

A LIST OF THE FISHES RECORDED FROM
CHRISTMAS ISLAND, INDIAN OCEAN

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ABSTRACT

A list of the fishes recorded from Christmas Island, Indian Ocean enumerates 129 species, 65 of which are new records for the island.

INTRODUCTION

At the kind invitation of the British Phosphate Commissioners, Dr Gerlof F. Mees and Mr Eric J. Car of the Western Australian Museum visited Christmas Island between June 14th and July 15th, 1961, and made extensive zoological collections. The most important collection was that of the fish fauna, and apart from the papers by Regan (1909), Palmer (1950), and Allen (1972), the fishes of the island were completely unknown. All the fishes collected by the party, and those forwarded to the W.A. Museum by British Phosphate Commissioners' staff members Mr T. Houston, Mr D. Powell, and Mr R. Forrester, are housed in the Western Australian Museum. Until his resignation from the Western Australian Museum on June 28th, 1963, Dr Mees continued to work on the Christmas Island material and fish identified by him (17 specimens) bear the numbers P5145 to P5762. The writer continued with the examination of the collection, and apart from a few unidentified specimens, the material, comprising some 380 specimens, is now fully registered. As Dr Mees did not have the opportunity to check his identifications before publication full responsibility for any misidentifications is accepted by the writer.

A cursory glance at the list presented below will suffice to show that a great deal of collecting will be required before a comprehensive check list of the fishes of Christmas Island can be compiled. The fishes recorded by Regan (21 species) and Palmer (42 species) have been included in this brief list of 129 species, 65 of which are new records for the island.

Order ANGUILLIFORMES

Family *Muraenidae* (Moray eels)

Arndha zebra (Shaw & Nodder)

One specimen, P5984.

Echidna nebulosa (Ahl)

Three specimens, P5989, P8435-6. Recorded as *Muraena nebulosa* by Regan (1909, p. 403).

Uropterygius concolor Rüppell

Two specimens, P8468-9.

Uropterygius marmoratus (Lacépède)

Fifteen specimens, P8451-5, P8457-66. Recorded as *Gymnomuraena marmorata* by Palmer (1950, p. 203).

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Uropterygius macrocephalus (Bleeker)

Recorded as *Gymnomuraena macrocephalus* by Palmer (1950, p. 203).

Uropterygius micropterus (Bleeker)

Sixteen specimens, P8456, P8470-83, P9215.

Gymnothorax flavimarginatus (Rüppell)

One specimen, P8467.

Gymnothorax meleagris (Shaw & Nodder)

Recorded by Palmer (1950, p. 203).

Gymnothorax picta (Ahl)

One specimen, P8439. Recorded as *Muraena picta* by Palmer (1950, p. 203).

Order SALMONIFORMES

Family Synodontidae (Lizardfishes)

Synodus variegatus (Lacépède)

One specimen, P11977.

Saurida undosquamis (Richardson)

One specimen, P5460.

Order GADIFORMES

Family Ophidiidae (Eelpouts)

Brotula multibarbata Temminck & Schlegel

Recorded by Regan (1909, p. 406).

Order ATHERINIFORMES

Family Exocoetidae (Flyingfishes)

Cypsilurus oxycephalus (Bleeker)

Recorded by Palmer (1950, p. 203).

Family Belonidae (Longtoms)

Belone crocodila Lesueur

One specimen, P5458. Recorded as *Strongylura annulatus* (= *B. crocodila*) by Palmer (1950, p. 203).

Belone platyura Bennett

One specimen, P5459.

Order BERYCIFORMES

Family **Holocentridae** (Squirrelfishes)

Holocentrus bleekeri Weber

Seven specimens, P5456-7, P12653-7.

Holocentrus caudimaculatus Rüppell

Recorded by Palmer (1950, p. 200).

Holocentrus microstomus Günther

Recorded by Palmer (1950, p. 200).

Holocentrus tiereoides Bleeker

Recorded by Palmer (1950, p. 200).

Myripristis murdjan (Forskål)

Three specimens, P5469, P12651-2. Recorded by Palmer (1950, p. 201).

Order GASTEROSTEIFORMES

Family **Aulostomidae** (Trumpetfishes)

Aulostoma chinensis (Linnaeus)

Two specimens, P7935-6. Recorded as *Aulostoma valentini* (= *A. chinensis*) by Palmer (1950, p. 203).

Family **Solenostomidae** (Ghost Pipefishes)

Solenichthys cyanopterus (Bleeker)

Two specimens, P5470.

Family **Syngnathidae** (Pipefishes)

Choeroichthys sculptus (Günther)

Two specimens, P21084-5.

Order SCORPAENIFORMES

Family **Scorpaenidae** (Scorpionfishes)

Pterois volitans (Linnaeus)

One specimen, P5972. Previously recorded by Regan (1909, p. 404), and Palmer (1950, p. 202).

Pterois radiata Cuvier

Six specimens, P5968-71, P5988, P8282. Recorded by Palmer (1950, p. 202).

Pteropterus antennata (Bloch)
Four specimens, P8278-81.

Sebastapistes sp.
Two specimens, P21064, P21089.

Scorpaenodes guamensis (Quoy & Gaimard)
One specimen, P21087.

Dendroscorpaena cirrhosa (Thunberg)
Two specimens, P21086, P21088.

Family **Caracanthidae** (Velvetfishes)

Caracanthus unipinna (Gray)
Recorded by Regan (1909, p. 404).

Order PERCIFORMES

Family **Serranidae** (Gropers, Rock Cods)

Epinephelus merra Bloch
Recorded by Palmer (1950, p. 201).

Epinephelus corallicola (Valenciennes)
Two specimens, P21045-6. These specimens agree well with the description of
E. spilotoceps (= *E. corallicola*) given by Schultz (1953, pp. 357-60).

Cephalopholis leopardus (Lacépède)
Two specimens, P21042-3.

Cephalopholis urodelus (Valenciennes)
One specimen, P21044.

Cephalopholis miniatus (Forskål)
One specimen, P21047.

Family **Grammistidae** (Six-lined Perch)

Grammistes sexlineatus (Thunberg)
One specimen, P5990.

Family **Plesiopidae** (Roundheads)

Plesiops nigricans (Rüppell)
Two specimens, P5991, P21766.

Plesiops melas Bleeker
Recorded by Regan (1909, p. 403).

Family **Kuhliidae** (Flagtails)

Kuhlia taeniura (Cuvier)

Recorded by Palmer (1950, p. 201).

Family **Priacanthidae** (Red Bullseyes)

Priacanthus cruentatus (Lacépède)

Recorded by Palmer (1950, p. 201).

Family **Apogonidae** (Cardinalfishes)

Apogon savayensis Günther

One specimen, P21081.

Family **Echeneidae** (Suckerfishes)

Remora remora (Linnaeus)

Two specimens, P7208-9.

Family **Carangidae** (Trevally, Darts)

Trachinotus bailloni (Lacépède)

Recorded by Palmer (1950, p. 203).

Family **Lutjanidae** (Hussars)

Macolor niger (Forskål)

One specimen, P21763.

Lutjanus vaigiensis (Quoy & Gaimard)

Recorded by Palmer (1950, p. 201).

Aphareus furcatus (Lacépède)

Recorded by Palmer (1950, p. 201).

Caesio lunaris Cuvier

One specimen, P8697.

Caesio xanthonotus Bleeker

One specimen, P21765.

Family **Nemipteridae** (Sea Breams)

Gnathodentex aurolineatus (Lacépède)

Thirty specimens, P11884-911, P21762, P21764.

Monotaxis grandoculis (Forskål)

Recorded as *Sphaerodon heterodon* (= *M. grandoculis*) by Regan (1909, p. 403).

Family **Mullidae** (Goatfishes)

Parupeneus bifasciatus (Lacépède)

Two specimens, P21037-8. Recorded as *Parupeneus andrewsii* (= *P. bifasciatus*) by Regan (1909, p. 403, pl. 65).

Family **Pempheridae** (Bullseyes)

Pempheris otaitensis Lesson

Recorded by Palmer (1950, p. 203).

Pempheris oualensis Cuvier

Four specimens, P13423-6.

Family **Ephippidae** (Batfishes)

Platax teira (Forskål)

Recorded by Palmer (1950, p. 204).

Family **Chaetodontidae** (Coralfishes)

Forcipiger longirostris (Broussonet)

Ten specimens, P5981-3, P6083-9. Recorded by Palmer (1950, p. 204) and Regan (1909, p. 403).

Chaetodon trifasciatus Park

One specimen, P5465.

Chaetodon ephippium Cuvier

One specimen, P7909.

Chaetodon citrinellus Cuvier

Four specimens, P5762, P8798-9, P10747. Recorded by Palmer (1950, p. 201).

Chaetodon ornatissimus Cuvier

Three specimens, P5978-9, P10769.

Chaetodon meyeri Bloch & Schneider

Two specimens, P5464, P5467.

Chaetodon lunula (Lacépède)

Four specimens, P5462, P10753, P10835-6.

Anisochaetodon unimaculatus (Bloch)

One specimen, P5461.

Hemitaurichthys zoster (Bennett)

One specimen, P5463.

Pomacanthus imperator (Bloch)

Recorded by Palmer (1950, p. 204).

Pomacanthus semicirculatus (Cuvier)

One specimen, P12150.

Pygoplites diacanthus (Boddaert)

Four specimens, P5973-5, P5980.

Family **Pomacentridae** (Demoiselles)

Pomacentrus nigricans (Lacépède)

Four specimens, P10872-4, P10936.

Abudefduf sordidus (Forskål)

Six specimens, P10742-6, P10994. Recorded as *Glyphisodon sordidus*, by Regan (1909, p. 404).

Abudefduf saxatilis vaigiensis (Quoy & Gaimard)

Two specimens, P10855-6. Recorded as *Abudefduf saxatilis* by Palmer (1950, p. 201).

Abudefduf notatus (Day)

Twelve specimens, P10976-87. Recorded by Palmer (1950, p. 204).

Abudefduf biocellatus (Quoy & Gaimard)

Three specimens, P10752, P10849-50.

Abudefduf xanthozonus (Bleeker)

One specimen, P10969.

Dascyllus trimaculatus (Rüppell)

One specimen, P10878.

Dascyllus marginatus (Rüppell)

One specimen, P10879.

Chromis ternatensis (Bleeker)

Two specimens, P10973-4.

Amphiprion perideraion Bleeker

Nine specimens, P21542-50.

Amphiprion clarkii (Bennett)

One specimen, P10892. Recorded by Allen (1972, p. 116).

Family **Cirrhitidae** (Hawkfishes)

Cirrhitichthys oxycephalus (Bleeker)

Recorded as *Cirrhitichthys murrayi* (= *C. oxycephalus*) by Regan (1909, p. 404, pl. 66, fig. 6).

Paracirrhitichthys hemistictus (Günther)

Two specimens, P21034-5.

Family **Mugilidae** (Mulletts)

Crenimugil crenilabis (Forskål)

Recorded as *Mugil crenilabis* by Palmer (1950, p. 205).

Family **Labridae** (Wrasses)

Novaculichthys bifer (Lay & Bennett)

One specimen, P11706.

Gomphosus tricolor (Quoy & Gaimard)

Recorded by Palmer (1950, p. 204).

Gomphosus caeruleus Lacépède

One specimen, P21080. Recorded by Palmer (1950, p. 202).

Thalassoma hardwicki (Bennett)

Recorded by Palmer (1950, p. 204).

Pseudojulis notospilus Günther

Recorded by Palmer (1950, p. 204).

Stethojulis strigiventer (Bennett)

Recorded by Palmer (1950, p. 204).

Halichoeres marginatus (Rüppell)

Two specimens, P21082-3.

Halichoeres hyrtlilii (Bleeker)

Recorded as *PlatyGLOSSUS hyrtelii* by Regan (1909, p. 404).

Pseudocoris heteropterus (Bleeker)

One specimen, P21259.

Family **Mugiloididae** (Grubfishes)

Parapercis clathrata Ogilby

One specimen, P5455.

Family **Blenniidae** (Blennies)

Andamia heteroptera (Bleeker)

Recorded by Palmer (1950, p. 204).

Andamia reyi (Savage)

Seventeen specimens, P5145, P10451-65, P10520.

Alticus saliens (Lacépède)

Twelve specimens, P10486-96, P10525.

Praealticus natalis (Regan)

Sixteen specimens, P10509-19, P10688-92. Recorded as *Blennius natalis* by Regan (1909, p. 405).

Istiblennius bellus (Günther)

Twenty-four specimens, P10479-85, P10570-80, P10694-9.

Istiblennius hasseltii (Bleeker)

Recorded as *Salarias hasseltii* by Regan (1909, p. 405).

Istiblennius lineatus (Valenciennes)

Two specimens, P10468, P10683.

Mimoblennius atrocinctus (Regan)

Recorded as *Blennius atrocinctus* by Regan (1909, p. 405).

Nannosalarias nativitatis (Regan)

Recorded as *Blennius nativitatis* by Regan (1909, pp. 404-5).

Entamacrodus epalzeocheilus (Bleeker)

Two specimens, P10595-6.

Entamacrodus caudofasciatus (Regan)

Thirteen specimens, P10673-82, P10701-3. Recorded as *Salarias caudofasciatus* by Regan (1909, p. 405).

Ecsenius bicolor (Day)

Recorded as *Salarias melanosoma* (= *E. bicolor*) by Regan (1909, p. 406, pl. 66, fig. 5).

"*Salarias tridactylus* Günther"

I am unable to trace a description of any species named *Salarias tridactylus* by Günther as recorded by Palmer (1950, p. 204), and suspect that Palmer's record refers to the *S. tridactylus* listed by Günther (1861, p. 242) which is an employment by Günther in new combination of *Blennius tridactylus* Bloch 1801, a species shown to be a junior primary homonym of *Blennius tridactylus* Lacépède 1800, by Smith-Vaniz and Springer (1971, p. 60).

Family **Gobiidae** (Gobies)

Bathygobius fuscus (Rüppell)

One specimen, P10693. Recorded as *Gobius albopunctatus* (= *B. fuscus*) by Regan (1909, p. 404).

Bunaka gyrinoides (Bleeker)

Recorded by Palmer (1950, p. 204).

Eviota epiphanes Jenkins

Recorded by Palmer (1950, p. 204).

Family **Acanthuridae** (Surgeonfishes, Moorish Idols)

Zanclus canescens (Linnaeus)

Six specimens, P5985-7, P8659, P8692, P8794.

Naso hexacanthus (Bleeker)

Three specimens, P7101, P8660-1.

Naso lituratus (Bloch & Schneider)

Six specimens, P5997-8, P6044-6, P8693.

Zebrasoma flavescens (Bennett)

One specimen, P8691.

Acanthurus triostegus (Linnaeus)

Four specimens, P5994-5, P10890-1. Recorded by Palmer (1950, p. 202).

Acanthurus guttatus Bloch & Schneider

Recorded by Palmer (1950, p. 204).

Acanthurus lineatus (Linnaeus)

Thirteen specimens, P5993, P6047-56, P8095-6.

Acanthurus glaucopareius Cuvier

Twenty specimens, P5996, P5999-6016, P6042. Recorded by Palmer (1950, p. 202).

Acanthurus oblivaceus Bloch & Schneider

Two specimens, P6043, P8694.

Ctenochaetus strigosus (Bennett)

Recorded by Palmer (1950, p. 202).

Order PLEURONECTIFORMES

Family **Bothidae** (Left-handed Flounders)

Bothus mancus (Broussonnet)

Recorded by Palmer (1950, p. 205).

Order TETRAODONTIFORMES

Family **Balistidae** (Triggerfishes)

Melichthys niger (Bloch)

Three specimens, P8097-9. Recorded as *Melichthys radula* (= *M. niger*) by Palmer (1950, p. 203).

Melichthys vidua (Richardson)

Three specimens, P6017, P6209, P8658.

Balistapus undulatus (Park)

Thirteen specimens, P6018–28, P7927–8.

Balistes bursa Bloch & Schneider

Four specimens, P6268, P8100–2.

Rhinecanthus echarpe (Anon.)

Recorded as *Balistes rectangulus* (= *R. echarpe*) by Regan (1909, p. 406).

Xanthichthys sp.

One specimen, P8662.

Cantherhines pardalis (Rüppell)

One specimen, P21090.

Family **Ostraciontidae** (Boxfishes)

Ostracion meleagris Shaw & Nodder

Four specimens, P6269–70, P8699–700.

Family **Tetraodontidae** (Pufferfishes)

Canthigaster amboinensis (Bleeker)

One specimen, P5992.

Family **Diodontidae** (Porcupinefishes)

Diodon hystrix Linnaeus

One specimen, P9199. Recorded by Regan (1909, p. 406).

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