

Ba Mun Nature Reserve

Alternative site name(s)

Bai Tu Long, Dao Ba Mun [Ba Mun island]

Province(s)

Quang Ninh

Status

Decreed

Management board established

Yes

Latitude

20°58' - 21°08'N

Longitude

107°34' - 107°38'E

Bio-unit

06a - Tropical South China



Conservation status

Ba Mun was included on Decision No. 41/TTg of the Prime Minister, dated 24 January 1977, which decreed the establishment of a 2,000 ha nature reserve called Dao Ba Mun (MARD 1997). In 1998, MARD requested the development of an investment plan for the site, following Decision No. 1784/KH-QS, dated 12 June 1998. In November of the same year, an investment plan was published by FIPI (Anon. 1998), and was subsequently approved by Quang Ninh Provincial People's Committee and MARD. Following approval of the investment plan, Ba Mun Nature Reserve was officially established in September 1999. In the investment plan, the nature reserve was defined as the whole of Ba Mun island at low tide: a total area of 2,153 ha (Anon. 1998). Ba Mun Nature Reserve is included on the 2010 list (FPD 1998).

Based upon the biodiversity value and potential economic value, particularly from ecotourism, of Ba Mun island, Quang Ninh Provincial People's Committee proposed elevating the status of Ba Mun Nature Reserve to that of a marine national park. An investment plan for the renamed Bai Tu Long Marine National Park was published by FIPI in October 1999, and has been approved by Quang Ninh Provincial People's Committee. This investment plan is expected to be approved by the government in January 2001, at

which point Bai Tu Long Marine National Park will be established with a total area of c.13,000 ha, comprising the existing Ba Mun Nature Reserve, surrounding islands and a large marine component. In preparation for the establishment of the marine national park, field surveys were carried out in May and June 2000 (Vietnam News 2000).

Topography and hydrology

Ba Mun Nature Reserve is situated on Ba Mun island, an island in the Van Hai archipelago in Bai Tu Long bay. The nature reserve is located in Minh Chau commune, Van Don district, Quang Ninh province. Ba Mun island lies 20 km from Cai Rong town (the capital of Van Don district), which itself is 10 km from the nearest point on the Vietnamese mainland.

Ba Mun island is a narrow strip of land, 18 km long and, on average, 1 km wide, running from north to south. The highest point on the island is Cai Quyt peak at 307 m. Streams that originate on the central ridge of the island flow down to the west or east; most of these streams are seasonal. It is notable that, while the geology of most of the islands in the Van Hai archipelago is limestone, that of Ba Mun island is composed of schist, sand and gravel.

Biodiversity value

Ba Mun Nature Reserve supports about 2,000 ha of lowland evergreen forest, although this has been heavily disturbed by selective timber extraction and very little undisturbed forest remains. Tree species diversity is high, with no one family dominating. Common tree species include members of the Caesalpiniaceae, Theaceae, Dipterocarpaceae, Myrtaceae and Sapotaceae families. The nature reserve also includes 175 ha of mangrove forest, which is distributed along the sheltered western shore of the island. The dominant mangrove species is *Aegyceras corniculata*, while *Bruguiera gymnorhiza*, *Kandelia candel* and *Rhizophora stylosa* are also present. In addition to these forest types, a small area that was once subjected to rotational swidden cultivation now supports grassland dominated by *Imperata cylindrica*, *Erianthus arundinacea* and *Saccharum spontaneum*.

The forest on Ba Mun island is relatively rich in plant species, with a total of 398 vascular plant species, belonging to 109 families, being recorded to date. Four of these plant species are listed in the *Red Data Book of Vietnam*: *Decussocarpus fleuryi*, *Goniiothalamus chinensis*, *Morinda officinalis* and *Smilax glabra*. Three species are listed in the 1997 IUCN Red List of *Threatened Plants*: *Decussocarpus fleuryi*, *Hopea chinensis* and *Licuala tonkinensis*.

Despite Ba Mun island's isolation from the mainland, the nature reserve supports a high diversity of terrestrial fauna. Prior to 1975, the fauna of Ba Mun island was the most diverse and abundant known in Quang Ninh province. Subsequent decades of illegal hunting and timber extraction have, however, significantly reduced the diversity of Ba Mun's fauna (Anon. 1998). According to the investment plan for Ba Mun Nature Reserve (Anon. 1998), Wild Boar *Sus scrofa* and Indian Muntjac *Muntiacus muntjak* still occur, although the presence of other large mammal species, such as Asiatic Black Bear *Ursus thibetanus*, could not be confirmed.

Conservation issues

The overall level of human impact on the natural resources of Ba Mun Nature Reserve is relatively low. No people inhabit the nature reserve and the average

population density in the three buffer zone communes (Minh Chau, Quang Lan and Ban Sen) is 41 people per square kilometre, compared with 232 people per square kilometre for Vietnam as a whole. The nature reserve is situated far from the nearest centres of population, and the impact on the nature reserve's biodiversity from non-timber forest product collection is low.

The biggest threats to biodiversity at Ba Mun island are hunting and timber extraction. Timber is extracted for house construction and manufacture of pit props for coal mines in Quang Ninh province. The most commonly extracted timber species are *Erythrophleum fordii*, *Vatica odorata*, *Hopea chinensis*, *Aglaia gigantea* and *Madhuca* sp. As a result of hunting, populations of large mammal species have declined over the past 10 years, and some species may already have been eradicated from the nature reserve. Although controls on illegal hunting and logging have improved in recent years, these threats are likely to continue for the foreseeable future. Tightening controls on timber extraction and wildlife trade, and conducting conservation awareness activities could mitigate these threats further (Anon. 1998).

Other documented values

As the last island in Bai Tu Long bay to support a significant area of forest, Ba Mun has potential for ecotourism development. The effective management of Ba Mun Nature Reserve's biodiversity may directly benefit both the nature reserve itself and local economy (Anon 1998).

Related projects

No information.

Literature sources

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