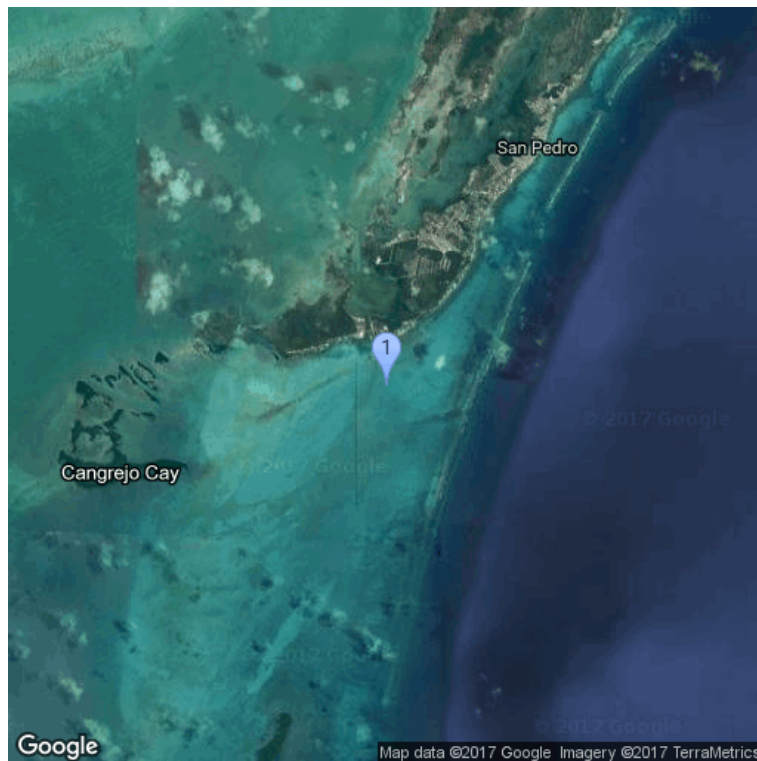




CaMPAM

Network and Forum

Hol Chan Marine Reserve



Short Name

Hol Chan

Country

Belize

Description

Ecoregion location

WCaribbean

Boundaries

17 52 11, -87 59 52

Map URL

<http://www.holchanbelize.org/loc.html>

Total Surface area

55.2

Land Surface area

0.3

Sea Surface area

4.9

Shoreline area

None

Site national category

Marine Reserve

Site international designation

SPAW, Part of the Belize Barrier Reef System World Heritage Site.

IUCN category

II

Designation

Legally Designated

Date established

1987/07/05

Legal citation

Fisheries (Hol Chan Area Marine Reserve) Order

Other legal designations

SI 107 of December 1998 SI 113 of October 1989

Primary responsible institution

Fisheries Department

Primary contact

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Geological features

beaches, rocky shores, rocky shores, keys, blue holes

Terrestrial habitats

Several of the islands also include dry land with other mangrove species such as *Laguncularia racemosa* (white mangrove), *Avicennia germinans* (black mangrove), and *Conocarpus erectus* (buttonwood). One of the cayes near the north eastern reserve border is

Marine habitats

Hol Chan's one square mile coral reef zone can be divided into four habitats: the back reef, reef crest, fore reef, and the channel or cut across the barrier reef. Approximately .75 (linear) miles of the back reef habitat is north of the channel. This section is separated from the grassbeds by a "sand row" approximately 40 meters wide which has no seagrass cover. This sandy area is inhabited by a wide variety of mollusca including the Queen conch (*Strombus gigas*). The depth of this "sand row" is approximately 1.75 meters, while the remainder of the back reef habitat (both north and south of the cut) has a depth of about one meter. This

northern back reef habitat is characterized by large formations of elkhorn coral (

Marine flora

Thalassia, Syringodium and calcareous algaes, halimeda and penicillus. Among the many algae is the commercially valuable Eucheuma isoforme, used locally in "seaweed smoothies".

Marine invertebrates and fishes

Over 160 species of fish have been identified in the reserve, along with nearly 40 species of corals, 5 sponges, 8 algae, 2 seagrasses, 3 marine mammals and 3 species of sea turtle. Approximately fifteen species of sponges have been identified and several were unidentifiable. Some small hard corals such as Manicina areolata and Favia fragum. Fish and invertebrates representative of this habitat are present, including a notably large population of Queen Conch. Brain corals (Diploria spp.), Starlet corals (Siderastrea spp.), boulder corals (Montastrea spp.), some patches of Staghorn coral (Acropora cervicornis), along with numerous sea fans (Gorgonia spp.) and other soft corals are dispersed throughout the area. The .25 (linear) miles of back reef south of the cut is characterized by large formations of finger corals (Porites spp.) and lettuce corals (Agaricia spp.) which cover large areas perpendicular to the reef crest. Near the southern border is a shallow region of coral rubble and sand covered with Dictyota spp. algae. Large schools of blue tangs and grunts are common, as are triggerfish, hog fish, parrot fish, barracuda and nurse sharks. Black tipped reef sharks and juvenile sea turtles (probably loggerhead, Caretta caretta) are occasionally seen. The reef crest foundation consists primarily of dead elkhorn and boulder corals, amalgamated into "reef cement" and covered with turf algae and fire coral (Millepora spp.). The depth of this high energy wave zone is generally .4 meters to 0 meters, with numerous dead elkhorn coral tips breaking the water's surface during low tides. There are several deeper areas or "mini-cuts" which allow further water exchange and passage across the reef for some

Marine mammals, birds and sea turtles

Marine mammals: Delphinus delphis and Stenella attenuata West Indian Manatee - Trichechus manatus. Sea turtles: Eretmochelys imbricata, Caretta caretta, Chelonia mydas

Primary management institution

Fisheries Department

Other institutions that participate in management

Hol Chan Trust Fund., Marine Reserve Advisory Committee, Each reserve has an advisory committee, which is composed of similar representation from each area respectively. The composition is as follows: 1 representative from each Village councils and/or Town

Personnel

Manager, assistant manager, three rangers.

Management objectives

species protection, ecosystem protection, fisheries management

Other management objectives

Are for education and research, preserve genetic resources

Management framework

Yes

Date of establishment of management framework

None

Last update of management framework

None

Management programmes

advisory committee, enforcement program, fisheries regulations, institutional arrangements for management

Other zone types

Zones A, B, C, D (Sark Alley).

Funding sources

Enforcement, education, zoning, user fees and sale of souvenir items for income generation.

Fisheries regulations

Reef zone, fishing and collecting prohibited, other activities regulated. Seagrass and mangrove zones, fishing regulated and restricted, collecting prohibited. Zone D (Shark Ray Alley) recreational zone for feeding sharks and rays.

Coastal development

Several communities on Ambergris Cay, and the largest is San Pedro Town.

Issues or threats for accomplishing management objectives

Conflicts exist between diving and fishing activities occasionally.

Areas of special expertise for knowledge transfer