

# Avian richness of the Basanta Protected Forest, far-western lowland Nepal: Implication for conservation

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## Abstract

Birds are important components of biodiversity and acts as an indicator of habitat quality, productivity and stability. This study aimed to document species richness and assess the temporal distribution pattern of globally threatened bird species in the Basanta Protected Forest (BPF), one of the largest corridor forests which connects Dudhwa National Park (India) with protected areas of western lowland Nepal. During study period of ten years from 2010 to 2019, a total of 381 bird species from 78 families of 19 orders were recorded. Order Passeriformes had the highest species richness (n=180) followed by order Accipitriformes and Charadriiformes. Among the families, the family Muscicapidae had the highest species richness (n=31), followed by Accipitridae and Anatidae. Majority of bird recorded were forest bird followed by wetland and farmland bird species. Fifteen globally threatened species like red-headed vulture (*Sarcogyps calvus*), white-rumped vulture (*Gyps bengalensis*), slender-billed vulture (*Gyps tenuirostris*), steppe eagle (*Aquila nipalensis*) and Egyptian vulture (*Neophron percnopterus*) were recorded in the BPF. Extensive avian survey in the BPF is important for further exploration of avian community along with its driving factors, which might play a crucial role in developing baseline information and implementing conservation implications.

**Keywords:** Bird community; Ghodaghodi; Forest; Vantage points; Passeriformes

## 1 | Introduction

Birds have been associated with forests as long as there have been birds (Sereno & Chenggang 1992). From the time of origin, birds have occupied diversified habitat and foraging strategies compared to other vertebrates (Naish 2014). Birds are good indicators of habitat quality, productivity and stability (Vallecillo et al. 2016), because they respond quickly to habitat change. Forest being one of the major habitats of bird species provides nesting (Bakermans et al. 2012), wintering sites (Wunderle Jr & Waide 1993, Bauer & Hoyer 2014) and thermal refugia (Dawson et al. 2005, Seavy 2006). And most important, forest is the source of shelter and sustenance for majority of bird species (Jordano 1995, Sekercioglu et al. 2004, Kissling et al. 2012).

Highest number of bird species are found in tropical and subtropical forests in Southeast Asia and declines towards the pole (Newton 2003). A large variety of species ranging from least concerned to threatened species are found in the forest. Majority

of the threatened bird species are found in forest (BirdLife International 2017). The anthropogenic pressure has negatively affected the forest and ultimately decreases the overall species richness (Reijnen et al. 1995, Halfwerk et al. 2011). Few decades back, it was estimated that if the deforestation and habitat degradation persisted, about 20 percent of the tropical forest by the year 2020 and more than 50 percent of the same by the year 2024 is likely to be lost (Wilson 1989). And recent studies carried on tropical forest of Brazil and Southeast Asia have concluded that biodiversity declines with habitat loss (Barlow et al. 2016, Symes et al. 2018). Studies from around the globe have found that habitat specialist bird species are most susceptible to forest disturbances (Arcilla et al. 2015, Pavlacky Jr et al. 2015, Asefa et al. 2017).

Basanta Protected Forest (BPF) is a part of Terai Arc Landscape (TAL), a Global 200 Ecoregion which is categorized as

critical/endangered (Olson & Dinerstein 2002). Forest corridor link protected areas providing refuge for wildlife population. The BPF link Sukhlaphata National Park and Bardia National Park of Nepal with Dudhwa National Park in India through the forest of Churia foothills and is frequently used by globally important mammalian species like tigers, elephants and rhinoceros. Ghodagodi lake, a globally known Ramsar site lies within Basanta forest, which is one of the major ecological importance of this forest. Having significant ecological value, this forest faces potential threats of excessive grazing, poisoning, encroachment, infrastructure development, eutrophication and Chure degradation (Gurung et al. 2018). Although numerous studies have been done focusing on the Ghodagodi wetland, proper documentation of species richness in the entire BPF is yet lacks. Knowing the importance of adjacent forest in wetland ecosystem conservation and management. This study aimed to document species richness of entire BPF and assess the temporal distribution pattern of globally threatened species.

## 2 | Materials and methods

### 2.1 | Study area

Basanta Protected Forest (BPF) with a total area of 83438.9 hectares lies in Kailali district. It occupies about 25.3 percent of total area of district. Twenty-seven lakes including largest natural lake cluster of Terai region commonly known as Ghodagodi Ramsar site lies within this protected forest. This protected forest area is composed of four different types of forests: Chir-pine forest, Chir-pine broad-leaved forest, Hill sal forest and towards Terai plains there is lower tropical sal and mixed broad-leaved forest. Dominant vegetation found are sal (*Shorea robusta*), asna or saj (*Terminalia alata*), simal (*Bombax ceiba*), khair (*Acacia catechu*) and so on. Along with this, two species- globally vulnerable satsal (*Dalbergia latifolia*) and nationally threatened vijaysal (*Pterocarpus marsupium*) were also recorded. Not only flora, this forest is also rich in faunal diversity. Globally threatened species like tiger (*Panthera tigris*), Asian elephant (*Elephas maximus*), clouded leopard (*Neofelis nebulosa*), smooth-coated otter (*Lutra perspicillata*), red-crowned roofed turtle (*Kachuga kachuga*), etc have been recorded (Bista & Shah 2010, Kafle 2009, Shrestha et al. 2014).

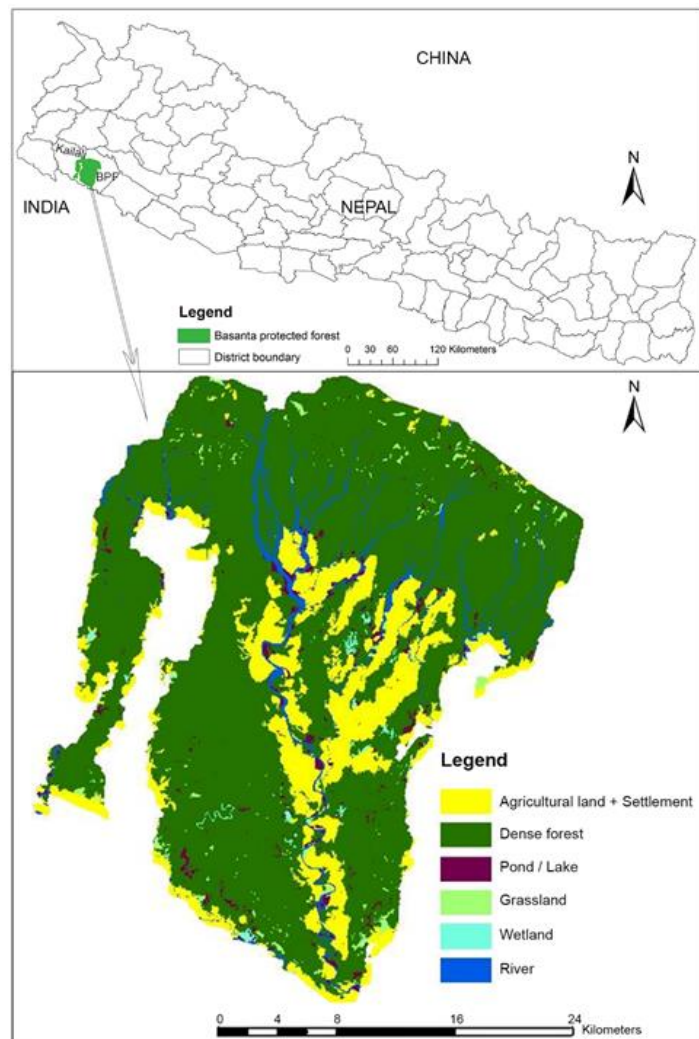


Figure 1. Map of the Basanta Protected Forest showing the land-use categories

### 2.2 | Bird survey

Different bird observation techniques were employed during study. For wetland birds, point count from vantage point was employed, vantage points were selected to cover maximum sighting distance, but not more than 1km. In each vantage point, 15 to 20 minutes time was spent tending towards as shorter time period as possible to avoid multiple counting of a single individual of the bird species. And for terrestrial birds, point count method (Bibby et al. 2000) was used. Birds observed and heard within 20m radius were recorded from a fixed point. The period of observation for a point varied based on habitat. About 20 minutes in the dense forest to detect rare and inconspicuous species (Dos Anjos & Bocon 1999, Pandey et al. 2020) and 10 minutes in an open area like cultivation/farmland. Bushnell Falcon 10\*50 wide-angle binoculars were used. Most of the data were recorded opportunistically by the first author for ten years. Opportunistic

data have been used previously for species occurrence at large geographic and temporal scale (Devictor et al. 2010). Many previous studies from avian taxa have proved similar results found from large volume of opportunistic data to those of formal bird count surveys when examining spatial and temporal patterns of bird occurrences (Munson et al. 2010, Walker & Taylor 2017). For wetland birds and threatened species field surveys were done in summer and winter seasons. The field books-‘Birds of Nepal’ (in Nepali) (Grimmet et al. 2003) and ‘Birds of Nepal’ (Grimmett et al. 2016) were used for the identification of birds.

**2.3 | Data analysis**

The collected data from the field survey were at first entered into an excel datasheet. Observed birds were classified into four feeding guilds- carnivorous, frugivorous, omnivorous and insectivorous, based on the diet descriptions available in (Sundar & Subramanya 2010, Grimmett et al. 2016). Population trend of globally threatened birds were analysed for last 10 years. All the graphs and plots were drawn using excel.

**3 | Results**

**3.1 | Avian richness of the BPF**

A total of 381 bird species was recorded representing 19 orders and 78 families. During study, conservation priority species (i.e. globally threatened species, nationally threatened species and bird species listed on CITES) were also recorded. Passeriformes (180) order was found dominant and least numbers of bird species were recorded from order Podicipediformes (Fig. 2).

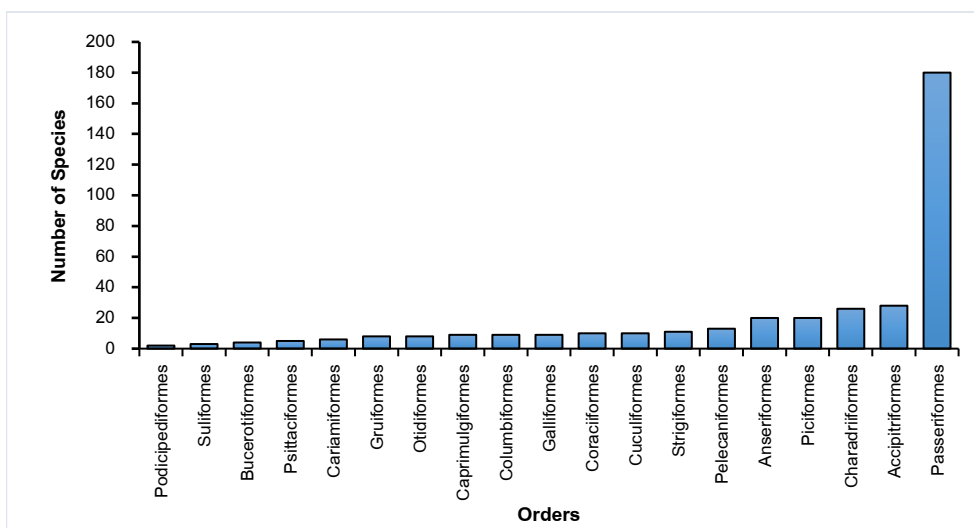


Figure 2. Number of bird species in different orders observed in the BPF, Kailali.

In case of family, highest number of species were recorded from family Muscicapidae followed by Accipitridae and lowest was recorded from families- Anhingidae, Burhinidae, Recurvirostridae and so on.

**3.2 | Species richness in different habitat types**

Among 381 bird species, 76 species of wetland birds and 305 species of terrestrial birds were recorded. In case of terrestrial birds, 46 species of agricultural/farmland birds and 259 species of forest birds were recorded (Fig. 3).

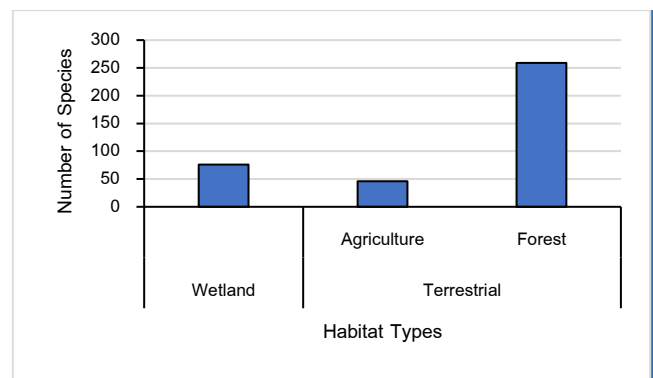


Figure 3. Species richness in different habitat types of the BPF.

**3.3 | Species richness in different feeding guilds**

Concerning feeding guilds, highest number of Insectivorous species (192) were recorded followed by Omnivorous (75) and lowest number of Granivorous (6) (Fig. 4).

**3.4 | Conservation priority birds of the BPF**

During the study, number of conservation priority species were found. A total of 15 globally threatened species, 53 nationally threatened species and 58 CITES enlisted bird species were

recorded from study area (Fig. 5) (Annex 1). Globally threatened species like red-headed vulture (*Sarcogyps calvus*), white-rumped vulture (*Gyps bengalensis*), slender-billed vulture (*Gyps tenuirostris*), Asian woolly neck (*Ciconia episcopus*) and so on were recorded (Table 1) (Fig. 6).

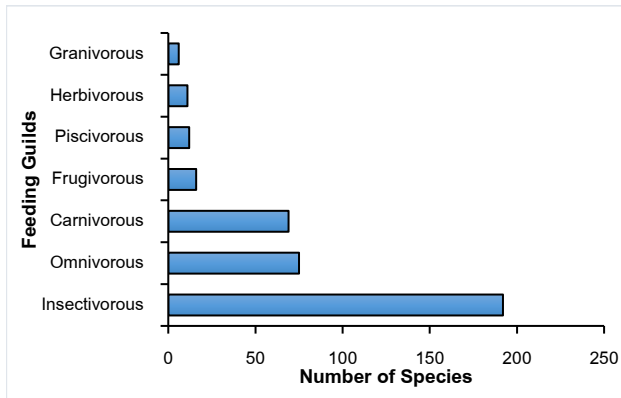


Figure 4. Species richness in different feeding guilds of birds observed in BPF, Kailali.

To assess the change in temporal pattern of globally threatened species, most frequently recorded GTS were plotted year wise (Fig. 7). The irregular temporal distribution pattern might be due to inconsistent time, season and survey effort for some globally threatened species. Globally threatened species like, swamp francolin, lesser adjutant, red-headed vulture, slender-billed vulture, steppe eagle, grey-crowned prinia and Finn’s weaver were recorded once in study period of 10 years. Vulnerable species-sarus crane has irregular temporal distribution patterns, it was recorded in year 2010-11 and did not record for 7 years.

supporting a high diversity of flora and fauna. However, the avian community of entire Basanata forest is still unexplored. Therefore, this study aimed to document species richness of entire forest and assess the temporal distribution pattern of globally

Table 1. List of globally threatened bird species recorded in the BPF, Kailali

SN	English name	Scientific name	IUCN Categories
1	Red-headed Vulture	<i>Sarcogyps calvus</i>	Critically Endangered
2	White-rumped Vulture	<i>Gyps bengalensis</i>	
3	Slender-billed Vulture	<i>Gyps tenuirostris</i>	
4	Steppe Eagle	<i>Aquila nipalensis</i>	Endangered
5	Egyptian Vulture	<i>Neophron percnopterus</i>	
6	Swamp Francolin	<i>Francolinus gularis</i>	Vulnerable
7	Common Pochard	<i>Aythya ferina</i>	
8	Sarus Crane	<i>Antigone Antigone</i>	
9	Lesser Adjutant	<i>Leptoptilos javanicus</i>	
10	Asian Woollyneck	<i>Ciconia episcopus</i>	
11	Indian Spotted Eagle	<i>Clanga hastate</i>	
12	Great Hornbill	<i>Buceros bicornis</i>	
13	Great Slaty Woodpecker	<i>Mulleripicus pulverulentus</i>	
14	Grey-crowned Prinia	<i>Prinia cinereocapilla</i>	
15	Finn’s Weaver	<i>Ploceus megarhynchus</i>	

threatened species in Basanta forest.

4.1 | Avian richness of the BPF

This study recorded a total of 381 species of birds belonging to 19 orders representing 78 families. Order Passeriformes and family Muscipidae was found dominant among the avian community, which is similar to other studies in birds (Inskipp & Inskipp 2003, Adhikari et al. 2019, Pandey et al. 2020). We observed that insectivorous form is the most species-rich feeding guild in the Basanta forest, which is consistent with many other studies in birds (Katuwal et al. 2016, Pandey et al. 2020). Highly diverse avian community of the study area might be due to greater habitat complexity (Pan et al. 2016, Hu et al. 2018). Lakes

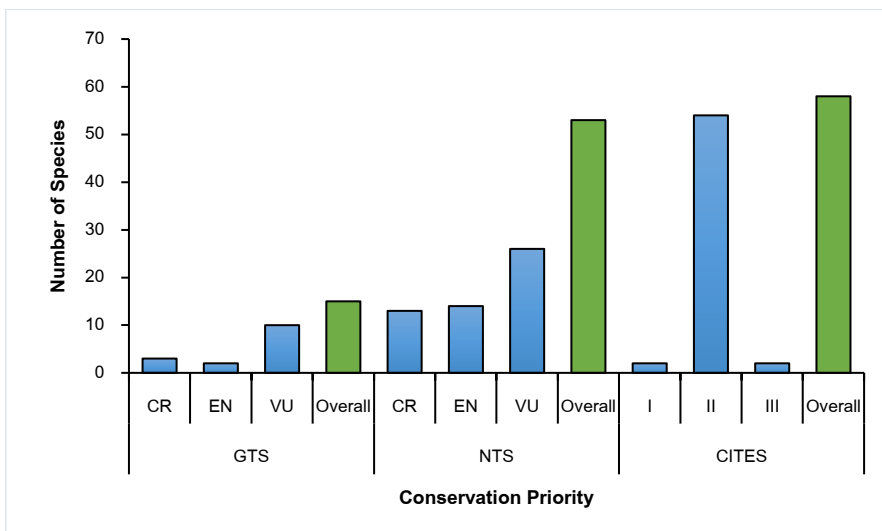


Figure 5. Species richness of conservation priority observed in BPF, Kailali.

Later, it was again recorded in year 2019-20.

4 | Discussion

Basanta forest is one of ecologically important forest of western Terai, which have a globally important Ghodagodi Ramsar site within. Climatic zonation, diverse habitat and connectivity with Dudhwa National Park of India might be the reason behind

complex, riverine habitat, forest habitat with different forest types like chir-pine forest, chir-pine broad-leaved forest, Hill sal forest, and tropical sal and mixed broadleaved forest have created habitat heterogeneity. Along with that, different land-use types include agricultural land, human settlement area, shrublands, grasslands and some barren area have supported wide habitat,

shelter and resources to the species (Canterbury et al. 2000, Schaub et al. 2010, Ferger et al. 2014, Crosby et al. 2015). In agricultural land, bare ground has been observed to be an important component of habitat for especially ground foraging insectivorous bird (Schaub et al. 2010), and some granivorous species (Moorcroft et al. 2002).

**4.2 | Globally threatened birds in the BPF**

Altogether 38 bird species from Nepal were declared as globally threatened species (BirdLife International 2020). Among that, we recorded 15 globally threatened (three Critically Endangered, two Endangered and ten Vulnerable) species in BPF alone. In national context, 168 bird species were assessed as nationally threatened species which includes 68 Critically Endangered species, 38 Endangered species and 62 Vulnerable species (Inskipp et al. 2017). A total of 53 nationally threatened (thirteen Critically Endangered, fourteen Endangered and twenty-six Vulnerable) species were recorded from this forest.

In global scenario, risk of extinction of birds is increasing day by day (White & Bennett 2015). With an increase in population, stress on forest increases and ultimately results in habitat destruction and degradation. Encroachment of forest area by local inhabitants, poaching and expansion of Mahendra highway are examples of anthropogenic actions found in the study area. Alternation of

vegetation structure and habitat fragmentation through forest degradation and deforestation are among the main threats affecting biodiversity (Sekercioglu 2002, Heikkinen et al. 2004, Chace & Walsh 2006). In many previous studies, it was found many forest specialist species are negatively affected by forest disturbance and have disappeared from some heavily transformed forests (Sekercioglu 2002, Gove et al. 2008). And, in contrast, habitat generalist species can positively exploit habitat changes induced by disturbance and better adapted to open habitats (Sekercioglu 2002, Chace & Walsh 2006).

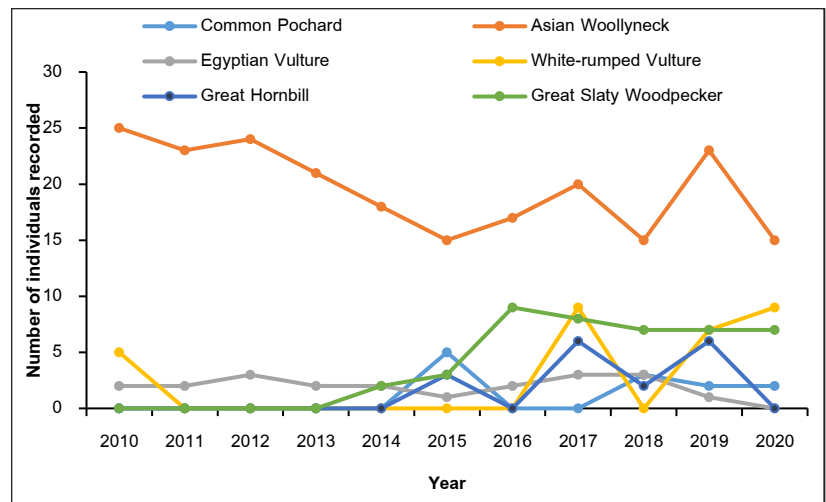


Figure 7. Temporal distribution of some globally threatened species observed in BPF, Kailali.

**4.3 | Conservation implication**

Basanta forest is one of the largest corridor forests which connects Dudhwa National Park (India) with western lowland protected areas of Nepal. Movement of flagship species like tiger (*Panthera tigris*) and elephant (*Elephas maximus*) occurs in this forest. Corridors are designed to maintain connectivity among fragmented resources and are modern approaches for heterogeneous landscape conservation. Connectivity among habitat patches are crucial for conservation and to facilitate movements between fragmented resources (Taylor et al. 1993, Hess & Fischer 2001).

Another important aspect of this forest is Ghodaghodi Ramsar site, largest natural wetland of terai lies within this forest. It is one of IBAs which harbours many wetland birds. The values of wetland ecosystem service ranks



Figure 6. Some globally threatened birds observed in the Basanta Protected forest. A, White-rumped vulture (*Gyps bengalensis*); B, Slender-billed vulture (*Gyps tenuirostris*); C, Red-headed vulture (*Sarcogyps calvus*); D, Asian woollyneck (*Ciconia episcopus*) (Photos by: Hiru Lal Dangaura).



first among all kinds of ecosystem (Costanza et al. 1997) and it is due to irreplaceable role in maintaining the global hydrological cycle, regulating the global climate, safeguarding human welfare and protecting the ecosystem diversity (Bureau 2006, Hu et al. 2017). Numbers of globally and nationally threatened species along with other bird species were found in this forest. Not only for avian fauna, it is equally important for other taxa too. So, conservation of this entire forest area is very important. Numerous studies were conducted focusing on Ghodaghodi Ramsar site. Despite being ecologically important, very few extensive surveys in the entire forest is carried till date. Anthropogenic factors were found affecting forest area and ultimately bird community. Therefore, regular monitoring of habitat change and bird community should be done to counter anthropogenic changes.

## 5 | Conclusions

The study found that entire BPF has diverse avian community and is home for large number of bird species including globally and nationally threatened species. High diverse community is due to habitat heterogeneity, diverse forest and landuse types and connectivity between protected areas. Declined occurrence of globally threatened species such as red-headed vulture, white-rumped vulture, steppe eagle, swamp francolin, Asian woollyneck etc, might be due to anthropogenic factors like encroachment, road expansion, poaching and eutrophication. Therefore, a detailed study assessing the factors affecting the avian richness in BPF is warranted.

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## Authors' contributions

Dangaura, H. L. performed field data collection. Pandey, N., Chand, D. B. and Bhusal, K. P. analysed the data and prepared manuscript. All authors contributed in manuscript improvements and approved for submission.

## Conflicts of interest

Authors declare no conflict of interest.

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## References

- Adhikari, J. N., Bhattarai, B. P. and Thapa, T. B. 2019. Factors affecting diversity and distribution of threatened birds in Chitwan National Park, Nepal. *Journal of Threatened Taxa* **11**:13511–13522. <https://doi.org/10.11609/jott.4137.11.5.13511-13522>
- Arcilla, N., Holbech, L. H. and O'Donnell, S. 2015. Severe declines of understory birds follow illegal logging in Upper Guinea forests of Ghana, West Africa. *Biological Conservation* **188**:41–49. <https://doi.org/10.1016/j.biocon.2015.02.010>
- Asefa, A., Davies, A. B., McKechnie, A. E., Kinahan, A. A. and van Rensburg, B. J. 2017. Effects of anthropogenic disturbance on bird diversity in Ethiopian montane forests. *The Condor: Ornithological Applications* **119**:416–430. <https://doi.org/10.1650/CONDOR-16-81.1>
- Bakermans, M. H., Rodewald, A. D. and Vitz, A. C. 2012. Influence of forest structure on density and nest success of mature forest birds in managed landscapes. *The Journal of Wildlife Management* **76**:1225–1234. <https://doi.org/10.1002/jwmg.349>
- Barlow, J., Lennox, G. D., Ferreira, J., Berenguer, E., Lees, A. C., Mac Nally, R., et al. 2016. Anthropogenic disturbance in tropical forests can double biodiversity loss from deforestation. *nature* **535**:144-147. <https://doi.org/10.1038/nature18326>
- Bauer, S. and Hoyer, B. J. 2014. Migratory animals couple biodiversity and ecosystem functioning worldwide. *Science* **344**. <https://doi.org/10.1126/science.1242552>
- Bibby, C. J., Burgess, N. D., Hill, D. A. and Mustoe, S. 2000. *Bird census techniques*. Academic Press, USA, p 302.
- BirdLife International 2017. Threatened birds occur in all habitats, but the majority are found in forest. Retrieved 25 September 2020, Retrieved from <http://www.birdlife.org>.
- BirdLife International 2020. Country profile: Nepal. Retrieved 25 September 2020, Retrieved from: <http://www.birdlife.org/datazone/country/nepal>.
- Bista, D. and Shah, K. 2010. Diversity and Status of the Turtles in Ghodaghodi Lake Area, Kailali district, Far West Nepal. *Journal of Natural History Museum* **25**:366–373.

- Bureau, R. C. 2006. The Ramsar Convention Manual: A Guide to the Convention on Wetlands, Ramsar, Iran, 1971. Ramsar Convention Bureau.
- Canterbury, G. E., Martin, T. E., Petit, D. R., Petit, L. J. and Bradford, D. F. 2000. Bird communities and habitat as ecological indicators of forest condition in regional monitoring. *Conservation Biology* **14**:544–558. <https://doi.org/10.1046/j.1523-1739.2000.98235.x>
- Chace, J. F. and Walsh, J. 2006. Urban effect on native avifauna: a review. *Landscape and Urban Planning* **74**:46–69. <https://doi.org/10.1016/j.landurbplan.2004.08.007>
- Costanza, R., d'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., et al. 1997. The value of the world's ecosystem services and natural capital. *Nature* **387**:253–260. <https://doi.org/https://doi.org/10.1038/387253a0>
- Crosby, A. D., Elmore, R. D., Leslie Jr, D. M. and Will, R. E. 2015. Looking beyond rare species as umbrella species: Northern Bobwhites (*Colinus virginianus*) and conservation of grassland and shrubland birds. *Biological Conservation* **186**:233–240. <https://doi.org/https://doi.org/10.1016/j.biocon.2015.03.018>
- Dawson, R. D., Lawrie, C. C. and O'Brien, E. L. 2005. The importance of microclimate variation in determining size, growth and survival of avian offspring: experimental evidence from a cavity nesting passerine. *Oecologia* **144**:499–507. <https://doi.org/https://doi.org/10.1007/s00442-005-0075-7>
- Devictor, V., Whittaker, R. J. and Beltrame, C. 2010. Beyond scarcity: citizen science programmes as useful tools for conservation biogeography. *Diversity and Distributions* **16**:354–362. <https://doi.org/10.1111/j.1472-4642.2009.00615.x>
- os Anjos, L. and Bocon, R. 1999. Bird communities in natural forest patches in southern Brazil. *The Wilson Bulletin* **111**:397–414. <https://doi.org/10.2307/4164105>
- Ferger, S. W., Schleuning, M., Hemp, A., Howell, K. M. and Böhning-Gaese, K. 2014. Food resources and vegetation structure mediate climatic effects on species richness of birds. *Global Ecology and Biogeography* **23**:541–549. <https://doi.org/10.1111/geb.12151>
- Gove, A. D., Hylander, K., Nemomisa, S. and Shimelis, A. 2008. Ethiopian coffee cultivation—Implications for bird conservation and environmental certification. *Conservation Letters* **1**:208–216. <https://doi.org/10.1111/j.1755-263X.2008.00033.x>
- Grimmet, R., Inskipp, C., Inskipp, T. and Baral, H. S. 2003. Nepalka charaharu. *Bird Conservation Nepal*.
- Grimmet, R., Inskipp, C., Inskipp, T. and Baral, H. S. 2016. *Birds of Nepal*. Bloomsbury Publishing, UK, p 386.
- Gurung, B., Jnawali, S. R., Dhakal, T., Bhattarai, B., Thapa, G. J. and Wikramanayake, E. 2018. Participatory threat assessment of two major wildlife corridors in the terai arc landscape. *Parks* **24**:97. <https://doi.org/10.2305/IUCN.CH.2018.PARKS-24-1.en>
- Halfwerk, W., Holleman, L. J., Lessells, C. M. and Slabbekoorn, H. 2011. Negative impact of traffic noise on avian reproductive success. *Journal of Applied Ecology* **48**:210–219. <https://doi.org/10.1111/j.1365-2664.2010.01914.x>
- Heikkinen, R. K., Luoto, M., Virkkala, R. and Rainio, K. 2004. Effects of habitat cover, landscape structure and spatial variables on the abundance of birds in an agricultural–forest mosaic. *Journal of Applied Ecology* **41**:824–835. <https://doi.org/10.1111/j.0021-8901.2004.00938.x>
- Hess, G. R. and Fischer, R. A. 2001. Communicating clearly about conservation corridors. *Landscape and Urban Planning* **55**:195–208. [https://doi.org/10.1016/S0169-2046\(01\)00155-4](https://doi.org/10.1016/S0169-2046(01)00155-4)
- Hu, S., Niu, Z., Chen, Y., Li, L. and Zhang, H. 2017. Global wetlands: Potential distribution, wetland loss, and status. *Science of the Total Environment* **586**:319–327. <https://doi.org/10.1016/j.scitotenv.2017.02.001>
- Hu, Y., Ding, Z., Jiang, Z., Quan, Q., Guo, K., Tian, L., et al. 2018. Birds in the Himalayas: What drives beta diversity patterns along an elevational gradient? *Ecology and evolution* **8**:11704–11716. <https://doi.org/10.1002/ece3.4622>
- Inskipp, C., Baral, H. S., Inskipp, T., Khatiwada, A. P., Khatiwada, M. P., Poudyal, L. P., et al. 2017. Nepal's National Red List of Birds. *Journal of Threatened Taxa* **9**:9700. <https://doi.org/10.11609/jott.2855.9.1.9700-9722>
- Inskipp, C. and Inskipp, T. 2003. Bird conservation priorities of the Annapurna Conservation Area. Report submitted to UNEP-WCMC/King Mahendra Trust for Nature Conservation / Annapurna Conservation Area Project.
- Jordano, P. 1995. Angiosperm fleshy fruits and seed dispersers: a comparative analysis of adaptation and constraints in plant-animal interactions. *The American Naturalist* **145**:163–191. <https://doi.org/10.1086/285735>
- Kafle, G. 2009. A review on Research and Conservation of Otters in Nepal. IUCN Otter Specialist Group Bulletin **26**:32–43.
- Katuwal, H. B., Basnet, K., Khanal, B., Devkota, S., Rai, S. K., Gajurel, J. P., et al. 2016. Seasonal changes in bird species and feeding guilds along elevational gradients of the Central Himalayas, Nepal. *PLoS One* **11**:e0158362. <https://doi.org/10.1371/journal.pone.0158362>
- Kissling, W. D., Sekercioglu, C. H. and Jetz, W. 2012. Bird dietary guild richness across latitudes, environments and biogeographic regions. *Global Ecology and Biogeography* **21**:328–340. <https://doi.org/10.1111/j.1466-8238.2011.00679.x>
- Moorcroft, D., Whittingham, M., Bradbury, R. and Wilson, J. 2002. The selection of stubble fields by wintering granivorous birds reflects

- vegetation cover and food abundance. *Journal of Applied Ecology* 535–547.  
<https://doi.org/10.1046/j.1365-2664.2002.00730.x>
- Munson, M. A., Caruana, R., Fink, D., Hochachka, W. M., Iliff, M., Rosenberg, K. V., et al. 2010. A method for measuring the relative information content of data from different monitoring protocols. *Methods in Ecology and Evolution* 1:263–273.  
<https://doi.org/10.1111/j.2041-210X.2010.00035.x>
- Naish, D. 2014. The fossil record of bird behaviour. *Journal of Zoology* 292:268–280. <https://doi.org/10.1111/jzo.12113>
- Newton, I. 2003. *Speciation and biogeography of birds*. Academic Press, USA, p 656.
- Olson, D. M. and Dinerstein, E. 2002. The Global 200: Priority ecoregions for global conservation. *Annals of the Missouri Botanical Garden* 199–224. <https://doi.org/10.2307/3298564>
- Pan, X., Ding, Z., Hu, Y., Liang, J., Wu, Y., Si, X., et al. 2016. Elevational pattern of bird species richness and its causes along a central Himalaya gradient, China. *PeerJ* 4:e2636.  
<https://doi.org/10.7717/peerj.2636>
- Pandey, N., Khanal, L. and Chalise, M. K. 2020. Correlates of avifaunal diversity along the elevational gradient of Mardi Himal in Annapurna Conservation Area, Central Nepal. *Avian Research* 11. <https://doi.org/10.1186/s40657-020-00217-6>
- Pavlacky Jr, D. C., Possingham, H. P. and Goldizen, A. W. 2015. Integrating life history traits and forest structure to evaluate the vulnerability of rainforest birds along gradients of deforestation and fragmentation in eastern Australia. *Biological Conservation* 188:89–99. <https://doi.org/10.1016/j.biocon.2014.10.020>
- Reijnen, R., Foppen, R., Braak, C. T. and Thissen, J. 1995. The effects of car traffic on breeding bird populations in woodland. III. Reduction of density in relation to the proximity of main roads. *Journal of Applied Ecology* 187–202.  
<https://doi.org/10.2307/2404428>
- Schaub, M., Martinez, N., Tagmann-Isoset, A., Weisshaupt, N., Maurer, M. L., Reichlin, T. S., et al. 2010. Patches of bare ground as a staple commodity for declining ground-foraging insectivorous farmland birds. *PLoS One* 5:e13115.  
<https://doi.org/10.1371/journal.pone.0013115>
- Seavy, N. 2006. Physiological correlates of habitat association in East African sunbirds (Nectariniidae). *Journal of Zoology* 270:290–297. <https://doi.org/10.1111/j.1469-7998.2006.00138.x>
- Sekercioglu, C. H. 2002. Effects of forestry practices on vegetation structure and bird community of Kibale National Park, Uganda. *Biological Conservation* 107:229–240.  
[https://doi.org/10.1016/S0006-3207\(02\)00097-6](https://doi.org/10.1016/S0006-3207(02)00097-6)
- Sekercioglu, C. H., Daily, G. C. and Ehrlich, P. R. 2004. Ecosystem consequences of bird declines. *Proceedings of the National Academy of Sciences* 101:18042–18047.  
<https://doi.org/10.1073/pnas.0408049101>
- Sereno, P. C. and Chenggang, R. 1992. Early evolution of avian flight and perching: new evidence from the Lower Cretaceous of China. *Science* 255:845–848.  
<https://doi.org/10.1126/science.255.5046.845>
- Shrestha, T. K., Aryal, A., Rai, R. K., Lamsal, R. P., Koirala, S., Jnawali, D., et al. 2014. Balancing wildlife and human needs: the protected forest approach in Nepal. *Natural Areas Journal* 34:376–380. <https://doi.org/10.3375/043.034.0313>
- Sundar, K. G. and Subramanya, S. 2010. Bird use of rice fields in the Indian subcontinent. *Waterbirds* 33:44–70.  
<https://doi.org/10.1675/063.033.s104>
- Symes, W. S., Edwards, D. P., Miettinen, J., Rheindt, F. E. and Carrasco, L. R. 2018. Combined impacts of deforestation and wildlife trade on tropical biodiversity are severely underestimated. *Nature communications* 9:1–9.  
<https://doi.org/10.1038/s41467-018-06579-2>
- Taylor, P. D., Fahrig, L., Henein, K. and Merriam, G. 1993. Connectivity is a vital element of landscape structure. *Oikos* 68(3):571–573.  
<https://doi.org/10.2307/3544927>
- Vallecillo, S., Maes, J., Polce, C. and Lavalley, C. 2016. A habitat quality indicator for common birds in Europe based on species distribution models. *Ecological Indicators* 69:488–499.  
<https://doi.org/10.1016/j.ecolind.2016.05.008>
- Walker, J. and Taylor, P. 2017. Using eBird data to model population change of migratory bird species. *Avian Conservation and Ecology* 12. <https://doi.org/10.5751/ACE-00960-120104>
- White, R. L. and Bennett, P. M. 2015. Elevational distribution and extinction risk in birds. *PLoS One* 10:e0121849.  
<https://doi.org/10.1371/journal.pone.0121849>
- Wilson, E. O. 1989. Conservation: the next hundred years. *Conservation for the Twenty-first Century*, pp 3–7.
- Wunderle Jr, J. M. and Waide, R. B. 1993. Distribution of overwintering Nearctic migrants in the Bahamas and Greater Antilles. *The Condor* 95:904–933. <https://doi.org/10.2307/1369428>

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**Annex 1: List of bird species from Basanta forest and their taxonomic position, feeding guild category and conservation priority.**

**Note:** GTC: Globally Threatened Category, NTC: Nationally Threatened Category, CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora (O: Omnivores, H: Herbivores, I: Insectivores, P: Piscivores, G: Granivores, C: Carnivores, F: Frugivores)

SN	Order	Family	English name	Scientific name	Feeding Guilds	GTC/NTC/CITES
1	Galliformes	Phasianidae	hill partridge	<i>Arborophila torqueola</i>	O	
2	Galliformes	Phasianidae	common quail	<i>Coturnix coturnix</i>	O	
3	Galliformes	Phasianidae	rain quail	<i>Coturnix coromandelica</i>	O	
4	Galliformes	Phasianidae	black francolin	<i>Francolinus francolinus</i>	O	
5	Galliformes	Phasianidae	grey francolin	<i>Francolinus pondicerianus</i>	O	..N/VI..
6	Galliformes	Phasianidae	swamp francolin	<i>Francolinus gularis</i>	O	VU/EN/..
7	Galliformes	Phasianidae	Indian peafowl	<i>Pavo cristatus</i>	O	..I..III
8	Galliformes	Phasianidae	red junglefowl	<i>Gallus gallus</i>	O	
9	Galliformes	Phasianidae	kalij pheasant	<i>Lophura leucomelanos</i>	O	..I..III
10	Anseriformes	Anatidae	lesser whistling duck	<i>Dendrocygna javanica</i>	H	
11	Anseriformes	Anatidae	greylag goose	<i>Anser anser</i>	H	
12	Anseriformes	Anatidae	goosander	<i>Mergus merganser</i>	P	
13	Anseriformes	Anatidae	ruddy shelduck	<i>Tadorna ferruginea</i>	H	
14	Anseriformes	Anatidae	common shelduck	<i>Tadorna tadorna</i>	I	
15	Anseriformes	Anatidae	African comb duck	<i>Sarkidiornis melanotos</i>	H	..EN/II
16	Anseriformes	Anatidae	cotton pygmy-goose	<i>Nettapus coromandelianus</i>	H	..N/VI..
17	Anseriformes	Anatidae	red-crested pochard	<i>Netta rufina</i>	H	
18	Anseriformes	Anatidae	common pochard	<i>Aythya ferina</i>	O	VU..I..
19	Anseriformes	Anatidae	ferruginous duck	<i>Aythya nyroca</i>	O	..N/VI..
20	Anseriformes	Anatidae	tufted duck	<i>Aythya fuligula</i>	C	
21	Anseriformes	Anatidae	garganey	<i>Spatula querquedula</i>	O	..N/VI..
22	Anseriformes	Anatidae	northern shoveler	<i>Spatula clypeata</i>	O	
23	Anseriformes	Anatidae	falcated duck	<i>Mareca falcata</i>	H	..CR/..
24	Anseriformes	Anatidae	gadwall	<i>Mareca strepera</i>	H	
25	Anseriformes	Anatidae	Eurasian wigeon	<i>Anas penelope</i>	H	
26	Anseriformes	Anatidae	Indian spot-billed duck	<i>Anas poecilorhyncha</i>	O	
27	Anseriformes	Anatidae	mallard	<i>Anas platyrhynchos</i>	O	
28	Anseriformes	Anatidae	northern pintail	<i>Anas acuta</i>	O	..EN/..
29	Anseriformes	Anatidae	common teal	<i>Anas crecca</i>	O	
30	Podicipediformes	Podicipedidae	little grebe	<i>Tachybaptus ruficollis</i>	P	
31	Podicipediformes	Podicipedidae	great crested grebe	<i>Podiceps cristatus</i>	P	
32	Columbiformes	Columbidae	rock dove	<i>Columba livia</i>	G	
33	Columbiformes	Columbidae	Oriental turtle-dove	<i>Streptopelia orientalis</i>	G	
34	Columbiformes	Columbidae	Eurasian collared-dove	<i>Streptopelia decaocto</i>	G	
35	Columbiformes	Columbidae	red turtle-dove	<i>Streptopelia tranquebarica</i>	G	
36	Columbiformes	Columbidae	western spotted dove	<i>Spilopelia suratsensis</i>	G	
37	Columbiformes	Columbidae	grey-capped emerald dove	<i>Chalcophaps indica</i>	G	
38	Columbiformes	Columbidae	orange-breasted green-pigeon	<i>Treron bicinctus</i>	F	

39	Columbiformes	Columbidae	ashy-headed green-pigeon	<i>Treron phayrei</i>	F	
40	Columbiformes	Columbidae	yellow-footed green-pigeon	<i>Treron phoenicopterus</i>	F	
41	Caprimulgiformes	Caprimulgidae	grey nightjar	<i>Caprimulgus jotaka</i>	I	
42	Caprimulgiformes	Caprimulgidae	large-tailed nightjar	<i>Caprimulgus macrurus</i>	I	
43	Caprimulgiformes	Caprimulgidae	Indian nightjar	<i>Caprimulgus asiaticus</i>	I	../EN/..
44	Caprimulgiformes	Caprimulgidae	savanna nightjar	<i>Caprimulgus affinis</i>	I	
45	Caprimulgiformes	Apodidae	white-rumped spinetail	<i>Zoonavena sylvatica</i>	I	
46	Caprimulgiformes	Apodidae	white-throated needletail	<i>Hirundapus caudacutus</i>	I	
47	Caprimulgiformes	Apodidae	Himalayan swiftlet	<i>Aerodramus brevirostris</i>	I	
48	Caprimulgiformes	Apodidae	alpine swift	<i>Tachymarptis melba</i>	I	
49	Caprimulgiformes	Apodidae	house swift	<i>Apus nipalensis</i>	I	
50	Cuculiformes	Cuculidae	greater coucal	<i>Centropus sinensis</i>	C	
51	Cuculiformes	Cuculidae	lesser coucal	<i>Centropus bengalensis</i>	I	
52	Cuculiformes	Cuculidae	sirkeer malkoha	<i>Taccocua leschenaultii</i>	I	
53	Cuculiformes	Cuculidae	green-billed malkoha	<i>Phaenicophaeus tristis</i>	I	
54	Cuculiformes	Cuculidae	Jacobin cuckoo	<i>Clamator jacobinus</i>	I	
55	Cuculiformes	Cuculidae	western koel	<i>Eudynamys scolopaceus</i>	F	
56	Cuculiformes	Cuculidae	grey-bellied cuckoo	<i>Cacomantis passerinus</i>	I	
57	Cuculiformes	Cuculidae	common hawk-cuckoo	<i>Hierococcyx varius</i>	I	
58	Cuculiformes	Cuculidae	Indian cuckoo	<i>Cuculus micropterus</i>	I	
59	Cuculiformes	Cuculidae	common cuckoo	<i>Cuculus canorus</i>	I	
60	Gruiformes	Rallidae	ruddy-breasted crane	<i>Zapornia fusca</i>	O	
61	Gruiformes	Rallidae	brown crane	<i>Zapornia akool</i>	O	
62	Gruiformes	Rallidae	white-breasted waterhen	<i>Amauornis phoenicurus</i>	I	
63	Gruiformes	Rallidae	purple swamphen	<i>Porphyrio porphyrio</i>	O	
64	Gruiformes	Rallidae	common moorhen	<i>Gallinula chloropus</i>	O	
65	Gruiformes	Rallidae	common coot	<i>Fulica atra</i>	O	
66	Gruiformes	Gruidae	sarus crane	<i>Antigone antigone</i>	O	VU/VU/II
67	Gruiformes	Gruidae	Demoiselle crane	<i>Anthropoides virgo</i>	O	../VU/II
68	Otidiformes	Ciconiidae	lesser adjutant	<i>Leptoptilos javanicus</i>	C	VU/VU/..
69	Otidiformes	Ciconiidae	painted stork	<i>Mycteria leucocephala</i>	P	../EN/..
70	Otidiformes	Ciconiidae	Asian openbill	<i>Anastomus oscitans</i>	C	../VU/..
71	Otidiformes	Ciconiidae	black stork	<i>Ciconia nigra</i>	C	../VU/II
72	Otidiformes	Ciconiidae	Asian woollyneck	<i>Ciconia episcopus</i>	C	VU/./..
73	Otidiformes	Ciconiidae	black-necked stork	<i>Ephippiorhynchus asiaticus</i>	C	../CR/..
74	Otidiformes	Threskiornithidae	black-headed ibis	<i>Threskiornis melanocephalus</i>	I	
75	Otidiformes	Threskiornithidae	red-naped ibis	<i>Pseudibis papillosa</i>	I	
76	Pelecaniformes	Ardeidae	Eurasian bittern	<i>Botaurus stellaris</i>	C	../EN/..
77	Pelecaniformes	Ardeidae	yellow bittern	<i>Ixobrychus sinensis</i>	C	
78	Pelecaniformes	Ardeidae	cinnamon bittern	<i>Ixobrychus cinnamomeus</i>	C	
79	Pelecaniformes	Ardeidae	black bittern	<i>Ixobrychus flavicollis</i>	C	../EN/..
80	Pelecaniformes	Ardeidae	black-crowned night-heron	<i>Nycticorax nycticorax</i>	C	
81	Pelecaniformes	Ardeidae	green-backed heron	<i>Butorides striata</i>	C	
82	Pelecaniformes	Ardeidae	Indian pond-heron	<i>Ardeola grayii</i>	C	
83	Pelecaniformes	Ardeidae	cattle egret	<i>Bubulcus ibis</i>	C	
84	Pelecaniformes	Ardeidae	grey heron	<i>Ardea cinerea</i>	C	
85	Pelecaniformes	Ardeidae	purple heron	<i>Ardea purpurea</i>	C	

86	Pelecaniformes	Ardeidae	great white egret	<i>Ardea alba</i>	C	
87	Pelecaniformes	Ardeidae	intermediate egret	<i>Ardea intermedia</i>	C	
88	Pelecaniformes	Ardeidae	little egret	<i>Egretta garzetta</i>	C	
89	Suliformes	Phalacrocoracidae	little cormorant	<i>Microcarbo niger</i>	P	
90	Suliformes	Phalacrocoracidae	great cormorant	<i>Phalacrocorax carbo</i>	P	
91	Suliformes	Anhingidae	Oriental darter	<i>Anhinga melanogaster</i>	P	
92	Charadriiformes	Burhinidae	Indian thick-knee	<i>Burhinus indicus</i>	I	
93	Charadriiformes	Recurvirostridae	black-winged stilt	<i>Himantopus himantopus</i>	I	
94	Charadriiformes	Charadriidae	little ringed plover	<i>Charadrius dubius</i>	I	
95	Charadriiformes	Charadriidae	river lapwing	<i>Vanellus duvaucelii</i>	I	
96	Charadriiformes	Charadriidae	yellow-wattled lapwing	<i>Vanellus malabaricus</i>	I	..NU/..
97	Charadriiformes	Charadriidae	grey-headed lapwing	<i>Vanellus cinereus</i>	I	
98	Charadriiformes	Charadriidae	red-wattled lapwing	<i>Vanellus indicus</i>	I	
99	Charadriiformes	Rostratulidae	greater painted-snipe	<i>Rostratula benghalensis</i>	O	
100	Charadriiformes	Jacaniidae	pheasant-tailed jacana	<i>Hydrophasianus chirurgus</i>	I	..NU/..
101	Charadriiformes	Jacaniidae	bronze-winged jacana	<i>Metopidius indicus</i>	I	
102	Charadriiformes	Scolopacidae	little stint	<i>Calidris minuta</i>	I	
103	Charadriiformes	Scolopacidae	pintail snipe	<i>Gallinago stenura</i>	I	
104	Charadriiformes	Scolopacidae	common snipe	<i>Gallinago gallinago</i>	I	
105	Charadriiformes	Scolopacidae	common sandpiper	<i>Actitis hypoleucos</i>	I	
106	Charadriiformes	Scolopacidae	green sandpiper	<i>Tringa ochropus</i>	I	
107	Charadriiformes	Scolopacidae	common greenshank	<i>Tringa nebularia</i>	I	
108	Charadriiformes	Scolopacidae	common redshank	<i>Tringa totanus</i>	I	
109	Charadriiformes	Scolopacidae	wood sandpiper	<i>Tringa glareola</i>	I	
110	Charadriiformes	Scolopacidae	marsh sandpiper	<i>Tringa stagnatilis</i>	I	
111	Charadriiformes	Turnicidae	common buttonquail	<i>Turnix sylvaticus</i>	O	
112	Charadriiformes	Glareolidae	oriental pratincole	<i>Glareola maldivarum</i>	I	
113	Charadriiformes	Glareolidae	little pratincole	<i>Glareola lactea</i>	I	
114	Charadriiformes	Laridae	brown-headed gull	<i>Larus brunnicapillus</i>	P	..NU/..
115	Charadriiformes	Laridae	Pallas's gull	<i>Larus ichthyaetus</i>	P	
116	Charadriiformes	Laridae	whiskered tern	<i>Chlidonias hybrida</i>	P	
117	Charadriiformes	Laridae	river tern	<i>Sterna aurantia</i>	P	..CR/..
118	Strigiformes	Tytonidae	common barn-owl	<i>Tyto alba</i>	C	..NU/II
119	Strigiformes	Strigidae	Asian barred owl	<i>Glaucidium cuculoides</i>	C	..I/..II
120	Strigiformes	Strigidae	jungle owl	<i>Glaucidium radiatum</i>	C	..I/..II
121	Strigiformes	Strigidae	spotted owl	<i>Athene brama</i>	C	..I/..II
122	Strigiformes	Strigidae	collared scops-owl	<i>Otus lettia</i>	I	..I/..II
123	Strigiformes	Strigidae	Indian scops-owl	<i>Otus bakkamoena</i>	I	..I/..II
124	Strigiformes	Strigidae	mountain scops-owl	<i>Otus spilocephalus</i>	C	..I/..II
125	Strigiformes	Strigidae	Oriental scops-owl	<i>Otus sunia</i>	C	..I/..II
126	Strigiformes	Strigidae	brown wood-owl	<i>Strix leptogrammica</i>	C	..NU/II
127	Strigiformes	Strigidae	dusky eagle-owl	<i>Bubo coromandus</i>	C	..CR/II
128	Strigiformes	Strigidae	brown fish-owl	<i>Ketupa zeylonensis</i>	C	..NU/II
129	Accipitriformes	Pandionidae	osprey	<i>Pandion haliaetus</i>	P	..I/..II
130	Accipitriformes	Accipitridae	black-winged kite	<i>Elanus caeruleus</i>	C	..I/..II
131	Accipitriformes	Accipitridae	Oriental honey-buzzard	<i>Pernis ptilorhynchus</i>	C	..I/..II
132	Accipitriformes	Accipitridae	crested serpent-eagle	<i>Spilornis cheela</i>	C	..I/..II

133	Accipitriformes	Accipitridae	short-toed snake-eagle	<i>Circaetus gallicus</i>	C	../II
134	Accipitriformes	Accipitridae	Egyptian vulture	<i>Neophron percnopterus</i>	C	EN/VU/II
135	Accipitriformes	Accipitridae	red-headed vulture	<i>Sarcogyps calvus</i>	C	CR/EN/II
136	Accipitriformes	Accipitridae	Himalayan griffon	<i>Gyps himalayensis</i>	C	../VU/II
137	Accipitriformes	Accipitridae	white-rumped vulture	<i>Gyps bengalensis</i>	C	CR/CR/II
138	Accipitriformes	Accipitridae	slender-billed vulture	<i>Gyps tenuirostris</i>	C	CR/CR/II
139	Accipitriformes	Accipitridae	griffon vulture	<i>Gyps fulvus</i>	C	../II
140	Accipitriformes	Accipitridae	cinereous vulture	<i>Aegypius monachus</i>	C	../EN/II
141	Accipitriformes	Accipitridae	mountain hawk-eagle	<i>Nisaetus nipalensis</i>	C	../II
142	Accipitriformes	Accipitridae	changeable hawk-eagle	<i>Nisaetus cirrhatus</i>	C	../II
143	Accipitriformes	Accipitridae	rufous-bellied eagle	<i>Lophotriorchis kienerii</i>	C	../CR/II
144	Accipitriformes	Accipitridae	Indian spotted eagle	<i>Clanga hastata</i>	C	VU/VU/II
145	Accipitriformes	Accipitridae	steppe eagle	<i>Aquila nipalensis</i>	C	EN/VU/II
146	Accipitriformes	Accipitridae	booted eagle	<i>Hieraaetus pennatus</i>	C	../II
147	Accipitriformes	Accipitridae	western marsh-harrier	<i>Circus aeruginosus</i>	C	../VU/II
148	Accipitriformes	Accipitridae	hen harrier	<i>Circus cyaneus</i>	C	../VU/II
149	Accipitriformes	Accipitridae	ped harrier	<i>Circus melanoleucos</i>	C	../VU/II
150	Accipitriformes	Accipitridae	shikra	<i>Accipiter badius</i>	C	../II
151	Accipitriformes	Accipitridae	besra	<i>Accipiter virgatus</i>	C	../II
152	Accipitriformes	Accipitridae	Eurasian sparrow hawk	<i>Accipiter nisus</i>	C	../II
153	Accipitriformes	Accipitridae	grey-headed fish-eagle	<i>Ichthyophaga ichthyaetus</i>	C	../CR/II
154	Accipitriformes	Accipitridae	black kite	<i>Milvus migrans</i>	C	../II
155	Accipitriformes	Accipitridae	white-eyed buzzard	<i>Butastur teesa</i>	C	../II
156	Accipitriformes	Accipitridae	Himalayan buzzard	<i>Buteo refectus</i>	C	../II
157	Bucerotiformes	Bucerotidae	great hornbill	<i>Buceros bicornis</i>	F	VU/EN/I
158	Bucerotiformes	Bucerotidae	Indian grey hornbill	<i>Ocyrceros birostris</i>	F	
159	Bucerotiformes	Bucerotidae	Oriental pied hornbill	<i>Anthracoceros albirostris</i>	F	../II
160	Bucerotiformes	Upupidae	common hoopoe	<i>Upupa epops</i>	I	
161	Coraciiformes	Meropidae	blue-bearded bee-eater	<i>Nyctornis athertoni</i>	I	
162	Coraciiformes	Meropidae	Asian green bee-eater	<i>Merops orientalis</i>	I	
163	Coraciiformes	Meropidae	chestnut-headed bee-eater	<i>Merops leschenaulti</i>	I	
164	Coraciiformes	Meropidae	blue-tailed bee-eater	<i>Merops philippinus</i>	I	
165	Coraciiformes	Coraciidae	Indian roller	<i>Coracias benghalensis</i>	C	
166	Coraciiformes	Alcedinidae	blue-eared kingfisher	<i>Alcedo meninting</i>	C	../EN/..
167	Coraciiformes	Alcedinidae	common kingfisher	<i>Alcedo atthis</i>	C	
168	Coraciiformes	Alcedinidae	ped kingfisher	<i>Ceryle rudis</i>	C	
169	Coraciiformes	Alcedinidae	stork-billed kingfisher	<i>Pelargopsis capensis</i>	C	
170	Coraciiformes	Alcedinidae	white-breasted kingfisher	<i>Halcyon smyrnensis</i>	C	
171	Piciformes	Megalaimidae	coppersmith barbet	<i>Psilopogon haemacephalus</i>	F	
172	Piciformes	Megalaimidae	great barbet	<i>Psilopogon virens</i>	F	
173	Piciformes	Megalaimidae	lineated barbet	<i>Psilopogon lineatus</i>	F	
174	Piciformes	Megalaimidae	brown-headed barbet	<i>Psilopogon zeylanicus</i>	F	
175	Piciformes	Megalaimidae	blue-throated barbet	<i>Psilopogon asiaticus</i>	F	
176	Piciformes	Picidae	Eurasian wryneck	<i>Jynx torquilla</i>	I	
177	Piciformes	Picidae	speckled piculet	<i>Picumnus innominatus</i>	I	
178	Piciformes	Picidae	bay woodpecker	<i>Blythipicus pyrrhotis</i>	I	
179	Piciformes	Picidae	greater flameback	<i>Chrysocolaptes guttacristatus</i>	I	

180	Piciformes	Picidae	Himalayan flameback	<i>Dinopium shorii</i>	I	
181	Piciformes	Picidae	black-rumped flameback	<i>Dinopium benghalense</i>	I	
182	Piciformes	Picidae	rufous woodpecker	<i>Micropternus brachyurus</i>	I	
183	Piciformes	Picidae	lesser yellownape	<i>Picus chlorolophus</i>	I	
184	Piciformes	Picidae	streak-throated woodpecker	<i>Picus xanthopygaeus</i>	I	
185	Piciformes	Picidae	great slaty woodpecker	<i>Mulleripicus pulverulentus</i>	I	VU/EN/..
186	Piciformes	Picidae	grey-capped woodpecker	<i>Picoides canicapillus</i>	I	
187	Piciformes	Picidae	Indian pygmy woodpecker	<i>Picoides nanus</i>	I	
188	Piciformes	Picidae	yellow-crowned woodpecker	<i>Leiopicus mahrattensis</i>	I	
189	Piciformes	Picidae	brown-fronted woodpecker	<i>Leiopicus auriceps</i>	I	
190	Piciformes	Picidae	fulvous-breasted woodpecker	<i>Dendrocopos macei</i>	I	
191	Cariamiformes	Falconidae	lesser kestrel	<i>Falco naumanni</i>	C	..I/II
192	Cariamiformes	Falconidae	common kestrel	<i>Falco tinnunculus</i>	C	..I/II
193	Cariamiformes	Falconidae	red-headed falcon	<i>Falco chicquera</i>	C	..EN/II
194	Cariamiformes	Falconidae	Eurasian hobby	<i>Falco subbuteo</i>	I	..I/II
195	Cariamiformes	Falconidae	Oriental hobby	<i>Falco severus</i>	I	..CR/II
196	Cariamiformes	Falconidae	Peregrine falcon	<i>Falco peregrinus</i>	C	..I/I
197	Psittaciformes	Psittacidae	slaty-headed parakeet	<i>Psittacula himalayana</i>	F	..I/II
198	Psittaciformes	Psittacidae	plum-headed parakeet	<i>Psittacula cyanocephala</i>	H	..I/II
199	Psittaciformes	Psittacidae	red-breasted parakeet	<i>Psittacula alexandri</i>	F	..VU/II
200	Psittaciformes	Psittacidae	alexandrine parakeet	<i>Psittacula eupatria</i>	F	..I/II
201	Psittaciformes	Psittacidae	rose-ringed parakeet	<i>Psittacula krameri</i>	F	
202	Passeriformes	Pittidae	Indian pitta	<i>Pitta brachyura</i>	I	
203	Passeriformes	Oriolidae	maroon oriole	<i>Oriolus traillii</i>	O	
204	Passeriformes	Oriolidae	black-hooded oriole	<i>Oriolus xanthornus</i>	O	
205	Passeriformes	Oriolidae	Indian golden oriole	<i>Oriolus kundoo</i>	O	
206	Passeriformes	Oriolidae	slender-billed oriole	<i>Oriolus tenuirostris</i>	O	
207	Passeriformes	Vireonidae	white-browed shrike-babbler	<i>Pteruthius aeralatus</i>	I	
208	Passeriformes	Vireonidae	white-bellied erpornis	<i>Erpornis zantholeuca</i>	I	
209	Passeriformes	Campephagidae	small minivet	<i>Pericrocotus cinnamomeus</i>	I	
210	Passeriformes	Campephagidae	long-tailed minivet	<i>Pericrocotus ethologus</i>	I	
211	Passeriformes	Campephagidae	scarlet minivet	<i>Pericrocotus flammeus</i>	I	
212	Passeriformes	Campephagidae	rosy minivet	<i>Pericrocotus roseus</i>	I	
213	Passeriformes	Campephagidae	Indian cuckooshrike	<i>Coracina macei</i>	I	
214	Passeriformes	Campephagidae	black-winged cuckooshrike	<i>Lalage melaschistos</i>	I	
215	Passeriformes	Artamidae	ashy woodswallow	<i>Artamus fuscus</i>	I	
216	Passeriformes	Vangidae	bar-winged flycatcher-shrike	<i>Hemipus picatus</i>	I	
217	Passeriformes	Vangidae	large woodshrike	<i>Tephrodornis virgatus</i>	I	
218	Passeriformes	Vangidae	common woodshrike	<i>Tephrodornis pondicerianus</i>	I	
219	Passeriformes	Aegithinidae	common iora	<i>Aegithina tiphia</i>	I	
220	Passeriformes	Rhipiduridae	white-browed fantail	<i>Rhipidura aureola</i>	I	
221	Passeriformes	Rhipiduridae	white-throated fantail	<i>Rhipidura albicollis</i>	I	
222	Passeriformes	Dicruridae	black drongo	<i>Dicrurus macrocercus</i>	I	
223	Passeriformes	Dicruridae	ashy drongo	<i>Dicrurus leucophaeus</i>	I	
224	Passeriformes	Dicruridae	white-bellied drongo	<i>Dicrurus caerulescens</i>	I	
225	Passeriformes	Dicruridae	crow-billed drongo	<i>Dicrurus annectens</i>	I	
226	Passeriformes	Dicruridae	lesser racket-tailed drongo	<i>Dicrurus remifer</i>	I	



227	Passeriformes	Dicruridae	hair-crested drongo	<i>Dicrurus hottentottus</i>	I	
228	Passeriformes	Dicruridae	greater racquet-tailed drongo	<i>Dicrurus paradiseus</i>	I	
229	Passeriformes	Monarchidae	black-naped monarch	<i>Hypothymis azurea</i>	I	
230	Passeriformes	Monarchidae	Indian paradise-flycatcher	<i>Terpsiphone paradisi</i>	I	
231	Passeriformes	Laniidae	brown shrike	<i>Lanius cristatus</i>	C	
232	Passeriformes	Laniidae	long-tailed shrike	<i>Lanius schach</i>	C	
233	Passeriformes	Laniidae	grey-backed shrike	<i>Lanius tephronotus</i>	C	
234	Passeriformes	Corvidae	rufous treepie	<i>Dendrocitta vagabunda</i>	O	
235	Passeriformes	Corvidae	grey treepie	<i>Dendrocitta formosae</i>	O	
236	Passeriformes	Corvidae	red-billed blue magpie	<i>Urocissa erythroryncha</i>	O	
237	Passeriformes	Corvidae	black-headed jay	<i>Garrulus lanceolatus</i>	I	
238	Passeriformes	Corvidae	house crow	<i>Corvus splendens</i>	O	
239	Passeriformes	Corvidae	large-billed crow	<i>Corvus macrorhynchos</i>	O	
240	Passeriformes	Stenostiridae	yellow-bellied fairy-fantail	<i>Chelidorhynch hypoxanthus</i>	I	
241	Passeriformes	Stenostiridae	grey-headed canary-flycatcher	<i>Culicicapa ceylonensis</i>	I	
242	Passeriformes	Paridae	green-backed tit	<i>Parus monticolus</i>	I	
243	Passeriformes	Paridae	great tit	<i>Parus major</i>	I	
244	Passeriformes	Paridae	black-lored tit	<i>Machlolophus xanthogenys</i>	I	
245	Passeriformes	Alaudidae	ashy-crowned sparrow-lark	<i>Eremopterix griseus</i>	O	
246	Passeriformes	Alaudidae	Bengal bushlark	<i>Mirafra assamica</i>	O	
247	Passeriformes	Alaudidae	sand lark	<i>Alaudala raytal</i>	O	
248	Passeriformes	Alaudidae	Hume's lark	<i>Calandrella acutirostris</i>	O	
249	Passeriformes	Alaudidae	eastern short-toed lark	<i>Calandrella dukhunensis</i>	O	
250	Passeriformes	Alaudidae	crested lark	<i>Galerida cristata</i>	O	
251	Passeriformes	Cisticolidae	zitting cisticola	<i>Cisticola juncidis</i>	I	
252	Passeriformes	Cisticolidae	golden-headed cisticola	<i>Cisticola exilis</i>	I	
253	Passeriformes	Cisticolidae	striated prinia	<i>Prinia crinigera</i>	I	
254	Passeriformes	Cisticolidae	grey-crowned prinia	<i>Prinia cinereocapilla</i>	I	VU/CR/..
255	Passeriformes	Cisticolidae	grey-breasted prinia	<i>Prinia hodgsonii</i>	I	
256	Passeriformes	Cisticolidae	graceful prinia	<i>Prinia gracilis</i>	I	
257	Passeriformes	Cisticolidae	jungle prinia	<i>Prinia sylvatica</i>	I	
258	Passeriformes	Cisticolidae	yellow-bellied prinia	<i>Prinia flaviventris</i>	I	
259	Passeriformes	Cisticolidae	ashy prinia	<i>Prinia socialis</i>	I	
260	Passeriformes	Cisticolidae	plain prinia	<i>Prinia inornata</i>	I	
261	Passeriformes	Cisticolidae	common tailorbird	<i>Orthotomus sutorius</i>	I	
262	Passeriformes	Acrocephalidae	booted warbler	<i>Iduna caligata</i>	I	
263	Passeriformes	Locustellidae	striated grassbird	<i>Megalurus palustris</i>	I	../CR/..
264	Passeriformes	Hirundinidae	Asian house martin	<i>Delichon dasypus</i>	I	
265	Passeriformes	Hirundinidae	Nepal house martin	<i>Delichon nipalense</i>	I	
266	Passeriformes	Hirundinidae	barn swallow	<i>Hirundo rustica</i>	I	
267	Passeriformes	Hirundinidae	Asian plain martin	<i>Riparia chinensis</i>	I	
268	Passeriformes	Hirundinidae	collared sand martin	<i>Riparia riparia</i>	I	
269	Passeriformes	Pycnonotidae	ashy bulbul	<i>Hemixos flavala</i>	O	
270	Passeriformes	Pycnonotidae	black bulbul	<i>Hypsipetes leucocephalus</i>	O	
271	Passeriformes	Pycnonotidae	red-whiskered bulbul	<i>Pycnonotus jocosus</i>	O	
272	Passeriformes	Pycnonotidae	Himalayan bulbul	<i>Pycnonotus leucogenys</i>	O	
273	Passeriformes	Pycnonotidae	red-vented bulbul	<i>Pycnonotus cafer</i>	O	

274	Passeriformes	Phylloscopidae	yellow-browed warbler	<i>Phylloscopus inornatus</i>	I	
275	Passeriformes	Phylloscopidae	Hume's leaf-warbler	<i>Phylloscopus humei</i>	I	
276	Passeriformes	Phylloscopidae	buff-barred warbler	<i>Phylloscopus pulcher</i>	I	
277	Passeriformes	Phylloscopidae	dusky warbler	<i>Phylloscopus fuscatus</i>	I	
278	Passeriformes	Phylloscopidae	smoky warbler	<i>Phylloscopus fulgiventor</i>	I	
279	Passeriformes	Phylloscopidae	Siberian chiffchaff	<i>Phylloscopus tristis</i>	I	
280	Passeriformes	Phylloscopidae	Tickell's leaf-warbler	<i>Phylloscopus affinis</i>	I	
281	Passeriformes	Phylloscopidae	greenish warbler	<i>Phylloscopus trochiloides</i>	I	
282	Passeriformes	Phylloscopidae	Blyth's leaf-warbler	<i>Phylloscopus reguloides</i>	I	
283	Passeriformes	Phylloscopidae	western crowned leaf-warbler	<i>Phylloscopus occipitalis</i>	I	
284	Passeriformes	Phylloscopidae	grey-hooded warbler	<i>Phylloscopus xanthoschistos</i>	I	
285	Passeriformes	Phylloscopidae	grey-bellied tesia	<i>Tesia cyaniventer</i>	I	
286	Passeriformes	Phylloscopidae	grey-sided bush-warbler	<i>Cettia brunnifrons</i>	I	
287	Passeriformes	Phylloscopidae	pale-footed bush-warbler	<i>Hemitesia pallidipes</i>	I	..NUI..
288	Passeriformes	Aegithalidae	red-headed tit	<i>Aegithalos iredalei</i>	I	
289	Passeriformes	Sylviidae	lesser whitethroat	<i>Sylvia curruca</i>	I	
290	Passeriformes	Zosteropidae	Oriental white-eye	<i>Zosterops palpebrosus</i>	I	
291	Passeriformes	Timaliidae	white-browed scimitar-babbler	<i>Pomatorhinus schisticeps</i>	I	
292	Passeriformes	Timaliidae	rusty-cheeked scimitar-babbler	<i>Erythrogonys erythrogonys</i>	I	
293	Passeriformes	Timaliidae	chestnut-capped babbler	<i>Timalia pileata</i>	I	
294	Passeriformes	Timaliidae	pin-striped tit-babbler	<i>Mixomis gularis</i>	I	
295	Passeriformes	Timaliidae	black-chinned babbler	<i>Cyanoderma pyrrhops</i>	I	
296	Passeriformes	Pellorneidae	puff-throated babbler	<i>Pellorneum ruficeps</i>	I	
297	Passeriformes	Leiotrichidae	striated babbler	<i>Argya earlei</i>	I	
298	Passeriformes	Leiotrichidae	spiny babbler	<i>Acanthoptila nipalensis</i>	I	
299	Passeriformes	Leiotrichidae	jungle babbler	<i>Turdoides striata</i>	I	
300	Passeriformes	Leiotrichidae	white-crested laughingthrush	<i>Garrulax leucolophus</i>	I	
301	Passeriformes	Leiotrichidae	rufous sibia	<i>Heterophasia capistrata</i>	O	
302	Passeriformes	Leiotrichidae	silver-eared mesia	<i>Leiothrix argentauris</i>	I	..EN/II
303	Passeriformes	Certhiidae	Sikkim treecreeper	<i>Certhia discolor</i>	I	
304	Passeriformes	Certhiidae	bar-tailed treecreeper	<i>Certhia himalayana</i>	I	
305	Passeriformes	Sittidae	chestnut-bellied nuthatch	<i>Sitta cinnamoventris</i>	I	
306	Passeriformes	Sittidae	white-tailed nuthatch	<i>Sitta himalayensis</i>	I	
307	Passeriformes	Sittidae	velvet-fronted nuthatch	<i>Sitta frontalis</i>	I	
308	Passeriformes	Sittidae	wallcreeper	<i>Tichodroma muraria</i>	I	
309	Passeriformes	Sturnidae	common starling	<i>Sturnus vulgaris</i>	O	
310	Passeriformes	Sturnidae	Asian pied starling	<i>Gracupica contra</i>	O	
311	Passeriformes	Sturnidae	Brahminy starling	<i>Sturnia pagodarum</i>	O	
312	Passeriformes	Sturnidae	chestnut-tailed starling	<i>Sturnia malabarica</i>	O	
313	Passeriformes	Sturnidae	common myna	<i>Acridotheres tristis</i>	O	
314	Passeriformes	Sturnidae	bank myna	<i>Acridotheres ginginianus</i>	O	
315	Passeriformes	Sturnidae	jungle myna	<i>Acridotheres fuscus</i>	O	
316	Passeriformes	Sturnidae	spot-winged starling	<i>Saroglossa spilopterus</i>	O	
317	Passeriformes	Turdidae	scaly thrush	<i>Zoothera dauma</i>	I	
318	Passeriformes	Turdidae	orange-headed thrush	<i>Geokichla citrina</i>	I	
319	Passeriformes	Turdidae	grey-winged blackbird	<i>Turdus boulboul</i>	I	
320	Passeriformes	Turdidae	Tickell's thrush	<i>Turdus unicolor</i>	I	

321	Passeriformes	Turdidae	black-throated thrush	<i>Turdus atrogularis</i>	I	
322	Passeriformes	Muscicapidae	Oriental magpie-robin	<i>Copsychus saularis</i>	I	
323	Passeriformes	Muscicapidae	white-rumped shama	<i>Kittacincla malabarica</i>	I	
324	Passeriformes	Muscicapidae	dark-sided flycatcher	<i>Muscicapa sibirica</i>	I	
325	Passeriformes	Muscicapidae	small niltava	<i>Niltava macgrigoriae</i>	I	
326	Passeriformes	Muscicapidae	verditer flycatcher	<i>Eumyias thalassinus</i>	I	
327	Passeriformes	Muscicapidae	pale blue-flycatcher	<i>Cyornis unicolor</i>	I	
328	Passeriformes	Muscicapidae	pale-chinned flycatcher	<i>Cyornis poliogenys</i>	I	
329	Passeriformes	Muscicapidae	Tickell's blue-flycatcher	<i>Cyornis tickelliae</i>	I	
330	Passeriformes	Muscicapidae	Siberian blue robin	<i>Larivora cyane</i>	I	
331	Passeriformes	Muscicapidae	bluethroat	<i>Cyanecula svecica</i>	I	
332	Passeriformes	Muscicapidae	Siberian rubythroat	<i>Calliope calliope</i>	I	
333	Passeriformes	Muscicapidae	Himalayan rubythroat	<i>Calliope pectoralis</i>	I	
334	Passeriformes	Muscicapidae	rufous-gorgeted flycatcher	<i>Ficedula strophiate</i>	I	
335	Passeriformes	Muscicapidae	ultramarine flycatcher	<i>Ficedula superciliaris</i>	I	
336	Passeriformes	Muscicapidae	little pied flycatcher	<i>Ficedula westermanni</i>	I	
337	Passeriformes	Muscicapidae	rusty-tailed flycatcher	<i>Ficedula ruficauda</i>	I	
338	Passeriformes	Muscicapidae	red-throated flycatcher	<i>Ficedula albicilla</i>	I	
339	Passeriformes	Muscicapidae	blue-fronted redstart	<i>Phoenicurus frontalis</i>	I	
340	Passeriformes	Muscicapidae	blue-capped redstart	<i>Phoenicurus coeruleocephala</i>	I	
341	Passeriformes	Muscicapidae	white-throated redstart	<i>Phoenicurus schisticeps</i>	I	
342	Passeriformes	Muscicapidae	white-capped water-redstart	<i>Phoenicurus leucocephalus</i>	I	
343	Passeriformes	Muscicapidae	plumbeous water-redstart	<i>Phoenicurus fuliginosus</i>	I	
344	Passeriformes	Muscicapidae	black redstart	<i>Phoenicurus ochruros</i>	I	
345	Passeriformes	Muscicapidae	white-winged redstart	<i>Phoenicurus erythrogastrus</i>	I	
346	Passeriformes	Muscicapidae	Hodgson's redstart	<i>Phoenicurus hodgsoni</i>	I	
347	Passeriformes	Muscicapidae	chestnut-bellied rock-thrush	<i>Monticola rufiventris</i>	I	
348	Passeriformes	Muscicapidae	blue rock-thrush	<i>Monticola solitarius</i>	I	
349	Passeriformes	Muscicapidae	grey bushchat	<i>Saxicola ferreus</i>	I	
350	Passeriformes	Muscicapidae	pied bushchat	<i>Saxicola caprata</i>	I	
351	Passeriformes	Muscicapidae	common stonechat	<i>Saxicola torquatus</i>	I	
352	Passeriformes	Muscicapidae	brown rockchat	<i>Oenanthe fusca</i>	I	
353	Passeriformes	Chloropseidae	golden-fronted leafbird	<i>Chloropsis aurifrons</i>	O	
354	Passeriformes	Chloropseidae	orange-bellied leafbird	<i>Chloropsis hardwickii</i>	O	
355	Passeriformes	Dicaeidae	thick-billed flowerpecker	<i>Dicaeum agile</i>	O	
356	Passeriformes	Dicaeidae	pale-billed flowerpecker	<i>Dicaeum erythrorhynchos</i>	O	
357	Passeriformes	Dicaeidae	fire-breasted flowerpecker	<i>Dicaeum ignipectus</i>	O	
358	Passeriformes	Nectariniidae	purple sunbird	<i>Cinnyris asiaticus</i>	O	
359	Passeriformes	Nectariniidae	green-tailed sunbird	<i>Aethopyga nipalensis</i>	O	
360	Passeriformes	Nectariniidae	crimson sunbird	<i>Aethopyga siparaja</i>	O	
361	Passeriformes	Prunellidae	rufous-breasted accentor	<i>Prunella strophiate</i>	I	
362	Passeriformes	Ploceidae	black-breasted weaver	<i>Ploceus benghalensis</i>	O	..NU/..
363	Passeriformes	Ploceidae	streaked weaver	<i>Ploceus manyar</i>	O	..CR/..
364	Passeriformes	Ploceidae	Baya weaver	<i>Ploceus philippinus</i>	O	
365	Passeriformes	Ploceidae	Finn's weaver	<i>Ploceus megarhynchus</i>	O	VU/CR/..
366	Passeriformes	Estrildidae	red avadavat	<i>Amandava amandava</i>	O	
367	Passeriformes	Estrildidae	scaly-breasted munia	<i>Lonchura punctulata</i>	O	

368	Passeriformes	Estrildidae	tricoloured munia	<i>Lonchura malacca</i>	O	
369	Passeriformes	Passeridae	house sparrow	<i>Passer domesticus</i>	O	
370	Passeriformes	Passeridae	Eurasian tree sparrow	<i>Passer montanus</i>	O	
371	Passeriformes	Passeridae	chestnut-shouldered bush-sparrow	<i>Gymnoris xanthocollis</i>	O	
372	Passeriformes	Motacillidae	olive-backed pipit	<i>Anthus hodgsoni</i>	I	
373	Passeriformes	Motacillidae	paddyfield pipit	<i>Anthus rufulus</i>	I	
374	Passeriformes	Motacillidae	western yellow wagtail	<i>Motacilla flava</i>	I	
375	Passeriformes	Motacillidae	grey wagtail	<i>Motacilla cinerea</i>	I	
376	Passeriformes	Motacillidae	citrine wagtail	<i>Motacilla citreola</i>	I	
377	Passeriformes	Motacillidae	white-browed wagtail	<i>Motacilla maderaspatensis</i>	I	
378	Passeriformes	Motacillidae	white wagtail	<i>Motacilla alba</i>	I	
379	Passeriformes	Fringillidae	common rosefinch	<i>Carpodacus erythrinus</i>	H	
380	Passeriformes	Emberizidae	crested bunting	<i>Emberiza lathamii</i>	O	
381	Passeriformes	Emberizidae	black-faced bunting	<i>Emberiza spodocephala</i>	O	..NUI..