

Quy Nhon Proposed Marine Protected Area

Alternative site name(s)

Quy Nhon lagoon, Thi Nai lagoon

Province(s)

Binh Dinh

Status

Proposed

Management board established

No

Latitude

13°50' - 13°55'N

Longitude

109°13' - 109°18'E

Bio-unit

05b - South Annam



Conservation status

The Asian Development Bank (ADB 1999) proposed establishing a marine protected area at Quy Nhon lagoon, with a total area of 5,800 ha, comprising a terrestrial component of 800 ha and a marine component of 5,000 ha.

Topography and hydrology

Quy Nhon lagoon is located north of Quy Nhon town. The lagoon is a natural saline swamp that is connected to the East Sea by a 700 metre-wide channel. The lagoon covers around 5,000 ha at high tide and 3,200 ha at low tide (Scott 1989). During the rainy season, the water level in the lagoon rises to 14 m in the deepest part but, during the dry season, the average water level is only 1.5 m. The lagoon is sheltered from the open sea by the Phuong Mai peninsula, which extends down from the north (ADB 1999).

Biodiversity value

The lagoon supports both seaweed and seagrass beds. Seaweed beds cover about 35 ha and are dominated by *Gracilaria verrucosa* and *G. blodgettii*. Seagrass beds cover about 200 ha. Past surveys have

recorded 185 phytoplankton species, 58 zooplankton species, 100 mollusc species, 71 crustacean species and 116 fish species (ADB 1999).

Conservation issues

The lagoon is surrounded by settlements, including Quy Nhon town, which poses difficulties in managing the site as a protected area and maintaining environmental sustainability. The lagoon has become severely degraded as a result of over-exploitation, destructive fishing and expansion of aquaculture (ADB 1999).

Other documented values

More than 1,000 households depend upon the natural resources of the lagoon for their livelihoods. About 80 tonnes of seaweed are harvested each year and used for food and fertilizer. The lagoon is a spawning area for the shrimp *Penaeus merguensis*, and the area is important for shrimp production. Yields of wild-caught shrimp are around 200 to 250 tonnes per year but are reported to be declining rapidly (ADB 1999).

Related projects

No information.

Literature sources

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

Scott, D. A. (1989) A directory of Asian wetlands. Gland: IUCN.