





# **Xuan Son Nature Reserve**

### Alternative site name(s)

None

### Province(s)

Phu Tho

**Status** 

Decreed

### **Management board established**

Yes

**Latitude** 

21<sup>0</sup>06' - 21<sup>0</sup>11'N

Longitude

104<sup>0</sup>51' - 104<sup>0</sup>58'E

**Bio-unit** 

10b - Northern Indochina



### Conservation status

Xuan Son was included on Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986, which decreed the establishment of a 4,585 ha nature reserve (MARD 1997). In 1990, an investment plan was prepared by FIPI, which defined the area of the nature reserve as 5,487 ha, comprising a strict protection area of 3,870 ha, a forest rehabilitation area of 725 ha and an administration and services area of 892 ha (Anon. 1990). The investment plan was approved by the then Vinh Phu Provincial People's Committee and the former Ministry of Forestry in 1992 (FPD 1998, Phu Tho Provincial FPD 2000).

In 1995, two investment plans were prepared by FIPI: the first covered investment in the nature reserve for the period from 1996 to 2000, while the second covered investment in the buffer zone. These investment plans gave the area of the nature reserve as 5,487 ha and the area of the buffer zone as 14,825 ha. The investment plans were approved by Decision No. 2101/QD-UB of the then Vinh Phu Provincial People's Committee, dated 15 October 1996 (Anon. 1995).

Xuan Son Nature Reserve falls under the management of Phu Tho Provincial Forest Protection Department (Phu Tho Provincial FPD 2000).

# Topography and hydrology

Xuan Son Nature Reserve is located in Thanh Son district, Phu Tho province, at the extreme south-eastern extent of the Hoang Lien mountains, 45 km south-west of the confluence of the Red and Black Rivers. Elevations at Xuan Son are lower than elsewhere in the Hoang Lien mountains: the nearest point above 2,000 m is 40 km to the north-west. The nature reserve ranges in elevation from c.200 to 1,386 m at the summit of Mount Voi (Anon. 1990).

Limestone karst covers 1,661 ha, equivalent to 30% of the area of the nature reserve (Anon. 1990). The limestone karst contains a large number of caves, some of which contain river systems. The nature reserve is situated in the watershed of the Red River.

# **Biodiversity value**

According to the first investment plan, Xuan Son Nature Reserve supports 4,056 ha of forest, equivalent to 74% of the total area of the nature reserve (Anon. 1990). The natural vegetation types at Xuan Son are lowland and lower montane evergreen forest, and lowland and lower montane limestone forest.

According to the first investment plan, 314 vascular plant species, 48 mammal species, 121 bird species, 13

reptile species and 14 amphibian species have been recorded at Xuan Son Nature Reserve. The investment plan reported the occurrence of one group of Black Gibbon *Hylobates concolor* with three or four individuals, and one group of Phayre's Leaf Monkey *Semnopithecus phayrei* with 15 to 18 individuals (Anon. 1990). However, the current status of these species at the site is not known, and it is possible that both are locally extinct. In addition, the extensive cave systems at Xuan Son are reported to support a high diversity of bat species (Anon. 1990).

### Conservation issues

A nature reserve management board was established on 28 November 1992. Xuan Son Nature Reserve has 19 members of staff, divided between six guard stations (Phu Tho Provincial FPD 2000).

The nature reserve has a buffer zone of 25,575 ha, comprising all or part of the following communes: Kim Huong, Xuan Dai, Tan Son, Kiet Son, Lai Dong and Dong Son. There are 23,002 inhabitants of the buffer zone and a further 1,042 people live inside the nature reserve. The inhabitants of the buffer zone belong to the Dao, Muong and Kinh ethnic groups (Phu Tho Provincial FPD 2000).

The main threats to biodiversity identified by Phu Tho Provincial FPD (2000) are shifting cultivation and forest fire. These would appear to be bigger threats in non-limestone areas, where hillsides are suitable for cultivation. Communities inside the nature reserve, which live in limestone areas, cultivate wet rice on flat valley bottoms. However, the limestone hillsides close to these communities are still covered with primary forest (A. Tordoff pers. comm.).

One conservation issue at Xuan Son is that the nature reserve is, by itself, too small to support viable populations of several mammal and bird species. However, the nature reserve is contiguous with forest areas to the west, in Son La province, and to the south, in Hoa Binh province, and is, therefore, part of a larger area of natural habitat.

### Other documented values

Xuan Son Nature Reserve has potential as a site for tourism, as the site is relatively close to Hanoi, the site

has great scenic beauty, and the ethnic minority communities in the area still practice traditional lifestyles (A. Tordoff pers. comm.).

## Related projects

No information.

### Literature sources

Anon. (1990) [Investment plan for Xuan Son Nature Reserve, Vinh Phu province]. Viet Tri: Vinh Phu Provincial People's Committee. In Vietnamese.

Anon. (1995) [Investment plan for Xuan Son Nature Reserve and buffer zone]. Viet Tri: Northeastern Sub-FIPI. In Vietnamese.

Phu Tho Provincial FPD (2000) [FPD questionnaire]. Viet Tri: Phu Tho Provincial Forest Protection Department. In Vietnamese.