

Ben En National Park

Alternative site name(s)

None

Province(s)

Thanh Hoa

Status

Decreed

Management board established

Yes

Latitude

19°30' - 19°40'N

Longitude

105°21' - 105°35'E

Bio-unit

10b - Northern Indochina



Conservation status

In 1979, Ben En was designated as an area for the protection of fauna. In the same year, a dam was built on the Muc river, forming an artificial lake; the purpose of which was to regulate water supply for agriculture down-river. Ben En was designated as a nature reserve in 1986, with an area of 12,000 ha (MARD 1997). According to Decision No. 194/CT of the Prime Minister dated 9 August 1986, the main objective of the nature reserve was the protection “of the wild life elephant and *Cervus unicolor* and forests in the upper part of the Muc river” (Cao Van Sung 1995). On 27 January 1992, Ben En National Park was established by Decision No. 33/CT of the Prime Minister (Ha Dinh Duc ed. 2000). Four state forest enterprises conducted commercial logging activities in the watershed of the Muc river until 1992 (Tordoff *et al.* 2000).

Ben En National Park is situated in Nhu Thanh and Nhu Xuan districts, Thanh Hoa province. The core zone of the national park covers 16,634 ha, while the buffer zone covers around 12,000 ha. The core zone comprises parts of Xuan Thai, Binh Luong and Xuan Binh communes (Tordoff *et al.* 2000). A proposed extension of the national park to the border with Nghe An Province would increase the area of the core zone to 38,153 hectares and the buffer zone to 31,172

hectares (Anon. 1995). This proposal was submitted to the then Ministry of Forestry by Thanh Hoa Provincial People’s Committee on 19 June 1995 (Ha Dinh Duc ed. 2000). The 2010 list also contains a proposal to extend Ben En National Park from 16,634 to 38,153 ha (FPD 1998), and a proposal to extend Ben En National Park from 16,634 to 50,000 ha is included in the *Biodiversity Action Plan for Vietnam* (Government of SRV/GEF 1994).

Topography and hydrology

Ben En National Park is situated in a region of low hills surrounding an artificial lake. Altitude ranges from 20 to 497 m, with most areas being below 200 m. The lake is 50 m above sea level and covers 2,281 ha. The geology of the national park is characterised by sedimentary rocks, particularly mudstone. Small areas of limestone are also present, and impressive limestone karst formations can be found in the buffer zone in north-east boundary of the national park. The core zone of the national park is drained by the Muc river, while the proposed extension to the national park is drained by the Chang river (Tordoff *et al.* 2000).

Biodiversity value

Ben En National Park is moderately important for the conservation of biodiversity. The national park

protects one of the few surviving areas of lowland forest in north-central Vietnam. The forest has, however, been extensively disturbed in the past by commercial logging operations, and, as a result, is characterised by small, shade-intolerant trees and a dense undergrowth dominated by bamboo. However, since the cessation of commercial logging, forest quality has improved (Tordoff *et al.* 2000).

Despite the disturbed condition of the forest, the diversity of plants and animals at Ben En National Park remains high. Recent surveys by Frontier-Vietnam and the Institute of Ecology and Biological Resources recorded a total of 737 plant species, 64 mammal species, 194 bird species, 28 amphibian species, 58 fish species, and a high diversity of lepidopterans (Tordoff *et al.* 2000). Ben En is potentially an important site for the conservation of Vietnam's mammals as it is home to 20 species listed in the 1996 IUCN Red List of Threatened Animals (IUCN 1996). The population sizes of most large mammal species at Ben En are very low, probably as a result of past hunting, and some have undoubtedly been eradicated already (Tordoff *et al.* 2000).

One species of global conservation concern that still occurs at Ben En National Park is White-cheeked Gibbon *Hylobates leucogenys*, the most recent confirmed record of which was in November 1998 (Tordoff *et al.* 2000). Previously, Asian Elephant *Elephas maximus* occurred at the national park. However, despite several anecdotal reports (Tordoff *et al.* 1997, Ha Dinh Duc ed. 2000), there have been no confirmed records of this species from Ben En since 1993 (Tordoff *et al.* 1997). Tordoff *et al.* (2000) concluded that the species has probably been eradicated from the core zone of the national park, and that any populations which do still persist are likely to be small, of doubtful viability, and restricted to buffer zone areas to the west of the core zone.

Conservation issues

The area was commercially logged until 1992, and, whilst forest still covers most of the core zone, no areas remain undisturbed. More than 18,000 people live in the buffer and core zones of the national park and continue to exert an influence on the natural environment. Illegal logging by both local people and

people from outside the national park continues, and, whilst this activity is not preventing forest regeneration, it will surely delay the process (Tordoff *et al.* 2000).

The continued survival of many large and medium-sized mammals at Ben En National Park is threatened, in the long term, by the fact that the core zone may be too small to support viable populations of these species. It is important, therefore, that the proposed extension of the national park, which will link it with forest areas in Nghe An province, takes place. Unfortunately, people are already moving into the area of the proposed extension and clearing forest for swidden agriculture and sugar cane cultivation. Unless this forest clearance is controlled immediately, it threatens to isolate the forest in the core zone from surrounding forest areas and significantly reduce the conservation importance of the national park (Tordoff *et al.* 2000).

The national park authorities intend to relocate the 4,000 people who are currently living in the core zone of the national park. Up until now, this policy has not been implemented due to lack of resources and local support. Because these people know neither when nor if the proposed relocation to the buffer zone will take place, they are uncertain about their future and have little incentive to exploit the forest in a sustainable fashion or to invest in schemes without immediate returns, such as planting fruit trees (Tordoff *et al.* 2000). Tordoff *et al.* (2000) recommend that a decision be reached as to whether communities in the core zone of the national park should be relocated. If they are to be moved, this should happen as soon as possible. If they are to remain, the communities should be encouraged to take part in community forestry and other schemes to raise income and reduce dependence on natural resources.

Other documented values

The national park protects the watershed of the Muc river, which has been dammed, forming an artificial lake. The forest cover provides catchment protection for this water system, which provides water for irrigation for communities downstream (Tordoff *et al.* 2000).

In the years following the construction of Ben En dam, a state fishery production unit stocked the lake with fish and managed harvesting. Between 1983 and 1987, the annual yield of fish increased from 14 to 30 tonnes but, by 1989, this had fallen to only 7 tonnes. In 1993, the activities of the state fishery production unit ceased, although local people still continue to fish on the lake and its tributaries. These activities are, however, in breach of national park management regulations (Tordoff *et al.* 2000).

Most households in the core and buffer zones of Ben En National Park exploit forest products to a greater or lesser degree. Many forest products, such as bamboo and rattan, are in plentiful supply due to the disturbed condition of the forest. However, over-exploitation of some resources in the past, such as timber trees and large mammals, has caused them to become scarce (Tordoff *et al.* 2000).

Ben En National Park has high tourism potential and is currently being developed as an attraction for domestic tourists. Scenic beauty and accessibility are two of the national park's greatest assets. There is a small guesthouse at the national park and visitors can take a boat trip on the lake. Tourism has the potential to both raise the profile of the national park and generate income for management (Tordoff *et al.* 2000).

Related projects

In July-September 1997 and October-December 1998, Frontier-Vietnam and the Institute of Ecology and Biological Resources conducted biodiversity surveys of Ben En National Park (Tordoff *et al.* 1997, 2000).

In 1997-1998, the Ecosystem Conservation Society of Japan and Hanoi National University implemented a wildlife conservation programme for Ben En National Park (Ha Dinh Duc ed. 2000).

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