

Pu Mat

Criteria: A1, A2 & A3

Province(s): Nghe An
PA Status: National Park
Latitude: 18°57'N
Longitude: 104°42'E
Area: 91,113 ha
Altitude Range: 100-1,841 masl

EBA / SA:

Annamese Low lands EBA

Priority Landscape:

NA 4 - Northern Annamites

**General Description**

The IBA comprises Pu Mat National Park, which is situated in the northern Annamite mountains. The highest points in the national park are found along the main ridge of the Annamite mountains, which forms the international border with Laos. The topography of the IBA is dominated by the valleys of three major rivers, which drain eastwards, away from the main ridge. The IBA is extensively forested, with large areas of lowland evergreen forest at lower elevations and smaller areas of lower montane evergreen forest at higher elevations. Along river valleys and at other easily accessible points, the forest has been degraded by illegal timber extraction. However, most of the forest in the IBA remains relatively undisturbed. Pu Mat IBA is an important site for the conservation of plant and animal taxa endemic to the Annamite mountains. For example, the IBA is known to support populations of Saola *Pseudoryx nghetinhensis*, Annamite Muntjac *Muntiacus truongsonensis* and Annamite Striped Rabbit *Nesolagus timminsi*^{1,2}.

Bird Fauna: Key Features

Pu Mat IBA supports a large area of relatively undisturbed evergreen forest, over a wide altitudinal gradient. Consequently, the IBA supports a rich and diverse avifauna. Most significantly the IBA supports one of the most extensive areas of lowland evergreen forest remaining in the Annamite Lowlands Endemic Bird Area (EBA). While Pu Mat only supports two of the nine restricted-range species that define this EBA, it supports a significant number of globally threatened and near-threatened species, including several that are characteristic of relatively undisturbed lowland evergreen forest, such as Red-collared Woodpecker *Picus rabieri*, Blyth's Kingfisher *Alcedo hercules* and Lesser Fish Eagle *Ichthyophaga humilis*. In addition to species characteristic of lowland evergreen forest, Pu Mat IBA supports a large number of species characteristic of lower montane evergreen forest, including over 50 species restricted to the Sino-Himalayan Subtropical Forests Biome. These species include a number that are known from few other IBAs in Vietnam, such as Dark-sided Thrush *Zoothera marginata*, Yellow-throated Fulvetta *Alcippe cinerea* and, provisionally, Blue-naped Pitta *Pitta nipalensis*. Most significantly, lower montane evergreen forest at Pu Mat supports a population of the globally vulnerable Rufous-necked Hornbill *Aceros nipalensis*, which is currently known to occur at only one other site in Vietnam: Che Tao IBA. However, the population of Rufous-necked Hornbill at Pu Mat has been much reduced by heavy hunting pressure².

Species	IBA Criteria	Global Threat Status	Other IBAs	Notes
Crested Argus <i>Rheinardia ocellata</i>	A1, A2	VU	15	The species was frequently heard, from low elevations up to at least 1,300 m asl, between April and May 1999 ³ .
Rufous-necked Hornbill <i>Aceros nipalensis</i>	A1, A3	VU	1	Three birds were seen between November and December 1994 ⁴ . Small numbers were recorded at four locations during 1998 ³ . A group of two to four birds was recorded at 1,400 m asl on the north-west face of Mount Pu Mat in April 1999 ³ .
Chestnut-necklaced Partridge <i>Arborophila charltonii</i>	A1	NT	7	Several birds were heard between July and November 1998 ³ and between April and May 1999 ³ .
Red-collared Woodpecker <i>Picus rabieri</i>	A1, A3	NT	11	A single sighting was made between July and November 1998 ³ . Single individuals were recorded on two separate occasions in April 1999 ³ .

Species	IBA Criteria	Global Threat Status	Other IBAs	Notes
Great Hornbill <i>Buceros bicornis</i>	A1	NT	13	One or two individuals were recorded in the Khe Thoi area and two or three birds were recorded on Mount Pu Xam Liem in November 1998 ³ . Single birds were heard calling on four occasions during April 1999 ³ .
Brown Hornbill <i>Anorrhinus tickelli</i>	A1, A3	NT	16	The species was recorded between November and December 1994 ⁵ and between April and May 1999 ³ . Flocks of at least 25 birds were observed between July and November 1998 ³ .
Blyth's Kingfisher <i>Alcedo hercules</i>	A1, A3	NT	8	The species was found to be widely distributed on forested rivers and larger streams during surveys between July and November 1998 and between April and May 1999 ³ .
Lesser Fish Eagle <i>Ichthyophaga humilis</i>	A1	NT	6	Two birds, thought to be this species, were seen in July 1998 ³ . A single individual was recorded in April 1999 ³ .
Grey-headed Fish Eagle <i>Ichthyophaga ichthyaetus</i>	A1	NT	8	A single bird was seen along the Khe Bong river in lowland evergreen forest at c.500 m asl in May or June 2002 ⁶ .
Short-tailed Scimitar Babbler <i>Jabouilleia danjoui</i>	A1, A2	NT	17	Two individuals were recorded in November 1998 ³ . In addition, two birds were recorded at c.800 m asl and a single bird was seen at c.900 m asl in April 1999 ³ .

Biome Restricted Species: The site qualifies under criterion A3 because it supports 51 species restricted to the Sino-Himalayan Subtropical Forests (Biome 08) and 19 species restricted to the Indochinese Tropical Moist Forests (Biome 09). See Appendix 4 for details.

Secondary Criteria

Species	Status	Species	Status
Northern Slow Loris <i>Nycticebus bengalensis</i> ²	DD	[Chinese Stripe-necked Turtle <i>Ocadia sinensis</i>] ²	EN
Pygmy Loris <i>Nycticebus pygmaeus</i> ²	VU	[Keel Box Turtle <i>Pyxidea mouhotii</i>] ²	EN
[Northern Pigtail Macaque <i>Macaca leonina</i>] ²	VU	Four-eyed Turtle <i>Sacalia quadriocellata</i> ²	EN
Assamese Macaque <i>Macaca assamensis</i> ²	VU	[Elongated Tortoise <i>Indotestudo elongata</i>] ²	EN
Rhesus Macaque <i>Macaca mulatta</i> ²	NT	Impressed Tortoise <i>Manouria impressa</i> ²	VU
Long-tailed Macaque <i>Macaca fascicularis</i> ²	NT	[Asiatic Softshell Turtle <i>Amyda cartilaginea</i>] ²	VU
Stump-tailed Macaque <i>Macaca arctoides</i> ²	VU	Wattle-necked Softshell Turtle <i>Palea steindachneri</i> ²	EN
*[Red-shanked Douc <i>Pygathrix nemaesusnemaesus</i>] ²	EN	[Chinese Softshell Turtle <i>Pelodiscus sinensis</i>] ²	VU
White-cheeked / Buff-cheeked Gibbon <i>Nomascus leucogenys/gabriellae</i> ²	DD/VU	<i>Fokienia hodginsii</i> ²	NT
Big-headed Turtle <i>Platysternon megacephalum</i> ²	EN	Asian Elephant <i>Elephas maximus</i> ²	EN
Indochinese Box Turtle <i>Cuora galbinifrons</i> ²	CR	*[Lesser One-horned Rhinoceros <i>Rhinoceros sondaicus</i>] ²	CR
[Chinese Three-striped Box Turtle <i>Cuora trifasciata</i>] ²	CR	[Indochinese Warty Pig <i>Sus bucculentus</i>] ²	DD
[Asian Leaf Turtle <i>Cyclemys dentata</i>] ²	NT	Gaur <i>Bos gaurus</i> ²	VU
[Black-breasted Leaf Turtle <i>Geoemydaspengleri</i>] ²	EN	Southern Serow <i>Naemorhedus sumatraensis</i> ²	VU
		Saola <i>Pseudoryx nghetinhensis</i> ²	EN

Notes: [] = unconfirmed record; * = possibly extinct at the site.

Threats to Biodiversity

The relatively large area of forest at Pu Mat IBA provides a certain degree of natural protection to the biodiversity of the IBA. However, the natural resources of Pu Mat remain under high human pressure. One of the major threats to biodiversity at Pu Mat is large-scale illegal timber extraction, which is degrading significant areas of lowland evergreen forest place along the main river valleys. In addition, most other areas of forest in the IBA have been affected by small-scale illegal timber extraction, although the impact of this has been limited in most places.

Another major threat to biodiversity is over-exploitation of animals, which is widespread at Pu Mat in response to the high level of demand from the wildlife trade. Over-exploitation is a particular threat to populations of certain mammal and reptile species, and results of recent surveys indicate that at least some globally threatened mammals, such as Red-shanked Douc *Pygathrix nemaesus nemaesus*, may have already been eradicated from the IBA². Additional threats to biodiversity at Pu Mat include over-exploitation of non-timber forest products, such as rattans and orchids, clearance of forest for cultivation, and gold mining².

Threat	Severity
Agricultural intensification / expansion	•
Extraction industry (mining)	•
Hunting	• • •
Selective logging / cutting	• •
Unsustainable exploitation of NTFPs	• •

Conservation Actions

- In 1986, the establishment of Pu Mat Nature Reserve was decreed by the government of Vietnam, and, subsequently, a management board was established¹.
- In 1997, the Ministry for Agriculture and Rural Development, with support from the European Union, began implementation of an integrated conservation and development project, entitled *Social Forestry and Nature Conservation*, at the IBA¹.
- In 2001, Pu Mat Nature Reserve was upgraded to national park status.

Recommendations

- The enforcement of national park management regulations should be strengthened, particularly controls on hunting and timber extraction.
- Effective measures should be introduced to control the rampant trade in wildlife within the northern Annamites in general and Nghe An province in particular.
- Special emphasis should be placed on protecting remaining areas of lowland evergreen forest within the main river valleys at the site and promoting regeneration of degraded forest in these areas.
- Biological surveys should be carried out in contiguous forest areas to the north-west and south-east of the IBA, particularly the 2,711 m asl Mount Pu Xai Lai Leng, the highest peak in the Annamite mountains.

References

1. BirdLife International and the Forest Inventory and Planning Institute (2001) *Sourcebook of existing and proposed protected areas in Vietnam*. Hanoi: BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute.
2. Grieser Johns, A. ed. (2000) *Pu Mat: a biodiversity survey of a Vietnamese protected area*. Vinh: Social Forestry and Nature Conservation in Nghe An Province.
3. Round, P. D. (1999) *Avifaunal surveys of the Pu Mat Nature Reserve, Nghe An province, Vietnam 1998-1999*. Vinh: Social Forestry and Nature Conservation in Nghe An Province.
4. Eames, J. C. and Tordoff, A. W. (in prep.) Recent records and a conservation status review of some threatened and near-threatened bird species in Vietnam.
5. Kemp, N., Le Mong Chan and Dilger, M. (1995) *Site description and conservation evaluation: Pu Mat Nature Reserve, Con Cuong district, Nghe An province, Vietnam*. London: Society for Environmental Exploration and Xuan Mai Forestry College.
6. B. Long *in litt.* 2002.



Blyth's Kingfisher *Alcedo hercules*