

# SURVEY ON THE AVIAN DIVERSITY ALONG THE ANNAPURNA SANCTUARY TREKKING ROUTE IN WESTERN NEPAL

Hemanta Dhakal<sup>1</sup>, Dharma Giri<sup>2</sup>, Anisha Rana<sup>3</sup>, Bipana M. Sadadev<sup>3</sup>, Prasant Ghimire<sup>4</sup>, Kritagya Gyawali<sup>5</sup>, Binita Karki<sup>6</sup> and Manshanta Ghimire<sup>7</sup>

<sup>1</sup>Prithvi Narayan Campus, Pokhara

<sup>2-6</sup>Institute of Forestry, Pokhara

<sup>7</sup>Pokhara Bird Society, Pokhara

E-mail: [hdforecology@gmail.com](mailto:hdforecology@gmail.com)

## ABSTRACT

A bird survey was carried out on one of Nepal's most popular trekking destinations, Annapurna Base Camp in the Annapurna Conservation Area (ACA). ACA trekking route was selected as our transect line. Direct observation method and call count method were used during the survey following the transect line. A total of 166 species were recorded representing nine orders and 39 families. The main objective of the present work was to study the avian diversity. Eight nationally threatened and three globally threatened bird species were recorded during the survey. White-rumped vulture *Gyps bengalensis* (Gmelin) and Red-headed vulture *Sarcogyps calvus* (Scopoli) (critically endangered species) were also recorded. The abundance of Rufous sibia *Malacias capistratus* (Vigors) was higher, while Nepal house martin *Delichon nipalense* (Moore) had the highest number. Hunting, excessive harvesting of bamboo shoots, orchids, overgrazing and improper management of solid waste were directly observed threats.

**Key Words :** Avian Survey, white-rumped vulture, Himalayan monal, Annapurna

Conservation Area.

## INTRODUCTION

Among 887 bird species in Nepal, 518 species have been recorded in Annapurna Conservation Area including significant population of Cheer Pheasant *Catreus wallichii* (Hardwicke), a globally threatened species (Baral, 2018). Mammals total 104 species including some of the world's rare and endangered species such as, the Snow Leopard, *Panthera uncia uncia* (Schreber); Red Panda, *Ailurus fulgens* (Cuvier); Himalayan Musk Deer, *Moschus chrysogaster*

(Hodgson) and others like the Asiatic Wild Dog, *Cuon alpinus* (Pallas); Himalayan Black Bear, *Ursus thibetanus* (Cuvier); Smooth-coated Otter, *Lutrogale perspicillata* (Hilaire); Clouded Leopard, *Neofelis nebulosa* (Griffith). etc. ( NTNC, 2015). In addition, 39 reptile species and 22 amphibian species have been found (NTNC, 2015). The high number (1,226 species) of flowering plants has also been recorded (NTNC, 2015).

The conservation area is the country's only protected area that supports all of Nepal's six Himalayan pheasant species including the

splendid Himalayan Monal, *Lophophorus impejanus* (Latham), the country's national bird, known as Danphe in Nepal. It is found on steep grassy slopes and open rocky slopes above the treeline upto 4,570 m in summer, descending to lower altitudes down to 3,300 m in rhododendron forest during winter. The Globally threatened Cheer Pheasant *Catreus wallichii* (Hardwicke) is significant in the precipitous terrain with scrub, tall grasses and stunted trees, steep hillsides of Ghasa, Pipar and Santel (Inskipp, 2017).

The main objective of the present investigation was to study the avian diversity along the Annapurna Sanctuary trekking route.

## MATERIALS AND METHODS

### Study area

Annapurna Conservation Area (Figure.1) is located at 28°32'N and 84°00'E in western Nepal around the Annapurna massifs. It includes one of the most impressive mountain range in the world, popularly known as the Annapurna Sanctuary which is surrounded by high peaks over 7,000 meters.

The study area comprises the Annapurna Sanctuary trekking trail (Nayapool- Ghandruk-

Chomroong-Sinuwa-Bamboo-Dovan-Himalaya-Deurali-Machhapuchre Base Camp- Annapurna Base Camp- Sinuwa-Jhinu-Landruk-Pokhara). The altitude ranges from 700 m to 4,130m.

### Data Collection

#### Direct observation method

The trekking route was taken as the transect line and the survey was conducted along the transect line by direct count method and call count method and all birds encountered were recorded. The survey was opportunistic. Trekking guide map was also used during the trip collected from ACAP office.

Four binoculars Bushnell and Nikon 8x42, and digital cameras, Nikon D3100 (70-300), D5100 (18-55), Nikon Coolpix p900 (2000mm) optics were used in the field. In addition, Garmin GPSmap62S GPS and field guides, *Birds of Nepal* (Grimmett et al, 2003), *Birds of the Indian Subcontinent* by Grimmett et al. (2011), and Grimmett et al. (2016) and Inskipp et al. (2016) were followed for identification.

#### Call count method

Calls of some of the species were also recorded and identified during the survey. Xento-canto source was used as key identification tool.

We followed Call Count Method for nocturnal birds. Tape recorder with environment friendly volume was used to play the calls of nocturnal birds. Each call was played for 10 seconds and paused for next 50 seconds. Till this time we waited for response call. Their call back record was kept as bird species available in those areas. This method was continued for 5 times. Similar method and used for other different species of birds. The calls were downloaded from Xento-canto source was used as key identification tool (<https://www.xeno-canto.org/>).

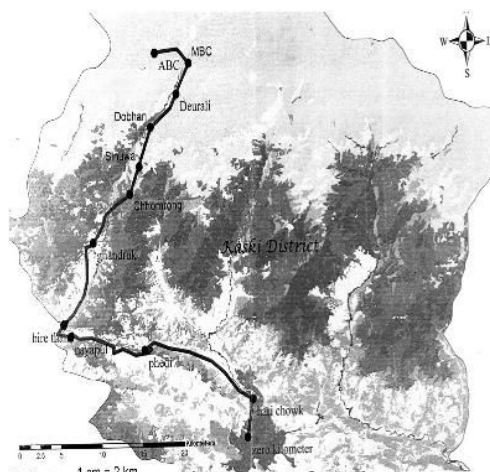


Figure 1. Location map of study area.

## Analysis and mapping

Simple statistical methods were used with the help of SPSS software to analyze the recorded data which refers to the number of species recorded during the survey (direct observation method and call count method). GPS was used to record the walking trail and GPS points. GPS coordinates were used for making GIS Map.

## RESULTS AND DISCUSSION

We recorded 166 species of birds in the study area representing 5 orders and 39 families. Bird rich families were Timaliidae (27 species), Turdidae (19 species), Sylviidae (10 species) and Muscicapidae (6 species). Among recorded species, *Rufous sibia* was sighted more frequently, showing that it is the most widely distributed species on the Annapurna Base Camp (ABC) trek, however its population appeared to be much less than some other species including Nepal House Martin. Similarly, the forests between Ghandruk, Chhomrong, Sinuwa, Jhinu and Bamboo were found to have the highest species richness.

Birds recorded from their calls were, Black Francolin, *Francolinus francolinus* (two calls between Sauibazar and Kimche); Hill Partridge, *Arborophila torquelo*a (seventeen calls between Ghandruk and Khimrong Dada); Rufous throated Partridge, *Arborophila rufogularis* (one call at Khomrong Dada); Mountain Scops Owl, *Otus spilocephalus* (more than 100 calls at Ghandruk); Golden-throated Barbet, *Megalaima franklinii* (one call recorded at Ghandruk); Nepal Wren Babbler, *Pnoepyga immaculate* (two calls between Komrong Danda to Komrong Khola) and Pygmy Wren Babbler, *Pnoepyga pusilla* (one call at Ghandruk).

Threats like rock mining taking out rocks, boulders and sand for use in constructing

new houses and lodges, a new motor road construction going on rapidly, children carrying catapults, uncontrolled livestock grazing, harvesting bamboo shoots and orchids were observed from Chhomrong and above, all the way to Deurali. Lack of solid waste management – unmanaged rubbish pits were observed along the trail. In addition the trekking route seemed to be very busy, helicopter and overgrazing were found to be the main disturbing factors to bird community.

Present study recommends to raise conservation awareness about the importance of birds to both residents and visitors within the conservation area and to improve the trekking trail and provide suspension bridges along the trekking route between Himalaya and Deurali in the Modi Khola valley which will help to promote bird ecotourism on the ABC trek in the conservation area.

## REFERENCES

- Baral R. (2018). *Birds of Annapurna Conservation Area*. National Trust for Nature conservation, Annapurna Conservation Area Project, Pokhara, Nepal. p. 74.
- Grimmett, R., C. Inskipp, T. Inskipp and H. S. Baral (2003). *Birds of Nepal*. Helms Field Guide. (Nepali Version). Christopher Helm, London, UK.
- Grimmett, R., C. Inskipp, T. Inskipp and H.S. Baral (2016). *Birds of Nepal (Revised Edition)*. Christopher Helm, London, UK.
- Grimmett, R., C. Inskipp, and T. Inskipp (2011). *Birds of the Indian Subcontinent* (2nd edition). Helms Field Guide, Oxford University Press, India.
- Inskipp, C., H. S. Baral, S. Phuyal, T. R. Bhatt, M. Khatiwada, T. Inskipp, A. Khatiwada, S. Gurung, P. B. Singh, L. Murray, L. Poudyal and R. Amin, (2016). *The Status*

of Nepal's Birds: The National Red List Series. Zoological Society of London, U.K.

Inskipp, C. (2017). *Birds of Annapurna Conservation Area Jewels of Nepal Himalaya*. Wild Sojourns, Special Anniversary Issue.

National Trust for Nature Conservation (2015). Annapurna Conservation Area Project. <http://ntnc.org.np/project/annapurna-conservation-area-project>

**Table 1.** Checklist of birds recorded from Annapurna Sanctuary, Kaski, Nepal.

SN	English Name	Scientific Name	Nepali Name	Status	
				Global	National
	<b>Order: Galliformes</b>				
	<b>Family: Phasianidae</b>				
1.	Black Francolin	<i>Francolinus francolinus</i> (Linnaeus)	कालो तित्रा	-	-
2.	Hill Partridge	<i>Arborophila torquelo</i> (Valenciennes)	पिउरा	-	-
3.	Rufous throated Partridge	<i>Arborophila rufogularis</i> (Blyth)	लालकण्ठे पिउरा	-	NT
4.	Kalij Pheasant	<i>Lophura leucomelanos</i> (Latham)	कालिज	-	-
	<b>Order: Ciconiiformes</b>				
	<b>Family: Ardeidae</b>				
5.	Indian Pond Heron	<i>Ardeola grayii</i> (Sykes)	आसकोटे बकुल्ला	-	-
6.	Cattle Egret	<i>Bubulcus ibis</i> (Linnaeus)	बस्तु बकुल्ला	-	-
7.	Intermediate Egret	<i>Mesophoyx intermedia</i> (Wagler)	मझौला सेतो बकुल्ला	-	-
8.	Little Egret	<i>Egretta garzetta</i> (Linnaeus)	सानो सेतो बकुल्ला	-	-
	<b>Order: Falconiformes</b>				
	<b>Family: Falconidae</b>				
9.	Common Kestrel	<i>Falco tinnunculus</i> (Linnaeus)	बौडाई	-	-
	<b>Family: Accipitridae</b>				
10.	Black Kite	<i>Milvus migrans</i> (Boddaert)	कालो चिल	-	-
11.	Bearded Vulture	<i>Gypaetus barbatus</i> (Linnaeus)	हाडफोर गिद्ध	-	-
12.	White-rumped Vulture	<i>Gyps bengalensis</i> (Gmelin)	डंगर गिद्ध	CR	CR
13.	Himalayan Vulture	<i>Gyps himalayensis</i> (Hume)	हिमाली गिद्ध	NT	VU
14.	Red-headed Vulture	<i>Sarcogyps calvus</i> (Scopoli)	सुन गिद्ध	CR	EN

Survey on The Avian Diversity Along The Annapurna Sanctuary Trekking ...

15.	Black Eagle	<i>Ictinaetus malayensis</i> (Temminck)	द्रोणक चील	-	-
16.	Eurasian Sparrowhawk	<i>Accipiter nisus</i> (Linnaeus)	वनबाज	-	-
17.	Long-legged Buzzard	<i>Buteo rufinus</i> (Cretzschmar)	लामखुट्टे शयेनबाज	-	-
18.	Bonelli's Eagle	<i>Aquila fasciata</i> (Vieillot)	मोरङ्गी चील	-	-
	<b>Order: Columbiformes</b>				
	<b>Family: Columbidae</b>				
19.	Common Pigeon	<i>Columba livia</i> (Gmelin)	मलेवा	-	-
20.	Snow Pigeon	<i>Columba leuconota</i> (Vigors)	हिमाली मलेवा	-	-
21.	Speckled Wood Pigeon	<i>Columba hodgsonii</i> (Vigors)	छिरबिरे वनपरेवा	-	-
22.	Oriental Turtle Dove	<i>Streptopelia orientalis</i> (Latham)	तामे बुकुर	-	-
23.	Spotted Dove	<i>Streptopelia chinensis</i> (Scopoli)	कुर्ले बुकुर	-	-
24.	Barred Cuckoo Dove	<i>Macropygia unchall</i> (Wagler)	धर्क बुकुर	-	VU
	<b>Order: Psittaciformes</b>				
	<b>Family: Psittacidae</b>				
25.	Slaty-headed Parakeet	<i>Psittacula himalayana</i> (Lesson)	मदना सुगा	-	-
	<b>Order: Strigiformes</b>				
	<b>Family: Strigidae</b>				
26.	Mountain Scops Owl	<i>Otus spilocephalus</i> (Blyth)	लेकाली उलक	-	-
27.	Collared Owlet	<i>Glaucidium brodiei</i> (Burton)	सानो बुन्दुल	-	-
	<b>Order: Caprimulgiformes</b>				
	<b>Family: Caprimulgidae</b>				
28.	Grey Nightjar	<i>Caprimulgus jotaka</i> (Temminck and Schlegel)		-	-
	<b>Order: Coraciiformes</b>				
	<b>Family: Alcedinidae</b>				
29.	White-throated Kingfisher	<i>Halcyon smyrnensis</i> (Kuhl)	सेतो कण्ठे माटीकोरे	-	-
30.	Common Kingfisher	<i>Alcedo atthis</i> (Linnaeus)	सानो माटीकोरे	-	-

31.	Crested Kingfisher	<i>Megaceryle lugubris</i> (Temminck)	दुलो छिरविरे माटीकोरे	-	-
	<b>Order: Piciformes</b>				
	<b>Family: Megalaimidae</b>				
32.	Blue-throated Barbet	<i>Megalaima asiatica</i> (Latham)	कृयुर्के	-	-
33.	Golden-throated Barbet	<i>Megalaima franklinii</i> (Blyth)	कुम्नुष	-	-
34.	Great Barbet	<i>Megalaima virens</i> (Blyth)	न्याउली	-	-
	<b>Family: Picidae</b>				
35.	Darjeeling Woodpecker	<i>Dendrocopos darjellensis</i> (Blyth)	दार्जीलिङ्ग काष्ठकुट	-	-
36.	Rufous Woodpecker	<i>Celeus brachyurus</i> ( Vieillot)	सानो तामे लाहाँचे	-	-
	<b>Family: Corvidae</b>				
37.	Yellow-billed Blue Magpie	<i>Urocissa flavirostris</i> (Blyth)	सुनदुँडे लामपुच्छे	-	-
38.	Red-billed Blue Magpie	<i>Urocissa erythrorhyncha</i>	स्यालपोथरी लामपुच्छे	-	-
39.	Grey Treepie	<i>Dendrocitta formosae</i> (Swinhoe)	पहाडी कोकले	-	-
40.	Rufous Treepie	<i>Dendrocitta vagabunda</i> (Latham)	कोकले	-	-
41.	Alpine Chough	<i>Pyrrhocorax graculus</i> (Linnaeus)	टेमु	-	-
42.	House crow	<i>Corvus splendens</i> (Vieillot)	घर काग	-	-
43.	Large-billed Crow	<i>Corvus macrorhynchos</i> (Bonaparte)	कालो काग	-	-
	<b>Family: Oriolidae</b>				
44.	Maroon Oriole	<i>Oriolus traillii</i> (Vigors)	घनरक्त सुनचरी	-	-
	<b>Family: Campephagidae</b>				
45.	Long-tailed Minivet	<i>Pericrocotus ethologus</i> (Bangs and Phillips)	लामपुच्छे रानीचरी	-	-
	<b>Family: Rhipiduridae</b>				
46.	White-throated Fantail	<i>Rhipidura albicollis</i> (Vieillot)	नक्कले मारुनीचरी	-	-
47.	Yellow-bellied Fantail	<i>Chelidorhynchus hypoxantha</i> (Vieillot)	पहेलो मारुनीचरी	-	-
	<b>Family: Labiidae</b>				

48.	Long-tailed Shrike	<i>Lanius schach</i> (Linnaeus)	भद्राई	-	-
49.	Grey-backed Shrike	<i>Lanius tephronotus</i> (Linnaeus)	हिमाली भद्राई	-	-
	<b>Family: Diciridae</b>				
50.	Black Drongo	<i>Dicrurus macrocerus</i> (Vieillot)	कालो चिबे	-	-
51.	Ashy Drongo	<i>Dicrurus leucophaeus</i> (Vieillot)	ध्वाँसे चिबे	-	-
52.	Sprangled Drongo	<i>Dicrurus hottentottus</i> (Gould)	केशराज चिबे	-	-
	<b>Family: Paridae</b>				
53.	Green-backed Tit	<i>Parus monticolus</i> (Vigors)	हरियो चिचिल्कोटे	-	-
54.	Black-lored Tit	<i>Parus xanthogenys</i> (Vigors)	पाण्डु चिचिल्कोटे	-	-
55.	Rufous-vented Tit	<i>Periparus rubidiventris</i> (Blyth)	सेतोगर्धने चिचिल्कोटे	-	-
	<b>Family: Aegithalidae</b>				
56.	Black-throated Tit	<i>Aegithalos concinnus</i> (Gould, 1855)	कालीकण्ठे चिचिल्कोटे	-	-
	<b>Family: Hirundinidae</b>				
57.	Plain Martin	<i>Riparia pahudicola</i> (Vieillot)	भित्तेगौथली	-	NT
58.	Barn Swallow	<i>Hirundo rustica</i> (Linnaeus)	घर गौथली	-	-
59.	Asian House Martin	<i>Delichon dasypus</i> (Bonaparte)	एशियाली भीरगौथली	-	-
60.	Nepal House Martin	<i>Delichon nipalense</i> (Moore)	नेपाल भीरगौथली	-	-
	<b>Family: Pycnonotidae</b>				
61.	Himalayan Bulbul	<i>Pycnonotus leucogenys</i> (Gray)	जुल्फे जुरेली	-	-
62.	Red-vented Bulbul	<i>Pycnonotus cafer</i> (Linnaeus)	जुरेली	-	-
63.	Mountain Bulbul	<i>Ixox maclellandii</i> (Horsfield)	कैलोपेटे जुरेली	-	-
64.	Black Bulbul	<i>Hypsipetes leucocephalus</i> (Gmelin)	बाबु जुरेली	-	-
	<b>Family: Cisticolidae</b>				
65.	Striated Prinia	<i>Prinia crinigera</i> (Hodgson)	सुया घाँसेफिस्टो	-	-
	<b>Family: Sylviidae</b>				

66.	Chestnut-headed Tesia	<i>Oligura castaneocoronata</i> (Burton)	रातोटाउके टिसिया	-	-
67.	Common Tailorbird	<i>Orthotomus sutorius</i> (Pennant)	पात सिउने फिस्टो	-	-
68.	Dusky Warbler	<i>Phylloscopus fuscatus</i> (Blyth)	गोधुली फिस्टो	-	-
69.	Tickell's Leaf Warbler	<i>Phylloscopus affinis</i> (Tickell)	पीतोदर बुनेफिस्टो	-	-
70.	Ashy-throated Warbler	<i>Phylloscopus maculipennis</i> (Blyth)	फुस्रो कण्ठे फिस्टो	-	-
71.	Lemon-rumped Warbler	<i>Phylloscopus chloroetus</i> (Gray and Gray)	पीतकटी फिस्टो	-	-
72.	Greenish Warbler	<i>Phylloscopus trochiloides</i> (Sundevall)	जीबल फिस्टो	-	-
73.	Whistler's Warbler	<i>Seicercus whistleri</i> (Ticehurst)	सुसेली फिस्टो	-	-
74.	Chestnut-crowned Warbler	<i>Seicercus castaniceps</i> (Ticehurst)	रातोटाउके फिस्टो	-	-
75.	Grey-hooded Warbler	<i>Phylloscopus xanthoscistos</i> (Gray and Gray)	तुमलकारी फिस्टो	-	-
<b>Family: Zosteropidae</b>					
76.	Oriental White-eye	<i>Zosterops palpebrosus</i> (Temminck)	कांकीर	-	-
<b>Family: Timaliidae</b>					
77.	White-throated Laughing-thrush	<i>Garrulax albogularis</i> (Gould)	सोइरने तोरीगाँडा	-	-
78.	White-crested Laughing-thrush	<i>Garrulax leucolophus</i> (Hardwicke)	हिउँजुरे तोरीगाँडा	-	-
79.	Striated Laughing-thrush	<i>Garrulax striatus</i> (Vigors)	कल्की तोरीगाँडा	-	-
80.	Variegated Laughing-thrush	<i>Garrulax variegatus</i> (Vigors)	टिकीबुरी तोरीगाँडा	-	-
81.	Spotted Laughing-thrush	<i>Garrulax ocellatus</i> (Vigors)	मुँदाले तोरीगाँडा	-	-
82.	Streaked Laughing-thrush	<i>Garrulax lineatus</i> (Vigors)	छिर्के तोरीगाँडा	-	-
83.	Scaly Laughing-thrush	<i>Garrulax subunicolor</i> (Blyth)	कत्ले तोरीगाँडा	-	-
84.	Black-faced Laughing-thrush	<i>Garrulax affinis</i> (Blyth)	कानटाटे तोरीगाँडा	-	-
85.	Chestnut-crowned Laughing-thrush	<i>Garrulax erythrocephalus</i> (Vigors)	कटुसटाउके तोरीगाँडा	-	-



Survey on The Avian Diversity Along The Annapurna Sanctuary Trekking ...

86.	Red-billed Leiothrix	<i>Leiothrix lutea</i> (Scopoli)	रोचिष्णु मिसिया	-	-
87.	Black-headed Shrike Babbler	<i>Pteruthius rufiventer</i> (Blyth)	कालोटाउके मद्राईभ्याकुर	-	-
88.	Green Shrike Babbler	<i>Pteruthius xanthochlorus</i> (Gray and Gray)	हरित मद्राईभ्याकुर	-	-
89.	Hoary-throated Barwing	<i>Actinodura nipalensis</i> (Hodgson)	बनचाहर	-	-
90.	White-browed Fulvetta	<i>Fulvetta vinipectus</i> (Hodgson)	पीतनयन फूलबुझ	-	-
91.	Red-tailed Minla	<i>Minla ignotincta</i> (Hodgson)	लालपुच्छे मिन्ला	-	-
92.	Bar-throated Minla	<i>Siva strigula</i> (Hodgson)	शिव मिन्ला	-	-
93.	Rufous Sibia	<i>Malacias capistratus</i> (Vigors)	सिबिया	-	-
94.	Whiskered Yuhina	<i>Yuhina flavicollis</i> (Hodgson)	जुगे जुरेचरा	-	-
95.	Stripe-throated Yuhina	<i>Yuhina gularis</i> (Hodgson)	शुपलकल्की जुरेचरा	-	-
96.	White-bellied Erpomis	<i>Erpornis zantholeuca</i> (Blyth)	सेतोपेटे जुरेचरा	-	-
97.	Rusty-cheeked Scimitar Babbler	<i>Pomatorhinus erythrogenys</i> (Vigors)	पाल्कोटे	-	-
98.	Slender-billed Scimitar Babbler	<i>Xiphirhynchus superciliaris</i> (Blyth)	लामोसुँडे पाल्कोटे	-	VU
99.	Scaly-breasted Wren Babbler	<i>Pnoepyga albiventer</i> (Sclater)	कत्ले ढिकुरेभ्याकुर	-	-
100.	Nepal Wren Babbler	<i>Pnoepyga immaculate</i> (Martens and Eck)	नेपाल ढिकुरेभ्याकुर	-	-
101.	Pygmy Wren Babbler	<i>Pnoepyga pusilla</i> (Hodgson)	मुसालिँडे ढिकुरेभ्याकुर	-	-
102.	Black-chinned Babbler	<i>Stachyridopsis pyrrhops</i> (Blyth)	कालोचिउँडे बनभ्याकुर	-	-
103.	Golden Babbler	<i>Stachyridopsis chrysaea</i> (Blyth)	निगाले बनभ्याकुर	-	EN
<b>Family: Sittidae</b>					
104.	Chestnut-bellied Nuthatch	<i>Sitta cinnamoventris</i> (Blyth)	कटुसे मट्टा	-	-
105.	White-tailed Nuthatch	<i>Sitta himalayensis</i> (Jardine and Selby)	पहाडी मट्टा	-	-

106.	Velvet-fronted Nuthatch	<i>Sitta frontalis</i> (Swainson)	मखमली मट्टा	-	-
107.	Wallcreeper	<i>Tichodroma muraria</i> (Linnaeus)	मुरारी पुतलीचरा	-	-
	<b>Family: Certhiidae</b>				
108.	Hodgson's Treecreeper	<i>Certhia hodgsoni</i> (Brooks)	सेतोपेटे छेपारेचरी	-	-
109.	Brown-throated Treecreeper	<i>Certhia discolor</i> (Blyth)	खैरो छेपारेचरी	-	-
	<b>Family: Troglodytidae</b>				
110.	Eurasian Wren Babbler	<i>Troglodytes troglodytes</i> (Linnaeus)	चित्री	-	-
	<b>Family: Sturnidae</b>				
111.	Jungle Myna	<i>Acridotheres fuscus</i> (Wagler)	वनरुपी	-	-
112.	Common Myna	<i>Acridotheres tristis</i> (Linnaeus)	डाह्ये रूपी	-	-
113.	Chestnut-tailed Starling	<i>Sturnia malabarica</i> (Gmelin)	फुस्रोटाउके सारौ	-	-
	<b>Family: Turdidae</b>				
114.	Blue Whistling Thrush	<i>Myophonus caeruleus</i> (Scopoli)	कल्चौडे	-	-
115.	Scaly Thrush	<i>Zoothera dauma</i> (Latham)	गात्रे चाँचर	-	-
116.	White-collared Blackbird	<i>Turdus albocinctus</i> (Royle)	कण्ठे चाँचर	-	-
117.	Grey-winged Blackbird	<i>Turdus boulboul</i> (Latham)	मदना चाँचर	-	-
118.	Red-throated Thrush	<i>Turdus ruficollis</i> (Pallas)	रातो कण्ठे चाँचर	-	-
119.	White-browed Bush Robin	<i>Tarsiger indicus</i> (Vieillot)	सेतोआँखीभौ रबिन	-	-
120.	Himalayan Bluetail	<i>Tarsiger rufilatus</i> (Hodgson)	सुन्तलाकोखे रबिन	-	-
121.	Golden Bush Robin	<i>Tarsiger chrysaëus</i> (Hodgson)	सुनौला रबिन	-	-
122.	Oriental Magpie Robin	<i>Copsychus saularis</i> (Linnaeus)	धोबिनी चरी	-	-
123.	Black Redstart	<i>Phoenicurus ochruros</i> (S.G. Gmelin)	ध्याप्ची खञ्जरी	-	-
124.	Plumbeous Water Redstart	<i>Rhyacomis fuliginosa</i> (Vigors)	नीलाम्बर जलखञ्जरी	-	-

125.	White-capped water-Redstart	<i>Chaimarrornis leucocephalus</i> (Vigors.)	सेतोटाउके जलखञ्जरी		-
126.	Little Forktail	<i>Enicurus scouleri</i> (Vigors)	गंगा खोलेशोबिनी		
127.	Spotted Forktail	<i>Enicurus maculatus</i> (Vigors)	थोप्ले खोलेशोबिनी		
128.	Common Stonechat	<i>Saxicola torquatus</i> (Linnaeus)	भयाप्सी		
129.	Pied Bushchat	<i>Saxicola caprata</i> (Linnaeus)	कौसे भयाप्सी		
130.	Grey Bushchat	<i>Saxicola ferreus</i> (Gray)	हिमाली भयाप्सी		
131.	Blue Rock Thrush	<i>Monticola solitaries</i> (Linnaeus)	उमा चाँचर	-	-
132.	Chestnut-bellied Rock Thrush	<i>Monticola rufiventris</i> (Jardine and Swlby)	हजारा चाँचर	-	-
	<b>Family: Muscicapidae</b>				
133.	Dark-sided Flycatcher	<i>Muscicapa sibirica</i> (J.F. Gmelin)	झाँसे अर्जुनक	-	-
134.	Rufous-gorgeted Flycatcher	<i>Ficedula stophiata</i> (Hodgson)	सेतोटिके अर्जुनक	-	-
135.	Kashmir Flycatcher	<i>Ficedula subrubra</i> (Hartert and Steinbacher)	काश्मीरी अर्जुनक	-	-
136.	Grey-headed Canary Flycatcher	<i>Culicicapa ceylonensis</i> (Swainson)	चञ्चले अर्जुनक	-	-
137.	Verditer Flycatcher	<i>Eumyias thalassimus</i> (Swainson)	नीलतुथो अर्जुनक	-	-
138.	Rufous-bellied Niltava	<i>Niltava sundara</i> (Hodgson)	सुन्दर नीलतभा	-	-
	<b>Family: Cinclidae</b>				
139.	Brown Dipper	<i>Cinclus pallasii</i> (Temminck)	खैरो बन्जुल	-	-
	<b>Family: Dicaeidae</b>				
140.	Fire-breasted Flowerpecker	<i>Dicaeum ignipectus</i> (Blyth)	अग्निवक्ष पुष्पकोकिल	-	-
	<b>Family: Nectariniidae</b>				
141.	Mrs Gould's Sunbird	<i>Aethopyga gouldiae</i> (Vigors)	कान्ति बुङ्गेचरा	-	-
142.	Green-tailed Sunbird	<i>Aethopyga nipalensis</i> (Hodgson)	नेपाल बुङ्गेचरा	-	-
143.	Black-throated Sunbird	<i>Aethopyga saturate</i> (Hodgson)	कालीकण्ठे बुङ्गेचरा	-	-
144.	Crimson Sunbird	<i>Aethopyga siparaja</i> (Raffles)	सिपराजा बुङ्गेचरा	-	-
145.	Fire-tailed Sunbird	<i>Aethopyga ignicauda</i> (Hodgson)	लालपुच्छे बुङ्गेचरा	-	-
	<b>Family: Estrildidae</b>				
146.	White-rumped Munia	<i>Lonchura striata</i> (Linnaeus)	सेतोढाडे मुनियाँ	-	-
147.	Scaly-breasted Munia	<i>Lonchura punctulata</i> (Linnaeus)	कोटेरो मुनियाँ	-	-

	<b>Family: Prunellidae</b>				
148.	Alpine Accentor	<i>Prunella collaris</i> (Scopoli)	हिमाली लेकचरी	-	-
149.	Altai Accentor	<i>Prunella himalayana</i> (Blyth)	बल्लाई लेकचरी	-	-
150.	Rufous-breasted Accentor	<i>Prunella fulvescens</i> (Blyth)	मुसे लेकचरी	-	-
	<b>Family: Motacillidae</b>				
151.	Grey Wagtail	<i>Motacilla cinerea</i> (Tunstall)	फुसो टिकटिके	-	-
152.	White Wagtail	<i>Motacilla alba</i> (Linnaeus)	सेतो टिकटिके	-	-
153.	Yellow Wagtail	<i>Motacilla flava</i> (Linnaeus)	पहेलो टिकटिके	-	-
154.	White-browed Wagtail	<i>Motacilla maderaspatensis</i> (Gmelin)	खोले टिकटिके	-	-
155.	Paddyfield Pipit	<i>Anthus rufulus</i> (Vieillot)	वाली चुइयाँ		
156.	Olive-backed Pipit	<i>Anthus hodgsoni</i> (Richmond)	रुख चुइयाँ	-	-
	<b>Family: Passeridae</b>				
157.	House Sparrow	<i>Passer domesticus</i> (Linnaeus)	घर भंगेरा	-	-
158.	Russet Sparrow	<i>Passer rutilans</i> (Temminck)	कैलो भंगेरा	-	-
159.	Eurasian Tree Sparrow	<i>Passer montanus</i> (Linnaeus)	रुख भंगेरा	-	-
	<b>Family: Fringillidae</b>				
160.	Tibetan Serin	<i>Serinus thibetanus</i> (Hume)	मोट सिस्कीन	-	-
161.	Yellow-breasted Greenfinch	<i>Carduelis spinoides</i> (Vigors)	गाजले पीतचरी	-	-
162.	Common Rosefinch	<i>Carpodacus erythrinus</i> (Pallas)	बमोंगा तित	-	-
163.	Beautiful Rosefinch	<i>Carpodacus pulcherrimus</i> (Moore)	फिबी तितु	-	-
164.	Spot-winged Rosefinch	<i>Carpodacus rodopeplus</i> (Vigors)	पंखयोप्ले तितु	-	-
165.	White-browed Rosefinch	<i>Carpodacus thura</i> (Bonaparte and Schlegel)	पंखयोप्ले ठूलोतितु	-	-
166.	Red-headed Bullfinch	<i>Pyrrhula erythrocephala</i> (Vigors)	रातोटाउके टिउँटिउँ	-	-

(Received July 26, 2019; revised accepted September 28, 2019)