

# Pu Hu Proposed Nature Reserve

## Alternative site name(s)

None

## Province(s)

Thanh Hoa

## Status

Proposed

## Management board established

Yes

## Latitude

20°23' - 20°35'N

## Longitude

104°44' - 105°01'E

## Bio-unit

10b - Northern Indochina



## Conservation status

Pu Hu is not listed on any government decree relating to protected areas. However, an investment plan for Pu Hu was prepared by FIPI in 1998. This investment plan proposed establishing a 35,089 ha nature reserve in Xuan Hoa and Muong Lat districts, Thanh Hoa province (Anon. 1998a). The investment plan was approved by MARD on 9 February 1999, following Official Letter No. 557/BNN-KH. Shortly after this, on 20 March 1999, the investment plan was also approved by Thanh Hoa Provincial People's Committee, following Decision No. 447/XD-UB. The establishment of a nature reserve at Pu Hu has not yet been decreed by the government (Thanh Hoa Provincial FPD 2000). However, Pu Hu is included on the 2010 list as a 35,089 ha nature reserve, including 23,849 ha of forest (FPD 1998).

A nature reserve management board was established by Thanh Hoa Provincial People's Committee on 24 April 1999. The proposed nature reserve has 36 members of staff, based at 15 guard stations and the headquarters. Pu Hu proposed nature reserve is currently under the management of the provincial FPD (Thanh Hoa Provincial FPD 2000).

According to Thanh Hoa Provincial FPD (2000), the proposed nature reserve comprises a strict

protection area of 19,194 ha and a forest rehabilitation area of 15,895 ha. There is also an administration and services area of 14 ha and a buffer zone of approximately 40,000 ha. The buffer zone includes all or part of 11 communes: Trung Ly, Hien Kiet, Hien Chung, Nam Tien, Phu Son, Thach Xuan, Thien Phu, Trung Son, Trung Thanh, Phu Thanh and Phu Xuan.

## Topography and hydrology

Pu Hu proposed nature reserve is a massif situated to the west of a belt of limestone karst that runs south-east from Pu Luong proposed nature reserve to Cuc Phuong National Park. The geology of the Pu Hu massif is largely non-karst in nature but, rather, is a complex mix of granite, riolite, shale, schist, agglomerate, sandstone and limestone. The highest point in Pu Hu proposed nature reserve is Mount Hoc (1,440 m) in the north of the area. Due south of this peak, there are unnamed peaks at 1,390 m and 1,420 m. To the north, east and south of these peaks, elevations decline sharply into the valleys of the Ma and Luong rivers. The lowest point in the proposed nature reserve is below 50 m.

The Pu Hu massif is heavily dissected by streams. Streams in the west, north and east of the proposed nature reserve flow into the Ma river, which flows to the north and east of the site. Streams in the south of the proposed nature reserve flow into the Luong river,

which flows to the south of the site and joins the Ma river to the south-east of the site. The Ma river is one of the major rivers in north-central Vietnam. The catchment of this river comprises the northern parts of Hua Phan province in Laos and Thanh Hoa province in Vietnam.

## Biodiversity value

Pu Hu proposed nature reserve supports two main forest types. Lowland evergreen forest is found at elevations below 700 m, and is dominated by members of the Fabaceae, Meliaceae and Sapindaceae families. At lower elevations, this forest type has been extensively cleared for shifting cultivation. Lower montane evergreen forest is distributed at elevations above 700 m, and is dominated by members of the Fagaceae, Moraceae and Lauraceae families (Anon. 1998a).

The investment plan states that Pu Hu proposed nature reserve supports several mammal species of conservation concern, including Asiatic Black Bear *Ursus thibetanus*, Sun Bear *U. malayanus*, Leopard *Panthera pardus*, Gaur *Bos gaurus* and gibbon, presumably White-cheeked Gibbon *Hylobates leucogenys* (Anon. 1998a). All of these records should be treated with caution, however, as they originate from biodiversity surveys conducted in the wider Thanh Hoa area in 1997. Data from these surveys were subsequently used as justification for the designation of Pu Hu and Pu Luong as nature reserves.

The bird fauna of Pu Hu is yet to be thoroughly surveyed. However, two bird species of conservation concern have been recorded at the proposed nature reserve, the globally vulnerable Yellow-billed Nuthatch *Sitta solangiae*, and the globally near-threatened Lesser Rufous-headed Parrotbill *Paradoxornis atrosuperciliaris* (Le Trong Trai pers. comm.). The record of Yellow-billed Nuthatch is notable because it is a restricted-range species, while the record of Lesser Rufous-headed Parrotbill represents the most southerly extent of its known range in Vietnam.

## Conservation issues

According to Thanh Hoa Provincial FPD (2000), the population of the buffer zone is 29,537 people, while 2,867 people live inside the nature reserve. The inhabitants of the nature reserve and buffer zone belong to the Thai, Hmong, Dao and Kinh ethnic groups. Thanh Hoa Provincial FPD (2000) perceive the biggest threat to biodiversity in the area to be illegal forest clearance for agriculture. Indeed, there are 5,647 ha of hill agricultural land inside the boundaries of the nature reserve. The other main threats to biodiversity identified by the provincial FPD are illegal hunting, spontaneous in-migration, illegal exploitation of forest products, and forest fire. The last threat is probably associated with the use of fire to clear land for hill agriculture.

National Highway 15, which runs alongside the Ma river, to the east of Pu Hu proposed nature reserve, is currently being upgraded (A. Tordoff pers. comm.). Against a background of spontaneous in-migration, the upgraded road may act as a focus for settlement of migrants, and facilitate exploitation of forest products. Consequently, the upgraded road may be expected to increase human pressures on the proposed nature reserve.

Pu Hu nature reserve lies close to Xuan Nha Nature Reserve to the north-west and Pu Luong proposed nature reserve to the east. Although forest cover between these sites is not contiguous, reforestation activities could create habitat corridors between them. Therefore, Pu Hu is a potential component in a landscape-level conservation project to protect the forest areas along the border between Thanh Hoa and Hoa Binh provinces, from Cuc Phuong National Park to the Laotian border.

## Other documented values

Pu Hu has a role in protecting the watershed of the Ma river.

## Related projects

No information.

## Literature sources

Anon. (1998a) [Investment plan for Pu Hu Nature Reserve, Thanh Hoa province]. Hanoi: Forest Inventory and Planning Institute. In Vietnamese.

Anon. (1998b) [Summary of investment plan for Pu Hu Nature Reserve, Thanh Hoa province]. Hanoi: Forest Inventory and Planning Institute. In Vietnamese.

Thanh Hoa Provincial FPD (2000) [FPD questionnaire]. Thanh Hoa: Thanh Hoa Provincial Forest Protection Department. In Vietnamese.