

Tylosurus gavioloides

Belone gavioloides Castelnau, 1873: 142 (Fremantle, W. Australia).

Tylosurus macleayanus — Woodland and Slack-Smith, 1963: 25 (Heron I.).

Apparently rare offshore. Parin (1967) has synonymised *T. gavioloides* and *T. macleayanus* placing them in the genus *Lhotskia* Whitley. B.B. Collette (personal communication, 1980) however, regards *Lhotskia* as a synonym of *Tylosurus*. Distributed in tropical and subtropical Australia.

ATHERINIDAE . . . HARDYHEADS

Atherinomorus capricornensis

Pranesus capricornensis Woodland, 1961: 540 (Heron I.).

?*Pranesus ogilbyi* (non Whitley) — Williams, 1969: 106 (North West I.).

Common in lagoons, often in large schools. Hardyheads observed at North West Island by Williams (1969) and assumed to be *P. ogilbyi* probably refer to *A. capricornensis*. Distribution restricted largely to the Capricorn Group and as far north as Barnard Island, near Cairns (Ivantsoff, 1978).

Dentatherina merceri

Dentatherina merceri Patten and Ivantsoff, 1983: 331 (W. Pacific-One Tree I.).

Uncommon. Several specimens collected from the lagoon at One Tree Island. Widespread in the tropical W. Pacific.

Hypatherina tropicalis*

Atherinosoma (Taeniomembras) tropicalis Whitley, 1948: 87 (Whitsunday Passage, Queensland).

Common in lagoons. A number of specimens in the Australian Museum collected at Heron Island and One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Distributed throughout the Great Barrier Reef and New Guinea (Ivanstovff, 1978).

MONOCENTRIDIDAE . . . PINE-CONE FISHES

Cleidopus gloriamaris*

Cleidopus gloria-maris De Vis, 1882: 367 (Brisbane River, Queensland)

Rare. A single specimen (AMS I. 16934-001) collected in the lagoon at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Known only from subtropical Australia.

HOLOCENTRIDAE . . . SQUIRRELFISHES

Neoniphon sammara

Sciaena sammara Forsskål, 1775: 48 (Djedda, Red Sea).

Holocentrus sammara — Woodland and Slack-Smith, 1963: 27 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Myripristis kuntee*

Myripristis kuntee Valenciennes in Cuvier and Valenciennes, 1831: 487 (Mauritius).

Uncommon. Occurs in outer reef slope habitats. Two specimens (AMS I.15681-002; I.17152-001) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Myripristis murdjan

Sciaena murdjan Forsskål, 1775; 48 (Djedda, Red Sea).

Myripristis murdjan — Woodland and Slack-Smith, 1963: 27 (Heron I.).

Ostichthys parvidens — Goeden, 1974: 5 (Heron I.).

Moderately common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Myripristis pralinius*

Myripristis pralinius Cuvier in Cuvier and Valenciennes, 1829a: 170 (New Ireland).

Common? Twenty nine specimens in a single lot (AMS I.20547-021) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Myripristis violaceus*

Myripristis violaceus Bleeker, 1841c: 234 (Neira, Banda).

Uncommon? Nine specimens in one lot (AMS I.20547-020) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Sargocentron caudimaculatum*

Holocentrus caudimaculatus Rüppell, 1835-38 (1835): 97 (Red Sea).

Rare? A single specimen (AMS I.15684-003) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. This and succeeding species previously were assigned to *Adioryx* a genus which Matsuura and Shimizu (1982) recently have shown to be a junior synonym of *Sargocentron*. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Sargocentron diadema*

Holocentrus diadema Lacepède, 1803b: 235, 290, 292 (based on Commerson m.s.).

Moderately common in outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Sargocentron melanosphilos*

Holocentrum melanosphilos Bleeker, 1858a: 2 (Amboina).

Rare? A single specimen (AMS I.15684-003) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. This

species has been confused with *S. cornutum* (Bleeker), but Randall and Heemstra (m.s.) have shown that the species recent authors have identified as *cornutum* is usually *melanosphilos*. The true *cornutum* appears to be confined to the Indo-Malay region. Widespread in the tropical W. Pacific.

Sargocentron rubrum

Sciaena rubra Forsskål, 1775: 48 (Arabia).

Holocentrus praslin — Woodland and Slack-Smith, 1963: 26 (Heron I.).

Adioryx rubra — Burgess and Axelrod, 1976: pl. 46 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. According to Shimizu and Yamakawa (1979) *H. praslin* (Lacepède) is a junior synonym of *S.* (= *Adioryx*) *rubrum*. Widespread in the tropical Indo-W. Pacific.

Sargocentron spiniferum

Sciaena spinifera Forsskål, 1775: 49 (Djedda, Red Sea).

Holocentrus spinifer — Woodland and Slack-Smith, 1963: 27 (Heron I.).

Adioryx spinifer — Burgess and Axelrod, 1976: pl. 48 (Wistari Reef).

Uncommon? Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Sargocentron* sp.

A single specimen (AMS I.15685-001) collected at One Tree Island appears to represent an undescribed species of *Sargocentron*. The specimen is close to *S. cornutum* (Bleeker) but differs in possessing a strongly spinous upper margin to the suborbital, a dusky dorsal fin, and dark spots at the base of the soft dorsal and anal fins small and faint.

CAPROIDIDAE . . . BOARFISHES

Antigonia rubicunda

Antigonia rubicunda Ogilby, 1910a: 103 (off North Reef).

Rare. A deeper water species trawled offshore. Two specimens (syntypes — AMS I.14055, E.2962) trawled by the 'Endeavour' in 70 fathoms (127m) off North Reef. Known only from southern Queensland.

AULOSTOMIDAE . . . PAINTED FLUTEMOUTHS

Aulostomus chinensis

Fistularia chinensis Linneaus, 1766: 515 (India).

Aulostomus chinensis — Woodland and Slack-Smith, 1963: 26 (Heron I.).

Common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

FISTULARIIDAE . . . FLUTEMOUTHS

Fistularia commersonii

Fistularia commersonii Rüppell, 1835-38 (1835): 142 (Mohila, Red Sea).

Fistularia serrata (non Cuvier) — Saville-Kent, 1893: 103 (Lady Elliott I.).

Fistularia petimba (non Lacepède) — Woodland and Slack-Smith, 1963: 26 (Heron I.).

Fistularia villosa (non Klunzinger) — Williams, 1979: 139 (Tryon I.).

Common in lagoon and outer reef slope habitats. This species has been confused in the literature with *F. petimba* and its synonyms (for discussion see Fritzsche, 1976). *F. commersonii* is the common shallow water species found in the Capricorn-Bunker Group, whereas the true *F. petimba* usually occurs in deeper off-reef waters. Widespread in the tropical Indo-W. Pacific.

Fistularia petimba*

Fistularia petimba Lacepède, 1803b: 89 (New Britain; Réunion; equatorial Pacific).

Rare. A single specimen (AMS I.11048) trawled by the *Endeavour* in 70-74 fathoms (127-135m) N.E. of North Reef, represents the first record of the true *F. petimba* from the Capricorn-Bunker Group. Cosmopolitan in tropical seas.

SOLENOSTOMIDAE . . . GHOST PIPEFISHES

Solenostomus paradoxus*

Fistularia paradoxa Pallas, 1770: 32 (Amboina).

Rare. A single specimen (AMS I.21871-001) collected north of Wistari Reef represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

SYNGNATHIDAE . . . PIPEFISHES

Corythoichthys amplexus*

Corythoichthys amplexus Dawson and Randall, 1975: 271 (Indo-W. Pacific).

Moderately common in lagoons and outer reef slope habitats in 0-31m. A number of specimens in the Australian Museum collected at Heron Island, One Tree Island and Lady Musgrave Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Corythoichthys haematopterus

Syngnathus haematopterus Bleeker, 1951c: 258 (Neira, Banda).

Corythoichthys fasciatus (non Risso) — Woodland and Slack-Smith, 1963: 26 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 0-20m. Widespread in the tropical Indo-W. Pacific.

Corythoichthys intestinalis

Syngnathus intestinalis Ramsay, 1881: 494 (Bismarck Archipelago).

Corythoichthys intestinalis — Talbot *et al.*, 1978: 428 (One Tree I.).

Common in lagoons and outer reef slope habitats in 0-2m. Widespread in the tropical W. Pacific.

Corythoichthys paxtoni

Corythoichthys paxtoni Dawson, 1977: 335 (Queensland—One Tree I., Heron I.).

Common in lagoons and outer reef slope habitats in 0-18m. Known only from the Great Barrier Reef.

Corythoichthys schultzi*

Corythoichthys schultzi Herald in Schultz *et al.*, 1953: 271 (Marshall Is.).

Uncommon. Single specimens collected at Heron Island (AMS I.18181-001) and One Tree Island (AMS I.20555-002) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Doryrhamphus negrosensis

Doryrhamphus negrosensis Herre, 1933: 7 (Philippines).

Microphis pleurotaenia — McCulloch, 1910: 432 (Masthead I.).

Choeroichthys suillus mallus Whitley, 1954: 25 (Masthead I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Micrognathus brevirostris

Syngnathus brevirostris Rüppell, 1835-38 (1838): 144 (Massaua, Red Sea).

Micrognathus brevirostris — Whitley, 1926: 229 (North West I.).

Common in lagoons and outer reef slope habitats. Cryptic by day. Widespread in the tropical Indo-W. Pacific.

Micrognathus dunckeri*

Micrognathus dunckeri Chabanaud, 1929: 167 (Amboina).

Rare. A single specimen (AMS I.18178-001) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Micrognathus spinirostris*

Micrognathus spinirostris Dawson and Allen, 1981: 65 (Western Australia; Sri Lanka; Samoa)

Rare. A single specimen (AMS IB.4035) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Probably widespread in the tropical Indo-W. Pacific.

Solegnathus dunckeri*

Solegnathus dunckeri Whitley, 1927a: 294 (Lord Howe Island).

Rare. Occurs in deeper off-reef waters. A beachwash specimen from Fairfax Island (AMS IB.8096) represents the first record of this species from the Capricorn-Bunker Group. Known from Queensland, New South Wales and Lord Howe Island.

Solegnathus hardwickii

Syngnathus (sic) *Hardwickii* Gray, 1830: pl. 89, fig. 3 (in part, 'India').

Rare. Occurs in deeper off-reef waters. A single specimen (QM I.12024) trawled in 20-30 fathoms (66-99m) in the Capricorn Group represents the first record of this species from the Capricorn-Bunker Group. Known from tropical and sub-tropical Australia, South China Sea and Japan (Dawson, 1982).

YoZIA bicoarctata

Syngnathus bicoarctata Bleeker, 1857a: 99 (Amboina).

YoZIA bicoarctata — Woodland and Slack-Smith, 1963: 26 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

SCORPAENIDAE . . . SCORPION FISHES

Ablabys taenianotus Cuvier

Apistus taenianotus Cuvier in Cuvier and Valenciennes, 1828b: 404 (Mauritius; Martinique)

Amblyapistus (Parocosia) slacksmithi Whitley, 1958: 45 (Heron I.).

Rare. *Amblyapistus slacksmithi* described from Heron Island by Whitley (1958) is a junior synonym of *Ablabys taenianotus* (S.G. Poss, personal communication 1981). Widespread in the tropical Indo-W. Pacific.

*Cottopistes praepositum**

Liocranium praepositum Ogilby, 1903: 25 (Queensland).

Uncommon? Several specimens (QM I.3539-40, I.10984) collected in the Capricorn Group represent the first record of this species from the Capricorn-Bunker Group. This species and the following are referred to the genus *Cottopistes* by S. Poss who is revising the genus. Known from tropical Australia and New Guinea (Mees, 1964).

Cottopistes scorpio

Paracentropogon scorpio Ogilby, 1910a: 115 (14 miles S.E. Cape Capricorn, Queensland).

Liocranium scorpio — McCulloch, 1921: 177 (Capricorn Group).

Uncommon? Trawled in deeper off-reef waters (13-20 fathoms - 24-55 m). Known from tropical Australia, New Guinea and the Indo-Malay archipelago (Mees, 1964).

*Dendrochirus brachypterus**

Pterois brachypterus Cuvier in Cuvier and Valenciennes, 1829b: 70 (No locality given).

Uncommon. Two specimens (QM I.11821, I.12403) collected near One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Dendrochirus zebra

Pterois zebra Cuvier in Cuvier and Valenciennes, 1829b: 270 (Mauritius).

Dendrochirus zebra — Woodland and Slack-Smith, 1963: 54 (Heron I.).

Brachirus zebra — Coleman, 1974: 94 (Tryon I.).

Moderately common in lagoons and outer reef slope habitats amongst coral. Widespread in the tropical Indo-W. Pacific.

Erosa erosa

Erosa erosa Langsdorf in Cuvier and Valenciennes, 1829b: 459 (Japan).

Erosa erosa — McCulloch, 1921: 178 (Capricorn Group).

Rare? Trawled in deeper off-reef waters (20-30 fathoms - 36-55 m). Known from Queensland to Japan.

Hypomacrus brocki*

Hypomacrus brocki Schultz in Schultz *et al.*, 1966: 39 (Indonesia; Philippines; Marshall Is.).

Uncommon? Several specimens collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Inimicus caledonicus*

Pelor caledonicum Sauvage, 1878: 147 (New Caledonia).

Rare. A single specimen from North West Island (AMS IA.4782) and 2 specimens from Heron Island (QM I.9403, I. 9605) represent the first record of this species from the Capricorn-Bunker Group. *I. caledonicus* has previously been known in Australia as *I. barbatus*, a junior synonym (Eschmeyer *et al.*, 1979). Known from New Caledonia, Queensland, Andaman Islands and Nicobar Islands.

Kanekonia queenslandica*

Kanekonia queenslandica Whitley, 1952: 30 (Queensland).

Rare? A single specimen (AMS IB.7300) collected at Lady Elliott Island represents the first record of this species from the Capricorn-Bunker Group. Known only from Queensland.

Pterois antennata

Scorpaena antennata Bloch, 1787: 16-17 (Amboina).

Pteropterus antennata? — Goeden, 1974: 16 (Heron I.)

Uncommon. Occurs in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Pterois volitans

Gasterosteus volitans Linnaeus, 1758: 296 (Amboina).

Pterois volitans — Woodland and Slack-Smith, 1963: 54 (Heron I.).

Pterois lunulata (*non* Schlegel) — Burgess and Axelrod, 1976: pl. 293 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scorpaena grandisquamis

Scorpaena grandisquamis Ogilby, 1910a: 107 (North West I.).

Moderately common in lagoons. Known only from Queensland.

Scorpaena maculipinnis*

Parascorpaena maculipinnis Smith, 1957b: 57 (Mozambique).

Rare? A single specimen (AMS I.20498-006) collected at One Tree Island is provisionally identified as *S. maculipinnis*. Previously unrecorded from the Capricorn-Bunker Group. Known previously only from the W. Indian Ocean. A new record for Australia.

Scorpaena moultoni

Scorpaena moultoni Whitley, 1961b: 9 (north of Wilson I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 1-30m. Known only from Queensland.

Scorpaenodes guamensis

Scorpaena guamensis Quoy and Gaimard, 1824: 326 (Guam).

Scorpaenodes guamensis — Whitley, 1928b: 295 (Lady Musgrave I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scorpaenodes littoralis*

Sebastella littoralis Tanaka, 1917: 10 (Misaki, Japan).

Uncommon. Several specimens (AMS I.15637-004; CAS 13855) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia (previously recorded from Lord Howe Island).

Scorpaenopsis diabolus

Scorpaena diabolus Cuvier in Cuvier and Valenciennes, 1829b: 312 ('le grand Ocean oriental').

Scorpaenopsis diabolus — Whitley, 1954: 28 (Heron I.).

Uncommon. Occurs in reef flat and outer reef slope habitats amongst coral. Widespread in the tropical Indo-W. Pacific.

Scorpaenopsis gibbosus

Scorpaena gibbosa Bloch and Schneider, 1801: 192 ('America').

Scorpaenopsis gibbosus — Woodland and Slack-Smith, 1963: 55 (Heron I.).

Uncommon. Occurs in reef flat and outer reef slope habitats in 1-5m. Widespread in the tropical Indo-W. Pacific.

Sebastapistes bynoensis

Scorpaena bynoensis Richardson, 1844-48 (1845): 22 (N.W. Australia).

Sebastapistes bynoensis — Woodland and Slack-Smith, 1963: 55 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Synanceia horrida

Scorpaena horrida Linnaeus, 1766: 453 (East Indies).

? *Synanceja trachynis* — Woodland and Slack-Smith, 1963: 55 (Heron I.).

Synanceia horrida — Coleman, 1981: 56 (Tryon I.).

Uncommon. Occurs in lagoons and reef flat habitats. Widespread in the tropical W. Pacific and E. Indian Ocean (Eschmeyer and Rama Rao, 1973).

Synanceia verrucosa

Synanceia verrucosa Bloch and Schneider, 1801: XXXVII, 195 (India).

Synanceia verrucosa — Eschmeyer and Rama Rao, 1973: 362 (One Tree I., Fairfax I.).

Synanceichthys verrucosus? — Goeden, 1974: 16 (Heron I.).

Uncommon. Occurs in lagoons and reef flat habitats. Widespread in the tropical Indo-W. Pacific.

TRIGLIDAE . . . GURNARDS

Lepidotrigla argus

Lepidotrigla argus Ogilby, 1910a: 123 (Queensland — N.E. of North Reef).

Uncommon. Trawled in deeper off-reef waters. Several specimens in the Australian Museum collected by the *Endeavour* in 20 fathoms (36m) near the Bunker Group. Known only from southern Queensland and New South Wales.

Lepidotrigla calodactyla

Lepidotrigla calodactyla Ogilby, 1910a: 125 (N.E. of North Reef).

Common in deeper off-reef waters. Numerous specimens in the Australian Museum collected by the *Endeavour* in 70-74 fathoms (127-135m) N.E. of North Reef. Known only from southern Queensland and New South Wales.

*Paratrigla umbrosa**

Lepidotrigla umbrosa Ogilby, 1910a: 120 (Queensland).

Uncommon. Trawled in deeper off-reef waters. A number of specimens in the Australian Museum collected by the *Endeavour* in 20 fathoms (36m) near the Bunker Group represent the first record for the area. Known only from southern Queensland.

CARACANTHIDAE . . . ORBICULAR VELVETFISHES

*Caracanthus unipinna**

Micropus unipinna Gray, 1831: 20 (Pacific Ocean).

Uncommon. Occurs in leeward reef slope habitats in 2-6m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

APLOACTYLIDAE . . . VELVETFISHES

Neoaploactis tridorsalis

Neoaploactis tridorsalis Eschmeyer and Allen, 1978: 444 (One Tree I.).

Rare. Known only from the holotype (WAM P.25529-001) collected from One Tree Island.

PLATYCEPHALIDAE . . . FLATHEADS

Platycephalus indicus

Callionymus indicus Linnaeus, 1758: 250 (Asia).

Platycephalus indicus — Woodland and Slack-Smith, 1963: 55 (Heron I.).

Apparently rare. Known only from a single specimen recorded from Heron Island by Woodland and Slack-Smith (1963). No specimens in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

*Sorsogona tuberculata**

Platycephalus tuberculatus Cuvier in Cuvier and Valenciennes, 1829a: 258 (Trincomalee, India).

Rare. A single specimen (AMS IA.4785) collected at North West Island represents the first record of this species from the Capricorn-Bunker Group. Following Schultz in Schultz *et al* (1966) this species is referred to the genus *Sorsogona*. Widespread in the tropical Indo-W. Pacific.

Suggrundus bosschei

Platycephalus Bosscheis (sic) Bleeker, 1860a: 140 (E. Indies).

Insidiator bosschei — Woodland and Slack-Smith, 1963: 55 (Heron I.).

Uncommon. Occurs in lagoons in sandy areas. Widespread in the tropical W. Pacific.

Suggrundus chiltonae*

Thysanophrys chiltonae Schultz in Schultz *et al.*, 1966: 57 (Marshall Is.).

Rare. A single specimen (AMS I.20547-014) collected in the lagoon at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

DACTYLOPTERIDAE . . . FLYING GURNARDS

Dactyloptena orientalis

Dactylopterus orientalis Cuvier in Cuvier and Valenciennes, 1829b: 134 (Indian Ocean).

Dactyloptena orientalis — Grant 1975:474 (Capricorn Group).

Uncommon. A deeper water species. Numerous specimens collected near North Reef, North West Island, off Heron Island, and One Tree Island (juveniles) in the Australian Museum. Widespread in the tropical Indo-W. Pacific.

SERRANIDAE . . . GROUPERS

Anthias fasciata

Franzia fasciata Kamohara, 1954: 3 (Kochi, Japan).

Anthias fasciata — Allen and Starck, 1982: 49 (One Tree I.).

Uncommon. Occurs in outer reef slope habitats, usually in small aggregations in the vicinity of caves and ledges in 30-60 m. Record from the Capricorn Group based on a sight record by G.R. Allen at One Tree Island. Known only from southern Japan and the Great Barrier Reef.

Anthias pictilis

Anthias pictilis Randall and Allen, 1978: 33 (Lord Howe Island; New Caledonia; One Tree Island — sight record).

Pseudanthias sp. — Allen *et al.*, 1976: 395 (One Tree I.).

Uncommon. Occurs in outer reef slope habitats in deeper water (>20m). Known only from Lord Howe Island, New Caledonia and the southern Great Barrier Reef.

Anthias squamipinnis

Serranus (Anthias) squamipinnis Peters, 1855: 236 (Mozambique).

Anthias squammipinnis(sic) — Goeden, 1974: 8 (Heron I.).

Very common in outer reef slope habitats in 15-35m. Widespread in the tropical Indo-W. Pacific.

Cephalopholis aurantius*

Serranus aurantius Valenciennes in Cuvier and Valenciennes, 1828: 305 (Seychelles).

Rare. A single specimen (QM I.14890) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Cephalopholis cyanostigma

Serranus cyanostigma Valenciennes in Cuvier and Valenciennes, 1828: 359 (Java).

Cephalopholis(sic) cyanostigma — Williams, 1969: 106 (North West I.).

Cephalopholis cyanostigma — Goeden, 1974: 7 (Heron I.).

Rare? Reported by Williams (1969) and Goeden (1974) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums, and this record remains unconfirmed. Widespread in the tropical W. Pacific.

Cephalopholis miniatus

Perca miniata Forsskål, 1775: 41 (Djedda and Lohaja, Red Sea).

Cephalopholis miniata — Woodland and Slack-Smith, 1953: 29 (Heron I.).

Common in outer reef slope habitats in 5-15m. Widespread in the tropical Indo-W. Pacific.

Cephalopholis pachycentron

Serranus pachycentron Valenciennes in Cuvier and Valenciennes, 1828: 295 (E. Indies).

Cephalopholis pachycentron — Woodland and Slack-Smith, 1963: 29 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in coral rubble. Widespread in the tropical Indo-W. Pacific.

Cephalopholis sexmaculatus*

Serranus sexmaculatus Rüppell, 1828-31 (1828): 107 (Red Sea).

Rare. A single specimen (AMS I.15683-021) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. Previously recorded from the Great Barrier Reef as *C. coatesi* Whitley, a junior synonym.

Cephalopholis* sp.

Rare. A single specimen (QM I.17815) collected at North West Island possibly represents an undescribed species of *Cephalopholis*. The specimen is characterised by its deep body and black spots (blue in life).

Chelidoperca margaritifera*

Chelidoperca margaritifera Weber, 1913: 207 (between Misol and New Guinea).

Rare. A single specimen (AMS I.21858-001) dredged in 188m on a muddy bottom, east of North Reef, represents the first record of this species from the Capricorn-Bunker Group. Previously known only from the type locality (Ceram Sea). A new record for Australia.

Cromileptes altivelis

Serranus altivelis Valenciennes in Cuvier and Valenciennes, 1828: 324 (Java).

Cromileptes altivelis — Woodland and Slack-Smith, 1963: 29 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 2-15m. Widespread in the tropical W. Pacific.

Epinephelus caeruleopunctatus

Holocentrus caeruleo-punctatus Bloch, 1790: 94 (no locality given).

Epinephelus caeruleopunctatus — Woodland and Slack-Smith, 1963: 28 (Heron I.).

Rare? Reported by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums, and this record remains unconfirmed. Widespread in the tropical Indo-W. Pacific.

Epinephelus corallicola

Serranus corallicola Valenciennes in Cuvier and Valenciennes, 1828: 336 (no locality given).

Epinephelus corrallicola — Goeden, 1974: 7 (Heron I.).

Rare? Reported by Goeden (1974) but no specimens could be found in either the Australian or Queensland Museums, and this record remains unconfirmed. Widespread in the tropical Indo-W. Pacific.

Epinephelus fasciatus

Perca fasciata Forsskål, 1775: 11 and 40 (Cape Mohammed, Red Sea).

Epinephelus fasciatus — Woodland and Slack-Smith, 1963: 29 (Heron I.).

Common in outer reef slope habitats in 3-25m. Widespread in the tropical Indo-W. Pacific.

Epinephelus fuscoguttatus*

Perca summana fusco-guttata Forsskål, 1775: 42 (Suerens and Djedda, Red Sea).

Rare. Occurs in outer reef slope habitats. A single specimen (AMS IB.5066) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. This species has been confused with *E. microdon* (see Randall, 1964) which is more common in the Capricorn-Bunker Group, and Woodland and Slack-Smith's (1963) record of this species undoubtedly refers to *microdon*. Widespread in the tropical Indo-W. Pacific.

Epinephelus hexagonatus*

Holocentrus hexagonatus Bloch and Schneider, 1801: 323 (Tahiti).

Uncommon. Two specimens collected at One Tree Island (AMS IB.7707) and a Heron Island (AMS I.15495-001) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Epinephelus hoedtii

Serranus hoedtii Bleeker, 1855c: 406 (Amboina).

Epinephelus kohleri — Burgess and Axelrod, 1976: pl. 323 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, associated with bommies, in 5-20m. This species has been recorded from Heron Island as *E. kohleri* Schultz, a junior synonym of *E. hoedtii*, by Burgess and Axelrod (1976). Widespread in the tropical W. Pacific.

Epinephelus maculatus*

Holocentrus maculatus Bloch, 1790: 96 (E. Indies).

Rare. Two specimens collected at Heron Island (QM I.14203) and Polmaise Reef (QM I.17427) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

***Epinephelus malabaricus*?**

Holocentrus malabaricus Bloch and Schneider, 1801: 319 (Tranquebar).

Epinephelus tauvina (non Forsskål) — Woodland and Slack-Smith, 1963: 29 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, occasionally entering lagoons. The species previously identified as *E. tauvina* by Woodland and Slack-Smith (1963) and others is a misidentification (see Randall, 1964) and probably is *E. malabaricus*. Apparently widespread in the tropical W. Pacific.

Epinephelus merra

Epinephelus merra Bloch, 1793: 17 (Japan Sea).

Epinephelus merra Whitley, 1927b: 12 (North West I.).

Very common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Epinephelus microdon

Serranus microdon Bleeker, 1856c: 86 (Java).

Epinephelus fuscoguttatus (non Forsskål) — Woodland and Slack-Smith, 1963: 28 (Heron I.).

Uncommon. Two specimens (AMS I.15617-022, I.20853-006) collected at One Tree Island. Randall (1964) has pointed out that this species has been confused with *E. fuscoguttatus* and Woodland and Slack-Smith's (1963) record of the latter probably refers to *E. microdon*. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Epinephelus ongus

Holocentrus ongus Bloch, 1790: 69, pl. 234 (Japan).

Epinephelus slacksmithi Whitley, 1959: 312 (Heron I.).

Epinephelus summana (non Forsskål) — Woodland and Slack-Smith, 1963: 28 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. This species previously has been recorded from the Capricorn-Bunker Group as *E. summana* (Forsskål), a closely related Red Sea endemic (Randall and Ben Tuvia m.s.). *E. slacksmithi* Whitley is a junior synonym of *E. ongus*. Widespread in the tropical Indo-W. Pacific.

Epinephelus quoyanus

Serranus quoyanus Valenciennes in Cuvier and Valenciennes, 1830b: 519 (New Guinea).

Epinephelus megachir — Goeden, 1974: 8 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15m. This species previously has been recorded as *E. megachir* (Richardson), a junior synonym of *E.*

quoyanus (Randall and Ben Tuvia, m.s.). Widespread in the tropical Indo-W. Pacific.

Epinephelus undulostriatus

Serranus undulostriatus Peters, 1867: 518 (Sydney?)

Epinephelus undulostriatus — Goeden, 1974: 7 (Heron I.).

Moderately common in outer reef slope habitats, around bommies, in 5-25m. Known only from Queensland and New South Wales.

Liopropoma susumi*

Choristium susumi Jordan and Seale, 1906: 256 (Apia, Samoa).

Uncommon. Occurs in lagoons and outer reef slope habitats in 2-15m, usually in caves and under ledges. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Plectropomus leopardus

Holocentrus leopardus Lacepède, 1802b: 332-337 (no locality given).

Plectropoma maculatum leopardus — Whitley, 1926: 229 (North West I., Wilson I.).

Plectropomus maculatus (*non* Bloch) — Woodland and Slack-Smith, 1963: 29 (Heron I.).

Cephalopholis miniatus (*non* Forsskål) — Deas and Lawler, 1970: 4 (Heron I.).

Plectropomus leopardus — Goeden, 1974: 7 (Heron I.).

Common (abundant at Heron Island) in outer reef slope habitats in 5-35m, especially around bommies. This species has previously been confused with *P. maculatus* Bloch which is rare in the Capricorn-Bunker Group, and may be easily distinguished from *leopardus* by its larger spots, more elongate on the head. Widespread in the tropical Indo-W. Pacific.

Plectropomus maculatus

Bodianus maculatus Bloch, 1790: 48 (Japan).

Plectropomus truncatus (*maculatus*) — Goeden, 1974: 7 (Heron I.).

Rare. Observed underwater by the author during coral trout surveys at Heron Island. Specimens previously recorded as *P. maculatus* refer to *P. leopardus*. Goeden (1974) incorrectly refers this species to *P. truncatus*, which similarly has large spots on the body but lacks elongate spots on the head. Widespread in the tropical Indo-W. Pacific.

Plectropomus laevis

Labrus laevis Lacepède, 1802a: 431, 477, pl. 23, fig. 2 ('Le grande golfe de l'Inde').

Plectropomus melanoleucus — Goeden, 1974: 7 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. This species has previously been identified as *P. melanoleucus* (Lacepède), a junior synonym (J.E. Randall, personal communication 1982). Widespread in the tropical Indo-W. Pacific.

Plectropomus* sp

Rare. A single specimen (QM I.17475) collected at Lamont Reef is an undescribed species of *Plectropomus*. The new species has blue spots smaller than those of *P. truncatus* but larger than *leopardus*.

Promicrops 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.).

Rare. Occurs in outer reef slope habitats, usually in deeper water. Widespread in the tropical Indo-W. Pacific.

Rainfordia opercularis

Rainfordia opercularis McCulloch, 1923b: 120 (Edgecumbe Bay, Queensland).

Rainfordia opercularis — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 1-15m, usually under ledges near sand. Known only from Queensland.

Variola louti

Perca louti Forsskål, 1775: 40 (Djedda and Lohaja, Red Sea).

Variola louti — Whitley, 1933: 75 (North West I.).

Moderately common in outer reef slope habitats in 5-40m. Widespread in the tropical Indo-W. Pacific.

GRAMMISTIDAE . . . SOAP FISHES

Diploprion bifasciatum

Diploprion bifasciatum Kuhl and van Hasselt in Cuvier and Valenciennes, 1828: 137 (Java).

Diploprion bifasciatum — Woodland and Slack-Smith, 1963: 29 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical W. Pacific and E. Indian Ocean.

PSEUDOCROMIDAE . . . PYGMY GROUPERS

Labracinus lineata

Dampiera lineata Castelnau, 1875: 30 (Dampier's Archipelago, W. Australia).

Dampiera lineata — Whitley, 1928b: 295 (Lady Musgrave I.).

Uncommon. Occurs in lagoons and outer reefs slope habitats. Schultz (1967) has referred this species to the genus *Labracinus*. Distributed in the tropical W. Pacific.

Pseudochromis aureus

Pseudochromis aurea Seale, 1909: 528 (Philippines).

Pseudochromis (Devisina) aureus — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Rare. Reported from the reef flat at Heron Island (Woodland and Slack-Smith, 1963), but no specimens of *P. aureus* could be found in either the Australian or Queensland Museums. Widespread in the tropical W. Pacific.

Pseudochromis flammicauda

Pseudochromis flammicauda Lubbock and Goldman, 1976: 57 (Great Barrier Reef — One Tree I., Heron I.).

Rare. Occurs in outer reef slope habitats among coral and rocks in 3-10m. Known only from the Great Barrier Reef.

Pseudochromis fuscus*

Pseudochromis fuscus Müller and Troschel, 1849: 23 (Celebes).

Uncommon. Occurs in reef flat and outer reef slope habitats in 1-30m. Several specimens in the Australian Museum collected at One Tree Island and Lady Musgrave Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Pseudochromis longipinnis

Dampiera longipinnis Ogilby, 1908b: 34 (Bowen, Queensland).

Ogilbyina longipinnis — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Common in lagoons and outer reef slope habitats. Known only from Queensland.

Pseudochromis mccullochi

Pseudochromis mccullochi Myers, 1932: 30 (New Hebrides).

Pseudochromis mccullochi perpulcher — Whitley, 1959: 313 (Heron I.).

Common in reef flat and outer reef slope habitats amongst coral and rocks. Widespread in the tropical W. Pacific.

Pseudochromis novaehollandiae

Pseudochromis novae-hollandiae Steindachner, 1880: 160 (Port Denis[on]-Queensland).

Pseudochromis novae-hollandiae — McCulloch, 1915a: 49 (Masthead I.).

Klunzingerina novae-hollandiae — Fowler, 1957: 67 (Lady Musgrave I.).

Moderately common in lagoons and outer reef slope habitats. Known only from Queensland.

Pseudochromis paccagnellae

Pseudochromis paccagnellae Axelrod, 1973: 5 (Indonesia).

Pseudochromis paccagnellae — Burgess and Axelrod, 1976: pl. 334, 335 (Wistari Reef, Heron I.).

Rare. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Pseudochromis tapeinosoma

Pseudochromis tapeinosoma Bleeker, 1853a: 115 (Amboina).

Pseudochromis (Leptochromis) tapeinosoma — McCulloch, 1926: 194 (Masthead I., North West I.).

Pseudochromis (Assiculus) cyanotaenia — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Common in reef flat and outer reef slope habitats among coral and rocks. *P. cyanotaenia* probably is the male color form of *P. tapeinosoma* (R. Lubbock, personal communication 1980). Widespread in the tropical Indo-W. Pacific.

***Pseudochromis veliferus*.**

Pseudochromis veliferus Lubbock, 1980: 831 (Great Barrier Reef — One Tree I.).

Rare. Occurs in outer reef slope habitats among coral and rock on sand, in 15-20 m. Known only from Lizard Island and One Tree Island, Great Barrier Reef.

Pseudoplesiops* sp. 1

Three specimens (AMS I.20208-021 [2], I.20211-001 [1], of this possibly undescribed species collected at One Tree Island characterised by D 21-22; A 13-14.

Pseudoplesiops* sp. 2

Several specimens (AMS I.19338-002; I.20210-044; I.20213-003; I.21490-030) of this possibly undescribed species collected at One Tree Island and Fairfax Reef characterised by: D 24-25; A 15-16; V I, 3.

PLESIOPIDAE . . . PRETTYFINS

Assessor macneilli

Assessor macneilli Whitley, 1935: 231 (Hayman I., Queensland).

Assessor macneilli — Allen and Kuitert, 1976: 205 (One Tree I.).

Common in lagoons and outer reef slope habitats, associated with caves, crevices and undersides of ledges in 2-15 m, often in large aggregations. Known only from the Great Barrier Reef.

Callopleysiops altivelis*

Plesiops altivelis Steindachner, 1903: 17 (Nias, southwest of Sumatra).

Rare. Occurs in outer reef slope habitats in 3-45 m. Three specimens (AMS I.15625-027 [1]; I.15684-032 [2]) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Fraudella carassiops

Fraudella carassiops Whitley, 1935: 229 (Queensland — North West I.).

Rare. Apparently restricted to deeper water. Whitley's holotype and 2 paratypes of *F. carassiops* collected at North West Island. Known only from southern Queensland.

Paraplesiops poweri

Paraplesiops poweri Ogilby, 1908a: 17 (Moreton Bay, Queensland).

Paraplesiops poweri — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Common in lagoons and reef flat habitats, sheltering in caves, crevices and under ledges. Known only from southern Queensland and northern New South Wales.

Plesiops cephalotaenia*

Plesiops cephalotaenia Inger, 1955: 272 (Philippines; Borneo; New Guinea).

Common in reef flat and outer reef slope habitats in 1-5 m. Numerous specimens in the Australian Museum collected at Heron Island and One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Plesiops coeruleolineatus

Plesiops coeruleolineatus Rüppell, 1835-38 (1835): 5 (Massaua, Red Sea).

Pharopteryx melas — Ogilby, 1913a: 84 (Masthead I.).

Plesiops coeruleolineatus — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Moderately common in reef flats and outer reef slope habitats in 1-23 m. Widespread in the tropical Indo-W. Pacific.

Plesiops corallicola

Plesiops corallicola Bleeker, 1853b: 280 (Sumatra).

Plesiops corallicola — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Uncommon. Occurs in coral on reef flats. Widespread in the tropical W. Pacific and E. Indian Ocean.

Plesiops oxycephalus?

Plesiops oxycephalus Bleeker, 1855b: 320 (Batu I.).

?*Plesiops oxycephalus* — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Doubtfully recorded from Heron Island on the basis of a color transparency (Woodland and Slack-Smith, 1963). No specimens of *P. oxycephalus* were found in either the Australian or Queensland Museums, and record of this species remains unconfirmed. Known from Indonesia, the Philippines and New Hebrides.

***Plesiops* sp.**

Plesiops sp. — Allen *et al.*, 1976: 396 (One Tree I., Heron I.).

Common in coral in outer reef slope habitats in 2-30 m. This species has previously been misidentified as *P. nigricans*, which is restricted to the Red Sea (Inger, 1955). It will be described by J.E. Randall and P. Fourmanoir. Known also from Lord Howe Island, Norfolk Island and New Caledonia.

PSEUDOGRAMMATIDAE . . . DOTTYBACKS

Aporops bilinearis*

Aporops bilinearis Schultz, 1943: 112 (Hull I., Phoenix Is.).

Rare. A single specimen (AMS I.17445-072) collected One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

ACANTHOCLINIDAE . . . BANDED LONG-FINS

Belonepterygium fasciolatum

Acanthoclinus fasciolatus Ogilby, 1889: 63 (Lord Howe I.).

Acanthoclinus littoreus (*non* Bloch and Schneider) — McCulloch, 1910: 431-432 (Masthead I.).

Belonepterygium fasciolatum — McCulloch and Whitley, 1925: 150 (Masthead I.).

Common amongst coral on reef flats. Known only from southern Queensland and Lord Howe Island.

TERAPONIDAE . . . TERAPON PERCHES

Pelates quadrilineatus*

Holocentrus quadrilineatus Bloch, 1790: 82 (the Orient).

Rare. Two specimens (AMS E.1430, I.10912) trawled by the *Endeavour* in 20 fathoms (36m) near the Bunker Group represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Terapon jarbua

Sciaena jarbua Forsskål, 1775: 50 (Djedda, Red Sea).

Terapon jarbua — Woodland and Slack-Smith, 1963: 30 (Heron I.).

Uncommon. Occurs in shallow lagoons and reef flat habitats. Widespread in the tropical Indo-W. Pacific.

PRIACANTHIDAE . . . BULLSEYES

Priacanthus cruentatus*

Labrus cruentatus Lacepède, 1802a: 452, 522 (Martinique, West Indies).

Uncommon. Occurs in outer reef slope habitats, usually sheltering in caves or amongst coral by day. Two specimens (AMS I.17445-078) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Circumtropical distribution.

Priacanthus hamrur

Sciaena hamrur Forsskål, 1775: 45 (Djedda, Red Sea).

Priacanthus hamrur — Goeden, 1974: 8 (Heron I.).

Uncommon. Recorded from Heron Island by Goeden (1974). No specimens of *P. hamrur* are in the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Priacanthus macracanthus*

Priacanthus macracanthus Cuvier in Cuvier and Valenciennes, 1829a: 108 (Amboina).

Rare. Occurs in deeper water. Several specimens (AMS E.1437-40, I.10915-16) trawled by the *Endeavour* in 20 fathoms (36m) near the Bunker Group represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

APOGONIDAE . . . CARDINAL FISHES

Apogon atrogaster*

Amia atrogaster Smith and Radcliffe in Radcliffe, 1912: 439 (Philippines).

Uncommon. Occurs in lagoons and outer reef slope habitats. Several specimens in the Australian Museum collected at Heron Island and One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known previously only from the Philippines. A new record for Australia.

Apogon aureus

Centropomus aureus Lacepède, 1802b: 253 and 273 (Mauritius and Réunion).

Apogon aureus — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Apogon bandanensis

Apogon bandanensis Bleeker, 1854a: 95 (Banda, Neira).

Apogon bandanensis — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Apogon breviceaudatus

Apogon breviceaudatus Weber, 1909: 158 (Aru Is.).

Apogon breviceaudatus — McCulloch, 1921: 168 (near Capricorn Group).

Rare? Trawled in deeper water (25-30 fathoms - 45-55m). Known from tropical Australia and Indonesia.

Apogon chrysurus*

Apogon chrysurus Ogilby, 1889: 54 (Lord Howe I.).

Uncommon. Occurs in outer reef slope habitats in 2-25m. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from Queensland, New South Wales and Lord Howe Island.

Apogon coccineus

Apogon coccineus Rüppell, 1835-38 (1835): 88 (Red Sea).

Apogon cardinalis — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Apogon coccineus — Allen *et al.*, 1976: 397 (Capricorn Group).

Moderately common in lagoons and outer reef slope habitats. *A. cardinalis* recorded from Heron Island by Woodland and Slack-Smith (1963) is a junior synonym of *A. coccineus* according to Smith (1961). Widespread in the tropical Indo-W. Pacific.

Apogon cookii

Apogon cookii Macleay, 1881: 344 (Endeavour River and Darnley I., Queensland).

Apogon fasciatus (*non* White) — Whitley, 1926: 229 (North West I.).

Lovamia cooki — Woodland and Slack-Smith, 1963: 32 (Heron I.).

Apogon cooki — Talbot *et al.*, 1978: 428 (One Tree I.).

Moderately common in lagoons and outer reef slope habitats. Known from Queensland and New South Wales.

Apogon cyanosoma

Apogon cyanosoma Bleeker, 1853e: 71 (Lawajong, Solor I.).

Apogon cyanosoma — Russell *et al.*, 1974: 212 (One Tree I.).

Moderately common in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Apogon doederleini

Apogon doederleini Jordan and Snyder, 1901: 901 (Nagasaki, Japan).

?*Apogon endekataenia* (*non* Bleeker) — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Apogon agustata (*sic* — *non* Smith and Radcliffe) — Russell *et al.*, 1974: 212 (One Tree I.).

Apogon agustata (*sic* — *non* Smith and Radcliffe) — Talbot *et al.*, 1978: 428 (One Tree I.).

Very common in lagoons and outer reef slope habitats in 1-15m. This species has previously been confused with *A. angustata* Smith and Radcliffe. *A. endekataenia* recorded by Woodland and Slack-Smith (1963) probably also refers to *A. doederleini*. Known from Queensland, Japan, Formosa and the Philippines.

Apogon exostigma*

Amia exostigma Jordan and Starks in Jordan and Seale, 1906: 238 (Samoa).

Uncommon. Occurs in lagoons and outer reef slope habitats. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Apogon fragilis*

Apogon fragilis Smith, 1961: 385 (Pinda, E. Africa).

Rare. Two specimens (AMS I.18267-005, I.18271-002) collected in the lagoon and windward reef slopes at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Previously known only from the E. Indian Ocean. A new record for Australia.

Apogon frenatus

Apogon frenatus Valenciennes, 1832: 57 (New Guinea and Guam).

Apogon frenatus — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Apogon gracilis*

Apogonichthys gracilis Bleeker, 1856b: 371 (Ternate).

Rare? A single specimen (AMS I.15681-019) provisionally identified as *A. gracilis*, collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

***Apogon margaritophorus*?**

Apogon margaritophorus Bleeker, 1854e: 363 (Batjan).

Apogon margaritophorus — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Rare? Recorded from Heron Island by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums, and record of this species remains unconfirmed. Widespread in the tropical W. Pacific.

Apogon nigrofasciatus

Apogon nigrofasciatus Lachner in Schultz *et al.*, 1953: 466 (Marshall Is.).

Moderately common in lagoons and outer reef slope habitats. Numerous specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Apogon novemfasciatus

Apogon novemfasciatus Cuvier in Cuvier and Valenciennes, 1828: 154 (Timor and Guam).

Apogon fasciatus novemfasciatus — Whitley, 1926: 229 (North West I.).

Uncommon? Several specimens in the Australian and Queensland Museums collected at One Tree Island are provisionally identified as *A. novemfasciatus*. Widespread in the tropical Indo-W. Pacific.

Apogon nubilis*

Apogon nubilis Garman, 1903: 229 (Suva, Fiji Is.).

Common in lagoons and outer reef slope habitats. Numerous specimens in the Australian Museum collected at One Tree Island and Lady Musgrave Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Apogon savayensis*

Apogon savayensis Günther, 1871: 656 (Samoa and Celebes).

Uncommon. Several specimens in the Australian and Queensland Museums collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Apogon talboti*

Apogon talboti Smith, 1961: 387 (Zanzibar).

Rare? Two specimens (AMS I.15681-024, I.20206-008) collected at One Tree Island and provisionally identified as *A. talboti*, represent the first record of this species from the Capricorn-Bunker Group. Previously known only from the W. Indian Ocean. A new record for Australia.

Apogon trimaculatus*

Apogon trimaculatus Cuvier in Cuvier and Valenciennes, 1828: 156 (Moluccas).

Moderately common in lagoons and outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

***Apogon* sp.**

? *Apogon nigrocinctus* (non Smith and Radcliffe) — Woodland and Slack-Smith, 1963: 31 (Heron I.).

Common in outer reef slope habitats in 3-25m. Numerous specimens in the Australian Museum collected at One Tree Island appear to be an undescribed species of *Apogon* close to *A. diversus* (Smith and Radcliffe) (T.H. Fraser, personal communication 1981). *A. nigrocinctus* recorded by Woodland and Slack-Smith (1963) probably refers to this new species.

Apogonichthys ahimsa

Apogonichthys ahimsa Whitley, 1959: 314 (Heron I.).

Apparently uncommon. Several specimens from Heron Island in the Australian Museum and CSIRO collection. Known only from the Capricorn Group.

Apogonichthys ocellatus*

Apogon ocellatus Weber, 1913: 231 (Celebes).

Rare? A single specimen (AMS I.20209-023) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Archamia leai

Archamia leai Waite, 1916: 455 (Norfolk I.).

?*Archamia lineolata* (non Ehrenberg) — Woodland and Slack-Smith, 1963: 32 (Heron I.).

Common in outer reef slope habitats. This species was probably mistakenly identified as *A. lineolata* by Woodland and Slack-Smith (1963). Previously known only from Norfolk Island. A new record for Australia.

Cheilodipterus macrodon

Centropomus macrodon Lacepède, 1802b: 273 (Mauritius and Réunion).

Cheilodipterus macrodon — Goeden, 1974: 7 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Cheilodipterus quinquilineatus

Cheilodipterus quinquilineatus Cuvier in Cuvier and Valenciennes, 1828: 167 (Society Is.).

Paramia quinquilineatus — Low, 1971: 650 (Heron I.).

Cheilodipterus quinquilineatus — Goeden, 1974: 7 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-25m. Widespread in the tropical Indo-W. Pacific.

Fowleria aurita

Apogon auritus Valenciennes in Cuvier and Valenciennes, 1831: 443 (Mauritius).

Apogonichthys auritus — Fowler, 1957: 66 (Lady Musgrave I.).

Common in lagoons and outer reef slope habitats. Species belonging to the genus *Fowleria* are in need of revision in view of the contrasting treatments of Lachner in Schultz *et al.* (1953) and Smith (1961). Lachner's recognition of at least 4 species attributable to the genus (see Fraser, 1972) is followed here. *F. aurita* is widely distributed in the tropical Indo-W. Pacific.

Fowleria marmoratus*

Apogonichthys marmoratus Alleyne and Macleay, 1877: 268 (Cape Grenville, N. Australia).

Rare. Two specimens (AMS I.20205-010) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from northern Australia and the Marshall Islands.

Fowleria variegata*

Apogon variegatus Valenciennes, 1832: 55 (Mauritius).

Uncommon. Several specimens in the Australian and Queensland Museums collected at Heron Island, One Tree Island and Lady Musgrave Island are provisionally identified as *F. variegata*. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Gymnapogon* sp.

Rare? Three specimens (AMS I.20577-003) collected at One Tree Island possibly represent an undescribed species of *Gymnapogon*. The species is

characterised by having 11-12 dorsal soft rays and 12 anal soft rays, and a rounded caudal fin. The first record of a species of *Gymnapogon* from the Capricorn-Bunker Group.

Neamia octospina

Neamia octospina Smith and Radcliffe in Radcliffe, 1912: 441 (Palawan, Philippines).

Neamia octospina — Woodland and Slack-Smith, 1963: 32 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

*Pseudamia polystigma**

Cheilodipterus polystigma Bleeker, 1859c: 454 (Singapore).

Rare. Several specimens in the Australian Museum collected at One Tree Island and Wistari Reef represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Siphamia majimai

Siphamia majimai Matsubara and Iwai, 1958: 603 (Japan).

Siphamia zaribae Whitley, 1959: 323 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, commensal amongst spines of the sea-urchin *Echinothrix calmaris* (Slack-Smith, 1962). *S. zaribae* Whitley is a junior synonym of *S. majimai* (T.H. Fraser, personal communication 1981). Known from the Great Barrier Reef and Japan.

SILLAGINIDAE . . . WHITINGS

Sillago ciliata

Sillago ciliata Cuvier in Cuvier and Valenciennes, 1829a: 415 (Southern Seas).

Sillago ciliata diadoi — Whitley, 1932b: 345 (North West I.).

Sillago ciliata — Woodland and Slack-Smith, 1963: 32 (Heron I.).

Uncommon. Occurs in shallow lagoons on open sandy bottoms. Known from Queensland to Tasmania, Papua, Lord Howe Island and New Caledonia (R.J. McKay, ms.).

Sillago robusta

Sillago robusta Stead, 1908: 7 (Port Jackson, New South Wales).

Sillago auricomis — Ogilby, 1915a: 32 (Lady Elliott I.).

Rare. Occurs offshore on sandy bottoms in deeper water (>20m). *S. auricomis* Ogilby is a junior synonym of *S. robusta* (R.J. McKay, ms.). Distributed in tropical and subtropical Australia.

BRANCHIOSTEGIDAE . . . TILE FISHES

*Malacanthus brevirostris**

Malacanthus brevirostris Guichenot, 1848: 14 (Madagascar).

Uncommon. Occurs in outer reef slope habitats in 5-15m. A single specimen (AMS I.15625-006) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Previously recorded from Australia as *M. hoedti*, a junior synonym (Dooley, 1974). Widespread in the tropical Indo-W. Pacific.

Malacanthus latovittatus*

Labrus latovittatus Lacepède, 1798: 527 ('Great Equatorial Ocean').

Rare. A single specimen (QM I.16632) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

RACHYCENTRIDAE . . . SERGEANT FISH

Rachycentron canadum

Gasterosteus canadum Linnaeus, 1766: 491 (Carolinas).

Rachycentron canadum — Woodland and Slack-Smith, 1963: 34 (Heron I.).

Uncommon. Occurs in open waters. Circumtropical.

ECHENEIDIDAE . . . SUCKER FISHES

Echeneis naucrates

Echeneis naucrates Linnaeus, 1758: 261 (Indian Seas).

Echeneis naucrates — Ogilby, 1915a: 42 (North West I.).

Moderately common in lagoons and outer reef slope habitats. Frequently seen attached to turtles, large rays and sharks. Circumtropical.

Phtheirichthys lineatus*

Echeneis lineata Menzies, 1791: 187 (Tropical Pacific Ocean).

Apparently rare. A single specimen (AMS IA.5025) collected from North West Island represents the first record of this species from the Capricorn-Bunker Group. Circumtropical.

CARANGIDAE . . . JACKS & TREVALLYS

Alectis ciliaris

Zeus ciliaris Bloch, 1787: 29 (E. Indies).

Alectis ciliaris — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Rare? Recorded from Heron Island by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Carangoides ferdau

Scomber ferdau Forsskål, 1775: 55 (Djedda, Red Sea).

Caranx ferdau — Woodland and Slack-Smith, 1963: 32 (Heron I.).

Uncommon? Seen occasionally in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Carangoides fulvoguttatus

Scomber fulvoguttatus Forsskål, 1775: 56 (Red Sea).

Turrum emburyi Whitley, 1932b: 337 (North West I.).

Caranx emburyi — Marshall *et. al.*, 1959: 109 ('Capricorns').

Carangoides fulvoguttatus — Grant, 1982: 310 (Lamont Reef).

Uncommon. Seen occasionally in outer reef slope habitats sometimes forming dense shoals (Grant, 1982). *T. emburyi* is a junior synonym of *C. fulvoguttatus* (W.F. Smith-Vaniz, personal communication 1981). Widespread in the tropical Indo-W. Pacific.

Carangoides gymnostethus

Caranx gymnostethus Cuvier in Cuvier and Valenciennes, 1833: 73 (Seychelles).

Caranx gymnostethoides — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Carangoides gymnastethoides — Grant, 1982: 315, pl. 154 (Lamont Reef).

Uncommon. Occurs in lagoons and outer reef slope habitats. This species previously has been recorded as *C. gymnostethoides* Bleeker, a junior synonym (Smith, 1972). Widespread in the tropical Indo-W. Pacific.

Carangoides humerosus

Caranx humerosus McCulloch, 1915b: 137 (Bunker Group—20 miles N.E. Bustard Head).

Rare? The holotype (AMS E.1436) and paratype (AMS I.11107) of *C. humerosus* trawled in 20 fathoms (36 m) near the Bunker Group. Known only from Queensland.

Caranx ignobilis

Scomber ignobilis Forsskål, 1775: 55 (Djedda and Lohaja, Red Sea).

Caranx ignobilis — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Common? Recorded from Heron Island by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Caranx melampygus

Caranx melampygus Cuvier in Cuvier and Valenciennes, 1833: 116 (Waigiú; Rawak; Vanicolo; Buru; Isle de France).

Caranx melampygus — Woodland and Slack-Smith, 1963: 33 (Heron I.).

?*Caranx stellatus* (non Eydoux and Souleyt) — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Uncommon? Recorded from Heron Island by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. *C. stellatus* is a junior synonym of *C. melampygus* (Smith-Vaniz *et al.*, 1979). Widespread in the tropical Indo-W. Pacific.

Caranx radiatus

Caranx radiatus Macleay, 1881: 537 (Rockingham Bay, Queensland).

Absalom radiatus — Whitley, 1937b: 133 (Heron I.).

Rare. Occurs in outer reef slope habitats. Known only from tropical Australia and New Guinea.

Caranx sexfasciatus

Caranx sexfasciatus Quoy and Gaimard, 1824: 358 (Iles des Papous).

Caranx sexfasciatus — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Decapterus russelli*

Caranx russelli Rüppell, 1828-31 (1830): 99 (Tor, Red Sea).

Uncommon? A single specimen (AMS E.1434) trawled by the *Endeavour*

in 20 fathoms (36 m) near the Bunker Group represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Elagatis bipinnulata*

Seriola bipinnulata Quoy and Gaimard, 1824: 363 (Iles des Papous).

Uncommon. Seen occasionally in outer reef slope habitats. Sight records by the author at One Tree Island and Fairfax Island. Widespread in the tropical Indo-W. Pacific.

Gnathanodon speciosus

Scomber rim speciosus Forsskål, 1775: 54 (Djedda and Lohaja, Red Sea).

Caranx speciosus — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Naucrates ductor

Gasterosteus ductor Linnaeus, 1758: 295 ('In Pelago').

Naucrates ductor — Goeden, 1974: 7 (Heron I.).

Uncommon. This pilot fish occasionally is seen accompanying sharks. Circumtropical.

Pseudocaranx dentex

Scomber dentex Bloch and Schneider, 1801: 30 (Brazil).

Caranx georgianus — Woodland and Slack Smith, 1963: 33 (Heron I.).

Caranx nobilis — Power, 1969: 43 (North West I.).

Uncommon. Occurs in outer reef slope habitats. *P. dentex* is a senior synonym of *C. georgianus* and *C. nobilis* (Smith-Vaniz *et al*, 1979). Known from Queensland, New South Wales, Lord Howe Island and New Zealand.

Scomberoides lysan

Scomber lysan Forsskål, 1775: 54 (Djedda and Lohaja, Red Sea).

Scomberoides sanctipetri — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Rare? Pelagic, occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Selar crumenophthalmus

Scomber crumenophthalmus Bloch, 1793: 77 (Guinea, W. Africa).

Selar crumenophthalmus — Woodland and Slack-Smith, 1963: 33 (Heron I.).

Rare. Occurs in outer reef slope habitats. Circumtropical.

Seriola lalandi

Seriola lalandi Valenciennes *in* Cuvier and Valenciennes, 1833: 208 (Brazil).

Seriola grandis — McCulloch, 1915b: 123 (North Reef).

Uncommon. Seen occasionally in outer reef slope habitats, sometimes in small groups. Worldwide in the southern hemisphere.

Seriolina nigrofasciata*

Nomeus nigrofasciatus Rüppell, 1828-31 (1828): 92 (Massaua, Red Sea).

Rare? Two specimens collected at Lady Musgrave Island (QM I.15376) and near the Bunker Group (AMS E.1902) represent the first record this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Trachinotus bailloni

Caesiomorus bailloni Lacepède, 1802a: 93 (Madagascar).

Trachinotus bailloni — Woodland and Slack-Smith, 1963: 34 (Heron I.).

Uncommon. Seen occasionally in lagoons and outer reef slope habitats in shallow water. Widespread in the tropical Indo-W. Pacific.

Trachinotus blochii

Caesiomorus blochii Lacepède, 1802a: 92 (Madagascar).

Trachinotus blochi — Woodland and Slack-Smith, 1963: 34 (Heron I.).

Uncommon. Seen occasionally in lagoons and outer reef slope habitats in shallow water. Widespread in the tropical Indo-W. Pacific.

Trachinotus botla

Scomber botla Shaw, 1803: 591 (Visagapatam).

Trachinotus botla — Woodland and Slack-Smith, 1963: 34 (Heron I.).

Uncommon. Seen occasionally in lagoons and outer reef slope habitats in shallow water. Widespread in the tropical Indo-W. Pacific.

CORYPHAENIDAE . . . DOLPHIN FISHES

Coryphaena hippurus

Coryphaena hippurus Linnaeus, 1758: 261 (Open Seas).

Coryphaena hippurus — Woodland and Slack-Smith, 1963: 32 (Heron I.).

Uncommon. Occurs in open waters. Circumtropical.

LUTJANIDAE . . . SNAPPERS

Aprion virescens*

Aprion virescens Valenciennes in Cuvier and Valenciennes, 1803b: 544 (Seychelles).

Moderately common. Pelagic, occurs in outer reef slope habitats in 15-30m. Record of this species is based on underwater observation by the author at Heron Island and One Tree Island. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Lutjanus amabilis

Genyorage amabilis De Vis, 1885a: 145 (Moreton Bay, Queensland).

Lutjanus amabilis — Ogilby, 1915a: 21 (North West I.).

Common in lagoon and outer reef slope habitats. Known only from the Great Barrier Reef and New Calendonía.

Lutjanus argentimaculatus

Sciaena argenti-maculata Forsskål, 1775: 47 (Arabia).

Lutjanus argentimaculatus — Woodland and Slack-Smith, 1963: 34 (Heron I.).

Uncommon in outer reef slope habitats in deeper water. Widespread in the tropical Indo-W. Pacific.

Lutjanus bohar

Sciaena bohar Forsskål, 1775: 46 (Arabia).

Lutianus coatesi — Woodland and Slack-Smith, 1963: 34 (Heron I.).

Uncommon. Inhabits outer reef slope habitats in deeper water. Widespread in the tropical Indo-W. Pacific.

Lutjanus carponotatus

Mesoprion carponotatus Richardson, 1842: 28 (Port Essington, N. Australia).

Lutianus chrysotaenia — McCulloch, 1915b: 141 (North Reef, Masthead I.).

Lutjanus carponotatus — Williams, 1969: 106 (North West I.).

Very common in lagoon and outer reef slope habitats. Widespread in the tropical W. Pacific.

Lutjanus fulviflamma

Sciaena fulviflamma Forsskål, 1775: 45 (Arabia).

Lutianus fulviflamma — McCulloch, 1915b: 142 (North Reef).

Moderately common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Lutjanus malabaricus*

Sparus malabaricus Bloch and Schneider, 1801: 278 (Indian Ocean).

Rare. A single juvenile specimen (QM I.14126) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Lutjanus monostigma*

Mesoprion monostigma Cuvier in Cuvier and Valenciennes, 1828: 446 (Seychelles).

Uncommon. Two specimens (AMS I.20543-004) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Lutjanus quinquilineatus*

Holocentrus quinquilineatus Bloch, 1790: 84 (Japan).

Lutjanus kasmira (non Forsskål) — Power, 1969: 58 (Wistari Reef).

Lutjanus quinquilineatus — Burgess and Axlerod, 1976: pl. 342 (Wistari Reef).

Common in lagoon and outer reef slope habitats. This species has previously been confused with *L. kasmira* (Forsskål) which it closely resembles. Widespread in the tropical Indo-W. Pacific.

Lutjanus russelli

Mesoprion russelli Bleeker, 1849b: 41 (Malayo-Moluccan Archipelago).

Lutianus johnei — Woodland and Slack-Smith, 1963: 35 (Heron I.).

Lutianus russelli — McCulloch, 1915b: 142 (North Reef).

Common in lagoon and outer reef slope habitats in shallow water. Widespread in the tropical Indo-W. Pacific.

Lutjanus sebae

DiaCOPE sebae Cuvier in Cuvier and Valenciennes, 1828: 411 (no locality given).

Lutianus sebae — Woodland and Slack-Smith, 1963: 35 (Heron I.).

Uncommon. Juveniles inhabit outer reef slopes, adults occur over open bottoms in deeper water. Widespread in the tropical Indo-W. Pacific.

Macolor niger*

Sciaena niger Forsskål, 1775: 47 (Red Sea).

Uncommon. Inhabits leeward reef slopes. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Symphorichthys spilurus*

Symphorus spilurus Günther, 1874a:61 (Pelew Is.).

Rare. Occurs in outer reef slope habitats. A single specimen (QM I.10156) collected at Fitzroy Reef represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Symphorus nematophorus

Mesoprion nematophorus Bleeker, 1860b: 56 (Celebes).

Lutianus nematophorus — Woodland and Slack-Smith, 1963: 35 (Heron I.).

Uncommon. Inhabits outer reef slopes in deeper water. Widespread in the tropical Indo-W. Pacific.

CAESIONIDAE . . . FUSILIERS

Caesio caeruleaureus

Caesio caeruleaureus Lacepède, 1802a: 85, 86 (Moluccas).

Caesio coeruleaureus — Goeden, 1974: 9 (Heron I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Caesio cuning

Sparus cuning Bloch, 1791: 31 (East Indies).

Caesio cuning — Goeden, 1974: 9 (Heron I.).

Uncommon. Inhabits outer reef slope habitats, usually in deeper water. Widespread in the tropical Indo-W. Pacific.

Pterocaesio chrysozona

Caesio chrysozona Cuvier in Cuvier and Valenciennes, 1830b: 440 (East Indies).

Caesio chrysozonus — Goeden, 1974: 9 (Heron I.).

Very common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Pterocaesio digramma

Caesio digramma Bleeker, 1865: 180 (Amboina)

Pterocaesio digramma — Burgess and Axelrod, 1976: pl. 349 (Heron I.).

Uncommon. Inhabits outer reef slopes. Widespread in the tropical Indo-W. Pacific.

NEMIPTERIDAE . . . THREADFIN BREAMS

Nemipterus aurifilum

Nemipterus aurifilum Ogilby, 1910a: 93 (off North Reef).

Commonly trawled in deeper off-reef waters. A number of specimens in the Australian Museum trawled by the *Endeavour* in 70-74 fathoms (127-135m) N.E. of North Reef. Known only from southern Queensland.

*Nemipterus furcosus**

Dentex furcosus Valenciennes in Cuvier and Valenciennes, 1830b: 244
(Trinquemale, Ceylon).

A single specimen (AMS E.1451) trawled by the *Endeavour* in 20 fathoms (36m) near the Bunker Group and another collected at Heron Island (QM I.14124) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific-E. Indian Ocean.

*Nemipterus theodori**

Nemipterus theodori Ogilby, 1916a: 113 (Caloundra Banks, S. Queensland).

Uncommon. A number of specimens in the Australian Museum trawled by the *Endeavour* in deeper water N.E. of North Reef and near the Bunker Group, and a single specimen (QM I.12045) collected near Heron Island, represent the first record of this species from the Capricorn-Bunker Group. Known only from southern Queensland.

Pentapodus paradiseus

Pentapus paradiseus Günther, 1859: 383 (Moreton I., Queensland; Louisiade Archipelago).

Pentapus setosus (non Valenciennes) McCulloch, 1914b: 108 (Rock Cod Shoal).

Uncommon. Occurs in off-reef areas in deeper water (>20 m). This species previously has been confused with *P. setosus* (Valenciennes), an Indonesian species which it closely resembles. Known only from tropical E. Australia and New Guinea.

Pentapodus sp.*

Uncommon. Occurs in outer reef slope habitats. Several specimens (AMS I.20584-003) collected at One Tree Island appear to be a new species of *Pentapodus*. The specimens have 46 lateral line scales and lack filamentous extensions to the upper and lower lobes of the caudal fin.

Scolopsis bilineatus

Anthias bilineatus Bloch, 1793: 3 (Japan).

Scolopsis bilineatus — Woodland and Slack-Smith, 1963: 35 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Scolopsis lineatus

Scolopsis lineatus Quoy and Gaimard, 1824: 322 (Waigiu, Guebe I.).

Scolopsis cancellatus — Woodland and Slack-Smith, 1963: 35 (Heron I.).

?*Scolopsis trilineatus* (non Kner) — Russell *et al.*, 1974: 212 (One Tree I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 2-15 m. This species has been referred to by most authors as *S. cancellatus* (Cuvier), a junior synonym. *S. trilineatus* recorded by Russell *et al* (1974) is a misidentification. Widespread in the tropical W. Pacific.

Scolopsis margaritifer*

Scolopsides margaritifer Cuvier in Cuvier and Valenciennes, 1830a: 337 (Waigiou).

Rare. Occurs in lagoons. A single juvenile specimen (USNM 227614) collected at One Tree Island. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Scolopsis monogramma

Scolopsis monogramma Kuhl and Van Hasselt in Cuvier and Valenciennes, 1830a: 338 (Java, Batavia).

Scolopsis temporalis (non Cuvier) — Woodland and Slack-Smith, 1963: 35 (Heron I.).

?*Scolopsis personatus* (non Cuvier) — Russell *et al.*, 1974: 212 (One Tree I.).

Moderately common in lagoons and outer reef slope habitats in 2-20 m. This species probably was misidentified by Russell *et al* (1974) as *S. personatus*. *S. monogramma* has generally been confused in Australia with *S. temporalis* (Cuvier). Known from tropical Australia and New Guinea.

GERREIDAE . . . SILVER BIDDIES

Gerres carinatus*

Gerres carinatus Alleyne and Macleay, 1877: 273 (Darnley I., Torres Strait).

Uncommon. Occurs in lagoons. Several specimens collected at Heron Island (CSIRO B.1425) and North West Island (AMS IA.4033) are provisionally identified as *G. carinatus*. Not previously recorded from the Capricorn-Bunker Group. Known from Queensland and northern Australia.

Gerres oeyana

Labrus öyena Forsskål, 1775: 35 (Red Sea).

Gerres öyena — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Gerres splendens — Whitley, 1932a: 286 (North West I.).

Common in lagoons over shallow sandy bottoms. Widespread in the tropical Indo-W. Pacific.

HAEMULIDAE . . . SWEETLIPS

Diagramma pictum

Perca picta Thunberg, 1792: 143 (Japan).

Plectorhinchus (Spilotichthys) pictus — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Spilotichthys pictus — Goeden, 1974: 9 (Heron I.).

Very common in lagoons often in large aggregations over sandy bottoms close to patch reefs. Widespread in the tropical Indo-W. Pacific.

Plectorhinchus chaetodonoides

Plectorhinchus chaetodonoides Lacepède, 1800: pl. 13, fig. 2 (no locality given).

Plectorhinchus chaetodontoides — Goeden, 1974: 9 (Heron I.).

Gaterin punctatissimus (non Playfair) — Burgess and Axelrod, 1976: pl. 355 (Heron I.).

Moderately common in outer reef slope habitats around large bommies. A photograph identified by Burgess and Axelrod (1976) as a *G. punctatissimus* is a misidentification of *P. chaetodonoides*. Widespread in the tropical Indo-W. Pacific.

Plectorhinchus flavomaculatus

Diagramma flavomaculatum Ehrenberg in Cuvier and Valenciennes, 1830a: 304 (Red Sea).

Plectorhinchus (*Gaterin*) *reticulatus* — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Moderately common in outer reef slope habitats, occasionally entering lagoons and reef flat areas at high tide. Widespread in the tropical Indo-W. Pacific.

Plectorhinchus goldmanni

Diagramma Goldmanni Bleeker, 1853d: 602 (Ternate).

Plectorhinchus goldmanni — Goeden, 1974: 9 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Plectorhinchus nigrus

Pristipoma nigrum Mertens in Cuvier and Valenciennes, 1830a: 258 (Manila).

Plectorhinchus (*Pseudopristipoma*) *nigrus* — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Plectorhinchus picus*

Diagramma pica Cuvier in Cuvier and Valenciennes, 1830a: 297 (Tahiti).

Uncommon. Occurs in outer reef slope habitats. Two specimens (AMS I.15638-054, I.15682-058) from One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Plectorhinchus schotaf

Sciaena abu-mgaterin schotaf Forsskål, 1775: 51 (Arabia).

?*Plectorhinchus* (*Gaterin*) *sordidus* (non Klunzinger) — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. *P. sordidus* recorded from Heron Island by Woodland and Slack-Smith (1963) is probably a misidentification of *P. schotaf* (R.J. McKay, personal communication 1980). Widespread in the tropical Indo-W. Pacific.

Pomadasys nageb

Pristipoma nagab Rüppell, 1835: 124 (Djedda, Red Sea).

Pomadasys hasta (non Bloch) — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, occasionally entering lagoons and reef flat areas. *P. hasta* recorded from Heron Island by Woodland and Slack-Smith (1963) is probably a misidentification of *P. nageb* (R.J. McKay, personal communication 1983). Widespread in the tropical Indo-W. Pacific.

LETHRINIDAE . . . EMPEROR FISHES

Gymnocranius bitorquatus

Gymnocranius bitorquatus Cockerell, 1916: 56 (Moreton Bay, Queensland).

Gymnocranius audleyi — Ogilby, 1916c: 171 (Bunker Group, Rock Cod Shoals, North West I.).

Common in outer reef slope habitats in 2-40 m. Widespread in tropical Australia.

Lethrinus chrysostomus

Lethrinus chrysostomus Richardson, 1844-48 (1848): 118 (Norfolk I.).

Lethrinus chrysostomus — Ogilby, 1915a: 57 (Lady Elliott I.).

Common in outer reef slope habitats, usually solitary. Distributed throughout tropical Australia and Norfolk Island.

Lethrinus lentjan

Bodianus lentjan Lacepède, 1802b: 281, 293 (Java).

Lethrinus leutjanus — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Lethrinus mahsena

Sciaena mahsena Forsskål, 1775: 52 (Red Sea).

Lethrinus mahsena — Woodland and Slack-Smith, 1963: 36 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the the tropical Indo-W. Pacific.

Lethrinus nebulosus

Sciaena nebulosa Forsskål, 1775: 52 (Red Sea).

Lethrinus perselectus Whitley, 1933: 75 (North West I.).

Lethrinus hypselopterus (non Bleeker) — Fowler, 1957: 67 (Lady Musgrave I.).

Lethrinus mahsenoides (non Valenciennes) — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Lethrinus nebulosus — Williams, 1969: 106 (North West I.).

Common in lagoons and outer reef slopes, often in large schools. This species has been confused in the literature. According to Walker (1975) *L. perselectus* Whitley and *L. mahsenoides* of Woodland and Slack-Smith (1963), are synonyms of *L. nebulosus*. Fowler's (1957) record of *L. hypselopterus* appears to be a misidentification. Fowler's specimen (ANSP 95554) shows traces of the blue streaks radiating beneath the eye which are characteristics of *L. nebulosus* (see Sato, 1978). Widespread in the tropical Indo-W. Pacific.

Lethrinus nematacanthus*

Lethrinus nematacanthus Bleeker, 1854b: 403 (Nagasaki, Japan).

Uncommon. Occurs in outer reef slope habitats in deeper water. Several specimens in the Australian and Queensland Museums collected at Heron Island, Lady Elliott Island and trawled near the Bunker Group, represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Lethrinus reticulatus

Lethrinus reticulatus Valenciennes in Cuvier and Valenciennes, 1830b: 298 (New Guinea).

Lethrinus reticulatus — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Rare? Reported by Woodland and Slack-Smith (1963), but no specimens from the Capricorn-Bunker Group seen. Widespread in the tropical Indo-W. Pacific.

Lethrinus variegatus*

Lethrinus variegatus Valenciennes in Cuvier and Valenciennes, 1830b: 287 (Massuah, Red Sea).

Rare. A single specimen (AMS I.20837-002) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Monotaxis grandoculis*

Sciaena grandoculis Forsskål, 1775: 53 (Djedda, Red Sea).

Uncommon. Occurs in outer reef slope habitats. A single specimen (AMS I.20212-020) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

SPARIDAE . . . SEA BREAMS

Acanthopagrus australis

Chrysophrys australis Günther, 1859: 494 (Port Essington; Port Jackson; Harvey River, W. Australia).

Mylio australis — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, occasionally entering lagoons and reef flat areas. Widespread in tropical and subtropical Australia.

Argyrops spinifer

Sparus spinifer Forsskål, 1775: 32 (Djedda, Red Sea).

Argyrops spinifer — Grant, 1982: 412 (between Heron I. and Wistari Reef).

Uncommon. Reported from 'Fryingpan Pinnacles', an isolated patch of reef between Heron Island and Wistari Reef (Grant, 1982). Widespread in the tropical Indo-W. Pacific.

Chrysophrys auratus

Labrus auratus Bloch and Schneider, 1801: 266 (Queen Charlotte Sound, New Zealand).

Pagrus unicolor — Saville-Kent, 1893: 103 (Lady Elliott I.).

Chrysophrys auratus — Grant, 1978: 388 (Lamont Reef).

Rare. Occurs in moderately deep off-reef waters, taken by line fishing in September-October off Lamont Reef (Grant, 1978). Distributed throughout temperate Australia, Lord Howe Island, Norfolk Island and New Zealand. Its distribution in southern Great Barrier Reef waters extralimital.

Rhabdosargus sarba

Sparus sarba Forsskål, 1775: 31 (Red Sea).

Rhabdosargus sarba — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Common. Occurs in outer reef slope habitats, occasionally entering lagoons and reef flat areas. Widespread in the tropical Indo-W. Pacific.

MULLIDAE . . . GOATFISHES

Mulloidichthys flavolineatus

Mullus flavolineatus Lacepède, 1802a: 384, 406 (Mauritius).

?*Mulloidichthys auriflamma* (non Forsskål) — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Mulloidichthys samoensis (non Günther) — Talbot *et al.*, 1978: 428 (One Tree I.).

Uncommon. Occurs in lagoons. This species has often been referred to as *M. samoensis* (Günther), but according to Randall (1974, on the advice of P. Guézé) *M. flavolineatus* is the correct name. *M. auriflamma* recorded from Heron Island by Woodland and Slack-Smith (1963) probably also refers to *M. flavolineatus*. Widespread in the tropical Indo-W. Pacific.

Parupeneus barberinus

Mullus barberinus Lacepède, 1802a: 406 (near the Moluccas).

Parupeneus barberinus — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 1-30m. Widespread in the tropical Indo-W. Pacific.

Parupeneus chryserydros

Mullus chryserydros Lacepède, 1802a: 406 (Mauritius).

Parupeneus luteus — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Parupeneus cyclostomus — Goeden, 1974: 10 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. According to Kühlmorgen-Hille and Guézé (1974) *P. luteus* and *P. cyclostomus* are different color forms and junior synonyms of *P. chryserydros*. Widespread in the tropical Indo-W. Pacific.

Parupeneus fraterculus

Upeneus fraterculus Valenciennes in Cuvier and Valenciennes, 1831:524 (Seychelles).

Parupeneus spilurus — Woodland and Slack-Smith, 1963: 37 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats. According to Kühlmorgen-Hille and Guézé (1974) *P. spilurus* is a junior synonym of *P. fraterculus*. Widespread in the tropical Indo-W. Pacific.

Parupeneus indicus

Mullus indicus Shaw, 1803: 614 (Vizagapatam).

Parupeneus indicus — Goeden, 1974: 10 (Heron I.).

Rare? Reported for Heron Island by Goeden (1974) but no specimens could be found in either the Australian or Queensland Museums and this record remains unconfirmed. Widespread in the tropical Indo-W. Pacific.

Parupeneus trifasciatus*

Mullus trifasciatus Lacepède, 1802a: 404 (no locality given).

Uncommon. Two specimens collected at One Tree Island (AMS I.17929-018) and Fitzroy Reef (QM I.11392) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Upeneus* sp

Uncommon? Trawled in deeper off-reef waters (18 fathoms - 33m). Six specimens in one lot (AMS E.2018) trawled by the *Endeavour* near the Bunker Group represent the first record of a species of *Upeneus* from the Capricorn-Bunker Group. The specimens are old and faded and possibly represent an undescribed species characterised by possessing 7 first dorsal spines, 20-22 gill rakers on first arch, and dark bars on both upper and lower lobes of caudal fin.

PEMPHERIDIDAE . . . BULLSEYES

Parapriacanthus ransonneti*

Parapriacanthus ransonneti Steindachner, 1870: 623 (Nagasaki, Japan).

Common in outer reef slope habitats often in large aggregations. Numerous specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. This species has been previously recorded in Australia as *P. unwini*, a junior synonym (R.N. Jubb, ms.). Widespread in the tropical W. Pacific and E. Indian Ocean.

Pempheris analis*

Pempheris analis Waite, 1910: 375 (Denham Bay, Kermadec Is.).

Uncommon. Occurs in lagoons and outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Distributed throughout tropical and subtropical Australia, Lord Howe Island and the Kermadec Islands.

Pempheris schwenkii

Pempheris schwenkii Bleeker, 1855b: 314 (Batu I.).

Pempheris vanicolensis (non Cuvier) — Allen *et al.*, 1976: 405 (Heron I.).

Uncommon. *P. vanicolensis* recorded from Heron Island by Allen *et al.* (1976) is a misidentification of *P. schwenkii* (R.N. Jubb ms.). Widespread in the tropical and subtropical Indo-W. Pacific.

Pempheris* sp

Apparently rare. A single specimen (AMS I.15482-005) collected at Heron Island is a new species that will be described by R.N. Jubb. Distributed throughout tropical Australia.

KYPHOSIDAE . . . RUDDERFISHES

Kyphosus cinerascens

Sciaena cinerascens Forsskål, 1775: 53 (Arabia).

Kyphosus cinerascens — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Uncommon. Occurs in lagoons, reef flat and reef crest habitats. Widespread in the tropical Indo-W. Pacific.

Kyphosus gibsoni

Kyphosus gibsoni Ogilby, 1912: 50 (Moreton Bay, Queensland).

Kyphosus gibsoni — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Uncommon. Occurs in lagoons, reef flat and reef crest habitats, sometimes in large schools. Known only from Queensland.

*Kyphosus vaigiensis**

Pimelepterus vaigiensis Quoy and Gaimard, 1824: 386 (Iles de Papous).

Rare. Recorded on the basis of a single specimen (not kept) collected at Heron Island by Dr. K. Rhoede and identified by Dr. D.F. Hoese. Widespread in the tropical Indo-W. Pacific.

Microcanthus strigatus

Chaetodon strigatus Langsdorff in Cuvier and Valenciennes, 1831: 25 (Japan).

Microcanthus strigatus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Uncommon. Occurs in lagoons. Known from Queensland, New South Wales, Lord Howe Island, Japan, Ryukyu Islands and Hawaii.

EPHIPPIDAE . . . BATFISHES

Platax novemaculeatus

Platax novemaculeatus McCulloch, 1916: 188 (off Gloucester Head, Queensland).

Platax novemaculeatus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Common in outer reef slope habitats, especially around bommies. Known only from tropical Australia.

Platax pinnatus

Chaetodon pinnatus Linnaeus, 175: 272 (East Indies).

Platax pinnatus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

CHAETODONTIDAE . . . BUTTERFLYFISHES

Chaetodon aureofasciatus

Chaetodon aureofasciatus Macleay, 1878: 351 (Port Darwin, N. Australia).

Chaetodon aureofasciatus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Common in lagoons and outer reef slope habitats. Distributed throughout tropical Australia and New Guinea.

Chaetodon auriga

Chaetodon auriga Forsskål, 1775: 60 (Red Sea).

Anisochaetodon auriga — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Chaetodon auriga — Russell *et al.*, 1974: 212 (One Tree I.).

Very common in lagoon and outer reef slope habitats in 1-10m. Widespread in the tropical Indo-W. Pacific.

Chaetodon baronessa

Chaetodon baronessa Cuvier in Cuvier and Valenciennes, 1831: 45 (no locality given).

Chaetodon triangulum (*non* Cuvier) — Reese, 1973: 146 (Heron I.).

Gonochaetodon triangulum (*non* Cuvier) — Williams, 1979: 139 (Tryon I.).

Moderately common in outer reef slope habitats, usually associated with plate *Acropora* coral, in 1-10m. Widespread in the tropical Indo-W. Pacific.

Chaetodon bennetti

Chaetodon Bennettii Cuvier in Cuvier and Valenciennes, 1831: 84 (Sumatra).

Chaetodon benetti — Goeden, 1974: 11 (Heron I.).

Uncommon. Seen occasionally in outer reef slope habitats in 1-20m. Widespread in the tropical Indo-W. Pacific.

Chaetodon citrinellus

Chaetodon citrinellus Cuvier in Cuvier and Valenciennes, 1831: 27 Guam; (Tahiti).

?*Chaetodon semeion* (*non* Bleeker) — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Chaetodon citrinellus — Williams, 1969: 107 (North West I.).

Common in outer reef slope habitats in 1-10m. Record of *C. semeion* from Heron Island (Woodland and Slack-Smith, 1963) probably is a misidentification of *C. citrinellus*. Widespread in the tropical W. Pacific.

Chaetodon ephippium

Chaetodon ephippium Cuvier in Cuvier and Valenciennes, 1831: 174 (Moluccas; Society Is.).

Chaetodon ephippium — Goeden, 1974: 11 (Heron I.).

Uncommon. Seen occasionally in outer reef slope habitats in 1-10m. Widespread in the tropical Indo-W. Pacific.

Chaetodon flavirostris

Chaetodon flavirostris Günther, 1874a: 41 (Vavau, Tonga).

Chaetodon flavirostris — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-10m. Widespread in the tropical and subtropical S.W. Pacific.

Chaetodon kleinii

Chaetodon kleinii Bloch, 1790: 7 (East Indies).

Chaetodon kleinii? — Goeden, 1974: 11 (Heron I.).

Anisochaetodon kleini — Grant, 1975: 373 (Capricorn Group).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Chaetodon lineolatus

Chaetodon lineolatus Cuvier in Cuvier and Valenciennes, 1831: 40 (Mauritius).

Anisochaetodon lineolatus — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Chaetodon lunula

Pomacentrus lunula Lacepède, 1802b: 507 (no locality given).

Chaetodon lunula — Goeden, 1974: 11 (Heron I.).

Moderately common in outer reef slope habitats in 1-5m. Widespread in the tropical Indo-W. Pacific.

Chaetodon melannotus

Chaetodon melannotus Schneider in Bloch and Schneider, 1801: 224 (Tranquebar).

Chaetodon melannotus — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-10m. Widespread in the tropical Indo-W. Pacific.

Chaetodon mertensii

Chaetodon Mertensii Cuvier in Cuvier and Valenciennes, 1831: 47 (no locality given).

Chaetodon mertensii — Goeden, 1974: 11 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, generally in deeper water (15-20m). Widespread in the tropical Indo-W. Pacific.

Chaetodon meyeri

Chaetodon meyeri Schneider in Bloch and Schneider, 1801: 223 (Moluccas).

Chaetodon meyeri — Goeden, 1974: 11 (Heron I.).

Rare. No specimens from the Capricorn-Bunker Group are in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Chaetodon ornatissimus

Chaetodon ornatissimus Cuvier in Cuvier and Valenciennes, 1831: 22 (Tahiti).

Chaetodon ornatissimus — Goeden, 1974: 11 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 1-15m. Widespread in the tropical W. Pacific.

Chaetodon pelewensis

Chaetodon pelewensis Kner, 1867: 308 (Pelew Is.).

Chaetodon pelewensis — Goeden, 1974: 11 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 1-30m. Widespread in the tropical W. Pacific.

Chaetodon plebius

Chaetodon plebius Cuvier in Cuvier and Valenciennes, 1831: 68 (South Seas).

Chaetodon plebeius — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Tetrachaetodon plebeius — Williams, 1979: 139 (Tryon I.).

Very common in lagoons and outer reef slope habitats in 1-10m. Widespread in the tropical W. Pacific.

Chaetodon rainfordi

Chaetodon rainfordi McCulloch, 1923a: 4 (Holbourne I., Queensland).

Chaetodon rainfordi — Whitley, 1926: 229 (North West I.).

Very common in lagoons and outer reef slope habitats in 1-10m. Restricted to the Great Barrier Reef and Lord Howe Island.

Chaetodon reticulatus*

Chaetodon reticulatus Cuvier in Cuvier and Valenciennes, 1831: 32 (Tahiti).

Rare. A single specimen (AMS I.20975-001) represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Chaetodon speculum

Chaetodon speculum Cuvier in Cuvier and Valenciennes, 1831: 73 (Batavia).

Chaetodon speculum — Marshall, 1957: 126 (Heron I.).

Moderately common in outer reef slope habitats in 1-10m. Widespread in the tropical W. Pacific.

Chaetodon trifascialis

Chaetodon trifascialis Quoy and Gaimard, 1824: 379 (Guam).

Megaprotodon strigangulus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Common in outer reef slope habitats associated with plate *Acropora* coral, in 2-5m. Widespread in the tropical W. Pacific.

Chaetodon trifasciatus

Chaetodon trifasciatus Park, 1797: 34 (Sumatra).

Chaetodon trifasciatus — Reese, 1973: 146 (Heron I.).

Very common in lagoons and outer reef slope habitats, in 1-10m. Widespread in the tropical Indo-W. Pacific.

Chaetodon ulietensis

Chaetodon ulietensis Cuvier in Cuvier and Valenciennes, 1831: 39 (Ulietea).

Chaetodon falcula (non Bloch) — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 5-10m. Widespread in the tropical W. Pacific.

Chaetodon unimaculatus

Chaetodon unimaculatus Bloch, 1787: 75 (East Indies).

Chaetodon unimaculatus — Goeden, 1974: 11 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Chaetodon vagabundus

Chaetodon vagabundus Linnaeus, 1758: 276 (East Indies).

Anisochaetodon vagabundus Woodland and Slack-Smith, 1963: 39 (Heron I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Chelmon rostratus

Chaetodon rostratus Linnaeus, 1758: 273 (East Indies).

Chelmon rostratus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-10m. Widespread in the tropical Indo-W. Pacific.

Coradion altivelis

Coradion altivelis McCulloch, 1916: 191 (Wide Bay, Queensland).

Coradion altivelis — Goeden, 1974: 11 (Heron I.).

Moderately common in outer reef slope habitats, usually in deeper water (10-30m). Known from Sumatra, New Guinea and the Great Barrier Reef (Steene, 1978).

Forcipiger flavissimus

Forcipiger flavissimus Jordan and McGregor in Jordan and Evermann, 1898: 1671 (Revillagigedo Archipelago).

Forcipiger longirostris (*non* Broussonet) — Goeden, 1974: 11 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 1-30m. This species has been confused with *F. longirostris* which is distinguished by its much longer snout (see Randall and Caldwell, 1970). Widespread in the tropical Indo-W. Pacific.

Heniochus acuminatus

Chaetodon acuminatus Linnaeus, 1758: 272 (Indies).

Heniochus acuminatus — Woodland and Slack-Smith, 1963: 38 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Heniochus chrysostomus

Heniochus chrysostomus Cuvier in Cuvier and Valenciennes, 1831: 99 (Tahiti).

? *Heniochus permutatus* (*non* Cuvier) — Goeden, 1974: 11 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15m. The specific name *permutatus* has generally been mistakenly applied to *H. chrysostomus* (see Burgess, 1978) and it is probable that Goeden's (1974) record of *H. permutatus* from Heron Island is a misidentification of *H. chrysostomus*. Widespread in the tropical W. Pacific.

Heniochus monocerus*

Heniochus monocerus Cuvier in Cuvier and Valenciennes, 1831: 100 (Mauritius).

Uncommon. Occurs in outer reef slope habitats, usually in deeper water (10-20m). A single specimen (AMS I.15641-019) from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Heniochus varius*

Taurichthys varius Cuvier 1829: 128 (East Indies).

Uncommon. Occurs in outer reef slope habitats in 2-15m. Two specimens (AMS I.15685-053) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific and E. Indian Ocean.

Parachaetodon ocellatus*

Platax ocellatus Cuvier in Cuvier and Valenciennes, 1831: 229 (no locality given).

Uncommon. Occurs in deeper water associated with muddy bottoms. Several specimens (AMS E.1896-1899) trawled by the *Endeavour* near the Bunker Group in 20 fathoms (36m), represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific and E. Indian Ocean (Steene, 1978).

POMACANTHIDAE . . . ANGELFISHES

Centropyge bicolor

Chaetodon bicolor Bloch, 1787: 94 (both Indies).

Centropyge bicolor — Woodland and Slack-Smith, 1963: 40 (Heron I.).

Uncommon. Occurs in outer reef slope habitats, usually in deeper water (>10m). Widespread in the tropical W. Pacific and E. Indian Ocean (Allen and Steene, 1979).

Centropyge bispinosus

Holacanthus bispinosus Günther, 1860: 48 (Ambon; Aneitum, New Hebrides).

Centropyge bispinosus — Goeden, 1974: 11 (Heron I.).

Moderately common in outer reef slope habitats in deeper water (>5m). Widespread in the tropical Indo-W. Pacific.

Centropyge flavicauda

Centropyge flavicauda Fraser-Brunner, 1933: 597 (Macclesfield Bank, China Sea).

Centropyge flavicauda — Steene, 1978: 101 (One Tree I.).

Moderately common in outer reef slope habitats in deeper water (10-20m). Widespread in the tropical W. Pacific and also the E. Indian Ocean (Allen and Steene, 1979).

Centropyge flavissimus

Holacanthus flavissimus Cuvier in Cuvier and Valenciennes, 1831: 197 (Uleia).

Centropyge flavissium (sic) — Goeden, 1974: 11 (Heron I.).

Centropyge flavissimus — Steene, 1978: 102 (One Tree I.).

Rare. Occurs in outer reef slope habitats in 3-4m. Widespread in the tropical W. Pacific and E. Indian Ocean.

Centropyge heraldi

Centropyge heraldi Woods and Schultz in Schultz *et al.*, 1953: 602 (Marshall Is.).

Centropyge heraldi — Steene, 1978: 103 (Lady Musgrave I.).

Rare. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Centropyge tibicen

Holacanthus tibicen Cuvier in Cuvier and Valenciennes, 1831: 173 (no locality given).

Centropyge tibicen — Goeden, 1974: 11 (Heron I.).

Very common in lagoons and outer reef slope habitats. Widespread in the tropical W. Pacific and E. Indian Ocean (Allen and Steene, 1979).

Centropyge vrolikii

Holacanthus vrolikii Bleeker, 1853f: 339 (Ambon).

Centropyge vroliki — Woodland and Slack-Smith, 1963: 40 (Heron I.).

Moderately common in outer reef slope habitats in 1-25m. Widespread in the tropical Indo-W. Pacific.

Chaetodontoplus conspicillatus

Holacanthus conspicillatus Waite, 1900: 203 (Lord Howe I.).

Holacanthus (Chaetodontoplus) conspicillatus — McCulloch, 1922: 242 (Capricorn Group).

Rare. Record of this species by McCulloch (1922), was based on a specimen 205cm long collected near the Capricorn Group (apparently lost — not found in either the Australian or Queensland Museums). Known from the Great Barrier Reef and Lord Howe Island.

Chaetodontoplus melanosoma*

Holacanthus melanosoma Bleeker, 1853e: 78 (Lawajong, Solor).

Rare. A single specimen (QM I.10503) collected at Lady Musgrave Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Chaetodontoplus personifer

Holacanthus personifer McCulloch, 1941a: 221 (W. Australia).

Holacanthus personifer — Whitley, 1926: 230 (North West I.).

? *Chaetodontoplus conspicillatus* (*non* Waite) — Woodland and Slack-Smith, 1963: 40 (Heron I.).

Chaetodontoplus personifer — Russell *et al.*, 1974: 212 (One Tree I.).

Chaetodontoplus personifera — Goeden, 1974: 11 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. This species has been confused with *C. conspicillatus* and it is probable that record of the latter from Heron Island by Woodland and Slack-Smith (1963) refers to the more common *C. personifer*. Known from the Great Barrier Reef, Western Australia and New South Wales.

Pomacanthus imperator

Chaetodon imperator Bloch, 1787: 52 (Japan).

Pomacanthus imperator — Power, 1969: 31 (Sykes Reef).

Rare. Seen occasionally in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Pomacanthus navarchus*

Holacanthus navarchus Cuvier in Cuvier and Valenciennes, 1831: 171 (Java).

Rare. A single specimen (QM I.10518) collected at Lady Musgrave Island represents the first record of this species from the Capricorn-Bunker Group. This species previously has been referred to the genus *Euxiphipops*, but Shen and Liu (1979) regard *Euxiphipops* as a junior synonym of *Pomacanthus*. Widespread in the tropical W. Pacific.

Pomacanthus semicirculatus

Holacanthus semicirculatus — Cuvier in Cuvier and Valenciennes, 1831: 191 (East Indies).

Pomacanthus semicirculatus — Woodland and Slack-Smith, 1963: 39 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-25m. Widespread in the tropical Indo-W. Pacific.

Pomacanthus sexstriatus

Holacanthus sexstriatus Cuvier in Cuvier and Valenciennes, 1831: 194 (Java).

Euxiphipops sexstriatus — Power, 1969: 35 (Sykes Reef).

Moderately common in outer reef slope habitats, usually associated with coral caverns. Widespread in the tropical W. Pacific.

Pygoplites diacanthus

Chaetodon diacanthus Boddaert, 1772: pl. 9 (Amboina, Moluccas).

Pygoplites diacanthus — Power, 1969: 31 (Wistari Reef).

Rare. Seen occasionally in outer reef slope habitats in 1-20m. Widespread in the tropical Indo-W. Pacific.

POMACENTRIDAE . . . DAMSELFISHES

Abudefduf bengalensis

Chaetodon bengalensis Bloch, 1787: 110 (Bengal).

Glyphisodon palmeri — McCulloch, 1921: 172 (Masthead I.).

Abudefduf palmeri — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Abudefduf bengalensis — Grant, 1982: 500 (Capricorn Group).

Moderately common in lagoon and leeward reef slope habitats, in 1-6m. Widespread in the tropical Indo-W. Pacific.

Abudefduf saxatilis

Chaetodon saxatilis Linnaeus, 1758: 276 (India).

Abudefduf saxatilis vaigiensis — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Moderately common in outer reef slope habitats in 1-12m. Circumtropical.

Abudefduf septemfasciatus?

Glyphisodon septemfasciatus Cuvier in Cuvier and Valenciennes, 1830a: 463 (Mauritius).

Abudefduf septemfasciatus — Woodland and Slack-Smith, 1963: 41 (Heron I.).

No specimens of *A. septemfasciatus* from the Capricorn Group could be found in either the Australian or Queensland Museums, and record of this species from Heron Island by Woodland Slack-Smith (1963) must be regarded as doubtful. Widespread in the tropical Indo-W. Pacific.

Abudefduf sexfasciatus

Labrus sexfasciatus Lacepède, 1802a: 430, 477 (Indo-Pacific).

Glyphisodon coelestinus — Whitley, 1926: 230 (Masthead I., North West I.).

Abudefduf coelestinus — Woodland and Slack-Smith, 1963 (Heron I.).

Abudefduf sexfasciatus — Goeden, 1974: 12 (Heron I.).

Very common in lagoon and outer reef slope habitats, in 1-8m. This species has generally been referred to as *A. coelestinus* (Cuvier), but Allen *et al.* (1978) have shown that *sexfasciatus* is an older name. Widespread in the tropical Indo-W. Pacific.

Abudefduf sordidus*

Chaetodon sordidus Forsskål, 1775: 62 (Djedda, Red Sea).

Rare, a single specimen (AMS I.15474-001) collected at Heron Island represents the first record of this species from the Capricorn Group. Widespread in the tropical Indo-W. Pacific.

Abudefduf whitleyi

Abudefduf whitleyi Allen and Robertson, 1974: 154 (Great Barrier Reef — One Tree I.).

Very common in outer reef slope habitats, in 1-5m. Distributed throughout the Great Barrier Reef and New Caledonia.

Acanthochromis polyacanthus

Dascyllus polyacanthus Bleeker, 1855g: 503 (Batjan).

Acanthochromis polyacanthus — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Very common in lagoon and outer reef slope habitats, in 1-65m. Widespread in the tropical W. Pacific.

Amblyglyphidodon curacao

Chaetodon curacao Bloch, 1787: 106 ('Curacao Island' — off Venezeula, in error).

Abudefduf curacao — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Very common in lagoon and leeward reef slope habitats, particularly over staghorn coral in 1-15 m. Widespread in the tropical W. Pacific.

Amphiprion akindynos

Amphiprion akindynos Allen, 1972: 153 (Capricorn Group).

Amphiprion polymnus (*non* Bloch) — Whitley, 1926: 230 (North West I.).

Amphiprion papuensis (*non* Macleay) — Fowler, 1957: 67 (Lady Musgrave I.).

Amphiprion chrysogaster (*non* Cuvier) — Whitley, 1958: 35 (Heron I.).

?*Amphiprion bicinctus* (*non* Rüppell) — Woodland and Slack-Smith, 1963: 40 (Heron I.).

Amphiprion unimaculatus (*non* Whitley) — Power, 1969: 65 (One Tree I.).

Moderately common in lagoon and leeward reef slope habitats in 1-20 m. Commensal with anemones (*Radianthus* spp). Distributed in northern New South Wales, southern Queensland, the Great Barrier Reef, New Caledonia and the Loyalty Islands.

Amphiprion melanopus

Amphiprion melanopus Bleeker, 1852c: 561 (Amboina).

Amphiprion verweyi Whitley, 1933: 85 (Queensland — North West I.).

Moderately common in lagoons, in 1-10 cm. Commensal with anemones (apparently host-specific for *Physobranchia douglasi* — Allen, 1972). Widespread in the tropical W. Pacific.

Amphiprion periderion

Amphiprion periderion Bleeker, 1855f: 437 (Groot Oby).

Amphiprion periderion — Woodland and Slack-Smith, 1963: 40 (Heron I.).

Uncommon. No specimens from the Capricorn Group in either the Australian or Queensland Museums. Power (1969) has a photograph of this species from Wistari Reef. Widespread in the tropical W. Pacific.

Amphiprion percula?

Lutjanus percula Lacepède, 1802b: 194 (New Britain).

Amphiprion percula — Woodland and Slack-Smith, 1963: 40 (Heron I.).

Record of this species from Heron Island by Woodland and Slack-Smith (1963) is unconfirmed and possibly is based on a misidentification of a juvenile specimen of either *A. akindynos* or *A. melanopus*. Known from the Great Barrier Reef and New Guinea.

Chromis atripectoralis

Chromis atripectoralis Welander and Schultz, 1951: 107 (Central and western tropical Pacific).

Chromis caeruleus (*non* Cuvier) — Sale, 1971: 156 (Heron I.).

Chromis atripectoralis — Allen, 1975b: 72 (Heron I.).

Very common in outer reef slope habitats, often in large aggregations associated with staghorn coral (*Acropora*), in 2-15 m. This species is easily confused with *C. caerulea* and was dealt with under that name by Sale (1971). Widespread in the tropical Indo-W. Pacific.

Chromis atripes*

Chromis atripes Fowler and Bean, 1928: 43 (Philippines).

Uncommon. A few specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Chromis caerulea

Heliases caeruleus Cuvier *in* Cuvier and Valenciennes, 1830a: 497 (New Guinea; Ulea).

Chromis caeruleus — Woodland and Slack-Smith 1963: 41 (Heron I.).

Uncommon. Inhabits lagoons and outer reef slope habitats in 1.5-12 m, sometimes occurring in large aggregations. This species is less common in the Capricorn-Bunker Group than *C. atripectoralis* with which it has sometimes been confused. Widespread in the tropical Indo-W. Pacific.

Chromis chrysur*

Chromis chrysurus Bliss, 1883: 56 (Mauritius).

Uncommon. A few specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Chromis iomelas*

Chromis iomelas Jordan and Seale, 1906: 292 (Pago Pago, Samoa).

Rare. Occurs in deeper water. A single specimen (AMS I.15682-003) from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical S.W. Pacific.

Chromis lepidolepis*

Chromis lepidolepis Bleeker, 1877a: 401 (Timor).

Moderately common in outer reef slope habitats in 2-20 m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Chromis margaritifer

Chromis dimidiatus margaritifer Fowler, 1946: 140 (Ryukyu Is.).

Chromis dimidiatus (*non* Klunzinger) — Goeden, 1974: 12 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. A number of specimens collected at One Tree Island in the Australian Museum. This species was previously recorded from Heron Island under the name *C. dimidiatus* (Goeden, 1974). Widespread in the W. Pacific and E. Indian Ocean.

Chromis nitida

Tetradrachnum nitidum Whitley, 1928a: 219 (Hayman I., Queensland).

Chromis nitidus — Goeden, 1974: 12 (Heron I.).

Very common in outer reef slope habitats, often occurring in large aggregations, in 5-25 m. Very abundant in the Capricorn-Bunker Group, but rare in the northern Great Barrier Reef. Straggles southwards to northern New South Wales and Lord Howe Island.

Chromis retrofasciata*

Chromis retrofasciatus Weber, 1913: 359 (Kir I., Indonesia).

Rare. A single specimen (AMS I.15647-042) collected from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Chromis ternatensis

Heliases ternatensis Bleeker, 1856b: 377 (Ternate).

Chromis ternatensis — Goeden, 1974: 12 (Heron I.).

Chromis weberi (*non* Fowler and Bean) — Burgess and Axelrod, 1976: pl. 78 (Heron I.).

Uncommon. Inhabits outer reef slopes in 2-15 m. Widespread in the tropical Indo-W. Pacific.



1

Outer reef slope habitat, Heron Island



2



3. Moray eel,
Sideria picta
4. Warty-lipped
mullet,
Crenimugil
crenilabrus
5. Carpet shark,
Orectolobus
ornatus
6. Scientist
carrying out
underwater fish
survey at Heron
Island



7



8

- 7. Manta ray, *Manta alfredi*
- 8. Coral trout, *Plectropomus leopardus* and cleaner wrasse, *Labroides dimidiatus*



Chromis vanderbilti

Pycnochromis vanderbilti Fowler, 1941: 260 (Oahu, Hawaiian Is.).

Chromis vanderbilti — Allen, 1975b: 91 (Capricorn Group).

Rare. Inhabits outer reef slope habitats in 2-20 m. Widespread in the tropical W. Pacific.

Chromis weberi

Chromis weberi Fowler and Bean, 1928: 41 (Philippines).

Chromis weberi — Allen, 1975b: 89 (Heron I.).

Chromis opercularis (non Günther) — Burgess and Axelrod, 1976: pl. 79 (Heron I.).

Uncommon. Inhabits outer reef slope habitats in 3-25 m. Widespread in the tropical Indo-W. Pacific.

Chrysiptera biocellatus

Glyphisodon biocellatus Quoy and Gaimard, 1824: 389 (Guam).

Glyphisodon zonatus — Whitley, 1926: 230 (North West I.).

Abudefduf zonata — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Glyphidodontops biocellatus — Allen, 1975b: 148 (One Tree I.).

Moderately common in lagoons among rubble close to sandy areas, in 0.5-5 m. Widespread in the tropical Indo-W. Pacific.

Chrysiptera cyaneus

Glyphisodon cyaneus Quoy and Gaimard, 1824: 392 (no locality given).

Glyphisodon hedleyi Whitley, 1927b: 20 (Great Barrier Reef — North West I.).

Abudefduf assimilis — Goeden, 1974: 12 (Heron I.).

Abudefduf cyaneus — Goeden, 1974: 12 (Heron I.).

Moderately common in lagoons and sheltered reef flat habitats in 0.3-10 m. Widespread in the tropical W. Pacific.

Chrysiptera flavipinnis

Abudefduf flavipinnis Allen and Robertson, 1974: 157 (Great Barrier Reef — One Tree I.).

Glyphidodontops flavipinnis — Allen, 1975b: 152 (One Tree I.).

Moderately common in outer reef slopes habitats, usually among rubble, in 3-38 m. Distributed in S.E. New Guinea (Samarai I.), the Solomon Islands and the Great Barrier Reef.

Chrysiptera glaucus

Glyphisodon glaucus Cuvier in Cuvier and Valenciennes, 1830a: 475 (Guam).

Glyphidodontops glaucus — Allen, 1975b: 156 (One Tree I.).

Uncommon. Inhabits moderately exposed reef flat habitats, in 0.5-2 m. Widespread in the tropical Indo-W. Pacific.

Chrysiptera hemicyaneus?

Abudefduf hemicyaneus Weber, 1913: 351 (Taul; Kei, Indonesia).

Abudefduf hemicyaneus — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Record of this species from Heron Island by Woodland and Slack-Smith

(1963) is unconfirmed and is possibly based on misidentification of either *G. cyaneus* or *G. flavipinnis* (G.R. Allen, personal communication 1980). Widespread in the tropical W. Pacific.

Chrysiptera leucopomus

Glyphisodon leucopomus Lesson in Duperrey, 1830: 189 (Caroline Is.).

Abudedefduf amabilis — Marshall, 1953: 53 (Lady Musgrave I.).

Abudedefduf leucopomus — Goeden, 1974: 12 (Heron I.).

Glyphidodontops leucopomus — Allen, 1975b: 160 (One Tree I.).

Moderately common in exposed reef crest areas, in 0.2-2 m. Widespread in the tropical W. Pacific.

Chrysiptera rex*

Abudedefduf rex Snyder, 1909: 601 (Okinawa).

Moderately common in upper reef slope areas, frequently in surge channels, in 1-6 m. A number of specimens in the Australian Museum collected from One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Chrysiptera rollandi

Chromis rollandi Whitley, 1961a: 60 (New Caledonia).

Glyphidodontops rollandi — Allen, 1975b: 165 (One Tree I.).

Moderately common in lagoon and outer reef slope habitats in 2-35 m. Widespread in the tropical S.W. Pacific.

Chrysiptera talboti

Glyphidodontops talboti Allen, 1975a: 93 (One Tree I.).

Moderately common in outer reef slope habitats in 6-35 m. Widespread in the tropical S.W. Pacific.

Chrysiptera unimaculatus

Glyphisodon unimaculatus Cuvier in Cuvier and Valenciennes, 1830a: 478 (Timor).

Glyphidodontops unimaculatus — Allen, 1975b: 168 (One Tree I.).

Moderately common in exposed rubble or beach rock habitats, in 0.2-2 m. Widespread in the tropical W. Pacific.

Dascyllus aruanus

Chaetodon auruanus Linnaeus, 1758: 275 (Indies).

Dascyllus auruanus — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Common in lagoons, inhabiting small branching corals (*Pocillopora*, *Seriatopora*), in 1-12 m. Widespread in the tropical Indo-W. Pacific.

Dascyllus melanurus*

Dascyllus melanurus Bleeker, 1854a: 100 (Neira, Banda).

Rare, generally inhabits deeper water. Two specimens (AMS I.15625-013) collected from One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Largely restricted to the Indo-Australian archipelago. A new record for Australia.

Dascyllus reticulatus

Heliases reticulatus Richardson, 1846: 245 (China and Japan).

Dascyllus reticulatus — Sale, 1970: 362 (Heron I.).

Moderately common in outer reef slope habitats, frequently associated with small coral heads, in 1-50m. Widespread in the tropical Indo-W. Pacific.

Dascyllus trimaculatus

Pomacentrus trimaculatus Rüppell, 1828-31 (1828): 39 (Massaua, Red Sea).

Dascyllus trimaculatus — Sale, 1970: 362 (Heron I.).

Uncommon. Inhabits lagoons and outer reef slope habitats in 1-55m. Widespread in the tropical Indo-W. Pacific.

Dischistodus melanotus

Pomacentrus melanotus Bleeker, 1858a: 13 (Manado; Celebes).

Pomacentrus notophthalmus (non Bleeker) — Woodland and Slack-Smith, 1963: 42 (Heron I.).

Dischistodus notophthalmus (non Bleeker) — Allen, 1975b: 132 (One Tree I.).

Common in lagoons in 1-10m. This species has previously been misidentified as *D. notophthalmus* (G.R. Allen, personal communication 1980). Widespread in the tropical Indo-W. Pacific.

Dischistodus perspicillatus*

Pomacentrus perspicillatus Cuvier in Cuvier and Valenciennes, 1830a: 417 (no locality given).

Uncommon. Inhabits lagoons and sandy areas in 1-10m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific and E. Indian Ocean.

Dischistodus pseudochrysopoecilus

Pomacentrus pseudochrysopoecilus Allen and Robertson, 1974: 160 (D'Entrecasteaux Group).

Dischistodus pseudochrysopoecilus — Allen, 1975b: 135 (One Tree I.).

Moderately common in lagoon areas in 1-5m. Widespread in the tropical W. Pacific.

Neopomacentrus azysron

Pomacentrus azysron Bleeker, 1877b: 50 (Amboina).

? *Abudefduf bankieri* (non Richardson) — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Neopomacentrus azysron — Burgess and Axelrod, 1976: pl. 116 (Heron I.).

Very common in lagoons and outer reef slope habitats, in 5-16m. Specimens (QM I.9560) collected at Heron Island and identified as *Abudefduf bankieri* by Woodland and Slack-Smith (1963) are a misidentification of *N. azysron*. Widespread in the tropical W. Pacific.

Neopomacentrus cyanomos*?

Pomacentrus cyanomos Bleeker, 1856c: 89 (Batavia).

Neopomacentrus cyanomos — Talbot *et al.*, 1978: 428 (One Tree I.).

Rare. Occurrence of this species is based on underwater sight records made in One Tree Lagoon (Talbot *et al.*, 1978). This unconfirmed report of *N. cyanomos* represents the first record from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Paraglyphidodon melas

Glyphisodon melas Cuvier in Cuvier and Valenciennes, 1830a: 472 (Java).

Abudefduf melanopus — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Abudefduf melas — Woodland and Slack-Smith, 1963: 41 (Heron I.).

Paraglyphidodon melanopus — Allen, 1975b: 181 (One Tree I.).

Paraglyphidodon melas — Allen, 1977: 35 (One Tree I.).

Uncommon. Inhabits lagoons and outer reef slope habitats in 1-12m, frequently associated with soft corals (Alcyonaria). Masuda *et al* (1975) have shown *Paraglyphidodon* (= *Abudefduf*) *melanopus* is the juvenile and a junior synonym of *P. melas*. Widespread in the tropical Indo-W. Pacific.

Paraglyphidodon polyacanthus

Glyphidodon polyacanthus Ogilby, 1889: 65 (Lord Howe I.).

Paraglyphidodon polyacanthus — Allen, 1975b: 184, 186 (One Tree I.).

Uncommon. Inhabits outer reef slopes, usually in deeper surge channels on the leeward side of reefs, in 2-30m. Known only from the southern Great Barrier Reef, New Caledonia, Norfolk Island and Lord Howe Island.

Parma polylepis

Parma polylepis Günther, 1862: 59 (Norfolk I.).

Pomacentrus oligolepis? (*non* Whitley) — Goeden, 1974: 12 (Heron I.).

Parma polylepis — Allen, 1975b: 188 (One Tree I.).

Uncommon. Inhabits outer reef surge channels in 1-10m. *Pomacentrus oligolepis*, included by Goeden (1974) as a queried record for Heron Island, probably is a mistake for *Parma oligolepis*, a misidentification of *P. polylepis*. Known only from the southern Great Barrier Reef, New South Wales, New Caledonia, Norfolk Island and Lord Howe Island.

Plectroglyphidodon dickii

Glyphisodon dickii Liénard, 1839: 35 (Mauritius).

Abudefduf dicki — Goeden, 1974: 12 (Heron I.).

Uncommon. Inhabits outer reef slope habitats in 1-12m, frequently associated with plate *Acropora*. Widespread in the tropical Indo-W. Pacific.

Plectroglyphidodon imparipennis*

Glyphisodon imparipennis Vaillant and Sauvage, 1875: 279 (Honolulu).

Uncommon. Inhabits exposed outer reef slopes in 0.5-3m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Plectroglyphidodon johnstonianus

Plectroglyphidodon johnstonianus Fowler and Ball, 1924: 271 (Johnston I.).

Abudefduf johnstonianus — Goeden, 1974: 12 (Heron I.).

Uncommon. Inhabits outer reef slopes in 2-12m, frequently associated with *Acropora* and *Pocillopora* coral heads. Widespread in the tropical Indo-W. Pacific.

Plectroglyphidodon lacrymatus

Glyphisodon lacrymatus Quoy and Gaimard, 1824: 388 (Guam).

Abudefduf lacrymatus — Goeden, 1974: 12 (Heron I.).

Moderately common in outer reef slope habitats in 2-40m. Widespread in the tropical W. Pacific.

Pomacentrus australis

Pomacentrus australis Allen and Robertson, 1974: 158 (Great Barrier Reef — One Tree I.).

Common in lagoon and outer reef slope habitats in 5-25m, usually associated with open sand or rubble areas with occasional coral outcrops. Known only from the southern Great Barrier Reef, straggling as far south as Sydney, New South Wales.

Pomacentrus bankanensis

Pomacentrus bankanensis Bleeker, 1853g: 513 (Banda).

Pomacentrus dorsalis — Sale, 1974: 195 (Heron I.).

Moderately common in exposed outer reef slope habitats in 1-12m. Widespread in the tropical W. Pacific.

Pomacentrus branchialis

Pomacentrus branchialis Cuvier in Cuvier and Valenciennes, 1830a: 420 (Java).

Pomacentrus melanopterus — Goeden, 1974: 12 (Heron I.).

Moderately common in outer reef slope habitats in 6-40m, widespread in the tropical W. Pacific.

Pomacentrus coelestis*

Pomacentrus coelestis Jordan and Starks, 1901: 383 (Japan).

Very common in outer reef slope habitats in 1-12m, frequently among dead coral rubble. Specimens in the Australian Museum collected at Heron Island, One Tree Island, Fairfax Reef and Lady Musgrave Island represent the first record of this species from the Capricron-Bunker Group. Widespread in the tropical W. Pacific.

Pomacentrus lepidogenys

Pomacentrus lepidogenys Fowler and Bean, 1928: 98 (Philippines).

Pomacentrus lepidogenys — Allen, 1975b: 213 (One Tree I.).

Common in outer reef slope habitats in 1-12m. Widespread in the tropical W. Pacific.

Pomacentrus molluccensis

Pomacentrus molluccensis Bleeker, 1853a: 118 (Amboina).

Pomacentrus sufflavus Whitley, 1927b: 18 (North West I.).

Pomacentrus popei — Russell *et al.*, 1974: 212 (One Tree I.).

Very common in lagoons and outer reef slope habitats in 1-14m. Widespread in the tropical W. Pacific.

Pomacentrus pavo

Chaetodon pavo Bloch, 1787: 60 (East Indies).

Pomacentrus pavo — Woodland and Slack-Smith, 1963: 42 (Heron I.).

Common in lagoonal and sheltered outer reef slope habitats, in 1-16m. Widespread in the tropical Indo-W. Pacific.

Pomacentrus philippinus*

Pomacentrus philippinus Evermann and Seale, 1907: 91 (Philippines).

Moderately common in outer reef slope habitats, usually under ledges in 1.5-12m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Previously recorded from Australia as *Pseudopomacentrus imitator* Whitley, a junior synonym (Allen, 1975b). Widespread in the tropical W. Pacific.

Pomacentrus reidi*

Pomacentrus reidi Fowler and Bean, 1928: 99 (Philippines).

Uncommon. Inhabits outer reef slopes in 12-70m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Pomacentrus rhodonotus

Pomacentrus rhodonotus Bleeker, 1853b: 282 (Sumatra).

Pomacentrus chrysurus — Whitley, 1926: 230 (North West I.).

Pomacentrus flavicauda Whitley, 1928b: 298 (North West I.).

Common in lagoon and reef flat habitats in 0.5-3m. This species has generally been treated under the name *flavicauda*, a junior synonym of *P. rhodonotus* (G.R. Allen, personal communication 1980). Widespread in the tropical W. Pacific.

Pomacentrus tripunctatus

Pomacentrus tripunctatus Cuvier in Cuvier and Valenciennes, 1830a: 421 (Vanicolo, Santa Cruz Is.).

Pomacentrus tripunctatus — Woodland and Slack-Smith, 1963: 42 (Heron I.).

Moderately common in outer reef slope habitats, in 0.2-3m. Widespread in the tropical W. Pacific.

Pomacentrus vaiuli

Pomacentrus vaiuli Jordan and Seale, 1906: 280 (Samoa).

Pomacentrus vaiuli? — Goeden, 1974: 12 (Heron I.).

Rare. Inhabits outer reef slopes in 3-40m. Goeden (1974) included this species as a queried record from Heron Island; Allen (1975b: 233) records it from Wistari Reef. Widespread in the tropical W. Pacific and E. Indian Ocean.

Pomacentrus wardi

Pomacentrus wardi Whitley, 1927a: 301 (Heron I.).

? *Pomacentrus cranei* (non Herre) — Goeden, 1974: 12 (Heron I.).

? *Pomacentrus littoralis* (non Cuvier) — Goeden, 1974: 12 (Heron I.).

Very common in lagoon and outer reef slope habitats in 1-20m. *P. cranei* (= *burroughi* Fowler) and *P. littoralis* recorded from Heron Island by Goeden (1974) are probably misidentifications of *P. wardi* (G.R. Allen, personal communication 1980). Known only from the Great Barrier Reef.

***Pomacentrus* sp.**

Pomacentrus melanochir (non Bleeker) — Russell *et al.*, 1974: 212 (One Tree I.).

Very common in lagoon and outer reef slope habitats in 3-35m, usually in sandy areas. This species previously referred to as *P. melanochir*, is a new species and is being described by Dr. G.R. Allen. Widespread in the tropical W. Pacific.

Pristotis jerdoni

Pomacentrus jerdoni Day 1873: 237 (Madras, India).

Daya jerdoni — McCulloch, 1921: 170 (Capricorn Group).

Pristotis jerdoni — Allen, 1975b: 227 (One Tree I.).

Rare. Usually inhabits flat sandy bottoms in 15-40m, but one individual sighted in 5m at One Tree Island (Allen, 1975b). Widespread in the tropical Indo-W. Pacific.

Stegastes apicalis

Pomacentrus apicalis De Vis, 1885b: 874 (Queensland).

Pomacentrus apicalis — Woodland and Slack-Smith, 1963: 42 (Heron I.).

Eupomacentrus apicalis — Allen, 1975b: 137 (Heron I.).

Moderately common in outer reef slope habitats, in 1.5-5m. Known only from Queensland and Northern Territory.

Stegastes fasciolatus

Pomacentrus fasciolatus Ogilby, 1889: 64 (Lord Howe I.).

Pomacentrus jenkinsi — Sale, 1974: 195 (Heron I.).

Moderately common in exposed outer reef slopes, in 0.5-3m. Widespread in the tropical W. Pacific.

Stegastes gascoynei

Pseudopomacentrus gascoynei Whitley, 1964a: 173 (Kenn Reef, Coral Sea).

Eupomacentrus gascoynei — Allen, 1975b: 139, 141 (Capricorn Group — One Tree I.).

Uncommon. Inhabits outer reef slopes, in 2-5m. Known from the southern Great Barrier Reef, New Caledonia, Lord Howe Island and northern New Zealand.

Stegastes nigricans

Holocentrus nigricans Lacepède, 1802a: 332 (no locality given).

Pomacentrus nigricans — Woodland and Slack-Smith, 1963: 42 (Heron I.).

Moderately common in outer reef slope habitats in 1-12m, frequently among staghorn *Acropora*. Widespread in the tropical Indo-W. Pacific.

CIRRHITIDAE . . . HAWKFISHES

Cirrhitichthys aprinus

Cirrhites aprinus Cuvier in Cuvier and Valenciennes, 1829a: 76 (Timor).

Cirrhitichthys aprinus — Russell *et al.*, 1974: 212 (One Tree I.).

Cirrhites aprinus — Talbot *et al.*, 1978: 428 (One Tree I.).

Moderately common in lagoon and outer reef slope habitats. Widespread in the tropical W. Pacific.

*Cirrhitichthys falco**

Cirrhitichthys falco Randall, 1963: 435 (Mindanao).

Uncommon. A single specimen (AMS I.20573-002) from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

*Cirrhitichthys oxycephalus**

Cirrhites oxycephalus Bleeker, 1855c: 408 (Amboina).

Uncommon. A single specimen (AMS I.15635-014) from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Cyprinocirrhites polyactis

Cirrhitichthys polyactis Bleeker, 1875: 16 (Amboina).

Cirrhitichthys polyactis — McCulloch, 1922: 243 (near the Capricorn Group, Queensland).

Uncommon. Occurs in outer reef slope habitats in moderate depths (> 20m). Widespread in the tropical Indo-W. Pacific.

*Paracirrhites forsteri**

Grammistes forsteri Schneider in Bloch and Schneider, 1801: 191 (Marquesas).

Moderately common in outer reef slope habitats among living coral. A single specimen (AMS I.20716-001) from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

CHEILODACTYLIDAE . . . MORWONGS

Cheilodactylus vestitus

Zeodrius vestitus Castlenau, 1879: 377 (Sydney market, New South Wales).

Cheilodactylus gibbosus (*non* Richardson) — Goeden, 1974: 14 (Heron I.).

Uncommon. Occurs in exposed outer reef slope habitats in 1-10m. This species has been previously confused with *C. gibbosus* Richardson, a Western Australian species (J.E. Randall, personal communication 1981). Known only from tropical Australia and Lord Howe Island.



10



11



12



13



14

- 9. Hammerhead shark, *Sphyrna* sp.
- 10. Sweetlip emperor, *Lethrinus chrysostomus*
- 11. Sweetlip emperor, *Lethrinus chrysostomus*
- 12. Coral trout, *Plectropomus leopardus*
- 13. Coral cod, *Cephalopholis miniatus*
- 14. Brown blubberlip sweetlip, *Plectorhynchus chaetodonoides*





16



17

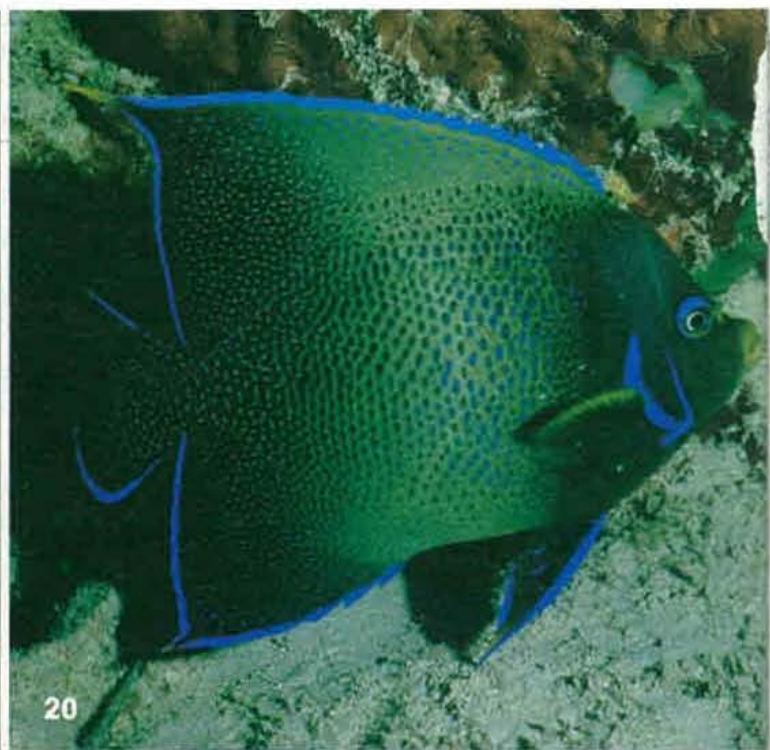


18

- 15. Juvenile barramundi cod, *Cromileptes altivelis*
- 16. Trumpetfish, *Aulostomus chinensis*
- 17. Honeycomb cod, *Epinephelus quoyanus*
- 18. Black-tipped cod, *Epinephelus fasciatus*



19



20

19. **Saddled butterflyfish,**
Chaetodon ephippium
20. **Blue-lined angelfish,**
Pomacanthus semicirculatus
21. **Racoon butterflyfish,**
Chaetodon lunula
22. **Ornate butterflyfish,**
Chaetodon ornatissimus



21



22

MUGILIDAE . . . MULLET

Crenimugil crenilabrus

Mugil crenilabrus crenilabrus Forsskål, 1775: 14 (Red Sea).

Crenimugil crenilabrus — Woodland and Slack-Smith, 1963: 27 (Heron I.).

Uncommon. Occurs in lagoons and reef flat habitats. Widespread in the tropical Indo-W. Pacific.

*Crenimugil labiosus**

Mugil labiosus Valenciennes in Cuvier and Valenciennes, 1836: 93 (Red Sea).

Apparently rare. Five specimens (AMS I.20463-031) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Liza dussumieri?

Mugil dussumieri Valenciennes in Cuvier and Valenciennes, 1836: 147 (Bombay; Coramandel).

Mugil dussumieri — Williams, 1969: 106 (North West I.).

Doubtfully reported from North West Island on the basis of an unconfirmed sight record by Williams (1969). Widespread in the tropical W. Pacific and E. Indian Ocean.

Liza vaigiensis

Mugil vaigiensis Quoy and Gaimard, 1824: 337 (Waigou).

Liza vaigiensis — Thomson, 1954: 104 (North West I.).

Apparently uncommon. Occurs in lagoons and reef flat habitats. Widespread in the tropical Indo-W. Pacific.

Mugil cephalus

Mugil cephalus Linnaeus, 1758: 316 (European Seas).

Mugil cephalus — Stephenson and Grant, 1954: 102 (Heron I.).

Uncommon. Occurs in lagoons and reef flat habitats. Cosmopolitan in tropical and warm temperate seas.

Myxus elongatus

Myxus elongatus Günther, 1861: 466 (Hobson's Bay, Victoria; Port Jackson, New South Wales).

Myxus elongatus — Woodland and Slack-Smith, 1953: 28 (Heron I.).

Uncommon. Occurs in lagoons and reef flat habitats, occasionally in large schools. Distributed in temperate and tropical Australia and throughout the tropical W. Pacific.

SPHYRAENIDAE . . . BARRACUDAS

Sphyraena jello

Sphyraena jello Cuvier in Cuvier and Valenciennes, 1829a: 340 (Vizagapatam, India).

Sphyraena jello — Woodland and Slack-Smith, 1963: 27 (Heron I.).

Reported from Heron Island by Woodland and Slack-Smith (1963). Widespread in the tropical Indo-W. Pacific.

Sphyraena pinguis

Sphyraena pinguis Günther, 1874b: 157 (Chefoo, China).

Sphyraena chrysotaenia — Russell *et al.*, 1974: 213 (One Tree I.).

Common in lagoons and outer reef slope habitats. Recorded from One Tree Island on the basis of an unconfirmed sight record (Russell *et al.*, 1974), but several specimens from Heron Island and One Tree Island in the Australian Museum are identifiable as *S. pinguis*. (For discussion of nomenclature and species referred to *S. pinguis* see Au, 1979). Widespread in the tropical Indo-W. Pacific.

LABRIDAE . . . WRASSES

Anampses geographicus

Anampses geographicus Valenciennes *in* Cuvier and Valenciennes, 1839b: 10 (no locality given).

Anampses pterophthalmus — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Moderately common in outer reef slope habitats in 1-15m. Widespread in the tropical W. Pacific.

Anampses neoguinaicus

Anampses (Anampses) neoguinaicus Bleeker, 1878a: 57 (New Guinea).

Anampses neoguinaicus — Randall, 1972a: 182 (Heron I., One Tree I.).

Common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical W. Pacific.

Bodianus axillaris

Labrus axillaris Bennett, 1831: 166 (Mauritius).

Lepidoplois axillaris — Goeden, 1974: 13 (Heron I.).

Moderately common in outer reef slope habitats, usually in deeper water (>10m). Widespread in the tropical Indo-W. Pacific.

Bodianus diana*

Labrus diana Lacepède, 1802a: 450 ('Great Equatorial Ocean').

Uncommon. Several specimens in the Australian Museum collected from One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Bodianus perditio*

Labrus perditio Quoy and Gaimard, 1834: 702 (Tonga).

Rare. A single specimen (AMS I.15682-055) from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Cheilinus chlorurus

Sparus chlorurus Bloch, 1791: 24 (Japan).

Cheilinus chlorurus — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Common in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Cheilinus digramma

Labrus digramma Lacepède, 1802a: 448, 518 ('Great Equatorial Ocean').

Cheilinus digrammus — Whitley, 1937b: 143 (Heron I.).

Moderately common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Cheilinus fasciatus

Sparus fasciatus Bloch, 1791: 18 (Japan).

Cheilinus fasciatus — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Cheilinus oxycephalus

Cheilinus oxycephalus Bleeker, 1853f: 349 (Amboina).

Cheilinus oxycephalus — Goeden, 1974: 13 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Cheilinus trilobatus

Cheilinus trilobatus Lacepède, 1802a: 529, 537 (Réunion; Mauritius; Madagascar).

Cheilinus trilobatus — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Cheilinus undulatus

Cheilinus undulatus Rüppell, 1835-38 (1935): 20 (Djedda, Red Sea).

Cheilinus undulatus — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Rare. Seen occasionally in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Cheilinus unifasciatus

Cheilinus unifasciatus Streets, 1877: 82 (Fanning I.).

Cheilinus unifasciatus — Marshall, 1964: 316 (Lady Musgrave I.).

Rare. Known from the Capricorn-Bunker Group only on the basis of a record from Lady Musgrave Island by Marshall (1964). Widespread in the tropical W. Pacific.

Choerodon cephalotes

Choerops cephalotes Castelnau, 1875: 39 (Cape York).

Choerodon cephalotes — Williams, 1979: 139 (Tryon I.).

Rare. Reported on the basis of a sight record from Tryon Island (Williams, 1979). A specimen (AMS E.2885) of *C. cephalotes* also trawled in 14-17 fathoms (25-31 m) near the Bunker Group by the *Endeavour*. Known only from Queensland and northern New South Wales.

Choerodon cyanodus

Labrus cyanodus Richardson, 1843a:355 (Black Point, N. Australia).

Choerodon olivaceus — Whitley, 1926: 231 (North West I.).

Choerodon albigena — Whitley, 1932b: 341 (North West I.).

Common in outer reef slope habitats. Known only from tropical Australia.

Choerodon fasciatus

Xiphocheilus fasciatus Günther, 1867a: 101 (Cape York).

Lienardella fasciata — Fowler, 1957: 69 (Lady Musgrave I.).

Moderately common in outer reef slope habitats in 1-15 m. Known from tropical Australia, Taiwan and Japan.

Choerodon graphicus

Choerops graphicus De Vis, 1885b: 878 (Cardwell, Queensland).

Choerodon transversalis Whitley, 1956: 258 (Heron I.).

Common in outer reef slope habitats. Known only from the Great Barrier Reef and New Caledonia.

Choerodon jordani*

Choerops jordani Snyder, 1908: 98 (Naha, Okinawa).

Moderately common in outer reef slope habitats on rubble bottoms in 15-30 m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Previously known only from Japan and the Philippines. A new record for Australia.

Choerodon schoenleinii

Cossyphus Schoenleinii Valenciennes in Cuvier and Valenciennes, 1839a: 143 (Celebes).

Choerodon schoenleinii — Burgess and Axelrod, 1976: pl. 128 (Heron I.).

Uncommon. Seen occasionally in outer reef slope habitats in 10-20 m. Widespread in the tropical W. Pacific.

Choerodon venustus

Choerops venustus De Vis, 1885a: 147 (Moreton Bay, Queensland).

Choerodon venusta — Ogilby, 1915a: 34 (North West I.).

Common in outer reef slope habitats. Known only from Queensland.

Cirrhilabrus labouti

Cirrhilabrus labouti Randall and Lubbock, 1982: 2, pl. 1A,B (New Caledonia; Loyalty Islands; Kenn Reef; Capricorn Group).

Rare. Occurs in outer reef slope habitats in deeper water (30-55m). Known only from the S.W. Pacific.

***Cirrhilabrus* sp.**

Cirrhilabrus temmincki (non Bleeker) — Goeden, 1974: 13 (Heron I.).

Very common in lagoons and outer reef slope habitats. This species has generally been treated under the name *C. temmincki*, but according to J.E. Randall (personal communication, 1980) who is revising the genus, specimens from the Capricorn-Bunker Group probably represent a new species.

Coris aurilineata

Coris aurilineata Randall and Kuiter, 1983:164 (E. Australia-Heron I.).

Rare. Occurs in outer reef slope habitats, associated with rubble and sand. Known only from E. Australia, Southern Queensland to New South Wales.

Coris aygula

Coris aygula Lacepede, 1802a: 96 (no locality given).

Coris aygula — Goeden, 1974: 13 (Heron I.).

Uncommon. Occasionally seen in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Coris dorsomaculata*

Coris dorsomaculata Fowler, 1908: 437 (Victoria).

Moderately common in outer reef slope habitats in deeper water (> 20 m). Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from the W. Pacific.

Coris gaimard

Julis Gaimard Quoy and Gaimard, 1824: 265 (Hawaiian Is.).

Coris gaimardi — Woodland and Slack-Smith, 1963: 42 (Heron I.).

Rare. Seen occasionally in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Coris variegata

Halichoeres variegatus Rüppell, 1835-38 (1835): 14 (Djedda, Red Sea).

Coris variegata — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Hemicoris pallida — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W Pacific.

Coris pictoides

Coris pictoides Randall and Kuiter, 1983:160 (Malaysia; Celebes; W. Australia; E. Australia-One Tree I.).

Uncommon. Seen occasionally in lagoons and outer reef slope habitats. Probably widespread in the tropical W. Pacific.

Cymolutes lecluse*

Xyrichthys lecluse Quoy and Gaimard, 1824: 284 (Hawaiian Is.).

Uncommon. Occurs in lagoons and outer reef habitats associated with sandy bottoms. Several specimens in the Australian Museum, collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Epibulus insidiator

Sparus insidiator Pallas, 1770: 41 (Java).

Epibulus insidiator — Woodland and Slack-Smith, 1963: 43 (Heron I.).

Moderately common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Gomphosus varius

Gomphosus varius Lacepède, 1802a: 100 (Tahiti).

Gomphosus varius — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Halichoeres biocellatus

Halichoeres biocellatus Schultz in Schultz *et al.*, 1960: 233 (Marshall Is.).

Halichoeres biocellatus? — Goeden, 1974: 13 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. This species was included as a queried record from Heron Island by Goeden (1974). Several specimens from One Tree Island are in the Australian Museum. Widespread in the tropical W. Pacific.

Halichoeres chrysus

Halichoeres chrysus Randall, 1980: 416 (W. Pacific; E. Indian Ocean; Great Barrier Reef — One Tree I.).

Uncommon. Occurs in outer reef slope habitats in deeper water (> 20 m). Widespread in the tropical W. Pacific and E. Indian Ocean.

Halichoeres hortulanus

Labrus hortulanus Lacepède, 1802a: 449, 518 ('Great Equatorial Ocean.').

Halichoeres hortulanus — Goeden, 1974: 13 (Heron I.).

Common in lagoons and outer reef slope habitats. This species has generally been known previously as *H. centiquadrus*, a junior synonym (J.E. Randall, personal communication 1980). Widespread in the tropical Indo-W. Pacific.

Halichoeres hartzfeldii

Julis (Halichoeres) Hartzfeldii Bleeker, 1852c: 563 (Amboina).

Halichoeres hartzfeldii — Talbot *et al.*, 1978: 428 (One Tree I.).

Moderately common in lagoons and outer reef slope habitats, associated with sand or rubble bottoms, in 5-25 m. Previously reported from One Tree Island on the basis of a sight record (Talbot *et al.*, 1978); a number of specimens collected from the lagoon of One Tree Reef are in the Australian Museum. Widespread in the tropical W. Pacific.

Halichoeres margaritaceus

Julis margaritaceus Valenciennes in Cuvier and Valenciennes, 1839a:484 (Vanikoro, Santa Cruz Is.).

Halichoeres opercularis — McCulloch, 1910: 431 (Masthead I.).

Halichoeres margaritaceus — Low, 1971: 650 (Heron I.).

Common in lagoons and reef crest habitats in 1-15 m. Widespread in the tropical W. Pacific.

Halichoeres marginatus

Halichoeres marginatus Rüppell, 1835-38 (1835): 16 (Red Sea).

Halichoeres marginatus — Low, 1971: 650 (Heron I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Halichoeres melanurus

Julis (Halichoeres) melanurus Bleeker, 1851c: 251 (Banda, Neira).

Halichoeres hoeveni — Low, 1971: 650 (Heron I.).

Halichoeres melanurus — Low, 1971: 650 (Heron I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical W. Pacific.

Halichoeres nebulosus

Julis nebulosus Valenciennes in Cuvier and Valenciennes, 1839a: 461 (Bombay).

Halichoeres nebulosus — McCulloch, 1910: 431 (Masthead I.).

Moderately common in lagoons and reef crest habitats in 1-5 m. Widespread in the tropical Indo-W. Pacific.

Halichoeres prosopeion

Julis (Halichoeres) prosopeion Bleeker, 1853f: 347 (Amboina).

Halichoeres prosopeion — Randall, 1980: 432 (Capricorn Group).

Moderately common in outer reef slope habitats in 5-20 m. Widespread in the tropical W. Pacific.

Halichoeres trimaculatus

Julis trimaculata Griffith, 1834: pl. 45, fig. 2 (Vanikoro, Santa Cruz Is.).

Halichoeres trimaculatus — Whitley, 1928b: 295 (Fairfax I.).

Guntheria vestalis Whitley, 1958: 37 (Lady Musgrave I.).

Guntheria trimaculata — Woodland and Slack-Smith, 1963: (Heron I.).

Common in lagoons, associated with sandy bottoms. Widespread in the tropical W. Pacific and E. Indian Ocean.

Hemigymnus fasciatus

Labrus fasciatus Bloch, 1792: 6 (Japan).

Hemigymnus fasciatus — Goeden, 1974: 13 (Heron I.).

Moderately common in outer reef slope habitats in 5-15 m. Widespread in the tropical Indo-W. Pacific.

Hemigymnus melapterus

Labrus melapterus Bloch, 1791: 137 (Japan)

Hemigymnus melapterus — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Hologymnosus doliatus

Labrus doliatus Lacepède, 1802a: 429 ('Great Gulf of India').

Hologymnosus semidiscus (non Lacepède) — Marshall, 1964: 309 (Lady Musgrave I.).

Uncommon. Seen occasionally in outer reef slope habitats in 1-15 m. According to J.E. Randall, who is revising this genus, the species commonly

identified as *H. semidiscus* is a misidentification of *H. doliatus*. Widespread in the tropical Indo-W. Pacific.

Labrichthys unilineatus

Cossyphus unilineatus Guichenot, 1847: 284 (Guam).

Labrichthys cyanotaenia — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Labrichthys unilineatus — Randall and Springer, 1973: 289 (One Tree I.).

Moderately common in lagoons and outer reef slope habitats in 2-15 m. Widespread in the tropical Indo-W. Pacific.

Labroides bicolor

Labroides bicolor Fowler and Bean, 1928: 224 (Philippines).

Labroides bicolor — Goeden, 1974: 13 (Heron I.).

Uncommon. Seen occasionally in lagoons and outer reef slope habitats, associated with caverns and ledges. Widespread in the tropical Indo-W. Pacific.

Labroides dimidiatus

Cossyphus dimidiatus Valenciennes in Cuvier and Valenciennes, 1828a:136 (Mauritius).

Labroides bicincta Saville-Kent, 1893: 308 (Lady Elliott I.).

Labroides dimidiatus — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Common in lagoons and outer reef slopes in 1-30m. Widespread in the tropical Indo-W. Pacific.

Labropsis australis

Labropsis australis Randall, 1981: 149. pl, 5A-C (Great Barrier Reef—Capricorn Group; Tonga; Fiji; New Hebrides; Solomon Is; Loyalty Is; Samoa).

Labropsis manabei (*non* Schmidt)—Goeden, 1974: 13 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. This species has previously been reported from the Capricorn Group under the name *L. manabei*. Widespread in the tropical S.W. Pacific.

Leptojulius cyanopleura

Julis (Halichoeres) cyanopleura Bleeker, 1853c: 489 (Batavia, Java).

Leptojulius cyanopleura — Randall and Ferraris, 1981: 90 (One Tree I.).

Uncommon. Occurs in outer reef slope habitats in 20-25m. Several specimens collected from One Tree Island in the Australian Museum. Widespread in the tropical W. Pacific and N. Indian Ocean to the Gulf of Oman.

Macropharyngodon choati

Macropharyngodon choati Randall, 1978: 761 (Great Barrier Reef—One Tree I; New South Wales).

Uncommon. Occurs in outer reef slope habitats in 1-30m. Known only from the Great Barrier Reef and northern New South Wales.

Macropharyngodon kuiteri

Macropharyngodon kuiteri Randall, 1978a: 766 (Great Barrier Reef—One Tree I; New Caledonia; New South Wales).

Rare. Occurs in outer reef slope habitats in 5-55m. Known only from the southern Great Barrier Reef, northern New South Wales and New Caledonia.

Macropharyngodon meleagris

Julis meleagris Valenciennes in Cuvier and Valenciennes, 1839a: 481 (Ulea).

? *Macropharyngodon palagris* — Low, 1971: 650 (Heron I.).

Macropharyngodon pardalis — Goeden, 1974: 13 (Heron I.).

Moderately common in outer reef slope habitats in 1-30m. *M. palagris* recorded from Heron Island by Low (1971) appears to be a misspelling of *meleagris*. Widespread in the tropical W. Pacific and E. Indian Ocean.

Macropharyngodon negrosensis

Macropharyngodon negrosensis Herre, 1932: 142 (Dumaguete, Oriental Negros, Philippines).

Macropharyngodon negrosensis — Randall, 1978: 764 (One Tree I.).

Rare. Occurs in outer reef slope habitats in deeper water (15-40m). Widespread in the tropical W. Pacific.

Novaculichthys taeniourus

Labrus taeniourus Lacepède, 802a: 448 (no locality given).

Novaculichthys taeniourus — Woodland and Slack-Smith 1963: 43 (Heron I.).

Hemipteronotus taeniourus — Goeden, 1974: 13 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Pseudocheilinus evanidus*

Pseudocheilinus evanidus Jordan and Evermann, 1903: 192 (Hilo, Hawaii).

Uncommon. Occurs in outer reef slope habitats in 15-30m. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Pseudocheilinus hexataenia

Cheilinus hexataenia Bleeker, 1857a: 4 (Amboina).

Pseudocheilinus hexataenia — Goeden, 1974: 13 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 2-10m. Widespread in the tropical Indo-W. Pacific.

Pseudocoris yamashiroi*

Julis yamashiroi Schmidt, 1930: 85 (Okinawa I.).

Rare. A single specimen (AMS I.18109-001) collected in deep water (30m) at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Previously known only from Japan and the Ryukyu Islands. A new record for Australia.

Pseudojuloides cerasinus

Pseudojulis cerasina Snyder, 1904: 528 (Honolulu, Hawaii).

Pseudojuloides cerasinus — Allen *et al.*, 1976: 421 (One Tree I.).

Uncommon. Occurs in outer reef slope habitats in deeper water (15-40m). Widespread in the tropical W. Pacific.

Pseudolabrus guentheri

Pseudolabrus Güntheri Bleeker, 1862: 131 (Australia).

Pseudolabrus guntheri — McCulloch, 1913: 370 (Masthead I.).

Very common in lagoons and outer reef slope habitats in 1-20m. Known from the southern Great Barrier Reef, southern Queensland and New South Wales.

Pteragogus flagellifera*

Ctenolabrus flagellifer Valenciennes in Cuvier and Valenciennes, 1839a: 240 (no locality given).

Rare. A single specimen (AMS I.15647-071) collected from One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Stethojulis bandanensis

Julis bandanensis Bleeker, 1851c: 254 (Banda, Neira).

Stethojulis axillaris (non Quoy and Gaimard)—Woodland and Slack-Smith, 1963:45 (Heron I.).

Common in lagoons and outer reef slope habitats. This species has previously been confused with *S. axillaris*, a Hawaiian endemic (Randall and Kay, 1974). Widespread in the tropical W. Pacific.

Stethojulis strigiventer

Julis strigiventer Bennett, 1832: 184 (Mauritius).

Stethojulis strigiventer — Woodland and Slack Smith, 1963: 45 (Heron I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Suezichthys gracilis

Labrichthys gracilis Steindachner and Doederlein, 1887: 273 (Tokyo, Japan).

Suezichthys gracilis — Randall, 1982: 204 (Capricorn Group).

Uncommon. Observed in sandy lagoon habitats. Antitropical in distribution, known from subtropical E. Australia, New Caledonia, S. China Sea and Japan.

Thalassoma amblycephalum

Julis amblycephalum Bleeker, 1856c: 83 (Java and Celebes).

? *Pseudojulis trifasciatus* — Woodland and Slack-Smith, 1963: 45 (Heron I.).

Thalassoma amblycephalus — Goeden, 1974: 13 (Heron I.).

Common in exposed outer reef slope habitats in 1-15m. *Pseudojulis trifasciatus* recorded from Heron Island by Woodland and Slack-Smith (1963) is probably a juvenile *T. amblycephalum*. J.E. Randall (1978b) who has examined the syntypes of *P. trifasciatus* reports that the specimens are juveniles of *T. amblycephalum*. Widespread in the tropical Indo-W. Pacific.

Thalassoma hardwickei

Sparus hardwickei Bennett, 1830: 12 (Ceylon).

Thalassoma hardwicki — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Thalassoma janseni

Julis (Julis) Janseni Bleeker, 1856a:56 (Celebes).

Thalassoma janseni — Woodland and Slack-Smith, 1963: 44 (Heron I.).

Moderately common in exposed reef crest habitats in 1-5m. Widespread in the tropical W. Pacific.

Thalassoma lunare

Labrus lunaris Linnaeus, 1758: 283 (India).

Thalassoma lunare — Fowler, 1957: 69 (Lady Musgrave I.).

Very common in lagoons and outer reef slope habitats in 1-20m. Widespread in the tropical Indo-W. Pacific.

Thalassoma lutescens

Julis lutescens Lay and Bennett, 1839: 65 (Tahiti and Ryukyu Is.).

Thalassoma lutescens — Goeden, 1974: 13 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical W. Pacific.

Thalassoma purpureum

Scarus purpureus Forsskål, 1775: 27 (Red Sea).

?*Thalassoma quinquivittata* (non Lay and Bennett) — Goeden, 1974: 13 (Heron I.).

Thalassoma purpureum — Allen *et al.*, 1976: 423 (One Tree I.).

Uncommon. Occurs in exposed reef crest habitats in 1-5m. *T. quinquivittatum* recorded from Heron Island by Goeden (1974) probably is a misidentification of *T. purpureum*. Widespread in the tropical Indo-W. Pacific.

Wetmorella philippina

Wetmorella philippina Fowler and Bean, 1928: 211 (Philippines).

Wetmorella ocellata — Goeden, 1974: 13 (Heron I.).

Moderately common in lagoon and outer reef slope habitats, usually associated with caverns and overhangs. Yogo and Tsukahara (1980) recently have synonymised *W. ocellata* Schultz and Marshall with *W. philippina*. Widespread in the tropical W. Pacific.

SCARIDAE . . . PARROTFISHES

Calatomus carolinus?

Callyodon carolinus Valenciennes in Cuvier and Valenciennes, 1839b: 291 (Caroline Is.).

Calotomus spinidens (non Quoy and Gaimard) — Goeden, 1974: 13 (Heron I.).

Rare. Occurs in outer reef slope habitats. Goeden's (1974) record of *C. spinidens* (Quoy and Gaimard) probably is a misidentification of *C. carolinus*. The true *spinidens* is a relatively small grass bed or algal flat species (Bruce and Randall, ms.). Widespread in the tropical Indo-W. Pacific.

Cetoscarus bicolor

Scarus bicolor Rüppell, 1828-31 (1828): 82 (Djedda, Red Sea).

Chlororus pulchellus — Woodland and Slack-Smith, 1963: 46 (Heron I.).

Chlorurus bicolor — Goeden, 1974: 13 (Heron I.).

Bolbometapon bicolor — Choat and Robertson, 1975: 264 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Hipposcarus longiceps

Scarus longiceps Valenciennes in Cuvier and Valenciennes, 1839b: 241 (Waigiu).

Scarus schultzi — Goeden, 1974: 13 (Heron I.).

Uncommon. Inhabits lagoons. This species has generally been misidentified as *S. harid* (see Smith, 1959b). Widespread in the tropical W. Pacific.

Scarus bleekeri

Callyodon bleekeri de Beaufort, 1940: 318 (Sumatra; Ternate; Philippines; New Ireland; Ponape; Solomon Is.).

Scarus bleekeri — Goeden, 1974: 13 (Heron I.).

Rare. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Scarus brevifilis

Pseudoscarus brevifilis Günther, 1909: 327 (Tahiti).

Scarus chlorodon — Goeden, 1974: 13 (Heron I.).

Very common in outer reef slope habitats. According to Randall and Choat (1980) the fish previously misidentified by Schultz (1958) and others as *S. chlorodon* Jenyns is *S. brevifilis*. Widespread in the tropical W. Pacific.

Scarus dimidiatus

Scarus dimidiatus Bleeker, 1859a: 17 (Doreh, New Guinea).

Scarus scaber (non Valenciennes) — Goeden, 1974: 13 (Heron I.).

Rare. Known only from a single specimen (AMS I.15481-001) collected at Heron Island. Randall and Choat (1980) point out that specimens from the Great Barrier Reef previously identified as *S. scaber* probably represent the initial color phase of *S. dimidiatus*. The true *S. scaber* is an Indian Ocean species. *S. dimidiatus* is widespread in the tropical W. Pacific.

Scarus flavipectoralis

Scarus flavipectoralis Schultz, 1958: 52 (Philippines).

Scarus flavipectoralis — Goeden, 1974: 13 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Scarus frenatus

Scarus frenatus Lacepède, 1802b: 13 ('Great Equinoxial Ocean').

Scarus vermiculatus — Woodland and Slack-Smith, 1963: 46 (Heron I.).

Scarus sexvittatus — Low, 1971: 650 (Heron I.).

Common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scarus ghobban

Scarus ghobban Forsskål, 1775: 28 (Djedda, Red Sea).

Scarus ghobban — Woodland and Slack-Smith, 1963: 45 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-12m. Widespread in the tropical Indo-W. Pacific.

Scarus gibbus

Scarus gibbus Rüppell, 1828-31 (1828): 81 (Red Sea).

Scarus microrhinos (*non* Bleeker) — Woodland and Slack-Smith, 1963, 46 (Heron I.).

Scarus gibbus — Choat and Robertson, 1975: 264 (Heron I.).

Very common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scarus globiceps

Scarus globiceps Valenciennes *in* Cuvier and Valenciennes, 1839b: 242 (Tahiti).

Scarus globiceps — Woodland and Slack-Smith, 1963: 45 (Heron I.).

Common in lagoons and outer reef slopes in 1-12m. Widespread in the tropical Indo-W. Pacific.

Scarus longipinnis

Scarus longipinnis Randall and Choat, 1980: 414 (Pitcairn I; Rapa; Capricorn Group — One Tree I., Heron I.).

Scarus sp. — Choat and Robertson, 1975: 264 (Heron I.).

Scarus sp. — Allen *et al.*, 1976: 424 (Capricorn Group).

Moderately common in deeper reef slope habitats in 15-40m. Known from the southern Great Barrier Reef, New Caledonia, and S.E. Oceania.

Scarus niger

Scarus niger Forsskål, 1775: x, 28 (Red Sea).

Scarus niger — Low, 1971: 650 (Heron I.).

Common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scarus oviceps

Scarus oviceps Valenciennes *in* Cuvier and Valenciennes, 1839b: 244 (Tahiti).

Scarus oviceps — Goeden, 1974: 13 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Scarus psittacus

Scarus psittacus Forsskål, 1775: 29 (Djedda, Red Sea).

Scarus forsteri — Low, 1971: 650 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-12m. Randall and Ormond (1978) have shown *S. forsteri* Valenciennes to be a junior synonym of *S. psittacus*. Widespread in the tropical Indo-W. Pacific.

Scarus rivulatus

Scarus rivulatus Valenciennes *in* Cuvier and Valenciennes, 1839b: 223 (Java).

Callyodon rivulatus — Ogilby, 1915a: 34 (North Reef).

Scarus fasciatus — Whitley, 1926: 233 (North West I.).

?*Scarus dubius* (*non* Bennett) — Woodland and Slack-Smith, 1963: 45 (Heron I.).

Scarus rivulatus — Choat and Robertson, 1975: 264 (Heron I.).

Very common in lagoons and outer reef slope habitats in 1-12m. According to Randall and Choat (1980) *S. fasciatus* Valenciennes is a junior synonym of *S. rivulatus*. Choat (1969) has suggested that *S. dubius* recorded by Woodland and Slack-Smith (1963) from Heron Island is probably a misidentification of *S. fasciatus* (= *rivulatus*). Widespread in the tropical W. Pacific.

Scarus rubroviolaceus

Scarus rubroviolaceus Bleeker, 1849a: 52 (Batavia, Java).

Scarops rubroviolaceus — Goeden, 1974: 13 (Heron I.).

Scarus rubroviolaceus — Choat and Robertson, 1975: 264 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scarus schlegeli

Pseudoscarus Schlegeli Bleeker, 1861: 242 (Celebes).

Scarus venosus (*non* Valenciennes) — Goeden, 1974: 13 (Heron I.).

Scarus schlegeli — Randall and Choat, 1980: 402 (Capricorn Group, Heron I.).

Common in lagoons and outer reef slope habitats in 1-12m. According to Randall and Choat (1980) *S. venosus* Valenciennes is a junior synonym of *S. psittacus*, and *S. schlegeli* formerly considered a synonym of *S. venosus*, must be re-established as the valid name for the Pacific identity of *S. venosus*. Widespread in the tropical W. Pacific.

Scarus sordidus

Scarus sordidus Forsskål, 1775: x, 30 (Arabia).

Scarus sordidus — Woodland and Slack-Smith, 1963: 46 (Heron I.).

Very common in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Scarus spinus

Pseudoscarus spinus Kner, 1868b: 31, 354 (Kandavu, Fiji).

Scarus formosus (*non* Valenciennes) — Goeden, 1974: 13 (Heron I.).

Scarus spinus — Randall and Choat, 1980: 401 (Capricorn Group, Wistari Reef).

Moderately common in outer reef slope habitats. According to Randall and Choat (1980) the fish previously misidentified by Schultz (1958) as *S. formosus* is *S. spinus*. Widespread in the tropical W. Pacific.

Scarus tricolor

Scarus tricolor Bleeker, 1849a: 59 (Batavia, Java).

Scarus lepidus (*non* Jenyns) — Choat and Robertson, 1975: 264 (Heron I.).

Rare. Occurs in outer reef slope habitats. According to J.H. Choat (personal communication, 1980) *S. lepidus* recorded from Heron Island (Choat and Robertson, 1975) is a misidentification of *S. tricolor* (previously incorrectly included in the synonymy of *S. lepidus* Jenyns by Schultz, 1958). Widespread in the tropical Indo-W. Pacific.

Scarus sp. 1

Scarus lunula (non Snyder) — Goeden, 1974: 13 (Heron I.).

Moderately common in outer reef slope habitats. According to J.H. Choat (personal communication, 1980) *S. lunula* identified from Heron Island (Goeden, 1974) is a misidentification and represents a new species to be described by Choat and Randall.

OPISTOGNATHIDAE . . . JAWFISHES

Opistognathus eximius

Merogymnus eximius Ogilby, 1908a: 18 (off Moreton Bay, Queensland).

Tandya latitabunda (non Whitley) — Whitley, 1937a: 21 (based on *Tandya* sp. Roughly, 1936: pl. 49, fig. 1 — Capricorn Group).

Merogymnus eximius — Marshall, 1964: 326 (Capricorn Group).

Uncommon. Occurs in outer reef slope habitats in deeper water (20-30 m). Whitley's (1937a) record of *Tandya latitabunda* from the Capricorn Group is based on a photograph in Roughly (1936) which is identified (p. 272) as *Tandya* sp. W.F. Smith-Vaniz, who is revising the family, has examined Roughley's photograph and reidentified it as *O. eximius*. Known only from Queensland.

Opistognathus* sp.

Moderately common in outer reef slope habitats in 1-15 m. Numerous specimens in the Australian Museum collected at Heron Island and One Tree Island represent a new species of *Opistognathus* which is being described by W.F. Smith-Vaniz.

MUGILOIDIDAE . . . GRUBFISHES

Parapercis cephalopunctata*

Percis cephalopunctata Seale, 1903: 124 (Guam).

Rare. A single specimen (AMS I. 20209-003) from the reef crest of One Tree Island, represents the first record of this species from the Capricorn-Bunker Group. Distributed in the tropical Indo-W. Pacific. A new record for Australia (specimens from Western Australia recorded as *P. cephalopunctata* by Allen (1976) are misidentifications of *P.* sp. 1 — G. Stroud, personal communication 1980).

Parapercis cylindrica

Sciaena cylindrica Bloch, 1792: 42 (East Indies).

Parapercis cylindrica — Whitley, 1926: 233 (North West I.).

Very common on sandy bottoms in shallow lagoon and protected reef slope habitats in 1-20 m. Widespread in the tropical W. Pacific.

Parapercis hexophthalma

Percis hexophthalma Cuvier (in Cuvier and Valenciennes), 1829a: 271 (Massuah, Red Sea).

Chilias hexophthalma — Fowler, 1957: 69 (Lady Musgrave I.).

Parapercis hexophthalma — Woodland and Slack-Smith, 1963: 46 (Heron I.).

Parapercis polyophthalmus — Russell *et al.*, 1974: 213 (One Tree I.).

Moderately common in shallow lagoons and protected reef slope habitats, in 2-20 m. *P. polyophthalma* Cuvier is a sexual color form of *P. hexophthalma* (Marshall, 1950). Widespread in the tropical Indo-W. Pacific.

Parapercis sp. 1*

Uncommon. This species has previously been known as *P. clathrata*, an invalid name (G. Stroud, personal communication 1980). Four specimens (AMS I. 20547-016) from One Tree Island represent the first record of this undescribed species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Parapercis sp. 2*

A single specimen (AMS. 21966-001) of this undescribed species collected in the lagoon at One Tree Island, will be described by G. Stroud. Other specimens in the Australian Museum are from Lizard Island, New Guinea and New Britain.

Parapercis sp. 3*

A single specimen (AMS E.2963) of this undescribed species trawled by the *Endeavour* in 70 fathoms (127 m) N.E. of North Reef will be described by G. Stroud. A deeper water species, other specimens in the Australian and Queensland Museums collected off the coasts of southern Queensland and northern New South Wales.

CREEDIIDAE . . . TOMMYFISHES

Limnichthys fasciatus

Limnichthys fasciatus Waite, 1904: 178 (Lord Howe I.).

Limnichthys fasciatus — Woodland and Slack-Smith, 1963: 46 (Heron I.).

Common in lagoons, living in the sand. Widespread in the subtropical W. Pacific and E. Indian Ocean (Randall, 1982).

Squamicroedia obtusa

Squamicroedia obtusa Rendahl, 1921: 20 (Cape Jaubert, N.W. Australia).

Squamicroedia obtusa — Whitley, 1956: 260 (Heron I.).

Apparently rare. The specimen (AMS IB.3546) from Heron Island upon which Whitley's (1956) record is based could not be located, so its correct identification remains unverified. *S. obtusa* is known from N.W. Australia and the Swain Reefs, Queensland (Nelson, 1978).

URANOSCOPIDAE . . . STARGAZERS

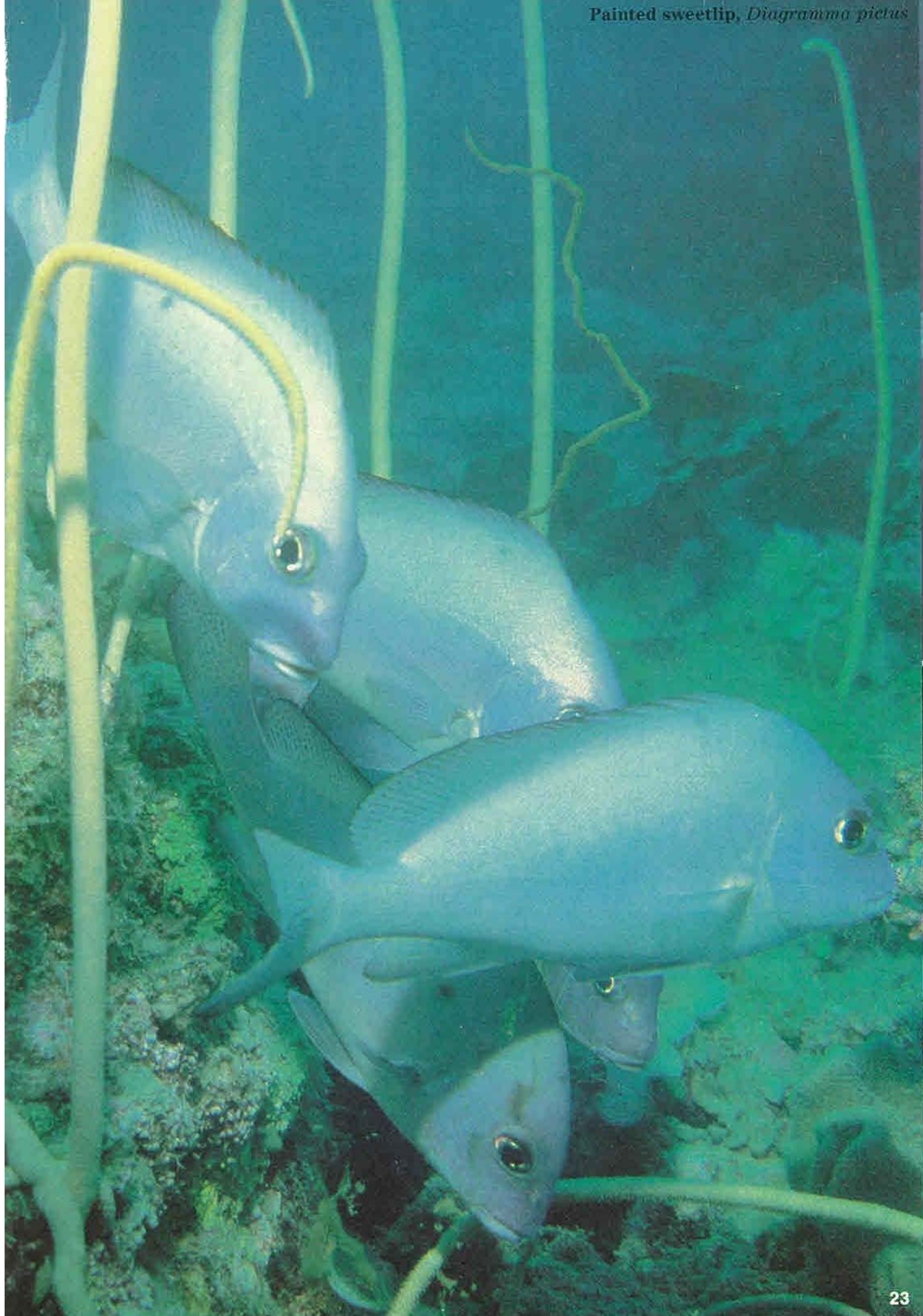
Ichthyoscopus sp*

Two specimens of *Ichthyoscopus* from Heron Island (AMS IB.7782, QM I.11908) and a specimen from One Tree Island (AMS I.20212-015) appear to be undescribed. Both lack a barbel on the chin, have weak dorsal spines, and are uniformly pale in alcohol, with the first dorsal fin black.

Uranoscopus terraereginae

Uranoscopus terrae-reginae Ogilby, 1910a: 131 (off North Reef).

Rare. A deeper water species trawled offshore. One of Ogilby's syntypes (QM I.1574) was trawled by the *Endeavour* in 70 fathoms (127 m) off North Reef. Mees (1960) has suggested *U. terraereginae* may prove to be a junior synonym of *U. cognatus* Cantor. Known from Queensland and northern New South Wales.





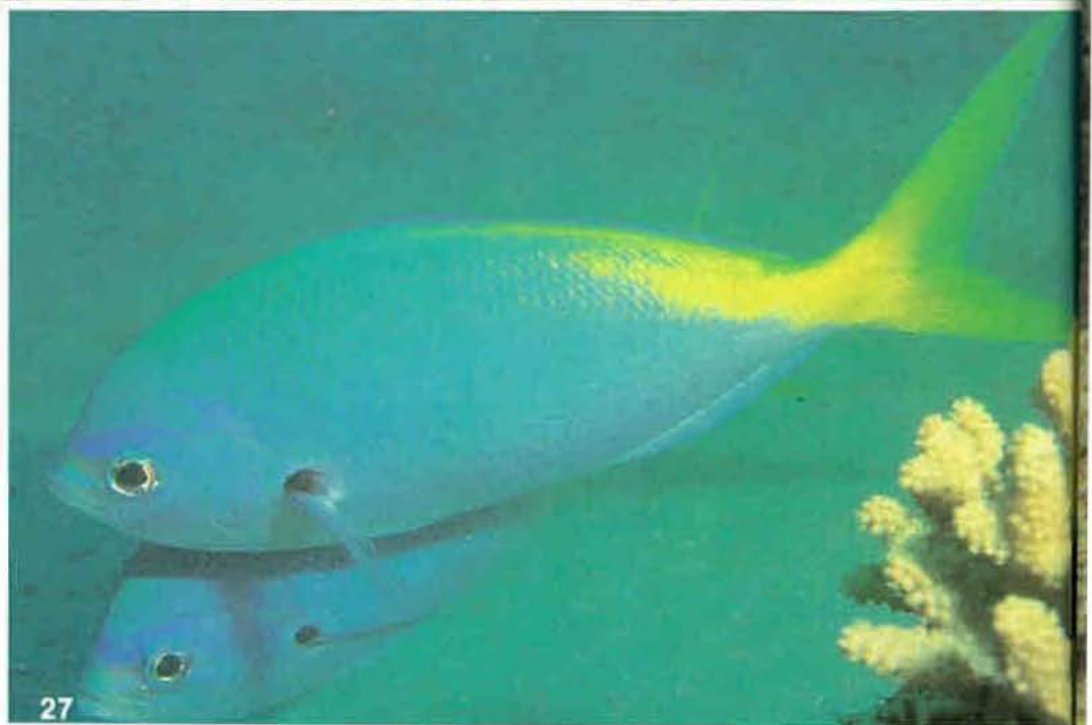
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24. Cardinal fish, *Apogon* sp.
 25. Short-finned batfish, *Platax novemaculatus*
 26. Gold-banded fusilier (nocturnal colour pattern), *Pterocaesio*
 27. Red-bellied fusilier, *Caesio cuning*



28

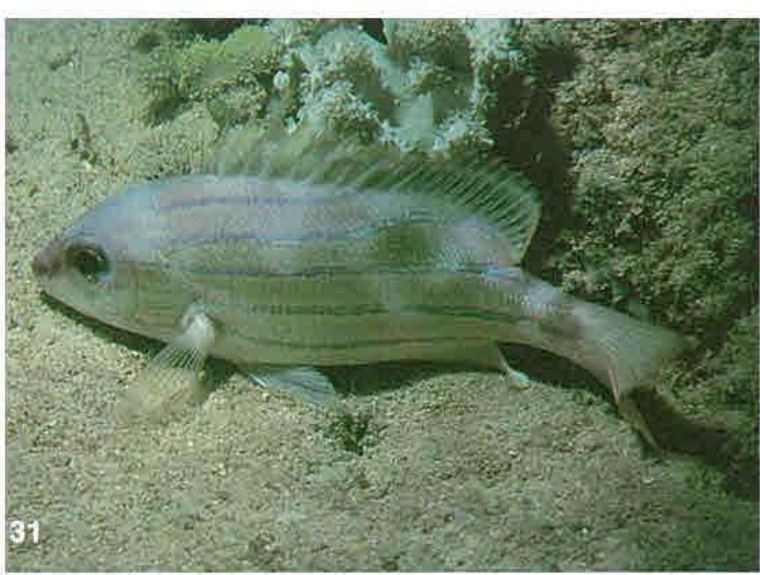


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28. **Stripeys**, *Lutjanus carponotatus*
29. **Devil scorpionfish**, *Scorpaenopsis diabolus*
30. **Butterfly cod**, *Pterois volitans*



- 31. Five-lined snapper (nocturnal colour pattern), *Lutjanus quinquilineatus*
- 32. Barrier Reef anemonefish, *Aniprion akindynos*
- 33. Blue puller, *Chromis triptoralis*
- 34. Hawkfish, *Cirrhitichthys falco*
- 35. Large-scaled leatherjacket, *Cantheschenia grandisquamis*

BLENNIIDAE . . . BLENNIES

Aspidontus taeniatus

Aspidontus taeniatus Quoy and Gaimard, 1834: 719 (Guam).

Petroscirtes taeniatus — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Aspidontus taeniatus — Goeden, 1974: 14 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats, Mimics the cleanerfish *Labroides dimidiatus*. Widespread in the tropical W. Pacific.

Aspidontus dussumieri

Blennechis dussumieri Valenciennes in Cuvier and Valenciennes, 1836: 282 (Réunion).

Aspidontus dussumieri — Smith-Vaniz, 1976: 64 (One Tree I.).

Rare. Seen occasionally in lagoons. Widespread in the tropical Indo-W. Pacific.

Atrosalarias fuscus

Salarias fuscus Rüppell, 1835-38 (1835): 135 (Massowah, Red Sea).

Salarias fuscus — McCulloch and McNeill, 1918: 12 (Masthead I.).

Atrosalarias fuscus — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Cirripectes alboapicalis

Salarias alboapicalis Ogilby, 1899: 742 (Lord Howe I.).

? *Cirripectes filamentosus* (non Alleyne and Macleay) — Allen *et al.*, 1976: 425 (One Tree I.).

Rare. A single specimen (AMS I.17445-040) collected at One Tree Island. *C. filamentosus* recorded from One Tree Island by Allen *et al* (1976) probably refers to this species. Previously known only from Lord Howe Island and Norfolk Island. A new record for Australia.

Cirripectes castaneus

Salarias castaneus Valenciennes in Cuvier and Valenciennes, 1836: 324 (Mauritius).

Moderately common. Several specimens in the Australian Museum collected at One Tree Island, represent the first record of this species from the Capricorn-Bunker Group. This species previously has been recorded from Australia as *C. sebae*, a junior synonym (J.T. Williams, personal communication 1982). Widespread in the tropical Indo-W. Pacific.

*Cirripectes polyzonus**

Salarias (Cirripectes) polyzona Bleeker, 1868: 278 (Amboina).

Moderately common. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Cirripectes stigmaticus*

Cirripectes stigmaticus Strasburg and Schultz, 1953: 132 (Rongerik Atoll; Bikini Atoll; Samoa; Gilbert Is; Marshall Is.).

Moderately common. Several specimens in the Australian Museum collection at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

***Cirripectes* sp.**

? *Cirripectes variolosus* (non Valenciennes) — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Very common in lagoons and out reef slope habitats. This new species is being described by J.T. Williams. Known also from Queensland, New Guinea and the Loyalty Islands (J.T. Williams, personal communication 1981).

Crossosalarius macrospilus*

Crossosalarius macrospilus Smith-Vaniz and Springer, 1971: 21 (Solomon Is; Tonga; S. China Sea; Ryukyu Is; Endeavour Reef, Queensland).

Rare. A single specimen (AMS I.19338-005) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Ecsenius bicolor

Salarias bicolor Day, 1888: 798 (Burma).

? *Ecsenius frontalis* (non Valenciennes) — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Ecsenius bicolor — Springer, 1968b: 7 (One Tree I.).

Common in lagoons and outer reef slope habitats in 2-15 m. Widespread in the tropical Indo-W. Pacific.

Ecsenius mandibularis

Ecsenius mandibularis McCulloch, 1923b: 122 (Masthead I.).

Very common in lagoons and outer reef slope habitats in 1-15 m. Known only from the Great Barrier Reef.

Ecsenius yaeyamensis

Salarias yaeyamensis Aoyagi, 1954: 213 (in part — Ryukyu Is.).

Ecsenius yaeyamensis — Springer, 1971: 33 (One Tree I., Capricorn Group).

Moderately common co-occurring with *E. mandibularis*. Widespread in the tropical W. Pacific.

Enchelyurus kraussi

Petroscirtes kraussi Klunzinger, 1871: 497 (Kosseir, Egypt).

Enchelyurus flavipes (non Peters) — Whitley, 1954: 23 (Lady Musgrave I.).

Enchelyurus kraussi — Haysom, 1957: 143 (Heron I.).

Common in reef flat and outer reef slope habitats amongst coral. Widespread in the tropical Indo-W. Pacific.

Entomacrodus thalassinus

Alticus thalassinus Jordan and Seale, 1906: 425 (Samoa).

Entomacrodus thalassinus — Springer, 1972b: 13 (One Tree I.).

Rare? Recorded from One Tree Island by Springer (1972b) on the basis of a single specimen in the U.S. National Museum. Widespread in the tropical W. Pacific.

Exallias brevis

Salarias brevis Kner, 1868a: 42 (Samoa).

Exallias brevis — Goeden, 1974: 14 (Heron I.).

Rare? Reported by Goeden (1974) but no specimens could be found in either the Australian or Queensland Museums, and record of this species remains unconfirmed. Widespread in the tropical Indo-W. Pacific.

Istiblennius chrysospilos

Salarius chrysospilos Bleeker, 1857a: 66 (Ambon).

Salarius chrysospilos — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Moderately common in outer reef slope habitats in 2-10 m. This species has sometimes been called *I. coronatus*. Widespread in the tropical W. Pacific.

Istiblennius dussumieri

Salarius dussumieri Valenciennes in Cuvier and Valenciennes, 1836: 310 (Malabar).

Istiblennius dussumieri — Whitley, 1926: 235 (North West I.).

Rare? Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Istiblennius meleagris

Salarius meleagris Valenciennes in Cuvier and Valenciennes, 1836: 332 ('Terre de Van-Dieman')

Salarius meleagris — Whitley, 1926: 235 (North West I.).

Uncommon. Occurs in outer reef slope habitats. Known only from tropical and subtropical Australia.

Istiblennius edentulus

Blennius edentulus Bloch and Schneider, 1801: 172 (Society Is.).

Salarius rivulatus — McCulloch and McNeill, 1918: 16 (Masthead I.).

Salarius edentulus — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Common in reef flat and outer reef slope habitats in 1-5 m. Widespread in the tropical Indo-W. Pacific.

Meiacanthus atrodorsalis

Petroscirtes atrodorsalis Günther, 1877: 198 (Samoa).

Meiacanthus atrodorsalis atrodorsalis — Smith-Vaniz, 1976: 103 (One Tree I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 2-15 m. Widespread in the tropical W. Pacific.

Meiacanthus lineatus

Petroscirtes lineatus De Vis, 1884: 698 (Murray I.).

Petroscirtes lineatus — Whitley, 1926: 235 (North West I.).

Petroscirtes grammistes (non Valenciennes) — Whitley, 1928a: 229 (North West I.; Masthead I.).

Meiacanthus grammistes (non Valenciennes) — Springer, 1968b: 9 (One Tree I.).

Meiacanthus lineatus — Springer and Smith-Vaniz, 1972: 23 (One Tree I.).

Common in lagoons and outer reef slope habitats in 1-15 m. This species has been confused with *Petroscirtes fallax* Smith-Vaniz with which it co-occurs and also with *M. grammistes*, a species not occurring in the southern part of the Great Barrier Reef. Known only from the Great Barrier Reef and Sulu Archipelago.

Nannosalarias nativitatus

Blennius nativitatus Regan, 1909a: 404 (Christmas I.).

Nannosalarias nativitatus — Smith-Vaniz and Springer, 1971: 33 (One Tree I.).

Moderately common in reef crest and outer reef slope habitats in 1-15 m. Widespread in the tropical W. Pacific.

Omobranchus germaini

Petroscirtes germaini Sauvage, 1883: 158 (New Caledonia).

Graviceps alexanderi — Whitley, 1954: 28 (Masthead I.).

Omobranchus germaini — Springer and Gomon, 1975: 43, 44 (One Tree I., Heron I.).

Common. Occurs in reef flat and outer reef slope habitats. Widespread in the tropical W. Pacific and E. Indian Ocean.

Omobranchus rotundiceps

Petroscirtes rotundiceps Macleay, 1882: 9 (Port Jackson, New South Wales).

Petroscirtes rotundiceps — Whitley, 1926: 234 (North West I.).

Graviceps angelus Whitley, 1959: 320 (Heron I.).

Omobranchus rotundiceps rotundiceps Springer and Gomon, 1975: 68 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific and E. Indian Ocean (Nicobar Is.).

Parenchelyurus hepburni

Enchelyurus hepburni Snyder, 1908: 110 (Okinawa).

Enchelyurus careuleopunctatus — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Parenchylurus hepburni — Springer, 1972a: 12 (One Tree I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Petroscirtes fallax

Petroscirtes (*Dasson*) *fallax* Smith-Vaniz, 1976: 42 (Great Barrier Reef — One Tree I, Fairfax Reef, Masthead I; New South Wales).

? *Petroscirtes temmincki* (non Bleeker) — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15 m. This species

previously been confused with *Meiacanthus lineatus* De Vis with which it co-occurs and is a Batesian mimic of (Springer and Smith-Vaniz, 1972). Known only from eastern Australia.

Petroscirtes lupus

Salarius lupus De Vis, 1886: 58 (Moreton Bay, Queensland).

Petroscirtes (Dasson) lupus — Smith-Vaniz, 1976: 52 (One Tree I.).

Uncommon. Occurs in lagoons and associated with floating clumps of weed. Known only from eastern Australia, New Caledonia and Lord Howe Island.

Petroscirtes mitratus

Petroscirtes mitratus Rüppell, 1828-31 (1830): 111 (Red Sea).

Petroscirtes mitratus — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Petroscirtes (Petroscirtes) mitratus — Smith-Vaniz, 1976: 36 (One Tree I.).

Uncommon. Occurs in lagoons. Widespread in the tropical Indo-W. Pacific.

Petroscirtes variabilis

Petroscirtes variabilis Cantor, 1850: 1182 (Sea of Penang; Singapore).

Petroscirtes eretes — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Petroscirtes viperidens — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Dasson variabilis — Russell *et al.*, 1974: 213 (One Tree I.).

Petroscirtes variabilis — Talbot *et al.*, 1978: 428 (One Tree I.).

Uncommon. Occurs in lagoons. Widespread in the tropical W. Pacific and N.E. Indian Ocean.

Petroscirtes xestus

Petroscirtes xestus Jordan and Seale, 1906: 433 (Pago Pago, Samoa).

Petroscirtes (Dasson) xestus — Smith-Vaniz, 1976: 37 (One Tree I.).

Rare? Occurs in lagoons. Widespread in the tropical Indo-W. Pacific.

Parablennius intermedius

Blennius intermedius Ogilby, 1915b: 127 (Darnley I., Queensland).

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

Pictiblennius intermedius — Bath, 1977: 205 (Masthead I.).

Uncommon. Occurs in lagoons associated with weed. Known only from southern Queensland.

Plagiotremus laudandus

Pescadorichthys (Musgravius) laudandus Whitley, 1961a: 63 (New Caledonia).

Plagiotremus laudandus — Allen *et al.*, 1976: 426 (One Tree I.).

Plagiotremus (Musgravius) laudandus — Smith-Vaniz, 1976: 130 (One Tree I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 1-15 m. Mimics *Meiacanthus atrodorsalis* (Springer and Smith-Vaniz, 1972). Widespread in the tropical Indo-W. Pacific.

Plagiotremus rhynorhynchos

Petroskirtes rhynorhynchos Bleeker, 1852a: 273 (Ceram).

Runula rhynorhynchos — Goeden, 1974: 14 (Heron I.).

Plagiotremus (Runula) rhynorhynchos — Smith-Vaniz, 1976: 136 (One Tree I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Plagiotremus tapeinosoma

Petroskirtes tapeinosoma Bleeker, 1857a: 64 (Amboina).

Petroscirtes tapeinosoma — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Runula taepinosoma? — Goeden, 1974: 14 (Heron I.).

Plagiotremus tapeinosoma — Russell *et al.*, 1976: 418 (One Tree I.).

Plagiotremus (Runula) tapeinosoma — Smith-Vaniz, 1976: 144 (Heron I., One Tree I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Salarias fasciatus

Blennius fasciatus Bloch, 1786: 110 (E. Indies).

Salarias fasciatus — McCulloch and McNeill, 1918: 12 (Masthead I.).

Common in lagoons and reef flat habitats. Widespread in the tropical Indo-W. Pacific.

Salarias guttatus?

Salarias guttatus Valenciennes *in* Cuvier and Valenciennes, 1836: 308 (Vanicolo).

Salarias irroratus — Talbot *et al.*, 1978: 428 (One Tree I.).

Rare? Reported from the lagoon at One Tree Island on the basis of an unconfirmed sight record (Talbot *et al.*, 1978). Widespread in the tropical W. Pacific.

Salarias sinuosus

Salarias sinuosus Snyder, 1908: 109 (Ryukyu Is.).

Salarias crenulatus — McCulloch, 1923b: 124 (Masthead I.).

Salarias crenulatus pallidus — Whitley, 1926: 235 (North West I.).

Salarias sinuosus — Woodland and Slack-Smith, 1963: 47 (Heron I.).

Moderately common in outer reef slope habitats in 1-5 m. Widespread in the tropical Indo-W. Pacific.

Salarias sp*

Two specimens (AMS I.20463-007) collected at One Tree Island possibly represent an undescribed species. The specimens are characterised by having a prominent pair of dark ocelli on either side beneath the lower jaw, and a series of elongate white markings on the anterior half of the body.

Stanulus talboti

Stanulus talboti Springer, 1968a: 119 (One Tree I.).

Rare? Occurs in outer reef slope habitats in 5-10 m. Known only from One Tree Island and Lord Howe Island.

Xiphasia setifer

Xiphasia setifer Swainson, 1839: 259 (Vizagapatam).

Xiphasia setifer — Smith-Vaniz, 1976: 72 (Heron I.).

Rare. Habitat unknown. Widespread in the tropical Indo-W. Pacific.

CONGROGADIDAE . . . EEL BLENNIES

Blennodesmus scapularis

Blennodesmus scapularis Günther, 1871: 667 (Port Mackay, Queensland).

Blennodesmus scapularis — McCulloch, 1915a: 55 (Masthead I.).

Haliophus malayanus (non Weber) — Woodland and Slack-Smith, 1963: 48 (Heron I.).

Common in lagoons and outer reef slope habitats amongst coral. Known from the Great Barrier Reef and N.W. Australia.

Congrogadus subducens

Machaerium subducens Richardson, 1843b: 175 (Port Essington, N. Australia).

Congrogadus subducens — Whitley, 1926: 236 (North West I.).

Common in lagoons and outer reef slope habitats amongst coral. Widespread in the tropical W. Pacific and E. Indian Ocean.

TRIPTERYGIIDAE . . . TRIPLE FINS

Helcogramma sp.*

Common in outer reef slope habitats in 1-10 m. A number of specimens in the Australian Museum collected at One Tree Island represent this undescribed species of *Helcogramma*. The species is characterised by having a moderately long snout (equal to eye diameter), 10-11 third dorsal rays and 32 lateral line scales.

Norfolkia squamiceps

Gillias squamiceps McCulloch and Waite, 1916: 449 (Lord Howe I; Norfolk I.).

Norfolkia squamiceps — Whitley, 1956: 261 (Heron I.).

Common in outer reef slope habitats in 1-10 m. Known from the southern Great Barrier Reef, Lord Howe Island and Norfolk Island.

Norfolkia thomasi

Norfolkia thomasi Whitley, 1964a: 192 (Heron I; Swain Reefs).

Common in outer reef slope habitats in 1-30 m. Known only from the Great Barrier Reef.

*Vauclusella annulata**

Tripterygium annulatum Ramsay and Ogilby, 1888: 1021 (Vaucluse, Port Jackson, New South Wales).

Moderately common in lagoons and outer reef slope habitats in 1-15 m. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known only from S. Queensland and New South Wales.

Vauclusella atrogulare

Tripterygion atrogulare Günther, 1873a: 267 (Bowen, Queensland).

Tripterygion atrogulare — Whitley, 1926: 235 (North West I.).

Vauclusella atrogulare — Woodland and Slack-Smith, 1963: 49 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15 m. Known only from the Great Barrier Reef.

Vaclusella* sp. 1

Common in outer reef slope habitats in 1-15 m. A number of specimens in the Australian Museum collected at One Tree Island represent this undescribed species of *Vaclusella*. The species is characterised by having a short lateral line extending to just behind middle of second dorsal fin, suborbital pores uniserial, body elongate, a single mandibular pore behind tip of lower jaw, and males with dark or black caudal fin and some black on cheeks and operculum ventrally.

Vaclusella* sp. 2

Common in outer reef slope habitats in 1-15 m. A number of specimens in the Australian Museum collected at One Tree Island represent this new species of *Vaclusella*. The species is characterised by having a lateral line which extends to near end of second dorsal fin, suborbital pores distinctly biserial, body only moderately elongate, 3-4 mandibular pores behind tip of lower jaw, and males with posterior half of body black.

Genus A. *acanthops*

Vaclusella acanthops Whitley, 1964b: 15 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-5m. This species, previously assigned to the genus *Vaclusella* appears to belong to a new genus according to Dr D.F. Hoese who has examined Australian tripterygiids.

Genus A sp. 1*

Moderately common in outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent a new species belonging to genus A. The new species is close to *acanthops* but differs in having a broad and flattened orbital tentacle (versus slender and pointed), anal II, 19-20 (versus II, 21-22), and body with spots forming diffuse bands (versus body with scattered spots).

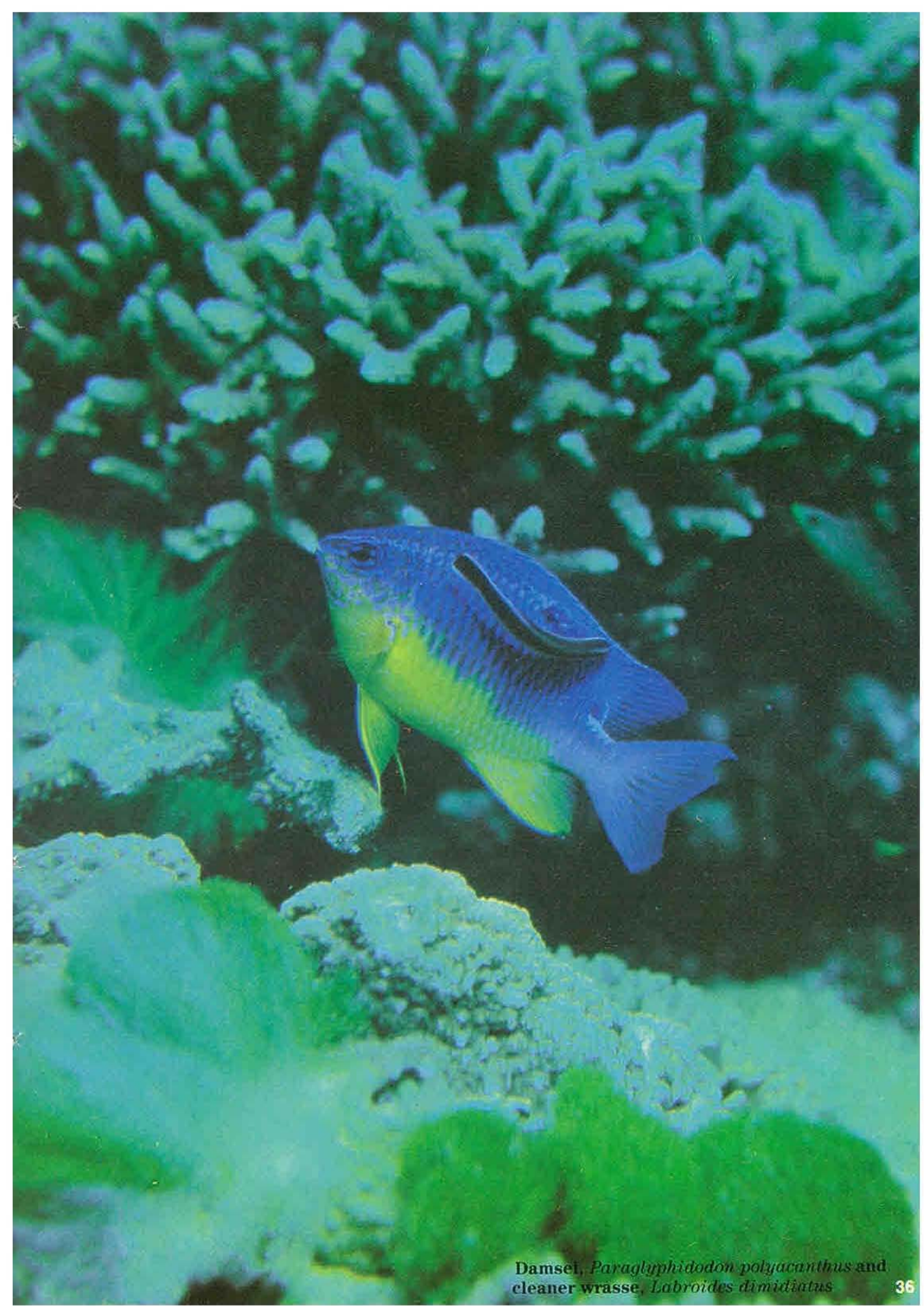
Genus B sp. 1*

Uncommon. Occurs in outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent a new genus and species according to Dr D.F. Hoese. Genus B is similar to *Vaclusella* but lacks branched pectoral fin rays. The new species is small (<20mm SL), possesses 7-8 spots at base of anal fin, anal fin I, 16-18, and has a short snout.

CLINIDAE . . . WEED FISHES

Springeratus* sp.

Two specimens (AMS IB.4031, I.19338-001) collected from One Tree Island represent a new species of *Springeratus* which is being described by L.A. Maugé and Y.B. Plessis in a forthcoming paper. Known also from New Caledonia.



Damselfish, *Paraglyphidodon polyacanthus* and cleaner wrasse, *Labroides dimidiatus*



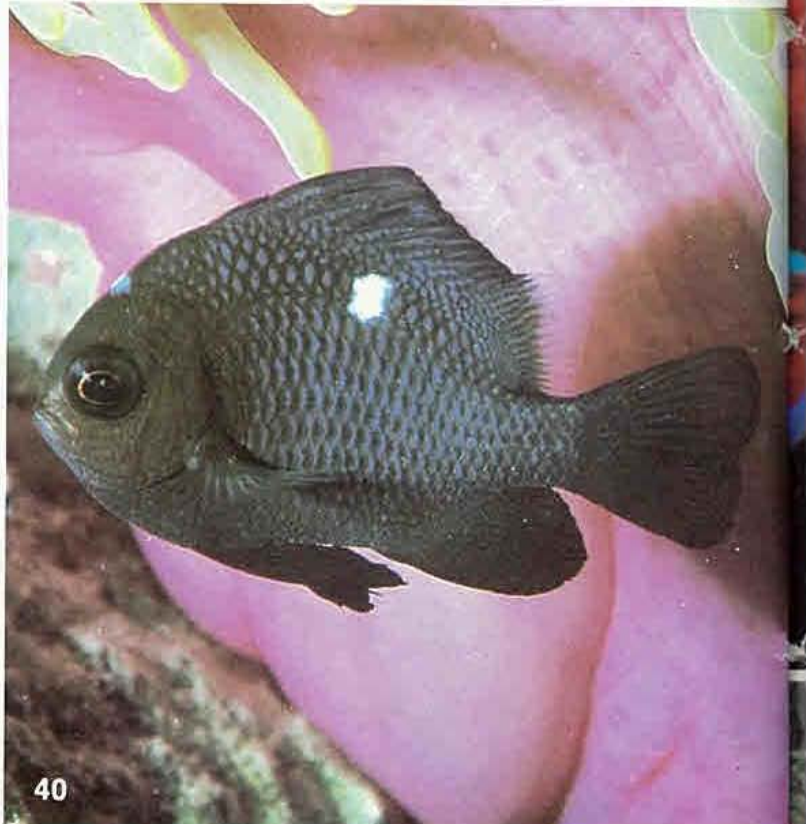
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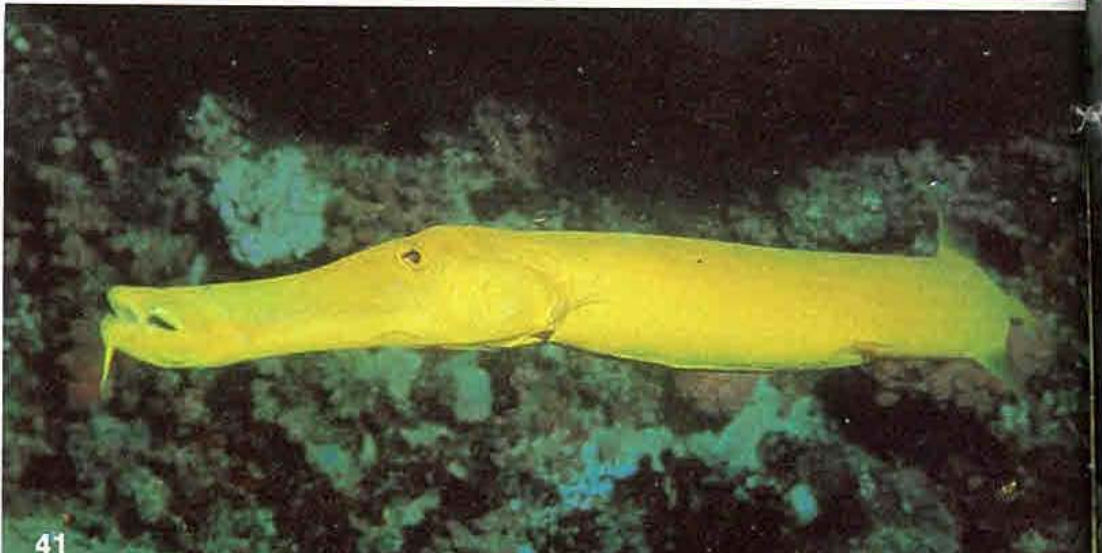


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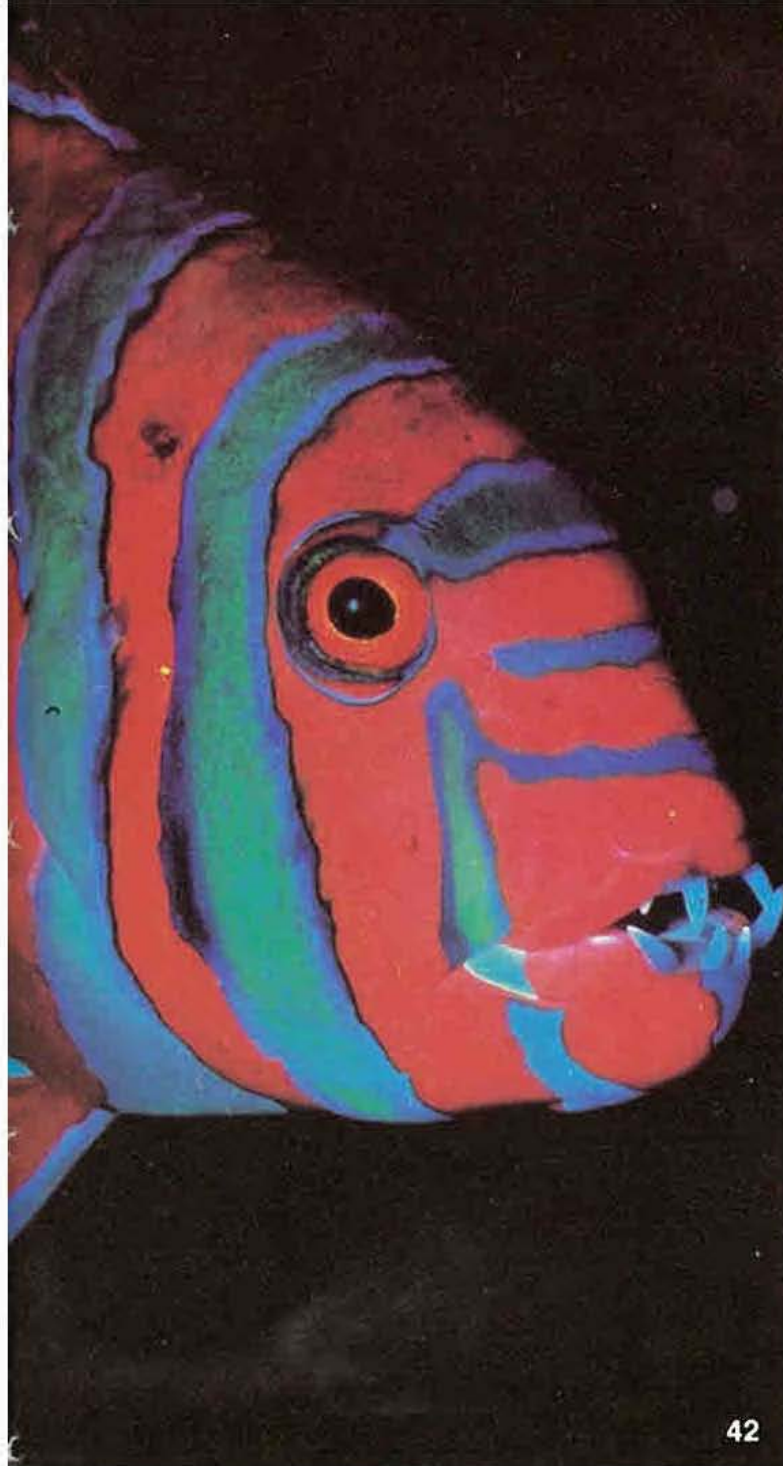


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- 37. Black-spotted box-fish, *Ostracion cubicus*
- 38. Blenny, *Ecsenuis mandibularis*
- 39. Talbot's damselfish, *Chrysiptera talboti*
- 40. Three-spot damselfish, *Dascyllus trimaculatus*
- 41. Trumpetfish (yellow colour variety), *Aulostomus chinensis*



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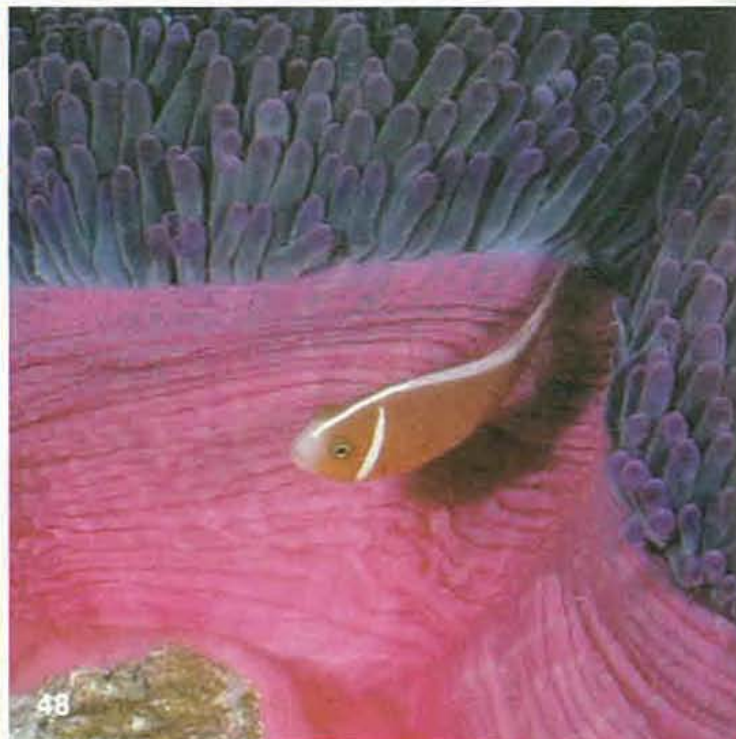
- 42. Harlequin tuskfish, *Choerodon fasciatus*
- 43. Parrotfish (asleep in cocoon), *Scarus gibbus*
- 44. Hawkfish, *Paracirrhites forsteri*
- 45. Blue tang, *Paracanthurus hepatus*



46



47



48

- 46. Moon wrasse, *Thalassoma lunare*
- 47. Schooling — evasive tactics?
- 48. Pink anemonefish, *Amphiprion perideraion*
- 49. Surgeonfish, *Acanthurus dussumieri*



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SCHINDLERIIDAE . . . FLOATERS

*Schindleria praematurus**

Hemirhamphus praematurus Schindler, 1930: 79 (Hawaiian Is.).

A single larval specimen (AMS I.15386-008) taken at the surface by night light fishing 1 mile W. of Heron Island, represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

CALLIONYMIDAE . . . DRAGONETS

Callionymus limiceps

Callionymus limiceps Ogilby, 1908b: 35 (off Hummocky I., Queensland).

Callionymus limiceps — McCulloch, 1926: 203 (Bunker Group, 17-20 miles N.W. of Lady Elliott I.).

Uncommon? Two specimens (AMS E.1444-5) trawled in deeper off-reef waters (18 fathoms-33m) by the *Endeavour*. Known only from southern Queensland.

Callionymus japonicus?

Callionymus japonicus Houttuyn, 1882: 311 (Japan).

Uncommon? Three small specimens in 2 lots (AMS I.20212-005, I. 20213-008) collected at One Tree Island are tentatively identified as *C. japonicus*. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Diplogrammus goramensis

Callionymus goramensis Bleeker, 1858: 214 (Goram I.).

Dicallionymus goramensis — Woodland and Slack-Smith, 1963: 49 (Heron I.).

Uncommon. Occurs in lagoons on sandy bottoms. Widespread in the tropical W. Pacific.

*Synchiropus ocellatus**

Callionymus ocellatus Pallas, 1770: 25 (Amboina).

Moderately common in lagoons on sandy bottoms. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Synchiropus splendidus

Callionymus splendidus Herre, 1927: 416 (Philippines).

Synchiropus (Synchiropus) splendidus — Fricke, 1981: 129 (One Tree I.).

Uncommon. Occurs in lagoons in shallow water. Widespread in the tropical W. Pacific.

GOBIIDAE . . . GOBIES

The family Gobiidae is the largest group of tropical Indo-W. Pacific shore fishes and most genera are in urgent need of revision. Dr. D.F. Hoese (Australian Museum) and Ms. H.K. Larson (Northern Territory Museum) are currently revising a number of genera, and new species preceded by DFH or HKL refer to their respective identification numbering systems.

Amblyeleotris diagonalis*

Amblyeleotris diagonalis Polunin and Lubbock, 1979: 245 (Great Barrier Reef; Sri Lanka; Andaman Sea; Madagascar).

Rare. Occurs in lagoons, commensal with snapping shrimps. A single specimen (BPBM 14501) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Amblyeleotris exilis*

Cryptocentrops exilis Smith, 1958b: 153 (Zanzibar).

Rare. Occurs in lagoons, commensal with snapping shrimps. Several specimens (AMS unregistered; BPBM 14499) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Amblyeleotris fasciata*

Zebreleotris fasciata Herre, 1953b: 191 (Marshall Is.).

Rare. Occurs in lagoons, commensal with snapping shrimps. A single specimen (BPBM 14508) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Amblyeleotris guttata*

Pteroculiops guttatus Fowler, 1938: 133 (Philippines).

Moderately common in lagoons, commensal with snapping shrimps. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Amblyeleotris ogasawarensis*

Amblyeleotris ogasawarensis Yanagisawa, 1978: 303 (Ogasawara Is., Japan).

Rare. Several specimens in the Australian and B.P. Bishop Museums collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from the Great Barrier and Japan. A new record for Australia.

Amblyeleotris steinitzi*

Cryptocentrus steinitzi Klausowitz, 1974: 70 (Red Sea; Palau; Marshall Is.).

Moderately common in lagoons, commensal with snapping shrimps. A number of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Amblyeleotris* sp. 1

Rare. Occurs in lagoons, commensal with snapping shrimps. A single specimen (BPBM 14500) of this undescribed species (DFH *Amblyeleotris* sp. 3) collected at One Tree Island is characterised by lacking vertical bars, and having 3 large and several smaller brownish spots on the upper part of the body. Known only from One Tree Island.

Amblyeleotris* sp. 2

Rare. Occurs in lagoons, commensal with snapping shrimps. Four specimens (BPBM 14480) collected at One Tree Island represent the first record of this undescribed species (DFH *Amblyeleotris* sp. 4) from the Capricorn-Bunker Group. The species is characterised by having a distinctive small black spot behind the eye. Known from the Great Barrier Reef, New Guinea and the Solomon Islands.

Amblygobius bynoensis

Gobius bynoensis Richardson, 1844-48 (1844): 1 (N.W. Australia).

Amblygobius bynoensis — Woodland and Slack-Smith, 1963: 53 (Heron I.).

Rare. Occurs in lagoons. Known only from tropical Australia.

Amblygobius nocturnus*

Yabotichthys nocturnus Herre, 1945: 3 (Philippines).

Moderately common in lagoons. Several specimens in the Australian Museum collected at One Tree Island and Lady Musgrave Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Amblygobius phalaena

Gobius phalaena Valenciennes in Cuvier and Valenciennes, 1837: 92 (Vanikoro, Santa Cruz Is.).

Amblygobius phalaena — McCulloch and Ogilby 1919: 253 (Masthead I.).

Amblygobius albimaculatus (*non* Rüppell) — Woodland and Slack-Smith, 1963: 53 (Heron I.).

Very common in lagoons associated with sand and coral rubble. This species previously has been misidentified as *A. albimaculatus* Rüppell, a Red Sea and W. Indian Ocean endemic (D.F. Hoese, personal communication 1980). Widespread in the tropical Indo-W. Pacific.

Amblygobius rainfordi

Koumansetta rainfordi Whitley, 1940b: 426 (Hayman I., Queensland).

Amblygobius rainfordi — Burgess and Axelrod, 1976: pl. 389 (One Tree I.).

Common in lagoons, under ledges. Known only from the Great Barrier Reef and Philippines.

Asterropteryx semipunctatus

Asterropteryx semipunctatus Rüppell, 1828-31 (1928): 138 (Massowah, Red Sea).

Asterropteryx semipunctatus — Whitley, 1926: 234 (North West I.).

Very common in lagoons, associated with sand and coral rubble. Widespread in the tropical Indo-W. Pacific.

Asterropteryx* sp.

Rare. Occurs in lagoons. A single specimen (AMS I.19111-011) collected at One Tree Island represents an undescribed species (DFH *Asterropteryx* sp. 3) characterised by having a dark bar beneath the eye and a black spot anterobasally on the first dorsal fin.

Bathygobius fuscus

Gobius fuscus Rüppell, 1828-31 (1828): 137 (Red Sea).

Bathygobius fuscus — McCulloch and Ogilby, 1919: 231 (Masthead I.).

?*Quisquilius macrophthalmus* (non Weber) — Woodland and Slack-Smith, 1963: 53 (Heron I.).

Moderately common in lagoons. *Quisquilius macrophthalmus* recorded by Woodland and Slack-Smith (1963) as 'common' at Heron Island probably was a misidentification of *B. fuscus* (D.F. Hoese, personal communication 1981). Widespread in the tropical Indo-W. Pacific.

Bathygobius cocosensis*

Gobius cocosensis Bleeker, 1854d: 47 (Cocos Is.).

Moderately common in lagoons. Several specimens in the Australian Museum collected along with *B. fuscus* at Heron Island and One Tree Island are identifiable as *B. cocosensis*. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Cabillus lacertops*

Cabillus lacertops Smith 1959a: 207 (Pinda, Mozambique).

Rare. Two specimens (AMS I.20063-017; I.20206-024) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from the Great Barrier Reef and W. Indian Ocean. A new record for Australia.

Cabillus tongarevae*

Glossogobius tongarevae Fowler, 1927: 27 (Tongareva I.).

Uncommon. Occurs in lagoons. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Cabillus* sp.

Rare. Two specimens (AMS I.20205-038, I.20211-029) collected at One Tree Island represent an undescribed species (DFH *Cabillus* sp. 4). The species is characterised by having 19 pectoral fin rays, 23-25 lateral line scales, and no laterosensory canal tube over the operculum.

***Callogobius hasseltii*?**

Eleotris hasseltii Bleeker, 1851a: 253 (Anjer, Java).

Callogobius hasseltii — McCulloch and Ogilby, 1919: 217 (Masthead I.).

Moderately common in lagoons. The genus *Callogobius* is in urgent need of revision and specimens identified as *C. hasseltii* from the Capricorn-Bunker Group may prove to represent an undescribed species (DFH *C.* sp. 5). Widespread in the tropical Indo-W. Pacific.

Callogobius* sp. 1

Rare. Occurs in lagoons. Two specimens (AMS I.15633-044, I.20569-001) collected at One Tree Island appear to be an undescribed species (DFH

Callogobius sp. 3). The species is characterised by having ctenoid scales posteriorly, 11 dorsal rays, 9 anal rays, fins with white spots, and postorbital and accessory laterosensory canals present. Known from One Tree Island and Lord Howe Island.

Callogobius* sp. 2

Common in lagoons. A number of specimens in the Australian Museum collected at One Tree Island appear to be an undescribed species (DFH *Callogobius* sp. 6). The species is characterised by its relatively deep body and dark coloration. Known from One Tree Island and Lord Howe Island.

Callogobius* sp. 3

Rare. A single specimen (AMS I.15617-043) collected at One Tree Island appears to be an undescribed species (DFH *Callogobius* sp. 7). The species is characterised by its relatively deep body, 9-10 dorsal rays, 9 anal rays, and separate pelvic fins.

Cryptocentroides cristatus*

Gobius cristatus Macleay, 1881: 610 (Port Jackson, New South Wales).

Rare? Several specimens (AMS IB.3913) collected at Heron Island represent the first record of this species from the Capricorn-Bunker Group. Known from Queensland and New South Wales.

Cryptocentrus cinctus*

Smilogobius cinctus Herre, 1936a: 12 (Singapore).

Uncommon. Occurs in lagoons, commensal with snapping shrimps. Several specimens in the Australian and B.P. Bishop Museums collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific and E. Indian Ocean. A new record for Australia.

Cryptocentrus fasciatus*

Gobiosoma fasciatum Playfair in Playfair and Günther, 1866: 72 (Zanzibar).

Common in lagoons, commensal with snapping shrimps. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from the Great Barrier Reef and Indian Ocean. A new record for Australia.

Ctenogobiops feroculus*

Ctenogobiops feroculus Lubbock and Polunin, 1977: 509 (Red Sea; Seychelles; New Caledonia).

Rare. A single specimen (AMS I.20210-023) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Ctenogobiops pomastictus*

Ctenogobiops pomastictus Lubbock and Polunin, 1977: 506 (Lizard I., Great Barrier Reef).

?*Ctenogobiops maculosus* (*non* Fourmanoir) — Russell *et al.*, 1974: 213 (One Tree I.).

Ctenogobius maculosus (*non* Fourmanoir) — Burgess and Axelord, 1976: pl. 390 (One Tree I.).

Common in lagoons, associated with sand and rubble. This species has previously been confused with *C. maculosus* Fourmanoir. Known only from the Great Barrier Reef.

Ctenogobiops* sp.

Moderately common in lagoons. Several specimens in the Australian Museum collected at One Tree Island apparently represent an undescribed species (DFH *Ctenogobiops* sp. 4) closely related to *C. maculosus* Fourmanoir (D.F. Hoese, personal communication 1980).

Discordipinna griessingeri

Discordipinna griessingeri Hoese and Fourmanoir, 1978: 21 (Red Sea; St. Brandon's Shoals, W. Indian Ocean; Cocos Keeling Is; Great Barrier Reef — One Tree I; Fiji; Society Is; Marquesas Is.).

Rare. Occurs in lagoons and outer reef slope habitats associated with coral rubble and sand, in 5-27m. Widespread in the tropical Indo-W. Pacific.

Eviota afelei

Eviota afelei Jordan and Seale, 1906: 387 (Pago Pago, Samoa).

Eviota afelei — Lachner and Karnella, 1980: 96 (Heron I., One Tree I.).

Very common in lagoons amongst coral. Widespread in the tropical W. Pacific.

Eviota distigma

Eviota distigma Jordan and Seale, 1906: 389 (Pago Pago, Samoa).

Eviota distigma — Fowler, 1957: 71 (Lady Musgrave I.).

Common in lagoons amongst coral. Widespread in the tropical Indo-W. Pacific.

Eviota fasciola

Eviota fasciola Karnella and Lachner, 1981: 268 (One Tree I., Heron I.).

Common amongst coral. Widespread in the tropical Indo-W. Pacific.

Eviota infulata

Eviotops infulatus Smith, 1956: 826 (Seychelles).

Eviota infulata — Lachner and Karnella, 1980: 99 (One Tree I.).

Uncommon. Occurs in lagoons amongst coral. Widespread in the tropical Indo-W. Pacific.

Eviota melasma

Eviota melasma Lachner and Karnella, 1980: 27 (Great Barrier Reef — One Tree I.).

Uncommon. Occurs in lagoons amongst coral. Widespread in the tropical Indo-W. Pacific.

Eviota monostigma

Eviota monostigma Fourmanoir, 1971: 498 (New Caledonia).

Eviota monostigma — Lachner and Karnella, 1980: 40 (Heron I., One Tree I.).

Common in lagoons amongst coral. Known only from the Great Barrier Reef and New Caledonia.

Eviota nebulosa

Eviota nebulosa Smith, 1958: 141 (Pinda, Mozambique).

Eviota nebulosa — Lachner and Karnella, 1980: 35 (One Tree I.).

Uncommon. Occurs in lagoons amongst coral. Widespread in the tropical Indo-W. Pacific.

Eviota prasites*

Eviota prasites Jordan and Seale, 1906: 387 (Pago Pago, Samoa).

Rare? Occurs in lagoons. Two specimens collected at One Tree Island (AMS I.18276-004) and Lady Musgrave Island (AMS I.21495-046) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Eviota queenslandica

Eviota viridis queenslandica Whitley, 1932a: 301 (Batt Reef, Queensland).

Eviota queenslandica — Lachner and Karnella, 1980: 86 (Heron I., One Tree I., Lady Musgrave I.).

Very common in lagoons amongst coral. This species has been confused by some authors with *E. viridis* Waite (= *E. prasina* (Klunzinger) — Lachner and Karnella, 1980), and previous records of *viridis* from the Capricorn-Bunker Group can be referred to *E. variola*. Widespread in the tropical Indo-W. Pacific.

Eviota sebreei*

Eviota sebreei Jordan and Seale 1906: 390 (Apia, Samoa).

Rare? A single specimen (AMS I.21495-037) collected at Lady Musgrave Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Eviota variola

Eviota variola Lachner and Karnella, 1980: 76 (Great Barrier Reef — One Tree I., Heron I.).

Eviota viridis (non Waite) — McCulloch, 1913: 387 (Masthead I.).

Very common in lagoon and reef flat habitats. This species is close to *E. queenslandica*, and previous records of *E. viridis* may also apply to *E. variola*. Known only from the southern Great Barrier Reef.

Eviota zebrina*

Eviota zebrina Lachner and Karnella, 1978: 15 (Seychelles).

Rare? A single specimen (AMS unregistered) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Known from tropical Australia and the Indian Ocean.

Eviota* sp. 1

Common in lagoons. Several specimens in the Australian Museum collected at One Tree Island represent a new species (DFH *Eviota* sp. 4) to be described by E.A. Lachner and S.J. Jewet. This species is characterised by having a black anal fin and otherwise very pale body. Widespread in the tropical Indo-W. Pacific (S.J. Jewet, personal communication 1981).

Eviota* sp. 2

Uncommon. Several specimens (AMS I.15641-047, I.20213-023) collected at One Tree Island represent a new species (DFH *Eviota* sp. 12) to be described by E.A. Lachner and S.J. Jewet. This species is plain brownish. Widespread in the tropical W. Pacific (S.J. Jewet, personal communication 1981).

Eviota* sp. 3

Uncommon. Several specimens (AMS I.17684-001, I.19111-010) collected at One Tree Island represent a new species (DFH *Eviota* sp. 13) to be described by E.A. Lachner and S.J. Jewet. This species is characterised by having a series of dark spots at the base of the caudal fin. Known only from the Great Barrier Reef (S.J. Jewet, personal communication 1981).

Exyrias puntang*

Gobius puntang Bleeker, 1852d: 486 (Ceram).

Moderately common in lagoons, under ledges. Record of *E. puntang* is based on underwater observations of this species at One Tree Island by Dr. D.F. Hoese. Widespread in the tropical Indo-W. Pacific.

Favonigobius lateralis

Gobius lateralis Macleay, 1881: 602 (King George's Sound, W. Australia).

Ctenogobius (Aurigobius) auriga Whitley, 1959: 317 (Heron I.).

Uncommon. Occurs in lagoons and reef flat habitats. Widespread in the tropical Indo-W. Pacific.

Feia nympha

Feia nympha Smith, 1959a: 206 (Pinda, Mozambique).

Feia nympha — Lachner and McKinney, 1979: 11 (One Tree I.).

Rare? Occurs in lagoons. Widespread in the tropical Indo-W. Pacific.

Fusigobius neophytus*

Gobius neophytus Gunther, 1877: 174 (Guam; Samoa; Society Is.).

Very common in lagoons. Numerous specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Fusigobius* sp. 1

Common in lagoons and outer reef slope habitats in 1-15m. Numerous specimens in the Australian Museum collected at One Tree Island represent an undescribed species (DFH *Fusigobius* sp. 2). The species is characterised by lacking spots on the first dorsal fin, having a brownish shoulder spot, and 17-18 pectoral rays.

Fusigobius* sp. 2

Rare? Occurs in lagoons. A single specimen (AMS I.20208-015) collected at One Tree Island represents an undescribed species (DFH *Fusigobius* sp. 3). This species is characterised by having a relatively high first dorsal fin and a distinctive shoulder spot.

Fusigobius* sp. 3

Rare? Occurs in outer reef slope habitats in 6-12 m. A single specimen (AMS I.15486-040) collected at Heron Island represents an undescribed species (DFH *Fusigobius* sp. 7). This species is characterised by having 2 spots on the first dorsal fin, a prominent shoulder spot, and 18-19 pectoral fin rays.

Gnatholepis inconsequens

Gnatholepis inconsequens Whitley, 1958: 44 (Heron I.).

Common in lagoons. Known only from the Great Barrier Reef.

Gobiodon ceramensis

Gobius ceramensis Bleeker, 1852d: 704 (Ceram).

Gobiodon ceramensis — Whitley, 1928b: 302 (Lady Musgrave I.).

Gobiodon quinquestrigatus ceramensis — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Moderately common in lagoons, commensal with living coral (Pocilloporidae). Widespread in the tropical W. Pacific.

Gobiodon citrinus

Gobius citrinus Rüppell, 1835-38 (1838): 139, pl. 32, fig. 4 (Massaua, Red Sea).

Gobiodon citrinus — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Moderately common, commensal with living coral clumps (*Acropora*). Widespread in the tropical Indo-W. Pacific.

Gobiodon heterospilos*

Gobiodon heterospilos Bleeker, 1856e: 409 (Kajeli, Borneo).

Uncommon. Occurs in lagoons, commensal with staghorn *Acropora*. Several specimens collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Gobiodon histrio

Gobius histrio Valenciennes in Cuvier and Valenciennes, 1837: 132 (Tonga).

Gobiodon histrio — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Gobiodon verticalis — McCulloch and Ogilby, 1919: 210 (North West I.).

Gobiodon rivulatus (*non* Rüppell) — Sawada and Arai, 1973: 597 (One Tree I., Heron I.).

Common in lagoons, commensal with *Acropora* coral. Specimens of *G. rivulatus* from Heron Island and One Tree Island recorded by Sawada and Arai (1973) are misidentifications of *G. histrio*. Widespread in the tropical Indo-W. Pacific.

Gobiodon okinawae*

Gobiodon okinawae Sawada *et al.*, 1972: 57 (Ryukyu Is.).

Rare? Several specimens in the Australian Museum collected at One Tree Island and Fairfax Island represent the first record of this species from the Capricorn-Bunker Group. Previously known only from the Ryukyu Islands. A new record for Australia.

Gobiodon quinquestrigatus

Gobius quinquestrigatus Valenciennes *in* Cuvier and Valenciennes, 1837: 134 (Tonga).

Gobiodon quinquestrigatus — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Common in lagoons, commensal with *Acropora* coral. Widespread in the tropical W. Pacific.

***Istigobius* sp. 1**

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

Common in lagoons. This undescribed species (DFH *Istigobius* sp. 5) has previously been misidentified as *Acentrogobius ornatus*. Widespread in the tropical Indo-W. Pacific.

Istigobius* sp. 2

Rare? A single specimen (AMS unregistered) collected at One Tree Island possibly represents an undescribed species (DFH *Istigobius* sp. 7).

Luposicya lupus*

Luposicya lupus Smith, 1959a: 217 (Pinda, Mozambique).

Rare. Commensal with sponges. Several specimens (AMS unregistered) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Previously known only from the W. Indian Ocean. A new record for Australia.

Macrodontogobius wilburi*

Macrodontogobius wilburi Heere, 1936b: 279 (Pelew Is.).

Rare. A single specimen (AMS I.20208-013) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Nemateleotris magnifica*

Nemateleotris magnificus Fowler, 1938: 131 (Buka Buka I., Celebes).

Rare. Occurs in outer reef slope habitats in moderately deep water (> 20 m). Record of this species is based on underwater observation by Dr D.F. Hoese at One Tree Island. Widespread in the tropical Indo-W. Pacific.

Oplopomops atherinoides*

Gobius atherinoides Peters, 1855: 445 (Mozambique).

Rare? Five specimens (AMS I.21376-019) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Paragobiodon echinocephalus

Gobius echinocephalus Rüppell, 1828-35 (1928): 136 (Massaua, Red Sea).

Paragobiodon echinocephala — Ogilby, 1913b: 92 (North West I., Masthead I.).

Moderately common, commensal with living coral clumps (*Stylophora*).
Widespread in the tropical Indo-W. Pacific.

Paragobiodon lacunicolus

Ruppellia lacunicola Kendall and Goldsborough, 1911: 318 (Tuamotu Is.).

Paragobiodon lacunicola — Lassig, 1976: 284 (Heron I.).

Uncommon. Commensal with living coral clumps (*Pocillopora*). Several specimens in the Australian Museum collected One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Paragobiodon melanosomus*

Gobius melanosoma Bleeker, 1852b: 703 (Ceram).

Moderately common, commensal with living coral clumps (*Seriatopora*). Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Paragobiodon modestus*

Gobiopterus modestus Regan, 1908: 242 (Chagos Archipelago).

Moderately common, commensal with living coral clumps (*Pocillopora*). Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Paragobiodon xanthosomus

Gobius xanthosoma Bleeker, 1852b: 703 (Ceram).

Paragobiodon xanthosoma — Lassig, 1976: 284 (Heron I.).

Common, commensal with living coral clumps (*Seriatopora*). Widespread in the tropical W. Pacific.

Paragobiodon* sp.

Uncommon. Occurs in lagoons, commensal with *Pocillopora*. Several specimens (AMS unregistered) from Heron Island and One Tree Island possibly represent an undescribed species of *Paragobiodon* related to *P. modestus*. Males are pale coloured and females are almost transparent with vertical dark bands on the body.

Parioglossus taeniatus

Parioglossus taeniatus Regan, 1912: 302 (Aldabra I.).

Herreolus formosus (non Smith) — Whitley, 1954: 23 (Heron I.).

Rare. A single specimen (AMS IB.2958) collected at Heron Island and identified as *Herreolus formosus* Smith by Whitley (1954) is *P. taeniatus*. Widespread in the tropical Indo-W. Pacific.

Pleurosicya* sp. 1

Uncommon. Commensal with *Acropora*. Several specimens in the Australian Museum collected at One Tree Island and Fairfax Island represent an undescribed species (HKL *Pleurosicya* sp. 1).

Pleurosicya* sp. 2

Common, commensal with soft corals and sponges. Numerous specimens in the Australian Museum collected at Heron Island, Wistari Reef and One Tree Island represent an undescribed species (HKL *Pleurosicya* sp. 7).

Pleurosicya* sp. 3

Rare. Commensal with gorgonians. A single specimen (AMS unregistered) collected in 24 m at Wistari Reef represents an undescribed species (HKL *Pleurosicya* sp. 20).

Priolepis cinctus*

Gobiomorphus cinctus Regan, 1908: 240 (Indian Ocean).

Rare? A single specimen (AMS I.20211-027) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Priolepis inhaca*

Gobius inhaca Smith, 1949: 103 (Inhaca, Mozambique).

Uncommon. Six specimens (AMS I.21376-013) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Previously known only from the W. Indian Ocean. A new record for Australia.

Priolepis nuchifasciatus

Gobius nuchifasciatus Günther, 1873a: 266 (Bowen, Queensland).

Zonogobius semidoliatus (*non Valenciennes*) — McCulloch, 1912: 606 (Masthead I.).

Priolepis nuchifasciatus — Whitley, 1932a: 304 (Masthead I.).

Zonogobius nuchifasciatus — Woodland and Slack-Smith, 1963: 53 (Heron I.).

Moderately common in lagoons. Distributed throughout tropical-subtropical Australia.

Priolepis semidoliatus

Gobius semidoliatus Valenciennes *in* Cuvier and Valenciennes, 1837: 51 (Vanicolo).

Uncommon. Occurs in lagoons. Widespread in the tropical W. Pacific.

Psilogobius mainlandi

Psilogobius mainlandi Baldwin, 1972: 126 (Oahu, Hawaiian Is.).

Psilogobius mainlandi (*sic*) — Randall, 1982: 205 (One Tree I.).

Uncommon. Occurs in lagoons. Five specimens (AMS I.20578-002) collected at One Tree Island. Previously known only from Hawaii.

Ptereleotris evides

Encaerura evides Jordan and Hubbs, 1925: 303 (Japan).

Ptereleotris tricolor? — Goeden, 1974: 16 (Heron I.).

Common in outer reef slope habitats. Previously recorded by Goeden (1974) as *P. tricolor* Smith, a junior synonym of *P. evides* (D.F. Hoese, personal communication 1981). Widespread in the tropical Indo-W. Pacific.

Ptereleotris heteropterus*

Eleotris heteropterus Bleeker, 1855e: 422 (Borneo).

Uncommon. Occurs in outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Known from Borneo and the Great Barrier Reef. A new record for Australia.

Ptereleotris microlepis

Gobius microlepis Bleeker, 1849c: 35 (Madura Straits).

Ptereleotris microlepis — Woodland and Slack-Smith, 1963: 54 (Heron I.).

Common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Ptereleotris zebra*

Pogonoculius zebra Fowler, 1938: 134 (Luzon, Philippines).

Common in outer reef slope habitats. Numerous specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Ptereleotris* sp.

Moderately common in outer reef slope habitats. A number of specimens in the Australian Museum collected at One Tree Island represent an undescribed species of *Ptereleotris*. The species is characterised by a single dorsal fin, lunate caudal fin, and an oblique bar from eye to corner of mouth. Widespread in tropical Indo-W. Pacific.

Signigobius biocellatus*

Signigobius biocellatus Hoese and Allen, 1977: 200 (Great Barrier Reef; New Guinea; Solomon Is., Palau; Philippines).

Rare. Seen occasionally in lagoons. Record of this species is based on underwater observation by the author at One Tree Island. Not previously recorded from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Silhouetta* sp.

Rare. Occurs in lagoons, sand burrowing. Recorded on the basis of a sight observation by D.F. Hoese at One Tree Island.

Tenacigobius* sp. 1

Rare? Commensal with gorgonians (*Isis hippurus*). A single specimen

(AMS unregistered) collected at One Tree Island represents an undescribed species (HKL *Tenacigobius* sp. 2).

Tenacigobius* sp. 2

Rare? Commensal with gorgonian seawhips (*Junceela*). A single specimen (AMS unregistered) collected at One Tree Island represents an undescribed species (HKL *Tenacigobius* sp. 6).

Trimma necopinnis

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

Common in lagoons. Known from tropical Australia and the Indian Ocean.

Trimma tevegae*

Trimma tevegae Cohen and Davis, 1969: 321 (Rabaul, New Britain).

Rare. Occurs in outer reef slope habitats in deeper water. A single specimen (AMS I.2026-014) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Trimma* sp. 1

Common in lagoons and outer reef slope habitats in 2-30m. Several specimens (AMS I.15641-054, I.15682-061) collected at One Tree Island possibly represent an undescribed species (DFH *Trimma* sp. 2) but may prove identical with *T. okinawae*. The species is characterised by its lack of predorsal scales and red body color with whitish spots.

Trimma* sp. 2

Common in outer reef slope habitats in deeper water (20-30m). Several specimens in the Australian Museum collected at One Tree Island represent an undescribed species (DFH *Trimma* sp. 4). The species is characterised by its uniform red body colour.

Trimma* sp. 3

Rare? Occurs in outer reef slope habitats in deeper water. A single specimen (AMS unregistered) collected at One Tree Island represents an undescribed species of *Trimma*. The species is characterised by its almost translucent body with yellow spots.

Valenciennesa longipinnis

Eleotris longipinnis Lay and Bennett, 1839: 64 (Loo Choo, China).

Valenciennesa longipinnis — McCulloch and Ogilby, 1919: 263 (Masthead I.).

Eleotroides longipinnis — Woodland and Slack-Smith, 1963: 54 (Heron I.).

Common in lagoons, associated with coral rubble and sand. Widespread in the tropical W. Pacific.

Valenciennesa muralis

Eleotris muralis Valenciennes in Cuvier and Valenciennes, 1837: 253 (Santa Cruz Is.).

Eleotroides muralis — Woodland and Slack-Smith, 1963: 54 (Heron I.).

Uncommon. Occurs in lagoons, associated with coral rubble and sand. Widespread in the tropical W. Pacific.

Valenciennesa puellaris*

Eleotroides puellaris Tomiyama in Tomiyama and Abe, 1956: 1136 (Japan).

Rare. Occurs in outer reef slope habitats in deeper water (20m). Specimens (AMS I.18801-002 and unregistered) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Valenciennesa strigatus*

Gobius strigatus Broussonet, 1782: 1 (Tahiti).

Uncommon. Occurs in lagoons and outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Valenciennesa* sp. 1

Rare? Occurs in lagoons. Two specimens collected at Heron Island (AMS I.19839-002) and One Tree Island (AMS I.18798-001) represent a new species of *Valenciennesa*. The species is characterised by having 2 blue-bordered red horizontal stripes on the head, and body with 2 blue-bordered reddish-orange stripes extending onto caudal peduncle. This species is being described by D.F. Hoese and H.K. Larson.

Valenciennesa* sp. 2

Uncommon. Occurs in outer reef slope habitats in 20-33m. Several specimens in the Australian Museum collected at Heron Island, Wistari Reef and One Tree Island represent a new species of *Valenciennesa*. The species is closely related to *V. puellaris* but has a higher dorsal ray count and lacks black on the first dorsal fin. This species is being described by D.F. Hoese and H.K. Larson.

Valenciennesa* sp. 3

Uncommon. Occurs in lagoons and outer reef slope habitats in 1-15m. Several specimens in the Australian Museum collected at Heron Island and One Tree Island represent a new species of *Valenciennesa*. The species is characterised by its distinctive coloration: an orange to black stripe from posterior margin of eye to base of caudal fin and a yellow stripe from beneath eye to caudal fin base, the two body stripes often interconnected by 4-6 narrow dusky or yellowish orange vertical bars.

Vanderhorstia* sp

Uncommon. Occurs in lagoons and outer reef slope habitats in 3-5m. Several specimens in the Australian Museum collected at One Tree Island represent an apparently undescribed species of *Vanderhorstia* or may be *V. ornitissima* (D.F. Hoese, personal communication 1981).

Yongeichthys criniger

Gobius criniger Valenciennes in Cuvier and Valenciennes, 1837: 82 (New Guinea).

Ctenogobius criniger — Woodland and Slack-Smith, 1963: 53 (Heron I.).

Yongeichthys criniger — Russell *et al.*, 1974: 213 (One Tree I.).

Uncommon. Occurs in lagoons, associated with sand and coral rubble. Widespread in the tropical Indo-W. Pacific.

Yongeichthys leftwichi*

Rhinogobius leftwichi Ogilby, 1910b: 24 (Great Sandy Strait, Queensland).

Rare. A single specimen (AMS IB.52215) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Known only from Queensland and New South Wales.

ELEOTRIDIDAE . . . GUDGEONS

Xenisthmus clara*

Heteroleotris clara Jordan and Seale, 1906: 392 (Pago Pago, Samoa).

Rare. A single specimen (AMS unregistered) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Xenisthmus sp.*

Rare. A single specimen (AMS unregistered) collected at One Tree Island represents an apparently undescribed species of *Xenisthmus*. The species is characterised by having only a very narrow black stripe along the body.

MICRODESMIDAE . . . WORMFISHES

Gunnellichthys monostigma*

Gunnellichthys monostigma Smith, 1958a: 127 (Pinda, Mozambique).

Uncommon. Five specimens (AMS I.15623-019) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific (Dawson, 1973).

Gunnellichthys pleurotaenia

Gunnellichthys pleurotaenia Bleeker, 1858a: 10 (off Menado, Celebes Sea).

Gunnellichthys pleurotaenia — Woodland and Slack-Smith, 1963: 49 (Heron I.).

Uncommon. Inhabits sand in lagoons and tide pools. Widespread in the tropical W. Pacific (Dawson, 1973).

Gunnellichthys viridescens*

Gunnellichthys viridescens Dawson, 1968: 61 (Seychelles; Maldive Is.).

Rare? A single specimen (AMS I.18256-001) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific (Dawson, 1973).

ACANTHURIDAE . . . SURGEONFISHES

Acanthurus bleekeri

Acanthurus bleekeri Günther, 1861: 335 (Java).

Acanthurus bleekeri — Burgess and Axelrod, 1976: pl. 153 (Wistari Reef).

Uncommon. Occurs in outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Acanthurus dussumieri

Acanthurus dussumieri Valenciennes in Cuvier and Valenciennes, 1835: 201 (Mauritius).

Teuthis grammoptilus — McCulloch, 1918: 92 (Masthead I.).

Acanthurus dussumieri — Woodland and Slack-Smith, 1963: 50 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Acanthurus nigricauda

Acanthurus gahm nigricauda Duncker and Mohr, 1929: 75 (South Seas).

Acanthurus gahm (non Forsskål) — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Rare. Occurs in outer reef slope habitats. Recorded as *A. gahm* by Woodland and Slack-Smith (1963) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. According to J.E. Randall (personal communication, 1981) *A. gahm* (Forsskål) is a junior synonym of *A. nigricans* (Linnaeus), a Red Sea endemic. Widespread in the tropical Indo-W. Pacific.

Acanthurus glaucopareius

Acanthurus glaucopareius Cuvier, 1829: 224 (Tahiti).

Acanthurus glaucopareus? — Goeden, 1974: 15 (Heron I.).

Rare. Occurs in outer reef slope habitats. Included as a queried record for Heron Island by Goeden (1974). A single specimen (AMS I.15469-001) collected at Heron Island confirms Goeden's record. Widespread in the tropical W. Pacific and E. Indian Ocean.

Acanthurus lineatus

Chaetodon lineatus Linnaeus, 1758: 274 (Indies).

Acanthurus lineatus — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Rare. Occurs in outer reef slope habitats. Woodland and Slack-Smith's (1963) record of this species is based on underwater observation and no specimens of *A. lineatus* have yet been collected from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Acanthurus mata

Chaetodon meta (sic) Cuvier, 1829: 224 (no locality given).

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

Uncommon. Occurs in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Acanthurus nigrofuscus

Chaetodon nigro-fuscus Forsskål, 1775: 64 (Red Sea).

Acanthurus nigrofuscus — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Common in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Acanthurus nigroris

Acanthurus nigroris Valenciennes in Cuvier and Valenciennes, 1835: 208 (Hawaiian Is.).

Teuthis nigroris — Whitley, 1958: 43 (Heron I.).

Rare. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific.

Acanthurus olivaceus

Acanthurus olivaceus Schneider in Bloch and Schneider, 1801: 214 (Tahiti).

Teuthis olivaceus — McCulloch, 1922: 243 (Capricorn Group).

Acanthurus olivaceus — Goeden, 1974: 15 (Heron I.).

Rare. Occurs in outer reef slope habitats. Widespread in the tropical W. Pacific and E. Indian Ocean.

Acanthurus pyroferus

Acanthurus pyroferus Kittlitz, 1834: 191 (Ulea I.; Caroline Is.).

Acanthurus pyroferus — Goeden, 1974: 15 (Heron I.).

Rare? Recorded from Heron Island by Goeden (1974) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums, and this record remains unconfirmed. Widespread in the tropical W. Pacific and E. Indian Ocean.

Acanthurus triostegus

Chaetodon triostegus Linnaeus, 1758: 274 (Indies).

Acanthurus triostegus — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Uncommon. Occurs (sometimes in large schools) in reef flat and outer reef slope habitats in 1-10m. Widespread in the tropical Indo-W. Pacific.

Acanthurus xanthopterus

Acanthurus xanthopterus Valenciennes in Cuvier and Valenciennes, 1835: 215 (Seychelles).

Acanthurus xanthopterus — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Ctenochaetus binotatus*

Ctenochaetus binotatus Randall, 1955: 164 (Philippines).

Rare. Occurs in outer reef slope habitats. Two specimens (AMS I.15685-052) collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific. A new record for Australia.

Ctenochaetus striatus*

Acanthurus striatus Quoy and Gaimard, 1824: 373 (Guam).

Moderately common in lagoons and outer reef slope habitats. A number

of specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia.

Ctenochaetus strigosus

Acanthurus strigosus Bennett, 1828: 41 (Hawaiian Is.).

Acanthurus strigosus — Woodland and Slack-Smith 1963: 50 (Heron I.).

Common in lagoons and outer reef slope habitats in 2-15m. Widespread in the tropical Indo-W. Pacific.

Naso annulatus

Priodon annulatus Quoy and Gaimard, 1824: 377 (Timor).

Naso annulatus — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats. Woodland and Slack-Smith (1963) state specimens were not examined: specimens collected at One Tree Island (AMS I.15679-051), Masthead Island (AMS I.11430), and Polmaise Reef (QM I.17423), however, confirm the record of *N. annulatus* from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Naso brevirostris

Naseus brevirostris Valenciennes in Cuvier and Valenciennes, 1835: 277 (Mauritius; Molluccas; New Guinea).

Naso brevirostris — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Moderately common in outer reef slope habitats in 2-10m. Widespread in the tropical Indo-W. Pacific.

Naso hexacanthus*

Priodon hexacanthus Bleeker, 1855c: 421 (Ambon).

Rare? A single specimen (AMS I.20572-008) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific. A new record for Australia (previously recorded from Lord Howe Island).

Naso lituratus

Acanthurus lituratus Bloch and Schneider, 1801: 216 (no locality given).

Naso litoralis (sic) — Goeden, 1974: 15 (Heron I.).

Rare? Previously reported by Goeden (1974). A single specimen (AMS I.15681-077) collected at One Tree Island confirms the record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Naso tuberosus

Naso tuberosus Lacepède, 1802a: 105 and 111 (Mauritius).

Naso tuberosis — Goeden, 1974: 15 (Heron I.).

Uncommon. Occurs in lagoons and outer reef slope habitats in 2-10m. Widespread in the tropical Indo-W. Pacific.

Naso unicornis

Chaetodon unicornis Forsskål, 1775: 63 (Red Sea).

Naso unicornis — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Moderately common in outer reef slope habitats in 2-10m. Widespread in the tropical Indo-W. Pacific.

Naso vlamingii*

Naseus vlamingii Valenciennes in Cuvier and Valenciennes, 1835: 293 (Moluccas).

Rare. A single specimen (AMS I.19111-009) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Paracanthurus hepatus

Teuthis hepatus Linnaeus, 1766: 507 (Amboina).

Acanthurus hepatus — Goeden, 1974: 15 (Heron I.).

Rare? Reported by Goeden (1974) but no specimens from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Zebrasoma scopas

Acanthurus scopas Cuvier, 1829: 224 (Neira, Banda).

?*Zebrasoma rostratum* (non Günther) — Woodland and Slack-Smith, 1963: 51 (Heron I.).

?*Zebrasoma flavescens* (non Bennett) — Goeden, 1974: 16 (Heron I.).

Zebrasoma scopas — Burgess and Axelrod, 1976: pl.155 (Heron I.).

Moderately common in outer reef slope habitats in 2-15m. *Zebrasoma rostratum* reported by Woodland and Slack-Smith (1963) and *Z. flavescens* recorded by Goeden (1974) probably are misidentifications of *Z. scopas*. Widespread in the tropical Indo-W. Pacific.

Zebrasoma veliferum

Acanthurus velifer Bloch, 1797: 106 (E. Indies).

Zebrasoma veliferum — Woodland and Slack-Smith, 1963: 51 (Heron I.).

Moderately common in lagoons and outer reef slope habitats in 2-10m. Widespread in the tropical Indo-W. Pacific.

ZANCLIDAE . . . MOORISH IDOLS

Zanclus cornutus

Zanclus cornutus Linnaeus, 1758: 273 (Indies).

Zanclus canescens — McCulloch, 1922: 243 (Capricorn Group).

Moderately common in lagoons and outer reef slope habitats in 3-25m. Widespread in the tropical Indo-W. Pacific.

SIGANIDAE

Siganus corallinus

Amphacanthus corallinus Valenciennes in Cuvier and Valenciennes, 1835: 139 (Seychelles; Java).

Siganus corallinus — Goeden, 1974: 15 (Heron I.).

Common in outer reef slope habitats, usually occurring in pairs. Widespread in the tropical Indo-W. Pacific.

Siganus doliatus

Siganus doliatus Cuvier in Guérin-Méneville, 1830: pl. 36, fig. 1 (Bourou; Vanicolo).

Siganus doliatus — Woodland and Slack-Smith, 1963: 49 (Heron I.).

Siganus virgatus (non Valenciennes) — Burgess and Axelrod, 1976: pl 160. (Heron I.).

Common in lagoon and outer reef slope habitats, usually occurring in pairs. Widespread in the tropical W. Pacific.

Siganus fuscescens

Centrogaster fuscescens Houttuyn, 1782: 33 (Japan).

Siganus capricornensis Whitley, 1926: 231 (North West I.).

Siganus oramin — Woodland and Slack-Smith, 1963: 50 (Heron I.).

Very common in lagoon and reef flat habitats, usually occurring in schools. Widespread in the tropical W. Pacific.

Siganus lineatus

Amphacanthus lineatus Valenciennes in Cuvier and Valenciennes, 1835: 95 (Vanicolo; New Guinea).

Siganus lineatus — Woodland and Slack-Smith, 1963: 50 (Heron I.).

Siganus guttatus (non Bloch) — Williams, 1979: 139 (Tryon I.).

Very common in lagoon and reef flat habitats, usually occurring in schools. Widespread in the tropical W. Pacific.

Siganus puellus

Amphacanthus puellus Schlegel, 1852: 39 (East Indies).

Siganus puellus — Goeden, 1974: 15 (Heron I.).

Common in outer reef slope habitats, usually occurring in pairs. Widespread in the tropical W. Pacific.

Siganus punctatus

Amphacanthus punctatus Schneider in Bloch and Schneider, 1801: 210 (Pacific Ocean).

Siganus punctatus — Marshall, 1941: 62 (Capricorn Group).

Siganus chrysopilos — Woodland and Slack-Smith, 1963: 49 (Heron I.).

Common in lagoon and outer reef slope habitats; juveniles and subadults usually in schools; adults solitary or in pairs. Widespread in the tropical W. Pacific.

Siganus spinus

Sparus spinus Linnaeus, 1758: 281 (East Indies).

Siganus spinus — Williams, 1979: 140 (Tryon I.).

Uncommon. Occurs in lagoons and outer reef slope habitats, usually in small schools of 3-8 individuals. Widespread in the tropical W. Pacific.

Siganus vulpinus

Amphacanthus vulpinus Schlegel and Müller, 1844: 12 (Moluccas; Celebes).

Siganus (Lo) vulpinus — Woodland and Slack-Smith, 1963: 50 (Heron I.).

Common in outer reef slope habitats, usually occurring in pairs. Widespread in the tropical W. Pacific.

TRICHIURIDAE . . . HAIRTAILS

Trichiurus lepturus*

Trichiurus lepturus (part) Linnaeus, 1758: 246 (S. Carolina, W. Atlantic).

Rare. A single juvenile specimen (AMS E.1920) collected N.E. of North Reef by the *Endeavour* represents the first record of this species from the Capricorn-Bunker Group. Cosmopolitan in all tropical and temperate seas (Tucker, 1956).

SCOMBRIDAE . . . TUNAS & SPANISH MACKERALS

Cybiosarda elegans*

Scomberomorus (Cybiosarda) elegans Whitley, 1935: 236 (Moreton Bay, Queensland).

Rare. A single specimen (not kept) sent by Dr K. Rhoede from Heron Island and identified by Dr D.F. Hoese, represents the first record of this species from the Capricorn-Bunker Group. Distributed in tropical and subtropical Australia.

Euthunnus affinis

Thynnus affinis Cantor, 1850: 1088 ('Sea of Penang').

Euthunnus alleteratus affinis — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Uncommon. Occurs in open waters, occasionally coming close to reefs and entering lagoons to feed on atherinids (B.B. Collette, personal communication 1981). Widespread in the tropical Indo-Pacific.

Grammatorcynus bicarinatus

Thunnus bicarinatus Quoy and Gaimard, 1824: 357 (Shark Bay, W. Australia).

Grammatorcynus bicarinatus — Coleman, 1964: 42 (Heron I.).

Rare. Recorded (photograph) by Coleman (1974) from Heron Island. Widespread in tropical and subtropical Australia.

Katsuwonus pelamis

Scomber pelamis Linnaeus, 1758: 297 ('In pelago inter Tropicos').

Katsuwonus pelamis — Blackburn and Serventy, 1981: 86, fig. 1 (Lady Elliott I.).

Uncommon? Blackburn and Serventy (1981) report this species from Lady Elliott Island, but state that it is unknown in inshore waters on the Great Barrier Reef north of Lady Elliott. Cosmopolitan in all tropical and subtropical seas.

Sarda australis

Pelamys australis Macleay, 1881: 557 (Port Jackson, New South Wales).

Sarda australis — Whitley, 1937b: 140 (Masthead I.).

Uncommon. Occurs in open waters. Restricted to the east coast of Australia (Southern Great Barrier Reef to New South Wales), Norfolk Island (Collette and Chao, 1975) and north-eastern New Zealand (James and Habib, 1979).

Scomberomorus commerson

Scomber commerson Lacepède, 1800: 598 (no locality given).

Cybiium commerson — Whitley, 1936: 36 (North West I.).

Scomberomorus commersoni — Woodland and Slack-Smith, 1963:52 (Heron I.).

Uncommon. Occurs in open waters. Marshall (1964) reports this fish occurs in immense numbers in the Bunkers and Capricorns during the months of May and June. Widespread in the tropical Indo-W. Pacific and E. Mediterranean.

Scomberomorus queenlandicus

Scomberomorus queenlandicus Munro, 1943: 82 (Cape Cleveland, Queensland).

Uncommon. A single specimen (not kept) sent by Dr K. Rhoede from Heron Island and identified by Dr D.F. Hoese, represents the first record of this species from the Capricorn-Bunker Group. Known from northern Australia (NSW, Qld, WA) and southern New Guinea (Collette and Russo, 1979).

Thunnus albacares*

Scomber albacares Bonnaterre, 1788: 140 (no locality given).

Rare. Occurs in open waters, occasionally coming close to reefs. A single specimen (AMS IA.7930) collected at Masthead Island represents the first record of this species from the Capricorn-Bunker Group. Circumtropical.

Thunnus tonggol

Thynnus tonggol Bleeker, 1851b: 356 (Batavia Sea).

Kishinoella tonggol — Woodland and Slack-Smith, 1963: 52 (Heron I.).

Uncommon. Occurs in open waters. Widespread in the tropical Indo-W. Pacific.

BOTHIDAE . . . LEFT HANDED FLOUNDERS

Arnoglossus fisoni

Arnoglossus fisoni Ogilby, 1898: 295 (Moreton Bay, Queensland).

Arnoglossus fisconi — Norman, 1926: 245 (Bunker Group, 20 miles N.E. Bustard Head).

Uncommon. A single specimen (now in British Museum) trawled by the *Endeavour* in deeper off-reef waters (20-21 fathoms - 36-38 m). Known from southern Queensland and the Bismarck Archipelago.

Arnoglossus intermedius*

Platophrys (Arnoglossus) intermedius Bleeker, 1866a: 47 (Celebes).

Uncommon? A single specimen (AMS I.20555-010) collected in the lagoon at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Bothus pantherinus

Rhombus pantherinus Rüppell, 1828-31 (1828): 121 (Mohila, Red Sea).

Bothus pantherinus — Woodland and Slack-Smith, 1963: 56 (Heron I.).

Uncommon. Recorded from Heron Island by Woodland and Slack-Smith (1963) but no specimens could be found in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Engyprosopon grandisquama*

Rhombus grandisquama Temminck and Schlegel, 1846: 183 (Japan).

Uncommon. Two specimens collected at North West Island (AMS IA.4508) and One Tree Island (AMS I. 20211-040) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Pseudorhombus jenynsii

Platessa jenynsii Bleeker, 1855a: 15 ('New Holland'-King George's Sound, W. Australia?).

Pseudorhombus multimaculatus — Norman, 1926: 239 (Bunker Group, 20 miles off Bustard Head).

Uncommon? A single specimen (AMS IA.3017) trawled by the *Endeavour* in deeper off-reef waters (20 fathoms-36m). Known from tropical and subtropical Australia.

Pseudorhombus spinosus

Pseudorhombus spinosus McCulloch, 1914: 129 (Abrolhos Is., W. Australia).

Pseudorhombus spinosus — Norman, 1926: 225 (Bunker Group, 25 miles off Bustard Head).

Moderately common in deeper off-reef waters (20 fathoms-36m). Several specimens in the Australian Museum trawled by the *Endeavour* near the Bunker Group. Known from Western Australia and southern Queensland.

SOLEIDAE . . . SOLES

Pardachirus hedleyi

Pardachirus hedleyi Ogilby, 1916b: 144 (Port Jackson, New South Wales).

Pardachirus hedleyi — Woodland and Slack-Smith, 1963: 56 (Heron I.).

Rare. Occurs on sandy bottoms in shallow water. Distributed in southern Queensland and New South Wales.

Pardachirus pavoninus

Achirus pavoninus Lacepède, 1802b: 658 (no locality given).

Pardachirus pavoninus — Woodland and Slack-Smith, 1963: 56 (Heron I.).

Moderately common on sandy bottoms in 3-40m. Widespread in the tropical W. Pacific.

CYNOGLOSSIDAE . . . TONGUEFISHES

Cynoglossus macrophthalmus

Cynoglossus macrophthalmus Norman, 1926: 306 (Bunker Group, 20 miles off Bustard Head).

Rare? a single specimen (Holotype—AMS E.1978) trawled by the *Endeavour* near the Bunker Group in deeper off-reef waters (20 fathoms-36m). Known only from southern Queensland.

Paraplagusia guttata

Plagusia guttata Macleay, 1878: 362 (Port Darwin, N. Australia).

Paraplagusia guttata — Norman, 1926: 300 (Bunker Group, 20 miles N.E. of Bustard Bay).

Uncommon? A single specimen (AMS E.1402) trawled by the *Endeavour* near the Bunker Group in deeper off-reef waters (20 fathoms-36m). Known from tropical Australia and New Guinea.

Paraplagusia unicolor

Plagusia unicolor Macleay, 1881: 138 (Port Jackson, New South Wales).

Paraplagusia unicolor — Norman, 1926: 298 (Bunker Group, 17-20 miles N.W. of Lady Elliott I.).

Uncommon? Several specimens in the Australian Museum trawled by the *Endeavour* near the Bunker Group in deeper off-reef waters (18 fathoms-33m). Known from southern Queensland and New South Wales.

TRIACANTHIDAE . . . TRIPOD FISHES

Tropidichthys angustifrons*

Triacanthus angustifrons Hollard, 1854: ('Mer des Indes').

Rare. Several specimens in the Australian Museum trawled by the *Endeavour* near the Bunker Group in deeper off-reef waters (19-21 fathoms-35-38m) represent the first record of this species from the Capricorn-Bunker Group. Known only from tropical and subtropical Australia.

BALISTIDAE . . . TRIGGERFISHES

Abalistes stellaris

Balistes stellaris Bloch and Schneider, 1801: 476 (Indian Ocean).

Abalistes stellaris — Woodland and Slack-Smith, 1963: 56 (Heron I.).

Rare. No specimens of *A. stellaris* from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Balistapus undulatus*

Balistes undulatus Park, 1797: 37 (Sumatra).

Uncommon. Inhabits outer reef slope habitats. A single specimen (AMS I.15685-050) collected at One Tree Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Balistoides conspicillum

Balistes conspicillum Bloch and Schneider, 1801: 474 (Indian Ocean).

Balistoides conspicillum — Goeden, 1974: 17 (Heron I.).

Balistoides niger (non Bloch or Park)—Williams, 1979: 140 (Tryon I.).

Balistes conspicillum — Heatwole, 1981: 24 (Heron I.).

Uncommon. Occurs in outer reef slope habitats in 5-30m. *Balistoides niger* recorded from Tryon Island by Williams (1979) probably refers to *B. conspicillum*. Widespread in the tropical Indo-W. Pacific.

Melichthys vidua

Balistes vidua Solander in Richardson, 1844: 128 (Tahiti).

Melichthys vidua — Goeden, 1974: 17 (Heron I.).

Rare. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Odonus niger

Xenodon niger Rüppell, 1835-38 (1835): 53 (Red Sea).

Odonus niger — Goeden, 1974: 17 (Heron I.).

Rare? No specimens of *O. niger* from the Capricorn-Bunker Group could be found in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Pseudobalistes fuscus

Balistes fuscus Bloch and Schneider, 1801: 471. (no locality given).

Pseudobalistes fuscus — Russell *et al.*, 1974: 213 (One Tree I.).

Rare. Reported from One Tree lagoon on the basis of an unconfirmed sight record (Russell *et al.*, 1974). Widespread in the tropical Indo-W. Pacific.

Rhinecanthus aculeatus

Balistes aculeatus Linnaeus, 1758: 328 (India).

Balistapus (Rhinecanthus) aculeatus — Whitley, 1932a: 310 (Masthead I.).

Balistapus aculeatus — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Rhinecanthus aculeatus — Russell *et al.*, 1974: 213 (One Tree I.).

Moderately common in lagoons and outer reef slope habitats in 1-15m. Widespread in the tropical Indo-W. Pacific.

Rhinecanthus rectangulus

Balistes rectangulus Bloch and Schneider, 1801: 465 (Indian Ocean).

Balistapus rectangulus — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Balistes escharpe — Goeden, 1974: (Heron I.).

Rhinecanthus echarpe — Williams, 1979: 140 (Tryon I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Sufflamen bursa*

Balistes bursa Bloch and Schneider, 1801: 476 (Indian Ocean).

Uncommon. Occurs in outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Sufflamen chrysopterus

Balistes chrysopterus Bloch and Schneider, 1801: 466 (Coromandel, India).

Balistes chrysopterus — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Very common in reef flat and outer reef slope habitats in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Sufflamen fraenatus

Balistes fraenatus Latreille, 1804: 74 (Madagascar and Polynesia).

Balistes capistratus — Woodland and Slack-Smith, 1963: 56 (Heron I.).

Common in reef flat and outer reef slope habitats in 1-15 m. This species has generally been known previously as *B. capistratus*, a junior synonym of *B. fraenatus* (Matsuura, 1980). Widespread in the tropical Indo-W. Pacific.

MONACANTHIDAE . . . LEATHERJACKETS

Aleuterus scriptus

Balistes scriptus Forster in Osbeck, 1771: 331 (China and Bahamas).

Osbeckia scripta — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Rare? Recorded from Heron Island by Woodland and Slack-Smith (1963) but no specimens from the Capicorn-Bunker Group could be found in either the Australian or Queensland Museums. Circumtropical.

Amanses scopas*

Balistes scopas Cuvier, 1816: p. 152, footnote. (Mauritius and E. Indies).

Moderately common in outer reef slope habitats. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Anacanthus barbatus*

Anacanthus barbatus Gray, 1831: 8 (Singapore).

Rare? A single specimen (QM I.3537) trawled in the Capricorn Group represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Cantherhines pardalis

Monacanthus pardalis Rüppell, 1835-38 (1835): 57 (Red Sea).

Cantherhines howensis? — Goeden, 1974: 18 (Heron I.).

Moderately common in outer reef slope habitats. *C. howensis* recorded with a query from Heron Island by Goeden (1974) probably refers to *C. pardalis*. Widespread in the tropical Indo-W. Pacific.

Cantheschenia grandisquamis

Cantheschenia grandisquamis Hutchins, 1977: 17 (One Tree I.).

Cantherhines howensis (*non* Ogilby) — Burgess and Axelrod, 1976: pl. 407 (Heron I.).

Rare? Known only from the holotype collected at One Tree Island, and an underwater photograph at Heron Island. An underwater photograph labelled as *Cantherhines howensis* by Burgess and Axelrod (1976) is a misidentification of *C. grandisquamis*. Known only from the Capricorn Group.

Chaetoderma penicilligera*

Balistes penicilligerus Cuvier, 1816: 185 (W. Australia).

Rare? A single specimen (AMS IB.5395) collected at Heron Island represents the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical W. Pacific.

Oxymonacanthus longirostris

Oxymonacanthus longirostris Bloch and Schneider, 1801: 464 (no locality given).

Oxymonacanthus longirostris — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Common in lagoons and outer reef slope habitats associated with branching corals, in 1-15 m. Widespread in the tropical Indo-W. Pacific.

Paraluteres prionurus*

Alutarius prionurus Bleeker, 1851c: 260 (Banda; Neira).

Uncommon. Occurs in lagoons and outer reef slope in 1-15 m. Closely mimics *Canthigaster valentini*. Several specimens in the Australian Museum collected at One Tree Island represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Paramonacanthus cingalensis*

Laputa cingalensis Fraser-Brunner, 1941: 191 (Ceylon).

Uncommon. Several specimens (AMS E.1431, E.1963-4) collected near the Bunker Group in 20 fathoms (36 m) represent the first record of this species from the Capricorn-Bunker Group. Known from tropical Australia and Ceylon.

Paramonacanthus japonicus*

Balistes japonicus Tilesius, 1809: 212; pl. 13 (Japan).

Uncommon. Several specimens (AMS E.1431-33) collected near the Bunker Group in 20 fathoms (36 m) represent the first record of this species from the Capricorn-Bunker Group. This species has previously been recorded from Australia as *Paramonacanthus oblongus*, a junior synonym (J.B. Hutchins, personal communication 1981). Widespread in the tropical W. Pacific and E. Indian Ocean.

Pervagor melanocephalus

Monacanthus melanocephalus Bleeker, 1853e: 95 (Solor).

Pervagor melanocephalus — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Very common in lagoons and outer reef slope habitats in 2-25 m. Widespread in the tropical Indo-W. Pacific.

Pseudomonacanthus peroni*

Monacanthus peroni Hollard, 1854: 356 ('Des Terres Australes').

Uncommon. Several specimens collected at North West Island (AMS IA. 4316) and in deep water (70-74 fathoms - 127-135 m) near North Reef (AMS I.11045-7) represent the first record of this species from the Capricorn-Bunker Group. Known from tropical Australia.

Thamnaconus hypargyreus*

Monacanthus hypargyreus Cope, 1873: 477 (Australia).

Uncommon. A number of specimens (AMS E.1701-6) collected in deep water (70-74 fathoms - 127-135 m) near North Reef represent the first record of this species from the Capricorn-Bunker Group. Known only from Queensland.

OSTRACIIDAE . . . BOX FISHES

Lactoria diaphinus*

Ostracion diaphinus Bloch and Schneider, 1801: 501 (no locality given).

Rare. Inhabits deeper water near reefs. Two specimens collected near Heron Island (AMS I.15386-003) and near One Tree Island (QM I.12376) represent the first record of this species from the Capricorn-Bunker Group. Widespread in the tropical Indo-W. Pacific.

Ostracion cubicus

Ostracion cubicus Linnaeus, 1758: 332 (India).

Ostracion tuberculatus — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Ostracion cubicus — Burgess and Axelrod, 1976: pl. 393 (Heron I.).

Common in lagoons and outer reef slope habitats. Randall (1972b) has adopted the name *cubicus* for this species, placing *O. tuberculatus* in synonymy (despite page priority of the latter name). Widespread in the tropical Indo-W. Pacific.

Ostracion meleagris

Ostracion meleagris Shaw in Shaw and Nodder, 1796: pl. 253 (Southern Ocean).

Ostracion lentiginosum? (*sic*) — Goeden, 1974: 18 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. *O. lentiginosum* included as a queried record by Goeden (1974) is a junior synonym of *O. meleagris* (Randall, 1972b). Widespread in the tropical Indo-W. Pacific.

Triorus republicae*

Lactophrys republicae Ogilby, 1913: 92 (replacement name for *Ostracion concatenatus* Bleeker — *non* Bloch).

Rare? A single specimen (QM I.12400) collected near Lamont Reef represents the first record of this species from the Capricorn-Bunker Group. Known from New Guinea, Queensland, New South Wales and Lord Howe Island.

TETRAODONTIDAE . . . PUFFER FISHES

Arothron hispidus

Tetraodon hispidus Linnaeus, 1758: 333 (India).

Arothron hispidus — Woodland and Slack-Smith, 1963: 57 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Arothron nigropunctatus

Tetraodon nigropunctatus Schneider in Bloch and Schneider, 1801: 507 (Tranquebar).

Arothron nigropunctatus — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Common in lagoon and outer reef slope habitats. Widespread in the tropical Indo-W. Pacific.

Arothron reticularis

Tetraodon reticularis Schneider in Bloch and Schneider, 1801: 506 (Malabar).

Arothron reticularis — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Known only from Woodland and Slack-Smith's (1963) record. No specimens from the Capricorn-Bunker Group are in either the Australian or Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Arothron stellatus

Tetraodon lagocephalus var. *stellatus* Schneider in Bloch and Schneider, 1801: 503 (Mauritius).

Arothron stellatus — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Uncommon. Occurs in outer reef slope habitats. Grows to a very large size (>1m). Widespread in the tropical Indo-W. Pacific.

Canthigaster bennetti

Tropidichthys Bennetti Bleeker, 1854c: 504 (Amboina).

Canthigaster bennetti — Russell *et al.*, 1974: 213 (One Tree I.).

Uncommon. Several specimens collected at One Tree Island confirm a previous sight record of this species (Russell *et al.*, 1974). Occurs in lagoon and outer reef slope habitats in 1-10m. Widespread in the tropical Indo-W. Pacific.

Canthigaster coronata

Tetraodon (Anosmius) coronatus Vaillant and Sauvage, 1875: 286 (Hawaiian Is.).

Canthigaster cinctus — McCulloch, 1922: 245 (Capricorn Group).

Canthigaster axiologous Whitley, 1931a: 333 (substitute name for *C. cinctus* of McCulloch, 1922).

Canthigaster coronata — Allen and Randall, 1977: 487 (One Tree I.).

Uncommon. This species has generally been reported under the name *C. cinctus*, a junior synonym of *C. coronatus* (Tyler 1967). Widespread in the tropical Indo-W. Pacific.

Canthigaster janthinoptera

Tropidichthys janthinoptera Bleeker, 1855c: 429 (Amboina).

Canthigaster janthinopterus — Whitley, 1959: 322 (Heron I.).

Canthigaster margaritatus (*non* Rüppell) — Goeden, 1975: 17 (Heron I.).

Moderately common in lagoons and outer reef slope habitats. *C. margaritata* recorded by Goeden (1974) from Heron Island appears to be a mistaken identity for *C. janthinopterus* (*C. margaritata* is known only from the Red Sea — Allen and Randall, 1977). Widespread in the tropical Indo-W. Pacific.

Canthigaster ocellincta

Canthigaster ocellincta Allen and Randall, 1977: 485 (Solomon Is; Philippines New Caledonia; Fiji; One Tree I.).

Rare. A single specimen (AMS I.18380-001) collected in 25m at One Tree Island is in the Australian Museum. Widespread in the tropical W. Pacific.

Canthigaster valentini

Tetraodon Valentini Bleeker, 1853a: 130 (Amboina).

Canthigaster valentini — Whitley, 1928b: 304 (Lady Musgrave I.).

Very common in lagoon and outer reef slope habitats in 1-20m. Widespread in the tropical Indo-W. Pacific.

Lagocephalus scleratus

Tetrodon scleratus Gmelin, 1788: 1444 (New Caledonia).

Gastrophysus scleratus — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Rare. Occurs in outer reef slope habitats generally in deeper water. Grows to a very large size (>1m). Widespread in the tropical Indo-W. Pacific.

Torquigener tuberculiferus*

Spheroides tuberculiferus Ogilby, 1912: 61, (Moreton Bay and Wide Bay, Queensland).

Rare. A single specimen (AMS E. 2017) trawled by the *Endeavour* 20 miles N.E. of Bustard Head in 20 fathoms (36m) represents the first record of this species from the Capricorn-Bunker Group. Occurs in deeper water on sandy bottoms. Known only from southern Queensland.

DIODONTIDAE . . . PORCUPINEFISHES

Diodon holocanthus*

Diodon holocanthus Linnaeus, 1758: 335 (ex Artedi—India).

Rare. A single specimen (AMS IA. 4777) from North West Island represents the first record of this species from the Capricorn-Bunker Group. Circumtropical.

Diodon hystrix

Diodon hystrix Linnaeus, 1758: 335 (ex Artedi—India).

Diodon armillatus Whitley, 1933: 107 (North West I.).

Diodon hystrix — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Uncommon. Occurs occasionally in lagoons. Leis (1977) has shown *D. armillatus* to be a junior synonym of *D. hystrix*. Cosmopolitan.

Diodon liturosus

Diodon liturosus Shaw, 1804: 436 (Indian Seas).

Diodon bleekeri — Woodland and Slack-Smith, 1963: 58 (Heron I.).

Rare. This species, recorded from Heron Island by Woodland and Slack-Smith (1963) is unrepresented in collections in the Australian and Queensland Museums. Widespread in the tropical Indo-W. Pacific.

Tragulichthys jaculiferus*

Diodon jaculiferus Cuvier, 1818: 130 ('Mers des Indies').

Uncommon. Several specimens in the Australian Museum collected at North West Island and trawled off the Bunker Group represent the first record of this species from the Capricorn-Bunker Group. Distributed throughout Australia and New Zealand.

UNCERTAIN SPECIES

The following species described from Lady Elliott Island is unable to be identified with any known species:

Labroides auropinna Saville-Kent, 1893: 308, pl. 16, fig. 9 (Lady Elliott I.).

RECORDS WITHOUT BASIS

The following two species (family Pomacentridae) recorded from Heron Island appear to be without basis (G.R. Allen, personal communication 1980) and could be misidentifications of any one of several pomacentrid species known from the area:

Abudefduf behni — Goeden, 1974: 12 (Heron I.).

Chromis leucurus — Goeden, 1974: 12 (Heron I.).

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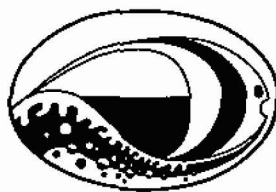
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