

Khe Net Proposed Nature Reserve

Alternative site name(s)

Rao Net

Province(s)

Quang Binh

Area

23,524 ha

Coordinates

18°02'N, 105°58'E

Agro-ecological zone

North Central Coast

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

In 1994, BirdLife International conducted a field survey in the lowland forests of central Vietnam, with the aim of identifying a suitable site for the conservation of endemic pheasant species, including Vietnamese Pheasant *Lophura hatinhensis* and Imperial Pheasant *L. imperialis*. Based on the results of this survey, BirdLife recommended establishing a nature reserve at Khe Net, in Quang Binh province, with the objective of protecting part of the only known population of Vietnamese Pheasant in the world (Eames *et al.* 1994).

In 1999, following their review of the Special-use Forests network of Vietnam, BirdLife International and the Forest Inventory and Planning Institute (FIPI) reiterated the proposal to establish a nature reserve at Khe Net (Wege *et al.* 1999). Following this proposal, BirdLife and FIPI conducted a biodiversity survey and socio-economic assessment of Khe Net in 2000, in order to collect data for a feasibility study for the establishment of a nature reserve at the site. This feasibility study was published in 2001, and proposed the establishment of a 23,524 ha nature reserve (Le Trong Trai *et al.* 2001).

The Khe Net area is currently under the management of Tuyen Hoa Forest Enterprise (Le Trong Trai verbally 2000). Khe Net is not included on any government decision or official set of proposals

regarding the Special-use Forests system (MARD 1997, FPD 2003). The future establishment of a nature reserve at the site is dependent upon an investment plan being prepared, and being approved by Quang Binh Provincial People's Committee and MARD.

Topography and hydrology

Khe Net proposed nature reserve is located in Tuyen Hoa district in the lowlands of north-central Vietnam. The topography of the proposed nature reserve is characterised by low hills, at elevations below 400 m. The largest watercourse running through the site is the Khe Net stream, which forms part of the watershed of the Gianh river. The Khe Net stream is fed by five main streams: the Khe Che, Khe Mon, Khe Lanh Anh, Khe Da Mai and Khe Bui Nhui. These streams all originate on the low ridge that forms the boundary between Ha Tinh and Quang Binh provinces.

Biodiversity values

Khe Net is contiguous with Ke Go Nature Reserve, which lies in Ha Tinh province to the north. The two sites combined support one of the largest remaining tracts of lowland evergreen forest in the Annamese Lowlands Endemic Bird Area (EBA). This EBA supports nine restricted-range bird species, six of which have been recorded at Khe Net: Annam Partridge *Arborophila merlini*, Vietnamese Pheasant, Imperial Pheasant, Crested Argus *Rheinardia ocellata*,

Short-tailed Scimitar Babbler *Jabouilleia danjoui* and Grey-faced Tit Babbler *Macronous kelleyi* (Stattersfield *et al.* 1998, Le Trong Trai *et al.* 2001). Most notably, the Khe Net-Ke Go area is the only area in the world known to support a population of the globally endangered Vietnamese Pheasant (Le Trong Trai *et al.* 1999). Because of its importance for the conservation of globally threatened and restricted-range bird species, Khe Net qualifies as an Important Bird Area (Tordoff 2002).

The vegetation of Khe Net proposed nature reserve is a mosaic of undisturbed and selectively logged lowland evergreen forest. Most of the ridge-tops in the proposed nature reserve are covered by tall forest, with a closed canopy, and, despite the fact that large timber trees have been selectively extracted in many areas, the forest retains an essentially primary character. Degraded forest areas usually occur on steeper slopes, and are often mixed with areas of secondary forest and tall bamboo. Most of the forest on flatter areas in the eastern part of the proposed nature reserve has been logged, and is now replaced by secondary vegetation types, with few tall trees and large numbers of palms (Le Trong Trai *et al.* 2001).

The composition of the flora of Khe Net proposed nature reserve is similar to that of Ke Go Nature Reserve. A total of 566 vascular plant species have been identified at the site, including eight globally threatened species: *Alseodaphne hainanensis*, *Aquilaria crassna*, *Dipterocarpus retusus*, *Erythrophleum fordii*, *Hopea mollissima*, *Madhuca pasquieri*, *Parashorea chinensis* and *Xylopiia pierrei* (Le Trong Trai *et al.* 2001).

The mammal fauna of Khe Net is characterised by high species diversity but low abundance. Several globally threatened mammal species recorded at the site are believed to occur at very low densities as a result of high hunting pressure. These include Gaur *Bos gaurus* and Southern Serow *Naemorhedus sumatraensis*. During the BirdLife/FIPI survey in 2000, a population of Annamese Leaf Monkey *Trachypithecus hatinhensis* was discovered at Khe Net. This discovery is of great conservation significance, as it is the first time in Vietnam that this species has been recorded away from the Phong Nha-Ke Bang limestone area. In addition, the BirdLife/FIPI survey recorded the recently described large mammal, Large-antlered

Muntjac *Muntiacus vuquangensis*, at the proposed nature reserve (Le Trong Trai *et al.* 2001).

Conservation issues

In the past, human pressure on the forest along the Ha Tinh-Quang Binh provincial border was intense. In recent years, however, selective logging and non-timber forest product (NTFP) exploitation appear to have subsided somewhat. Since 1997, the focus of the activities of Tuyen Hoa Forest Enterprise has shifted away from exploitation and towards forest protection and natural regeneration. Hunting, however, continues to be a problem at Khe Net, and threatens to eradicate a number of species of global conservation concern, unless measures are rapidly implemented to control it (Le Trong Trai *et al.* 2001). For instance, there are already indications that the globally vulnerable Crested Argus may have become extinct, or at least vastly reduced, at the site between 1994 and 2000, as a result of unsustainable hunting (Le Trong Trai *et al.* 2001).

Other documented values

The forest at Khe Net performs an important watershed protection function for the Gianh river. Khe Net proposed nature reserve is also an important source of NTFPs for local communities, particularly palm leaves, which are a major source of income for many households in the surrounding area.

Related projects

With funding from the national 661 Programme, Tuyen Hoa Forest Enterprise is currently implementing a forest regeneration and protection programme at the site.

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.

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Eligibility against VCF criteria

Khe Net is not currently eligible for VCF support because it is not under appropriate conservation management.

Criterion	Eligibility
A _I	NA5 - Ke Go and Ke Net Lowlands
A _{II}	VN035 - Khe Net
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	
B	
C	
D	

Literature sources

Eames, J. C., Lambert, F. R. and Nguyen Cu (1994) A survey of the Annamese Lowlands, Vietnam, and its implications for the conservation of Vietnamese and Imperial Pheasants *Lophura hatinhensis* and *L. imperialis*. Bird Conservation International 4(4): 343-382.

Lambert, F. R., Eames, J. C. and Nguyen Cu (1994) Surveys of the endemic pheasants in the Annamese lowlands of Vietnam, June-July, 1994: status and conservation recommendations for the Vietnamese Pheasant *Lophura hatinhensis* and Imperial Pheasant *L. imperialis*. Oxford: IUCN.

Lao Dong (2002) [Hundreds of cubic metres of wood wasted]. Lao Dong [Labour] 9 August 2002. In Vietnamese.

Le Trong Trai, Nguyen Huy Dung, Nguyen Cu, Le Van Cham and Eames, J. C. (1996) [An investment plan for Ke Go Nature Reserve, Ha Tinh province,

Vietnam: a contribution to the management plan]. Hanoi: BirdLife International and the Forest Inventory and Planning Institute. In Vietnamese.

Le Trong Trai, Nguyen Huy Dung, Nguyen Cu, Le Van Cham, Eames, J. C., and Chicoine, G. (1999) An investment plan for Ke Go Nature Reserve, Ha Tinh province, Vietnam: a contribution to the management plan. Hanoi: BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute.

Le Trong Trai, Tran Hieu Minh, Do Tuoc and Nguyen Van Sang (2001) [Feasibility study for the establishment of Khe Net Nature Reserve, Quang Binh province, Vietnam]. Hanoi: BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute. In Vietnamese.

Tordoff, A. W. ed. (2002) Directory of important bird areas in Vietnam: key sites for conservation. Hanoi: BirdLife International in Indochina and the Institute of Ecology and Biological Resources.

Vietnam News (2000) Vietnam to double conservation areas with new reserve. Vietnam News 7 October 2000.