

## Part 3

# Cnidaria, other than reef-building corals, of Ashmore Reef and Cartier Island

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### Abstract

Ashmore and Cartier Reefs have a rich cnidarian fauna, including many species of alcyonaceans. The blue coral, *Heliopora coerulea* and organ-pipe coral *Tubipora musica* are moderately common on the reef flats. Since most of the Alcyonacea have been identified only to genus no analysis of their geographic affinities is possible.

### Background and discussion

Cnidarians were collected at Ashmore and Cartier Reefs on the reef flats at low tide and by snorkelling and SCUBA diving in the lagoon and on the outer slopes to 20 metres depth.

The greatest diversity of gorgonians, antipatharians and alcyonaceans was found on the outer slopes of the north side of Ashmore Reef while Alcyonacea were abundant on the north side of Cartier Reef. Both the blue coral, *Heliopora coerulea* and the organ-pipe coral, *Tubipora musica* were moderately common, particularly on the reef flats.

No worthwhile comparisons of the Alcyonacean and Gorgonacean fauna can be made between Ashmore and Cartier Reefs and the Rowley Shoals and Scott Reef because of the few species fully identified. However there does appear to be a greater diversity of Alcyonacea and Gorgonacea at Ashmore Reef than at the Rowley Shoals or Scott Reef.

The octocorals have been identified, most to genus only, by Dr P. Alderslade of the Northern Territory Museum, Darwin. Additional records from the N.T. Museum and species identified from collections made by the Expedition of the *Professor Bogorov*, October 1978, are also included.

Dr S. Cairns of the National Museum of Natural History, Smithsonian Institution, Washington identified *Distichopora violacea* and has described the new species of *Stylaster* (Cairns 1988).

The classification of Octocorallia follows Bayer (1981).

Actiniaria, Corallimorpharia and zoanthidea were collected but have not been identified.

### References

- Bayer, F.M. (1981). Key to the genera of Octocorallia exclusive of Pennatulacea (Coelenterata: Anthozoa) with diagnoses of new taxa. *Proc. Biol. Soc. Wash.* 94(3): 902-947.
- Cairns, S. (1988). New records of Stylasteridae (Cnidaria: Hydrozoa) from Western Australia, including the description of two new species. *Rec. West. Aust. Mus.* 14(1): 105-119.
- Marsh, L.M. (1986). Pt 3, Cnidaria, other than reef-building corals. In Berry, P.F. (ed.) Faunal Surveys of the Rowley Shoals, Scott River and Seringapatam Reef, north-western Australia. *Rec. West. Aust. Mus. Suppl. No.* 25: 37-39.

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## List of Cnidaria, other than reef-building corals

## Key to symbols

Numbers =	W.A. Museum sampling stations (see Part 1, Figures 2 and 3, and Tables 1 and 2).
B =	R.V. Bogorov collection
C =	Cartier I. stations
N =	N.T. Museum stations (see Part 1, Table 2)
+	Present (Marsh 1986)
v	Visual record

	Ashmore Reef/ Cartier I.	Scott/ Seringapa- tam	Rowley Shoals
<b>HYDROZOA</b>			
<b>Hydroida</b>			
<i>Aglaophenia cupressina</i> Lamouroux, 1816	-	+	+
<i>Lytocarpus philippinus</i> (Kirchenpauer, 1872)	-	+	+
<b>Milleporina</b>			
<i>Millepora</i> spp.	2	+	+
<b>Stylasterina</b>			
<i>Stylaster tenisonwoodsii</i> Cairns, 1988	10	-	-
<b>ANTHOZOA</b>			
<b>Octocorallia</b>			
<b>Helioporacea</b>			
<b>HELIOPORIDAE</b>			
<i>Heliopora coerulea</i> (Pallas, 1766)	1V,8V,11V, 16V,2C	+	+
<b>Alcyonacea</b>			
<b>CLAVULARIIDAE</b>			
<i>Clavularia</i> sp.	6,1C	-	+
<b>TUBIPORIDAE</b>			
<i>Tubipora musica</i> Linnaeus, 1758	3,8V,11V, 20,2C	+	-
<i>Pachyclavularia</i> sp.	11,1C	-	-
<b>COELOGORGIIDAE</b>			
cf. <i>Coelogorgia</i> sp.	4,13,19	-	-
<b>ALCYONIIDAE</b>			
<i>Lobophytum</i> spp.	2,4,8,13,2C	+	+
<i>Sarcophyton</i> spp.	2,6,8,13, 16,18,B,N	+	+
<i>Sinularia</i> spp.	5c,8,13, 16,B,2C	+	+

	Ashmore Reef/ Cartier I.	Scott/ Seringapa- tam	Rowley Shoals
<b>NEPHTHEIDAE</b>			
<i>Nephthea</i> spp.	2,3,6,16, N,2C	+	+
<i>Capnella</i> spp.	16,B,N,2C	-	-
<i>C. imbricata</i> (Quoy and Gaimard, 1833)	N	-	-
<i>Dendronephthya</i> spp.	8,11,N	+	+
<i>Stereonephthya</i> sp.	2,13	+	-
<i>Lemnalia</i> sp.	4,6,8,13,N	-	+
<i>Paralemnalia</i> spp.	8	-	+
<i>Litophyton</i> sp.	B	-	-
<b>NIDALIIDAE</b>			
<i>Siphonogorgia</i> spp.	8,11	-	-
<b>XENIIDAE</b>			
<i>Xenia</i> sp.	8	-	-
<i>Anthelia</i> sp.	6	-	-
<b>BRIAREIDAE</b>			
<i>Briareum</i> sp.	13	-	-
<b>SUBBERGORGHIIDAE</b>			
<i>Subergorgia</i> sp.	8	-	-
<b>MELITHAEIDAE</b>			
<i>Melithaea</i> sp.	2,8	+	+
<i>Mopsella</i> sp.	8,11,N	-	-
<b>PLEXAURIDAE</b>			
" <i>Muricella</i> "	11	-	-
" <i>Plexaura</i> " <i>flava</i>	2,6,N	-	-
<i>Villogorgia</i> sp.	8	-	-
<b>GORGONIIDAE</b>			
<i>Rumphella</i> sp.	6V,8,N	-	-
<i>Hicksonella princeps</i> Nutting, 1910	4,N	-	-
<i>Pseudopterogorgia</i> sp.	1N	-	-
<b>ELLISELLIDAE</b>			
<i>Junceella</i> sp.	4,5	-	-
<b>ISIDIDAE</b>			
<i>Isis hippuris</i> Linnaeus, 1758	2,6,16,N	-	-
<b>Antipatharia</b>			
<i>Cirripathes</i> sp.	5,8	+	-
<i>Antipathes</i> sp.	8,11	-	-