# **Ba Vi National Park**

Alternative site name(s)

None

Province(s)

Ha Tay

Area

12,023 ha

**Coordinates** 

21<sup>0</sup>01' - 21<sup>0</sup>07'N, 105<sup>0</sup>18' - 105<sup>0</sup>25'E

Agro-ecological zone

Red River Delta

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 copleted** 

No

Map available

Yes

# **Management history**

Prior to 1977, Ba Vi was under the management of several bodies, including Ba Vi Forest Enterprise (Gilmour and Nguyen Van San 1999). On 24 January 1977, Ba Vi was included on Decision No. 41/TTg of the Prime Minister as a 2,144 ha nature reserve (MARD 1997). Management responsibility for the nature reserve originally lay with Ba Vi Forest Enterprise but, in July 1986, management responsibility was transferred to Ba Vi Nature Reserve Management Board, under the management of Hanoi City Department of Forestry (Gilmour and Nguyen Van San 1999).

In 1991, an investment plan was prepared, which proposed upgrading Ba Vi to national park status with a total area of 7,377 ha (Anon. 1991). This investment plan was approved by the government of Vietnam, following Decision No. 17/CT, dated 16 January 1991; at the same time, a management board was established (Ba Vi National Park Management Board *in litt.* 2000). Subsequently, the revision of the management category of the site to national park was approved by Decision No. 407/CT of the Chairman of the Council of Ministers, dated 18 December 1991, and management responsibility for the site was transferred to the former Ministry of Forestry (now MARD) (Gilmour and Nguyen Van San 1999).

According to Ba Vi National Park Management Board (*in litt.* 2000), the total area of the national park is currently 6,786 ha, comprising a strict protection area of 1,092 ha, a forest rehabilitation area of 4,646 ha and an administration and services area of 1,048 ha.

Ba Vi is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 12,023 ha national park (FPD 2003); this list has not yet been approved by the government...

# Topography and hydrology

Ba Vi National Park is centred on Mount Ba Vi, a mountain isolate situated about 50 km west of Hanoi. The mountain rises steeply out of a plain that rarely exceeds 30 m in elevation. In general, slopes on the western side of Ba Vi mountain, at an average of 25°, are steeper than those on the east. Above 400 m, the slopes on the western side may reach a gradient of 35° and rocky cliffs are present. Mount Ba Vi has three peaks: the highest is Dinh Vua at 1,296 m, followed by Tan Vien at 1,226 m and Ngoc Hoa at 1,120 m. Because of the mountainous topography, the climate at Ba Vi varies with altitude. Above 500 m, fog enshrouds the top of the mountain on most days.

Except for the Da River on the western side of the national park, Ba Vi has no large, permanent water bodies. Streams in the national park are small, steep sided and fast flowing. In the rainy season, the volume

of water flowing through these small watercourses and over the surface of the ground is sometimes sufficient to cause landslides. In the dry season, however, many of the streams are dry.

## **Biodiversity values**

At Ba Vi National Park, natural forest is mainly distributed at elevations above 600 m. The natural forest types at Ba Vi are lowland evergreen forest, lower montane evergreen forest and lower montane mixed coniferous and broadleaf forest. In 1998, the national park supported 4,701 ha of forest, comprising 1,710 ha of natural forest and 2,991 ha of plantation forest. The plantation forest is still, however, in the early stages of development, with only small trees present (Gilmour and Nguyen Van San 1999).

According to the investment plan (Anon. 1991), Ba Vi supports 812 species of vascular plant, of which several species were described for the first time from the site, for example *Ixora balansae*, *Litsea baviensis* and *Lasianthus langkokensis*. Also according to the investment plan, Ba Vi supports 44 mammal species, 114 bird species, 15 reptile species and nine amphibian species. Due to relentless human encroachment into the forest at Ba Vi, however, the diversity and abundance of large mammals and birds are now low. Indeed, several species are believed to have become locally extinct (Gilmour and Nguyen Van San 1999).

#### Conservation issues

The forest at the site provides a range of natural resources, including fuelwood, fodder, timber, medicines and foods, for local communities. Following the establishment of a protected area at the site, exploitation of natural resources was prohibited. However, local communities and people from outside the area continued to exploit natural resources for both domestic use and commercial purposes. Rapid population growth, from both migration and natural increase, exacerbated the pressure on the remaining forest area. It was estimated that, in 1998, the total population in the buffer zone of the national park was 46,547 people (Gilmour and Nguyen Van San 1999).

In recent years, the biodiversity of the national park has undergone a dramatic decline. Logging activities, both by local people and forest enterprises, have cleared large areas of forest. Agricultural encroachment from the lowlands and shifting cultivation have also been responsible for the loss of large areas of forest. Widespread fuelwood collection has resulted in forest degradation. Hunting pressure has been unsustainable, resulting in a loss of animal species. Finally, forest fire has degraded natural and plantation forest: it was estimated that, between 1992 and 1997, 365 ha of forest in the national park were destroyed by fire (Gilmour and Nguyen Van San 1999).

#### Other documented values

The forest at Ba Vi National Park is an important source of forest products for local communities. For example, medicinal plant collection is a major economic activity in the area. Between 1997 and 1998, an estimated 250 tonnes of medicinal plants were extracted from the national park. It has been estimated that 80% of the Dao ethnic group in Ba Vi commune extract medicinal plants, which is their second most important source of income (Gilmour and Nguyen Van San 1999).

During the French colonial period, Ba Vi was developed as a hill station, and around 200 villas were constructed on the mountain. In addition, a road was built up the mountain to an elevation of 1,100 m (Gilmour and Nguyen Van San 1999). With a relatively favourable climate, good infrastructure and close proximity to Hanoi, Ba Vi already attracts large numbers of visitors. Several tourism companies have developed resorts and visitor attractions in and around the national park. Ba Vi National Park is also an important site for education and scientific research. Further major tourism resorts are planned in and around the national park (Vietnam News 2003).

# Related projects

Between 1994 and 1999, the Australian NGO Association for Research and Environmental Aid (AREA) and the Centre for Natural Resources and Environmental Studies implemented an AUSAID-funded project entitled: *Environmental Protection in Vietnam: Integrated Community Development Project for the Environment of Ba Vi National Park.* The aim of this project was to improve the capacity of the

people in the project area by promoting sustainable economic and social development based on sound ecological principles and practices. Prior to this, AREA prepared a management plan for the national park (Jones 1993).

With funding from the Japan International Cooperation Agency, the Vietnam Forest Science Technology Association implemented a community forestry project in Yen Bai commune in the buffer zone of the national park (Gilmour and Nguyen Van San 1999).

The Institute of Ecological Economy has been implementing a project to develop an "ecological village" in Ba Vi and Ba Trai communes (Gilmour and Nguyen Van San 1999).

The Quaker Organisation is implementing activities on medicinal plant development in Ba Vi commune (Gilmour and Nguyen Van San 1999).

#### **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 support because it does not meet the criteria for supporting forest biodiversity of international importance. In addition, it is a centrally managed Special-use Forest.

Criterion	Eligibility
$A_{I}$	
$A_{II}$	
$B_{I}$	Decision No. 194/CT, dated 09/08/86
B <sub>II</sub>	National Park
$B_{\rm III}$	Under central 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

Anon. (1991) [Investment plan for Ba Vi National Park]. Hanoi: Hanoi City People's Committee. In Vietnamese.

Anon. (1993) [Final report on flora composition of Ba Vi National Park]. Ba Vi: Ba Vi National Park Management Board. In Vietnamese.

Bui Xuan Phuong and Monastyrskii, A. (1997) Final report: Ba Vi '96. Unpublished report to the Vietnam-Russia Tropical Centre.

Dang Ngoc Can and Trinh Viet Cuong (1995) Rutting behaviour of the Sika Deer *Cervus nippon* at Ba Vi breeding station. Pp 191-196 in: Dang Huy Huynh, Nguyen Tien Ban, Vu Quang Con, Nguyen Thi Le, Pham Van Luc, Tran Dinh Ly, La Dinh Moi and Cao Van Sung eds. [Results of research by IEBR] Hanoi: Institute of Ecology and Biological Resources. In Vietnamese.

Devyatkin, A. L. (1997) A new species of *Halpe* Moore, 1878 from north Vietnam. Atlanta 28: 121-124.

Gilmour, D. A. and Nguyen Van San (1999) Buffer zone management in Vietnam. Hanoi: IUCN Vietnam.

Jones, B. (1993) Ba Vi National Park management plan. Hanoi: Association for Research and Environmental Aid Ltd..

Nguyen Khac Do (1995) Some results of hydrobiological studying at the Ba Vi National Park. Pp 317-319 in: Dang Huy Huynh, Nguyen Tien Ban, Vu Quang Con, Nguyen Thi Le, Pham Van Luc, Tran Dinh Ly, La Dinh Moi and Cao Van Sung eds. [Results of research by IEBR.] Hanoi: Institute of Ecology and Biological Resources. In Vietnamese.

Nguyen Nghia Thin, Nguyen Thu Hien and Do Thi Thu Ha (1998) [Diversity of medicinal plants traditionally used by the Dao ethnic minority in Ba Vi district, Ha Tay province]. Lam Nghiep [Vietnam Forest Review] September 1998: 59-61. In Vietnamese.

Nguyen Van Truong and Nguyen Duc Khang (1994) [Natural and socio-economic condition of Ba Vi National Park]. Hanoi: National Centre for Natural Science and Technology. In Vietnamese.

Phung Tien Huy and Tran Minh Tuan (1999) [Resources management and scientific research in the national park of Ba Vi]. Lam Nghiep [Vietnam Forest Review] May 1999: 25-29. In Vietnamese.

Tran Tuyet Hang (1999) [Growth performance of horse-tail pine *Pinus massoniana*, one year after plantation at Ba Vi National Park, Ha Tay province]. Lam Nghiep [Vietnam Forest Review] January 1999: 53-54. In Vietnamese.

Tran Van On, Do Quyen, Le Dinh Bich, Jones, B., Wunder, J. and Russell-Smith, J. (2001) A survey on medicinal plants in Ba Vi National Park, Vietnam: methodology and implications for conservation and sustainable use. Biological Conservation 97: 295-304.

Vietnam News (2002) Mountain resort opens in Ba Vi. Vietnam News 10 August 2002.

Vietnam News (2003) Ha Tay announces its big plans for Ba Vi. Vietnam News 25 January 2003.