Thang Hen Proposed Nature Reserve

Alternative site name(s)

Ho Thang Hen [Thang Hen lake]

Province(s)

Cao Bang

Area

1,000 ha

Coordinates

22⁰46'N, 106⁰19'E

Agro-ecological zone

North-eastern

Decreed by government

No

Management board established

No

Investment plan prepared

No

VCF eligibility criteria met

A, B

Social screening criteria met

None

Conservation needs assessment prepared

No

Operational management plan prepared

No

Tracking tool completed

No

Map available

Yes

Management history

Thang Hen is located in Quoc Toan commune, Tra Linh district, Cao Bang province. Thang Hen is not listed on any government decision or official set of proposals regarding the national protected areas system (MARD 1997, FPD 2003). It was, however, proposed as a candidate site for nature reserve status on the basis of recent discoveries of new plant species there (Vu Van Dung and Nguyen Huy Thang 1999). According to Cao Bang Provincial FPD (*in litt.* 2003), the approximate area of the proposed nature reserve is 1,000 ha.

To date, a management board has not been established for the site, and the site is currently under the management of Thang Hen District People's Committee (Cao Bang Provincial FPD *in litt.* 2003). Thang Hen is not included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD (FPD 2003).

Topography and hydrology

Thang Hen is centred on a series of lakes, most of which are seasonal, within an area of limestone karst. The area is characterised by steep topography, and ranges in elevation from c.600 to 906 m (Tordoff *et al.* 2000).

Biodiversity values

Thang Hen supports around 1,000 ha of limestone forest. However, the remainder of the site has been denuded of natural vegetation and now supports a mixture of agricultural land and scrub (Tordoff *et al.* 2000).

A number of plant species of conservation importance have been recorded at Thang Hen, including eight orchid species new to science (Averyanov 1996, Averyanov 1997, Phan Ke Loc *et al.* 1999) and the globally vulnerable conifer *Pinus kwantungensis* (Phan Ke Loc *et al.* 1999, Tordoff *et al.* 2000).

The forest at Thang Hen may support remnant populations of a number of globally threatened mammal species, including Forest Musk Deer *Moschus berezovskii*, although these populations are under high hunting pressure. Even if hunting pressure were removed, the site is potentially too small to support viable populations of many mammal species, and, consequently, is of limited importance for their conservation (Tordoff *et al.* 2000).

Conservation issues

The significance of Thang Hen for conservation is compromised by high human pressure on the site. Almost all of the natural forest in Tra Linh district has already been cleared, and the remaining patches of forest are now the principal source of forest products for a large proportion of the district's inhabitants. Consequently, the small area of natural forest that remains at Thang Hen is being steadily eroded by unsustainable firewood collection and timber extraction. Due to a lack of alternative sources of forest products, the most probable scenario is that the remaining forest will be cleared, or at least severely degraded, in the near future (Tordoff *et al.* 2000).

Hunting is reportedly causing declines in populations of large and medium-sized mammals at Thang Hen, and threatens to eradicate the remnant populations of any globally threatened species that may still occur at the site. However, hunting pressure is not declining, in response to decreasing mammal populations, but is, instead, shifting to birds and small mammals.

There is a forest guard station at Thang Hen but forest protection measures appear to be ineffective. During a rapid field survey in 1999, hunting, timber extraction and firewood collection were frequently observed (Tordoff *et al.* 2000).

Other documented values

Thang Hen is an area of great scenic beauty and attracts small numbers of tourists. Cao Bang Provincial People's Committee plan to further develop tourism at the site: an unsurfaced road has already been built to the lakes, and a trail has been constructed. Presently, however, there is no tourism management at the site (Tordoff *et al.* 2000).

Related projects

No information.

Conservation needs assessment

A conservation needs assessment has not been conducted for the site.

Operational management plan

An operational management plan has not been prepared for the site.

Eligibility against VCF criteria

The site is currently ineligible for VCF support because it is not under appropriate conservation management.

| Criterion | Eligibility |
|------------------|------------------------------------|
| $A_{\rm I}$ | NH2 - Northern Highlands Limestone |
| A_{II} | |
| B_{I} | Proposed Special-use Forest |
| B _{II} | Nature Reserve |
| B _{III} | Under provincial management |
| C_{I} | |
| C _{II} | |

Social screening requirements

A social screening report has not been prepared for the site.

| Criterion | Eligibility |
|-----------|-------------|
| A | |
| В | |
| С | |
| D | |

Literature sources

Averyanov, L. V. (1996) New species of orchids (Orchidaceae) from Vietnam. Botanical Journal 81(10): 73-83.

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Phan Ke Loc, Nguyen Tien Hiep and Averyanov, L. V. (1999) [Is there any news about limestone karst flora in Cao Bang province?]. Pp 32-41 in: Le Sau ed. [Protection and sustainable development of forest and biodiversity in limestone areas of Vietnam] Hanoi: Forest Inventory and Planning Institute. In Vietnamese.

Tordoff, A. W., Vu Van Dung, Le Van Cham, Tran Quang Ngoc and Dang Thang Long (2000) A rapid field survey of five sites in Bac Kan, Cao Bang and Quang Ninh provinces: a review of the Northern Indochina Subtropical Forests Ecoregion. Hanoi: BirdLife International Vietnam Programme and the

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