



**The NEF Bio-ecological Nature Conservation Project in  
Mountainous Region of North Vietnam**

**AVIFAUNA FINAL RESEARCH REPORT  
FOR PERIOD 10/2018 – 9/2021**



**Ha Noi, 11/2021**

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## **ACKNOWLEDGEMENTS**

This report cannot be done without the technical and financial support from the Nagao Environmental Foundation. We would like to express our sincere thanks to the president and the director board of the foundation. We especially give our sincere appreciation to Professor Ohtsuka for his tireless interest and support.

We highly appreciate the local authorities and functional departments of Tuyen Quang, Ha Giang, Cao Bang and Bac Kan provinces for their permissions and administrative support for our field surveys and inventories.

We also thank the management boards and staffs of all four protected areas (Cham Chu, Bac Me, Phia Oak-Phia Den and Nam Xuan Lac) for their hospitality and support during our field surveys. We thank the local guides for their great accompany and support in the field surveys.

Last is not least, the project would not be done if we do not have supports from the leaders and staff of Central Institute for Natural Resources and Environmental Studies (VNU-CRES) as well as Institute for Ecology and Biological Resource (IEBR) of Vietnam Academy of Sciences and Technologies (VAST).

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## **1. PURPOSE OF THE PROJECT**

### **1.1. Overall purpose of the project**

In order to realize the NEF's fundamental goal of nature conservation in developing countries, especially in the Asia-Pacific region, this project aims at deepening our scientific knowledge of natural ecosystem, biodiversity in particular, and at contributing to nature conservation and sustainable development policies in Vietnam, one of the countries where the NEF has worked successfully since its foundation in 1989. More specifically, targeting an environmentally valuable but vulnerable limestone (karst) zone in the northern part of Vietnam (mainly, four provinces, i.e., Tuyen Quang, Bac Kan, Cao Bang, and Ha Giang), this project focuses on elucidation of the facts and causes of environmental degradation in recent days due primarily to economic development represented by land use/land cover changes and search for practical solution or mitigation. This project also aims to contribute to enhancement of young scientists' research capabilities, for the purpose of attaining another fundamental goal of the NEF.

### **1.2. Specific purposes of research groups**

The main purpose of this study/ survey is to better understanding of the avifauna and better conserve of the birds in the Northeastern provinces of Vietnam as well as in the country.

- To review the existing information and materials related to the area on birds and natural habitats/ landscape
- To carry out field surveys on avifauna of the hot spots within the provinces: species composition, species status, species distribution, conservation status. For this period, we carried out field surveys in Cham Chu Nature Reserve of Tuyen Quang province, Bac Me Nature Reserve (part of Du Gia National Park) of Ha Giang province, Phia Oac-Phia Den National Park (Cao Bang Province) and Nam Xuan Lac Nature Reserve (Bac Kan province).
- To propose biodiversity conservation measures for the region
- To build capacity for Vietnam Ornithology
- Writing reports
- Writing and publishing scientific papers in journals, workshop proceedings...

## 2. PARTICIPANT LIST

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## 3. PROJECT DURATION

### 3.1. Main phase:

+ Main phase: 10/2018-9/2021

+ Additional time: up to 12/2021, due to Covid-19 pandemic)

### 3.2. Time frame:

#### 3.2.1. First period

10/2018-9/2019

### **3.2.2. *Second period***

10/2019-9/2020

### **3.2.3. *Third period***

10/2020-9/2021

## **4. ABSTRACT**

The Northeastern region of Viet Nam contains a richness of ecosystems with limestones/ karst alternate with earth mountains and the rivers, lakes and streams which create different important habitats for many animal species include birds.

The protected area system (or Special Use Forests) in the Northeastern region of Viet Nam ranges from national park to nature reserve, species and habitat conservation and landscape protected areas.

We carried out 8 field surveys in Cham Chu protected area (Tuyen Quang province), Bac Me nature reserve (part of Du Gia-Dong Van Karst Geopark of Ha Giang), Phia Oac-Phia Den national park (Cao Bang), and Nam Xuan Lac habitat and species conservation area (Bac Kan) from October 2018 to September 2021 aiming at reviewing the existing information and documents related to the area on birds and natural habitats/ landscape of the areas as well as species composition, species status, species distribution, conservation status. We also want to propose biodiversity conservation measures for the region, to build capacity for Vietnam Ornithology, writing reports, and to publish scientific papers in journals, workshop proceedings...

We used binoculars, telescopes and camera to observe and to take photos of birds. We also used mist net to catch the birds, rings (bands) and measure equipment (scale, pliers, ruler...). During the surveys, we conducted line (transect) surveys as well as point surveys in the fields. The transects were made through four different types of habitats: i) garden/ settlement, ii) cultivation areas, iii) secondary forest, and iv) primary forest. We also conducted line surveys from hill base to the peak of the mountain. Species identification/ classification and comparison are based on available books and documents. In comparison, we mainly find out if the species still sighted, if the species are rare, endangered or threaten...

Our surveys and inventories have found total 220 species of birds belong to 56 families, 15 orders. Of those, there are 6 species of rare and endangered ones in IUCN Red List. The results also shown that there are 119 species identified in Cham Chu, 105 species in Bac Me nature reserves; 141 species found in Phia Oac-Phia Den national park and 92 species found in Nam Xuan Lac nature reserve. We have also published 4 scientific articles (1 in internal journal and 2 in national journal, 1 in national workshop proceeding) and trained 3

young scientists during the project life. We have also received the volunteer participation of one Japanese ornithologist during the field survey and bird banding.

During the past years, functional forces and local authorities have put a lot of efforts in the protection and conservation of the protected area system as well as fauna and flora including bird species. Nevertheless, they are still facing many difficulties and challenges such as the un-suitable policy, mechanism, direct impacts like mining, habitat invasions, Sweden cultivation; the lack and shortage of survey and inventory activities, public awareness and livelihood raising...

In order to better manage and conserve the protected areas and birds, it is in need to conduct/ carry out comprehensive activities and plan which include strengthening policy, management measures, building capacity, law enforcement, scientific survey and inventory, development of database, development of ecotourism as well as raising awareness and community participation.

## **5. BIO-ECOLOGICAL BACKGROUND OF THE TARGET AREA**

### **5.1. Natural characteristics of study areas**

#### ***5.1.1. Location of the sites***

The location of the protected areas (Cham Chu, Bac Me, Phia Oac-Phia Den and Nam Xuan Lac) where surveys were carried out is shown in figure 5.1 below.

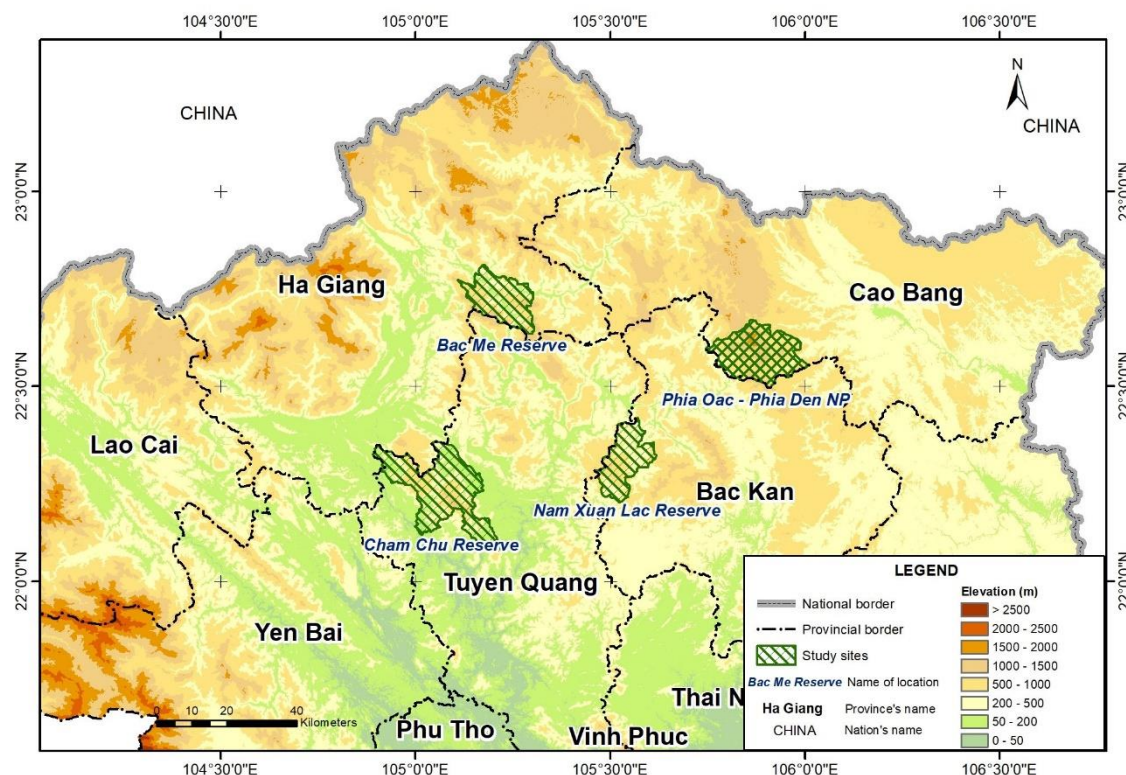


Figure 5.1: Location of the surveyed sites

## 5.1.2. General natural characteristics

### 5.1.2.1. Cham Chu nature reserve

Cham Chu nature reserve was established in 2021 by Decision No. 1536/QĐ-UBND dated 21/09/2001 of Tuyen Quang People's Committee.

On 21/7/2008 the Forest Protection Unit of Cham Chu Special Use Forest was established under the Forest Protection Department of Tuyen Quang province by Decision No. 408/QĐ-UBND.

The acreage of the protected area is 40.297 ha. Coordinates are:

$22^{\circ}14'16''$  to  $22^{\circ}21'30''$  N;

$104^{\circ}53'27''$  to  $105^{\circ}14'16''$  E.

### *Climatology*

The Cham Chu area has the characteristics of the Northeastern climate.



- Average temperature is 22,9<sup>0</sup>C; The average lowest temperature is 15,5<sup>0</sup>c (January), and the average highest temperature is 28,2<sup>0</sup>C (July). The temperature fluctuation between the coldest and warmest months is up to 7,3<sup>0</sup>C.

- Total average annual rainfall is 1661mm. There are 4 months with the average rainfall over 230mm (June, July, August and September) cover up to 65,24% total annual rainfall of the year. This leads to flooding, soil erosion and damage crops and goods of the local people.

Dry season prolong from October to February of the next year.

### ***Hydrology***

Like other areas in the Northeastern region, there is a dense river and stream system. Together with high rainfall (1661mm per year), the river and stream system create a high humidity in rainy season. Total length of the rivers and streams is 1113,7 km equivalent to 1,9 km/km<sup>2</sup>.

The Lo River flows thru the West and create a natural boundary of the protected area. In the East, a system of Khuổi Guồng river started from Trung Hà commune runs thru Hà Lang, it then joins the Tân Thành and Phúc Ninh rivers in the Southwest of the protected area.

***Topography***: The Cham Chu protected area covers entire Cham Chu Mountain with the Cham Chu peak up to 1.587 m asl.

#### **5.1.2.2. Bac Me nature reserve**

The Bac Me nature reserve was first established in 1994 by the People's Committee (PPC) of Ha Giang province in Decision No. 143/QĐ-UB dated 22/4 / 1994 with total acreage of 27.800 ha, located within 5 communes: Lạc Nông, Minh Ngọc, Yên Cường, Phiêng Luông and Thượng Tân of Bac Me district, Ha Giang province.

Nevertheless, in 2013, the PPC revised and decided to limit its territory down to 9.016,3 ha by Decision No. 1981/QĐ-UBND dated 19/ 9/2013 located within 3 communes: Minh Ngọc, Lạc Nong and Thuong Tan of Bac Me district.

In 2014, the PPC decided to merge Bac Me protected area into Du Gia national park by Decision No. 829/QĐ-UBND dated 29/04/2014 of the PPC of Ha Giang under the management of Department of Agriculture and Rural Development.

The Bac Me Nature Reserve is 31km East from Ha Giang city and coordinated by:

22<sup>0</sup>38'59" – 22<sup>0</sup>45'47" N

105<sup>0</sup>07'40" – 105<sup>0</sup>16'35" E.

### ***Climatology***

According to Ha Giang Department of Agriculture and Rural Development (2016). The Bac Me nature reserve located within the seasonal tropical climate with windy and cold in winter, rain in summer and dry from October to January next year.

Average air temperature is 22.7<sup>0</sup>C, monthly average highest temperature is 27.8<sup>0</sup>C, average lowest temperature is 15.4<sup>0</sup>C. The fluctuation of air temperature between highest and lowest months is 12.4<sup>0</sup>C. In summer, the area is influenced by the southeast wind with warm weather, dry which prolongs 4-5 months. Winter started in December and ended in March annually, and influenced by seasonal northeast wind.

Rainfall is rather high in the region of Ha Giang. Total rainfall annually is 2,430.1mm. Rainy season started in April and ended in November which make up to 93.48% of the total annual rainfall. During the year, three months which have the highest rainfall are June, July and August with flood, soil erosion consequently.

Moisture is rather high. Annual average relative humidity is from 81 - 86%. The highest relative humidity is fall in January, July, August and December. The driest months are April and May.

### ***Hydrology***

The Gam River system is the only one that flow from Cao Bang thru Lac Nong, Minh Ngoc, Thuong Tan communes and run into Na Hang reservoir. This system is the main waterbody that influence the hydrology of the region. In addition, there are also tributaries/streams that run from limestone valleys and ditches to Gam River.

In general, most of the streams is narrow, steep with many water falls. Water flow is fluctuated by seasons. There is more water in rainy season with very high velocity, and very often cause flooding and bank erosion.

#### **5.1.2.3. Phia Oac-Phia Den**

Phia Oac-Phia Den national park was established in 2018. The park is located within the administrative of 5 communes and town of Nguyen Binh district, Cao Bang province. They are Thanh Cong, Quang Thanh, Phan Thanh, Hung Dao and Tinh Tuc town. The coordinates are:

22<sup>0</sup> 31' 44" to 22<sup>0</sup> 39' 41" N;

105<sup>0</sup> 49' 53" to 105<sup>0</sup> 56' 24" E.

***The topography*** of Phia Oac-Phia Den national park is rather slope with soil mountains and limestones mixed together. It is higher up from east to west and from south to north.

The mountains with average height of  $\geq 700$ m, cover about 90% of the total natural acreage with the highest peak named Phia Oắc (1.931 m).

Low hills and mountains (<700m asl), cover about 7% of the total natural acreage of the national park.

Valleys and lowlands cover an area of about 3% of the total natural acreage.

### ***Climatology***

The climate of the area is made up by inland high mountain characters, and divided into two climatic sub-zones. The upper mountain zone is dominated by subtropical climate, the

lower zone is characterized by seasonal tropical climate. There are two distinguished seasons every year:

- Rainy season start from April to October, which make up to 85,4% of the total annual rainfall, and concentrated in July and August. The average annual rainfall is 1.592 mm; highest is 1.736 mm; and lowest is 1.466 mm.

- Dry season is from November to March next year. This season is very often influenced by winter seasonal wind and cold. The temperature goes down, less rainfall, and foggy.

- The annual average air temperature is 18<sup>0</sup>C; the absolute temperature happened from May to September, and range from 24.5<sup>0</sup> – 26.9<sup>0</sup> C, sometimes upto 34<sup>0</sup> C; the absolute temperature occurred from November to February of the coming year with temperature - 2<sup>0</sup>C - 5<sup>0</sup>C.

- The average relative humidity is 84.3%, July and August are very humid (> 87%), the lowest is December (80.5%).

- In addition, in the cases of low air temperature, there was frost and snow at Phia Oắc peak and Colea pass.

### ***Hydrology***

The Phia Oắc - Phia Đén is the start and catchment of rivers like: Hiến, Năng, and Thẻ Dục and other stream systems. The average density of the rivers is 2km/ 1 km<sup>2</sup>. The rivers and streams flow with water yearround.

#### **5.1.2.4. Nam Xua Lac nature reserve**

Nam Xuân Lạc species and habitat conservation area was established in 2004 by Decision No. 342/QĐ-UB dated 17/3/2004 with total natural area of 1,788 ha lies within Nà Dạ and Bản Khang hamlets of Xuân Lạc commune, Chợ Đồn district, Bắc Kạn province.

Its coordinates are: từ 22°17'-22°19'; 12° 45' - 13° 10' N; and 105°28'-105°33' E.

### ***Topography***

The topography of Nam Xuan Lac is rather complicated, highly separated, and dominated by northern Vietnam limestones/ karsts. Its elevation ranges from 400 m to 800 m asl with the highest peak (Tam Sao) of 1,159 m asl.

### ***Climatology***

Like other protected areas in the region, the species and habitat conservation area is located within the seasonal monsoon zone. There are two distinguished seasons: wet

(rain) and dry. Rainy season is from April to October, and dry season is from October to March of the coming year.

The average temperature is from 20-22°C. The highest absolute air temperature is 30°C, and lowest absolute temperature is 4°C. Average temperature in winter is 11°C, and in summer is 25°C.

Rainfall: average annual rainfall is from 1,153 – 1,528 mm, and concentrated in June and July with the highest monthly rainfall is upto 320 mm. Rainfall in dry season is less than 60 mm/month.

Humidity is about 75 - 82%. The highest humidity is 88% (in July).

### ***Hydrology***

There is one main stream started from Sơn Phú commune of Na Hang district flows to northwest direction thru Nà Dạ, Bản Eng, Bản Tùn hamlets of Nam Xuan Lac commune and then reach Ba Be Lake with a total length of about 9 km. In addition, there are also streams and rivulets (brook) start from the peak run into Ta Han stream. There are also underground karst brooks made from weathered.

## **5.2. Overview of biodiversity study history in the target areas**

The study of the avifauna of East Tonkin, Vietnam had been started since 1970 when Vo Quy investigated some places in Bac Kan province. However, these surveys have been undertaken with the small scale and separated. There were no systematically surveys on avifauna have been carried out in neither Cham Chu, Bac Me, Phia Oac-Phia Den nor Nam Xuan Lac.

The first notable list of birds was come from Ba Be National Park which had been made by experts from Institute of Ecology and Biological Resources (IEBR) in 1990. That list included 111 bird species belonging to 17 orders and 40 families. Currently, two of those species are not record for Ba Be National Park including Great Cormorant (*Pharacrocorax carbo*) and Collared Crow (*Corvus torquatus*) [IEBR, 1990].

December 1994, Frontier Vietnam Programme and Forestry University of Vietnam have carried out the survey and evaluated the conservation importance of Ba Be National Park. This report had reviewed all of the 111 bird species which were recorded in the last survey, following this, none of them were listed in the IUCN 1994 Red List, however, six species were

recorded in Vietnam Red Data Book (Fauna volume, 1992) as Crested Kingfisher (*Megaceryle lugubris*), Ruddy Kingfisher (*Halcyon coromanda*), Long-tailed Broadbill (*Psarisomus dalhousiae*), Eared Pitta (*Pitta phayrei*), Ratchet-tailed Treepie (*Temnurus temnurus*) and Great Hornbill (*Buceros bicornis*). Moreover, ten of those species have recorded with new distribution ranges, especially; some of these species have restricted distribution range in Indochina and Vietnam such as Ratchet-tailed Treepie, White-winged Magpie (*Urocissa whiteheadi*). Beside that, Red-vented Barbet (*Megalaima lagrandieri*) is an endemic species for Indochina. The report has also evaluated the species composition and concluded that there were 62 rare species, 27 fairly rare, 16 common and 6 species very common [Neville Kemp *et al*, 1994].

October 1996, Frontier Vietnam Programme, IEBR and Vietnam National University, Hanoi have undertaken the survey in Na Hang nature reserve, Tuyen Quang province, this survey was mostly focused in Ban Bung sub-sector. A total of 171 bird species were recorded including 13 threatened and rare species such as: Red-collared Woodpecker (*Picus rabieri*), Pied Falconet (*Microhierax melanoleucos*), Yellow-vented Green Pigeon (*Treron seimundi*), Brown Hornbill (*Anorrhinus tickelli*), Blue-rumped Pitta (*Pitta sorrow*), Bar-bellied Pitta (*P. elliotti*), Grey Laughingthrush (*Garrulax maesi*), Black-breasted Thrush (*Turdus dissimilis*), Slender-billed Scimitar Babbler (*Xiphirhynchus superciliaris*), Rufous-throated Fulvetta (*Alcippe rufogularis*), Greater Rufous-headed Parrotbill (*Paradoxornis ruficeps*), Fujian Nitava (*Niltava davidi*) and White-winged Magpie. The survey had also recorded four other national threatened species as Silver Pheasant (*Lophura nycthemera*), Long-tailed Broadbill, Eared Pitta and Ratchet-tailed Treepie and had evaluated the species abundant of the 171 recorded species. Following the evaluation, there were 58 rare, 35 fairly rare, 31 occasionally, 35 common and 12 very common species [Frontier, IEBR and Hanoi National University, 1996].

December 1996, as the part of Vietnam Forest Research Programme, Frontier and IEBR have carried out the biodiversity survey at Ba Be National Park. A total of 189 species were recorded, comparing with the last surveys, there were 25 other species not recorded during this survey, that mean the total number recorded species in Ba Be National Park stand at 214 after this survey. The survey had extended the elevation ranges for 13 species and added the new distribution range of three other species for Checklist of the Bird of Vietnam (1995). The survey also recorded two national threatened species which listed in Vietnam Red Data Book (1992) which are Long-tailed Broadbill, Crested Kingfish and other 8 species listed in the Red List of IUCN (1994) under the category as Near-threatened [Mike Hill *et al*, 1997].

However, in the investment plan to established Ba Be National Park, only 140 species were recorded and also mentioned some threatened species such as Great Hornbill, Brown Hornbill, Long-tailed Broadbill, Collared Crow and Grey Laughingthrush [Anon, 1997].

In 2000, as part of the project “*Expanding the Protected Areas Network in Vietnam for the 21<sup>st</sup> Century*” funded by European Union, Birdlife International Vietnam Programme and Forest Inventory and Planning Institute (FIPI) have commenced the rapid biodiversity survey at some sites in Bac Kan and Cao Bang provinces including Kim Hy nature reserve, Na Ri district, Bac Kan province, Thang Hen area, Tra Linh district, Cao Bang province, Trung Khanh nature reserve, Trung Khanh district, Cao Bang province and Phia Oac mountain, Nguyen Binh district, Cao Bang province. Due to the rapid field survey and mostly focused on evaluation of the forest cover, the list of birds recorded was limited (08 species in Kim Hy, 40 species in Thang Hen, 10 species in Trung Khanh and 32 species in Pia Oac) [Tordoff *et al*, 2000].

Between March and June 2000, American Museum of Nature History and Institute of Ecology and Biological Resources had conducted the ornithological surveys at the forest sites of Tay Con Linh Mountain and surrounding areas of Ha Giang province. A total of 146 bird species were recorded, including Beautiful Nuthatch (*Sitta formose*) (Vulnerable), Short-tailed Scimitar Babbler (now called Indochinese Wren Babbler) (*Jabouillea danjoui*) (Near-threatened), the first record for Vietnam of Yellow-vented Warbler *Phylloscopus cantator* and 16 additional species previously unrecorded in East Tonkin [C.J. Voget *et al*, 2003].

Beginning of 2001, as part of the project “Creating Protected Areas for Resource Conservation using landscape Ecology” (PARC), a series of surveys have carried out in Ba Be National Park and surrounding areas with the large scale, cover all the defined conservation importance sites. During April and May 2001, Birdlife International Vietnam Programme and IEBR surveyed some areas arounding Ba Be National Park included Dong Phuc, Ban Thi-Xuan Lac and Sinh Long areas. A total of 198 species have been recorded including 139 species recorded in Dong Phuc area, 156 species in Ban Thi-Xuan Lac and 149 species in Sinh Long area. Among those species, there were only one globally threatened species recorded as White-eared Night Heron (*Gorsachius magnificus*) (EN), White-eared Night Heron is a restricted range species for southeastern China. The survey also recorded some national threatened species including Eared Pitta, Long-tailed Broadbill, Bar-bellied Pitta, Grey Laughingthrush, Ratchet-tailed Treepie... [Le Trong Trai *et al*, 2001].

In May 2002, Birdlife International in Indochina and IEBR had conducted a rapid field survey the forest areas of Na Chi commune - Xin Man district and Du Gia Nature Reserve of Yen Minh districts, Ha Giang Province. The results are the out put of the Danida-funded project “*Improved conservation planning through institutional strengthening in Cambodia, Laos and Vietnam*”. A total of 107 bird species were recorded including some threatened and rare species such as Beautiful Nuthatch, Grey Laughingthrush (*Garrulax maesi*) and a range extension for East Tonkin of Brown-cheeked Fulvetta (*Alcippe poioicephala*) [Le Manh Hung *et al*, 2002].

June 2002, Birdlife International in Indochina, IEBR and Vietnam Russian Tropical Center have undertaken the second survey, focused to Ban Lam and Khau Tinh areas, Tuyen Quang province. However, due to the weather condition, the survey just undertook in 48 hours, 59 species were recorded included one globally near-threatened species as Blyth's Kingfisher (*Alcedo Hercules*), this was the only recorded for the species in Ba Be/Na Hang areas. This survey also recorded two species listed in Vietnam Red Data Book including Long-tailed Broadbill and Ratchet-tailed Treepie [Nguyen Duc Tu *et al*, 2002].

During 2000-2002, Birdlife International in Indochina and IEBR have defined to build up the network of "Important Bird Areas" (IBA) in Vietnam. A total of 63 areas were qualified as an Important Bird Areas in Vietnam. It is special that, three areas were qualified as an IBA within Ba Be/ Na Hang conservation complex including Ban Thi-Xuan Lac, Sinh Long and Ban Bung [Tordoff *et al*, 2002].

From October to November 2002, as part of the PARC project, Birdlife International in Indochina and Vietnam Russian Tropical Center have continuously carried out the third biodiversity survey in some defined areas within Na Hang nature reserve and Ba Be National Park as Nam Trang, Pac Ban and Dau Dang. A total of 173 bird species were recorded included 137 species in Nam Trang, 81 species in Pac Ban and 80 species in Dau Dang area. In those recorded species, there was one globally threatened recorded as Wood Snipe (*Gallinago nemoricola*) and two other globally near-threatened species: Great Hornbill and Brown Hornbill. The survey has recorded 20 new species for Na Hang nature reserve and 11 new species for Ba Be National Park, increased the total recorded species in Ba Be/ Na Hang conservation complex up to 240 species [PARC Ba Be/Na Hang, 2003].

In 2003, at the national workshop on Ba Be National Park and Na Hang nature reserve, Nguyen Cu had summarized the avifauna of Ba Be/ Na Hang conservation complex with 334 bird species belonging to 13 order and 39 families, account for more than 40% comparing with the total number recorded in Vietnam. Following the author, Ba Be/ Na Hang conservation complex contained 9 sub-species, which are endemic for Vietnam and 39 other national and globally threatened species [Nguyen Cu, 2003].

During May and June 2003, Birdlife International in Indochina, IEBR and Vietnam Russian Tropical Center have conducted the fourth survey in some sites within Ba Be National Park and Na Hang nature reserve. Two main survey sites were Ban Bung sector and the areas surrounding Ba Be National Park. Due to the survey out of the breeding season, only 70 species have been recorded in Ba Be and 67 species recorded in Ban Bung sector. Among those species, one was listed in the Threatened Birds of Asia - Chestnut-necklaced Partridge (*Arborophila chaltonii*) [Nguyen Duc Tu *et al*, 2003].

November 2003, Bac Kan provincial Forest Protection Department have building up the investment plan for establishment of Nam Xuan Lac Species/ Habitat Conservation Area,

located in Cho Don district, Bac Kan province. Following the investment plan, 156 species were defined for the area belonging to 13 order and 33 families. This list of recorded species was made by Birdlife International in 2001. The most notable species was White-eared Night Heron, (the globally Endanger species (EN)). Beside that, there were also recorded some other national threatened species as Long-tailed Broadbill, Grey Laughingthrush. [Bac Kan Forest Protection Department, 2003].

March 2004, PARC project has published the book “The field guide of mammals, birds, reptile and amphibian of Ba Be/ Na Hang conservation complex”. The book has included the list of 331 bird species, 21 of those species are globally and national threatened species [Pham Nhat *et al*, 2004].

April 2004, PARC had finished the final biodiversity report of Ba Be/ Na Hang conservation complex. The report represented the list of 327 species, which were recorded at five different sites like Na Hang nature reserve, Ba Be National Park, Dong Phuc, Ban Thi-Xuan Lac and Sinh Long areas. This report has also evaluated 7 globally threatened species including Red-collared Woodpecker, Chesnut-necklaced Partridge, Great Hornbill, Brown Hornbill, Wood Snipe, Grey-headed Fish Eagle (*Ichthyophaga ichthyaetus*) and White-eared Night Heron [PARC Ba Be/Na Hang, 2004].

In 2006, Fauna and Floral International (FFI) has conducted a rapid avifauna survey at Khau Ca Area of Tung Ba Commune (Vi Xuyen District), Minh Son and Yen Dinh Communes (Bac Me District), Ha Giang province. A total of 99 bird species belonging to 12 order and 23 families were recorded during the field survey. None of these are listed in the IUCN Red list (2006), only one species listed in Vietnam Red Data Book (2002) is Silver Pheasant (*Lophura nychthemera* (T)) [Le Manh Hung, 2006].

## **6. SOCIO-ECONOMIC CONDITION / SOCIOCULTURAL AND HISTORICAL CHARACTERISTICS OF THE INHABITANTS IN THE TARGET AREA**

### **6.1. Brief socio-economic characteristics of the Northern mountainous region**

There are 8 ethnic minority groups living in the area. Of them, the Tay and H'mông are majority ethnic groups which make up most of the population in the region. The rest are Dao, Kinh, Nùng, and Han. Bó Y and Mường are minor of the total population.

Distribution and custom of the local people in the area: Tày and Kinh usually live in the lower land near road and close to wet rice paddy. H'mông and Dao are very often live in the higher elevation of the mountains of the communes adjacent to the protected area. The H'mông's custom is to live separately, isolated and practice dry rice, mise and Sweden cultivation/ slash and burn. Their lives depend on natural land and resources of the protected area.



The main income of the local people in the region is from cultivation, husbandry and forestry.

## **6.2. Conservation and sustainable development policy**

Lying within the protected area system of the country, the studied areas following the Forest Law in 2017 and the related official legislations and decrees like Decree No. 156/2018/NĐ-CP dated 16/11/2018 of the Government, guiding details activities to implement Forest Law and Decree No. 83/ 2020/NĐ-CP, dated 15/7/2020 to revise and supplement Decree No. 156/2018/NĐ-CP dated 16/11/2018 of the Government.

As for that, the national parks and nature reserve areas structured with Management Board, Forest Rangers (including community forest rangers), Forest Guards (by contract), and Forest Patrol Teams (from communities). In parallel with this structure, a system of Forest Guard Stations and Forest Guard Points were also set up to control and protect the important routes and access points.

Nevertheless, according to Hoang Van Thang et al. (2021), the management and conservation activities are still facing too many difficulties, challenges and shortages. The Cham Chu protected area is under the district forest department, the Bac Me protected area, by administration, has become part of Du Gia – Dong Van Geopark national park, but the organization have not been completely set up. There was not enough manpower nor finance for the necessary activities. There are no adequate offices (headquarter) for the management boards, especially in Phia Oac-Phia Den national park.

Recently, all the surveyed areas have no ground boundary demarcation (only on maps). It leads to many difficulties in control and manage the area from poaching and invasion.

Scientific studies, inventory, surveys for conservation aims are still very limited (or almost none). There have been very little or no financially support for these works. Main data is from research institutes or universities from Hanoi or Thai Nguyen ones. In addition, in many cases, the study results were not handled to the management boards. Even if the data is handed over, management boards do not have enough or adequate equipment to store or to use for management and conservation purposes.

The communication, education and participation of the local communities as well as local authorities in conservation are still limited. In many cases, the main environmental education activities are propagandas, posters, left leads without a long run program.

The management activities are mainly to stop the poaching or invasion (law enforcement) onto the protected areas; forest fire control. However, due to the shortage of forest ranger force, lack of awareness, low income of local people, there have been still a number of poaching, hunting activities going on in the region. In addition, the development of livelihood activities has also put a lot of pressure onto protected area such as lemon and orange cultivation in the

buffer zone of Cham Chu protected area; Sweden cultivation in most protected areas. Mining in Du Gia national park and Nam Xuan Lac nature reserve, rock excavation in Phia Oac-Phia Den have also caused great pressures on management and conservation activities as well as on local communities.

Ecotourism as one of the income means for local communes have not been developed at the surveyed protected areas.

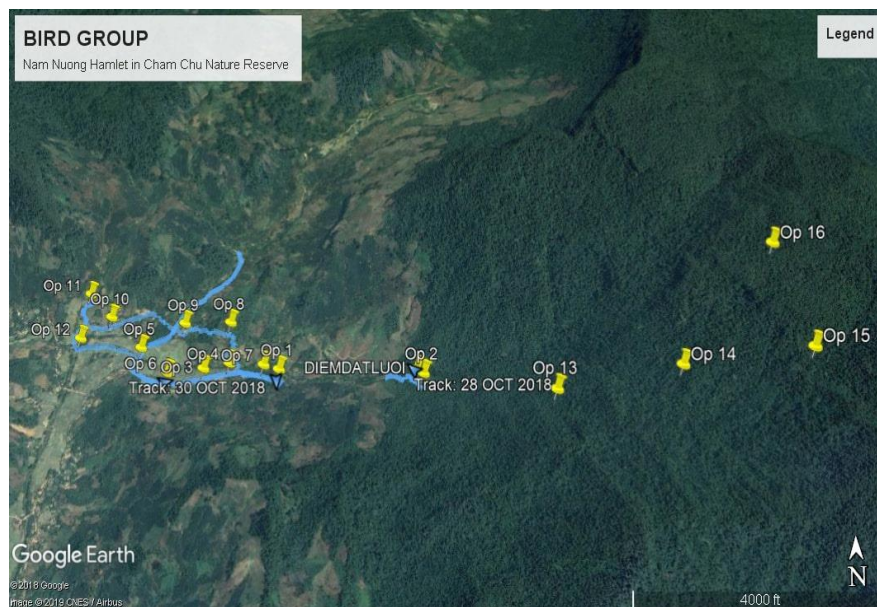
## 7. APPROACH AND METHODS

### 7.1. Approach and Methodology

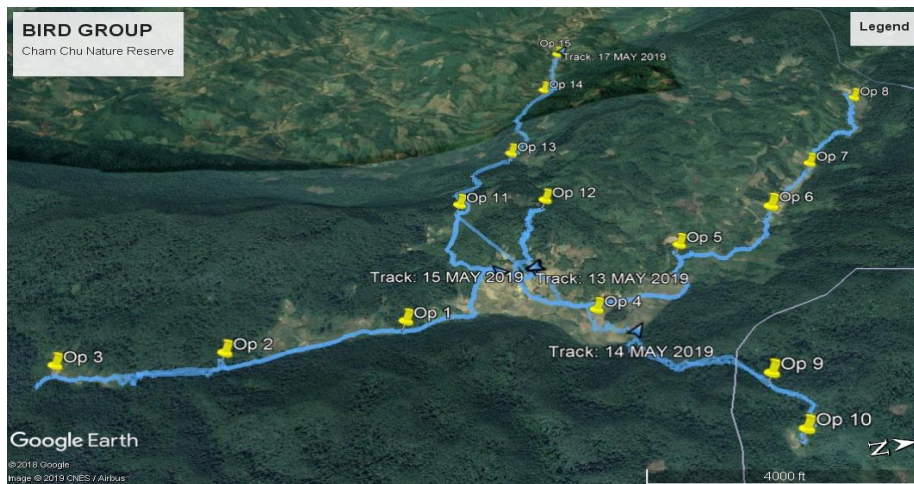
7.1.1. Materials: The group used binoculars, telescopes and camera to observe and to take photos of birds. The group also used mist net to catch the birds. We also used rings (bands) and measure equipment (scale, pliers, ruler...).

7.1.2. Methods:

- We conducted line (transect) surveys as well as point surveys in the fields. The transects were made through four different types of habitats: i) garden/ settlement, ii) cultivation areas, iii) secondary forest, and iv) primary forest. We also conducted line surveys from hill base to the peak of the mountain and canoeing along the rivers and lakes/ reservoir.



**Figure 7.1. Coordinates and transects in Nam Luong, Cham Chu Oct. 2018**



**Figure 7.2. Coordinates and transects of field survey in Cao Duong commune of Cham Chu Nature Reserve. May 2019.**

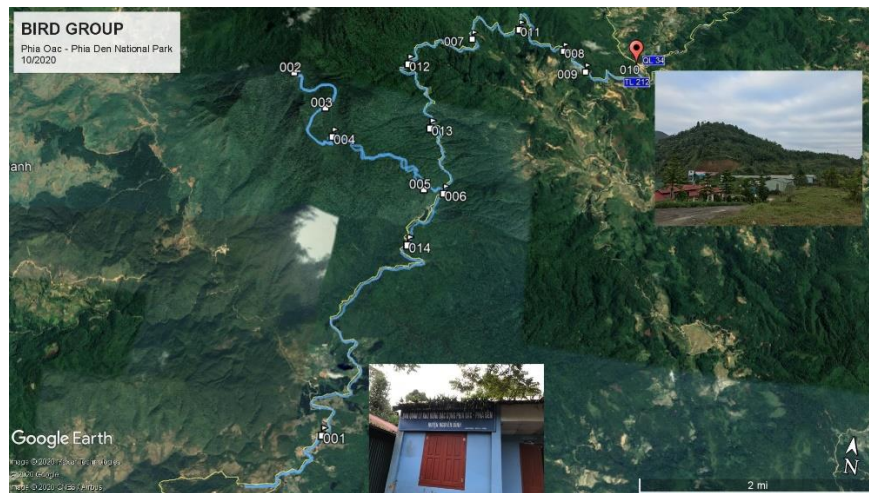


**Figure 7.3. Map showing survey sites in Lung Cang Village of Bac Me NR**

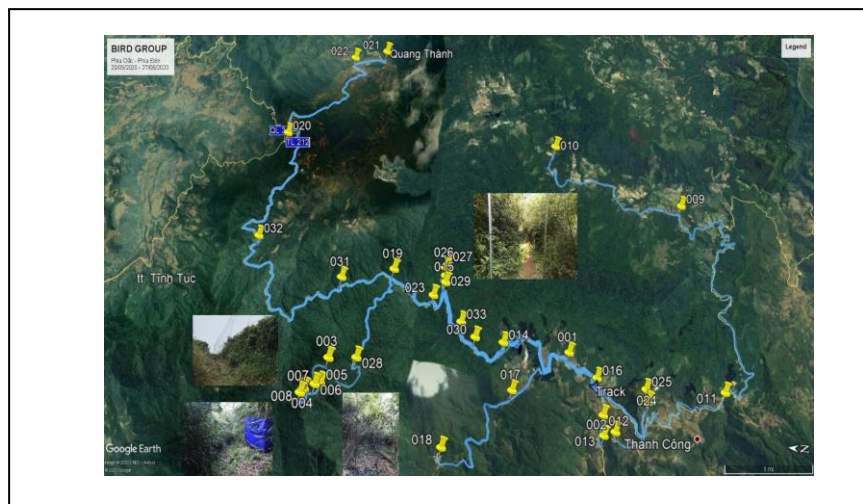


**Figure 7.4. Maps showing survey sites in Lac Nong Village, Bac Me NR**

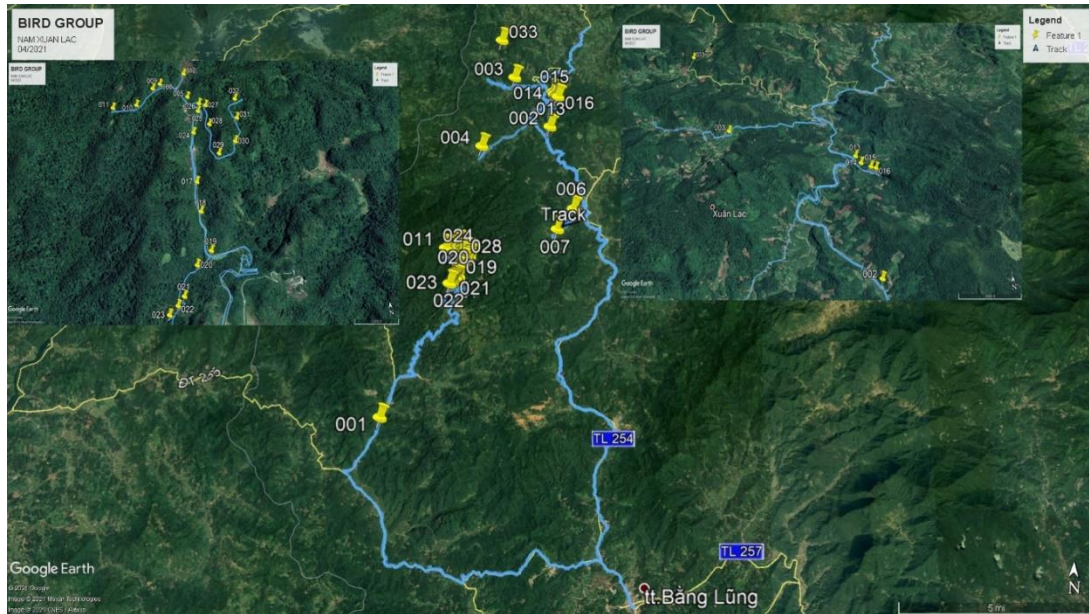




**Figure 7.5.** Map showing survey sites in Phia Oac – Phia Den NP, October 2020



**Figure 7.6.** Map showing survey site in Phia Oac – Phia Den NP, May 2020



**Figure 7.7. Map showing survey sites in Nam Xuan Lac 8/2020 and 4/ 2021**

- During the surveys, we used binoculars and telescope to watch birds flying over or sitting on the trees or on the ground. We also listen to the singing bird and identify species.
- We also used lengthy lenses camera to “shoot” the birds (which is easier for species identification/ classification).
- We used mist net to catch birds flying crossed the paths/ trails in the forest. Caught birds then identified, ringed and measures (weight, total length, wings...).
- Species identification/ classification and caparison are based on books which are listed below. In comparison, we mainly find out if the species still sighted, if the species are rare, endangered or threaten...

1) Anon. (2007) {*Red Data Book of Vietnam*}. Volume 1: Animals. Hanoi. Scientific and Technology Publishing House. (In Vietnamese).

2) Birdlife International (2001). *Threatened Birds of Asia: The Birdlife International Red Data Book*. Cambridge, UK.

4) Robson, C. R. (2009) *A field guide to the birds of Thailand and South-East Asia*. Bangkok: Asia Books.

5) Vo Quy, Nguyen Cu (1995). *The checklists of the birds of Vietnam*. Agriculture Publishing House.

6) Lê Mạnh Hùng (2012), “Introduction to some species of birds of Vietnam”. Natrual Science and Technology Publishing House, 585 pp. ISBN: 978-604-913-070-0.

7) Craik, R.C & Lê Quý Minh (2018). *Birds of Vietnam*. Lynx and Birdlife International Field Guides. Lynx Editions, Barcelona.



8) William Collins (2017). Collins Field Guide: Birds of Southeast Asia. Happer Collins Publishers.

9) <http://www.iucnredlist.org/apps/redlist/search>

10) <http://www.worldbirdnames.org/>



*Figure 7.8. Mist net and bird banding*



*Figure 7.9. Banded bird (Photo L.M. Hung) and Taking photo of bird (Photo H.V. Thang)*

## 8. RESULTS

### 8.1. Inventory results

#### *Species diversity and composition and distribution*

We have identified a total of 220 species, 43 families and 15 orders in four areas (see Appendix 1) which summarized in Table 8.1 below.

**Table 8.1. Species of birds found in protected areas in the Northeastern region**

Classification	Cham Chu	Bac Me	PO-PD	NXL
Order	12	15	14	12
Family	28	39	43	37
Species	119	105	140	92
Rare and endangered species	1	2	4	3

**Source: Hoang Van Thang and Le Manh Hung, 2021.**

PO-PD: Phia Oac-Phia Den national park

NXL: Nam Xuan Lac species and habitat conservation area

#### *Species newly found or recorded in the study areas*

We did not find any new species for the region and Vietnam. But these are the first systematic bird lists for the 4 protected areas.

Nevertheless, we have first recorded the presence distribution of Brown-breasted Bulbul (*Pycnonotus xanthorrhous* [Anderson](#), 1869) (Figure 7.10) in Du Gia national park and Nam Xuan Lac nature reserve as well as in Phia Oac-Phia Den national park (Le Manh Hung et al., 2021).

Eurasian Crested Grebe (*Podiceps cristatus* (Linnaeus, 1758)) was also first sighted in the region (Bac Me nature reserve).

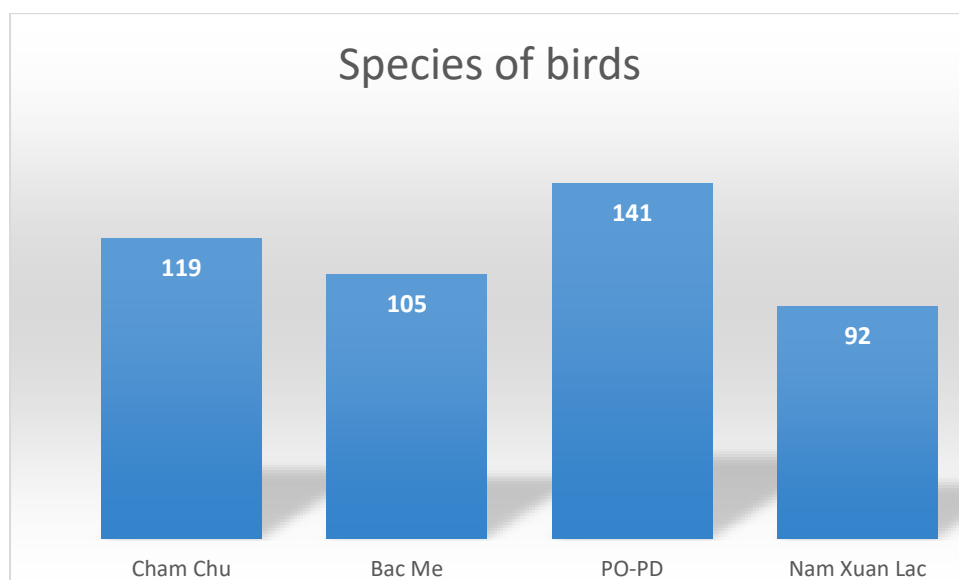
We have also reconfirmed the present of White-eared Night Heron in Nam Xuan Lac species and habitat conservation area and the adjacent area to Ba Be national park.



Figure 7.10. Brown-breasted Bulbul (Photo L.M. Hung)

***Comparative analysis between 4 study sites:***

We sighted more species and families in Phia Oac-Phia Den then in Cham Chu, Bac Me and Nam Xuan Lac. Nevertheless, we have higher number of order in Bac Me compared to other surveyed protected areas (figure 8.1 and 8.2).

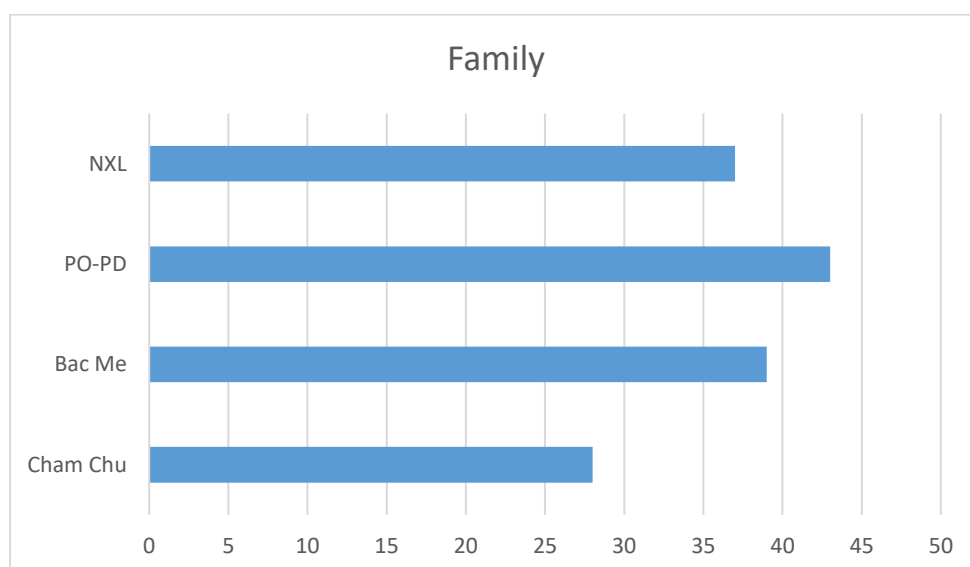


***Figure 8.1. Bird species found in the surveyed protected areas in Northeastern Vietnam***

Red-breasted Parakeet (NT), Blue-naped Pitta, Pale-throated Wren Babbler (VU), Yellow-billed Nuthatch (NT) found only in Cao Bang, Phia Oac-Phia Den national park, while Austen's Brown Hornbill (VU) heard only in Cham Chu and Nam Xuan Lac nature reserves,



and Silver Pheasant (LC) heard in all protected areas but Cham Chu. White-eared Night Heron (EN) found only in Nam Xuan Lac and the area adjacent to Ba Be national park. Collared Crow (NT) was sighted in Cao Bang – Phia Oac-Phia Den after a while.



**Figure 8.2. Bird families found in the surveyed protected areas in Northeastern Vietnam**

## **8.2. Microenvironmental and ecological characteristics of habitats, fauna/flora and biodiversity**

### **8.2.1. Brief microenvironmental and ecological characteristics of the specific study sites**

(Prepared by Groups of Mammal, Bird, Plant, Insects, Soil Invertebrates)

In general, the protected areas covered by tropical forests. With high rainfall and humidity, the forests and its habitats are heavily influenced by this kind of climate.

Limestones are the main habitats of the region with the elevation range from about 200m asl up to 1931m asl (Phia Oac peak).

The river and stream systems together with lake and reservoir make up its wetlands and aquatic habitats for many aquatic species as well as water birds.

In many spots of the region, settlements, home gardens and planted forests dominate the habitats. Dry crop lands (slash and burn cultivation) were expanded in the area. Orange and lemon plantation has led to the pollution of air and waterbodies which caused serious threats to the animals in general, birds specifically.

### **8.2.2. Threats and challenges causing the changes of habitat and biodiversity**

Even the conservation has achieved great efforts, nevertheless, the management and conservation there still face too many difficulties as well as challenges (as showed in Table 8.2)

***Table 8.2. Threats and challenges***

No.	Threats and challenges	Cham Chu	Bac Me	PO- PD	Nam Xuan Lac
1	Lack of adequate mechanism and policy	X	X	X	X
2	No demarcation	X	X	X	X
3	Illegal poaching	X	X	X	X
4	Illegal logging	X	X	X	X
5	Illegal nontimber forest product harvesting				
6	Wild animal hunting	X	X	X	X
7	Slash and burned cultivation/ Sweden cultivation	X	X	X	X
8	Orange and lemon cultivation in buffer zone and adjacent areas	X			
9	Mining and rock excavation		X	X	X
10	Low awareness on conservation	X	X	X	X
11	Lives dependent on forest (more or less)	X	X	X	X
12	Shortage of manpower	X	X	X	X
13	No ecotourism	X	X	X	X
14	No demarcation	X	X	X	X

15	Lack of facilities and infrastructures (including headquarter)	X	X	X	X
16	Newly management boards or holder management board (Cham Chu is managed by district forest department)	X	X	X	X
17	Lack or no activities on inventory, scientific surveys, no database on biodiversity in general, birds specifically	X	X	X	X

Source: Hoang Van Thang et al., 2021.

### 8.3. Threatened/endangered species

We have identified 6 threatened and endangered species including Red-breasted Parakeet (NT) Pale-throated Wren Babbler (VU), Austen's Brown Hornbill (VU), Silver Pheasant (T) White-eared Night Heron (EN) and Collared Crow (NT), and Yellow-billed Nuthatch (NT). Where 1 in Cham Chu, 2 in Bac Me, 4 in Phia Oac-Phia Den and 3 in Nam Xuan Lac (see Table 8.1).

## 9. DISCUSSION

Our results are the first comprehensive bird list for the 4 surveyed protected areas. We have identified 6 threatened and endangered species including Red-breasted Parakeet (NT) Pale-throated Wren Babbler (VU), Austen's Brown Hornbill (VU), Silver Pheasant (T) White-eared Night Heron (EN) and Collared Crow (NT), and Yellow-billed Nuthatch (NT). We have first recorded the presence distribution of Brown-breasted Bulbul (*Pycnonotus xanthorrhous* [Anderson](#), 1869) in Du Gia national park and Nam Xuan Lac nature reserve as well as Phia Oac-Phia Den national park (Le Manh Hung et al., 2021). We also first sighted Eurasian Crested Grebe (*Podiceps cristatus* (Linnaeus, 1758)) in the region (Bac Me nature reserve), and have also reconfirmed the present of White-eared Night Heron in Nam Xuan Lac species and habitat conservation area and the adjacent area to Ba Be national park.

We have also analysed the threats and challenges of the conservation and management of the protected areas in the region. Based on this analysis, we have also recommended the countermeasures for management and conservation of the biodiversity in those protected areas.

**Main countermeasures** to conserve each biological group of fauna/flora for the entire protected area/ region.

1. To develop appropriate policies and mechanisms for the protected areas in the region to conserve the biodiversity in general, and birds specifically.
2. To strengthen capacity, especially manpower and financial support for the protected areas in the region. It is recommended that scientific staffs on biological survey and monitoring, awareness education are essential.
3. To develop and carry out project on boundary identification and demarcation as soon as possible.
4. To develop and carry out surveys, inventory and monitoring activities, especially for threaten, rare and endangered species.
5. To develop data base for management and conservation purposes as well as for livelihood and socio-economic development in the buffer zones.
6. To improve the control environmental pollution agricultural activities such as orange, lemon cultivation (which used a large number of chemical pesticides...), mining, hunting and poaching...
7. To study and develop ecotourism projects with the participation of communities in order to provide financial support to management and conservation activities as well as to improve livelihood of local people in order to decrease pressure onto protected areas.
8. To improve communication and environmental education aiming at raising conservation awareness in schools and communities as well as involving them in biodiversity conservation efforts.

Nevertheless, due to the limitation of the survey time as well as the bad weather and impact of Covid-19 pandemic, our result is still limited. It is strongly recommended that more systematic and comprehensive surveys and inventories need to be carried out. More activities in habitat restoration, public awareness and communication have to be taken to consideration. More study on threaten and endangered bird species need to be carried out as soon as possible.

This study can be a good example for the implication of bird conservation in other areas, especially in the limestone ecosystems of Northwestern Vietnam.

## **10. EMPOWERMENT OF YOUNG SCIENTISTS:**

### ***List of assistant researchers***

Research assistants	<p>Phạm Việt Hùng, MSc. (Email: <a href="mailto:hungcres@gmail.com">hungcres@gmail.com</a>)</p> <p>Do Nhat Huynh, Master Student (Email: <a href="mailto:nhathuynhhus@gmail.com">nhathuynhhus@gmail.com</a>)</p> <p>Hoang Hai Duong, Master Student (Email: <a href="mailto:dhhoang.cres@gmail.com">dhhoang.cres@gmail.com</a>)</p> <p>Takeshi Ogura Mr. (Email: <a href="mailto:sultansmeise@gmail.com">sultansmeise@gmail.com</a>)</p>
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### ***Their works and achievement/ publications***

- The research assistants have achieved almost the proposed targets of the project for the second year. Nevertheless, we are facing difficult in publishing, especially peer reviewed papers.
- Young scientists have put their great efforts in working on the project and learned from “on job training”.
- Both young scientists (Do Nhat Huynh and Hoang Hai Duong) can work on GPS and mapping. Mr. Do Nhat Huynh can now identify birds and do bird banding. They can also write research reports. Mr. Pham Viet Hung can now handle bird banding activity.
- Mr. Do Nhat Huynh had defended his master thesis with the support of the research group (Certificate is shown in figure below).
- Mr. Do Nhat Huynh is co-authors of a scientific article entitled Conservation of Avian fauna in the protected areas in the North-eastern region of Vietnam.



ĐẠI HỌC QUỐC GIA HÀ NỘI  
TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM  
Độc lập - Tự do - Hạnh phúc

## GIẤY CHỨNG NHẬN

HIỆU TRƯỞNG TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN

Chứng nhận : ĐỖ NHẬT HUỖNH

Ngày sinh : 01/11/1996

Nơi sinh : Nam Định

Đã hoàn thành chương trình đào tạo cao học và đã bảo vệ thành công

Luận văn tốt nghiệp, thuộc chuyên ngành: Quản lý tài nguyên và môi trường.

Hiện đang chờ Trường Đại học Khoa học Tự nhiên xét cấp bằng Thạc sĩ./.

Hà Nội, ngày 18 tháng 06 năm 2021

TL. HIỆU TRƯỞNG

KT. TRƯỞNG PHÒNG ĐÀO TẠO

PHÓ TRƯỞNG PHÒNG



TS. Đỗ Hữu Tuấn

### ***Lesson learnt from the assistant researchers***

In the context that BIODIVERSITY continuously to be threatened and tends to decline due to the pressure of economic and social development and increasingly substantial climate change. To reduce the rate of degradation of BIODIVERSITY over the next ten years (until 2030) and allow the restoration of natural ecosystems in the following years, and to work towards the vision of the Convention on BIODIVERSITY “living harmonized with nature by 2050”, the Strategy for the next phase should focus on mitigating threats to BIODIVERSITY in areas of high BIODIVERSITY, significant wetlands, and landscapes. Critical ecology; promote methods of sustainable use of biological resources; strengthen practical cooperation between sectors in exploiting and using ecosystem services to serve the needs of socio-economic development, national defense, and security; ensure the participation of the community and stakeholders. The prerequisites for the implementation of the Strategy for the next period are to mobilize the highest levels of government with the political will, full

awareness of the importance and urgent need today to prevent the loss of BIODIVERSITY and to live in harmony with nature; reforming incentives, eliminating subsidies harmful to BIODIVERSITY including economic incentives; reforming economic fields towards sustainable development and green growth; increase resources for the conservation of BIODIVERSITY; promote the full and effective participation of local people and sectors of society in decision-making regarding the conservation of BIODIVERSITY and the sustainable use of ecosystem services, including in priority conservation areas and production landscapes; BIODIVERSITY is integrated into all planning, plans, and strategies of the fields and comprehensively applied in strategic environmental assessments and environmental impact assessments on BIODIVERSITY.

## **11. PUBLICATIONS**

1. Hoang Van Thang and Vo Thanh Son, 2020. Ecosystem service Trade-offs in the Northern mountainous region of Vietnam. National Conference on Environment and Sustainable Development Proceeding. Vietnam National University Publishing House. 606. Hanoi.
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### **13. APPENDIX**

**Appendix 1: List of birds found in 4 protected areas in the NOrtheastern region of Vietnam (Phia Oắc-Phia Đén, Bắc Mê, Chạm Chu, Nam Xuân Lạc)**

No.	Tên phổ thông	Tên khoa học	Hiện trạng (IUCN)	Ghi nhận			
				CC	BM	N XL	PO -PD
	<b>Bộ Gà</b>	<b>I. GALLIFORMES</b>					
	<b>Họ Trĩ</b>	<b>1. Phasianidae</b>					
1	Gà rừng –Red Junglefowl	<i>Gallus gallus</i> ( <a href="#">Linnaeus</a> , 1758)		X	X	X	X
2	Đa đa - Chinese Francolin	<i>Francolinus pintadeanus</i> (Scopoli, 1786)		X	X	X	X
3	Gà so ngực gụ - Green-legged Partridge	<i>Arborophila chloropus</i> (Blyth, 1859)		X			
4	Gà lôi trắng - Silver Pheasant	<i>Lophura nycthemera</i> (Linnaeus, 1758)	LC		X	X	X
5	Gà tiền mặt vàng - Grey Peacock-Pheasant	<i>Polyplectron bicalcaratum</i> <a href="#">Linnaeus</a> , 1758			X		
	<b>Bộ Ngỗng</b>	<b>II. ANSERIFORMES</b>					
	<b>Họ Vịt</b>	<b>2. Anatidae</b>					

6	Le nâu - Lesser Whistling-Duck	<i>Dendrocygna javanica</i> ( <a href="#">Horsfield</a> , 1821)			X		
	<b>Bộ Cú muỗi</b>	<b>III. CAPRIMULGIFORMES</b>					
	<b>Họ Cú muỗi</b>	<b>3. Caprimulgidae</b>					
7	Cú muỗi ẩn độ - Grey Nightjar	<i>Caprimulgus jokata</i> <a href="#">Latham</a> , 1790					X
8	Cú muỗi đuôi dài - Large-tailed Nightjar	<i>Caprimulgus macrurus</i> Hordfield, 1821				X	X
	<b>Bộ Yến</b>	<b>IV. APODIFORMES</b>					
	<b>Họ Yến</b>	<b>4. Apodidae</b>					
9	Yến hồng trắng - Pacific Swift	<i>Apus pacificus</i> (Latham, 1802)		X	X	X	X
10	Yến cầm trắng House Swift	<i>Apus nipalensis</i> ( <a href="#">JE Gray</a> , 1830)		X			X
11	Yến cọ - Asian Palm Swift	<i>Cypsiurus balasiensis</i> Gray,JE, 1829		X	X	X	X
12	Yến núi - Himalayan Swiftlet	<i>Aerodramus brevirostris</i> ( <a href="#">Horsfield</a> , 1840)			X		
13	Yến đuôi cứng hông xám - Silver-backed Needletail	<i>Hirundapus cochinchinensis</i> (Oustalet, 1878)		X	X		X

	<b>Bộ Cu cu</b>	<b>V. CUCULIFORMES</b>					
	<b>Họ Cu cu</b>	<b>5. Cuculidae</b>					
14	Tìm vệt - Plaintive Cuckoo	<i>Cacomantis merulinus</i> (Scopoli, 1786)		X		X	X
15	Cu cu đen - Drongo Cuckoo	<i>Surniculus lugubris</i> (Horsfield, 1821)		X	X		
16	Khát nước Chestnut-winged Cuckoo	<i>Clamator coromandus</i>					X
17	Tu hú - Asian Koel	<i>Eudynamys scolopacea</i> Linnaeus, 1758				X	X
18	Phuơn - Green-billed Malkoha	<i>Phaenicophaeus tristis</i> (Lesson, 1830)			X	X	X
19	Bìm bịp lớn - Greater Coucal	<i>Centropus sinensis</i> (Stephens, 1815)		X	X	X	X
20	Bìm bịp nhỏ - Lesser Coucal	<i>Centropus bengalensis</i> (Gmelin, 1788)		X	X	X	X
21	Bắt cô trời cột - Indian Cuckoo	<i>Cuculus micropterus</i> Gould, 1837		X		X	X
	<b>Bộ Bồ câu</b>	<b>VI. CULUMBIFORMES</b>					
	<b>Họ Bồ câu</b>	<b>6. Culumbidae</b>					

22	Cu gáy - Spotted Dove	<i>Streptopelia chinensis</i> (Scopoli, 1786)		X	X		X
23	Cu luồng - Emerald Dove	<i>Chalcophaps indica</i> (Linnaeus, 1758)		X	X	X	
	<b>Bộ Sếu</b>	<b>VII. GRUIFORMES</b>					
	<b>Họ Gà nước</b>	<b>7. Rallidae</b>					
24	Cuốc ngực trắng - White-breasted WaterHen	<i>Amaurornis phoenicurus</i> Pennant, 1769		X	X		
	<b>Bộ Le hôi</b>	<b>VIII. PODICIPEDIFORMES</b>					
	<b>Họ Le hôi</b>	<b>8. Podicipedidae</b>					
25	Le hôi - Little Grebe	<i>Tachybaptus ruficollis</i> ( <a href="#">Pallas</a> , 1764)			X		
26	Le mào lớn - Eurasian Crested Grebe	<i>Podiceps cristatus</i> (Linnaeus, 1758)			X		
	<b>Bộ Rẽ</b>	<b>IX. CHARADRIIFORMES</b>					
	<b>Họ Rẽ</b>	<b>9. Scolopacidae</b>					
27	Choắt nhỏ - Common Sandpiper	<i>Actitis hypoleucos</i> (Linnaeus, 1758)			X		
	<b>Bộ Bò nông</b>	<b>X. PELECANIFORMES</b>					

	<b>Họ Diệc</b>	<b>10. Ardeidae</b>					
28	Cò bợ - Chinese Pond Heron	<i>Ardeola bacchus</i> (Bonaparte, 1855)		X	X	X	X
29	Cò ruồi - Eastern Cattle Egret	<i>Bubulcus coromandus</i> <a href="#">Linnaeus</a> , 1758				X	X
30	Cò trắng - Little Egret	<i>Egretta garzetta</i> <a href="#">Linnaeus</a> , 1766		X	X	X	X
31	Cò ngàng nhỏ - Intermediate Egret	<i>Mesophoyx intermedia</i> <a href="#">Wagler</a> , 1827			X		
32	Cò ngàng lớn - Great Egret	<i>Ardea alba</i> Linnaeus, 1758			X		
33	Vạc hoa - White-eared Night Heron	<i>Gorsachius magnificus</i> (Ogilvie Grant, 1899)	EN, E			X	
34	Cò xanh – Striated Heron	<i>Butorides striatus</i> (Linnaeus, 1758)			X	X	
	<b>Bộ Ưng</b>	<b>XI. ACCIPITRIFORMES</b>					
	<b>Họ Ưng</b>	<b>11. Accipitridae</b>					
35	Diều mào - Black Baza	<i>Aviceda leuphotes</i> (Dumont, 1820)		X			
36	Diều hâu - Black Kite	<i>Milvus migrans</i> ( <a href="#">Boddaert</a> , 1783)		X			

37	Diều ăn ong - Oriental Honey Buzzard	<i>Pernis ptilorhynchus</i> Temminck, 1821		X			X
38	Diều ngón ngắn - Short-toed Snake Eagle	<i>Circaetus gallicus</i> (Gmelin, 1788)					X
39	Diều hoa miến điện - Crested Serpent Eagle	<i>Spilornis cheela</i> Latham, 1790		X	X	X	
40	Ứng ấn độ - Crested Goshawk	<i>Accipiter trivirgatus</i> ( <a href="#">Temminck</a> , 1824)		X		X	X
41	Ứng xám - Shikra	<i>Accipiter badius</i> <a href="#">Gmelin</a> , 1788				X	X
42	Ứng nhật bản - Japanese Sparrowhawk	<i>Accipiter gularis</i> ( <a href="#">Temminck</a> & <a href="#">Schlegel</a> , 1844)					X
43	Diều ấn độ - Grey- faced Buzzard	<i>Butastur indicus</i> ( <a href="#">Gmelin</a> , 1788)					X
44	Diều nhật bản - Himalayan Buzzard	<i>Buteo burmanicus</i> ( <a href="#">Linnaeus</a> , 1758)					X
45	Diều núi - Mountain Hawk-Eagle	<i>Nisaetus nipalensis</i> Hodgson, 1836		X			
	<b>Bộ Cú</b>	<b>XII. STRIGIFORMES</b>					
	<b>Họ Cú mèo</b>	<b>12. Strigidae</b>					

46	Cú mèo latuơ - Mountain Scops-Owl	<i>Otus spilocephalus</i> ( <a href="#">Blyth</a> , 1846)		X		X	X
47	Cú mèo khoang cổ - Collared Scops Owl	<i>Otus lettia</i> <a href="#">Pennant</a> , 1769		X	X	X	X
48	Cú vọ mặt trắng - Collared Owlet	<i>Glaucidium brodiei</i> (Burton, 1836)		X		X	X
49	Cú vọ - Asian Barred Owlet	<i>Glaucidium cuculoides</i> ( <a href="#">Vigors</a> , 1831)			X	X	
50	Hù - Brown Wood Owl	<i>Strix leptogrammica</i> Temminck, 1831		X			
		<b>XIII. TROGONIFORMES</b>					
		<b>13. Trogonidae</b>					
51	Nước bưng đỏ - Red-headed Trogon	<i>Harpactes erythrocephalus</i> (Gould, 1834)		X	X		X
	<b>Bộ Hồng hoàng</b>	<b>XIV. BUCEROTIFORMES</b>					
	<b>Họ Hồng hoàng</b>	<b>14. Bucerotidae</b>					
52	Cao cát bụng trắng - Oriental Pied Hornbill	<i>Anthracoceros albirostris</i> ( <a href="#">Shaw</a> & Nodder, 1807)					X



53	Niệc nâu - Austen's Brown Hornbill	<i>Anorrhinus austeni</i> Jerdon, 1872	VU	X		X	
	<b>Bộ Sẻ</b>	<b>XV. CORACIIFORMES</b>					
	<b>Họ Sẻ rừng</b>	<b>15. Coraciidae</b>					
54	Yểng quạ - Dollarbird	<i>Eurystomus</i> <i>orientalis</i> <a href="#">Linnaeus</a> , 1766		X	X		
	<b>Họ Bói cá</b>	<b>16. Alcedinidae</b>					
55	Sẻ đầu nâu - White-throated Kingfisher	<i>Halcyon</i> <i>smyrnensis</i> (Linnaeus, 1758)		X	X	X	X
56	Bồng chanh - Common Kingfisher	<i>Alcedo atthis</i> (Linnaeus, 1758)		X	X	X	X
	<b>Họ Trâu</b>	<b>17. Meropidae</b>					
57	Trâu lớn - Blue- bearded Bee-eater	<i>Nyctyornis</i> <i>athertoni</i> (Jardine & Selby, 1830)			X		
	<b>Bộ Gõ kiến</b>	<b>XVI. PICIFORMES</b>					
	<b>Họ Cu rốc</b>	<b>18. Megalaimidae</b>					
58	Thầy chùa lớn - Great Barbet	<i>Psilopogon virens</i> ( <a href="#">Boddaert</a> , 1783)		X	X		
59	Cu rốc đầu vàng - Golden-throated Barbet	<i>Psilopogon</i> <i>franklinii</i> ( <a href="#">Blyth</a> , 1842)		X			X

60	Thầy chùa đầu xám - Green-eared Barbet	<i>Psilopogon faiostricta</i> ( <a href="#">Temminck</a> , 1831)		X		X	
61	Thầy chùa huyết đỏ - Red-vented Barbet	<i>Psilopogon lagrandieri</i> Verreaux, 1868		X		X	X
62	Cu rốc đầu đỏ - Blue-throated Barbet	<i>Psilopogon asiatica</i> ( <a href="#">Latham</a> , 1790)					X
	<b>Họ Gõ kiến</b>	<b>19. Picidae</b>					
63	Vẹo cổ - Eurasian Wryneck	<i>Jynx torquilla</i> ( <a href="#">Linnaeus</a> , 1758)			X		
64	Gõ kiến lùn mày trắng - White-browed Piculet	<i>Sasia ochracea</i> <a href="#">Hodgson</a> , 1836		X			X
65	Gõ kiến nhỏ đầu xám - Grey-capped Pygmy Woodpecker	<i>Dendrocopos canicapillus</i> ( <a href="#">Blyth</a> , 1845)		X			
66	Gõ kiến xanh gáy vàng - Greater Yellownape	<i>Picus flavinucha</i> <a href="#">Gould</a> , 1834		X			
67	Gõ kiến xanh cánh đỏ - Lesser Yellownape	<i>Picus chlorolophus</i> <a href="#">Vieillot</a> , 1818		X			
68	Gõ kiến nâu cổ đỏ - Bay Woodpecker	<i>Blythipicus pyrrhotis</i> ( <a href="#">Hodgson</a> , 1837)		X	X	X	X
69	Gõ kiến nâu đỏ - Pale-headed Woodpecker	<i>Gecinulus grantia</i> (McClelland, 1840)					X

	<b>Bộ Cắt</b>	<b>XVII. FALCONIFORMES</b>					
	<b>Họ Cắt</b>	<b>20. Falconidae</b>					
70	Cắt lưng hung - Common Kestrel	<i>Falco tinnunculus</i> <a href="#">Linnaeus</a> , 1758					
	<b>Bộ Vẹt</b>	<b>XVIII. PSITTACIFORMES</b>					
	<b>Họ Vẹt</b>	<b>21. Psittacidae</b>					
71	Vẹt ngực đỏ - Red-breasted Parakeet	<i>Psittacula alexandri</i> (Linnaeus, 1758)	NT				X
	<b>Bộ Sẻ</b>	<b>XIX. PASSERIFORMES</b>					
	<b>Họ Mỏ rộng</b>	<b>22. Eurylaimidae</b>					
72	Mỏ rộng xanh - Long-tailed Broadbill	<i>Psarisomus dalhousiae</i> <a href="#">Jameson</a> , 1835			X	X	X
73	Mỏ rộng hung – Silver -breasted Broadbill	<i>Serilophus lunatus</i> ( <a href="#">Gould</a> , 1834)					X
	<b>Họ Đuôi cụt</b>	<b>23. Pittidae</b>					
74	Đuôi cụt gáy xanh – Blue-naped Pitta	<i>Hydrornis nipalensis</i> ( <a href="#">Hodgson</a> , 1837)					X
	<b>Họ Giả phượng chèo</b>	<b>24. Vangidae</b>					

75	Phường chèo đen - Bar-winged Flycatcher Shrike -	<i>Hemipus picatus</i> <a href="#">Sykes</a> , 1832		X			
	<b>Họ Nhạn rừng</b>	<b>25. Artamidae</b>					
76	Nhạn rừng - Ashy Woodswallow	<i>Artamus fuscus</i> ( <a href="#">Vieillot</a> , 1817)			X	X	X
	<b>Họ Chim nghệ</b>	<b>26. Aegithinidae</b>					
77	Chim nghệ ngực vàng - Common Iora	<i>Aegithina tiphia</i> ( <a href="#">Linnaeus</a> , 1758)			X		
	<b>Họ Phường chèo</b>	<b>27. Campephagidae</b>					
78	Phường chèo đỏ lớn - Scarlet Minivet	<i>Pericrocotus</i> <i>flammeus</i> <a href="#">Forster</a> , 1781		X	X	X	X
79	Phường chèo đỏ mỏ ngắn Short-billed Minivet	<i>Pericrocotus</i> <i>brevirostris</i> ( <a href="#">Vigors</a> , 1831)					X
80	Phường chèo trắng lớn - Ashy Minivet	<i>Pericrocotus</i> <i>divaricatus</i> (Raffles, 1822)					X
81	Phường chèo xám - Black-winged Cuckooshrike	<i>Lalage</i> <i>melaschistos</i> (Hodgson, 1836)		X			X
	<b>Họ Bách thanh</b>	<b>28. Laniidae</b>					
82	Bách thanh mày trắng - Brown Shrike	<i>Lanius cristatus</i> Linnaeus, 1758		X	X		

83	Bách thanh đầu đen - Long-tailed Shrike	<i>Lanius schach</i> <a href="#">Linnaeus</a> , 1758		X	X		
	<b>Họ Khướu mỏ quặp</b>	<b>29. Vireonidae</b>					
84	Khướu mào bụng trắng - White-bellied Erpornis	<i>Erpornis</i> <i>zantholeuca</i> (Blyth, 1844)		X			X
85	Khướu mỏ quặp mày trắng - Blyth's Shrike- babbler	<i>Pteruthius</i> <i>aeralatus</i> ( <a href="#">Temminck</a> , 1835)		X			X
86	Khướu mỏ quặp tai đen - Black-eared Shrike Babbler	<i>Pteruthius</i> <i>melanotis</i> <a href="#">Hodgson</a> , 1847		X			
	<b>Họ Vàng anh</b>	<b>30. Oriolidae</b>					
87	Vàng anh trung quốc - Black-naped Oriole	<i>Oriolus chinensis</i> Linnaeus, 1766		X	X	X	X
88	Tử anh - Maroon Oriole	<i>Oriolus traillii</i> ( <a href="#">Vigors</a> , 1832)					X
	<b>Họ Chèo bẻo</b>	<b>31. Dicruridae</b>					
89	Chèo bẻo - Black Drongo	<i>Dicrurus</i> <i>macrocerus</i> <a href="#">Vieillot</a> , 1817		X	X	X	X
90	Chèo bẻo bờm - Hair-crested Drongo	<i>Dicrurus</i> <i>hottentottus</i> ( <a href="#">Linnaeus</a> , 1766)		X			X

91	Chèo bẻo xám - Ashy Drongo	<i>Dicrurus leucophaeus</i> <a href="#">Vieillot</a> , 1817		X	X	X	X
92	Chèo bẻo rừng – Bronzed Drongo	<i>Dicrurus veneus</i> <a href="#">Vieillot</a> , 1817			X	X	
93	Chèo bẻo cò đuôi bằng - Lesser Racket-tailed Drongo	<i>Dicrurus remifer</i> ( <a href="#">Temminck</a> , 1823)		X			
94	Chèo bẻo cò đuôi chẻ - Greater Racket-tailed Drongo	<i>Dicrurus paradiseus</i> <a href="#">Linnaeus</a> , 1766		X	X	X	X
	<b>Họ Rẻ quạt</b>	<b>32. Rhipiduridae</b>					
95	Rẻ quạt họng trắng - White-throated Fantail	<i>Rhipidura albicollis</i> ( <a href="#">Vieillot</a> , 1818)		X		X	X
	<b>Họ Thiên đường</b>	<b>33. Monarchidae</b>					
96	Đớp ruồi xanh gáy đen - Black-naped Monarch	<i>Hypothymis azurea</i> (Boddaert, 1783)		X		X	X
97	Thiên đường đuôi phướn - Chinese Paradise Flycatcher	<i>Terpsiphone incei</i> ( <a href="#">Linnaeus</a> , 1758)		X		X	X
	<b>Họ Quạ</b>	<b>34. Corvidae</b>					
98	Giẻ cùi - Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i> ( <a href="#">Boddaert</a> , 1783)			X	X	X

99	Giẻ cùi vàng - White-winged Magpie	<i>Urocissa</i> <i>whiteheadi</i> <a href="#">Ogilvie-Grant</a> , 1899				X	
100	Giẻ cùi bụng vàng - Indochinese Green Magpie	<i>Cissa hypoleuca</i> <a href="#">Salvadori</a> & <a href="#">Giglioli</a> , 1885		X			
101	Ác là Eurasian Magpie	<i>Pica pica</i> ( <a href="#">Linnaeus</a> , 1758)			X		X
102	Quạ đen - Large- billed Crow	<i>Corvus</i> <i>macrorhynchos</i> <a href="#">Wagler</a> , 1827			X		X
103	Quạ khoang – Collared Crow	<i>Corvus</i> <i>torquatus</i> (Lesson, 1831)	NT				X
104	Chim khách Racket-tailed Treepie	<i>Crypsirina temia</i> ( <a href="#">Daudin</a> , 1800)		X		X	X
105	Choàng choạc xám - Grey Treepie	<i>Dendrocitta</i> <i>formosae</i> <a href="#">Swinhoe</a> , 1863					X
	<b>Họ Giẻ đóp ruồi</b>	<b>35. Stenostiridae</b>					
106	Đóp ruồi đầu xám - Grey-headed Canary Flycatcher	<i>Culicicapa</i> <i>ceylonensis</i> ( <a href="#">Swainson</a> , 1820)		X			
	<b>Họ Bạc má</b>	<b>36. Paridae</b>					
107	Chim mào vàng - Sultan Tit	<i>Melanochlora</i> <i>sultanea</i> ( <a href="#">Hodgson</a> , 1837)		X			X

108	Bạc má - Japanese Tit	<i>Parus minor</i> Temminck & Schlegel, 1848		X	X	X	X
109	Bạc má mào – Yellow cheeked Tit	<i>Parus spilonotus</i> <a href="#">Bonaparte</a> , 1850		X	X		X
	<b>Họ Chào mào</b>	<b>37. Pycnonotidae</b>					
110	Chào mào khoang cổ - Collared Finchbill	<i>Spizixos semitorques</i> <a href="#">Swinhoe</a> , 1961		X	X	X	
111	Chào mào vàng mào đen Black-crested Bulbul	<i>Pycnonotus melanicterus</i> ( <a href="#">Gmelin</a> , 1789)		X	X	X	X
112	Chào mào Red-whiskered Bulbul	<i>Pycnonotus jocosus</i> ( <a href="#">Linnaeus</a> , 1758)		X	X	X	X
113	Bông lau ngực nâu Brown-breasted Bulbul	<i>Pycnonotus xanthorrhous</i> <a href="#">Anderson</a> , 1869				X	X
114	Bông lau trung quốc Light-vented Bulbul	<i>Pycnonotus sinensis</i> ( <a href="#">Gmelin</a> , 1789)					X
115	Bông lau tai trắng - Sooty-headed Bulbul	<i>Pycnonotus aurigaster</i> ( <a href="#">Vieillot</a> , 1818)		X	X	X	X
116	Bông lau vàng - Flavescent Bulbul	<i>Pycnonotus flavescens</i> <a href="#">Blyth</a> , 1845			X		X



117	Cành cách lớn Puff-throated Bulbul	<i>Alophoixus pallidus</i> ( <a href="#">Swinhoe</a> , 1870)		X	X	X	X
118	Cành cách núi - Mountain Bulbul	<i>Ixos mccllellandii</i> <a href="#">Horsfield</a> , 1840		X	X		X
119	Cành cách hung - Chestnut Bulbul	<i>Hemixos castanonotus</i> <a href="#">Swinhoe</a> , 1870		X		X	X
120	Cành cách đen Himalayan Black Bulbul	<i>Hypsipetes leucocephalius</i> (Gmelin, 1789)		X	X	X	X
	<b>Họ Nhạn</b>	<b>38. Hirundinidae</b>					
121	Nhạn bụng trắng - Barn Swallow	<i>Hirundo rustica</i> <a href="#">Linnaeus</a> , 1758		X	X	X	X
122	Nhạn bụng xám - Red-rumped Swallow	<i>Cecropis daurica</i> ( <a href="#">Laxmann</a> , 1769)		X	X		X
123	Nhạn nâu đỏ - Grey- throated Sand Martin	<i>Riparia chinensis</i> (Rasmussen & Anderton, 2005)			X	X	
	<b>Họ Chích đớp ruồi</b>	<b>39. Cettiidae</b>					
124	Chích đớp ruồi mỏ vàng - Yellow-bellied Warbler	<i>Abroscopus superciliaris</i> ( <a href="#">Blyth</a> , 1859)		X			X
125	Chích bông đầu vàng - Mountain Tailorbird	<i>Orthotomus cuculatus</i> Temminck, 1836					X

126	Chích đuôi cụt bụng xanh - Grey- bellied Tesia	<i>Tesia cyaniventer</i> Hodgson, 1837					X
127	Chích đuôi cụt - Slaty-bellied Tesia	<i>Tesia olivea</i> McClelland, 1840		X			X
128	Chích đuôi cụt bụng vàng - Chestnut- headed Tesia	<i>Cettia</i> <i>castaneocoronata</i> Burton, 1836					X
	<b>Họ Chim Chích</b>	<b>40. <i>Phylloscopidae</i></b>					
129	Chích mày xám - Ashy-throated Warbler	<i>Phylloscopus</i> <i>maculipennis</i> Blyth, 1867					X
130	Chích mày lớn - Yellow-browed Warbler	<i>Phylloscopus</i> <i>inornatus</i> ( <a href="#">Blyth</a> , 1842)		X	X		X
131	Chích đuôi xám - Blyth's Leaf Warbler	<i>Phylloscopus</i> <i>reguloides</i> Blyth, 1842					X
132	Chích đớp ruồi mày đen - White- spectacled Warbler	<i>Phylloscopus</i> <i>intermedius</i> La Touche, 1898		X			
133	Chích đớp ruồi má xám - Grey-cheeked Warbler	<i>Phylloscopus</i> <i>poliogenys</i> <a href="#">Blyth</a> , 1847		X			
134	Chích đớp ruồi đầu hung - Chestnut- crowned Warbler	<i>Phylloscopus</i> <i>castaniceps</i> Hodgson, 1845		X			
	<b>Họ Chích đầm lầy</b>	<b>41. <i>Locustellidae</i></b>					
135	Chích họng vạch - Spotted Bush-Warbler	<i>Locustella</i> <i>thoracicus</i> ( <a href="#">Blyth</a> , 1845)			X		

	<b>Họ Chiền chiện</b>	<b>42. Cisticolidae</b>					
136	Chiền chiện núi họng trắng - Hill Prinia	<i>Prinia superciliaris</i> ( <a href="#">Moore</a> , 1854)		X	X	X	X
137	Chiền chiện đầu nâu - Rufescent Prinia	<i>Prinia rufescens</i> <a href="#">Blyth</a> , 1847		X	X		
138	Chiền chiện lưng xám - Grey-breasted Prinia	<i>Prinia hodgsonii</i> <a href="#">Blyth</a> , 1844		X			
139	Chiền chiện bụng hung - Plain Prinia	<i>Prinia inornata</i> <a href="#">Sykes</a> , 1832			X		
140	Chích bông đuôi dài - Common Tailorbird	<i>Orthotomus sutorius</i> ( <a href="#">Pennant</a> , 1769)		X	X	X	X
141	Chích bông cánh vàng - Dark-necked Tailorbird	<i>Orthotomus atroregularis</i> Temminck, 1836			X	X	
	<b>Họ Khướu mỏ cong</b>	<b>43. Timaliidae</b>					
142	Họa mi đất mỏ dài - Large Scimitar Babbler	<i>Erythrogonys hypoleucos</i> ( <a href="#">Blyth</a> , 1844)		X			
143	Họa mi đất ngực luộc - Streak-breasted Scimitar Babbler	<i>Pomatorhinus ruficollis</i> <a href="#">Hodgson</a> , 1836		X	X	X	X
144	Khướu đất họng xám - Pale-throated Wren Babbler	<i>Spelaeornis kinneari</i> Delacour & Jabouille, 1930	VU				X

145	Khướu bụi đầu đen - Grey-throated Babbler	<i>Stachyris nigriceps</i> <a href="#">Blyth</a> , 1844		X	X	X	X
146	Khướu bụi cổ chấm - Spot-necked Babbler	<i>Stachyris striolata</i> ( <a href="#">Müller</a> , 1835)		X	X		
147	Khướu bụi đầu đỏ - Rufous-capped Babbler	<i>Cyanoderma ruficeps</i> <a href="#">Blyth</a> , 1847				X	X
148	Khướu bụi vàng - Golden Babbler	<i>Cyanoderma chrysaeum</i> <a href="#">Blyth</a> , 1844		X	X	X	X
149	Chích chạch má vàng - Pin-Striped Tit Babbler	<i>Mixornis gularis</i> ( <a href="#">Horsfield</a> , 1822)		X	X	X	X
	<b>Họ Chuối tiêu</b>	<b>44. Pellorneidae</b>					
150	Lách tách đầu chấm - Rufous-winged Fulvetta	<i>Alcippe castaneiceps</i> ( <a href="#">Hodgson</a> , 1837)		X			
151	Lách tách má xám - David's Fulvetta	<i>Alcippe davidi</i> (Styan, 1896)		X		X	X
152	Chuối tiêu ngực chấm - Puff-throated Babbler -	<i>Pellorneum ruficeps</i> <a href="#">Swainson</a> , 1832		X		X	X
153	Chuối tiêu họng chấm - Spot-throated Babbler	<i>Pellorneum albiventris</i> ( <a href="#">Godwin-Austen</a> , 1877)					X
154	Chuối tiêu đất - Buff-breasted Babbler	<i>Pellorneum tickelli</i> ( <a href="#">Blyth</a> , 1859)		X	X	X	X

155	Khướu đá đuôi ngắn - Streaked Wren Babbler	<i>Napothera brevicaudata</i> ( <a href="#">Blyth</a> , 1855)		X	X	X	
156	Khướu đá nhỏ - Eyebrowed Wren Babbler	<i>Napothera epilepidota</i> ( <a href="#">Temminck</a> , 1827)		X		X	
	<b>Họ Khướu</b>	<b>45. Leiothrichidae</b>					
157	Khướu đuôi đỏ - Red-tailed Laughingthrush	<i>Trochalopteron milnei</i> ( <a href="#">David</a> , 1874)					X
158	Khướu tai bạc - Silver-eared Laughingthrush	<i>Trochalopteron melanostigma</i> (Blyth, 1855)					X
159	Họa mi Chinese Hwamei	<i>Garrulax canorus</i> ( <a href="#">Linnaeus</a> , 1758)					X
160	Khướu lùn cánh xanh Blue-winged Minla	<i>Actinodura cyanouroptera</i> (Hodgson, 1838)		X	X	X	X
161	Kim oanh mỏ đỏ Red-billed Leiothrix	<i>Leiothrix lutea</i> ( <a href="#">Scopoli</a> , 1786)		X			X
162	Kim oanh tai bạc - Silver-eared Mesia	<i>Leiothrix argenteauris</i> ( <a href="#">Hodgson</a> , 1837)		X	X		
163	Khướu xám Grey Laughingthrush	<i>Garrulax maesi</i> ( <a href="#">Oustalet</a> , 1890)		X	X		X

164	Khướu bạc má - Black-throated Laughingthrush	<i>Pterorhinus chinensis</i> ( <a href="#">Scopoli</a> , 1786)		X		X	X
165	Mi đầu đen Black-headed Sibia	<i>Malacias desgodinsi</i> (Oustalet, 1877)					X
	<b>Họ Khướu mỏ dẹt</b>	<b>46. Sylviidae</b>					
166	Khướu mỏ dẹt vàng Golden Parrotbill	<i>Suthora verreauxi</i> ( <a href="#">Sharpe</a> , 1883)					X
167	Khướu mỏ dẹt họng đen - Black- throated Parrotbill	<i>Suthora nipalensis</i> (Hodgson, 1837)					X
168	Khướu mỏ dẹt đuôi ngắn - Short-tailed Parrotbill	<i>Neosuthora davidiana</i> (Slater, 1897)					X
169	Khướu mỏ dẹt lớn - Rufous-headed Parrotbill	<i>Psittiparus bakeri</i> <a href="#">Blyth</a> , 1842					X
170	Khướu mỏ dẹt đầu xám - Grey-headed Parrotbill	<i>Psittiparus gularis</i> Gray, 1845					X
171	Khướu mỏ dẹt cằm đen - Spot-breasted Parrotbill	<i>Paradoxornis guttaticollis</i> <a href="#">David</a> , 1871					X
	<b>Họ Vành khuyên</b>	<b>47. Zosteropidae</b>					

172	Khướu mào khoang cổ - Indochinese Yuhina	<i>Staphida torqueola</i> ( <a href="#">Swinhoe</a> , 1870)		X	X	X	X
173	Khướu mào đầu đen - Black-chinned Yuhina	<i>Yuhina nigrimenta</i> <a href="#">Blyth</a> , 1845		X			
174	Vành khuyên nhật bản - Swinhoe's White- eye	<i>Zosterops simplex</i> <a href="#">Swinhoe</a> , 1861		X	X	X	X
	<b>Họ Trèo cây</b>	<b>48. Sittidae</b>					
175	Trèo cây trán đen - Velvet-fronted Nuthatch	<i>Sitta frontalis</i> <a href="#">Swainson</a> , 1820		X		X	X
176	Trèo cây mỏ vàng Yellow-billed Nuthatch	<i>Sitta solangiae</i> ( <a href="#">Delacour</a> & <a href="#">Jabouille</a> , 1930)	NT				X
	<b>Họ Sáo</b>	<b>49. Sturnidae</b>					
177	Yểng - Common Hill Myna	<i>Gracula religiosa</i> <a href="#">Linnaeus</a> , 1758				X	
178	Sáo mỏ ngà - Crested Myna	<i>Acridotheres</i> <i>crisatellus</i> ( <a href="#">Linnaeus</a> , 1766)			X	X	
179	Sáo nâu - Common Myna	<i>Acridotheres tristis</i> ( <a href="#">Linnaeus</a> , 1766)				X	
180	Sáo sậu - Black- collared Starling	<i>Gracupica</i> <i>nigricollis</i> (Paykull, 1807)			X		

181	Sáo đá đuôi hung - Chestnut-tailed Starling	<i>Sturnia malabarica</i> ( <a href="#">Gmelin</a> , 1789)			X		
	<b>Họ Đớp ruồi</b>	<b>50. Muscicapidae</b>					
182	Chích chòe than Oriental Magpie Robin	<i>Copsychus saularis</i> ( <a href="#">Linnaeus</a> , 1758)		X	X	X	X
183	Chích chòe lửa - White-rumped Shama	<i>Copsychus malabaricus</i> ( <a href="#">Scopoli</a> , 1788)				X	
184	Chích chòe nước trán trắng - Slaty-backed Forktail	<i>Enicurus schistaceus</i> ( <a href="#">Hodgson</a> , 1836)				X	
185	Chích chòe nước đầu trắng - White-crowned Forktail	<i>Enicurus leschenaulti</i> ( <a href="#">Vieillot</a> , 1818)				X	
186	Đớp ruồi sibêri - Dark-sided Flycatcher	<i>Muscicapa sibirica</i> <a href="#">Gmelin</a> , 1789					X
187	Đớp ruồi nâu - Asian Brown Flycatcher	<i>Muscicapa dauurica</i> <a href="#">Pallas</a> , 1811		X			X
188	Đớp ruồi trán đen - Small Niltava	<i>Niltava macgrigoriae</i> (Burton, 1836)		X	X		X
189	Đớp ruồi lớn - Large Niltava	<i>Niltava grandis</i> ( <a href="#">Blyth</a> , 1842)		X			
190	Đớp ruồi xanh xám - Verditer Flycatcher	<i>Eumyias thalassinus</i> ( <a href="#">Swainson</a> , 1838)			X		X



191	Đớp ruồi mugi - Mugimaki Flycatcher	<i>Ficedula mugimaki</i> ( <a href="#">Temminck</a> , 1815)			X		
192	Đớp ruồi xanh nhạt - Pale Blue- flycatcher	<i>Cyornis unicolor</i> <a href="#">Blyth</a> , 1843					X
193	Đớp ruồi hải nam - Hainan Blue Flycatcher	<i>Cyornis hainanus</i> ( <a href="#">Ogilvie-Grant</a> , 1900)		X			
194	Đớp ruồi họng trắng White-gorgeted Flycatcher	<i>Anthipes monileger</i> ( <a href="#">Hodgson</a> , 1845)					X
195	Đớp ruồi họng hung Hill Blue- flycatcher	<i>Cyornis whitei</i> Harrington, 1908					X
196	Hoét xanh - Blue Whistling Thrush	<i>Myophonus caeruleus</i> (Scopoli, 1786)		X			X
197	Oanh đuôi cụt lưng xanh - Red-flanked Bluetail -	<i>Tarsiger cyanurus</i> ( <a href="#">Pallas</a> , 1773)			X		
198	Đuôi đỏ đầu xám - Plumbeous Water Redstart -	<i>Phoenicurus fuliginosa</i> ( <a href="#">Vigors</a> , 1831)			X		
199	Đuôi đỏ đầu trắng - White-capped Water Redstart	<i>Phoenicurus leucocephalus</i> ( <a href="#">Vigors</a> , 1831)			X		

200	Hoét đá - Blue Rock-Thrush	<i>Monticola solitarius</i> ( <a href="#">Linnaeus</a> , 1758)			X		X
201	Hoét đá bụng hung - Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i> ( <a href="#">Jardine &amp; Selby</a> , 1833)					X
202	Sẻ bụi xám - Grey Bushchat	<i>Saxicola ferreus</i> Gray, 1847			X		X
	<b>Họ Chim xanh</b>	<b>51. Chloropseidae</b>					
203	Chim xanh nam bộ - Blue-winged Leafbird	<i>Chloropsis moluccensis</i> (Gmelin, 1788)		X		X	
204	Chim xanh hông vàng - Orange-bellied Leafbird	<i>Chloropsis hardwickii</i> <a href="#">Jardine &amp; Selby</a> , 1830		X			X
	<b>Họ Chim sâu</b>	<b>52. Dicaeidae</b>					
205	Chim sâu vàng lục Plain Flowerpecker	<i>Dicaeum minullum</i> ( <a href="#">Swinhoe</a> , 1870)			X	X	X
206	Chim sâu lưng đỏ - Scarlet-backed Flowerpecker	<i>Dicaeum cruentatum</i> ( <a href="#">Linnaeus</a> , 1758)				X	
207	Chim sâu ngực đỏ - Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i> ( <a href="#">Blyth</a> , 1843)		X			
	<b>Họ Hút mật</b>	<b>53. Nectariniidae</b>					
208	Hút mật họng tím - Olive-backed Sunbird	<i>Cinnyris jugularis</i> ( <a href="#">Linnaeus</a> , 1766)		X	X	X	

209	Hút mật đỏ - Crimson Sunbird	<i>Aethopyga siparaja</i> ( <a href="#">Raffles</a> , 1822)			X	X	
210	Hút mật họng vàng - Mrs Gould's Sunbird	<i>Aethopyga gouldiae</i> ( <a href="#">Vigors</a> , 1831)					X
211	Hút mật đuôi nhọn - Fork-tailed Sunbird	<i>Aethopyga christinae</i> <a href="#">Swinhoe</a> , 1869		X	X	X	X
212	Hút mật ngực đỏ - Black-throated Sunbird	<i>Aethopyga saturata</i> ( <a href="#">Hodgson</a> , 1836)		X	X		
213	Bắt chuối đốm đen - Streaked Spiderhunter	<i>Arachnothera magna</i> ( <a href="#">Hodgson</a> , 1837)		X	X		
	<b>Họ Sẻ</b>	<b>54. <i>Passeridae</i></b>					
214	Sẻ - Eurasian Tree Sparrow	<i>Passer montanus</i> ( <a href="#">Linnaeus</a> , 1758)		X	X	X	X
215	Sẻ hung - Russet Sparrow	<i>Passer rutilans</i> ( <a href="#">Temminck</a> , 1835)					X
	<b>Họ Chim di</b>	<b>55. <i>Estrildidae</i></b>					
216	Di cam White-rumped Munia	<i>Lonchura striata</i> ( <a href="#">Linnaeus</a> , 1766)			X	X	X
217	Di đá Scaly-breasted Munia	<i>Lonchura punctulata</i> ( <a href="#">Linnaeus</a> , 1758)				X	X

	<b>Họ Chà vôi</b>	<b>56. Motacillidae</b>					
218	Chà vôi núi - Grey Wagtail	<i>Motacilla cinerea</i> <a href="#">Tunstall</a> , 1771			X	X	X
219	Chà vôi trắng - White Wagtail	<i>Motacilla alba</i> <a href="#">Linnaeus</a> , 1758		X	X	X	X
220	Chim manh vân nam - Olive-backed Pipit	<i>Anthus hodgsoni</i> ( <a href="#">Richmond</a> , 1907)		X	X		
<b>Total</b>				<b>119</b>	<b>105</b>	<b>92</b>	<b>141</b>

Note: Taxonomy follow IOC 2019; Vietnamese name follow Le Manh Hung, 2012. EN = Endanger, VU = Vulnerable, NT = Near Threatened as per IUCN 2021.

E = Endanger by Vietnam Red Data Book, 2007.

**CC = Chạm Chu, BM = Bắc Mê, NXL = Nam Xuân Lạc, PO\_PD = Phía Oắc –  
Phía Đén**