

**BirdLife International Vietnam Programme,  
the Institute of Ecology and Biological Resources  
and Quang Binh Provincial Forest Protection Department  
with financial support from Danida**

## **A Rapid Field Survey of Le Thuy and Quang Ninh Districts, Quang Binh Province, Vietnam**



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Quang Binh Province, Vietnam**

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## 1. Introduction

This report presents the results of a rapid field survey of Le Thuy and Quang Ninh districts, Quang Binh province, conducted by the BirdLife International Vietnam Programme and the Institute of Ecology and Biological Resources (IEBR), in cooperation with Quang Binh Provincial Forest Protection Department (FPD), as part of the Danida-funded project *Improved conservation planning through institutional strengthening in Cambodia, Laos and Vietnam*.

### 1.1 Aim and objectives

The aim of the rapid field survey was to assess whether or not any areas within Le Thuy and Quang Ninh districts qualified as Important Bird Areas (IBAs). IBAs are areas of international importance for bird conservation that meet internationally recognised criteria. IBAs are not only important for birds but, typically, support a wide range of other important animal and plant species.

The specific objectives of the survey were to:

- collect data on the status and distribution of bird species in Le Thuy and Quang Ninh districts, particularly globally threatened and restricted-range species;
- collect data on the status and distribution of mammal species in the two districts, particularly globally threatened and restricted-range species.

### 1.2 Study area

The study area comprised the western parts of Le Thuy and Quang Ninh districts in southern Quang Binh province. The topography of the study area is dominated by the foothills of the Annamite mountains but rises in the west, to elevations above 1,000 m asl, along the main Annamite ridge. The study area is bordered by Bo Trach district, Quang Binh province to the north, Huong Hoa district, Quang Tri province to the south and Laos to the west. The eastern boundary of the study area follows the transition between the flat coastal plain, which is largely deforested, and the foothills of the Annamite mountains, which are largely forested. The study area is bounded by the coordinates 16°56' to 17°26'N and 106°17' to 106°49'E, and has a total area of approximately 150,000 ha.

As part of the Ho Chi Minh National Highway (National Highway 2) project, two roads are being constructed through southern Quang Binh province. The East Truong Son Road runs to the east of the study area, through the flat coastal plain, and bisects mainly anthropogenic habitats. The West Truong Son Road runs through the centre of the study area, through the foothills of the Annamite mountains, and bisects some of the largest blocks of natural forest remaining in southern Quang Binh province.

Six days were spent surveying in Le Thuy district, following a route from Kilometre 5 Forest Guard Station (17°14'N 106°39'E) in Ngan Thuy commune south to Rum village (16°57'N 106°38'E) in Kim Thuy commune, and, from there, west along provincial roads no. 18 and 24 to Chop Mut village in Lam Thuy commune. A further three days were spent surveying in Quang Ninh district, following a route from the headquarters of Truong Son State Forest Enterprise (SFE) (17°20'N 106°27'E) south to Truong Son commune centre (17°13'N 106°27'E), and then north to Ba Ren Forest Enterprise (17°26'N 106°28'E).

### 1.3 Itinerary

16 June 2002	Travelled to Dong Hoi town
17 June 2002	Met with Quang Binh Provincial FPD; surveyed in Le Thuy district
18-22 June 2002	Surveyed in Le Thuy district
23 June 2002	AWT returned to Hanoi; LMH and PDT travelled to Quang Ninh district
24-26 June 2002	LMH and PDT surveyed in Truong Son commune, Quang Ninh district
27 June 2002	LMH and PDT travelled to Dong Ha town, Quang Tri province

## 2. Birds

### 2.1 Methods

The main objective of the survey was to assess the status of globally threatened and restricted-range bird species in the study area. Therefore, the main method used was interviews with local people, followed up with field visits to verify anecdotal reports of key species.

In each village visited, the survey team conducted interviews with skilled hunters who demonstrated a high level of familiarity with the wildlife of the area. After the interviews were completed, the hunters were shown illustrations of bird species in order to confirm their descriptions. Also, the hunters were asked to produce any trophies (feathers, legs, hornbill casques, etc.) in their possession.

On 19, 20 and 21 June 2002, the survey team visited an area of lowland evergreen forest (16°58'N 106°38'E) south of Rum village, close to the border with Quang Tri province; an area called Khe Nuoc Trong by local people. During this period, birds were surveyed by observation and identification of calls, from 06h00 to 18h00 each day. In addition, a line of 20 snares was set to catch ground birds. Finally, *ad hoc* bird records were made throughout the rapid field survey, in forest areas and anthropogenic habitats.

### 2.2 Results

#### 2.2.1 Le Thuy district

Le Thuy district is located in the south of Quang Binh province, 30 km to the south-west of Dong Hoi town. The district is bordered by Huong Hoa district, Quang Tri province to the south, Quang Ninh district, Quang Binh province to the north and Laos to the west. All natural forest in Le Thuy district is under the management of Khe Giua SFE, including all areas formerly under the management of the now defunct Long Dai SFE. Khe Giua SFE continues to extract timber from natural forest areas.

A high proportion of western Le Thuy district is covered by natural forest. In the south of the district, close to the border with Quang Tri province, there are significant areas of relatively undisturbed lowland evergreen forest, with an intact canopy. In the north and east the district, the forest has been more heavily disturbed by commercial logging, and there are large areas of secondary vegetation. Human settlement and agricultural land are largely restricted to flat valley bottoms among the otherwise hilly landscape.

Mammal and bird populations in western Le Thuy district appear to be under relatively high hunting pressure, with many members of the Van Kieu ethnic minority interviewed reporting that they go hunting, and a number of Kinh wildlife traders operating in the area. These wildlife traders were reported to frequently advance money and equipment to local hunters in order to support their activities. Without effective controls, hunting pressure is likely to increase in the future with the construction of the West Truong Son Road and the resultant opening up of the district to outside market forces.

Interviews were conducted in a total of seven villages: Khe Sung village and Village No. 14 in Ngan Thuy commune; Xa Khia and Chop Mut villages in Lam Thuy commune; and Mit, Ho and Rum villages in Kim Thuy commune. After collecting several positive reports of key species in Rum village, the team spent three days surveying an area of lowland evergreen forest south of this village.

A total of 81 bird species were recorded in Le Thuy district, including during four species that were provisionally recorded based on information from local people (Appendix 1). Seven species listed in *Threatened Birds of Asia* (BirdLife International 2001) were recorded: Siamese Fireback *Lophura diardi*, Crested Argus *Rheinardia ocellata*, Great Hornbill *Buceros bicornis*, Brown Hornbill *Anorrhinus tickelli*, Lesser Fish Eagle *Ichthyophaga humilis*, Red-collared Woodpecker *Picus rabieri* and Short-tailed Scimitar Babbler *Jabouilleia danjoui*. Of these, Siamese Fireback and Great Hornbill

were only provisionally recorded. In addition, eight species listed in the *Red Data Book of Vietnam* (Anon. 1992) were recorded. Furthermore, three restricted-range species were recorded, including Annam Partridge *Arborophila merlini*, which is endemic to central Vietnam.

### **Key species accounts**

#### **Crested Argus** *Rheinardia ocellata*

On 17 June 2002, a Crested Argus tail feather was seen and photographed in the house of Mr Ho Hien, a member of the Van Kieu ethnic minority, in Village No. 14, Ngan Thuy commune. According to him, the bird was caught in the forest near Khe Sung village, Ngan Thuy commune by Mr Ho Van Cong, the village leader. On 19, 20 and 21 June 2002, at least three, five and four Crested Argus respectively were heard calling in forest in the Khe Nuoc Trong area, south of Rum village. On 22 June 2002, a brush made from Crested Argus feathers was seen in a house in Chop Mut village; the bird was reportedly trapped in 2001. All hunters interviewed in all villages were familiar with this species, and reported that they had seen or caught Crested Argus several times. Based on these reports, the density of calling birds in the Khe Nuoc Trong area and the availability of suitable habitat, it appears that western Le Thuy district supports a significant population of this species. Unfortunately, the species appears to be under high hunting pressure, particularly in the form of ground snaring. Crested Argus is listed in *Threatened Birds of Asia* (BirdLife International 2001) as vulnerable and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened. In addition, Crested Argus is a restricted-range species (Stattersfield *et al.* 1998).

#### **Brown Hornbill** *Anorrhinus tickelli*

On 20 June 2002, a group of at least six Brown Hornbills was seen at 200 m asl in forest in the Khe Nuoc Trong area. On the following day, a single bird was seen in the same area. Interestingly, although Brown Hornbill was observed on two of three days spent in the forest, most hunters interviewed seemed unfamiliar with it. Brown Hornbill is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

#### **Lesser Fish Eagle** *Ichthyophaga humilis*

On 19 June 2002, one adult Lesser Fish Eagle was seen in flight along a narrow, forested river in the Khe Nuoc Trong area. The bird was identified on the basis of all grey upperparts, dark underwing, grey breast and upper belly contrasting with white lower belly and vent, and dark undertail, lacking the dark terminal band shown by Grey-headed Fish Eagle *Ichthyophaga ichthyaetus*. Based on the results of the rapid field survey, there appear to be a number of forested lowland rivers in the south of Le Thuy district that may provide suitable habitat for this species. Lesser Fish Eagle is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

#### **Short-tailed Scimitar Babbler** *Jabouilleia danjoui*

On the morning of 20 June 2002, a pair of Short-tailed Scimitar Babblers was seen at 200 m asl, in a gully in forest in the Khe Nuoc Trong area. The birds were actively feeding on the ground and were quite confiding. On the afternoon of the same day, a pair, presumed to be the same birds, was seen in the same place. Short-tailed Scimitar Babbler is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

#### **Red-collared Woodpecker** *Picus rabieri*

On 20 June 2002, a single Red-collared Woodpecker was seen at 200 m asl in lowland evergreen forest in the Khe Nuoc Trong area. Red-collared Woodpecker is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

#### **[Great Hornbill** *Buceros bicornis*]

All hunters interviewed during the survey were familiar with at least two species of hornbill: Oriental Pied Hornbill *Anthracoceros albirostris*, which they described as being the smallest species, and black

and white in colour; and Great Hornbill, which they described as being bigger, and black, white and yellow in colour. Several hunters accurately described the species nesting in holes in large trees. A small number of hunters described a third species of hornbill, said to be intermediate in size between the other two. Although none of these reports were equivocal, they were assumed to refer to Brown Hornbill, given the records of this species in the Khe Nuoc Trong area. All hunters affirmed the continued occurrence of Great Hornbill in the area but reported that the species is now quite uncommon. One skull of a Great Hornbill, reportedly from a bird hunted in 1976, was seen and photographed in a local person's house in Mit village, Kim Thuy commune. Several other local people reported that Great Hornbill skulls were kept in their villages but none could be produced to show the survey team. The results of the rapid field survey indicate that, if a population of Great Hornbill remains in western Le Thuy district, it is fragmented, under high hunting pressure and, possibly, restricted to the more remote forest areas. Great Hornbill is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

**[Siamese Fireback *Lophura diardi*]**

According to reports from local hunters, Siamese Fireback is common in western Le Thuy district. All interviewees described the appearance of this species precisely. One member of the Van Kieu ethnic minority living near Kilometre 5 Forest Guard Station reported seeing four birds feeding at kilometre 9 on provincial road no. 10 a few days before the survey, and affirmed that he could easily trap the bird if the survey team wished. According to Mr Nguyen Chung Thuy, Head of Kilometre 5 Forest Guard Station, one male Siamese Fireback was confiscated by them in July 1999 and sent to the provincial FPD but it died after one week. This bird was trapped by local people in an area of degraded forest near kilometre 16 on provincial road no. 10. Siamese Fireback is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened and in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

**Annam Partridge *Arborophila merlini***

On 21 June 2002, one male specimen of Annam Partridge was collected in a snare line set by the survey team at 200 m asl in lowland evergreen forest in the Khe Nuoc Trong area. A museum skin was made and deposited at the zoological museum at IEBR. Between 19 and 21 June 2002, *Arborophila* partridge calls were frequently heard in the Khe Nuoc Trong area. Some of these calls are assumed to have been made by Annam Partridge. However, it is possible that some were made by Chestnut-necklaced Partridge *A. charltonii*, as the calls of the two species are possibly not distinguishable (Robson 2000). Chestnut-necklaced Partridge is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened.

Annam Partridge is a restricted-range species (Stattersfield *et al.* 1998), with a global range restricted to the Annamese Lowlands Endemic Bird Area (EBA). Because of uncertainty over its taxonomic status, Annam Partridge is not listed in *Threatened Birds of Asia* (BirdLife International 2001) or the *Red Data Book of Vietnam* (Anon. 1992). However, because of extensive habitat loss and degradation within its very limited range, and its susceptibility to snaring, the species should be considered threatened, both globally and nationally.

**Long-tailed Broadbill *Psarisomus dalhousiae***

On 19 June 2002, a single Long-tailed Broadbill was seen in lowland evergreen forest in the Khe Nuoc Trong area. The bird was seen feeding together with two Greater Yellownapes *Picus flavinucha*. Long-tailed Broadbill is listed in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

**Bar-bellied Pitta *Pitta elliotii***

Between 19 and 21 June 2002, alarm calls of Bar-bellied Pitta were heard several times per day in lowland evergreen forest at 200 asl in the Khe Nuoc Trong area. On 20 June 2002, one bird was seen feeding in the ground layer, close to a path in the forest. Bar-bellied Pitta is listed in the *Red Data Book of Vietnam* (Anon. 1992) as threatened.

**Rufous-bellied Eagle *Hieraaetus kienerii***

In the afternoon of 17 June 2002, one Rufous-bellied Eagle was observed in flight over scrub and

heavily degraded evergreen forest, about 5 km south of Kilometre 5 Forest Guard Station. Good views of the bird were obtained, and it was identified on the basis of a combination of black crown, white throat and upper breast, rufous lower breast and belly, rufous underwing coverts contrasting with pale flight feathers, and a rounded tail. In the early morning of 23 June 2002, a single bird was seen in flight over secondary vegetation near Kilometre 5 Forest Guard Station. Although this bird is not listed in *Threatened Birds of Asia* (BirdLife International 2001) or the *Red Data Book of Vietnam* (Anon. 1992), it is rare in Vietnam.

### ***Key species not recorded***

#### **Imperial Pheasant** *Lophura imperialis*

A number of hunters interviewed reported an all-dark pheasant with a red face, red legs, a long dark tail and a dark crest. When shown the plate of *Lophura* pheasants in *A Field Guide to the Birds of Thailand and South-East Asia* (Robson 2000), most of these hunters selected Siamese Fireback as most closely resembling the species they were describing, although several said that the species they were describing was darker than the one pictured. Two informants, however, claimed that the species they were describing was not Siamese Fireback. Mr Tran Hieu Khoi, a border guard from Border Army Station 601 reported that he killed a *ga loi den* ("black pheasant") near provincial road no. 24 in 1999. While he could not remember exactly what the bird looked like, he affirmed that it was different from Siamese Fireback in that the colour was all black and it had a short crest, similar to that on the illustration of Kalij Pheasant *L. leucomelanos*. A more detailed description of an all-dark pheasant was made by Mr Bay, chairman of Lam Thuy commune. This man reported that, one month previously, he had snared a pheasant close to Xa Khia village, Lam Thuy commune and had kept it for some weeks before it died. He described the bird as being very beautiful with iridescent feathers, a long dark tail, a long dark crest, a red face and red legs. He reported that this was the only time he had caught this species but, unfortunately, he had not kept any feathers from the deceased bird. He was familiar with Red Junglefowl *Gallus gallus*, Crested Argus and Siamese Fireback, all of which he described as common but maintained that the bird he had caught was a different species. When shown the plate of *Lophura* pheasants in *A Field Guide to the Birds of Thailand and South-East Asia* (Robson 2000), he selected Imperial Pheasant as most closely resembling the species he was describing. However, in the absence of a specimen, and considering the limitations of interviews as a source of information on *Lophura* pheasants (see Thewlis *et al.* 1998), these reports must be treated with the utmost caution.

Imperial Pheasant was described from a pair collected in central Vietnam in 1923 and 1924. Delacour and Jabouille (1931) state that the birds originated from the border between Quang Tri and Dong Hoi (now Quang Binh) provinces. However, the exact locality is unknown, and Björkegren, after searching for the species in Quang Binh province for 14 days in 1938, wrote "I understand from talking with Delacour that he doesn't know where they come from" (Eames and Ericson 1996). Imperial Pheasant is a restricted-range bird species, with a global range restricted to the Annamese Lowlands EBA (Stattersfield *et al.* 1998). The only recent records of this species are from Khe Net proposed nature reserve in northern Quang Binh province, Ke Go Nature Reserve in Ha Tinh province and Dakrong proposed nature reserve in Quang Tri province. Due to uncertainty over its taxonomic status, Imperial Pheasant is listed in *Threatened Birds of Asia* as data deficient (BirdLife International 2001).

Given the presumed historical collecting locality, recent confirmed records of the species from sites to the north and the south, and the availability of potentially suitable habitat, it is conceivable that Imperial Pheasant occurs, or did once occur, in western Le Thuy district. However, no equivocal data were obtained during the rapid field survey, and further, more prolonged surveys are required to clarify the status of this species in the area.

#### **Edwards's and Vietnamese Pheasants** *Lophura edwardsi* and *L. hatinhensis*

During the rapid field survey, no equivocal information on these species was obtained. Most interviewees were unfamiliar with the species and affirmed that they had never encountered them before. However, a single informant, Mr Hoang Cong Leng, a member of the Van Kieu ethnic minority living near the headquarters of Khe Giua SFE, described a dark pheasant with a long dark tail, red legs and a white crest. He reported that the last time he had hunted one was two or three years previously but that he occasionally saw it in the forest. When shown the plate of *Lophura* pheasants in

*A Field Guide to the Birds of Thailand and South-East Asia* (Robson 2000), he recognised Silver Pheasant *Lophura nycthemera* and Siamese Fireback but said that they were different from the species he was describing. He did not, however, recognise the picture of Edwards's Pheasant. Both Edwards's and Vietnamese Pheasants are restricted-range species (Stattersfield *et al.* 1998), with global ranges restricted to the Annamese Lowlands EBA. Both species are listed in *Threatened Birds of Asia* (BirdLife International 2001) and the *Red Data Book of Vietnam* (Anon. 1992) as endangered.

### 2.2.2 Quang Ninh district

Quang Ninh district situated to the west of Dong Hoi town, immediately south of Phong Nha-Ke Bang National Park. The district is bordered by Bo Trach district to the north, Dong Hoi town to the east, Le Thuy district to the south, and the international border with Laos to the west. All areas of natural forest in the district are under the management of Truong Son and Ba Ren SFEs. The forest in Truong Son SFE is in a better condition than that in Ba Ren SFE, which may, in part, be due to the lower human population density in the former. However, the condition and extent of the forest in Truong Son SFE may decline following the completion of the West Truong Son Road, if new human settlements are established along the road. The results of the rapid field survey indicate that hunting pressure is high in western Quang Ninh district, particularly due to the high levels of demand from workers on the West Truong Son Road.

Three days were spent surveying in Quang Ninh district. One day was spent conducting interviews in villages along the West Truong Son Road, from the headquarters of Truong Son SFE to Truong Son commune centre. Along this route, the forest is heavily degraded, apart from in the south of Truong Son commune, where there is a large area of lowland evergreen forest on limestone karst, near the border with Le Thuy district. One day was spent conducting interviews in villages in south of Truong Son SFE. In this area, the forest is in a relatively good condition in some places but degraded in others, as a result of previous exploitation. One day was spent surveying along the route between the headquarters of Truong Son SFE and the headquarters of Ba Ren SFE. Along this route, there is a large area of forest, which has been heavily degraded by the commercial logging activities of the two SFEs.

Due to time constraints, no time was spent surveying in forest areas. Instead the survey team concentrated on interviewing local people and staff of the SFEs. However, a number of *ad hoc* bird records were made. A total of 26 bird species were recorded in Quang Ninh district, four of which were only provisionally recorded on the basis of interviews.

### **Key species accounts**

#### **Crested Argus** *Rheinardia ocellata*

All hunters interviewed were familiar with Crested Argus and affirmed the continued presence of this species in the area. Two tail feathers of this species were observed in the house of Mr Ho Nam, a member of the Van Kieu ethnic minority, in Da Chet village, Truong Son. These feathers reportedly came from a bird snared in August 2001 in forest near the international border with Laos.

#### [**Great Hornbill** *Buceros bicornis*]

All hunters interviewed affirmed the continued occurrence of Great Hornbill but indicated that the population is now quite small. Mr Ho Sac and Mr Nam, members of the Van Kieu ethnic minority from Da Chet village, recently encountered several flocks in forest near the international border with Laos. Each flock contained three or four birds, and was observed feeding in large fruiting trees.

#### **Brown Hornbill** *Anorrhinus tickelli*

On 24 June 2002, two captive juvenile Brown Hornbills were seen and photographed in a border army station near Khe Cat village, Truong Son commune. The birds' owner reported buying them from a hunter in Khe Cat village. On the same day, one more captive juvenile bird was seen in the house of Mr Ho Nam, a member of the Van Kieu ethnic minority, in Da Chet village. On 25 June 2002, four more captive juvenile birds and one skull were seen in the house of Mr Ho Bun, a member of the Van Kieu ethnic minority, in Xa Biec Ngoai village. The four juveniles were reportedly taken from a nest

in the hole of a large tree, after their mother was killed. The results of the rapid field survey indicate that the remaining population of Brown Hornbill in Quang Ninh district is under severe threat from hunting and habitat fragmentation.

### ***Key species not recorded***

#### **Imperial Pheasant** *Lophura imperialis*

Most hunters interviewed were unfamiliar with this species. However, two detailed descriptions of all-dark pheasants were given by Van Kieu hunters in Ben Duong village, Truong Son commune. On 24 June 2002, Mr Ca and Mr Ho Ben, independently described a bird with a green body, a short, green tail, a red face, red legs and a green crest (in Vietnamese, the word *xanh* refers to both green and blue). Mr Ca reported that he had caught one bird in August 2001. Both men reported that the species is now very rare and only encountered by experienced hunters. However, despite detailed questioning, it was impossible to rule out that the species described was either Siamese Fireback or Coral-billed Ground Cuckoo *Carpococcyx renauldi*, both of which share most of the features described with Imperial Pheasant.

#### **Edwards's Pheasants** *Lophura edwardsi*

In 1998 or 1999, Mr Do Tuoc of the Forest Inventory and Planning Institute, collected a specimen of a juvenile Edwards's Pheasant, which had reportedly been snared by local people in western Quang Ninh district. However, given that precise locality and collection details are not available, the occurrence of Edwards's Pheasant in western Quang Ninh district is best treated as provisional. During the rapid field survey, the survey team were unable to obtain any further information about this species. However, no conclusions should be drawn from local people's unfamiliarity with this species, especially because all hunters interviewed in Le Thuy and Quang Ninh districts were also unfamiliar with Grey Peacock Pheasant *Polyplectron bicalcaratum*, a species that was confirmed to occur in the study area on the basis of field records.

#### **Sooty Babbler** *Stachyris herberti*

The survey team made a brief visit to an area of lowland evergreen forest in the south of Quang Ninh district, close to Le Thuy district. This area appears to support suitable habitat for Sooty Babbler, a species which is known to occur in Phong Nha-Ke Bang National Park, immediately to the north of Quang Ninh district. However, due to limited time and restricted access due to on-going construction work on the West Truong Son Road, a thorough search for this species was not possible. Sooty Babbler is a restricted-range species, with a global range restricted to the Annamese Lowlands EBA. The species is listed in *Threatened Birds of Asia* (BirdLife International 2001) as near threatened.

## **2.3 Conclusions**

The study area qualifies as an IBA because it meets criteria A1, A2 and A3. Before the precise boundaries of the IBA can be defined, further, more detailed studies are required in the study area, to assess the status and distribution of key bird species. However, it is probable that the IBA will include significant parts of western Le Thuy and Quang Ninh districts, as well as, possibly, parts of northern Huong Hoa district, where a rapid field survey in 2002 indicated the presence of significant populations of a number of key bird species, including Crested Argus (Le Manh Hung *et al.* 2002).

### **Criterion A1: The site regularly holds significant numbers of a globally threatened species, or other species of global conservation concern.**

The results of the rapid field survey indicate that the study area supports significant populations of the globally vulnerable Crested Argus and the globally near-threatened Brown Hornbill, Lesser Fish Eagle, Red-collared Woodpecker, Short-tailed Scimitar Babbler, and, provisionally, Siamese Fireback and Great Hornbill. In addition, there exists a provisional record of the globally endangered Edwards's Pheasant from western Quang Ninh district.

**Criterion A2: The site is known or thought to hold a significant component of a group of species whose breeding distributions define an EBA or secondary EBA.**

The study area is known to support populations of three of the nine restricted-range species whose ranges define the Annamese Lowlands EBA: Crested Argus, Annam Partridge and Short-tailed Scimitar-Babbler. Although no equivocal information about Imperial Pheasant was obtained during the rapid field survey, reports from a number of hunters in Le Thuy and Quang Ninh districts indicate the possible occurrence of the species in the study area. In addition, based on the specimen record from 1998 or 1999 and the availability of suitable habitat, it is possible that the study area supports a significant population of Edwards's Pheasant. However, further studies are required to evaluate the status and distribution of these two restricted-range species in the area.

Furthermore, the study area supports suitable habitat for at least three of the other four species whose ranges define the Annamese Lowlands EBA: White-cheeked Laughingthrush *Garrulax vassali*, Sooty Babbler and Grey-faced Tit-Babbler *Macronous kelleyi*. To date, however, these species have not been recorded in the study area.

**Criterion A3: The site is known or thought to hold a significant component of the group of species whose distributions are largely or wholly confined to one biome.**

Of the 83 species recorded in western Le Thuy and Quang Ninh districts during the rapid field survey, nine are restricted to the Sino-Himalayan Subtropical Forests (Biome 08): Brown Hornbill, Bay Woodpecker *Blythipicus pyrrhotis*, Blue-rumped Pitta *Pitta soror*, White-winged Magpie *Urocissa whiteheadi*, Indochinese Green Magpie *Cissa hypoleuca*, White-shouldered Starling *Sturnus sinensis*, Black-browed Fulvetta *Alcippe grotei*, Streaked Spiderhunter *Arachnothera magna* and, provisionally, Silver Pheasant. A further 10 species are restricted to the Indochinese Tropical Moist Forests (Biome 09): Red-collared Woodpecker, Grey Peacock Pheasant, Red-vented Barbet *Megalaima lagrandieri*, Green-eared Barbet *M. faiostricta*, Bar-bellied Pitta, Crow-billed Drongo *Dicrurus annectans*, Sultan Tit *Melanochlora sultanea*, Grey-eyed Bulbul *Iole propinqua* Lesser Necklaced Laughingthrush *Garrulax monileger* and, provisionally, Siamese Fireback. A further three species are restricted to the Indo-Malayan Tropical Dry Zone (Biome 10): Racket-tailed Treepie *Crypsirina temia*, Ashy Woodswallow *Artamus fuscus*, Sooty-headed Bulbul *Pycnonotus aurigaster*.

### 3. Mammals

#### 3.1 Methods

Due to time constraints, the survey team concentrated mainly on conducting interviews with local people, in order to evaluate the status of endemic and globally threatened mammal species in the study area. To this end, the following investigative method was applied:

- collecting information from government staff based at forest guard stations, SFE headquarters, forest guard stations, border army stations, communes and villages;
- conducting interviews with skilled hunters, old people and wildlife traders, supported by identification of remains or captive individuals;
- conducting field surveys in forest areas to assess the condition and extent of natural habitats, search for feeding signs and footprints, and listen for calls.

During the survey, a total of 14 skilled hunters and two wildlife traders were interviewed. Interviews focussed on the following endemic and globally threatened species: Saola *Pseudoryx nghetinhensis*, Annamite Striped Rabbit *Nesolagus timminsi*, Giant Muntjac *Megamuntiacus vuquangensis*, gibbons *Nomascus* spp., douc langurs *Pygathrix* spp., Tiger *Panthera tigris* and bears *Ursus* spp. Following the discovery of a Saola skull in Ho village, Kim Thuy commune, three days were spent in the forest south of Rum village, Kim Thuy commune, in order to collect more data about this species.

#### *List of interviewees*

1. Ms Nguyen Thi Hong, kilometre 19, provincial road no. 10, Ngan Thuy commune, Le Thuy district
2. Mr Ho Hien, Village No. 14, Ngan Thuy commune, Le Thuy district
3. Mr Ho Van Cuong, Ho village, Kim Thuy commune, Le Thuy district
4. Ms Ngo Thi Dung, Ho village, Kim Thuy commune, Le Thuy district
5. Unnamed hunter, Mit village, Kim Thuy commune, Le Thuy district
6. Unnamed hunter, Mit village, Kim Thuy commune, Le Thuy district
7. Unnamed hunter, Mit village, Kim Thuy commune, Le Thuy district
8. Unnamed hunter, Mit village, Kim Thuy commune, Le Thuy district
9. Mr Tran Dung, Khe Cat village, Truong Son commune, Quang Ninh district
10. Mr Tran Dinh Ca, Long Son village, Truong Son commune, Quang Ninh district
11. Mr Ho Ben, Ben Duong village, Truong Son commune, Quang Ninh district
12. Mr Ho Nam, Da Chet village, Truong Son commune, Quang Ninh district
13. Ms Ho Huong, Da Chet village, Truong Son commune, Quang Ninh district
14. Mr Ho Sac, Da Chet village, Truong Son commune, Quang Ninh district
15. Mr Ho Nam, Xa Leng village, Truong Son commune, Quang Ninh district
16. Mr Tuyen, Khe Tra Forest Guard Station, Truong Son SFE, Quang Ninh district

#### 3.2 Results

According to local people, prior to the Second Indochina War, Quang Ninh and Le Thuy districts supported a large area of lowland evergreen forest in a relatively good condition. During this time, Tiger, bears, wild cattle and Sambar *Cervus unicolor* were common in the area. However, since the end of the Second Indochina War and the beginning of commercial logging operations in the area, the forest condition declined and mammal populations decreased. Hunting is assumed to have been an important factor in the decrease of mammal populations, as all members of the Van Kieu ethnic group interviewed reported hunting now or in the past. Despite the low human population density in the area, the arrival of Kinh wildlife traders and the recent construction of the West Truong Son Road have opened up the area to outside market pressures, with the result that hunting is now occurring at an intensity higher than that required to meet local subsistence needs.

Local people interviewed reported that Wild Pig *Sus scrofa* and Southern Serow *Naemorhedus sumatraensis* are the two species most commonly hunted, although they reported that Saola and Giant

Muntjac *Megamuntiacus vuquangensis* are also caught in smaller numbers. For instance, Ms Ngo Thi Dung, a Kinh wildlife trader from Ho village, Kim Thuy commune reported that each year she buys 50 Southern Serow from local hunters but only two or three Saola. However, she indicated that some Saola may be sold to traders from outside of the area, who offer higher prices.

### ***Key species accounts***

#### ***Saola Pseudoryx nghetinhensis***

Most interviewees were familiar with Saola (called *la giang* in the language of the Van Kieu ethnic minority) and gave accurate descriptions of the horns and pelage features of the species. On 18 June 2002, the skull and horns of an adult male Saola (pictured on the cover of this report) was observed in the house of Mr Ho Van Cuong, a member of the Van Kieu ethnic minority in Ho village, Kim Thuy commune. The horns measured 525 mm (LHS) and 530 mm (RHS) from base to tip. The skull is now stored at the zoological museum at IEBR.

According to Mr Cuong, the Saola was hunted by his son and brother 10 days prior to our visit, in forest in the Khe Nuoc Trong area. Mr Cuong reported that he caught another Saola about three years previously, also in the Khe Nuoc Trong area, although he already sold the horns. He reported catching this animal by setting snares in a place he had observed Saola drinking. He said that he encounters Saola very rarely, and always as single animals or, more usually, in pairs. He reported that Saola feeds on the leaves of an aroid (Araceae).

On 21 June 2002, the survey team visited the locality where the Saola was hunted, accompanied by the hunters who caught the animal. The animal was caught midway along a trapline of around 100 snares, positioned every five metres along a drift fence made of brushwood. Each snare consisted of a running loop placed over a hole and attached to a bent sapling. The trapline ran from the top to the bottom of a slightly convex hillside. During the three days the survey team spent in the forest, one Wild Pig and one Southern Serow were caught in the same trapline. Close to this locality, the survey team found a wallow with fresh Sambar tracks.

The locality where the Saola was caught was on a 45°, south-west-facing slope, at least 300 m from the nearest stream (16°58.02'N 106°37.52'E; UTM 0673060 1876619). The locality was in lowland evergreen forest with a closed canopy and no signs of logging activity. The understorey was dominated by rattans and aroids, the latter of which was said by the hunters to be the preferred food plant of Saola. The Saola was trapped at an elevation of around 400 m asl. On the way to the site, the survey team found several patches of aroids with the leaves bitten off, which was described as Saola feeding sign by the hunters. However, this information is not unequivocal as, in the same area, the survey team was shown a spot where a Southern Serow was recently snared. The purported Saola feeding sign was on a north-west facing slope, at an elevation of 300 m asl, where the vegetation was similar to that at the locality where the Saola was caught.

Interestingly, the locality where the Saola was caught is only 4 km from Rum village, the nearest human settlement, and only 2 km from the West Truong Son Road. During the Second Indochina War, the Khe Nuoc Trong area lay along the route of a vehicle road used to transport men and supplies to the Khe Sanh battlefield. As a result, the area was subjected to intense bombardment by US Forces, and unexploded ordnance was observed along the now overgrown road by the survey team.

The hunters who caught the Saola reported that they had only been hunting in the Khe Nuoc Trong area since February and, in this time, they had not caught any other Saola. In fact, they reported that they had never seen a Saola in the wild or caught one previously in any other location. According to these hunters, there are only four other hunters regularly operating in this area, although there are a number of illegal gold prospectors.

An additional first-hand report of a Saola being hunted in the Khe Nuoc Trong area came from Mr Bay, the chairman of Lam Thuy commune, who was a member of a group of hunters who killed one there in 2000. The hunters used dogs to chase the animal until it came to bay in a stream, where they killed it. Additionally, Mr Bay reported that, in the past, Saola had occurred on forested hills in Lam

Thuy commune, although he had never actually seen one in this area. He reported that, with the increase in the human population, Saola disappeared from the area and can now only be found in two areas: the south of Kim Thuy commune and close to the border with Laos.

In Truong Son commune, Quang Ninh district, three more Saola skulls were seen by the survey team on 24 June 2002. One skull, observed in the house of Ms Ho Huong in Da Chet village, reportedly belonged to an animal hunted two years previously. Ms Huong reportedly confiscated the skull from two hunters in lieu of money they owed her. She is now keeping the skull for medicinal purposes as she believes that the horns can be used as a cure for colic. The animal was reportedly hunted in a forest area on Lo O mountain. The exact location of Lo O mountain could not be discerned but it was reported to be three hours walk to the south-west of Da Chet village, towards the international border with Laos. A second skull was seen in the house of Mr Ho Sac in Da Chet village. This skull was reportedly taken from a dead Saola found by a small stream in a forest area near Lo O mountain in May 2000. According to Mr Sac, the animal may have died from natural causes, as he did not find any evidence of snaring in the area. A third skull was seen in the house of Mr Long in Long Son village. Mr Long reported that this skull came from a Saola he trapped near the international border with Laos two months previously. He reported that this was only the second Saola he had hunted: the first was five years previously. According to Mr Long, a set of Saola horns can fetch VND 800,000 to 1 million (roughly US\$50 to 65). Based on the short length of the horns, it was assumed by the survey team that this skull belonged to a young animal.

In 1998, during a biodiversity survey in the upper catchment of the Xe Bang Fai river in Khammouane province, Laos, the survey team received accurate reports of Saola from local people, although they were unable to locate a specimen and, thereby, confirm these reports (Walston and Vinton 1999). In context of the discovery of Saola in western Le Thuy and Quang Ninh districts, these reports are significant because the upper catchment of the Xe Bang Fai river is adjacent to Quang Ninh district. Therefore, the Saola population in southern Quang Binh province may be part of a population that extends into contiguous forest areas in Laos.

**Gibbon species** *Nomascus* sp.

All interviewees, in both districts, reported the continued presence of gibbons, and gave accurate descriptions of both the calls and the pelage features. At 05h00 on the morning of 19 June 2002, a group of gibbons was heard calling in the forest, approximately 1 km south of Rum village, Kim Thuy commune. This group comprised at least one male and one female. At 05h00 on the morning of 20 June 2002, a group of gibbons, comprising at least one male and one female, and possibly the same group as that heard on the previous day, was heard calling in the same area. At 05h15 on the morning of 21 June 2002, a single male gibbon was heard calling in the Khe Nuoc Trong area. The local people in Rum village reported that there were at least three groups of gibbons in forest areas near the village, and that they could not hunt them because they did not possess guns. Based on the known distribution of gibbons in Vietnam, the gibbons heard during the rapid field survey were presumed to be White-cheeked Crested Gibbon *Nomascus leucogenys*.

**[Douc langur species** *Pygathrix* sp.]

All interviewees, in both districts, reported the continued presence of a douc langur species. Most interviewees reported that douc langurs are now very rare and only occur in small groups. However, a single hunter, Mr Doan Kim Don, who operates in the Khe Nuoc Trong area, reported that a group of over 30 douc langurs occurs in the forest between Khe Nuoc Trong and the border with Laos. Mr Don described the species as having seven colours and a long, white tail. Based on the descriptions given by local people and the known distributions of douc langurs in Vietnam, these reports are presumed to refer to Red-shanked Douc Langur *Pygathrix nemaeus*.

**Giant Muntjac** *Megamuntiacus vuquangensis*

A skull of Giant Muntjac was observed in the house of Mr Ho Sac in Da Chet village, Truong Son commune, Quang Ninh district. A second skull was observed in the house of Mr Ho Nam in Xa Leng village, also in Truong Son commune. Both skulls appeared to be very old, and both men reported that the species is now very rare in the area.

**Annamite Striped Rabbit** *Nesolagus timminsi*

Most interviewees reported the occurrence of this species. For example, Mr Doan Kim Don, a hunter operating in the Khe Nuoc Trong area, reported catching two or three individuals in this area over the previous year. During the field visit to the Khe Nuoc Trong area, one adult male Annamite Striped Rabbit was trapped in a snare line set by the survey team, in lowland evergreen forest at 200 m asl. The locality was within 50 m of a stream in closed canopy forest with an understorey dominated by tree saplings and palms. The results of the rapid field survey indicate that forest areas in southern Kim Thuy commune and on Lo O mountain, Truong Son commune, may support significant populations of this little known species. Further survey work is required to assess the distribution of the species in the study area in more detail.

**3.3 Conclusions**

The natural forest in western Le Thuy and Quang Ninh districts has been reduced in extent and fragmented as a result of several factors, including the effects of the Second Indochina War and commercial logging operations, and the mammal populations therein remain under high hunting pressure. However, the results of the rapid field survey indicate that the remaining areas of lowland evergreen forest in the two districts support populations of several mammal taxa endemic to the Annamite mountains, including Saola, Annamite Striped Rabbit, White-cheeked Crested Gibbon, Red-shanked Douc Langur and Giant Muntjac. Of these, the population of Saola in western Le Thuy and Quang Ninh districts is of undoubted international importance, and, together with populations which may occur in the upper catchment of the Xe Bang Fai river in Laos and northern Huong Hoa district, Quang Tri province (Walston and Vinton 1999, Le Manh Hung *et al.* 2002), may form part of one of the largest remaining populations in the world.

The mammal populations in western Le Thuy and Quang Ninh districts remain severely threatened by habitat loss and hunting, threats which may intensify following the completion of the West Truong Son Road. Unless rapid and effective conservation measures are put in place, the suite of endemic Annamite taxa that make the south of Quang Binh province of international significance for mammal conservation may soon be eradicated. On the other hand, if action is taken to control hunting and prevent any further disturbance to and loss of forest habitats, the populations of many key mammal species may well recover over the next 10 to 15 years.

## 4. Recommendations

1. Further survey work should be conducted to determine the status and distribution of the following key mammal and bird species in the study area: Saola, Annamite Striped Rabbit, White-cheeked Crested Gibbon, Red-shanked Douc Langur, Giant Muntjac, Edwards's Pheasant, Imperial Pheasant, Crested Argus, Annam Partridge, Great Hornbill and Brown Hornbill. This work should concentrate on determining the presence or absence of each key species within each forest compartment in the study area, as a basis for targetted conservation action and integration of biodiversity considerations into SFE management plans and other land-use plans.
2. Appropriate and targetted community-based conservation initiatives should be developed in communities adjacent to any forest compartment that supports any of the key species listed above. Such initiatives might include raising conservation awareness, signing household or village agreements pledging not to hunt key species, incorporating restrictions on hunting key species into forest protection contracts, and establishment of community patrolling, in collaboration with FPD staff.
3. Strict anti-hunting regulations should be enforced within forest compartments that support any of the key species listed above. In particular, all use of snares and guns in these areas should be banned. Hunting of common species, such as Wild Pig, Indian Muntjac *Muntiacus muntjak* and Red Junglefowl, should be permitted within any forest compartments that do not support any of the key species listed above.
4. FPD staff should cooperate with commune people's committees, SFE management boards and border army units to strictly enforce national laws prohibiting trade in threatened wildlife species, particularly Decree No. 48/ND-CP of the Prime Minister, dated 22 April 2002, amending and supplementing Decree No. 18/HDBT, dated 17 January 1992.
5. Human settlement along the route of the West Truong Son Road should be strictly controlled. No settlement should be permitted within or adjacent to any forest compartment that supports any of the key species listed above.
6. The management plans of Khe Giua, Truong Son and Ba Ren SFEs should be modified so that any forest compartments that support Saola, White-cheeked Gibbon or Great Hornbill are zoned as protection forest, where timber extraction is prohibited.
7. The feasibility of establishing a protected area in southern Le Thuy district, incorporating the Khe Nuoc Trong area and other forest areas along the border with Quang Tri province should be assessed, and, if appropriate, such a protected area should be established under the management of Quang Binh Provincial FPD.

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## Appendix 1: List of birds recorded in Le Thuy and Quang Ninh districts, Quang Binh province

No.	Common Name	Order, Family, Genus and Species	Site	Notes		
				1	2	3
		<b>Galliformes</b>				
		<b>Phasianidae</b>				
1	Chinese Francolin	<i>Francolinus pintadeanus</i>	1			
2	Annam Partridge	<i>Arborophila merlini</i>	1			RRS
3	Red Junglefowl	<i>Gallus gallus</i>	1			
4	[Silver Pheasant]	[ <i>Lophura nycthemera</i> ]	3			
5	[Siamese Fireback]	[ <i>L. diardi</i> ]	3	NT	T	
6	Grey Peacock Pheasant	<i>Polyplectron bicalcaratum</i>	1			
7	Crested Argus	<i>Rheinardia ocellata</i>	1,2	VU	T	RRS
		<b>Turniciformes</b>				
		<b>Turnicidae</b>				
8	Barred Buttonquail	<i>Turnix suscitator</i>	1			
		<b>Piciformes</b>				
		<b>Picidae</b>				
9	Rufous Woodpecker	<i>Celeus brachyurus</i>	1			
10	Greater Yellownape	<i>Picus flavinucha</i>	1			
11	Red-collared Woodpecker	<i>P. rabieri</i>	1	NT	T	
12	Bay Woodpecker	<i>Blythipicus pyrrhotis</i>	1			
		<b>Megalaimidae</b>				
13	Red-vented Barbet	<i>Megalaima lagrandieri</i>	1			
14	Green-eared Barbet	<i>M. faiostriata</i>	1,2			
		<b>Bucerotiformes</b>				
		<b>Bucerotidae</b>				
15	[Oriental Pied Hornbill]	[ <i>Anthracoceros albirostris</i> ]	3			
16	[Great Hornbill]	[ <i>Buceros bicornis</i> ]	3	NT	T	
17	Brown Hornbill	<i>Anorrhinus tickelli</i>	1,2	NT	T	
		<b>Trogoniformes</b>				
		<b>Trogonidae</b>				
18	Red-headed Trogon	<i>Harpactes erythrocephalus</i>	1			
		<b>Coraciiformes</b>				
		<b>Alcedinidae</b>				
19	Common Kingfisher	<i>Alcedo atthis</i>	1			
20	Oriental Dwarf Kingfisher	<i>Ceyx erithacus</i>	1			
21	White-throated Kingfisher	<i>Halcyon smyrnensis</i>	1,2			
		<b>Cuculiformes</b>				
		<b>Cuculidae</b>				
22	Plaintive Cuckoo	<i>Cacomantis merulinus</i>	1,2			
23	Drongo Cuckoo	<i>Surniculus lugubris</i>	1			
24	Green-billed Malkoha	<i>Phaenicophaeus tristis</i>	1			
		<b>Centropodidae</b>				
25	Greater Coucal	<i>Centropus sinensis</i>	1,2			
26	Lesser Coucal	<i>C. bengalensis</i>	1			
		<b>Apodiformes</b>				
		<b>Apodidae</b>				
27	Needletail species	<i>Hirundapus</i> sp.	1			
28	Asian Palm Swift	<i>Cypsiurus balasiensis</i>	1,2			

No.	Common Name	Order, Family, Genus and Species	Site	Notes		
				1	2	3
		<b>Strigiformes</b>				
		<b>Strigidae</b>				
29	Mountain Scops Owl	<i>Otus spilocephalus</i>	1			
		<b>Columbiformes</b>				
		<b>Columbidae</b>				
30	Spotted Dove	<i>Streptopelia chinensis</i>	1,2			
31	Orange-breasted Green Pigeon	<i>Treron bicincta</i>	1			
		<b>Gruiformes</b>				
		<b>Rallidae</b>				
32	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>	1,2			
		<b>Ciconiiformes</b>				
		<b>Accipitridae</b>				
33	Oriental Honey-buzzard	<i>Pernis ptilorhynchus</i>	1			
34	Lesser Fish Eagle	<i>Ichthyophaga humilis</i>	1	NT		
35	Crested Serpent Eagle	<i>Spilornis cheela</i>	1			
36	Crested Goshawk	<i>Accipiter trivirgatus</i>	2			
37	Hawk species	<i>A. sp.</i>	1			
38	Black Eagle	<i>Ictinaetus malayensis</i>	1,2			
39	Rufous-bellied Eagle	<i>Hieraaetus kienerii</i>	1			
		<b>Ardeidae</b>				
40	Chinese Pond Heron	<i>Ardeola bacchus</i>	1			
		<b>Passeriformes</b>				
		<b>Pittidae</b>				
41	Blue-rumped Pitta	<i>Pitta soror</i>	1			
42	Bar-bellied Pitta	<i>P. elliotii</i>	1		T	
		<b>Eurylaimidae</b>				
43	Long-tailed Broadbill	<i>Psarisomus dalhousiae</i>	1		T	
		<b>Irenidae</b>				
44	Asian Fairy Bluebird	<i>Irena puella</i>	1			
45	Blue-winged Leafbird	<i>Chloropsis cochinchinensis</i>	1			
		<b>Laniidae</b>				
46	Long-tailed Shrike	<i>Lanius schach</i>	1,2			
		<b>Corvidae</b>				
47	White-winged Magpie	<i>Urocissa whiteheadi</i>	1			
48	Indochinese Green Magpie	<i>Cissa hypoleuca</i>	1			
49	Racket-tailed Treepie	<i>Crypsirina temia</i>	1,2			
50	Large-billed Crow	<i>Corvus macrorhynchos</i>	1			
51	Ashy Woodswallow	<i>Artamus fuscus</i>	2			
52	Ashy Drongo	<i>Dicrurus leucophaeus</i>	1			
53	Crow-billed Drongo	<i>D. annectans</i>	1,2			
54	Greater Racket-tailed Drongo	<i>D. paradiseus</i>	1			
55	Black-naped Monarch	<i>Hypothymis azurea</i>	1			
56	Asian Paradise Flycatcher	<i>Terpsiphone paradisi</i>	1			
		<b>Muscicapidae</b>				
57	Blue Whistling Thrush	<i>Myophonus caeruleus</i>	1,2			
58	Oriental Magpie Robin	<i>Copsychus saularis</i>	1,2			
		<b>Sturnidae</b>				
59	White-shouldered Starling	<i>Sturnus sinensis</i>	1			
60	Crested Myna	<i>Acridotheres cristatellus</i>	1,2			

No.	Common Name	Order, Family, Genus and Species	Site	Notes		
				1	2	3
		<b>Paridae</b>				
61	Sultan Tit	<i>Melanochlora sultanea</i>	1			
		<b>Pycnonotidae</b>				
62	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>	1,2			
63	Sooty-headed Bulbul	<i>P. aurigaster</i>	1,2			
64	Puff-throated Bulbul	<i>Alophoixus pallidus</i>	1			
65	Grey-eyed Bulbul	<i>Iole propinqua</i>	1			
		<b>Sylviidae</b>				
66	Common Tailorbird	<i>Orthotomus sutorius</i>	1,2			
67	Dark-necked Tailorbird	<i>O. atrogularis</i>	1			
68	White-crested Laughingthrush	<i>Garrulax leucolophus</i>	1			
69	Lesser Necklaced Laughingthrush	<i>G. monileger</i>	1			
70	Buff-breasted Babbler	<i>Pellorneum tickelli</i>	1			
71	Scaly-crowned Babbler	<i>Malacopteron cinereum</i>	1			
72	Short-tailed Scimitar Babbler	<i>Jabouilleia danjoui</i>	1	NT	T	RRS
73	Striped Tit Babbler	<i>Macronous gularis</i>	1			
74	Chestnut-capped Babbler	<i>Timalia pileata</i>	1			
75	Black-browed Fulvetta	<i>Alcippe grotei</i>	1			
76	White-bellied Yuhina	<i>Yuhina zantholeuca</i>	1			
		<b>Nectariniidae</b>				
77	Scarlet-backed Flowerpecker	<i>Dicaeum cruentatum</i>	1			
78	Olive-backed Sunbird	<i>Nectarinia jugularis</i>	1			
79	Crimson Sunbird	<i>Aethopyga siparaja</i>	1			
80	Little Spiderhunter	<i>Arachnothera longirostra</i>	1			
81	Streaked Spiderhunter	<i>A. magna</i>	1			
		<b>Passeridae</b>				
82	Eurasian Tree Sparrow	<i>Passer montanus</i>	1			
83	White Wagtail	<i>Motacilla alba</i>	1,2			

Bird names, sequence and species limits follow Inskipp *et al.* (1996) except for Annam Partridge *Arborophila merlini* and Black-browed Fulvetta *Alcippe grotei*, which follow Robson (2000).

Brackets [ ] denote that a record is provisional.

Site: 1 = recorded by A. W. Tordoff and Le Manh Hung in Le Thuy district, 17-22 June 2002; 2 = recorded by Le Manh Hung in Quang Ninh district, 24-26 June 2002; 3 = reliable first-hand reports by local people in both districts.

Notes 1: VU = Vulnerable, NT = Near Threatened as per BirdLife International (2001).

Notes 2: T = Threatened as per Anon. (1992).

Notes 3: RRS = Restricted-range Species as per Stattersfield *et al.* (1998).