





Con Dao National Park

Alternative site name(s)

Con Son, Poulo Condore

Province(s)

Ba Ria-Vung Tau

Status

Decreed

Management board established

Yes

Latitude

8⁰37' - 8⁰48'N

Longitude

106⁰32^{''} - 106⁰45'E

Bio-unit

05a - Mekong Detla



Conservation status

The Con Dao archipelago is located about 80 km off the coast of southern Vietnam. In 1983, the FPD of Vung Tau-Con Dao Special Area, in cooperation with the FPD of the former Ministry of Forestry and Ho Chi Minh City Sub-FIPI, prepared a feasibility study for the Con Dao archipelago, which recommended establishing a Special-use Forest at the site. Following this recommendation, Decision No. 85/CT of the Chairman of the Council of Ministers, dated 1 March 1984, decreed the establishment of Con Dao National Park, with an area of 6,000 ha (MARD 1997).

In 1990, Con Dao National Park Management Board, in collaboration with the Centre for Natural Resources and Environmental Studies (CRES), prepared an investment plan for Con Dao National Park. This investment plan proposed establishing a 15,043 ha national park, comprising a strict protection area of 3,200 ha, a forest rehabilitation area of 2,843 ha and a marine protection area of 9,000 ha (Anon. 1990). The investment plan was approved by Decision No. 135/TTg of the Prime Minister, dated 31 March 1993 (ADB 1999).

In 1997, Ho Chi Minh City Sub-FIPI prepared a revised investment plan for Con Dao National Park, for the period 1998 to 2002. This investment plan gave the

total area of the national park as 19,998 ha, comprising a strict protection area of 5,446 ha, a forest rehabilitation area of 500 ha, an administration and services area of 52 ha and a marine protection area of 14,000 ha. In addition, a marine buffer zone of 20,500 ha was defined (Anon. 1997). The revised investment plan was approved by Decision No. 1165/QD-UB of Ba Ria-Vung Tau Provincial People's Committee, dated 16 May 1998 (Con Dao National Park Management Board 2000).

The management board of Con Dao National Park was established by Ba Ria-Vung Tau Provincial People's Committee on 28 May 1993. The management board currently has 57 members of staff, based at the national park headquarters and eight guard stations. The management board is under the direct management of the provincial people's committee (Con Dao National Park Management Board 2000).

Topography and hydrology

Con Dao National Park is centred on an archipelago of 14 islands, the largest of which is Con Son. The topography of Con Son island is mountainous, and dominated by a granite ridge, which runs from southwest to north-east, sheltering the bays on both sides of the island from strong winds. The highest points on the island are the summits of Mount Thanh Gia and Mount

Chua, at 577 and 515 m respectively. The smaller islands reach a maximum elevation of 200 m.

There are no permanent watercourses on any of the islands of the Con Dao archipelago, only seasonal streams. In the rainy season, water is plentiful but, in the dry season, there is a serious lack of water. Three reservoirs collect water during the rainy season to supply the local population during the dry season.

The Con Dao archipelago is located on the boundary between two sea currents: a warm one from the south, and a cold one from the north.

Biodiversity value

Con Son island and many of the other islands of the archipelago are extensively forested. According to the revised investment plan, the national park supports 4,905 ha of forest, equivalent to 81% of the total terrestrial area. To date, 882 vascular plant species have been recorded at the national park, including 91 species of medicinal plant. One outstanding feature of Con Dao's flora is the 44 plant species that were discovered for the first time on the islands. A number of these species are named after the site, including Dipterocarpus condorensis, Ilex condorensis, Pavetta condorensis and Psychotria condorensis (Anon. 1997).

The terrestrial forest supports a number of bird and mammal species of conservation importance, including an endemic subspecies of Black Giant Squirrel, *Ratufa bicolor condorensis*. The bird fauna of Con Dao National Park is not well studied. However, a number of bird species recorded at Con Dao are not known from any other site in Vietnam, including Nicobar Pigeon *Caloenas nicobarica*, Red-billed Tropicbird *Phaethon aethereus*, Pied Imperial Pigeon *Ducula bicolor* and Masked Booby *Sula dactylatra*.

The marine ecosystems at the national park include mangroves, coral reefs and seagrass beds. Mangroves are distributed around Ba island and along the west coast of Con Son island. The coral reefs at Con Dao are among the most pristine in Vietnam and support high levels of biodiversity. Surveys conducted by Nha Trang Institute of Oceanography have shown the presence of 1,323 species of marine fauna and flora, including 44 species listed in the *Red Data Book of Vietnam*. At 153 species, the mollusc diversity of Con

Dao is the highest of any of Vietnam's offshore islands (ADB 1999). The seagrass beds at Con Dao support a small population of the globally threatened marine mammal, Dugong *Dugong dugon*. Furthermore, the sandy beaches of the islands are important nesting sites for Green Turtle *Chelonia mydas* and Hawksbill Turtle *Eretmochelys imbricata* (Nguyen Thi Dao 1999).

Conservation issues

To date, the level of human impact on the terrestrial ecosystem has been relatively low (J. Hardcastle pers. comm.). One exception, however, is introduced mammal species, which are a particular threat to populations of ground-nesting birds, such as Nicobar Pigeon and seabirds (J. Eames pers. comm.).

One of the biggest threats to biodiversity at Con Dao National Park is infrastructure development. Currently, the islands are being developed as a site for tourism, and a number of associated construction projects are now under way. These include the construction of new hotels, the extension of the airport and the building of new roads. These activities are likely to have severe negative impacts on the natural environment of the national park, in the form of pollution, disturbance to wildlife populations, and siltation of coral reefs and seagrass beds (J. Hardcastle pers. comm.).

The marine biodiversity at Con Dao National Park is threatened by destructive fishing techniques, including the use of cyanide to catch live groupers. Another fishing technique with negative impacts on biodiversity is the use of high intensity lights. These lights are known to disorientate nesting turtles. Other threats to the marine turtles of Con Dao are collection of their eggs for food, oil pollution and infrastructure development (Nguyen Thi Dao 1999).

A fishing port has been built at Ben Dam bay, and was due to commence operating at the end of 2000. A series of other ports, including an oil depot, will be built in the coming years on Con Son island. The construction of these port facilities, and the associated increase in boat traffic, will certainly have negative impacts on the marine ecosystems in the form of pollution and increased disturbance to marine turtle nesting beaches.

Human activities are not the only threat to biodiversity at Con Dao National Park. In 1997, the islands were hit by Typhoon Linda, which caused some damage to the coral reefs, and disturbed marine turtle nesting sites.

Other documented values

The Con Dao archipelago has historical significance as the site of several prisons used by the French colonial regime and South Vietnamese regime. Many famous revolutionaries were imprisoned on the island prior to 1975, and the site is considered a national memorial. A 30 ha site incorporating the prisons was formally recognised as a national heritage site by Decision No. 54/VH/QD of the Ministry of Culture and Information (ADB 1999).

The Con Dao archipelago has already been developed for tourism, and tourism is one of the most important sectors of the islands' economy. There is great potential to further develop ecotourism at the national park, in the form of hiking, birdwatching, snorkeling, diving and watching nesting turtles. Controlled and environmentally sensitive ecotourism development has the potential to raise awareness of conservation issues and generate revenue for management of the national park.

The waters off the Con Dao archipelago are an important fishery. Several marine products of high economic value, such as groupers and giant clams, occur in the area. The islands' mangroves are an important nursery area for the fishery.

Related projects

There have been three major international-donor-funded conservation projects implemented at Con Dao National Park in recent years. Firstly, WWF and Global Environmental Consultants Ltd. implemented the Con Dao Coastal and Marine Environmental Management Demonstration Project, with funding from the Asian Development Bank (ADB). The objectives of this project were to develop a coastal and marine environmental management plan and an ecotourism plan for the national park. Secondly, the WWF Indochina Programme, Nha Trang Institute of Oceanography and Hong Kong University of Science

and Technology implemented a Danida-funded project on marine biodiversity conservation in 1998. Thirdly, the WWF Indochina Programme implemented a second Danida-funded project on marine biodiversity conservation in 2000.

In addition, there is one on-going project at Con Dao National Park. For the last five years, the WWF Indochina Programme has been working with the national park management board to implement a marine turtle conservation project. This project has initiated a turtle monitoring programme, and has set up five artificial hatcheries to protect turtle eggs from natural damage. This project is funded by WWF International, WWF US and WWF Netherlands (Nguyen Thi Dao pers. comm.).

Finally, Voluntary Services Overseas (VSO) have placed two volunteers with the national park: one is working as an English teacher and the other is working in the scientific department.

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