

New records of reef and shore fishes from northwestern Australia

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The fish fauna of reefs and shoals on the outer edge of Australia's North-West Shelf was summarised by Allen and Russell (1986) and Allen (1993). They reported 833 species, mainly from Rowley Shoals, Scott-Seringapatam Reefs, Ashmore Reef, and Cartier Island. Hutchins et al (1995) recorded 45 additional species from the area. The present paper reports 49 new records of reef and shore fishes for Western Australia, including 15 that are new to Australian seas. The fishes were collected or observed by the author on three expeditions between 1991 and 1994. The first of these involved a survey of coastal localities and offshore islands in the Kimberley region between Wyndham and Broome for 17 days in August 1991. A second trip of 19 days duration visited the Monte Bello Islands in August 1993. The final trip, in September 1994, made collections and observations at offshore reefs including Scott, Seringapatam, Ashmore, Hibernia, and Cartier, as well as Cassini Island on the Kimberley coast.

Collections were obtained with a chemical ichthyocide (rotenone powder) and a small multi-prong hand spear. In addition, a series of visual

transects were conducted with the use of SCUBA. Underwater photographs, now deposited in the files of the Western Australian Museum (WAM), were taken of many species and form the basis of several of the records listed below.

The list of new records for Western Australia is presented below. An additional list includes species that were collected for the first time on reefs and islands along the Kimberley Coast, although they are known from offshore sites such as Rowley Shoals and Ashmore Reef. The approximate latitude and longitude for the various localities mentioned in these lists are indicated in Table 1.

Three species, also obtained in these collections, are not included in the present list. They represent new taxa and have been described elsewhere: *Pseudochromis howsoni* Allen (1994a), a pseudochromid from Ashmore Reef; *Amblyglyphidodon batunai* Allen (1994b), a pomacentrid observed at Churchill Reef, and *Cirrhilabrus randalli* Allen (1995) from Rowley Shoals, Scott-Seringapatam Reefs, Ashmore Reef, and Cartier Reef.

Two additional new taxa, *Gymnothorax* sp. (Kimberley coastal islands) and *Notograptus* sp. (Montgomery Reef and Scorpion Island, Kimberley coast), were also collected. They will eventually be described by the author. An undescribed species of *Opistognathus* was observed at Hibernia Reef. It is widespread in Indonesia (see Kuitert 1992: 144, for illustrations).

ACKNOWLEDGEMENTS

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Table 1 Locality data for new fish records from Western Australia.

Location	Latitude and Longitude
Scott Reef	14°02'S, 121°52'E
Seringapatam Reef	13°38'S, 122°01'E
Ashmore Reef	12°11'S, 123°07'E
Cartier Reef	12°32'S, 123°33'E
Hibernia Reef	11°58'S, 123°21'E
Monte Bello Islands	20°25'S, 115°30'E
Powerful Island	16°05'S, 123°27'E
Lord & Byron Islands	16°10'S, 123°28'E
Beagle Reef	15°21'S, 123°32'E
Churchill Reef	15°31'S, 123°17'E
Prince Regent River	15°37'S, 125°18'E
Rob Roy Reef	14°25'S, 124°51'E
West Montalivet Island	14°17'S, 125°13'E
near Cleghorn Island	14°22'S, 125°25'E
near Descartes Island	14°11'S, 125°38'E
near Fenelon Island	14°09'S, 125°39'E
Cassini Island	13°56'S, 125°37'E
Long Reef	13°48'S, 125°47'E
Scorpion Island	13°52'S, 126°36'E
Tranquil Bay	13°56'S, 127°18'E
King George River	14°03'S, 127°20'E

Management. The 1994 expedition to offshore reefs and the Kimberley coast was partially financed by the Western Australian Museum. The Australian Nature Conservation Agency provided a research permit to conduct surveys at Ashmore Reef. Collecting assistance was provided by Paddy Berry and Clay Bryce of WAM and by Bonnie and Hugh Morrison of Perth Diving Academy. Douglass Hoese (Australian Museum, Sydney) and Helen Larson (Museum and Art Gallery of the Northern Territory, Darwin) assisted with gobiid identifications.

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- List of New Records for Western Australia**
Key to symbols:
WAM = Western Australian Museum registration number
P = photographed only
V = visual record, no photograph
* = new record for Australia
- Chlopsidae**
Kaupichthys atronasmus Schultz, 1953. Scott Reef (WAM P.30835-059)
- Muraenidae**
Gymnothorax pseudothrysoides (Bleeker, 1852). Powerful Island, Kimberley coast (WAM P.30320-024).
Rhinomuraena quaesita Garmann, 1888. Ashmore Reef (V).
- Ophichthidae**
**Ophichthus evermanni* Jordan and Richardson, 1908. Powerful Island, Kimberley coast (WAM P.30320-024).
- Clupeidae**
Spratelloides delicatulus (Bennett, 1832). Monte Bello Islands and Beagle Reef, Kimberley coast (WAM P.30680.014 and P.30316-016).
- Bythitidae**
Dinematichthys ilucoetoides Bleeker, 1855. Long Reef, Kimberley coast (WAM P.30308-001).
- Hemiramphidae**
Zenarchopterus gilli Smith, 1945. King George River and Sunday I., Kimberley coast (C).
- Atherinidae**
Atherinomorus lacunosa (Forster, 1801). Scorpion Island, Kimberley Coast (WAM P.30305-004).
- Syngnathidae**
* *Doryrhamphus multiannulatus* (Regan, 1903). Monte Bello Islands (P).
**Phoxocampus belcheri* (Kaup, 1856). Monte Bello Islands (WAM P.30680-021).
- Serranidae**
Cephalopholis cyanostigma (Kuhl and Van Hasselt, 1828). Widespread Kimberley coast (WAM P.30308-015).
- Apogonidae**
**Apogon fleurieu* (Lacepede, 1801). Ashmore Reef (V).
Apogon lateralis Valenciennes, 1832. King George River, Kimberley coast (WAM P.30300-003).
**Apogon gilberti* (Jordan and Seale, 1905). Seringapatam Reef (P).
Apogon notatus (Houttuyn, 1782). Ashmore Reef (P).
**Apogon perlitus* Fraser and Lachner, 1985. Seringapatam and Cartier reefs (P).
**Gymnapogon philippinus* (Herre, 1939). Montgomery Reef (WAM P.30851-013).
- Lutjanidae**
Lutjanus johnii (Bloch, 1792). Hunter and Prince Regent rivers, Kimberley coast (P).
- Chaetodontidae**
**Chaetodon decussatus* Cuvier, 1831. Ashmore Reef (P).
Heniochus monoceros Cuvier, 1831. Scott and Cartier reefs (V).
- Pomacanthidae**
**Chaetodontoplus mesoleucus* (Bloch, 1787). Widespread Kimberley coast (WAM P.30310-001).
- Pomacentridae**
**Chromis caudalis* Randall, 1988. Ashmore Reef (V).
Pomacentrus littoralis Cuvier, 1830. Monte Bello

Islands and widespread Kimberley coast (WAM P.30302-011, P.30303-012, and P.30316-013).

Labridae

Bodianus anthioides (Bennett, 1831). Seringapatam and Cartier reefs (V).

Coris dorsomaculata Fowler, 1908. Ashmore Reef (V).

Diproctacanthus xanthurus (Bleeker, 1856). Widespread Kimberley coast (WAM P.30311-028).

**Halichoeres purpureus* (Bloch and Schneider, 1801). West Montalivet Island, Kimberley coast (V).

**Paracheilinus mccoskeri* Randall and Harmelin-Vivien, 1977. Scott and Ashmore reefs (WAM P.30836-007).

Trichonotidae

Trichonotus elegans Shimada and Yoshino, 1984. Cartier Reef (WAM P.30881-001).

Pinguipedidae

Parapercis snyderi Jordan & Starks, 1905. Long Reef, Kimberley coast and Monte Bello Islands (WAM P.30307-021, P.30312-018, and P.30690-006).

Blenniidae

Ecsenius lividinalis Chapman and Schultz, 1952. Near Fenelon Island and near Descartes Island, Kimberley coast (WAM P.30311-031).

**Ecsenius namiyei* (Jordan and Evermann, 1903). Ashmore Reef (WAM P.30960-010).

Callionymidae

Synchiropus ocellatus (Pallas, 1770). Scott Reef (WAM P.30834-037).

Gobiidae

Amblyeleotris gymnocephalus (Bleeker, 1853). Near Cleghorn Island, Kimberley coast (P).

Amoya madraspatensis (Day, 1868). Tranquil Bay, Kimberley coast (WAM P.30301-006).

Cryptocentrus insignitus (Whitley, 1956). Lord and Byron Islands, Kimberley coast (WAM P.30319-026).

**Ctenogobioptis tangaroai* Lubbock and Polunin, 1977. Scott Reef (WAM P.30835-013).

Drombus triangularis (Weber, 1911). Mission Bay, Kimberley coast (WAM P.30303-014).

Eviota sebreei Jordan and Seale, 1906. Near Fenelon Island and near Descartes Island, Kimberley coast (WAM P.30310-010 and P.30311-008).

Favonigobius melanobranchus (Fowler, 1934). Mission Bay, Kimberley coast (WAM P.30849-033).

**Oplopomops* sp. (Peters, 1855). Seringapatam Reef (WAM P.30883-002).

Trimma taylori Lobel, 1979. Seringapatam Reef (WAM P.30839-001).

Trimmatom macropodus Winterbottom, 1989. Hibernia Reef (WAM P.30844-037).

Trimmatom zapotes Winterbottom, 1989. Scott Reef (WAM P.30835-004).

Microdesmidae

Parioglossus palustris (Herre, 1945). Lord and Byron Islands, Kimberley coast (WAM P.30319-024).

Parioglossus philippinus (Herre, 1945). King George River, Cassini Island, and near Descartes Island, Kimberley coast (WAM P.30300-005, P.30309-013, and P.30311-034).

Acanthuridae

Naso annulatus (Quoy and Gaimard, 1825). Scott, Hibernia, and Cartier reefs (V).

Naso thorpei Smith, 1966. Cartier Reef (V).

Naso thynnoides (Valenciennes, 1835). Cartier Reef (V).

List of fishes previously recorded from offshore reefs in Western Australia, but recorded for the first time from coastal localities

Muraenidae

Uropterygius concolor Ruppell, 1838. Cassini Island, Kimberley coast (WAM P.30309-004).

Holocentridae

Sargocentron caudimaculatum (Ruppell, 1838). Rob Roy Reef, Kimberley coast (V).

Serranidae

Epinephelus ongus (Bloch, 1790). Near Descartes Island, Kimberley coast (V).

Pseudochromidae

Labracinus cyclophthalma (Muller and Troschel, 1849). Ashmore Reef, Timor Sea and Cassini Island, Kimberley coast (WAM P.30847-003).

Lutjanidae

Macolor niger (Forsskal, 1775). West Montalivet Island, Kimberley coast (V).

Caesionidae

Caesio caerulaurea Lacepede, 1801. Widespread Kimberley coast (V).

Chaetodontidae

Chaetodon vagabundus Linnaeus, 1758. Cassini, West Montalivet Islands and Rob Roy Reef, Kimberley-coast (P).

Pomacentridae

Acanthochromis polyacantha (Bleeker, 1855). Widespread Kimberley coast (WAM P.30305-003, P.30307-005, and P.30308-013).

Pomacentrus adelus Allen, 1991. Widespread Kimberley coast (WAM P.30311-030).

Labridae

Bodianus diana (Lacepede, 1801). Cassini Island, Kimberley coast (V).

Halichoeres hartzfeldi (Bleeker, 1852). Near Fenelon Island and near Cleghorn Island, Kimberley coast (WAM P.30312-006).

Halichoeres melanurus (Bleeker, 1851). Widespread

Kimberley coast (WAM P.30307-025, P.30310-016, P.30311-029, P.30847-004).

Microdesmidae

Ptereleotris microlepis (Bleeker, 1856). Cassini I., near Fenelon Island, and near Cleghorn Island, Kimberley coast (WAM P.30312-017 and P.30847-001).

Siganidae

Siganus vulpinus (Schlegel and Muller, 1845). Cassini Island and Rob Roy Reef, Kimberley coast (P).

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