

Dao Con Co Proposed Marine Protected Area

Alternative site name(s)

Con Co island

Province(s)

Quang Tri

Status

Proposed

Management board established

No

Latitude

17°07' - 17°13'N

Longitude

107°17' - 107°23'E

Bio-unit

05c - North Annam



Conservation status

Dao Con Co proposed marine protected area is centred on Con Co island, which lies in the East Sea, about 25 km off the coast of Quang Tri province. Following a series of surveys, Dao Con Co was proposed as a marine protected area by the Hai Phong Institute of Oceanography in 1995. In this proposal, the area of the proposed marine protected area was given as 350 ha, although this figure only comprised the terrestrial component (Nguyen Huy Yet and Vo Si Tuan 1995). Dao Con Co was subsequently included on a list of 16 proposed marine protected areas compiled on behalf of MOSTE in 1998 (Nguyen Chu Hoi *et al.* eds. 1998).

The proposal to establish a marine protected area at Dao Con Co was reiterated by the Asian Development Bank (ADB 1999) in their marine and coastal protected areas systems plan for Vietnam. In the ADB proposal, the area of the site was given as 2,490 ha, comprising a marine component of 2,140 ha and a terrestrial component of 350 ha.

Con Co island is located in Vinh Linh district but it is managed directly by a local armed forces unit (ADB 1999).

Topography and hydrology

Con Co island is a small, rounded island with an area of 350 ha. There are two low hills on the island, which reach elevations of 63 and 37 m. The intertidal area is characterised by narrow sandy beaches, interspersed with rocky outcrops. The seabed consists of a layer of basalt layer covered by coral reefs and soft sediments. The waters surrounding Con Co island are typically 15-20 m deep, although they reach depths of over 30 m in the east of the proposed marine protected area.

Biodiversity value

Con Co island supports three main vegetation types: lowland evergreen forest, grassland and scrub. The lowland evergreen forest is characterised by *Calophyllum inophyllum*, *Terminalia catappa* and *Barringtonia asiatica*. A total of 118 plant species have been recorded on the island (ADB 1999).

Surveys of the marine ecosystem have recorded 52 species of seaweed, 119 species of coral, 89 species of mollusc, 10 species of echinoderm, nine species of crustacean and 267 species of marine fish, including 77 coral-reef-dependent species (Nguyen Chu Hoi *et al.* eds. 1998). The coral reefs at Dao Con Co proposed marine protected area are unusual for the waters of the

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Gulf of Tonkin, insofar as that they occur down to depths of over 10 m below sea level. At these depths, the reefs are dominated by corals in the genera *Pocillopora* and *Millepora* (ADB 1999).

Nguyen Huy Yet and Vo Si Tuan (1995) [Information on proposed marine protected areas on the coast of Vietnam]. Hai Phong: Hai Phong Institute of Oceanography. In Vietnamese.

Conservation issues

The major threats to the marine biodiversity of Dao Con Co are unsustainable fishing activities, including dynamite fishing and over-exploitation of lobsters. However, ADB (1999) report that the overall level of human activities at the site is low. A further threat to marine biodiversity comes from the tropical storms that occur in the area between May and September and which can cause considerable damage to the coral reefs (ADB 1999).

Other documented values

The waters off Con Co island are an important fishing ground, and the island itself serves as a refuge for fishing boats during storms and as a source of freshwater for fishers (ADB 1999).

Related projects

The ADB is currently supporting a regional technical assistance called *Coastal and Marine Environment Management in the South China Sea (East Sea)*, partly supported by a grant from the Swedish Development Cooperation Agency. This project aims to promote improved management of coastal and marine resources in the region, and is being implemented by MOSTE. Under this project, a draft coastal and marine protected area systems plan for Vietnam has been compiled, which reviews a number of candidate sites for inclusion within a revised national system of 30 marine and coastal protected areas. Dao Con Co is included in this plan.

Literature sources

ADB (1999) Draft coastal and marine protected areas plan. Hanoi: Asian Development Bank.

Nguyen Chu Hoi, Nguyen Huy Yet and Dang Ngoc Thanh eds. (1998) [Scientific basis for marine protected areas planning]. Hai Phong: Hai Phong Institute of Oceanography. In Vietnamese.