Ban Dao Son Tra Nature Reserve

Alternative site name(s)

Son Tra peninsula

Province(s)

Da Nang city

Area

4,370 ha

Coordinates

16°06' - 16°09'N, 108°13' - 108°21'E

Agro-ecological zone

South Central Coast

Decreed by government

Yes

Management board established

Yes

Investment plan prepared

Yes

VCF eligibility criteria met

B, C

Social screening criteria met

None

Conservation needs assessment prepared

No

Operational management plan prepared

No

Tracking tool completed

No

Map available

Yes

Management history

Ban Dao Son Tra was listed on Decision No. 41/TTg of the Prime Minister, dated 24 January 1977, which decreed the establishment of a 4,000 ha cultural and historical site. In 1989, an investment plan was prepared, which proposed establishing a 4,439 ha nature reserve, comprising a strict protection area of 2,595 ha and a forest rehabilitation area of 1,844 ha (Anon. 1989). This investment plan was approved by the then Quang Nam-Da Nang Provincial People's Committee on 12 September 1989, and by the former Ministry of Forestry in 1992 (FPD 1998). Subsequently, a nature reserve management board was established, and currently has nine permanent members of staff and two contracted staff (Da Nang City FPD *in litt.* 2003).

Ban Dao Son Tra is included on a list of Specialuse Forests to be established by the year 2010, prepared by the FPD of MARD, as a 4,370 ha nature reserve (FPD 2003); this list has not yet been approved by the government.

Topography and hydrology

Ban Dao Son Tra Nature Reserve covers a rocky peninsula, situated to the north-east of Da Nang city. The peninsula was created when alluvium deposition created a land bridge between the mainland and three islands; Nghe, Mo Dieu and Co Ngua. Son Tra peninsula measures 7 by 13 km, and encloses the southern part of Da Nang bay. The highest point on the peninsula is 696 m, and the surrounding waters are shallow, reaching a depth of little more than 10 m within 1 km of the shore.

Biodiversity values

At Ban Dao Son Tra, between 1966 and 1969, Van Peenen *et al.* (1971) recorded Red-shanked Douc *Pygathrix nemaeus* and a form of macaque described as being intermediate between Crab-eating Macaque *Macaca fascicularis* and Rhesus Macaque *M. mulatta*. These species were also recorded by Dinh Thi Phuong Anh and Huynh Ngoc Tao (2000) between 1996 and 1998.

According to the investment plan (Anon. 1989), in 1989, the nature reserve supported 400 ha of primary forest and 2,611 ha of secondary forest. The primary forest is dominated by members of the Fagaceae, Dipterocarpaceae, Anacardiaceae, Moraceae and Sapindaceae families. Other habitats present at Ban Dao Son Tra include scrub, grassland and plantation forest.

As well as its importance for terrestrial biodiversity, the nature reserve also has some marine biodiversity values. For instance, small numbers of nesting marine turtles have been reported from several

of the beaches on Son Tra peninsula (N. Cox *in litt*. 2003).

Conservation issues

Illegal use of forest resources is one of the main problems at Ban Dao Son Tra, with people hunting, and collecting wood and other non-timber forest products. Uncontrolled hunting is of particular concern to the population of Red-shanked Douc, the species of highest conservation importance at the nature reserve. Forest fire is also an occasional problem.

Other documented values

Ban Dao Son Tra Nature Reserve has potential ecotourism values, due to its proximity to Da Nang city and the presence of a population of Red-shanked Douc.

Related projects

Between 1989 and 1995, research was conducted by Quang Nam-Da Nang Provincial DARD, with funding from the provincial science union. This research concentrated mainly on the ecology of the nature reserve and technical issues related to plantation forest. A further study was conducted by FIPI between 1991 to 1995, although the exact nature of this work is not known.

In 2003, the WWF Indochina Programme provided some support to Da Nang City Department of Fisheries and local communities to monitor turtle nesting beaches.

Forest protection and reforestation activities are currently being implemented at the nature reserve with support from the national 661 Programme (Da Nang City FPD *in litt.* 2003).

Conservation needs assessment

A conservation needs assessment has not been conducted for the site.

Operational management plan

An operational management plan has not been prepared for the site.

Eligibility against VCF criteria

The site is ineligible for VCF funding because it does not meet the criteria for supporting forest biodiversity of international importance. The site is situated within Priority Landscape CA1 - Central Annamites but has been assessed by a subsequent analysis as having low importance for international biodiversity conservation (Tordoff *et al.* 2003).

Criterion	Eligibility
$A_{\rm I}$	
A_{II}	
B_{I}	Decision No. 41/TTg, dated 24/01/77
B _{II}	Nature Reserve
B _{III}	Under provincial management
C_{I}	Management board established
C _{II}	

Social screening requirements

A social screening report has not been prepared for the site.

Criterion	Eligibility
A	
В	
С	
D	

Literature sources

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

Anon. (1989) [Investment plan for Son Tra Nature Reserve, Da Nang city, Quang Nam-Da Nang province]. Da Nang: Quang Nam-Da Nang Provincial Forest Protection Department. In Vietnamese.

Cheung, C.P.S. (1992) Report on a visit to the coasts of Vietnam. Unpublished report to WWF Asian Region.

Dinh Thi Phuong Anh and Huynh Ngoc Tao (2000) Fauna of mammalia in Son Tra peninsula, Da Nang city. Tap Chi Sinh Hoc [Journal of Biology] 22(15)CD: 113-116. In Vietnamese.

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Dinh Thi Phuong Anh and Nguyen Minh Tung (2000) Herpetology fauna of Son Tra Nature Reserve, Da Nang city. Tap Chi Sinh Hoc [Journal of Biology] 22(15)CD: 30-33. In Vietnamese.

Nguyen Phu Tho (1995) Son Tra protected area profile and measures for its protection. Pp 131-132, 278-279 in Vietnam Forest Science Technology Association. Proceedings of the national conference on national parks and protected areas of Vietnam. Hanoi: Agricultural Publishing House. In English and Vietnamese.

Storey, R. and Robinson, D. (1995) Lonely planet travel survival kit: Vietnam. Third edition. Hawthorn: Lonely Planet Publications.

Tordoff, A. W., Timmins, R. J., Smith R. J. and Mai Ky Vinh (2003) Central Annamites Biological Assessment. Hanoi: WWF Indochina Programme.

Van Peenen, P. F. D., Light, R. H. and Duncan, J. F. (1971) Observations on mammals of Mt. Son Tra, South Vietnam. Mammalia 35: 126-143.