

BirdLife International Vietnam Programme
and the
Forest Inventory and Planning Institute
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**Rapid Field Survey of South-east Gia Lai Province
and South-west Lam Dong Province, Vietnam**

4-12 March 2000

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1. Introduction

Between 4 and 12 March 2000, the BirdLife International Vietnam Programme and the Forest Inventory and Planning Institute (FIPI) conducted a rapid field survey of south-east Gia Lai province and south-west Lam Dong province, Vietnam. This work formed part of the European-Union-funded project *Expanding the protected areas network in Vietnam for the 21st century*.

In 1999, BirdLife and FIPI, as part of the same European-Union-funded project, carried out an analysis of the protected areas system in Vietnam. They identified habitat types, ecoregions, elevation zones and key species that are under-represented within the current system, and proposed 25 areas that should be added in order to achieve equitable representation. These areas included a 37,800 ha area of evergreen and deciduous forest in south-east Gia Lai province, and a 27,700 ha area of evergreen, mixed and bamboo forest in south-west Lam Dong province. However, as the only information available about these areas was remote-sensing data, BirdLife and FIPI were unable to define their exact locations or boundaries.

The aim of the rapid field survey was to collect information on the biodiversity value, current management and socio-political background of these areas. It was intended that, if suitable sites could be identified, feasibility studies would then be carried out to assess the feasibility of establishing protected areas or implementing other, appropriate, conservation measures at these sites.

2. Itinerary

4/3/00	travelled to Pleiku
5/3/00	visited Bien Ho lake, Gia Lai province
6/3/00	met Gia Lai Provincial Forest Protection Department (FPD)
7/3/00	visited A Yun Pa district, Gia Lai province
8/3/00	visited Krong Pa district, Gia Lai province; travelled to Da Lat
9/3/00	met Lam Dong Provincial FPD
10/3/00	visited Bao Loc district, Lam Dong province
11/3/00	met Cat Tien National Park Conservation Project; met vice-director of Cat Tien National Park
12/3/00	travelled to Hanoi

3. South-east Gia Lai Province

During discussions with Gia Lai Provincial FPD, seven candidate sites were considered, of which the last three were visited during the rapid field survey.

3.1 Ia R Sai Forest Enterprise

Ia R Sai Forest Enterprise is situated in Krong Pa district, on the border with Phu Yen province. Provincial and district land-use maps and 1995 remote-sensing data from FIPI show that the area is largely deforested.

3.2 Chu R Pan Mountain

Chu R Pan Mountain, which is situated in Mang Yang district, has two peaks (1,581 and 1,504 m). Each peak supports about 500 ha of forest in varying condition but these forest blocks are separated by a belt of scrub in the valley between the peaks. The forest on the lower, easternmost peak is contiguous with forest areas in Krong Ch Ro district to the east. The forest on the higher, westernmost peak is isolated.

3.3 An Khe, Krong H Re and Krong Ch Ro Forest Enterprises

An Khe Forest Enterprise is situated in An Khe district, while Krong H Re and Krong Ch Ro Forest Enterprises are situated in Krong Ch Ro district. The three areas are contiguous and contain a large area of evergreen forest. The highest point is 1,029 m but most forest is distributed at elevations around 600 m. Access to An Khe Forest Enterprise was reported to be good.

3.4 South-eastern A Yun Pa District and Western Krong Pa District

This area supports an extensive area of open deciduous forest, and is contiguous with forest areas in northern Dac Lac province. This area was reported to be susceptible to fire. Access to the forest in A Yun Pa district, which is centred in Ia R To commune, was reported to be difficult. The westernmost area of forest in Krong Pa district has been designated as watershed protection forest, and was reported to be in a good condition. The forest to the east of this has been designated for use by the army.

A large Asian Development Bank (ADB) watershed protection project is being implemented in Ia R To commune and Ia R Bol commune, to the west. The aim of this project is to protect the watershed of the Song Ba River.

3.5 Ia R Mok Mountain

Ia R Mok Mountain (548 m), which is located in Krong Pa district, supports about 4,000 ha of evergreen forest, classified as "rich". To the south, the mountain is bordered by an industrial tree enterprise which is largely devoid of natural forest. The mountain is situated very close to Krong Pa town, which is the focus for migration into the district. It is possible, therefore, that this area will come under increased human pressure for forest resources in the future.

3.6 Ia Ba and A Yun Pa Forest Enterprises

Ia Ba Forest Enterprise is situated in Krong Ch Ro district, while A Yun Pa Forest Enterprise is situated in A Yun Pa district. The two forest enterprises are contiguous and support a significant area of semi-deciduous forest, dominated by *Dipterocarpus* spp. Access to the area is very good as a road passes through the two forest enterprises and the topography is flat. The forest was selectively logged in the past but the forest condition is still quite good, and canopy cover is intact. A Yun Pa Forest Enterprise ceased timber extraction in 1998 and now has a duty to protect the forest. A Yun Pa District FPD staff reported that the area supported Green Peafowl *Pavo muticus*. A Yun Pa Forest Enterprise is contiguous with forest in Chu Mo commune to the east.

3.7 Eastern A Yun Pa District and Northern Krong Pa District

Communes in northern Krong Pa district and Chu Mo and Ia Tul communes in eastern A Yun Pa district support a large block of natural forest. The forest is distributed along a long ridge, running in a north-south direction. The western slopes of this ridge support semi-deciduous forest, dominated by *Dipterocarpus* spp., while the eastern slopes support semi-evergreen forest; the transition zone between the two forest types is relatively narrow. The forest is contiguous with forest areas in Phu Yen province to the east. The highest point in the area is 1,245 m but most forest is distributed at altitudes around 500 m. The area is located in the watershed of the Song Ba River.

There are no significant human settlements within the forest block, although the human population density in surrounding areas is quite high. These areas are flat and are given over to wet rice cultivation. Although forest on the lower slopes, adjacent to the flat areas, has been disturbed, few areas of forest have been cleared. This may partly be because the ground is very rocky and unsuitable for agriculture but may also indicate that human pressure on the forest is not too high in these areas. Most people in Chu Mo

commune and the communes in northern Krong Pa district belong to the Ba Na ethnic minority, while most people in Ia Tul commune belong to the Gia Rai ethnic minority. In all areas, a number of Kinh migrants from Red River Delta provinces have settled along the main roads. In A Yun Pa town, there is a medium-sized, French-owned sugar processing factory. This may create economic incentives for local people to clear forest to plant sugar cane. Another pressure on the forest is the demand for timber to make supports for pepper cultivation.

Access to Chu Mo commune is good: in some places the forest begins within 500 m of the road, although a wide river must be waded to reach the forest. Access to Ia Tul commune, where most of the semi-evergreen forest is distributed, is more difficult, involving a two-day walk. Access to the forest in northern Krong Pa district is good: the start of the forest is one hour on foot from the end of the road. In the south, the forest can be accessed from the border between A Yun Pa and Krong Pa districts, where the main road passes through the forest.

In 1995, a forest enterprise was established in Chu Mo commune, with the main duties of forest protection and reforestation. This forest enterprise acts as a buffer to human impact on forest in Ea Tul commune. To the north-west, A Yun Pa and Ia Ba Forest Enterprises perform a similar function, as do forest areas in Phu Yen province to the east.

A suitable approach for this area might be to establish a protected area in Ia Tul commune and adjacent areas in Krong Pa district, and then to develop a project for this area and the neighbouring forest enterprises. The objectives of this project could include to promote sustainable forestry activities in the forest enterprises and to direct some of the revenue towards conservation activities in the protected area.

4. South-west Lam Dong Province

The area visited in south-west Lam Dong province was the forest block on the southern side of the Dong Nai River that stretches eastward from the Cat Loc sector of Cat Tien National Park. This forest block is located in Bao Lam district and is currently managed by two forest enterprises, Loc Bac in the west and Bao Loc in the east. On the northern side of the Dong Nai River, in Dac Lac province, there is also a large area of natural forest. Therefore, the area supports a large stretch of intact riverine forest, a natural habitat type that has declined significantly in extent in Vietnam and is poorly represented within the national protected areas system. The area is also important because it forms part of the corridor of natural forest that links the lowland habitats at Cat Tien National Park with the montane habitats on the Da Lat Plateau. It is vital to preserve forest cover along the length of this corridor, in order to conserve the entire ecosystem and to maintain sufficient habitat to support viable populations of large mammal species.

The district land-use map shows that the forest is distributed along the southern side of the Dong Nai River in Loc Bac Forest Enterprise and extends south, along the boundary between the two forest enterprises. Most of the remaining areas within the forest enterprises, including the southern side of the Dong Nai River in Bao Loc Forest Enterprise, support bamboo. Most of the forest is evergreen forest, and is in varying condition as a result of past logging activities. A few small areas of coniferous forest are located in Bao Loc Forest Enterprise.

The director of Bao Lam District FPD reported that the area supports Green Peafowl, Sambar *Cervus unicolor*, mouse-deer *Tragulus* sp., and bear *Ursus* sp. A specimen of Douc Langur *Pygathrix nemaeus* ssp., which was hunted in Loc Bac Forest Enterprise in 1997, was seen at the headquarters of the district FPD.

The two forest enterprises continue to extract both timber and bamboo from the area: in 2000, Bao Loc Forest Enterprise plans to extract 4,115 m³ of timber, while Loc Bac Forest Enterprise plans to extract 2,751 m³. Most extraction will take place in the south of the forest enterprises, because forest areas along

the Dong Nai River have already been exploited. These areas are now designated as watershed protection forest.

Most of the inhabitants of the area belong to the Chu Ru ethnic minority. However, some Kinh migrants have settled in Loc Bac Forest Enterprise and are cultivating tea and coffee. The topography in this area is characterised by rolling hills at elevations between 600 and 700 m; making the area very suitable for tea and coffee cultivation. In 2000, the road between Loc Thang town (the centre of Bao Lam district) and the centre of Loc Bac Forest Enterprise will be upgraded. This could be expected to lead to an increase in migration into the area, with associated problems of forest clearance for agriculture and over-exploitation of forest products.

The riverine forest habitats along the Dong Nai River are threatened by the Dong Nai 3 and Dong Nai 4 combined hydropower project. This project, which is funded by the Japanese International Cooperation Agency (JICA), involves constructing two hydropower dams on the Dong Nai River in northeastern Bao Lam district. If this project goes ahead, these dams can be expected to have significant negative environmental impacts on the area, including: inundation of an 18 km-stretch of riverine forest; increased access to forest areas; displacement of people, leading to increased population density elsewhere in the district; influx of construction workers; and disruption of the downstream ecosystem.

Access to the area is good: unsurfaced roads provide access to several areas of forest in Loc Bac Forest Enterprise. The Dong Nai River (which is in a steep gorge) can be reached on foot at several places, although travel along the river was reported to be difficult due to the presence of rapids. The forest enterprises are, however, situated in a restricted area, which foreigners cannot visit without special permission.