

Ngoc Son Proposed Nature Reserve

Alternative site name(s)

Ngoc Son-Tu Do

Province(s)

Hoa Binh

Status

Proposed

Management board established

No

Latitude

20°31' - 20°30'N

Longitude

105°15' - 105°29'E

Bio-unit

10b - Northern Indochina



Conservation status

A proposal to establish a 10,000 ha nature reserve at Ngoc Son was made by Hoa Binh Provincial People's Committee in 1996 (MARD 1997). To date, however, an investment plan has not been prepared and a management board has not been formed (Hoa Binh Provincial FPD 2000). It is not even clear whether the boundary of the nature reserve has been defined. Ngoc Son is not included on any government decree regarding protected areas, nor is it included on the 2010 list (FPD 1998).

Topography and hydrology

Ngoc Son proposed nature reserve is situated in Ngoc Son and Tu Do communes, Lac Son district, Hoa Binh province. The proposed nature reserve lies on the north-eastern flank of the limestone range that extends in a north-westerly direction from Cuc Phuong National Park to Son La province. The geology of the proposed nature reserve is characterised by limestone karst, and the topography is steep and rugged. Within the karst, there are a few flat-bottomed valleys, which run from north-west to south-east.

Ngoc Son proposed nature reserve is approximately 25 km long and 6 km wide. The maximum elevation in the proposed nature reserve is 1,065 m, in the north-

west, while the lowest elevation is under 100 m. The average elevation of the top of the limestone karst is about 600 m. The hydrology of the area is complex. The proposed nature reserve is drained by a tributary of the Buoi river, which feeds the Ma river, which, in turn, reaches the sea near Thanh Hoa city.

Biodiversity value

In the absence of any biological surveys of the site, almost no information exists about the biodiversity value of Ngoc Son. Satellite image data from 1995 indicate that the proposed nature reserve is still largely covered by limestone forest, probably due to the inaccessibility of the area and the unsuitability of the limestone karst for agriculture. It would appear, however, that the flat valley bottoms have been settled by people, and that the forest has been cleared for cultivation.

Given the proximity of Ngoc Son proposed nature reserve to Cuc Phuong National Park and Pu Luong proposed nature reserve, it can be expected that the flora and fauna of Ngoc Son have strong similarities with those of the other two sites. For instance, Ngoc Son might be expected to support a population of the globally critically endangered and endemic primate, Delacour's Leaf Monkey *Semnopithecus francoisi delacouri*. This species has been recorded in several contiguous areas of similar habitat: Pu Luong proposed

nature reserve to the west (Baker 1999), Ba Thuoc district to the south (Ngo Van Tri 1999) and Cuc Phuong National Park to the south-east (Ratajszczak 1988). There is a need, therefore, for a survey to assess the status of this species at Ngoc Son.

Conservation issues

Hoa Binh Provincial FPD (2000) consider timber extraction and collection of non-timber forest products to be the main threats to biodiversity within the proposed nature reserve. In the buffer zone, they identify clearance of forest for shifting cultivation and forest fire as additional threats. At least some of the timber extracted from the proposed nature reserve is used locally for house construction. Quarrying of limestone is another threat to biodiversity at Ngoc Son (O. Maxwell pers. comm.).

Ngoc Son is an important link in a chain of near-contiguous decreed and proposed protected areas, which stretches from Cuc Phuong National Park to the Laotian border. Providing that intervening areas of forest can be protected, and habitat corridors re-established in areas where forest has been cleared, the area has the potential to be one of the most intact natural landscapes in Vietnam.

Other documented values

No information.

Related projects

Ngoc Son proposed nature reserve may be included within a landscape-level conservation project to protect the limestone range between Cuc Phuong and Pu Luong, currently being developed by the Fauna and Flora International-Indochina Programme. At the landscape level, Ngoc Son has particular importance because it includes a large proportion of the intervening forest between Cuc Phuong National Park and Pu Luong proposed nature reserve. The project is awaiting final approval by the principal donor, the Global Environment Facility (GEF).

Literature sources

Baker, L. R. (1999) Survey of the Delacour's Langur for the Frankfurt Zoological Society and the Endangered Primate Rescue Centre. Unpublished report to the Frankfurt Zoological Society and the Endangered Primate Rescue Centre.

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

Luong Van Hao (1999) [Survey of the distribution of Delacour's Langur in Hoa Binh province, June 1999]. Unpublished report to the Endangered Primate Rescue Centre. In Vietnamese.

Ngo Van Tri (1999) Preliminary assessment on the mammal in Tuong limestone mountain complex, Ba Thuoc district, Thanh Hoa province. Unpublished report to Fauna and Flora International-Indochina Programme.

Ratajszczak, R. (1988) Notes on the current status and conservation of primates in Vietnam. *Primate Conservation* 9: 134-136.