

Dakrong Proposed Nature Reserve

Alternative site name(s)

None

Province(s)

Quang Tri

Status

Proposed

Management board established

No

Latitude

16°23' - 16°42'N

Longitude

106°53' - 107°09'E

Bio-unit

05c - North Annam and Ma - Central Annam Mountains



Conservation status

Dakrong proposed nature reserve is situated in Dakrong district, Quang Tri province. In 1993, the site was designated as a watershed protection forest, with an area of 32,171 ha. In June and July 1998, BirdLife International and FIPI assessed the feasibility of upgrading Dakrong Watershed Protection Forest to nature reserve status. The feasibility study concluded that a 35,072 ha nature reserve should be established (Le Trong Trai *et al.* 1999). In 2000, FIPI prepared an investment plan for Dakrong, and recommended the establishment of a 40,526 ha nature reserve. This investment plan was approved by Quang Tri Provincial People's Committee in September 2000, and by MARD in January 2001 (Le Trong Trai pers. comm.).

Dakrong is included on a proposed list of protected areas currently being prepared by FPD and FIPI as a 40,526 ha nature reserve (FPD and FIPI in prep.). A proposal to establish a protected area at Dakrong is also included in the BirdLife/FIPI review of the protected areas system (Wege *et al.* 1999).

Topography and hydrology

Dakrong proposed nature reserve is situated on a ridge of low mountains, which extend south-east from the Annamite mountains, and form the boundary

between Quang Tri and Thua Thien Hue provinces. The highest point in the proposed nature reserve is Mount Dong Ba Le at 1,102 m, although most of the proposed nature reserve lies below 500 m.

Dakrong proposed nature reserve is situated in the watershed of the Quang Tri (Thach Han) river. Streams originating in the south of the site drain into the Dakrong river, which feeds the Quang Tri river. Streams originating in the north of the site drain directly into the Quang Tri river. As a result of extreme seasonality in rainfall, localised rainfall patterns and low retention in degraded upper water catchments, there are large temporal variations in water flow. Heavy rainfall can result in flash floods and extensive erosion (Le Trong Trai *et al.* 1999).

Biodiversity value

In combination with Phong Dien proposed nature reserve in Thua Thien Hue province, Dakrong proposed nature reserve supports the largest remaining area of lowland evergreen forest in central Vietnam (Le Trong Trai *et al.* 1999). However, the forest at Dakrong has been heavily disturbed, and primary forest only occupies around 60% of the total area of the proposed nature reserve.

Dakrong proposed nature reserve is located in the southern part of the Annamese Lowlands Endemic

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Bird Area (EBA) (Stattersfield *et al.* 1998). In 1996, Edwards's Pheasant *Lophura edwardsi*, a critically endangered, restricted-range bird species was rediscovered at Dakrong and neighbouring Phong Dien proposed nature reserves; these were the first records of this species since 1929 (Eve 1997). Dakrong proposed nature reserve also supports populations of four other restricted-range bird species: Annam Partridge *Arborophila merlini*, Crested Argus *Rheinardia ocellata*, Short-tailed Scimitar Babbler *Jabouilleia danjoui* and Grey-faced Tit Babbler *Macronous kelleyi* (Le Trong Trai *et al.* 1999).

Dakrong proposed nature reserve is an important site for the conservation of mammal diversity. Two recently discovered large mammal species, Sao La *Pseudoryx nghetinhensis* and Giant Muntjac *Megamuntiacus vuquangensis*, occur at the proposed nature reserve. Furthermore, Dakrong supports populations of several primate species of conservation concern, including Douc Langur *Pygathrix nemaeus*, Pig-Tailed Macaque *Macaca nemestrina*, Bear Macaque *M. arctoides* and Buff-cheeked Gibbon *Hylobates gabriellae* (Le Trong Trai *et al.* 1999).

Conservation issues

Several factors have played a role in the reduction and fragmentation of forest cover in the area, particularly spraying of chemical defoliants during the Second Indochina War. The forest resources in the area are largely unprotected, and small-scale timber extraction takes place unhindered. The scarcity of economically valuable timber trees is leading to the exploitation of less accessible areas and the targeting of less valuable tree species (Le Trong Trai *et al.* 1999).

Trapping and hunting are widespread at the proposed nature reserve. Common trapping methods include box traps and wire snares. These trapping methods are indiscriminate, and pose a particular threat to ground birds, such as Edwards's Pheasant. Other human activities incompatible with conservation include clearance of land for agriculture, and livestock grazing (Le Trong Trai *et al.* 1999).

Dakrong proposed nature reserve is contiguous with Phong Dien proposed nature reserve in Thua Thien Hue province. This extends the effective

protection coverage of the combined area to over 80,000 ha. The two proposed nature reserves are isolated from forest areas in southern Quang Binh province by large expanses of agricultural land, scrub and grassland. However, the possibility of establishing forest corridors to link the two proposed nature reserves to forest blocks to the west, in Laos, and south, in southern Thua Thien Hue province should be investigated (Le Trong Trai *et al.* 1999).

Dakrong proposed nature reserve is currently poorly administered. The site lacks appropriate facilities, and has no vehicles or communications equipment. Furthermore, the salaries of FPD staff are low (Le Trong Trai *et al.* 1999).

Other documented values

Dakrong proposed nature reserve protects the upstream catchments of the Quang Tri (Thach Han) river. This river supplies freshwater for many agricultural areas downstream. Because of the topography of the area, localised rainfall patterns and the prevalence of periods of intense rainfall, downstream areas are particularly prone to soil erosion, flood damage and drought (Le Trong Trai *et al.* 1999).

The forest at Dakrong district contain valuable timber species and were classified as production forest sometime after 1976. However, it was soon found that wartime aerial spraying of defoliants, coupled with small-scale exploitation by local inhabitants, had reduced the timber value so much that attempts at logging were halted. Potentially exploitable forests are limited and currently inaccessible. The valuable timber trees that remain occur at low densities and in inaccessible locations, which render them too costly to exploit on a commercial scale. Despite this, small-scale extraction of timber continues, especially of the more valuable timber species (Le Trong Trai *et al.* 1999).

Related projects

Since early 1997, Oxfam Hong Kong has begun to develop a programme entitled the *Dakrong Community Development Programme*. This programme is aimed at achieving food security through sustainable natural resource use and community participation. The budget for this programme is US\$300,000, and the first phase

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of the programme will work in Hai Phuc and Ba Long communes in the buffer zone of Dakrong proposed nature reserve (Flint 1999).

Literature sources

Anon. (1999) [Appendix: PRA results from four villages in Dakrong Nature Reserve, Dakrong district, Quang Tri province]. Hanoi: Population and Development International, Birdlife International and the Forest Inventory and Planning Institute. In Vietnamese.

Anon. (1999) [Report of a PRA conducted in Dakrong Nature Reserve, Dakrong district, Quang Tri province]. Hanoi: Population and Development International, Birdlife International and the Forest Inventory and Planning Institute. In Vietnamese.

Anon. (1999) [Report of a rapid field survey using PRA in Dakrong Nature Reserve, Dakrong district, Quang Tri province]. Hanoi: Population and Development International, Birdlife International and the Forest Inventory and Planning Institute. In Vietnamese.

Eve, R. (1997) Edwards's Pheasant, naturalists and the history of its rediscovery. Pp 61-67 in: Hennache, A. ed. The international studbook for Edwards's Pheasant *Lophura edwardsi* and its conservation. Paris: Museum National D'Histoire Naturelle. In English and French.

Flint, C. (1999) Community participation in protected area planning and management: a review of PRA methods for the planning of ICAD and protected area co-management in the proposed Dakrong Nature Reserve, Quang Tri, Vietnam. Unpublished report to Birdlife International Vietnam Programme and the Forest Inventory and Planning Institute.

Kemf, E. (undated) Rare pheasant rediscovered in Vietnam. Newspaper article.

Lao Dong [Labour] (2000) [New information about the pheasant found in Quang Tri]. Lao Dong [Labour] 20 June 2000.

Le Trong Trai and Eames, J. C. (1998) [Biodiversity survey in Phong Dien and Dakrong proposed nature reserves, Thua Thien Hue and Quang Tri provinces]. Dieu Tra Quy Hoach Rung [Forest

Inventory and Planning Journal] 2: 23-30. In Vietnamese.

Le Trong Trai, Richardson, W. J., Le Van Cham, Tran Hieu Minh, Tran Quang Ngoc, Nguyen Van Sang, Monastyrskii, A. L. and Eames, J. C. (1998) [A feasibility study for the establishment of Phong Dien (Thua Thien Hue province) and Dakrong (Quang Tri province) Nature Reserves]. Hanoi: BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute. In Vietnamese.

Le Trong Trai, Richardson, W. J., Le Van Cham, Tran Hieu Minh, Tran Quang Ngoc, Nguyen Van Sang, Monastyrskii, A. L. and Eames, J. C. (1999) A feasibility study for the establishment of Phong Dien (Thua Thien Hue province) and Dakrong (Quang Tri province) Nature Reserves. Hanoi: BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute.

Nhan Dan [The People] (2000) [Establishment of the Blue Pheasant Nature Reserve in the Dakrong highlands]. Nhan Dan [The People]: 23 July 2000. In Vietnamese.

Truong Van La (2000) Status and additional distribution of three rare valuable pheasant species in Vietnam. Tap Chi Sinh Hoc [Journal of Biology] 22(15)CD: 66-71. In Vietnamese.

Vietnam News (2000) New nature reserve for Quang Tri. Vietnam News 18 September 2000.