

Animals of the Cottesloe Reef Fish Habitat Protection Area.

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The Cottesloe Fish Habitat Protection Area, proclaimed in September 2001, extends from North Street to the southern boundary of the Town of Mosman Park and extends seawards for 800metres from the high water mark. The boundaries are marked by yellow buoys at each seaward corner and off Cottesloe main beach. Five cylindrical buoys indicate mooring points for small boats.

There are a number of different habitats within the Cottesloe Reef Fish Habitat Protection Area:

The northern half of the area is moderately exposed to wave action while the southern half (south of the main groyne) is more sheltered due to the influence of Rottnest Island. Much of the shoreline is sand but limestone pavement underlies the sandy near shore areas and may be periodically exposed by winter storms. Intertidal rock platforms extend from Mudurup Rocks nearly to the Beach Street groyne, while broken, slightly deeper platforms are found to the north and south. Offshore in 9 to 10 metres depth there is patchy rock with sponge gardens and a rich associated fauna.

North of the main beach, almost to Eric Street and seawards, there is shallow algal-covered reef with seagrass meadows beyond. This reef is rich in fish life, including large dusky morwongs, tarwhine, wrasses, herring and other pelagic fishes as well as many smaller species taking cover in the rock holes and overhangs. The groynes themselves provide rock habitat, colonised by barnacles and limpets. The groynes also provide habitat for clouds of pomfrets, numerous banded sweep, redlipped morwong and schools of buffalo bream.

The rock platform at Mudurup Rocks slopes gently seawards with algal cover changing from sea lettuce and turf algae near the shore to sargassum and kelp near the edge. Bare coralline algae patches at the reef edge are the habitat of a mollusc community of limpets, chitons and abalone. Sea anemones of several species are found on the platform, turban shells, carnivorous whelks, many small shells on the large algae and small six armed sea stars in reef pockets. There are also many-armed carnivorous stars roving about. These are just a few of the animals found on the reef platform. The undercut cliff is home to periwinkles in the splash zone and limpets, chitons and barnacles lower down. Octopus are often seen in the reef holes and sea hares are common grazers. South of Mudurup Rocks the rock platforms are flatter and subjected to heat and desiccation during the summer low tides, so they have a less diverse fauna than Mudurup Rocks.

Slightly deeper broken reef has a rich algal cover with wireweed seagrass in patches. Heart urchins may be found in sand pockets, sea cucumbers are common among weed and sand, and short-spined sea urchins live wrapped in kelp fronds. Weedy seadragons are seen occasionally. Cuttle fish are found sometimes – they lay strings of white pea-sized eggs which hang under ledges while squid have been observed laying eggs in deeper water. Port Jackson sharks are common and their strange, horny, spiral egg cases are often found on the beach after storms.

Approximately four hundred metres offshore in South Cottesloe, at a depth of 9-10 metres, a partly rocky bottom supports sponge gardens with several species of hard corals; suspension-feeding brightly coloured sea cucumbers, soft corals and feather stars. Sandy areas are home to two species of large sand dwelling sea stars and sea pens, which are sometimes washed up after storms. This community of animals is only found in moderately sheltered waters such as Owen Anchorage and formerly in Cockburn Sound.

Overall, the marine fauna is predominantly of Southern Australian species, with about 20% tropical species among the rich and varied fauna, particularly in the deeper waters.

For further reference:

A new CD Rom on shells – molluscan fauna of WA's lower west coast, by Ben Schneider www.ecosystemworld.com or 9222 5860

G.J. Edgar, Australian Marine Life, the plants and animals of temperate waters, Reed Books, 1997.