

# Chu Yang Sin National Park

## Alternative site name(s)

Chu Giang Sinh

## Province(s)

Dak Lak

## Area

58,947 ha

## Coordinates

12°14' - 12°31'N, 108°18' - 108°35'E

## Agro-ecological zone

Central Highlands

## Decreed by government

Yes

## 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

Chu Yang Sin was included on Decision No. 194/CT of the Chairman of the Council of Ministers, dated 9 August 1986, which proposed establishing a 20,000 ha nature reserve (MARD 1997). In 1993, an investment plan was prepared for Chu Yang Sin, which proposed establishing a 32,328 ha nature reserve (Anon. 1993). This investment plan was approved by Dak Lak Provincial People's Committee on 21 March 1994, by Official Letter No. 261/TT-UB (Anon. 1997).

Based on recommendations made by Le Trong Trai *et al.* (1996), a revised investment plan was prepared in 1997 (Anon. 1997). The revised investment plan proposed expanding the area of the nature reserve to 59,278 ha. This investment plan was approved by Dak Lak Provincial People's Committee on 16 September 1997, by Official Letter 1824/TT-UB, and by MARD on 31 December 1997 by Decision No. 4898/NN-KH/CV (Anon. 1997). Following the approval of the revised investment plan, a nature reserve management board was established under the management of Dak Lak Provincial DARD (Nguyen Cu verbally 2000). The management board currently has 45 members of staff, based at seven guard stations, and is under the management of Dak Lak Provincial People's Committee (Luong Van Linh, Director of Chu Yang Sin National Park *in litt.* 2003).

In 2002, the management category of Chu Yang Sin was revised from nature reserve to national park, following Decision No. 92/TTg of the Prime Minister, dated 12 July 02. According to the Prime Minister's Decision, the total area of the national park is 58,947 ha, comprising a strict protection area of 19,401 ha, a forest rehabilitation area of 39,526 ha, and an administration and services area of 20 ha.

Chu Yang Sin is included on a list of Special-use Forests to be established by the year 2010, prepared by the FPD of MARD, as a 58,947 ha national park (FPD 2003); this list has not yet been approved by the government.

## Topography and hydrology

Chu Yang Sin National Park is located in Lak and Krong Bong districts, Dak Lak province, 60 km to the south-east of Buon Ma Thuot town. The national park encompasses a range of high mountains in the northern part of the Southern Annamite mountains. The national park is centred on Mount Chu Yang Sin, which, at 2,442 m, is the highest point in the southern Annamites. The topography of the national park is characterised by steep slopes and narrow valleys.

The north of Chu Yang Sin National Park is drained by the Ea K'tour and Ea Krong Kmao streams, which flow north to join the Ea Krong Ana river. Streams in the south of Chu Yang Sin flow into the

Krong No river. Both the Ea Krong Ana and Krong No rivers flow west and north before joining the Srepok river, a major tributary of the Mekong River.

## Biodiversity values

At elevations below 800 m, the national park supports lowland semi-evergreen forest, characterised by *Lagerstroemia calyculata* and *Terminalia nigrovenulosa*, and lowland evergreen forest, dominated by *Hopea odorata*, *Dipterocarpus alatus* and *D. turbinatus*. Montane evergreen forest is widely distributed above 800 m, and dominated by members of the Fagaceae and Lauraceae. Montane evergreen forest at Chu Yang Sin is also characterised by conifers, such as *Pinus dalatensis*, *P. krempffii*, *P. kesiya* var. *langbianensis*, *Podocarpus imbricatus* and *Fokienia hodginsii*. On mountain summits and ridge lines, elfin forest formations are distributed, dominated by *Lyonia annamensis*, *L. ovalifolia* and the dwarf bamboo *Arundinaria* sp. Coniferous forest, dominated by *Pinus kesiya*, occupies more than 10,600 ha of the national park. This is a secondary vegetation type that is formed in areas subject to periodic burning. A significant proportion of the national park supports bamboo forest, dominated by *Oxytenanthera nigrociliata* and *Bambusa procera*. Open secondary growth, scrub and grassland cover less than 1% of the total area of the national park (Le Trong Trai *et al.* 1996).

Chu Yang Sin National Park is situated within the Da Lat Plateau Endemic Bird Area (Stattersfield *et al.* 1996). Eight restricted-range bird species have been recorded at Chu Yang Sin: Germain's Peacock Pheasant *Polyplectron germaini*, Grey-crowned Crocias *Crocias langbianis*, Black-hooded Laughingthrush *Garrulax milleti*, Collared Laughingthrush *G. yersini*, White-cheeked Laughingthrush *Garrulax vassali*, Short-tailed Scimitar Babbler *Jabouilleia danjoui*, Grey-faced Tit Babbler *Macronous kellei* and Yellow-billed Nuthatch *Sitta solangiae* (Le Trong Trai *et al.* 1996). The most important of these species, from a conservation perspective, is Grey-crowned Crocias, which is endemic to the Da Lat plateau and classified as globally endangered. Chu Yang Sin qualifies as an Important Bird Area (Tordoff 2002).

A total of 46 mammal species have been recorded at Chu Yang Sin. Mammals of particular conservation significance recorded at the site include Black-shanked Douc *Pygathrix nigripes* and Yellow-cheeked Crested Gibbon *Hylobates gabriellae* (Le Trong Trai *et al.* 1996).

## Conservation issues

There is no permanent human settlement within the national park, and hunting, fishing and rattan collection currently do not pose significant threats to biodiversity there. However, the social make-up of the buffer zone communities is in flux. The traditional subsistence economy of the indigenous M'ngong and Ede ethnic groups is rapidly transforming into a multi-ethnic and market-driven agricultural economy, as a result of improved road access, rural development projects and spontaneous in-migration of members of the Hmong ethnic group from northern Vietnam. Without an appropriate balance of controls and incentives, these social changes could lead to the emergence of "grey" economies based on exploitation of the natural resources of the national park (P. Jepson verbally 2000).

## Other documented values

Chu Yang Sin National Park has an important role in protecting the watershed of the Srepok river. The national park also has potential for ecotourism development, although this is currently not realised.

## Related projects

BirdLife International and Dak Lak Provincial People's Committee are currently developing a medium-sized Global Environment Facility project entitled *Integrating Watershed and Biodiversity Management in Chu Yang Sin National Park*. This project is expected to begin implementation in 2004, for five years. The aim of the project is to conserve the biodiversity attributes of Chu Yang Sin National Park through awareness raising, sustainable management of natural resources, institutional strengthening, and promoting rural development strategies.

## 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

Chu Yang Sin is eligible for VCF support because it meets criteria A, B and C.

Criterion	Eligibility
A <sub>I</sub>	SA3 - Southern Annamites Main Montane Block
A <sub>II</sub>	VN030 - Chu Yang Sin
B <sub>I</sub>	Decision No. 92/TTg - 12/07/02
B <sub>II</sub>	National Park
B <sub>III</sub>	Under provincial management
C <sub>I</sub>	Management board established
C <sub>II</sub>	

## Social screening requirements

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

Criterion	Eligibility
A	
B	
C	
D	

## Literature sources

Anon. (1993) [Investment plan for Chu Yang Sin Nature Reserve, Dak Lak province]. Buon Me Thuot: Dak Lak Provincial People's Committee. In Vietnamese.

Anon. (1993) An investment plan for Chu Yang Sin Nature Reserve, Dak Lac province. Unofficial translation by BirdLife International.

Anon. (1997) [Investment plan for Chu Yang Sin Nature Reserve, Dak Lak province]. Buon Me Thuot:

Dak Lak Provincial Department of Agriculture and Rural Development. In Vietnamese.

Anon. (1999) [Review of forest nature]. Buon Me Thuot: Dak Lak Provincial Department of Agriculture and Rural Development and Chu Yang Sin Nature Reserve Management Board. In Vietnamese.

Eames, J. C. (1994) Little-known Oriental bird: Grey-crowned Crocias. OBC Bulletin 19: 20-23.

Eames, J. C. (1995) Endemic birds and protected area development on the Da Lat plateau, Vietnam. Bird Conservation International 5(4): 491-523.

Eames, J. C. (1996) [Endemic birds and protected areas development in the southern Central Highlands]. Hanoi: BirdLife International and the Forest Inventory and Planning Institute. In Vietnamese.

Eames, J. C. and Nguyen Cu (1994) A management feasibility study of Thuong Da Nhim and Chu Yang Sin Nature Reserves on the Da Lat Plateau, Vietnam. Hanoi: WWF Vietnam Programme and the Forest Inventory and Planning Institute.

Eames, J. C. and Nguyen Cu (1994) [A management feasibility study of Thuong Da Nhim and Chu Yang Sin Nature Reserves on the Da Lat plateau, Vietnam]. Hanoi: WWF Vietnam Programme and the Forest Inventory and Planning Institute. In Vietnamese.

Eames, J. C., Le Trong Trai and Nguyen Cu (1995) Rediscovery of the Grey-crowned Crocias *Crocias langbianis*. Bird Conservation International 5(4): 525-535.

Eames, J. C., Robson, C. R. and Nguyen Cu (1994) A new subspecies of Spectacled Fulvetta *Alcippe ruficapilla* from Vietnam. Forktail 10: 141-158.

Hill, M., Eames, J. C., Le Trong Trai and Nguyen Cu (2001) Population sizes, status and habitat associations of forest birds in Chu Yang Sin Nature Reserve, Dak Lak province, Vietnam. Bird Conservation International 11: 49-70.

Le Trong Trai, Eames, J. C., Le Van Cham, Nguyen Cu and Tran Van Khoa (1995) [Preliminary results of a survey of fauna and flora at Chu Yang Sin Nature Reserve, Dak Lak province]. Hanoi: BirdLife International and the Forest Inventory and Planning Institute. In Vietnamese.

Le Trong Trai, Nguyen Cu, Le Van Cham, Eames, J. C. and Tran Van Khoa (1996) [Biodiversity study and review of the investment plan of Chu Yang Sin Nature Reserve]. Hanoi: Ministry of Agriculture and Rural Development and Dak Lak Provincial People's Committee. In Vietnamese.

Poulsen, E. (1995) Action plan for water resources development, upper Srepok basin, Vietnam: pilot project for integrated rural development in Yang Mao. Buon Ma Thuot and Lyngby: COWI-Kruger Consult Upper Srepok Basin Joint Venture.

Saigon Liberation (2001) [Protect Chu Yang Sin Nature Reserve]. Saigon Liberation 10 January 2001. 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.