

Pu Hu Proposed Nature Reserve

Alternative site name(s)

None

Province(s)

Thanh Hoa

Area

35,089 ha

Coordinates

20°23' - 20°35'N, 104°44' - 105°01'E

Agro-ecological zone

North Central Coast

Decreed by government

No

Management board established

Yes

Investment plan prepared

Yes

VCF eligibility criteria met

A, 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

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 approved by Thanh Hoa Provincial People's Committee, following Decision No. 447/XD-UB.

A nature reserve management board was established by Decision No. 741/QD-UB of Thanh Hoa Provincial People's Committee, dated 24 April 1999 (Pu Hu Nature Reserve Management Board *in litt.* 2003). The management board currently has 35 members of staff, based at five guard stations. Pu Hu proposed nature reserve is currently under the management of Thanh Hoa Provincial FPD (Pu Hu Nature Reserve Management Board *in litt.* 2003).

Pu Hu is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 35,089 ha nature reserve (FPD 2003); this list has not yet been approved by the government. According to Pu Hu Nature Reserve Management Board (*in litt.* 2003), however, the total area of the proposed nature reserve is 27,503 ha, comprising a strict protection area of 16,265 ha, a forest

rehabilitation area of 11,233 ha, and an administration and services area of 5 ha. In addition, there is a buffer zone of 51,100 ha.

Topography and hydrology

The proposed nature reserve is centred on the Pu Hu massif, a complex mix of granite, riolite, shale, schist, agglomerate, sandstone and limestone. The massif is separated from the belt of limestone karst that runs between Pu Luong proposed nature reserve and Cuc Phuong National Park by the valley of the Ma river, one of the major rivers in north-central Vietnam. 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, and 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 feeds the Ma river.

Biodiversity values

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).

According to Pu Hu Nature Reserve Management Board (*in litt.* 2003), 508 plant species and 266 animal species have been recorded at the site. The investment plan states that Pu Hu proposed nature reserve supports several mammal species of conservation concern, including Asian Black Bear *Ursus thibetanus*, Sun Bear *U. malayanus*, Gaur *Bos gaurus* and a gibbon species, presumably White-cheeked Crested Gibbon *Hylobates leucogenys* (Anon. 1998a). All of these records should be treated with caution, however, as they originate from biodiversity surveys conducted over a wider area of Thanh Hoa province 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, one restricted-range species, Yellow-billed Nuthatch *Sitta solangiae*, has been recorded at the site (Le Trong Trai verbally 2000).

Conservation issues

According to Pu Hu Nature Reserve Management Board (*in litt.* 2003), the human population of the buffer zone is 28,746 people, while an additional 365 people live inside the proposed 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 (*in litt.* 2000) perceive the biggest threat to biodiversity at the site to be illegal forest clearance for agriculture. Indeed, there are 5,647 ha of hill agricultural land inside the boundaries of the proposed 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.

Other documented values

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

Related projects

A number of government programmes are currently being implemented in the buffer zone of Pu Hu proposed nature reserve, including the national 135 and 661 Programmes (Pu Hu Nature Reserve Management Board *in litt.* 2003). In addition, a rural development project is currently being implemented by World Vision in the buffer zone.

Conservation needs assessment

A conservation needs assessment has not been conducted for the site, although SNV and Fauna & Flora International (FFI) plan to conduct one in the second half of 2004.

Operational management plan

An operational management plan has not been prepared for the site, although SNV and FFI plan to prepare one in the second half of 2004.

Eligibility against VCF criteria

The site is eligible for VCF support because it meets criteria A, B and C.

Criterion	Eligibility
A _I	NA1 - Northern Indochina Limestone
A _{II}	
B _I	Proposed Special-use Forest
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	
B	
C	
D	

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.