

Checklist

Vertebrate fauna of Madhesh Province, Nepal: Diversity and conservation status

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Abstract

Understanding the occurrence and distribution of vertebrate species provides basis for identifying potential threats, their roles in ecosystem services and their contributions to local livelihoods. However, information on vertebrate fauna in Madhesh Province, Nepal remains limited. Existing studies are scattered, and mostly focused to charismatic species, particularly in the Parsa National Park and Koshi Tappu Wildlife Reserve, which hindered the development of targeted management and conservation action plans across the province. This study provides a comprehensive checklist of vertebrate fauna in Madhesh Province, compiling species occurrence and their conservation status. Data on vertebrate species, including fish, amphibians, reptiles, birds, and mammals were collected from multiple survey methods such as cast nets, seine net, transect surveys, camera traps, mist nets, live traps, and sign observation, along with opportunistic survey from 2022 to 2026, and literature review. In total, 147 fish species (one globally Endangered and three Vulnerable), 87 herpetofauna species comprising 19 amphibians (one globally Vulnerable) and 68 reptiles (three globally Critically Endangered, five Endangered, and five Vulnerable), 575 bird species (seven globally Critically Endangered, seven Endangered, and 13 Vulnerable), and 76 mammal species (one globally Critically Endangered, seven Endangered, and 10 Vulnerable) were documented across the Madhesh Province. This study provides a consolidated baseline dataset of vertebrate diversity and conservation status for developing conservation plans and policies at local and provincial level.

Keywords: Bird, Fish, Herpetofauna, Koshi Tappu Wildlife Reserve, Mammal, Parsa National Park

1 | Introduction

Global biodiversity is declining due to habitat loss, fragmentation, over-exploitation, climate change, invasive alien species and environmental pollutions (Slingenberg et al. 2009; IPBES 2019), with particularly severe impacts on faunal species (Ceballos et al. 2015). Biodiversity loss is often greater outside the protected areas system, where governmental policies and their management areas are not functioning properly than the protected areas system (Avigliano et al. 2019; Katuwal et al. 2021). Many threatened species also live outside protected areas, since these landscapes still contain

suitable habitat (Rodrigues et al. 2004; Avigliano et al. 2019; Li et al. 2020). However, such areas remain relatively less studied compared to protected areas, and this is even more challenging and true in developing countries like Nepal (Inskipp et al. 2016; Katuwal et al. 2021, 2025b). For this reason, documenting vertebrate fauna in these areas is important, as it helps record species diversity and establish the baseline information for conservation planning and management. Such information is also crucial for monitoring temporal changes in biodiversity and assessing the impacts of habitat alteration and human activities (Sutherland 2006; Wilson 2016).

Several vertebrate fauna surveys conducted in Nepal during the 19th to 21st centuries documented the occurrences of major taxonomic groups, such as fish (n = 220), herpetofauna (n = 240), birds (n = 902) and mammals (n = 215), with limited information on their spatial distribution (Hunter & Yonzon 1993; Schleich & Kästle 2002; Jnawali et al. 2011; Amin et al. 2018; Sharma et al. 2019; Dahal et al.

2022; Khatri et al. 2020; DNPWC & BCN 2025; Subba et al. 2026). These include 40 endemic species, comprising two mammal species, *Apodemus gorkha*, and *Myotis csorbai* (Hunter & Yonzon 1993; Baral & Shah 2008; Amin et al. 2018), one bird species *Acanthoptila nipalensis* (Inskipp et al. 2016; DNPWC & BCN 2025), 18 fish species (Khatri et al. 2020; Limbu et al. 2024; Limbu et al. 2026; Haggard et al. 2026) and 19 species of herpeto-fauna species (Rai et al. 2022). Despite these efforts, detailed spatial distribution data on vertebrate fauna are still lacking in Nepal. Because, available studies are largely concentrated within the protected areas and primarily focused on the large and charismatic species (Bist et al. 2021). Approximately 60% of mammal and bird species are known to occur outside the protected areas in Nepal (Baral & Shah 2008; Inskipp et al. 2016), while information on other faunal groups, such as fish, and herpetofauna remain scarce. Therefore, understanding vertebrate diversity beyond the protected area is essential as these species are increasingly threatened by habitat loss and fragmentation, poaching and illegal trade and lack of awareness, particularly within the Madhesh Province (Katuwal et al. 2023a, 2025a).

Madhesh Province, one of the seven provinces of Nepal, is situated at southeastern region. The province includes the Chure region, which comprises 71% forest (DFRS 2014) forms important ecological corridors linking protected areas such as Koshi Tappu Wildlife Reserve and Parsa and Chitwan National Park. However, the Chure landscape is increasingly degrading and fragmenting due to settlement expansion, extraction of timber and riverbed materials, forest fires, hunting and declining water sources (GoN/PCTMCBD 2018; Chaudhary & Subedi 2019), ultimately threatening vertebrate fauna inhabiting in these areas. Although Subedi et al. (2021) assessed biodiversity across the Chure region of Nepal, comprehensive information for the entire Madhesh Province remains limited. The few existing studies also focus on particular species or taxa (e.g., *Panthera tigris*, *Houbaropsis bengalensis*, some amphibians and reptiles) and are largely restricted to protected areas (Bhattarai et al. 2018; Mishra et al. 2021; Pun et al. 2022; Inskipp et al. 2024), although a few have been carried outside the protected areas as well (Katuwal et al. 2019, 2023a, 2025b; Bajagain et al. 2025). Compiling all the scattered studies, both inside and outside the protected areas, is therefore a pre-requisite for identifying the overall species inhabiting the province, the threats they face, and their implications for livelihoods, ecosystem services and functioning (Pringle et al. 2007; Walker & Hawkins 2013; Bertolino et al. 2015). In addition, the information of species at provincial and local administrative level Nepal is pre-requisite for developing site- and species-specific conservation and management strategies despite their ecological range because financial and administrative are constraints.

To address these knowledge gaps, we present a comprehensive checklist of vertebrate fauna of Madhesh Province, based on systematic field surveys and review of literature. This study provides distribution, diversity and conservation status of the vertebrate fauna found in the province to inform evidence-based policy formulation and management decisions for sustainable biodiversity conservation, including the development of site- and species-specific conservation and management strategies.

2 | Materials and methods

2.1 | Study area

Madhesh Province lies in the southeastern part of Nepal. The province comprises a 9661 km² and is 6.5% of total Nepal's area. Koshi Tappu Wildlife Reserve lies in the east and Chitwan National Park and Parsa National Park in the west, while Chure hills run along its northern edge. The province is made up of eight districts: Parsa, Bara, Rautahat, Sarlahi, Mahottari, Dhanusa, Siraha and Saptari, with elevation below 1000 m.

Two protected areas fall within the province, Parsa National Park, and Koshi Tappu Wildlife Reserve, along with five Important Bird and Biodiversity Areas: Parsa National Park and Buffer Zone, Kohalbi and Baragadi, Janakinagar-Murtiya Forest and Associated Farmlands, Dhanusadham Protected Forest and Associated Farmlands, and Koshi Tappu Wildlife Reserve and Koshi Barrage. In addition, several religious and community forests are scattered across the Chure and Tarai belts of the province. The major rivers include the Lal Bakaiya, Bagmati, Kamala, Triyuga, and Koshi.

Around 20% of Nepal's population lives in Madhesh Province, and agriculture is the primary source of income. Rice is grown during the monsoon season, while wheat, mustard and vegetables in winter, and maize and vegetables in summer. Similarly, sugarcane is also common across much of the province. In addition, farmers practice agroforestry by growing *Eucalyptus* spp., *Bombax ceiba*, and various orchards on their farmland.

Habitat encroachment, forest land conversion to agriculture and settlements, riverbed modification, are major drivers of natural habitat loss and degradation in Madhesh Province (Chaudhary & Subedi 2019; Ram et al. 2021). Nevertheless, this area also provides suitable habitat for various rare and globally threatened species such as *Panthera tigris*, *Rhinoceros unicornis*, *P. pardus*, *Aquila nipalensis*, *Varanus salvator*, *Hylarana leptoglossa*, *Tor putitora*, and *T. tor* (Subedi et al. 2021).

2.2 | Research design

We overlaid 358 grids of 5×5 km² across the Madhesh Province (Figure 1). From these grids, 15 grids were initially selected per district, resulting in 120 sampling grids. The final number of grids was adjusted according to the species-specific characteristics and logistic constraints. Data were collected through 1) systematic field survey, 2) opportunistic observation and 3) literature reviews.

We established a total of 370 fish sampling occasions at 45 stations: each spaced at least 5 km apart based on habitat heterogeneity, and elevation 60 m to 245 m. At each station, 10 samplings were conducted at 20 m intervals to record the fish species. Sampling was conducted using cast nets (1 cm × 1 cm) and Micromesh seine net (0.1 cm × 0.1 cm) across four perennial rivers: Triyuga, Kamala, Bagmati, and Lal Bakaiya during January–February 2024.

Amphibian surveys were conducted in 55 randomly selected grids, each containing three 100 m long transects separated by at least 1 km. The elevation ranges from 60 m to 252 m. Night-time visual encounter surveys were conducted on either side (2 m) of each transect (Campbell & Christman 1982), with three observers surveying each transect for 30 minutes. In total, 208 transects were surveyed, except in Parsa National Park, where surveys were opportunistic. Reptiles were documented through an opportunistic survey due to detection limitation across standardized transects. Information on the snakes were also recorded through rescued data in the Madhesh Province. Whenever reptiles were observed, their location, and number were recorded. Some of the fish, and herpetofauna that could not be identified in the field were collected as voucher specimens, identified in the lab and deposited at the museum of Central Department of Zoology, Tribhuvan University (CDZMTU-Fis501-535; CDZMTU-HERP-101-112).

Birds were surveyed in 120 randomly selected grids, each containing three transects established across forest, river, farmland or settlement areas, with a minimum distance of around 1 km between the transects (Siegel 2009; Katuwal et al. 2025a). In total, we surveyed 356 transects in winter and these same transects were revisited in summer, along with three additional transects, all below 350 m. The length of transect was 250 m in length and 50 m on either side. Surveys were conducted in both winter (December 2022–January 2023) and summer (April–May 2023; few grids inside PNP were surveyed in 2024 due to access restriction caused by problematic elephant) season and in morning (06:00–11:30) and late afternoon (15:00–18:00) periods (Katuwal et al. 2025a).

Mammals were surveyed using camera traps, live traps, and mist nets in 5 km × 5 km grid from December 2022 to March 2023. A total of 154 camera traps were deployed from 60 m -560 m elevation in grids with at least 50% forest cover (Sharma et al. 2023, 2024, 2025; Subedi et al. 2025). Four cameras were installed 40–60 cm above the ground at 1 km interval along animal trails operated for 21 consecutive days, resulting in 3,234 trap days (154 sites × 21 days). In addition, 200 m transect was surveyed on either side of the camera traps to record indirect signs such as footprints, feces, scratches, and burrows within each selected grid (Subedi et al. 2024; Sharma et al. 2025). Bat surveys were conducted at 92 sites in 72 grids (60 m to 569 m of elevation) using mist nets (2.6 m height, 6 m length, 38 mm mesh size) set approximately 5–10 cm above ground from 18:00 to 21:00 hours and checked at five-minutes interval. Captured bats were measured, photographed, and identified using standard field guide and experts' consultation. Rodents were surveyed using live traps along 92 transects in 72 grids (60 m to 569 m of elevation) of each 100 m long. Along each transect, 10 traps were placed at 10 m intervals and were baited with biscuits and bread. Captured rodents were carefully measured, identified in the fields, unidentified species were photographed and later identified

with help of experts. For species identification, we followed different field guides; fish (Hamilton 1822; Shrestha 1981; Talwar & Jhingran, 1991; Shrestha 2019), herpetofauna (Schleich & Kästle 2002; Frost 2026), birds (Grimmett et al. 2016), and mammals (Menon 2003; Baral & Shah 2008; Jnawali et al. 2011; Jackson et al. 2022). Bird migration status was based on Grimmett et al. (2016).

In addition to systematic field surveys, several opportunistic surveys for all vertebrate fauna were conducted between 2022 and 2026, covering elevation around 800 m. We also thoroughly reviewed biodiversity profiles, books, reports, journal articles, online citizen science databases (e.g. eBird), and social media platforms. Additionally, we consulted the Natural History Museum, Kathmandu, Nepal, and the museum of the Central Department of Zoology, Tribhuvan University, Kathmandu, Nepal to identify potential species in the area. The occurrence of all the fauna was further cross-checked and validated through field studies as far as possible, including direct observations, sign surveys, and camera traps. The final checklist thus integrates both empirical field data and literature records.

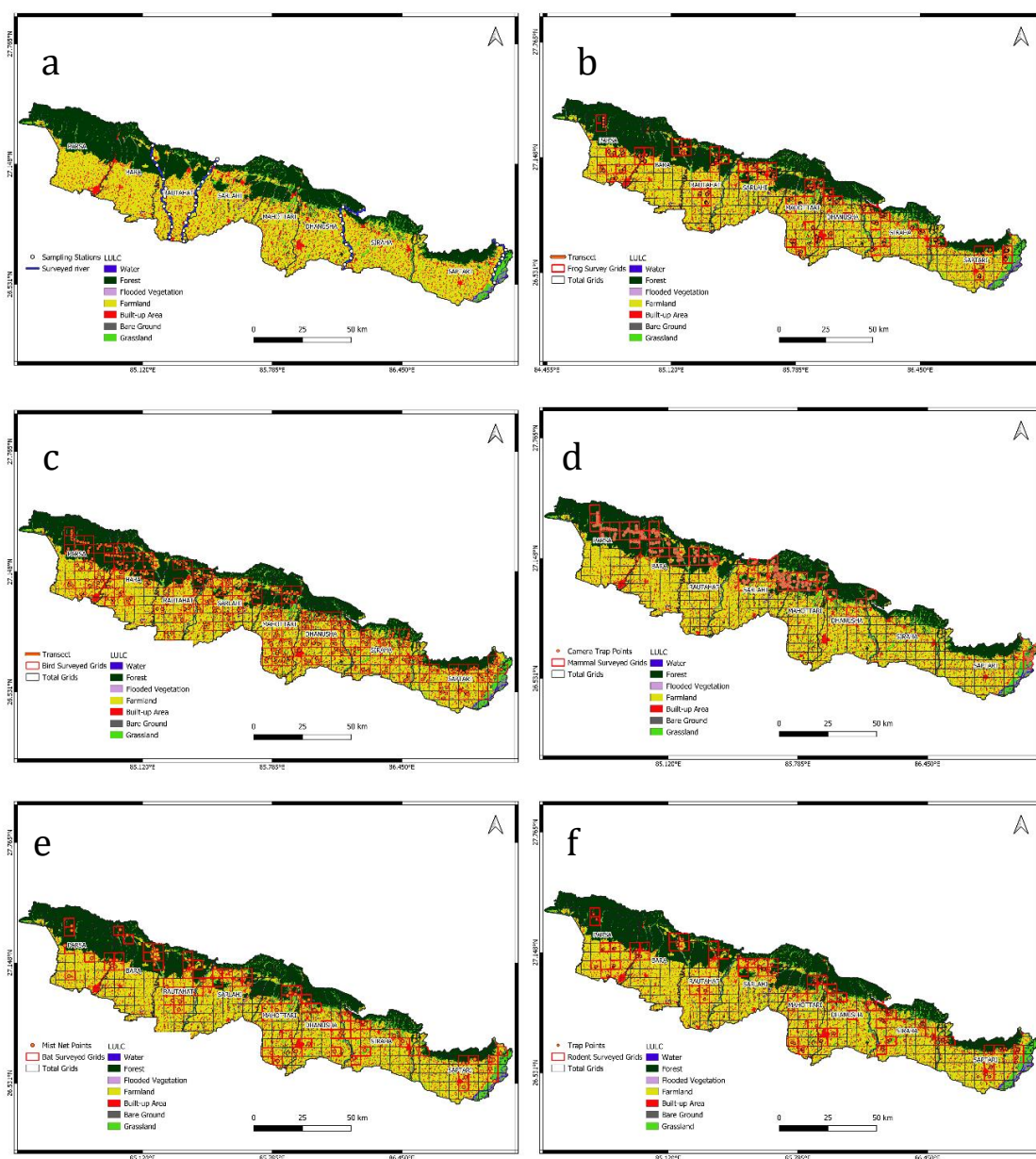


Figure 1. Research design for fish sampling stations (a), herpetofauna (b), bird (c), camera traps (d), mist net for bat species (e), and rodents (f) survey in Madhesh Province, Nepal from 2022–2024.

3 | Results

We documented a total of 147 fish species (68 species during this field study) of 12 orders and 33 families (Appendix 1). The order Cypriniformes was the most diverse, comprising eight families and 79 species (Appendix 1). Seven species, *Garra cf. mullya*, *Pangio pangia*, *Nemacheilus corica*, *Aplocheilus panchax*, *Ompok pabo*, *Nangra nangra*, and *Pseudolaguvia kapuri* were recorded for the first time from the province (Figure 2 & 3). Among the documented fish species, one was Endangered (EN), three Vulnerable (VU), while 10 was Near Threatened (NT), 127 Least Concern (LC), and five Data Deficient (DD) (Table 1; Appendix 1).



Figure 2. Fish of Madhesh Province *Pseudolaguvia kapuri* (a), *Pangio pangia* (b), and *Aplocheilus panchax* (c)



Figure 3. Fish of Madhesh Province from top to down: *Ompok pabo* (a); *Nemacheilus corica* (b); *Nangra nangra* (c); *Garra cf. mullya* (d)

Table 1. Measurements for species in figure 4: Snout–Vent Length (SVL); Head Length (HL); Head Width (HW); Snout Length (SL); Standard Length (SL); Eye Diameter (ED); Tympanum Diameter (TD); Forelimb Length (FLL), First Finger Length (F1L); Hindlimb Length (HLL); First Toe Length (L1T) All measurements are in mm, Body Weight (BWt) in gm.

	SVL	HL	HW	SL	ED	TD	FLL	L1F	HLL	L1T	BWt
<i>Fejervarya orissaensis</i>	44.7	19.4	15.28	6.7	4.54	2.9	24.51	6.37	63.27	6.46	9.9
<i>Sphaerotheca swani</i>	38.14	15.65	14.29	4.44	5.95	1.36	18.03	6.43	45.71	6.21	7.3
<i>Sphaerotheca maskeyi</i>	40.08	15.67	16.81	7.05	5.39	3.94	26.39	9.37	59.7	6.23	8.8



Figure 4. Some amphibians recorded in Madhesh Province: *Fejervarya orissaensis* (a), *Sphaerotheca swani* (b), and *Sphaerotheca maskeyi* (c)

We documented 19 amphibian species (15 species during this field study), all anurans, belonging to five families (Appendix 2). The family Dicroglossidae was the most diverse, represented by 10 species. Three species—*Fejervarya orissaensis*, *Sphaerotheca maskeyi* and *Sphaerotheca swani*—were recorded for the first time from the province (Figure 4, Table 1). Among these, *Amolops mahabharatensis* is listed as VU under the IUCN Red list of threatened categories, while the remaining 18 species are classified as LC (Appendix 2).

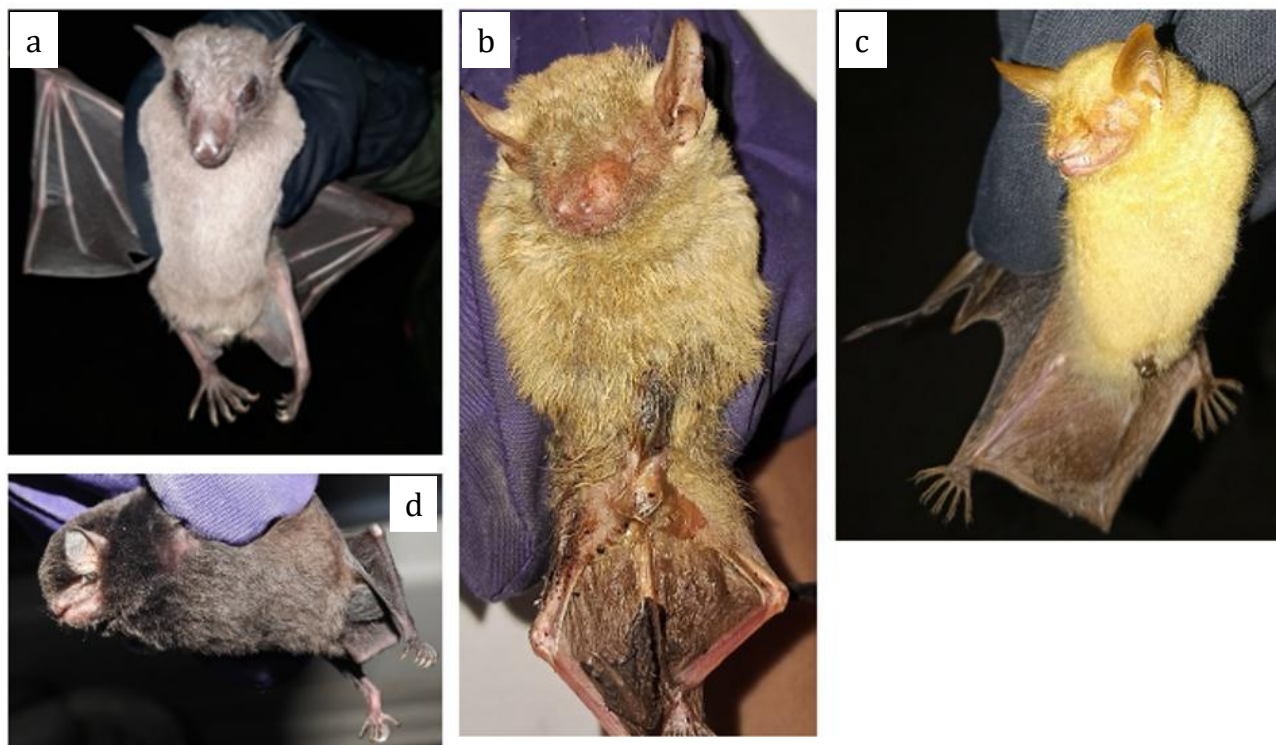
Similarly, a total of 68 reptile species (23 species during this field study) of three orders and 20 families were documented (Appendix 3). The order Squamata was the most diverse, comprising 15 families and 59 species. Of the recorded reptiles, three species are listed as Critically Endangered (CR), five EN, five VU, four NT, and 51 LC (Table 2; Appendix 3).

We documented 575 bird species (364 species during this study) belonging to 24 orders and 88 families (Appendix 4). The order Passeriformes is the most diverse, comprising 43 families and 268 species. Out of all birds, 27 species are listed as globally threatened, including seven CR, seven EN, 13 VU, whereas 32 were NT and 518 were LC species (Table 2; Appendix 4). Additionally, 106 species are categorized as nationally threatened, comprising 39 CR, 21 EN, 46 VU, whereas 45 were NT, 422 were LC, 1 was DD and remaining not evaluated, according to national threat assessments (Appendix 5).

We documented 76 mammal species (63 species during this field study) across ten orders and 27 families (Appendix 5). The order Carnivora was the most diverse, comprising seven families and 21 species. Six bat species—*Taphozous longimanus*, *Miniopterus pusillus*, *Rousettus leschenaulti*, *Hesperoptenus tickelli*, *Kerivoula picta*, and *Myotis sicarius*—were newly recorded for the province (Figure 5 & 6). Of the total mammals, 18 species are listed as globally threatened on the IUCN Red List, including one CR, seven EN, 10 VU, whereas five were NT and 52 were LC species (Table 2; Appendix 5).



Figure 5. Bat species recorded in Madhesh Province *Trapphous longimanus* (a) and *Myotis sicarius* (b)



At the national level, 26 species are classified as threatened, comprising 15 EN, 11 VU species, whereas two were NT, 35 were LC, 11 were DD, and one was not evaluated (Appendix 5).

Notes: Morphometric measurements of bats presented in figure 5 and 6 [Body weight (Wt); Fore arm (FA); Head Body (HB)]

Trapphous logimanus [Wt=20.7 gm; HB=71.77 mm; FA=61.23 mm; Thumb=6.54 mm; Ear (Tragus=5.13 mm; Pinna=10.09 mm); Tail=23.88 mm]

Myotis sicarius [Wt=12.5 gm; HB=53.24 mm; FA=50.48 mm; Thumb=8.23 mm; Ear (Tragus=5.25 mm; Pinna=13.22 mm); Tail=41.25 mm]

Rousettus leshenaulti [Wt=108.3 gm; HB=96.47 mm; FA=84.05 mm; Thumb=22.31 mm; Ear (Pinna=18.07 mm); Tail=11.32 mm]

Hesperoptenus tickelli [Wt=21.6 gm; HB=68.78; FA=58.45; Thumb=11.86; Ear (Tragus=8.58; Pinna=18); Tail=51.65]

Miniopterus pusillus [Wt=8.9 gm; HB=45.9 mm; FA=43 mm; Thumb=7.2 mm; Ear (Tragus=3.9 mm; Pinna=5.9 mm); Tail=44 mm]

Kerivoula picta, [Wt=4.8 gm; HB=45 mm; FA=34 mm; Thumb=8 mm; Ear (Pinna=13 mm); Tail=35 mm]

4 | Discussion

Our comprehensive assessment, based on both field survey and literature review, shows that Madhesh Province supports remarkably diverse vertebrate assemblages despite intense anthropogenic pressure and widespread habitat modification. Although a significant portion of these species are least concern, the province also provides vital refugia habitats for several globally and nationally threatened species, highlighting the importance of conserving its critical species and habitats. This updated checklist provides empirical foundations to guide future conservation strategies and management interventions beyond the existing protected areas system.

The aquatic ecosystem of the Madhesh Province shows remarkable significance, supporting 66% of the total fish species found in the country (Shrestha 2019). Anthropogenic pressures such as habitat degradation, pollution, and overfishing are the major causes of these

freshwater fish population declining (Arthington et al. 2016; Khatri et al. 2020). The presence of endangered species such as *Tor putitora* and several vulnerable species in the river system suggest an immediate need for habitat management. Nevertheless, the predominance of species classified as least concern may suggest a relatively healthy ecosystem, yet the nine species listed as data deficient and one unevaluated status highlight important gaps in our current knowledge. These gaps, combined with the fact that our sampling covered only four rivers, including few opportunistic surveys in other wetlands, over a single season, mean that present findings likely underrepresent the true fish diversity in the province. Future studies covering larger stretch of Koshi river and other wetland across multiple seasons are highly recommended for a more complete fish assessment of the province.

Several fish species reported in previous checklists were considered likely to represent erroneous identification or doubtful records and were therefore excluded from the present checklist. For example, *Schizothorax macrophthalmus* is an endemic fish to Nepal restricted to Rara lake in Mugu District (Devi & Boguskaya 2009). Despite its inclusion in previous checklists (KTWR 2018), its occurrence in the Koshi or Bagmati river basins, which drain the Madhesh Province, is biogeographically implausible. Therefore, we excluded it from our checklist. Similarly, *Mastacembelus malabaricus*, an endemic species to the Western Ghats, South India (Ali & Sidhartha 2023), *Physoschistura elongata* (Vishwanath 2010) and *Garra rupicola* (Singh 2020), which are endemic to Arunachal Pradesh, Northeast India, *Nandus meni* which is endemic to Bangladesh (Hossain & Sarker 2013; Kapuri et al. 2021), *Macrogathus aculeatus* occurring only in Vietnam, Indonesia, Sumatra, Java and Peninsular Malaysia (Daniels 2020), *Labeo caeruleus* which is endemic to Pakistan (Daniels 2021), *Opsarius radiolatus* which is only reported from the Seti Gandaki system in Nepal (Prasad et al. 2020; Dahanukar 2023), and *Channa orientalis* endemic to South Western Sri Lanka (de Alwis Goonatilake et al. 2019, Ekanayake et al. 2021) were also reported in previous literature (KTWR 2018; Ghimire & Koju 2021). Given the marked disjunction between their known distributional ranges and the study area, their prior inclusion is taxonomically and ecologically doubtful, most plausibly attributable to misidentification of congeners or superficially similar species. Accordingly, these eight species have been excluded from the updated checklist. The presence of *Barbonymus gonionotus* (Silver Barb), a popular

Table 2. List of globally threatened vertebrate fauna of Madhesh Province.

SN	English name	Scientific name	IUCN status
A	Fishes		
1	Putitor mahseer	<i>Tor putitora</i>	EN
2	Dark mahseer	<i>Naziritor chelyoides</i>	VU
3	Wallago	<i>Wallago attu</i>	VU
4	Goonch	<i>Bagarius bagarius</i>	VU
B	Amphibians		
1	Mahabharat torrent frog	<i>Amolops mahabharatensis</i>	VU
C	Reptiles		
1	Dark sitana	<i>Sitana fusca</i>	CR
2	Gharial	<i>Gavialis gangeticus</i>	CR
3	Elongated tortoise	<i>Indotestudo elongata</i>	CR
4	Tricarinate hill turtle	<i>Melanochelys tricarinata</i>	EN
5	Indian peacock softshell turtle	<i>Nilssonia hurum</i>	EN
6	Indian softshell turtle	<i>Nilssonia gangetica</i>	EN
7	Indian narrow-headed softshell turtle	<i>Chitra indica</i>	EN
8	Yellow monitor	<i>Varanus flavescens</i>	EN
9	Indian roofed turtle	<i>Pangshura tecta</i>	VU
10	Indian flapshell turtle	<i>Lissemys punctata</i>	VU
11	King cobra	<i>Ophiophagus hannah</i>	VU
12	Burmese python	<i>Python bivittatus</i>	VU
13	Mugger	<i>Crocodylus palustris</i>	VU
D	Birds		
1	Baer's pochard	<i>Aythya baeri</i>	CR
2	Bengal florican	<i>Houbaropsis bengalensis</i>	CR
3	Lesser florican	<i>Sypheotides indicus</i>	CR
4	Red-headed vulture	<i>Sarcogyps calvus</i>	CR
5	White-rumped vulture	<i>Gyps bengalensis</i>	CR
6	Slender-billed vulture	<i>Gyps tenuirostris</i>	CR
7	Yellow-breasted bunting	<i>Emberiza aureola</i>	CR
8	Indian skimmer	<i>Rynchops albigollis</i>	EN
9	Black-bellied tern	<i>Sterna acuticauda</i>	EN
10	Egyptian vulture	<i>Neophron percnopterus</i>	EN
11	Steppe eagle	<i>Aquila nipalensis</i>	EN
12	Pallas's fish-eagle	<i>Haliaeetus leucorhynchus</i>	EN
13	Finn's weaver	<i>Ploceus megarhynchus</i>	EN
14	Swamp grass-babbler	<i>Laticilla cinerascens</i>	EN
15	Long-tailed duck	<i>Clangula hyemalis</i>	VU
16	Common pochard	<i>Aythya ferina</i>	VU
17	River tern	<i>Sterna aurantia</i>	VU
18	Indian spotted eagle	<i>Clanga hastata</i>	VU
19	Greater spotted eagle	<i>Clanga clanga</i>	VU
20	Tawny eagle	<i>Aquila rapax</i>	VU
21	Eastern imperial eagle	<i>Aquila heliaca</i>	VU
22	Great hornbill	<i>Buceros bicornis</i>	VU
23	Black-capped kingfisher	<i>Halcyon pileata</i>	VU
24	Grey-crowned prinia	<i>Prinia cinereocapilla</i>	VU
25	Bristled grassbird	<i>Schoenicola striata</i>	VU
26	Kashmir flycatcher	<i>Ficedula subrubra</i>	VU
27	White-throated bushchat	<i>Saxicola insignis</i>	VU
E	Mammals		
1	Chinese pangolin	<i>Manis pentadactyla</i>	CR
2	Indian pangolin	<i>Manis crassicaudata</i>	EN
3	Asian elephant	<i>Elephas maximus</i>	EN
4	Tiger	<i>Panthera tigris</i>	EN
5	Wild water buffalo	<i>Bubalus arnee</i>	EN
6	Hog deer	<i>Axis porcinus</i>	EN
7	Ganges river dolphin	<i>Platanista gangetica</i>	EN
8	Dhole	<i>Cuon alpinus</i>	EN
9	Greater one-horned rhino	<i>Rhinoceros unicornis</i>	VU
10	Gaur	<i>Bos gaurus</i>	VU
11	Four-horned antelope	<i>Tetracerus quadricornis</i>	VU
12	Sambar	<i>Rusa unicolor</i>	VU
13	Clouded leopard	<i>Neofelis nebulosa</i>	VU
14	Leopard	<i>Panthera pardus</i>	VU
15	Fishing cat	<i>Prionailurus viverrinus</i>	VU
16	Smooth-coated otter	<i>Lutrogale persicillata</i>	VU
17	Sloth bear	<i>Melursus ursinus</i>	VU
18	Mandelli's mouse-eared myotis	<i>Myotis sicarius</i>	VU

Note: VU – Vulnerable, EN – Endangered, CR – Critically Endangered, Details of these species are mentioned in appendices 1-5.

aquarium fish originating from the Java region of Indonesia, is most likely a result of introduction through the aquarium industry (Thin et al. 2020). In addition, we also still question the records of several snow trout species including *Schizothorax richardsonii*, *S. progastus*, *S. plagiosomus*, *S. labiatus*, *S. esocinus* and *Schizopyge curvifrons* and *Pseudecheneis crassicauda* in this province. These species are characteristic of high-altitude Himalayan rivers and streams, where they inhabit cold, fast-flowing, well-oxygenated waters (Shrestha 1981; Rai et al. 2002; Ng & Edds 2005; Yadav et al. 2014; Wagle et al. 2015; Khan et al. 2020). Their occasional records from the lowland rivers of Madhesh Province are unlikely to represent established populations. Instead, these individuals were most likely transported downstream from higher elevations during monsoon floods, representing allochthonous occurrences rather than resident populations. These records require further verification through comprehensive field surveys and taxonomic studies before they can be recognized as valid records in the fish checklist of Madhesh Province.

Our documentation of 36% of the country's herpetofauna (Rai et al. 2022) further establishes the biological value of the province. While reptile diversity, particularly the snakes, was robustly represented, our amphibian species were limited primarily to anuran frogs. The short duration of this study likely resulted in underrepresentation of amphibian richness. Future surveys, particularly in the Chure regions, are essential for comprehensive inventory. Even though it is short duration of field work, the recorded species *Fejervarya orissaensis*, *Sphaerotheca maskeyi* and *Sphaerotheca swani* in the province expands our understanding of their distribution. The presence of several globally threatened herpetofauna indicates that these species are facing broad spectrum of environmental pressure, necessitating long-term study and threat mitigation. Several herpetofauna reported in IUCN range were considered likely to represent erroneous identification or doubtful records and were therefore excluded from the present checklist. For example, species *Batagur dhongoka* (Das et al. 2019), *Python molurus* (Aengals et al. 2021), *Gloydus himalayanus* even the species name is taxonomically updated as *Gloydus nepalensis* (Limbu et al. 2023; Jablonski et al. 2026), *Ovophis monticola* (Lau and Guo 2021), *Protobothrops jerdonii* (Wogan et al. 2012), *Indotyphlops porrectus* (Vyas et al. 2021), *Fejervarya limnocharis* (IUCN SSC Amphibian Specialist Group. 2023), *Humerana humeralis* (IUCN SSC Amphibian Specialist Group. 2022), *Japalura tricarinata* (Cai et al. 2021), *Boiga cyanea* (Thy et al. 2022), *Boiga siamensis* (Wogan et al. 2021), *Oligodon kheriensis* (Limbu et al. 2022), *Oreocryptophis porphyraeus* (Tshewang et al. 2022), *Rhabdophis himalayanus* (Limbu et al. 2022), *Xenochrophis cerasogaster* (Ghosh et al. 2022), *Pseudoxenodon macrops* (Wogen et al. 2012), etc., however their presence suggests erroneous identification or doubtful records due to their geographical distribution ranges. Further field surveys and taxonomic studies are needed to

confirm these records for the Madhesh Province herpetofauna checklist.

Madhesh province support 64% of Nepal's bird species (DNPWC & BCN 2025). This remarkable diversity is largely attributed to high environmental heterogeneity created due to mosaic of intact forest, farmlands, wetlands, settlements, grassland and different protected areas and Important Bird and Biodiversity Areas (Katuwal et al. 2025a, b). Despite this diversity, conservation threats are increasing, possibly due to ongoing anthropogenic pressure such as habitat loss and degradation, hunting, felling of nesting trees, forest fire and lack of water resources (Katuwal et al. 2021; 2023a; 2025a, b). *Loriculus vernalis* which have very few numbers of records from Nepal (Inskipp et al. 2016) was photographed from Saptari district in this survey. Additionally, several nationally threatened species, such as *Leptoptilos javanicus* and *Anastomus oscitans* have high nest concentration in different districts of the province (Katuwal et al. 2023b; Tamang et al. 2024), indicating that the province provides suitable habitat for these species. Continuous monitoring, particularly across the forest, and river of Chure in different seasons, will likely yield more species records and nest distribution of several threatened species.

Our study shows that Madhesh contains 36% of the total mammal species found in the country (Jnawali et al. 2011). These include a highly adaptable rodent population and bats assemblages (Kunz et al. 2003; Kunz & Fenton 2005; Kunz 2013). The presence of carnivores, particularly the top predators, is vital indicator of ecosystem health as these species regulate the herbivore population and maintain community structure (Ripple et al. 2014; Fernandez-Sepulveda & Martín 2022). In the present checklist, we did not include some doubtful occurrences of species such as *Ursus thibetanus*, and *Arctictis binturong* mentioned by Jnawali et al. (2011); however, we recommend targeted studies to verify their status in future.

Around one-fourth of mammalian species are under threat. Furthermore, species such as *Rattus tanezumi* remain unevaluated in the National Red List. This lack of data highlights important gap in local biodiversity assessments. The record of six new species of bat from this province, points to have high diversity of bat, which elevates the conservation importance of caves and mature forest. In addition, *Myotis sicarius* which was recorded only above Chure region, including Lalitpur in the east to Kaski districts in the west within an elevation range of approximately 840–1500 m (Jnawali et al. 2011) is reported during our survey. The confirmation of this species in the lowlands of Nepal indicates that its distribution may be more extensive than previously recognized, highlighting the need for further surveys and conservation efforts for this threatened species. To safeguard this population, national biodiversity assessments must be regularly updated to reflect the shifting pressure on both common and threatened species.

5 | Conclusions

Our comprehensive assessment, synthesized from field surveys and literature reviews, confirms that Madhesh Province serves as vital habitat for a large number of vertebrate fauna, supporting a significant portion of Nepal's total vertebrate species. Most of the species were concentrated in the Chure region, especially in the central to western parts, though some species are also common in the southern lowlands, such as *Sus scrofa*, *Boselaphus tragocamelus*, and *Macaca mulatta*. Despite this ecological value, several species are facing increasing anthropogenic threats, resulting in a high

concentration of globally and nationally threatened species. To conserve the vertebrate fauna of the province, targeted policies must be formulated to protect the Chure regions, forest, wetlands and farmlands, while simultaneously should address illegal hunting, forest fire, and implement strategies to manage human-wildlife conflict. In addition, continuous monitoring across different seasons and habitats is needed.

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Authors' contributions

HPS: conceptualization, methodology, visualization, investigation, data curation, resources, formal analysis, funding acquisition, writing – original draft; BPB: conceptualization, methodology, visualization, resources, investigation, data curation, formal analysis, funding acquisition, writing – review and editing; SR: conceptualization, methodology, investigation, data curation, writing – review and editing; AN: investigation, data curation, writing – review and editing; BR: investigation, data curation, writing – review and editing; PK: investigation, data curation, writing – review and editing; NR: investigation, data curation, writing – review and editing; SMS: investigation, data curation, writing – review and editing; GP: investigation, data curation, writing – review and editing; DNM: investigation, data curation, resources, writing – review and editing; AKR: resources, investigation, writing – review and editing; SK: methodology, resources, investigation, funding acquisition, writing – review and editing; HBK: conceptualization, methodology, visualization, investigation, data curation, resources, formal analysis, funding acquisition, writing – original draft. All authors contributed critically to the drafts and gave final approval for publication.

Conflicts of interest

The authors declare no conflict of interest.

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Appendix 1. Fish of Madhesh Province, Nepal

SN	Common Name	Scientific Name	IUCN Status	Methods	Rivers recorded	Citations
Order: Anabantiformes						
Family: Anabantidae						
1	Gangetic koi	<i>Anabas cobojus</i>	DD	This study and Literature review	TY (S), KM (L)	Shrestha and Edds 2012
2	Climbing perch	<i>Anabas testudineus</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
Family: Badidae						
3	Badis	<i>Badis badis</i>	LC	This study and Literature review	TY (S/L)	Shah 2016; Shrestha and Edds 2012
Family: Channidae						
4	Dwarf snakehead	<i>Channa gachua</i>	LC	Literature review	TY (L), BG (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Subedi et al. 2021; Yadav 2017
5	Great snakehead	<i>Channa marulius</i>	LC	This study and Literature review	BG (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011
6	Spotted snakehead	<i>Channa punctata</i>	LC	This study and Literature review	TY (S/L), KM (S/L), BG (L), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Shah 2016; Yadav 2017
7	Assamese snakehead	<i>Channa stewartii</i>	LC	Literature review	KS (L)	KTWR 2018
8	Snakehead murrel	<i>Channa striata</i>	LC	This study and Literature review	TY (L), KM (L), BG (S), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
Family: Nandidae						
9	Gangetic leaffish	<i>Nandus nandus</i>	LC	This study and Literature review	TY (S/L), BG (L), KS (L), KS (L)	KTWR 2018; Shah 2016; Yadav 2017
Family: Osphronemidae						
10	Honey gourami	<i>Trichogaster chuna</i>	LC	This study and Literature review	TY (S/L)	Shah 2016; Shrestha and Edds 2012
11	Banded gourami	<i>Trichogaster fasciata</i>	LC	This study and Literature review	TY (S/L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011
Order: Anguilliformes						
Family: Anguillidae						
12	Indian mottled eel	<i>Anguilla bengalensis</i>	NT	Literature review	TY (L), KS (L)	KTWR 2018; Limbu & Subba 2011
Order: Beloniformes						
Family: Belontiidae						
13	Freshwater garfish	<i>Xenentodon cancila</i>	LC	Literature review	TY (L), KM (L), BG (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Yadav 2017
Order: Clupeiformes						
Family: Dorosomatidae						
14	Indian river shad	<i>Gudusia chapra</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; PNP 2018
Family: Engraulidae						
15	Gangetic hairfin anchovy	<i>Setipinna phasa</i>	LC	Literature review	KS (L)	KTWR 2018
Order: Cypriniformes						
Family: Balitoridae						
16	Gray's stone loach	<i>Balitora brucei</i>	NT	This study and Literature review	KM (S), KS (L)	KTWR 2018
Family: Botiidae						
17	Almorha loach	<i>Botia almorhae</i>	LC	Literature review	KS (L)	KTWR 2018
18	Loach	<i>Botia histrionica</i>	LC	Literature review	KS (L)	KTWR 2018

19	Reticulate loach	<i>Botia lohachata</i>	LC	This study and Literature review	TY (L), KM (S/L), LB (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Shah 2016; Subedi et al. 2021
20	Bengal loach	<i>Botia dario</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018; Limbu & Subba 2011
Family: Cobitidae						
21	Gongota loach	<i>Canthophrys gongota</i>	LC	This study and Literature review	TY (L), KM (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
22	Annandale loach	<i>Lepidocephalichthys annandalei</i>	LC	This study and Literature review	TY (S/L), KS (L)	KTWR 2018
23	Guntea loach	<i>Lepidocephalichthys guntea</i>	LC	This study and Literature review	TY (L), KM (S/L), BG (S/L), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Shah 2016; Subedi et al. 2021; Yadav 2017
24	Goalpara loach	<i>Neoeucirrhichthys maydelli</i>	LC	Literature review	KS (L)	KTWR 2018
25		<i>Pangio pangia</i>	LC	This study	BG (S)	
Family: Cyprinidae						
26	Kalabans	<i>Bangana dero</i>	LC	This study and Literature review	TY (L), KM (L), BG (S/L), LB (S), KS (L)	KTWR 2018; Subedi et al. 2021; Yadav 2017
27	Silver barb	<i>Barbonymus gonionotus</i>	LC	Literature review	TY (L), KM (L)	Shah 2016
28	Chaguni	<i>Chagunius chagunio</i>	LC	This study and Literature review	TY (L), KM (L), BG (L), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Yadav 2017
29	Mrigal	<i>Cirrhinus mrigala</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
30	Reba carp	<i>Cirrhinus reba</i>	LC	This study and Literature review	KM (L), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011; PNP 2018
31	Common carp/Eurasian carp	<i>Cyprinus carpio</i>	LC	Literature review	TY (L)	Shah 2016
32	Annandale garra	<i>Garra annandalei</i>	LC	This study and Literature review	KM (S/L), BG (S), KS (L)	Ghimire & Koju 2021; KTWR 2018
33	Sucker head	<i>Garra gotyla</i>	LC	Literature review	BG (L), KS (L)	KTWR 2018; Subedi et al. 2021
34	Lamta garra	<i>Garra lamta</i>	LC	Literature review	KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011
35	Sucker fish	<i>Garra cf. mulya</i>	LC	This study	KM (S), BG (S), LB (S)	
36	Angra labeo	<i>Labeo angra</i>	LC	Literature review	KS (L)	KTWR 2018
37	Minor carp	<i>Labeo bata</i>	LC	Literature review	TY (L), KM (L)	Shah 2016
38	Boga labeo	<i>Labeo boga</i>	LC	Literature review	KM (L), KS (L)	KTWR 2018; Subedi et al. 2021
39	Catla	<i>Labeo catla</i>	LC	Literature review	TY (L), KM (L)	Shah 2016; PNP 2018
40	Ghora mach	<i>Labeo dyocheilus</i>	LC	Literature review	KS (L)	KTWR 2018
41	Fringed-lipped peninsula carp	<i>Labeo fimbriatus</i>	LC	Literature review	TY (L), KM (L)	Ghimire & Koju 2021; Shah 2016
42	Kuria labeo	<i>Labeo gonius</i>	LC	Literature review	KM (L), BG (L), KS (L)	KTWR 2018; Yadav 2017
43	Pangusia labeo	<i>Labeo pangusia</i>	NT	This study and Literature review	KM (L), BG (S)	Shrestha and Edds 2012
44	Rohu	<i>Labeo rohita</i>	LC	Literature review	TY (L), KM (L), BG (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Yadav 2017
45	Karnatala labeo	<i>Labeo calbasu</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Subedi et al. 2021
46	Dark mahseer	<i>Naziritor chelynoides</i>	VU	Literature review	KS (L)	KTWR 2018
47	Katli	<i>Neolissochilus hexagonolepis</i>	NT	This study and Literature review	LB (S), KS (L)	KTWR 2018
48	Rosy barb	<i>Pethia conchoni</i>	LC	This study and Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
49	Golden dwarf barb	<i>Pethia gelius</i>	LC	Literature review	KS (L), KS (L)	KTWR 2018
50	Ticto barb	<i>Pethia ticto</i>	LC	This study and Literature review	TY (S/L), KM (L), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011
51	Spottedsail barb	<i>Pethia phutunio</i>	LC	Literature review	KS (L)	KTWR 2018
52	Chola barb	<i>Puntius chola</i>	LC	Literature review	KM (L), KS (L)	KTWR 2018

53	Spotfin swamp barb	<i>Puntius sophore</i>	LC	This study and Literature review	TY (S/L), KM (S/L), BG (S/L), LB (S)	KTWR 2018; Limbu & Subba 2011; Shah 2016; PNP 2018; Subedi et al. 2021; Yadav 2017
54	Onespot barb	<i>Puntius terio</i>	LC	This study and Literature review	TY (L), KM (L), BG (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Shah 2016
55	Olive barb	<i>Systomus sarana</i>	LC	This study and Literature review	TY (S), KM (L), BG (S/L), LB (S), KS (L)	KTWR 2018; PNP 2018; Yadav 2017
56	Gangetic latia	<i>Tariqilabeo latius</i>	LC	This study and Literature review	TY (S), BG (S), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011
57	Putitor mahseer	<i>Tor putitora</i>	EN	This study and Literature review	TY (L), KM (L), BG(S), KS (L)	KTWR 2018; Limbu & Subba 2011; Subedi et al. 2021
58	Copper mahseer	<i>Tor tor</i>	DD	Literature review	TY (L), KS (L)	KTWR 2018; Shah 2016
59	Khasi garra	<i>Garra nasuta</i>	LC	Literature review	KS (L)	KTWR 2018
Family: Danionidae						
60	Barred baril	<i>Barilius barila</i>	LC	This study and Literature review	TY (L), KM (S), LB (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Subedi et al. 2021
61	Vagra baril	<i>Barilius vagra</i>	LC	This study and Literature review	TY (L), KM (S/L), BG (S), LB (S), KS (L)	KTWR 2018; Subedi et al. 2021
62	Jaya	<i>Cabdio jaya</i>	LC	Literature review	KM (L), TY (L), KS (L)	KTWR 2018; Limbu & Subba 2011
63	Morar barb	<i>Cabdio morar</i>	LC	This study and Literature review	TY (L), KM (L), BG (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Shah 2016
64		<i>Danio dangila</i>	LC	Literature review	KS (L)	KTWR 2018
65	Zebra danio	<i>Danio rerio</i>	LC	This study and Literature review	KM (S), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011
66	Giant danio	<i>Devario aequipinnatus</i>	LC	Literature review	KM (L), TY (L), KS (L)	KTWR 2018; Subedi et al. 2021
67	Sind danio	<i>Devario devario</i>	LC	This study and Literature review	TY (S/L), KM (S/L), BG (S), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011
68	Flying barb	<i>Esomus danrica</i>	LC	This study and Literature review	TY (S/L), KM (S/L), BG (S), LB (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011
69	Indian glass barb	<i>Laubuka laubuca</i>	LC	This study and Literature review	TY (L), KM (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011
70	Baril baril	<i>Opsarius barna</i>	LC	This study and Literature review	TY (S/L), KM (S/L), BG (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
71	Sunara	<i>Opsarius bendelisis</i>	LC	This study and Literature review	KM (S/L), BG (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Subedi et al. 2021
72	Shacra baril	<i>Opsarius shacra</i>	LC	This study and Literature review	BG (S), KS (L)	KTWR 2018
73	Tileo baril	<i>Opsarius tileo</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018
74	Trout barb	<i>Raiamas bola</i>	LC	Literature review	KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011
75	Burmese trout	<i>Raiamas guttatus</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Shah 2016
76	Large razorbelly minnow	<i>Salmotoma bacaila</i>	LC	Literature review	TY (L), KM (L), KS (L)	Ghimire & Koju 2021; KTWR 2018; Shah 2016
77		<i>Amblypharyngodon mola</i>	LC	This study and Literature review	KM (L), BG (S), KS (L)	KTWR 2018; Limbu & Subba 2011
78	Lahori chilwa	<i>Barilius modestus</i>	LC	This study and Literature review	TY (S), KM (L)	Ghimire & Koju 2021
79	Silver hatchet chela	<i>Chela cachius</i>	LC	Literature review	TY (L)	Shah 2016
80	Silver razorbelly minnow	<i>Salmotoma acinaces</i>	LC	This study and Literature review	TY (S), KM (S), BG (S), LB (S), KS (L)	KTWR 2018
81		<i>Securicula gora</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018
Family: Nemacheilidae						
82	Corica loach	<i>Nemacheilus corica</i>	LC	This study	KM (S), BG (S), LB (S)	
83	Ring loach	<i>Schistura beavani</i>	LC	Literature review	KS (L)	KTWR 2018

84		<i>Schistura multifasciata</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018
85		<i>Schistura cf. rupecula</i>	LC	This study and Literature review	BG (S), KS (L)	KTWR 2018
86		<i>Paracanthocobitis botia</i>	LC	This study and Literature review	KM (S/L), BG (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Subedi et al. 2021
Family: Psilorhynchidae						
87	Homaloptera minnow	<i>Psilorhynchus homaloptera</i>	LC	This study and Literature review	TY (S/L), KS (L)	KTWR 2018
88	Rainbow minnow	<i>Psilorhynchus nudithoracicus</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018
89	Stone carp	<i>Psilorhynchus pseudecheneis</i>	LC	This study and Literature review	TY (S/L), KS (L)	KTWR 2018
90	Balitora minnow	<i>Psilorhynchus balitora</i>	LC	This study and Literature review	KM (S/L)	Subedi et al. 2021
91	Red stone carp	<i>Psilorhynchus sucatio</i>	LC	This study and Literature review	TY (S), KM (S/L), BG (S), KS (L)	KTWR 2018
Family: Xenocypridae						
92	Grass carp	<i>Ctenopharyngodon idella</i>	LC	Literature review	TY (L)	Shah 2016
93	Silver carp	<i>Hypophthalmichthys molitrix</i>	NT	Literature review	TY (L)	Shah 2016
94	Bighead carp	<i>Hypophthalmichthys nobilis</i>	DD	Literature review	TY (L)	Shah 2016
Order: Cyprinodontiformes						
Family: Aplocheilidae						
95	Blue panchax	<i>Aplocheilichthys panchax</i>	LC	This study	KM (S), BG (S)	
Order: Gobiiformes						
Family: Gobiidae						
96	Tank goby	<i>Glossogobius giurinus</i>	LC	This study and Literature review	TY (L), KM (S), BG (S), LB (S), KS (L)	Ghimire & Koju 2021; KTWR 2018; Limbu & Subba 2011; Shah 2016
Order: Osteoglossiformes						
Family: Notopteridae						
97	Clown knifefish	<i>Chitala chitala</i>	NT	Literature review	KM (L), BG (L), KS (L)	KTWR 2018; Yadav 2017
98	Bronze featherback	<i>Notopterus notopterus</i>	LC	Literature review	TY (L), KM (L)	Shah 2016; PNP 2018
Order: Ovalentaria/mics						
Family: Ambassidae						
99	Elongate glass perchlet	<i>Chanda nama</i>	LC	This study and Literature review	TY (S/L), KM (L), BG (S), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
100	Indian glassy fish	<i>Chanda ranga</i>	LC	This study and Literature review	TY (S/L), KM (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
101	Highfin glassy perchlet	<i>Pseudambassis lala</i>	NT	Literature review	TY (L)	Shah 2016
Order: Siluriformes						
Family: Ailiidae						
102	Gangetic ailia	<i>Ailia coila</i>	NT	This study and Literature review	TY (S), KM (L), BG (S), KS (L)	KTWR 2018; Limbu & Subba 2011
103	Garua bachcha	<i>Clupisoma garua</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
104	Jal kapoor	<i>Clupisoma montanum</i>	LC	Literature review	TY (L)	Shah 2016
Family: Amblycipitidae						
105	Indian torrent catfish	<i>Amblyceps mangois</i>	LC	This study and Literature review	BG (S), KS (L)	KTWR 2018
Family: Bagridae						
106	Batasio	<i>Batasio batasio</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018; Limbu & Subba 2011
107	Day's mystus	<i>Mystus bleekeri</i>	LC	This study and Literature review	TY (S), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011

108	Gangetic mystus	<i>Mystus cavasius</i>	LC	This study and Literature review	TY (L), KM (L), BG (S), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
109	Tengara catfish	<i>Mystus tengara</i>	LC	This study and Literature review	TY (L), KM (S/L), BG (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Yadav 2017
110	Striped dwarf catfish	<i>Mystus vittatus</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Subedi et al. 2021
111	Rita	<i>Rita rita</i>	LC	Literature review	KS (L)	KTWR 2018
112	Long-whiskered catfish	<i>Sperata aor</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
Family: Chacidae						
113	Squarehead catfish	<i>Chaca chaca</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018; Shah 2016
Family: Clariidae						
114		<i>Clarias batrachus</i>	LC	This study and Literature review	TY (L), BG (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Yadav 2017
Family: Heteropneustidae						
115	Singee	<i>Heteropneustes fossilis</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016
Family: Schilbeidae						
116		<i>Eutropiichthys murius</i>	LC	Literature review	KS (L)	KTWR 2018
117	Batchwa vacha	<i>Eutropiichthys vacha</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Shah 2016
118	Indian potasi	<i>Pachypterus atherinoides</i>	LC	Literature review	KS (L)	KTWR 2018
Family: Siluridae						
119	Butter catfish	<i>Ompok bimaculatus</i>	NT	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Shah 2016
120	Buhari	<i>Wallago attu</i>	VU	This study and Literature review	TY (L), KM (L), BG (S), KS (L)	KTWR 2018; Shah 2016
121		<i>Ompok pabo</i>	NT	This study	TY (S)	
Family: Sisoridae						
122	Goonch	<i>Bagarius bagarius</i>	VU	This study and Literature review	TY (S/L), KS (L)	KTWR 2018; Limbu & Subba 2011
123	Indian gagata	<i>Gagata cenia</i>	LC	Literature review	TY (L), KM (L), KS (L)	KTWR 2018; Shah 2016
124		<i>Glyptothorax annandalei</i>	LC	Literature review	KS (L)	KTWR 2018
125		<i>Glyptothorax botius</i>	LC	Literature review	KS (L)	KTWR 2018
126		<i>Glyptothorax cavia</i>	LC	Literature review	KS (L)	KTWR 2018
127		<i>Glyptothorax indicus</i>	LC	Literature review	KS (L)	KTWR 2018
128	River cat	<i>Glyptothorax pectinopterus</i>	LC	Literature review	KS (L)	KTWR 2018
129	Torrent telchitta catfish	<i>Glyptothorax telchitta</i>	LC	This study and Literature review	TY (S/L), KS (L)	KTWR 2018; Shah 2016
130	Three-lined catfish	<i>Glyptothorax trilineatus</i>	LC	Literature review	KS (L)	KTWR 2018
131		<i>Glyptothorax jivanae</i>	NA	Literature review	BG (L)	Haggard 2026
132	Glosst gogangra	<i>Gogangra viridescens</i>	LC	Literature review	KS (L)	KTWR 2018
133	Koshi nangra	<i>Nangra assamensis</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018; Shah 2016
134		<i>Nangra nangra</i>	LC	This study	BG (S)	
135	Sucker throat catfish	<i>Pseudecheneis sulcata</i>	LC	Literature review	KS (L)	KTWR 2018
136	Kade capre	<i>Pseudolaguvia kapuri</i>	LC	This study	KM (S), BG (S)	
137		<i>Sisor rhabdophorus</i>	LC	Literature review	KS (L)	KTWR 2018
138		<i>Erethistes pusillus</i>	LC	Literature review	KS (L)	KTWR 2018
139		<i>Glyptothorax alaknandi</i>	LC	Literature review	KM (L)	Ghimire & Koju 2021
140		<i>Sisor rheophilus</i>	DD	Literature review	KS (L)	KTWR 2018
Order: Synbranchiformes						
Family: Mastacembelidae						
141	One-stripe spinyeel	<i>Macrognathus aral</i>	LC	This study and Literature review	TY (L), KM (L), BG (S)	Shah 2016
142		<i>Macrognathus lineatamaculatus</i>	DD	Literature review	KM (L)	Ghimire & Koju 2021

143	Barred spiny eel	<i>Macrogathus pancalus</i>	LC	This study and Literature review	TY (S/L), KM (S/L), BG (L)	Shah 2016; Yadav 2017
144	Zebra spiny eel	<i>Macrogathus zebrinus</i>	LC	Literature review	KM (L)	Ghimire & Koju 2021
145	Zig-zag eel	<i>Mastacembelus armatus</i>	LC	This study and Literature review	TY (L), KM (L), LB (S), KS (L)	KTWR 2018; Limbu & Subba 2011; Shah 2016; Subedi et al. 2021
Family: Synbranchidae						
146	Gangetic mud-eel	<i>Ophichthys cuchia</i>	LC	Literature review	TY (L), KM (L)	Shah 2016
Order: Tetraodontiformes						
Family: Tetraodontidae						
147	Ocellated pufferfish	<i>Leiodon cutcutia</i>	LC	Literature review	TY (L), KS (L)	KTWR 2018; Shah 2016

Appendix 2. Amphibians of Madhesh Province, Nepal

SN	Order/Family/English Name	Scientific Name	IUCN Status	Methods	Location	Citations
Order: Anura						
Family: Bufonidae						
1	Asian black-spinned toad	<i>Duttaphrynus melanostictus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018 ; 2020; Chhetry 2010; KTWR 2018; Shah & Tiwari 2004
2	Marbled toad	<i>Firouzophrynus stomaticus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018 ; 2020; Chhetry 2010; KTWR 2018; Shah & Tiwari 2004
Family: Dicroglossidae						
3	South Asian skittering frog	<i>Euphlyctis adolfi</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018 ; 2020; KTWR 2018; Shah & Tiwari 2004
		<i>Fejervarya orissaensis</i>				
4	Odisha cricket frog		LC	This study	P,B,R,S,M,D,Si,Sp	
5	Jerdon's bullfrog	<i>Hoplobatrachus crassus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018 ; 2020; Chhetry 2010; KTWR 2018; PNP 2018; Shah & Tiwari 2004
6	Indian bullfrog	<i>Hoplobatrachus tigerinus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020; Chhetry 2010; KTWR 2018; Shah & Tiwari 2004
7	Nepal cricket frog	<i>Minervarya nepalensis</i>	LC	Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020
8	Pierre's cricket frog	<i>Minervarya pierrei</i>	LC	This study and Literature review	P,B,S,M,Si,Sp	Bhattarai et al. 2020
9	Syhadra cricket frog	<i>Minervarya syhadrensis</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020; Chhetry 2010; Shah & Tiwari 2004
10	Terai wart frog	<i>Minervarya teraiensis</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020; Chhetry 2010; Shah & Tiwari 2004
11	Swan's burrowing frog	<i>Sphaerotheca swani</i>	LC	This study	P,B,R,S,M,D,Si,Sp	
12	Maskey's burrowing frog	<i>Sphaerotheca maskeyi</i>	LC	This study	P,B,R,Si,Sp	
Family: Microhylidae						
13	Painted frog	<i>Uperodon taprobanicus</i>	LC	This study and Literature review	P,B,R,Si,Sp	Bhattarai et al. 2018; 2020; KTWR 2018; PNP 2018; Shah & Tiwari 2004
14	Globular balloon frog	<i>Uperodon globulosus</i>	LC	Literature review	P,B,R	Bhattarai et al. 2018; 2020; PNP 2018; Shah & Tiwari 2004
15	Marbled globular frog	<i>Uperodon systoma</i>	LC	Literature review	Sp	Khatiwada et al. 2021
16	Nilphamari narrow-mouthed frog	<i>Microhyla nilphamariensis</i>	LC	This study and Literature review	P,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020

Family: Ranidae						
17	Mahabharat torrent frog	<i>Amolops mahabharatensis</i>	VU	Literature review	P	Bhattarai et al. 2020
18	Common tree frog	<i>Polypedates maculatus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020; Shah & Tiwari 2004
19	Six-lined bush frog	<i>Polypedates taeniatus</i>	LC	This study and Literature review	Sp	Bhattarai et al. 2020

Appendix 3. Reptiles of Madhesh Province, Nepal

SN	/Order/Family/English name	Scientific name	IUCN Status	Methods	Location	Citations
Order: Testudines						
Family: Geoemydidae						
1	Indian black turtle	<i>Melanochelys trijuga</i>	LC	Literature review	Sp	Bhattarai et al. 2020; KTW 2018
2	Tricarinate hill turtle	<i>Melanochelys tricarinata</i>	EN	Literature review	P,B,R	Aryal et al. 2010; Bhattarai et al. 2020; MWT 2022
3	Brown roofed turtle	<i>Pangshura smithii</i>	NT	Literature review	Sp	Aryal et al. 2010; MWT 2022
4	Indian roofed turtle	<i>Pangshura tecta</i>	VU	Literature review	D	Aryal et al. 2010 ; Bhattarai et al. 2023
5	Indian tent turtle	<i>Pangshura tentoria</i>	LC	Literature review	Sp	Aryal et al. 2010; KTW 2018; MWT 2022
Family: Testudinidae						
6	Elongated tortoise	<i>Indotestudo elongata</i>	CR	This study and Literature review	P,B	Aryal et al. 2010; Bhattarai et al. 2018, 2020; Kharel & Chhetry 2014; KTW 2018; MWT 2022; Shah & Tiwari 2004
Family: Trionychidae						
7	Indian softshell turtle	<i>Nilssonia gangetica</i>	EN	Literature review	D,Sp	Aryal et al. 2010; KTW 2018; MWT 2022; Shah & Tiwari 2004
8	Indian flapshell turtle	<i>Lissemys punctata</i>	VU	This study and Literature review	P,B,R,S,M,D,Sp	Aryal et al. 2010; Bhattarai et al. 2020; KTW 2018; MWT 2022; Shah & Tiwari 2004
9	Indian peacock softshell turtle	<i>Nilssonia hurum</i>	EN	Literature review	R,D,Sp	Aryal et al. 2010; KTW 2018; MWT 2022
10	Indian narrow-headed softshell turtle	<i>Chitra indica</i>	EN	Literature review	Sp	Aryal et al. 2010; KTW 2018
Order: Squamata						
Family: Agamidae						
11	Changeable lizard	<i>Calotes vultosus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020; PNP 2018; Shah & Tiwari 2004
12	Dark sitana	<i>Sitana fusca</i>	CR	This study and Literature review	P,B,M	Bhattarai et al. 2018; 2020; Shah & Tiwari 2004
Family: Gekkonidae						
13	Common house gecko	<i>Hemidactylus frenatus</i>	LC	Literature review	P,B,S,M,Si	Bhattarai et al. 2018; 2020; KTW 2018; Shah & Tiwari 2004
14	Fox gecko	<i>Hemidactylus garnotii</i>	LC	This study and Literature review	P,S,M	Shah & Tiwari 2004
15	Kushmore house gecko	<i>Hemidactylus kushmorensis</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020
16	Yellow-bellied house gecko	<i>Hemidactylus flaviviridis</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2018; 2020; KTW 2018
Family: Scincidae						
17	Sikkim ground skink	<i>Ablepharus sikimensis</i>	LC	Literature review	Sp	KTW 2018; Zhao et al. 2021 Bhattarai et al. 2018; 2020; Shah & Tiwari 2004

18	Common ground skink	<i>Eutropis carinata</i>	LC	Literature review	P,B,R,S,M	
19	Striped ground skink	<i>Eutropis trivittata</i>	LC	This study and Literature review	P,B,M	Bhattarai et al. 2018; 2020; Shah & Tiwari 2004
20	Bronze ground skink	<i>Eutropis macularia</i>	LC	Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; PNP 2018; Shah & Tiwari 2004
21	White-spotted supple skink	<i>Riopa albopunctata</i>	LC	Literature review	S,M	Bhattarai et al. 2020; Shah & Tiwari 2004
22	Common dotted garden skink	<i>Riopa punctata</i>	LC	This study and Literature review	P, D	Shah & Tiwari 2004
23	Spotted forest skink	<i>Sphenomorphus maculatus</i>	LC	This study and Literature review	P,D	Bhattarai et al. 2018;2020
Family: Varanidae						
24	Bengal monitor lizard	<i>Varanus bengalensis</i>	NT	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTW R 2018; PNP 2018; Shah & Tiwari 2004
25	Yellow monitor	<i>Varanus flavescens</i>	EN	Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTW R 2018; PNP 2018; Shah & Tiwari 2004
Family: Erycidae						
26	Common sand boa	<i>Eryx conicus</i>	NT	Literature review	P,D	Bhattarai et al. 2020; MWT 2022; PNP 2018; Shah & Tiwari 2004
27	Red sand boa	<i>Eryx johnii</i>	NT	Literature review	P,M,D	Bhattarai et al. 2018; 2020; MWT 2022; Shah & Tiwari 2004
Family: Colubridae						
28	Long-snout vine snake	<i>Ahaetulla longirostris</i>	LC	Literature review	P,D,Si	Bhattarai et al. 2020; Chhetri & Chhetry 2013; MWT 2022; Shah & Tiwari 2004
29	Forsten's cat snake	<i>Boiga forsteni</i>	LC	Literature review	D	Bhattarai et al. 2020; MWT 2022
30	Tawny cat snake	<i>Boiga stoliczkae</i>	LC	Literature review	P	Bhattarai et al. 2020
31	Indian gamma snake	<i>Boiga trigonata</i>	LC	Literature review	P,B,D,Sp	Bhattarai et al. 2020; KTW R 2018; Shah & Tiwari 2004
32	Ornate flying snake	<i>Chrysopelea ornata</i>	LC	Literature review	P,B,D	Bhattarai et al. 2020; MWT 2022
33	Common trinket snake	<i>Coelognathus helena</i>	LC	Literature review	P,D	Bhattarai et al. 2020; MWT 2022
34	Copper-head trinket snake	<i>Coelognathus radiatus</i>	LC	Literature review	P,D	Bhattarai et al. 2020; MWT 2022
35	Common bronze-back tree snake	<i>Dendrelaphis tristis</i>	LC	Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; Chhetri & Chhetry 2013; MWT 2022; Shah & Tiwari 2004
36	Common wolf snake	<i>Lycodon aulicus</i>	LC	This study and Literature review	P,B,D	Bhattarai et al. 2020; MWT 2022; Shah & Tiwari 2004
37	Twin-spotted wolf snake	<i>Lycodon jara</i>	LC	Literature review	P,D	Bhattarai et al. 2018 ; Bhattarai et al. 2020; MWT 2022
38	Barred wolf snake	<i>Lycodon striatus</i>	LC	Literature review	D	MWT 2022
39	White-barred kukri snake	<i>Oligodon albocinctus</i>	LC	Literature review	D	MWT 2022
40	Russell's kukri snake	<i>Oligodon russelii</i>	LC	Literature review	P,B,D	Bhattarai et al. 2020; KTW R 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
41	Common rat snake	<i>Ptyas mucosa</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTW R 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
42	Cantor's black-headed snake	<i>Sibynophis sagittarius</i>	LC	Literature review	P,M,D	Bhattarai et al. 2020; MWT 2022; Shah & Tiwari 2004
43	Collared black-headed snake	<i>Sibynophis collaris</i>	LC	Literature review	D	MWT 2022, Wogan et al. 2021
Elapidae						
44	Lesser black krait	<i>Bungarus lividus</i>	LC	Literature review	P	Bhattarai et al. 2018;2020
45	Common krait	<i>Bungarus caeruleus</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; Chhetri & Chhetry 2013; KTW R 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
46	Banded krait	<i>Bungarus fasciatus</i>	LC	Literature review	P,B,R,S,D	Bhattarai et al. 2018, 2020; Chhetri & Chhetry 2013; KTW R 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
47	Wall's krait	<i>Bungarus walli</i>	LC	Literature review	D	MWT 2022

48	Monocled cobra	<i>Naja kaouthia</i>	LC	Literature review	S,M,D,Si,Sp	KTWR,2018; MWT 2022; Shah & Tiwari 2004
49	Indian cobra	<i>Naja naja</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTWR 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
50	King cobra	<i>Ophiophagus hannah</i>	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTWR 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
<i>Homolapsidae</i>						
51	Rainbow water snake	<i>Enhydryis enhydryis</i>	LC	Literature review	S,D	Chettri & Chhetry 2013; KTWR 2018; MWT 2022; Shah & Tiwari 2004
52	Siebold's water snake	<i>Ferania sieboldii</i>	LC	This study and Literature review	D	MWT 2022; Shah & Tiwari 2004
Family: Natricidae						
53	Buff striped keelback	<i>Amphiesma stolatum</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; Chettri & Chhetry 2013; KTWR 2018; MWT 2022; Shah & Tiwari 2004
54	Olive keelback water snake	<i>Atretium schistosum</i>	LC	Literature review	S,D	Chettri & Chhetry 2013; MWT 2022
55	Checkered keelback snake	<i>Fowlea piscator</i>	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTW 2018; MWT 2022; Shah & Tiwari 2004
56	St.Jhon's keelback water snake	<i>Fowlea sanctijohannis</i>	LC	Literature review	S	Chettri & Chhetry 2013; KTWR 2018
57	Bar-necked keelback	<i>Fowlea schnurrenbergeri</i>	LC	Literature review	M,D	MWT 2022; Shah & Tiwari 2004; Srinivasulu & Mohapatra 2021
58	Red-necked keelback	<i>Rhabdophis helleri</i>	LC	Literature review	P	Bhattarai et al. 2018
Family: Psammophiidae						
59	Sand snake	<i>Psammophis condanarus</i>	LC	Literature review	D	MWT 2022; Limbu et al. 2022
Family: Psammodynastidae						
60	Common mock viper	<i>Psammodynastes pulverulentus</i>	LC	Literature review	P	Bhattarai et al. 2018; 2020
Family: Pseudoxenodontidae						
Family: Pythonidae						
61	Burmese python	<i>Python bivittatus</i>	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Bhattarai et al. 2020; KTWR 2018; MWT 2022; Shah & Tiwari 2004
Family: Typhlopidae						
62	Diard's blind snake	<i>Argyrophis diardii</i>	LC	Literature review	S	Bhattarai et al. 2020; Chettri & Chhetry 2013
63	Brahminy blind snake	<i>Indotyphlops braminus</i>	LC	This study and Literature review	B,S,D,Si,Sp	Bhattarai et al. 2020; Chettri & Chhetry 2013; KTWR 2018; MWT 2022; PNP 2018; Shah & Tiwari 2004
Family: Viperidae						
64	Russell's viper	<i>Daboia russelii</i>	LC	Literature review	P,S,M,D,Si,Sp	Bhattarai et al. 2020; Chettri & Chhetry 2013; MWT 2022; Shah & Tiwari 2004
65	White-lipped tree viper	<i>Trimeresurus albolabris</i>	LC	Literature review	P	Bhattarai et al. 2020; KTWR 2018
66	Nepal pit viper	<i>Trimeresurus septentrionalis</i>	LC	This study and Literature review	P	Bhattarai et al. 2020
Order: Crocodylia						
Family: Crocodylidae						
67	Mugger	<i>Crocodylus palustris</i>	VU	This study and Literature review	P,Sp	Bhattarai et al. 2018; 2020; Shah & Tiwari 2004
Family: Gavialidae						
68	Gharial	<i>Gavialis gangeticus</i>	CR	Literature review	Sp	KTWR 2018

Appendix 4. Birds of Madhesh Province, Nepal

SN	Order/Family/ English Name	Scientific Name	IUCN Status	National Status	Methods	Migratory Status	Location	Citations
Order: Galliformes								
Family: Phasianidae								
1	Indian peafowl	<i>Pavo cristatus</i>	LC	NT	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
2	Common quail	<i>Coturnix coturnix</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
3	Black francolin	<i>Francolinus francolinus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
4	Grey francolin	<i>Ortygornis pondicerianus</i>	LC	VU	This study and Literature review	Local resident	P,R,S,D,Si, Sp	eBird 2026; KTWR 2018
5	Swamp francolin	<i>Ortygornis gularis</i>	NT	EN	This study and Literature review	Very local resident	Sp	eBird 2026; KTWR 2018; PNP 2018
6	Red junglefowl	<i>Gallus gallus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
7	Kalij pheasant	<i>Lophura leucomelanos</i>	LC	LC	This study and Literature review	Widespread Resident	P,B,R,Si,S p	eBird 2026; PNP 2018
Order: Anseriformes								
Family: Anatidae								
8	Fulvous whistling-duck	<i>Dendrocygna bicolor</i>	LC	LC	Literature review	Winter visitor	Sp	eBird 2026; Inskipp et al. 2020; KTWR 2018
9	Lesser whistling-duck	<i>Dendrocygna javanica</i>	LC	LC	This study and Literature review	Breeding resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
10	Bar-headed goose	<i>Anser indicus</i>	LC	NT	This study and Literature review	Passage migrant and winter visitor	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
11	Greylag goose	<i>Anser anser</i>	LC	NT	This study and Literature review	Passage migrant and winter visitor	P,Si,D,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022; PNP 2018
12	Bean goose	<i>Anser fabalis</i>	LC	LC	Literature review	Vagrant	P	PNP 2018
13	Greater white-fronted goose	<i>Anser albifrons</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
14	Long-tailed duck	<i>Clangula hyemalis</i>	VU	VU	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
15	Common goldeneye	<i>Bucephala clangula</i>	LC	LC	Literature review	Rare winter visitor and passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
16	Smew	<i>Mergellus albellus</i>	LC	LC	Literature review	Vagrant	P,Sp	Inskipp et al. 2020; KTWR 2018; PNP 2018
17	Goosander	<i>Mergus merganser</i>	LC	LC	This study and Literature review	Widespread winter visitor	P,S,D,Si,S p	eBird 2026; KTWR 2018; PNP 2018
18	Red-breasted merganser	<i>Mergus serrator</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
19	Common shelduck	<i>Tadorna tadorna</i>	LC	LC	This study and Literature review	Rare winter visitor and spring passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
20	Ruddy shelduck	<i>Tadorna ferruginea</i>	LC	NT	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018

21	Knob-billed duck	<i>Sarkidiornis melanotos</i>	LC	EN	Literature review	Very rare resident	Sp	eBird 2026; KTWR 2018
22	Cotton pygmy-goose	<i>Nettapus coromandelianus</i>	LC	VU	This study and Literature review	Resident and summer visitor	P,B,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
23	Red-crested pochard	<i>Netta rufina</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
24	Common pochard	<i>Aythya ferina</i>	VU	NT	This study and Literature review	Winter visitor and passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
25	Baer's pochard	<i>Aythya baeri</i>	CR	CR	This study and Literature review	Rare and local passage migrant	Sp	eBird 2026; Inskipp et al. 2016; KTWR 2018
26	Ferruginous duck	<i>Aythya nyroca</i>	NT	VU	This study and Literature review	Winter visitor and passage migrant	P,R,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
27	Tufted duck	<i>Aythya fuligula</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,S,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
28	Greater scaup	<i>Aythya marila</i>	LC	LC	Literature review	Vagrant	Sp	eBird 2026; Inskipp et al. 2020; KTWR 2018
29	Garganey	<i>Spatula querquedula</i>	LC	VU	This study and Literature review	Passage migrant and uncommon winter visitor	P,B,S,D,Sp	eBird 2026; KTWR 2018;
30	Northern shoveler	<i>Spatula clypeata</i>	LC	LC	This study and Literature review	Passage migrant and winter visitor	P,S,Sp	eBird 2026; KTWR 2018; PNP 2018
31	Baikal teal	<i>Sibirionetta formosa</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
32	Falcated duck	<i>Mareca falcata</i>	NT	CR	Literature review	Rare winter visitor and passage migrant	P,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
33	Gadwall	<i>Mareca strepera</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
34	Eurasian wigeon	<i>Mareca penelope</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,S,D,M,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
35	Indian spot-billed duck	<i>Anas poecilorhyncha</i>	LC	NT	Literature Review	Resident and winter visitor	D,Sp	eBird 2026; KTWR 2018
36	Chinese spot-billed duck	<i>Anas zonorhyncha</i>	LC	LC	Literature review	Uncommon winter visitor and passage migrant	P,D,Sp	Inskipp et al. 2020; KTWR 2018; MWT 2022; PNP 2018
37	Mallard	<i>Anas platyrhynchos</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
38	Northern pintail	<i>Anas acuta</i>	LC	EN	This study and Literature review	Winter visitor and passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
39	Common teal	<i>Anas crecca</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Order: Podicipediformes								
Family: Podicipedidae								
40	Little grebe	<i>Tachybaptus ruficollis</i>	LC	LC	This study and Literature review	Common resident and winter visitor	P,B,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
41	Great crested grebe	<i>Podiceps cristatus</i>	LC	LC	This study and Literature review	Winter visitor	P,S,Sp	eBird 2026; KTWR 2018; PNP 2018
42	Black-necked grebe	<i>Podiceps nigricollis</i>	LC	LC	Literature review	Rare winter visitor	D,Sp	eBird 2026; KTWR 2018; MWT 2022
Order: Phoenicopteriformes								

Family: Phoenicopteridae								
43	Greater flamingo	<i>Phoenicopiterus roseus</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
Order: Columbiformes								
Family: Columbidae								
44	Rock dove	<i>Columba livia</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
45	Common woodpigeon	<i>Columba palumbus</i>	LC	LC	Literature review	Erratic winter visitor	D,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022
46	Oriental turtle-dove	<i>Streptopelia orientalis</i>	LC	LC	This study and Literature review	Widespread Resident and Winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
47	Eurasian collared-dove	<i>Streptopelia decaocto</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
48	Red collared-dove	<i>Streptopelia tranquebarica</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
49	Western spotted dove	<i>Spilopelia suratensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
50	Laughing dove	<i>Spilopelia senegalensis</i>	LC	LC	This study and Literature review	Uncertain and erratic visitor	P,D,S,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
51	Grey-capped emerald dove	<i>Chalcophaps indica</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
52	Orange-breasted green-pigeon	<i>Treron bicinctus</i>	LC	LC	This study and Literature review	Local resident	P,B,R,S,D, Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
53	Ashy-headed green-pigeon	<i>Treron phayrei</i>	NT	NT	Literature review	Local resident	P,R,Sp	eBird 2026; KTWR 2018; PNP 2018
54	Thick-billed green-pigeon	<i>Treron curvirostra</i>	LC	EN	This study and Literature review	Rare and local resident	P,B,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
55	Yellow-footed green-pigeon	<i>Treron phoenicopiterus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018;
56	Pin-tailed green-pigeon	<i>Treron apicauda</i>	LC	NT	Literature review	Local resident	P	Inskipp et al. 2016; PNP 2018
Order: Caprimulgiformes								
Family: Caprimulgidae								
57	Grey nightjar	<i>Caprimulgus jotaka</i>	LC	LC	Literature review	Resident and partial migrant	P	Inskipp et al. 2016; PNP 2018
58	Large-tailed nightjar	<i>Caprimulgus macrurus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
59	Indian nightjar	<i>Caprimulgus asiaticus</i>	LC	EN	Literature review	Very rare resident	P,B,D,Si,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022; PNP 2018
60	Sykes's nightjar	<i>Caprimulgus mahrattensis</i>	LC	LC	This study and Literature review	Vagrant	P,D,Sp	Inskipp et al. 2020; KTWR 2018
61	Savanna nightjar	<i>Caprimulgus affinis</i>	LC	NT	Literature review	Common resident	P,B,R,D,Si, Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Hemiprocidae								
62	Crested treeswift	<i>Hemiprocne coronata</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Apodidae								
63	White-rumped spinetail	<i>Zoonavena sylvatica</i>	LC	NT	This study and Literature review	Widespread resident	P,B,R,S,M	eBird 2026; PNP 2018

64	White-throated needletail	<i>Hirundapus caudacutus</i>	LC	LC	This study and Literature review	Summer visitor	P,B	PNP 2018
65	Silver-backed needletail	<i>Hirundapus cochinchinensis</i>	LC	LC	Literature review	Rare summer visitor	P,R,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
66	Himalayan swiftlet	<i>Aerodramus brevirostris</i>	LC	LC	Literature review	Winter visitor	P,B,R,S,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
67	Asian Palm swift	<i>Cypsiurus balasiensis</i>	LC	LC	This study and Literature review	Uncommon Resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
68	Alpine swift	<i>Tachymarptis melba</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
69	Pacific swift	<i>Apus pacificus</i>	LC	LC	Literature review	Summer visitor and rare winter visitor	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
70	House swift	<i>Apus nipalensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
Order: Cuculiformes								
Family: Cuculidae								
71	Greater coucal	<i>Centropus sinensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
72	Lesser coucal	<i>Centropus bengalensis</i>	LC	LC	This study and Literature review	Local resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
73	Sirkeer malkoha	<i>Taccocua leschenaultii</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
74	Green-billed malkoha	<i>Phaenicophaeus tristis</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
75	Jacobin cuckoo	<i>Clamator jacobinus</i>	LC	LC	This study and Literature review	Summer visitor	P,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
76	Chestnut-winged cuckoo	<i>Clamator coromandus</i>	LC	NT	This study and Literature review	Summer visitor	P,B,R,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
77	Western koel	<i>Eudynamys scolopaceus</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
78	Banded Bay cuckoo	<i>Cacomantis sonneratii</i>	LC	LC	This study and Literature review	Rare resident and summer visitor	P,B,Sp	eBird 2026; KTWR 2018; PNP 2018
79	Plaintive cuckoo	<i>Cacomantis merulinus</i>	LC	LC	Literature review	Winter visitor and passage migrant	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
80	Grey-bellied cuckoo	<i>Cacomantis passerinus</i>	LC	LC	This study and Literature review	Summer visitor	P,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
81	Fork-tailed Drongo-cuckoo	<i>Surniculus dicruroides</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
82	Common hawk-cuckoo	<i>Hierococcyx varius</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
83	Indian cuckoo	<i>Cuculus micropterus</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
84	Common cuckoo	<i>Cuculus canorus</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
85	Himalayan cuckoo	<i>Cuculus saturatus</i>	LC	LC	Literature review	Summer visitor	B,Sp	eBird 2026; KTWR 2018
Order: Gruiformes								
Family: Rallidae								
86	Eastern water rail	<i>Rallus indicus</i>	LC	VU	Literature review	Winter visitor	Sp	Inskipp et al. 2020; KTWR 2018
87	Slaty-breasted rail	<i>Lewinia striata</i>	LC	VU	Literature review	Uncommon visitor	Sp	Inskipp et al. 2020; KTWR 2018

88	Ruddy-breasted crane	<i>Zapornia fusca</i>	LC	LC	This study and Literature review	Summer visitor	P,R,Sp	eBird 2026; KTWR 2018; PNP 2018
89	Brown crane	<i>Zapornia akool</i>	LC	LC	Literature review	Local resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
90	Baillon's crane	<i>Zapornia pusilla</i>	LC	VU	Literature review	winter visitor and passage migrant	P,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
91	White-breasted waterhen	<i>Amaurornis phoenicurus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
92	Watercock	<i>Gallicrex cinerea</i>	LC	NT	This study and Literature review	Local monsoon visitor	S,Sp	eBird 2026; KTWR 2018
93	Purple swampphen	<i>Porphyrio porphyrio</i>	LC	LC	This study and Literature review	Local resident and winter visitor	P,D,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
94	Common moorhen	<i>Gallinula chloropus</i>	LC	LC	This study and Literature review	Local resident and Winter visitor	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
95	Eurasian coot	<i>Fulica atra</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,S,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Gruidae								
96	Demoiselle crane	<i>Anthropoides virgo</i>	LC	VU	Literature review	Passage migrant	P,Si,Sp	eBird 2026; Inskipp et al. 2016; KTWR 2018; PNP 2018
97	Common crane	<i>Grus grus</i>	LC	NT	Literature review	Winter visitor and passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
Order: Otidiformes								
Family: Otididae								
98	Bengal florican	<i>Houbaropsis bengalensis</i>	CR	CR	Literature review	Rare and local resident	Sp	eBird 2026; KTWR 2018
99	Lesser florican	<i>Sypheotides indicus</i>	CR	CR	Literature review	Very rare summer visitor	Sp	eBird 2026; KTWR 2018
Order: Gaviiformes								
Family: Gaviidae								
100	Red-throated loon	<i>Gavia stellata</i>	LC	LC	Literature review	Vagrant	Sp	eBird 2026; Inskipp et al. 2020; KTWR 2018
Order: Ciconiiformes								
Family: Ciconiidae								
101	Greater adjutant	<i>Leptoptilos dubius</i>	NT	CR	Literature review	Local visitor	Si,Sp	Inskipp et al. 2016; KTWR 2018
102	Lesser adjutant	<i>Leptoptilos javanicus</i>	NT	VU	This study and Literature review	Local resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
103	Painted stork	<i>Mycteria leucocephala</i>	LC	EN	This study and Literature review	Non breeding visitor	P,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
104	Asian openbill	<i>Anastomus oscitans</i>	LC	VU	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
105	Black stork	<i>Ciconia nigra</i>	LC	VU	This study and Literature review	Winter visitor and passage migrant	P,B,R,D,M, Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
106	Asian woollyneck	<i>Ciconia episcopus</i>	NT	NT	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
107	Black-necked stork	<i>Ephippiorhynchus asiaticus</i>	NT	CR	Literature review	Very rare and very local resident	Sp	eBird 2026; KTWR 2018
Order: Pelecaniformes								
Family: Threskiornithidae								
108	Eurasian spoonbill	<i>Platalea leucorodia</i>	LC	CR	Literature review	Rare and local winter visitor and passage migrant	Sp	eBird 2026; KTWR 2018

109	Black-headed ibis	<i>Threskiornis melanocephalus</i>	NT	NT	This study and Literature review	Resident	B,R,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
110	Red-naped ibis	<i>Pseudibis papillosa</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
111	Glossy ibis	<i>Plegadis falcinellus</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
Family: Ardeidae								
112	Eurasian bittern	<i>Botaurus stellaris</i>	LC	EN	Literature Review	Rare passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
113	Yellow bittern	<i>Ixobrychus sinensis</i>	LC	LC	This study and Literature review	Summer visitor	P,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
114	Cinnamon bittern	<i>Ixobrychus cinnamomeus</i>	LC	LC	This study and Literature review	Summer visitor	P,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
115	Black bittern	<i>Ixobrychus flavicollis</i>	LC	EN	This study and Literature review	Rare local resident	P,R,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
116	Black-crowned night heron	<i>Nycticorax nycticorax</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
117	Green-backed heron	<i>Butorides striata</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D,M,Sp	eBird 2026; KTWR 2018; PNP 2018
118	Indian pond heron	<i>Ardeola grayii</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
119	Cattle egret	<i>Bubulcus ibis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
120	Grey heron	<i>Ardea cinerea</i>	LC	LC	This study and Literature review	Rare resident and common winter visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
121	Purple heron	<i>Ardea purpurea</i>	LC	LC	This study and Literature review	Widespread resident and monsoon visitor	P,D,Si,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022; PNP 2018
122	Great white egret	<i>Ardea alba</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,M,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
123	Intermediate egret	<i>Ardea intermedia</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
124	Little egret	<i>Egretta garzetta</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Pelecanidae								
125	Spot-billed pelican	<i>Pelecanus philippensis</i>	NT	CR	Literature review	Rare non-breeding visitor	Sp	eBird 2026; KTWR 2018
126	Great white pelican	<i>Pelecanus onocrotalus</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
Order: Suliformes								
Family: Phalacrocoracidae								
127	Little cormorant	<i>Microcarbo niger</i>	LC	LC	This study and Literature review	Resident, winter visitor and passage migrant	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
128	Great cormorant	<i>Phalacrocorax carbo</i>	LC	LC	This study and Literature review	Winter visitor	P,B,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
129	Indian cormorant	<i>Phalacrocorax fuscicollis</i>	LC	LC	Literature review	Vagrant	D,Sp	Inskipp et al. 2020; KTWR 2018; MWT 2022
Family: Anhingidae								
130	Oriental darter	<i>Anhinga melanogaster</i>	NT	NT	This study and Literature review	Local breeding resident and visitor	P,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Order: Charadriiformes								

Family: Burhinidae								
131	Indian thick-knee	<i>Burhinus indicus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
132	Great thick-knee	<i>Esacus recurvirostris</i>	NT	CR	Literature review	Resident and winter visitor	P,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Recurvirostridae								
133	Pied avocet	<i>Recurvirostra avosetta</i>	LC	LC	This study and Literature review	Passage migrant	P,D,Sp	eBird 2026; KTWR 2018; PNP 2018
134	Black-winged stilt	<i>Himantopus himantopus</i>	LC	LC	Literature review	Uncommon passage migrant	P,D,M,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Charadriidae								
135	Grey plover	<i>Pluvialis squatarola</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
136	Pacific golden plover	<i>Pluvialis fulva</i>	LC	NT	This study and Literature review	Winter visitor	P,R,S,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
137	Little ringed plover	<i>Charadrius dubius</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
138	Kentish plover	<i>Charadrius alexandrinus</i>	LC	LC	This study and Literature review	Uncommon winter visitor;	R,S,D,Si,S p	eBird 2026; KTWR 2018
139	Long-billed plover	<i>Charadrius placidus</i>	LC	LC	Literature review	Very rare winter visitor and passage migrant	Sp	Inskipp et al. 2016
140	Tibetan sandplover	<i>Charadrius atrifrons</i>	LC	NT	Literature review	Rare winter visitor and spring migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
141	Greater sandplover	<i>Charadrius leschenaultii</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020
142	Northern lapwing	<i>Vanellus vanellus</i>	NT	NT	This study and Literature review	Uncommon winter visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
143	River lapwing	<i>Vanellus duvaucelii</i>	NT	NT	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
144	Yellow-wattled lapwing	<i>Vanellus malabaricus</i>	LC	VU	This study and Literature review	Local resident and visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
145	Grey-headed lapwing	<i>Vanellus cinereus</i>	LC	LC	This study and Literature review	Common winter visitor and passage migrant	P,R,D,M,S p	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
146	Red-wattled lapwing	<i>Vanellus indicus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Rostratulidae								
147	Greater painted-snipe	<i>Rostratula benghalensis</i>	LC	LC	This study and Literature review	Uncommon resident	P,R,S,D,M, Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Jacanidae								
148	Pheasant-tailed jacana	<i>Hydrophasianus chirurgus</i>	LC	VU	This study and Literature review	Uncommon resident	P,R,M,D,S p	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
149	Bronze-winged jacana	<i>Metopidius indicus</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
Family: Scolopacidae								
150	Whimbrel	<i>Numenius phaeopus</i>	LC	LC	Literature review	Rare passage migrant	P,Sp	Inskipp et al. 2020; KTWR 2018; PNP 2018
151	Eurasian curlew	<i>Numenius arquata</i>	NT	CR	This study and Literature review	Rare passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
152	Black-tailed godwit	<i>Limosa limosa</i>	NT	NT	Literature review	Rare and local passage migrant	Sp	eBird 2026; KTWR 2018

153	Red knot	<i>Calidris canutus</i>	NT	NT	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
154	Ruff	<i>Calidris pugnax</i>	LC	LC	Literature review	Uncommon passage migrant	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
155	Curlew sandpiper	<i>Calidris ferruginea</i>	NT	NT	Literature review	Vagrant	P,Sp	Inskipp et al. 2020; KTWR 2018; PNP 2018
156	Temminck's stint	<i>Calidris temminckii</i>	LC	LC	This study and Literature review	Common winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
157	Sanderling	<i>Calidris alba</i>	LC	LC	Literature review	Vagrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
158	Dunlin	<i>Calidris alpina</i>	LC	LC	Literature review	Winter visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
159	Little stint	<i>Calidris minuta</i>	LC	LC	This study and Literature review	Winter visitor	P,S,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
160	Eurasian woodcock	<i>Scolopax rusticola</i>	LC	LC	Literature review	Widespread resident	D	MWT 2022
161	Pin-tailed snipe	<i>Gallinago stenura</i>	LC	LC	Literature review	Winter visitor and passage migrant	P,D,M,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
162	Common snipe	<i>Gallinago gallinago</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
163	Jack snipe	<i>Lymnocyrtus minimus</i>	LC	LC	Literature review	Winter visitor and passage migrant	Sp	Inskipp et al. 2016; KTWR 2018
164	Terek sandpiper	<i>Xenus cinereus</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
165	Common sandpiper	<i>Actitis hypoleucos</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
166	Green sandpiper	<i>Tringa ochropus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
167	Spotted redshank	<i>Tringa erythropus</i>	LC	LC	Literature review	Uncommon passage migrant and winter visitor	P,M,Sp	eBird 2026; KTWR 2018; PNP 2018
168	Common greenshank	<i>Tringa nebularia</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
169	Common redshank	<i>Tringa totanus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,S,D,Sp	eBird 2026; KTWR 2018; PNP 2018
170	Wood sandpiper	<i>Tringa glareola</i>	LC	LC	Literature review	Winter visitor and passage migrant	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
171	Marsh sandpiper	<i>Tringa stagnatilis</i>	LC	LC	Literature review	Winter visitor and passage migrant	P,M,Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
Family: Turnicidae								
172	Yellow-legged buttonquail	<i>Turnix tanki</i>	LC	NT	Literature review	Rare and local resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
173	Barred buttonquail	<i>Turnix suscitator</i>	LC	LC	This study and Literature review	Resident	P,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Glareolidae								
174	Indian courser	<i>Cursorius coromandelicus</i>	LC	EN	Literature review	Local resident	Sp	eBird 2026; KTWR 2018
175	Oriental pratincole	<i>Glareola maldivarum</i>	LC	NT	Literature review	Rare passage migrant	Sp	Inskipp et al. 2016; KTWR 2018
176	Little pratincole	<i>Glareola lactea</i>	LC	NT	This study and Literature review	Local resident and partial migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Laridae								
177	Indian skimmer	<i>Rynchops albigollis</i>	EN	CR	Literature review	Very rare non-breeding visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
178	Slender-billed gull	<i>Larus genei</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018

179	Brown-headed gull	<i>Larus brunnicephalus</i>	LC	VU	Literature review	Passage migrant and Winter visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
180	Black-headed gull	<i>Larus ridibundus</i>	LC	VU	Literature review	Passage migrant and Winter visitor	P,D,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
181	Pallas's gull	<i>Larus ichthyaetus</i>	LC	LC	This study and Literature review	Passage migrant and Winter visitor	P,R,S,D,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
182	Mew gull	<i>Larus canus</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
183	Lesser black-backed gull	<i>Larus fuscus</i>	LC	LC	This study and Literature review	Passage migrant	Sp	eBird 2026
184	Little tern	<i>Sternula albifrons</i>	LC	VU	Literature review	Local Summer visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
185	Common gull-billed tern	<i>Gelochelidon nilotica</i>	LC	CR	Literature review	Passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
186	Caspian tern	<i>Hydroprogne caspia</i>	LC	CR	Literature review	Very rare and very local visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
187	Whiskered tern	<i>Chlidonias hybrida</i>	LC	LC	This study and Literature review	Uncommon passage migrant	Sp	eBird 2026; KTWR 2018
188	White-winged tern	<i>Chlidonias leucopterus</i>	LC	LC	Literature review	Rare spring passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
189	River tern	<i>Sterna aurantia</i>	VU	CR	Literature review	Rare and very local visitor	P,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
190	Common tern	<i>Sterna hirundo</i>	LC	NT	Literature review	Very rare passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
191	Black-bellied tern	<i>Sterna acuticauda</i>	EN	CR	Literature review	Very rare and and very local visitor	P,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Order: Procellariiformes								
Family: Procellariidae								
192	Short-tailed shearwater	<i>Ardenna tenuirostris</i>	LC	NE	Literature review	Vagrant	Sp	eBird 2026
Order: Strigiformes								
Family: Tytonidae								
193	Common barn-owl	<i>Tyto alba</i>	LC	VU	This study and Literature review	Local resident	P,B,D,M,S,p	eBird 2026; KTWR 2018; MWT 2022
Family: Strigidae								
194	Brown boobook	<i>Ninox scutulata</i>	LC	LC	This study and Literature review	Common resident	P,B,R,Sp	eBird 2026; KTWR 2018; PNP 2018
195	Collared owlet	<i>Glaucidium brodiei</i>	LC	LC	Literature review	Common resident	P	Inskipp et al. 2016
196	Asian barred owlet	<i>Glaucidium cuculoides</i>	LC	LC	Literature review	Widespread resident	P,B,R	Inskipp et al. 2016; MWT 2022; PNP 2018
197	Jungle owlet	<i>Glaucidium radiatum</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
198	Spotted owlet	<i>Athene brama</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
199	Collared scops-owl	<i>Otus lettia</i>	LC	LC	This study and Literature review	Local common resident	P,B,D,M,Si,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022; PNP 2018
200	Indian scops-owl	<i>Otus bakkamoena</i>	LC	LC	This study and Literature review	Local common resident	Sp	eBird 2026; KTWR 2018
201	Oriental scops-owl	<i>Otus sunia</i>	LC	LC	Literature review	Winter visitor and passage migrant	P,B,R,Sp	eBird 2026; KTWR 2018
202	Short-eared owl	<i>Asio flammeus</i>	LC	VU	This study and Literature review	Winter visitor and passage migrant	P,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018; Rokka et al. 2021
203	Brown wood-owl	<i>Strix leptogrammica</i>	LC	VU	Literature review	Rare and local resident	P,Sp	eBird 2026

204	Spot-bellied eagle-owl	<i>Bubo nipalensis</i>	LC	EN	Literature review	Rare and local resident	P,B	eBird 2026; PNP 2018
205	Dusky eagle-owl	<i>Bubo coramandus</i>	LC	CR	This study and Literature review	Very rare and very local resident	Sp	Inskipp et al. 2016; KTWR 2018
206	Brown fish-owl	<i>Ketupa zeylonensis</i>	LC	VU	This study and Literature review	Uncommon resident	P,B,R,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Order: Accipitriformes								
Family: Pandionidae								
207	Osprey	<i>Pandion haliaetus</i>	LC	LC	This study and Literature review	Non-breeding resident, winter visitor and passage migrant	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Elanidae								
208	Black-winged kite	<i>Elanus caeruleus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Accipitridae								
209	Oriental honey-buzzard	<i>Pernis ptilorhynchus</i>	LC	LC	This study and Literature review	Common resident and passage migrant	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
210	Black baza	<i>Aviceda leuphotes</i>	LC	NT	Literature review	Local and very uncommon summer visitor	P,B,D,M,S,p	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
211	Egyptian vulture	<i>Neophron percnopterus</i>	EN	VU	This study and Literature review	Widespread resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
212	Crested serpent-eagle	<i>Spilornis cheela</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
213	Short-toed snake-eagle	<i>Circaetus gallicus</i>	LC	LC	Literature review	Winter visitor	P,B,R,Si,S,p	eBird 2026; KTWR 2018; PNP 2018
214	Red-headed vulture	<i>Sarcogyps calvus</i>	CR	EN	This study and Literature review	Widespread resident	P,Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
215	Himalayan griffon	<i>Gyps himalayensis</i>	NT	VU	This study and Literature review	Widespread resident and altitudinal movements	S,B,R,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
216	White-rumped vulture	<i>Gyps bengalensis</i>	CR	CR	This study and Literature review	Resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
217	Slender-billed vulture	<i>Gyps tenuirostris</i>	CR	CR	This study and Literature review	Local resident	P,M,Si,Sp	eBird 2026; KTWR 2018
218	Griffon vulture	<i>Gyps fulvus</i>	LC	DD	Literature review	Local resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
219	Cinereous vulture	<i>Aegypius monachus</i>	NT	EN	This study and Literature review	Winter visitor and passage migrant	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
220	Mountain hawk-eagle	<i>Nisaetus nipalensis</i>	NT	LC	Literature review	Winter visitor and passage migrant	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
221	Changeable hawk-eagle	<i>Nisaetus cirrhatus</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,D,Sp	eBird 2026; KTWR 2018; PNP 2018
222	Rufous-bellied eagle	<i>Lophotriorchis kienerii</i>	NT	CR	Literature review	Very rare visitor	P,Sp	Inskipp et al. 2016; PNP 2018
223	Black eagle	<i>Ictinaetus malaiensis</i>	LC	LC	Literature review	Frequent resident	P,D,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022; PNP 2018
224	Indian spotted eagle	<i>Clanga hastata</i>	VU	VU	Literature review	Rare resident	P,B,R,S,M,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
225	Greater spotted eagle	<i>Clanga clanga</i>	VU	VU	This study and Literature review	Winter visitor and passage migrant	P,D,Sp	eBird 2026; MWT 2022; PNP 2018
226	Tawny eagle	<i>Aquila rapax</i>	VU	LC	Literature review	Presumably resident	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018

227	Steppe eagle	<i>Aquila nipalensis</i>	EN	VU	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
228	Eastern imperial eagle	<i>Aquila heliaca</i>	VU	CR	This study and Literature review	Winter visitor and passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
229	Golden eagle	<i>Aquila chrysaetos</i>	LC	VU	Literature review	Widespread but sparsely distributed resident	Sp	Inskipp et al. 2016; KTWR 2018
230	Bonelli's eagle	<i>Aquila fasciata</i>	LC	LC	This study and Literature review	Resident	D,Sp	Inskipp et al. 2016; KTWR 2018
231	Booted eagle	<i>Hieraaetus pennatus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,S,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
232	Western marsh-harrier	<i>Circus aeruginosus</i>	LC	VU	Literature review	Uncommon winter visitor and passage migrant	P,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
233	Hen harrier	<i>Circus cyaneus</i>	LC	VU	Literature review	Winter visitor and passage migrant	P,B,S,D,M, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
234	Pallid harrier	<i>Circus macrourus</i>	NT	VU	Literature review	Winter visitor and passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
235	Pied harrier	<i>Circus melanoleucos</i>	LC	VU	This study and Literature review	Uncommon winter visitor	P,D,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
236	Montagu's harrier	<i>Circus pygargus</i>	LC	CR	Literature review	Rare passage migrant	P,Si,Sp	KTWR 2018; PNP 2018
237	Crested goshawk	<i>Accipiter trivirgatus</i>	LC	LC	Literature review	Uncommon resident	P,B,R,Sp	eBird 2026; KTWR 2018; PNP 2018
238	Shikra	<i>Accipiter badius</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
239	Besra	<i>Accipiter virgatus</i>	LC	LC	This study and Literature review	Uncommon resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
240	Eurasian sparrowhawk	<i>Accipiter nisus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,D,M, Sp	eBird 2026; KTWR 2018; PNP 2018
241	Northern goshawk	<i>Accipiter gentilis</i>	LC	LC	Literature review	Frequent resident	Sp	Inskipp et al. 2016; KTWR 2018
242	Pallas's fish-eagle	<i>Haliaeetus leucoryphus</i>	EN	CR	Literature review	Very rare winter visitor and passage migrant	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
243	White-tailed sea-eagle	<i>Haliaeetus albicilla</i>	LC	CR	Literature review	Very rare winter visitor and passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
244	Lesser fish-eagle	<i>Ichthyophaga humilis</i>	NT	CR	Literature review	Very rare resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
245	Grey-headed fish-eagle	<i>Ichthyophaga ichthyaetus</i>	NT	CR	Literature review	Rare and local breeding resident	P,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
246	Brahminy kite	<i>Haliastur indus</i>	LC	CR	Literature review	Rare Resident	P,M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
247	Black kite	<i>Milvus migrans</i>	LC	LC	This study and Literature review	Widespread resident and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
248	White-eyed buzzard	<i>Butastur teesa</i>	LC	LC	This study and Literature review	Common resident	P,B,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
249	Himalayan buzzard	<i>Buteo refectus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
250	Long-legged buzzard	<i>Buteo rufinus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,M,D, Sp	eBird 2026; KTWR 2018; PNP 2018
Order: Trogoniformes								
Family: Trogonidae								
251	Red-headed trogon	<i>Harpactes erythrocephalus</i>	LC	EN	This study and Literature review	Local and uncommon resident	P,R,D,Si	eBird 2026; MWT 2022; PNP 2018
Order: Bucerotiformes								

Family: Bucerotidae								
252	Great hornbill	<i>Buceros bicornis</i>	VU	EN	Literature review	Rare and local resident	P,R,S,Si	eBird 2026; PNP 2018
253	Indian Grey hornbill	<i>Ocyrceros birostris</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
254	Oriental Pied hornbill	<i>Anthracoceros albirostris</i>	LC	NT	This study and Literature review	Frequent resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Upupidae								
255	Common hoopoe	<i>Upupa epops</i>	LC	LC	This study and Literature review	Widespread resident and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Order: Coraciiformes								
Family: Meropidae								
256	Blue-bearded bee-eater	<i>Nyctyornis athertoni</i>	LC	LC	This study and Literature review	Uncommon resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018
257	Asian green bee-eater	<i>Merops orientalis</i>	LC	LC	This study and Literature review	Widespread resident and summer visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
258	Chestnut-headed bee-eater	<i>Merops leschenaulti</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
259	Blue-tailed bee-eater	<i>Merops philippinus</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Coraciidae								
260	Indian roller	<i>Coracias benghalensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
261	Indochinese roller	<i>Coracias affinis</i>	LC		Literature review	Vagrant	Sp	eBird 2026; KTWR 2018
262	Oriental dollarbird	<i>Eurystomus orientalis</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D, Sp	eBird 2026; KTWR 2018; MWT 2022
Family: Alcedinidae								
263	Blue-eared kingfisher	<i>Alcedo meninting</i>	LC	EN	Literature review	Rare and very local resident	P,Sp	Inskipp et al. 2016
264	Common kingfisher	<i>Alcedo atthis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
265	Crested kingfisher	<i>Megaceryle lugubris</i>	LC	LC	Literature review	Widespread resident	P,R,Si,Sp	Inskipp et al. 2016; PNP 2018
266	Pied kingfisher	<i>Ceryle rudis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
267	Stork-billed kingfisher	<i>Pelargopsis capensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,S,D,M, Sp	eBird 2026; KTWR 2018; PNP 2018
268	White-throated kingfisher	<i>Halcyon smyrnensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
269	Black-capped kingfisher	<i>Halcyon pileata</i>	VU	LC	Literature review	Rare and irregular visitor	P,R,Sp	eBird 2026; KTWR 2018; PNP 2018
Order: Piciformes								
Family: Megalaimidae								
270	Coppersmith barbet	<i>Psilopogon haemacephalus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
271	Blue-eared barbet	<i>Psilopogon cyanotis</i>	LC	CR	Literature review	Very rare and local resident	Sp	Inskipp et al. 2016
272	Great barbet	<i>Psilopogon virens</i>	LC	LC	Literature review	Widespread resident	P,B,S,D,M	eBird 2026
273	Lineated barbet	<i>Psilopogon lineatus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022

274	Brown-headed barbet	<i>Psilopogon zeylanicus</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; MWT 2022
275	Blue-throated barbet	<i>Psilopogon asiaticus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
Family: Picidae								
276	Eurasian wryneck	<i>Jynx torquilla</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
277	White-browed piculet	<i>Sasia ochracea</i>	LC	CR	Literature review	Rare resident	P	PNP 2018
278	Speckled piculet	<i>Picumnus innominatus</i>	LC	LC	This study and Literature review	Common resident	P,S	Inskipp et al. 2016; PNP 2018
279	Greater flameback	<i>Chrysocolaptes guttacristatus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Sp	eBird 2026; PNP 2018
280	Himalayan flameback	<i>Dinopium shorii</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, Si,Sp	eBird 2026; MWT 2022; PNP 2018
281	Black-rumped flameback	<i>Dinopium benghalense</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
282	Rufous woodpecker	<i>Micropternus brachyurus</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,Si, Sp	eBird 2026; KTWR 2018; PNP 2018
283	Greater yellownape	<i>Chrysophlegma flavinucha</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,D, M,Si,Sp	eBird 2026; PNP 2018
284	Lesser yellownape	<i>Picus chlorolophus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,M, Si,Sp	eBird 2026; PNP 2018
285	Streak-throated woodpecker	<i>Picus xanthopygaeus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
286	Black-naped woodpecker	<i>Picus guerini</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,M, Si,Sp	eBird 2026; PNP 2018
287	Grey-capped woodpecker	<i>Picoides canicapillus</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
288	Indian pygmy woodpecker	<i>Picoides nanus</i>	LC	LC	This study and Literature review	Resident	P,B,R,Sp	eBird 2026; KTWR 2018; PNP 2018
289	Yellow-crowned woodpecker	<i>Leiopicus mahrattensis</i>	LC	LC	This study and Literature review	Resident	P,B,R,D,Si, Sp	KTWR 2018; MWT 2022; PNP 2018
290	Fulvous-breasted woodpecker	<i>Dendrocopos macei</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Order: Falconiformes								
Family: Falconidae								
291	Collared falconet	<i>Microhierax caerulescens</i>	LC	NT	This study and Literature review	Frequent resident	P,B,R,S,M, D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
292	Lesser kestrel	<i>Falco naumanni</i>	LC	NT	This study and Literature review	Passage migrant and uncommon winter visitor	P,Sp	eBird 2026; KTWR 2018; PNP 2018
293	Common kestrel	<i>Falco tinnunculus</i>	LC	LC	This study and Literature review	Resident, passage migrant and winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
294	Red-headed falcon	<i>Falco chicquera</i>	NT	EN	This study and Literature review	Resident	P,B,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
295	Amur falcon	<i>Falco amurensis</i>	LC	LC	This study and Literature review	Uncommon passage migrant	P,R,S,D,Si, Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
296	Merlin	<i>Falco columbarius</i>	LC	LC	Literature review	Rare passage migrant	D,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022
297	Eurasian hobby	<i>Falco subbuteo</i>	LC	LC	Literature review	Uncommon resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018

298	Oriental hobby	<i>Falco severus</i>	LC	CR	Literature review	Very rare resident	P,Sp	KTWR 2018; PNP 2018
299	Laggar falcon	<i>Falco jugger</i>	NT	CR	Literature review	Very rare	P,Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
300	Peregrine falcon	<i>Falco peregrinus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,R,S,D,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Order: Psittaciformes								
Family: Psittacidae								
301	Vernal hanging-parrot	<i>Loriculus vernalis</i>	LC	CR	This study and Literature review	Very rare resident or visitor	D,Sp	Inskipp et al. 2016; MWT 2022
302	Slaty-headed parakeet	<i>Himalayapsitta himalayana</i>	LC	LC	Literature review	Resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
303	Blossom-headed parakeet	<i>Himalayapsitta roseata</i>	NT	NT	This study and Literature review	Very local resident or winter visitor	P,B,D,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
304	Plum-headed parakeet	<i>Himalayapsitta cyanocephala</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
305	Red-breasted parakeet	<i>Psittacula alexandri</i>	NT	VU	This study and Literature review	Resident	P,B,M,Sp	eBird 2026; KTWR 2018; PNP 2018
306	Rose-ringed parakeet	<i>Alexandrinus krameri</i>	LC	LC	This study and Literature review	Abundant and widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
307	Alexandrine parakeet	<i>Palaeornis eupatria</i>	NT	NT	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Order: Passeriformes								
Family: Pittidae								
308	Indian pitta	<i>Pitta brachyura</i>	LC	LC	This study and Literature review	Local summer visitor	P,B,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
309	Western hooded pitta	<i>Pitta sordida</i>	LC	VU	This study and Literature review	Summer visitor	P,B,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Eurylaimidae								
310	Long-tailed broadbill	<i>Psarisomus dalhousiae</i>	LC	LC	This study and Literature review	Local resident	P,B,D	MWT 2022; PNP 2018
Family: Oriolidae								
311	Maroon oriole	<i>Oriolus traillii</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,M,Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
312	Black-hooded oriole	<i>Oriolus xanthornus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
313	Indian golden oriole	<i>Oriolus kundoo</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
314	Black-naped oriole	<i>Oriolus chinensis</i>	LC	LC	Literature review	Rare winter visitor or passage migrant	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
315	Slender-billed oriole	<i>Oriolus tenuirostris</i>	LC	LC	Literature review	Very uncommon winter visitor	D,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022
Family: Vireonidae								
316	White-bellied erpornis	<i>Erpornis zantholeuca</i>	LC	LC	Literature review	Local resident	P	Inskipp et al. 2016; PNP 2018
Family: Campephagidae								
317	Small minivet	<i>Pericrocotus cinnamomeus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
318	Long-tailed minivet	<i>Pericrocotus ethologus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,D,Sp	eBird 2026; PNP 2018

319	Short-billed minivet	<i>Pericrocotus brevirostris</i>	LC	LC	This study	Rare resident	R	
320	Scarlet minivet	<i>Pericrocotus flammeus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
321	Ashy minivet	<i>Pericrocotus divaricatus</i>	LC	LC	Literature review	Vagrant	D,Sp	KTWR 2018; MWT 2022
322	Rosy minivet	<i>Pericrocotus roseus</i>	LC	LC	Literature review	Local uncommon resident	P,D,Sp	eBird 2026; KTWR 2018; PNP 2018
323	Oriental cuckooshrike	<i>Coracina javensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
324	Black-winged cuckooshrike	<i>Lalage melaschistos</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
325	Black-headed cuckooshrike	<i>Lalage melanoptera</i>	LC	LC	This study and Literature review	Very rare spring and summer visitor	P,B,R,S,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Artamidae								
326	Ashy woodswallow	<i>Artamus fuscus</i>	LC	LC	This study and Literature review	Local resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Vangidae								
327	Bar-winged flycatcher-shrike	<i>Hemipus picatus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
328	Large woodshrike	<i>Tephrodornis virgatus</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; MWT 2022; PNP 2018
329	Common woodshrike	<i>Tephrodornis pondicerianus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Aegithinidae								
330	Common Iora	<i>Aegithina tiphia</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Rhipiduridae								
331	White-browed fantail	<i>Rhipidura aureola</i>	LC	LC	This study and Literature review	Rare resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
332	White-throated fantail	<i>Rhipidura albicollis</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Dicruridae								
333	Black drongo	<i>Dicrurus macrocercus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
334	Ashy drongo	<i>Dicrurus leucophaeus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
335	White-bellied drongo	<i>Dicrurus caerulescens</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Sp	eBird 2026; KTWR 2018; PNP 2018
336	Crow-billed drongo	<i>Dicrurus annectens</i>	LC	LC	This study and Literature review	Local and uncommon summer visitor	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
337	Bronzed drongo	<i>Dicrurus aeneus</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
338	Lesser racquet-tailed drongo	<i>Dicrurus remifer</i>	LC	LC	Literature Review	Frequent resident	P,B,D,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
339	Hair-crested drongo	<i>Dicrurus hottentottus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
340	Greater racquet-tailed drongo	<i>Dicrurus paradiseus</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018

Family: Monarchidae								
341	Black-naped monarch	<i>Hypothymis azurea</i>	LC	LC	This study and Literature review	Local partial migrant	P,B,R,S,Si,Sp	eBird 2026; KTWR 2018
342	Indian paradise-flycatcher	<i>Terpsiphone paradisi</i>	LC	LC	This study and Literature review	Summer visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Laniidae								
343	Brown shrike	<i>Lanius cristatus</i>	LC	LC	This study and Literature review	Winter visitor	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
344	Isabelline shrike	<i>Lanius isabellinus</i>	LC	LC	Literature Review	Rare winter visitor	Sp	Inskipp et al. 2016; KTWR 2018
345	Bay-backed shrike	<i>Lanius vittatus</i>	LC	LC	This study and Literature review	Uncommon passage migrant	P,B,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
346	Long-tailed shrike	<i>Lanius schach</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
347	Grey-backed shrike	<i>Lanius tephronotus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
348	Great grey shrike	<i>Lanius excubitor</i>	LC	CR	Literature review	Rare local resident	P,D,Sp	Inskipp et al. 2016; KTWR 2018; MWT 2022
Family: Corvidae								
349	Rufous treepie	<i>Dendrocitta vagabunda</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
350	Red-billed blue magpie	<i>Urocissa erythroryncha</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
351	Common green magpie	<i>Cissa chinensis</i>	LC	LC	Literature review	Common resident	P,B,R	eBird 2026; PNP 2018
352	House crow	<i>Corvus splendens</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
353	Large-billed crow	<i>Corvus macrorhynchos</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Stenostiridae								
354	Yellow-bellied fairy-fantail	<i>Chelidorhynch hypoxanthus</i>	LC	LC	Literature review	Locally common resident	P,D	eBird 2026; PNP 2018
355	Grey-headed canary-flycatcher	<i>Culicicapa ceylonensis</i>	LC	LC	This study and Literature review	Common partial migrant	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Paridae								
356	Sultan tit	<i>Melanochlora sultanea</i>	LC	EN	Literature review	Rare and very local resident	P	PNP 2018
357	Great tit	<i>Parus major</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Alaudidae								
358	Ashy-crowned sparrow-lark	<i>Eremopterix griseus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
359	Horsfield's bushlark	<i>Mirafrja javanica</i>	LC	LC	Literature review	Local resident	R,Si	Inskipp et al. 2016
360	Bengal bushlark	<i>Mirafrja assamica</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D,M,Si,Sp	eBird 2026; PNP 2018
361	Sand lark	<i>Alaudala raytal</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
362	Hume's lark	<i>Calandrella acutirostris</i>	LC	LC	This study and Literature review	Resident and passage migrant	S,M,Sp	eBird 2026; KTWR 2018

363	Mongolian short-toed lark	<i>Calandrella dukhunensis</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,R,S,M,S p	eBird 2026; KTWR 2018; PNP 2018
364	Oriental skylark	<i>Alauda gulgula</i>	LC	LC	This study and Literature review	Breeding resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
365	Crested lark	<i>Galerida cristata</i>	LC	NT	This study and Literature review	Rare resident	P,B,D, Si,Sp	Inskipp et al. 2016; KTWR 2018
Family: Cisticolidae								
366	Zitting cisticola	<i>Cisticola juncidis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
367	Golden-headed cisticola	<i>Cisticola exilis</i>	LC	NT	This study and Literature review	Local resident	P,S,D,M,S p	eBird 2026; KTWR 2018; PNP 2018
368	Striated prinia	<i>Prinia crinigera</i>	LC	LC	Literature review	Common resident	P,B,Sp	eBird; KTWR 2018; PNP 2018
369	Grey-crowned prinia	<i>Prinia cinereocapilla</i>	VU	CR	Literature review	Local resident	P,B,Sp	eBird 2026; KTWR 2018; PNP 2018
370	Grey-breasted prinia	<i>Prinia hodgsonii</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
371	Graceful prinia	<i>Prinia gracilis</i>	LC	LC	Literature review	Local resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
372	Yellow-bellied prinia	<i>Prinia flaviventris</i>	LC	NT	This study and Literature review	Local resident	P,R,D,Sp	eBird 2026; KTWR 2018; PNP 2018
373	Ashy prinia	<i>Prinia socialis</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
374	Plain prinia	<i>Prinia inornata</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
375	Common tailorbird	<i>Orthotomus sutorius</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Acrocephalidae								
376	Thick-billed warbler	<i>Arundinax aedon</i>	LC	LC	This study and Literature review	Widespread winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
377	Booted warbler	<i>Iduna caligata</i>	LC	LC	Literature review	Uncommon passage migrant and winter visitor	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
378	Black-browed reed-warbler	<i>Acrocephalus bistrigiceps</i>	LC	NT	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
379	Blyth's Reed-warbler	<i>Acrocephalus dumetorum</i>	LC	LC	This study and Literature review	Widespread winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
380	Paddyfield warbler	<i>Acrocephalus agricola</i>	LC	LC	Literature review	Local visitor	P,D,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
381	Blunt-winged warbler	<i>Acrocephalus concinens</i>	LC	LC	Literature review	Very rare local visitor and passage migrant	Sp	Inskipp et al. 2016; KTWR 2018
382	Clamorous reed-warbler	<i>Acrocephalus stentoreus</i>	LC	NT	This study and Literature review	Uncommon Winter visitor and passage migrant	P,B,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Pnoepygidae								
383	Pygmy cupwing	<i>Pnoepyga pusilla</i>	LC	LC	Literature review	Frequent resident	P	Inskipp et al. 2016; PNP 2018
Family: Locustellidae								
384	Pallas's grasshopper-warbler	<i>Helopsaltes certhiola</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
385	Lanceolated warbler	<i>Locustella lanceolata</i>	LC	LC	Literature review	Vagrant	P,Sp	Inskipp et al. 2020; KTWR 2018; PNP 2018
386	Common grasshopper-warbler	<i>Locustella naevia</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018

387	Chinese grasshopper-warbler	<i>Locustella tacsanowskia</i>	LC	LC	Literature review	Rare winter visitor and Passage Migrant	Sp	KTWR 2018
388	Spotted grasshopper-warbler	<i>Locustella thoracica</i>	LC	LC	Literature review	Local winter visitor	Sp	Inskipp et al. 2016; KTWR 2018
389	Striated grassbird	<i>Megalurus palustris</i>	LC	CR	Literature review	Local resident	P,D,Sp	eBird 2026; KTWR 2018; PNP 2018
390	Bristled grassbird	<i>Schoenicola striata</i>	VU	VU	Literature review	Summer visitor	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Hirundinidae								
391	Northern house martin	<i>Delichon urbicum</i>	LC	LC	Literature review	Very rare passage migrant	Sp	Inskipp et al. 2016
392	Asian house martin	<i>Delichon dasypus</i>	LC	LC	This study and Literature review	Common resident	P,D,Sp	KTWR 2018; MWT 2022; PNP 2018
393	Nepal house martin	<i>Delichon nipalense</i>	LC	LC	Literature review	Common resident	P,D,Sp	KTWR 2018; MWT 2022; PNP 2018
394	Streak-throated swallow	<i>Petrochelidon fluvicola</i>	LC	LC	Literature review	Rare visitor	P,Sp	KTWR 2018; PNP 2018
395	Red-rumped swallow	<i>Cecropis daurica</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
396	Wire-tailed swallow	<i>Hirundo smithii</i>	LC	LC	Literature review	Local resident	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
397	Eurasian crag martin	<i>Ptyonoprogne rupestris</i>	LC	LC	Literature review	Common resident	P	PNP 2018
398	Barn swallow	<i>Hirundo rustica</i>	LC	LC	This study and Literature review	Common resident and summer visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
399	Asian plain martin	<i>Riparia chinensis</i>	LC	LC	This study and Literature review	Locally common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
400	Collared sand martin	<i>Riparia riparia</i>	LC	LC	Literature review	Passage Migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Pycnonotidae								
401	White-throated bulbul	<i>Alophoxus flaveolus</i>	LC	EN	Literature review	Local resident	P,D	Inskipp et al 2016; MWT 2022; PNP 2018
402	Ashy bulbul	<i>Hemixos flava</i>	LC	LC	Literature review	Widespread, uncommon resident	P,B,S,R,D	eBird 2026; MWT 2022
403	Mountain bulbul	<i>Ixos mcclllandii</i>	LC	LC	Literature review	Widespread resident	B,Sp	Inskipp et al. 2016
404	Black bulbul	<i>Hypsipetes leucocephalus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, Sp	eBird 2026; KTWR 2018; MWT 2022
405	Black-crested bulbul	<i>Rubigula flaviventris</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,Si,S p	eBird 2026; KTWR 2018; PNP 2018
406	Red-whiskered bulbul	<i>Pycnonotus jocosus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
407	Himalayan bulbul	<i>Pycnonotus leucogenys</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
408	Red-vented bulbul	<i>Pycnonotus cafer</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018
Family: Phylloscopidae								
409	Yellow-browed warbler	<i>Phylloscopus inornatus</i>	LC	LC	Literature review	Uncommon winter visitor and passage migrant	P,B,R,D,Si, Sp	eBird 2026; KTWR 2018; PNP 2018
410	Hume's leaf-warbler	<i>Phylloscopus humei</i>	LC	LC	This study and Literature review	Widespread resident and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022

411	Lemon-rumped leaf-warbler	<i>Phylloscopus chloronotus</i>	LC	LC	This study and Literature review	Widespread resident	P,D,Sp	MWT 2022; PNP 2018
412	Dusky warbler	<i>Phylloscopus fuscatus</i>	LC	LC	This study and Literature review	Frequent winter visitor	P,B,S,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
413	Smoky warbler	<i>Phylloscopus fuligiventer</i>	LC	LC	This study and Literature review	Resident	P,B,R,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
414	Siberian chiffchaff	<i>Phylloscopus tristis</i>	LC	LC	This study and Literature review	Widespread winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
415	Sulphur-bellied warbler	<i>Phylloscopus griseolus</i>	LC	LC	Literature review	Rare passage migrant, very rare winter visitor	B	eBird 2026
416	Tickell's leaf-warbler	<i>Phylloscopus affinis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
417	Green-crowned warbler	<i>Phylloscopus burkii</i>	LC	LC	Literature review	Widespread resident	P,D,Sp	eBird 2026; KTWR 2018; PNP 2018
418	Whistler's warbler	<i>Phylloscopus whistleri</i>	LC	LC	This study and Literature review	Widespread resident	P,B,Sp	eBird 2026; KTWR 2018
419	Chestnut-crowned warbler	<i>Phylloscopus castaniceps</i>	LC	LC	Literature review	Frequent resident	P	PNP 2018
420	Green warbler	<i>Phylloscopus nitidus</i>	LC	NE	This study and Literature review	Uncommon Passage Migrant	B,D	eBird 2026
421	Greenish warbler	<i>Phylloscopus trochiloides</i>	LC	LC	This study and Literature review	Summer visitor, winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
422	Large-billed leaf-warbler	<i>Phylloscopus magnirostris</i>	LC	LC	This study and Literature review	Common summer visitor, rare winter visitor	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
423	Blyth's leaf-warbler	<i>Phylloscopus reguloides</i>	LC	LC	This study and Literature review	Widespread resident	P,B,D,M,S p	eBird 2026; KTWR 2018
424	Western crowned leaf-warbler	<i>Phylloscopus occipitalis</i>	LC	LC	This study and Literature review	Rare winter visitor and passage migrant	P,B,D,M,S p	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
425	Grey-hooded warbler	<i>Phylloscopus xanthoschistos</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,M, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Scotocercidae								
426	Grey-bellied tesia	<i>Tesia cyaniventer</i>	LC	LC	This study and Literature review	Frequent resident	P,B,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
427	Chestnut-crowned bush-warbler	<i>Cettia major</i>	LC	LC	This study and Literature review	Uncommon Resident	P,B,Sp	eBird 2026; KTWR 2018; PNP 2018
428	Grey-sided bush-warbler	<i>Cettia brunnifrons</i>	LC	LC	Literature review	Widespread resident	P,D,Sp	KTWR 2018; MWT 2022; PNP 2018
429	Chestnut-headed tesia	<i>Cettia castaneocoronata</i>	LC	LC	Literature review	Widespread resident	P	PNP 2018
430	Pale-footed bush-warbler	<i>Hemitesia pallidipes</i>	LC	VU	Literature review	Very local resident	P,D,M,Sp	KTWR 2018; MWT 2022; PNP 2018
431	Yellow-bellied warbler	<i>Abroscopus superciliaris</i>	LC	VU	Literature review	Very local and uncommon resident	P	Inskipp et al. 2016; PNP 2018
432	Hume's bush-warbler	<i>Horornis brunnescens</i>	LC	VU	This study	Local resident	D	
433	Aberrant bush-warbler	<i>Horornis flavolivaceus</i>	LC	LC	This study and Literature review	Common resident	P,B,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Sylviidae								

434	Eastern orphee warbler	<i>Curruca crassirostris</i>	LC	LC	Literature review	Vagrant	P,Sp	Inskipp et al. 2020; KTWR 2018; PNP 2018
435	Lesser whitethroat	<i>Curruca curruca</i>	LC	LC	This study and Literature review	Uncommon Winter visitor and passage migrant	P,S,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Paradoxornithidae								
436	Yellow-eyed babbler	<i>Chrysomma sinense</i>	LC	NT	This study and Literature review	Local resident	P,B,S,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Zosteropidae								
437	Black-chinned yuhina	<i>Yuhina nigrimenta</i>	LC	VU	Literature review	Uncommon Resident	P	Inskipp et al. 2016
438	Indian white-eye	<i>Zosterops palpebrosus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Timaliidae								
439	White-browed scimitar-babbler	<i>Pomatorhinus schisticeps</i>	LC	NT	This study and Literature review	Local resident	P,M,Sp	Inskipp et al. 2016; PNP 2018
440	Rusty-cheeked scimitar-babbler	<i>Erythrogenys erythrogenys</i>	LC	LC	Literature review	Local common resident	P,B,R	eBird 2026
441	Grey-throated babbler	<i>Stachyris nigriceps</i>	LC	LC	Literature review	Frequent resident	P,B,R,S,D	MWT 2022; PNP 2018
442	Chestnut-capped babbler	<i>Timalia pileata</i>	LC	NT	Literature review	Local resident	P	eBird 2026; PNP 2018
443	Pin-striped tit-babbler	<i>Mixornis gularis</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018
444	Black-chinned babbler	<i>Cyanoderma pyrrhops</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,D	eBird 2026; PNP 2018
Family: Pellorneidae								
445	Swamp grass-babbler	<i>Laticilla cinerascens</i>	EN	CR	Literature review	Very rare and local resident	Sp	eBird 2026; KTWR 2018
446	Puff-throated babbler	<i>Pellorneum ruficeps</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; PNP 2018
447	Indian grass-babbler	<i>Graminicola bengalensis</i>	NT	EN	Literature review	Very local resident	P	PNP 2018
Family: Alcippeidae								
448	Nepal fulvetta	<i>Alcippe nipalensis</i>	LC	LC	Literature review	Resident	P	Inskipp et al. 2016
Family: Leiotrichidae								
449	Jungle babbler	<i>Argya striata</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
450	Striated babbler	<i>Argya earlei</i>	LC	LC	This study and Literature review	Resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
451	Common babbler	<i>Argya caudata</i>	LC	VU	This study and Literature review	Local resident	P,D,Si,Sp	eBird 2026
452	Spiny babbler	<i>Acanthoptila nipalensis</i>	LC	LC	Literature review	Local and frequent resident	B	NOU 2026
453	White-crested laughingthrush	<i>Garrulax leucolophus</i>	LC	LC	Literature review	Widespread resident	P,R	Inskipp et al. 2016
454	Lesser necklaced laughingthrush	<i>Garrulax monileger</i>	LC	VU	Literature review	Local resident	P,B,Si	eBird 2026; PNP 2018
455	Greater necklaced laughingthrush	<i>Pterorhinus pectoralis</i>	LC	VU	This study and Literature review	Local and uncommon resident	P,B,R,S,Si, Sp	eBird 2026; PNP 2018

Family: Sittidae								
456	Chestnut-bellied nuthatch	<i>Sitta cinnamoventris</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
457	Velvet-fronted nuthatch	<i>Sitta frontalis</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,M, Si,Sp	eBird 2026; PNP 2018
458	Wallcreeper	<i>Tichodroma muraria</i>	LC	LC	This study and Literature review	Common resident and winter visitor	R,S,D,Si,Sp	eBird 2026
Family: Sturnidae								
459	Common starling	<i>Sturnus vulgaris</i>	LC	LC	This study and Literature review	Passage migrant and winter visitor	P,B,S,Sp	eBird 2026; KTWR 2018; PNP 2018
460	Rosy starling	<i>Pastor roseus</i>	LC	LC	Literature review	Uncommon passage migrant	Sp	eBird 2026; KTWR 2018
461	Indian pied starling	<i>Gracupica contra</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
462	Brahminy starling	<i>Sturnia pagodarum</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
463	Chestnut-tailed starling	<i>Sturnia malabarica</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
464	Common myna	<i>Acridotheres tristis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
465	Bank myna	<i>Acridotheres ginginianus</i>	LC	LC	This study and Literature review	Local resident	P,R,D,S,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
466	Jungle myna	<i>Acridotheres fuscus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
467	Great myna	<i>Acridotheres grandis</i>	LC	LC	Literature review	Local resident	M,Si,Sp	eBird 2026; KTWR 2018
468	Spot-winged starling	<i>Saroglossa spilopterus</i>	LC	LC	This study and Literature review	Breeding migrant	P,B,R,S,D, Sp	eBird 2026; KTWR 2018; PNP 2018
469	Common hill myna	<i>Gracula religiosa</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Turdidae								
470	Long-billed thrush	<i>Zoothera monticola</i>	LC	LC	Literature review	Uncommon Resident	P	PNP 2018
471	Scaly thrush	<i>Zoothera dauma</i>	LC	LC	This study and Literature review	Partial migrant	P,B,R,D,Si, Sp	eBird 2026; KTWR 2018; PNP 2018
472	Orange-headed thrush	<i>Geokichla citrina</i>	LC	LC	This study and Literature review	Partial migrant	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
473	Grey-winged blackbird	<i>Turdus boulboul</i>	LC	LC	This study and Literature review	Common resident	P,R,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
474	Tickell's thrush	<i>Turdus unicolor</i>	LC	LC	This study and Literature review	Frequent resident	P,R,Sp	eBird 2026; KTWR 2018
475	White-collared blackbird	<i>Turdus albocinctus</i>	LC	LC	Literature review	Common resident	Sp	Insipp et al. 2016; KTWR 2018
476	Dusky thrush	<i>Turdus eunomus</i>	LC	LC	Literature review	Irregular and rare winter visitor	Sp	Inskipp et al. 2016; KTWR 2018
477	Black-throated thrush	<i>Turdus atrogularis</i>	LC	LC	This study and Literature review	Winter visitor	P,B,S,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
478	Rufous-throated thrush	<i>Turdus ruficollis</i>	LC	LC	Literature review	Uncommon winter visitor	Sp	eBird 2026; KTWR 2018
Family: Muscicapidae								

479	Oriental magpie-robin	<i>Copsychus saularis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
480	Indian robin	<i>Copsychus fulicatus</i>	LC	LC	This study and Literature review	Local resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
481	White-rumped shama	<i>Copsychus malabarica</i>	LC	LC	This study and Literature review	Common resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
482	Dark-sided flycatcher	<i>Muscicapa sibirica</i>	LC	LC	Literature review	Summer visitor and passage migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
483	Asian brown flycatcher	<i>Muscicapa dauurica</i>	LC	LC	This study and Literature review	Uncommon summer visitor and Passage Migrant	P,Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
484	Rufous-bellied niltava	<i>Niltava sundara</i>	LC	LC	Literature review	Common resident	Si,Sp	Inskipp et al. 2016; KTWR 2018
485	Small niltava	<i>Niltava macgrigoriae</i>	LC	LC	This study and Literature review	Common resident	S,Si,Sp	Inskipp et al. 2016; KTWR 2018
486	Verditer flycatcher	<i>Eumyias thalassinus</i>	LC	LC	This study and Literature review	Partial migrant	P,B,R,S,D, M,Sp	eBird 2026; KTWR 2018; PNP 2018
487	Pale blue flycatcher	<i>Cyornis unicolor</i>	LC	LC	This study	Resident and summer visitor	Si	
488	Pale-chinned flycatcher	<i>Cyornis poliogenys</i>	LC	LC	This study and Literature review	Common resident	P,B,R,D,Si, Sp	eBird 2026; KTWR 2018; MWT 2022
489	Tickell's blue flycatcher	<i>Cyornis tickelliae</i>	LC	LC	Literature review	Local resident	P	Inskipp et al. 2016; PNP 2018
490	Blue-throated blue flycatcher	<i>Cyornis rubeculoides</i>	LC	LC	This study and Literature review	Uncommon summer visitor	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
491	Indian blue robin	<i>Larvivora brunnea</i>	LC	LC	Literature review	Common summer visitor	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
492	Bluethroat	<i>Luscinia svecica</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
493	Siberian rubythroat	<i>Calliope calliope</i>	LC	LC	This study and Literature review	Frequent winter visitor and passage migrant	P,B,R,D,M, Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
494	Himalayan rubythroat	<i>Calliope pectoralis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
495	White-tailed blue robin	<i>Myiomela leucura</i>	LC	LC	Literature review	Common resident	P,R,Sp	eBird 2026; KTWR 2018; PNP 2018
496	Little forktail	<i>Enicurus scouleri</i>	LC	LC	Literature review	Widespread resident	S,D,Sp	eBird 2026; KTWR 2018; MWT 2022
497	Slaty-backed forktail	<i>Enicurus schistaceus</i>	LC	LC	This study and Literature review	Common resident	P,B,Si	eBird 2026
498	Black-backed forktail	<i>Enicurus immaculatus</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; MWT 2022; PNP 2018
499	Spotted forktail	<i>Enicurus maculatus</i>	LC	LC	This study and Literature review	Widespread resident	B,D	MWT 2022
500	Blue whistling-thrush	<i>Myophonus caeruleus</i>	LC	LC	This study and Literature review	Winter visitor	P,B,R,S,M, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
501	Slaty-blue flycatcher	<i>Ficedula tricolor</i>	LC	LC	This study and Literature review	Resident	P,B,S,M,S p	eBird 2026; KTWR 2018; PNP 2018
502	Snowy-browed flycatcher	<i>Ficedula hyperythra</i>	LC	LC	Literature review	Uncommon resident	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
503	Rufous-gorgeted flycatcher	<i>Ficedula strophitata</i>	LC	LC	Literature review	Resident	P	PNP 2018
504	Ultramarine flycatcher	<i>Ficedula superciliaris</i>	LC	LC	Literature review	Common breeding visitor and rare winter visitor	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018

505	Little pied flycatcher	<i>Ficedula westermanni</i>	LC	LC	Literature review	Uncommon resident	P,D,Si,Sp	KTWR 2018; MWT 2022; PNP 2018
506	Red-breasted flycatcher	<i>Ficedula parva</i>	LC	LC	Literature review	Winter visitor	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
507	Red-throated flycatcher	<i>Ficedula albicilla</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
508	Kashmir flycatcher	<i>Ficedula subrubra</i>	VU	VU	Literature review	Passage migrant	Sp	Inskipp et al. 2016; KTWR 2018
509	Blue-fronted redstart	<i>Phoenicurus frontalis</i>	LC	LC	This study and Literature review	Winter visitor	D,Si	eBird 2026
510	White-capped water-redstart	<i>Phoenicurus leucocephalus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
511	Plumbeous water-redstart	<i>Phoenicurus fuliginosus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,S,Sp	eBird 2026; KTWR 2018; PNP 2018
512	Black redstart	<i>Phoenicurus ochruros</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
513	Daurian redstart	<i>Phoenicurus aureus</i>	LC	LC	Literature review	Vagrant	Sp	Inskipp et al. 2020; KTWR 2018
514	Hodgson's redstart	<i>Phoenicurus hodgsoni</i>	LC	LC	Literature review	Frequent winter visitor	Sp	Inskipp et al. 2016; KTWR 2018
515	Blue-capped rock-thrush	<i>Monticola cinclorhyncha</i>	LC	LC	Literature review	Frequent summer visitor	P,R,Sp	eBird 2026; KTWR 2018; PNP 2018
516	Chestnut-bellied rock-thrush	<i>Monticola rufiventris</i>	LC	LC	Literature review	Widespread resident	Sp	eBird 2026
517	Blue rock-thrush	<i>Monticola solitarius</i>	LC	LC	This study and Literature review	Frequent resident and winter visitor	P,B,S,M,Si, Sp	eBird 2026; KTWR 2018; PNP 2018
518	Jerdon's bushchat	<i>Saxicola jerdoni</i>	LC	CR	Literature review	Very rare and local resident	Sp	Inskipp et al. 2016; KTWR 2018
519	Grey bushchat	<i>Saxicola ferreus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
520	White-throated bushchat	<i>Saxicola insignis</i>	VU	EN	Literature review	Local winter visitor and passage migrant	P,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
521	Pied bushchat	<i>Saxicola caprata</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
522	White-tailed stonechat	<i>Saxicola leucurus</i>	LC	NT	This study and Literature review	Local resident	P,B,Sp	eBird 2026; KTWR 2018; PNP 2018
523	Common stonechat	<i>Saxicola torquatus</i>	LC	LC	This study and Literature review	Widespread resident, winter visitor and passage migrant	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
524	Isabelline wheatear	<i>Oenanthe isabellina</i>	LC	LC	This study and Literature review	Vagrant	P,D,Sp	eBird 2026; KTWR 2018; PNP 2018
525	Desert wheatear	<i>Oenanthe deserti</i>	LC	LC	Literature review	Summer visitor and passage migrant	Sp	Inskipp et al. 2016; KTWR 2018
526	Brown rockchat	<i>Oenanthe fusca</i>	LC	LC	This study and Literature review	Rare and very local resident	P,B,R,S,D, M,Sp	eBird 2026; KTWR 2018; MWT 2022
Family: Chloropseidae								
527	Golden-fronted leafbird	<i>Chloropsis aurifrons</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
528	Orange-bellied leafbird	<i>Chloropsis hardwickii</i>	LC	LC	Literature review	Common resident	P,B,R,Sp	eBird 2026; PNP 2018
Family: Dicaeidae								
529	Thick-billed flowerpecker	<i>Dicaeum agile</i>	LC	LC	This study and Literature review	Resident	P,B,R,S,Si, Sp	eBird 2026; KTWR 2018; PNP 2018

530	Pale-billed flowerpecker	<i>Dicaeum erythrorhynchos</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
531	Plain flowerpecker	<i>Dicaeum minullum</i>	LC	LC	This study	Frequent resident	P,S,M	
532	Fire-breasted flowerpecker	<i>Dicaeum ignipectus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,Si	PNP 2018
Family: Nectariniidae								
533	Streaked spiderhunter	<i>Arachnothera magna</i>	LC	LC	Literature review	Frequent resident	P,B	eBird 2026; PNP 2018
534	Purple sunbird	<i>Cinnyris asiaticus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
535	Black-throated sunbird	<i>Aethopyga saturata</i>	LC	LC	Literature review	Widespread resident	P,Sp	Inskipp et al. 2016
536	Crimson sunbird	<i>Aethopyga siparaja</i>	LC	LC	This study and Literature review	Widespread resident	P,B,S,D,M, Si,Sp	eBird 2026; MWT 2022; PNP 2018
Family: Ploceidae								
537	Black-breasted weaver	<i>Ploceus benghalensis</i>	LC	VU	Literature review	Local resident	P,Sp	eBird 2026; KTWR 2018; PNP 2018
538	Streaked weaver	<i>Ploceus manyar</i>	LC	CR	Literature review	Local migrant	P,Sp	eBird 2026; KTWR 2018; PNP 2018
539	Baya weaver	<i>Ploceus philippinus</i>	LC	NT	This study and Literature review	Common resident	P,B,R,S,D, M,Sp	eBird 2026; KTWR 2018; PNP 2018
540	Finn's weaver	<i>Ploceus megarhynchus</i>	EN	CR	Literature review	Local resident and summer visitor	Sp	Inskipp et al. 2016; KTWR 2018
Family: Estrildidae								
541	Red avadavat	<i>Amandava amandava</i>	LC	NT	This study and Literature review	Local resident	P,D,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
542	Indian silverbill	<i>Euodice malabarica</i>	LC	NT	This study and Literature review	Local resident	P,R,S,D,M, Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
543	White-rumped munia	<i>Lonchura striata</i>	LC	LC	This study and Literature review	Local resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018
544	Scaly-breasted munia	<i>Lonchura punctulata</i>	LC	LC	This study and Literature review	Common widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
545	Tricoloured munia	<i>Lonchura malacca</i>	LC	LC	This study and Literature review	Local resident	P,B,S,D,Si, Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
546	Chestnut munia	<i>Lonchura atricapilla</i>	LC	EN	Literature review	Rare and local Resident	D,Sp	eBird 2026; KTWR 2018; MWT 2022
Family: Passeridae								
547	House sparrow	<i>Passer domesticus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
548	Spanish sparrow	<i>Passer hispaniolensis</i>	LC	LC	Literature review	Vagrant	P,D,Sp	KTWR 2018; MWT 2022; PNP 2018
549	Eurasian tree sparrow	<i>Passer montanus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
550	Chestnut-shouldered bush-sparrow	<i>Gymnoris xanthocollis</i>	LC	LC	This study and Literature review	Frequent resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022
Family: Motacillidae								
551	Forest wagtail	<i>Dendronanthus indicus</i>	LC	LC	Literature review	Passage Migrant	P	PNP 2018

552	Tree pipit	<i>Anthus trivialis</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,R,S,D,M, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
553	Olive-backed pipit	<i>Anthus hodgsoni</i>	LC	LC	This study and Literature review	Widespread resident and winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
554	Red-throated pipit	<i>Anthus cervinus</i>	LC	LC	This study and Literature review	Winter visitor and passage migrant	P,Si,Sp	eBird 2026; KTWR 2018; PNP 2018
555	Rosy pipit	<i>Anthus roseatus</i>	LC	LC	This study and Literature review	Common resident	P,B,R,D,S, Sp	eBird 2026; KTWR 2018; PNP 2018
556	Buff-bellied pipit	<i>Anthus rubescens</i>	LC	LC	Literature review	Rare winter visitor and passage migrant	Sp	Inskipp et al. 2016; KTWR 2018
557	Water pipit	<i>Anthus spinoletta</i>	LC	LC	This study and Literature review	Rare winter visitor and passage migrant	P,B,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
558	Richard's pipit	<i>Anthus richardi</i>	LC	LC	This study and Literature review	Widespread winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
559	Paddyfield pipit	<i>Anthus rufulus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
560	Blyth's pipit	<i>Anthus godlewskii</i>	LC	LC	This study and Literature review	Uncommon winter visitor and passage migrant	Sp	eBird 2026; KTWR 2018
561	Tawny pipit	<i>Anthus campestris</i>	LC	LC	This study and Literature review	Uncommon winter visitor	B,R,D,M,Si, Sp	eBird 2026; KTWR 2018; MWT 2022
562	Long-billed pipit	<i>Anthus similis</i>	LC	LC	Literature review	Resident and local winter visitor	D,Sp	KTWR 2018; MWT 2022
563	Western Yellow wagtail	<i>Motacilla flava</i>	LC	LC	This study and Literature review	Winter visitor	P,B,R,S,M, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
564	Grey wagtail	<i>Motacilla cinerea</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
565	Citrine wagtail	<i>Motacilla citreola</i>	LC	LC	This study and Literature review	Common winter visitor	P,B,R,S,D, M,Sp	eBird 2026; KTWR 2018; PNP 2018
566	White-browed wagtail	<i>Motacilla maderaspatensis</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
567	White wagtail	<i>Motacilla alba</i>	LC	LC	This study and Literature review	Common passage migrant and winter visitor	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
Family: Fringillidae								
568	Common rosefinch	<i>Carpodacus erythrurus</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, Si,Sp	eBird 2026; KTWR 2018; PNP 2018
Family: Emberizidae								
569	Crested bunting	<i>Emberiza lathami</i>	LC	LC	This study and Literature review	Widespread resident	P,B,R,S,D, M,Si,Sp	eBird 2026; KTWR 2018; MWT 2022; PNP 2018
570	Black-headed bunting	<i>Emberiza melanocephala</i>	LC	VU	This study and Literature review	Winter visitor and passage migrant	S,D,Sp	eBird 2026; KTWR 2018; MWT 2022
571	Red-headed bunting	<i>Emberiza bruniceps</i>	LC	LC	This study and Literature review	Vagrant	P,Si,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
572	Chestnut-eared bunting	<i>Emberiza fucata</i>	LC	LC	Literature review	Winter visitor and passage migrant	P,Sp	Inskipp et al. 2016; KTWR 2018; PNP 2018
573	Yellow-breasted bunting	<i>Emberiza aureola</i>	CR	CR	Literature review	Very local Winter visitor and passage migrant	P,R,S,D,Sp	eBird 2026; KTWR 2018; PNP 2018
574	Little bunting	<i>Emberiza pusilla</i>	LC	VU	This study and Literature review	Uncommon winter visitor	P,R,S,D,Si, Sp	eBird 2026; KTWR 2018; MWT 2022
575	Black-faced bunting	<i>Emberiza spodocephala</i>	LC	VU	Literature review	Local winter visitor	P,S,Sp	eBird 2026; KTWR 2018; PNP 2018

Appendix 5. Mammals of Madhesh Province, Nepal

SN	English Name	Scientific Name	IUCN Status	National Status	Methods	Location	Citations
Order: Proboscidea							
Family: Elephantidae							
1	Asian elephant	<i>Elephas maximus</i>	EN	EN	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; PNP 2018; Ram et al. 2022
Order: Perissodactyla							
Family: Rhinocerotidae							
2	Greater one-horned rhino	<i>Rhinoceros unicornis</i>	VU	EN	This study and Literature review	P	Jnawali et al. 2011; PNP 2018
Order: Artiodactyla							
Family: Bovidae							
3	Gaur	<i>Bos gaurus</i>	VU	VU	This study and Literature review	P	Baral & Shah 2008; Jnawali et al. 2011; Pun et al. 2022; PNP 2018
4	Nilgai	<i>Boselaphus tragocamelus</i>	LC	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Katuwal et al. 2018; KTWR 2018; Pun et al. 2022; Mallik 2019; PNP 2018
5	Wild water buffalo	<i>Bubalus arnee</i>	EN	EN	This study and Literature review	Sp	Kandel et al. 2018; KTWR 2018
6	Four-horned antelope	<i>Tetracerus quadricornis</i>	VU	DD	This study and Literature review	P	Baral & Shah 2008; Jnawali et al. 2011; PNP 2018; Regmi et al. 2022
Family: Cervidae							
7	Chital	<i>Axis axis</i>	LC	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
8	Hog deer	<i>Axis porcinus</i>	EN	EN	This study and Literature review	P,B,Sp	Baral & Shah 2008; Chettri & Chhetry 2013; Jnawali et al. 2011; KTWR 2018; Pun et al. 2022; PNP 2018
9	Northern red muntjac	<i>Muntiacus vaginalis</i>	LC	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
10	Sambar	<i>Rusa unicolor</i>	VU	VU	This study and Literature review	P,B,R	Baral & Shah 2008; Jnawali et al. 2011; Pun et al. 2022; PNP 2018
Family: Platanistidae							
11	Ganges river dolphin	<i>Platanista gangetica</i>	EN	EN	This study and Literature review	Sp	Baral & Shah 2008; KTWR 2018
Family: Suidae							
12	Wild boar	<i>Sus scrofa</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; Limbu & Karki 2003; Katuwal et al. 2018; PNP 2018; Regmi et al. 2022
Order: Carnivora							
Family: Canidae							
13	Golden jackal	<i>Canis aureus</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
14	Dhole	<i>Cuon alpinus</i>	EN	EN	This study and Literature review	P	Baral & Shah 2008; Jnawali et al. 2011; Karki et al. 2022; PNP 2018
15	Bengal fox	<i>Vulpes bengalensis</i>	LC	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
Family: Felidae							
16	Jungle cat	<i>Felis chaus</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; Mishra et al. 2020; PNP 2018; Regmi et al. 2022
17	Clouded leopard	<i>Neofelis nebulosa</i>	VU	EN	Literature review	P,D,S	Baral & Shah 2008; Jnawali et al. 2011; Poudel et al. 2019

18	Leopard	<i>Panthera pardus</i>	VU	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
19	Tiger	<i>Panthera tigris</i>	EN	EN	This study and Literature review	P,B,R, Sp	Baral & Shah 2008; Jnawali et al. 2011; PNP 2018; Regmi et al. 2022; Pokharel et al. 2026
20	Mainland leopard cat	<i>Prionailurus bengalensis</i>	LC	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; PNP 2018; Regmi et al. 2022
21	Fishing cat	<i>Prionailurus viverrinus</i>	VU	EN	This study and Literature review	P,B,Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; Mishra et al. 2021; Poudel et al. 2019
Family: Herpestidae							
22	Small Indian mongoose	<i>Urva auropunctatus</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; PNP 2018
23	Indian grey mongoose	<i>Urva edwardsii</i>	LC	VU	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
24	Crab-eating mongoose	<i>Urva urva</i>	LC	VU	Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; Sharma & Lamichhane 2017
Family: Hyaenidae							
25	Striped hyaena	<i>Hyaena hyaena</i>	NT	EN	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; 2020; Jnawali et al. 2011; PNP 2018; Regmi et al. 2022
Family: Mustelidae							
26	Smooth-coated otter	<i>Lutrogale perspicillata</i>	VU	EN	This study and Literature review	Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; Mishra et al. 2022
27	Yellow-throated marten	<i>Martes flavigula</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Basnet & Rai 2020; Jnawali et al. 2011; KTWR 2018
28	Honey badger	<i>Mellivora capensis</i>	LC	EN	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; Regmi et al. 2022
Family: Ursidae							
29	Sloth bear	<i>Melursus ursinus</i>	VU	EN	This study and Literature review	P,B,S,D	Baral & Shah 2008; Jnawali et al. 2011; PNP 2018
Family: Viverridae							
30	Masked palm civet	<i>Paguma larvata</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011
31	Common palm civet	<i>Paradoxurus hermaphroditus</i>	LC	LC	This study and Literature review	P,S,M	Baral & Shah 2008; Jnawali et al. 2011
32	Large Indian civet	<i>Viverra zibetha</i>	LC	NT	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; Regmi et al. 2022
33	Small Indian civet	<i>Viverricula indica</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; PNP 2018
Order: Primates							
Family: Cercopithecidae							
34	Rhesus macaque	<i>Macaca mulatta</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; KTWR 2018; PNP 2018; Regmi et al. 2022
35	Tarai gray langur	<i>Semnopithecus hector</i>	NT	LC	This study and Literature review	P,B,R,S	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; Regmi et al. 2022
Order: Lagomorpha							
Family: Leporidae							
36	Indian hare	<i>Lepus nigricollis</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp	Baral & Shah 2008; Bhandari et al. 2015; Jnawali et al. 2011; Katuwal et al. 2018; KTWR 2018; PNP 2018; Regmi et al. 2022
Order: Pholidota							
Family: Manidae							
37	Chinese pangolin	<i>Manis pentadactyla</i>	CR	EN	This study and Literature review	P,D,Sp	Baral & Shah 2008
38	Indian pangolin	<i>Manis crassicaudata</i>	EN	EN	Literature review	P,B	Baral & Shah 2008; Jnawali et al. 2011; PNP 2018

Order: Eulipotyphla						
Family: Soricidae						
39	House shrew	<i>Suncus murinus</i>	LC	LC	Literature review	P,B,R,S,M,D,Si,Sp Bhattarai 2012
40	Anderson's shrew	<i>Suncus stoliczkanus</i>	LC	DD	This study and Literature review	B,Si Jnawali et al. 2011
41	Pygmy white-toothed shrew	<i>Suncus etruscus</i>	LC	DD	This study and Literature review	P,S,M Jnawali et al. 2011
Order: Rodentia						
Family: Hystricidae						
42	Indian crested porcupine	<i>Hystrix indica</i>	LC	DD	This study and Literature review	P,S,M,D,Sp Baral & Shah 2008; Bhandari et al. 2015; Bhattarai 2012; Jnawali et al. 2011; KTWR 2018; Mishra et al. 2022; PNP 2018
Family: Muridae						
43	Soft-furred metad	<i>Millardia meltada</i>	LC	LC	This study and Literature review	B,Sp Jnawali et al. 2011
44	Lesser bandicoot rat	<i>Bandicota bengalensis</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Bhattarai 2012; Jnawali et al. 2011; KTWR 2018; PNP 2018
45	Greater bandicoot rat	<i>Bandicota indica</i>	LC	DD	Literature review	P,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018; PNP 2018
46	Indian bush-rat	<i>Golunda ellioti</i>	LC	LC	Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018
47	Common Indian field mouse	<i>Mus booduga</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011
48	Fawn-coloured mouse	<i>Mus cervicolor</i>	LC	LC	This study	B,S,M,Si,Sp
49	House mouse	<i>Mus musculus</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Doody et al. 2016; Jnawali et al. 2011; PNP 2018
50	Brown spiny mouse	<i>Mus saxicola</i>	LC	LC	Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018
51	Earth-coloured mouse	<i>Mus terricolor</i>	LC	LC	This study and Literature review	P,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018
52	Indochinese forest rat	<i>Rattus andamanensis</i>	LC	DD	This study and Literature review	M Aplin et al. 2016
53	House rat	<i>Rattus rattus</i>	LC	LC	This study and Literature review	PNP,P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011; PNP 2018
54	Oriental house rat	<i>Rattus tanezumi</i>	LC	NE	This study and Literature review	R,Si Heaney & Molur 2016
55	Indian gerbil	<i>Tatera indica</i>	LC	LC	Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018
56	Asiatic long-tailed climbing mouse	<i>Vandeleuria oleracea</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Doody et al. 2016; Jnawali et al. 2011; PNP 2018
Family: Sciuridae						
57	Hoary-bellied squirrel	<i>Callosciurus pygerythrus</i>	LC	LC	This study and Literature review	P,Sp Baral & Shah 2008; Doody et al. 2016
58	Five-striped palm squirrel	<i>Funambulus pennantii</i>	LC	LC	This study and Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; KTWR 2018; PNP 2018
59	Red giant flying squirrel	<i>Petaurista petaurista</i>	LC	LC	Literature review	P,B,R,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018
Family: Spalacidae						
60	Lesser bamboo rat	<i>Cannomys badius</i>	LC	DD	This study and Literature review	D,Sp Baral & Shah 2008; Jnawali et al. 2011; KTWR 2018
Order: Chiroptera						
Family: Emballonuridae						
61	Long-winged tomb bat	<i>Taphozous longimanus</i>	LC	DD	This study	D
Family: Megadermatidae						
62	Greater false vampire	<i>Lyroderma lyra</i>	LC	LC	This study and Literature review	P,S,M,D,Si,Sp Baral & Shah 2008; Jnawali et al. 2011

Family: Miniopteridae						
63	Small long-fingered bat	<i>Miniopterus pusillus</i>	LC	DD	This study	B
Family: Pteropodidae						
64	Indian flying fox	<i>Pteropus medius</i>	NT	LC	This study and Literature review	P,B,R,S,D,Si,Sp Acharya 2015; Katuwal et al. 2019; KTWR 2018
65	Greater shortnosed fruit bat	<i>Cynopterus sphinx</i>	LC	LC	This study and Literature review	B,R,S,M,D,Si,Sp Baral & Shah 2008; Jha 2013; Jnawali et al. 2011; KTWR 2018
66	Leschenault's rousette	<i>Rousettus leschenaulti</i>	NT	LC	This study	R,S,M,D,Si,Sp
Family: Vespertilionidae						
67	Indian pipistrelle	<i>Pipistrellus coromandra</i>	LC	LC	Literature review	P,R,S,Sp Jha 2013; Jnawali et al. 2011; KTWR 2018; PNP 2018
68	Tickell's bat	<i>Hesperoptenus tickelli</i>	LC	DD	This study	R
69	Painted woolly bat	<i>Kerivoula picta</i>	NT	LC	This study	B
70	Round-eared tube-nosed bat	<i>Murina cyclotis</i>	LC	LC	Literature review	P Baral & Shah 2008; Jnawali et al. 2011
71	Mandelli's mouse-eared myotis	<i>Myotis sicarius</i>	VU	VU	This study	P,D,Si,S
72	Least pipistrelle	<i>Pipistrellus tenuis</i>	LC	LC	Literature review	P Baral & Shah 2008; Jha 2013; Jnawali et al. 2011
73	Greater Asiatic yellow house bat	<i>Scotophilus heathii</i>	LC	LC	This study and Literature review	P,R,S,M,D,Si,Sp Baral & Shah 2008; Jha 2013; Jnawali et al. 2011; KTWR 2018; PNP 2018
74	Lesser Asiatic yellow house bat	<i>Scotophilus kuhlii</i>	LC	DD	Literature review	P,B,R,S,M,D,Si Baral & Shah 2008; Jnawali et al. 2011
75	Unidentified bat species (2 individuals)	<i>Pipistrellus</i> sp.	-	-	This study	P,B,R,S,M,D,Si,Sp
Family: Rhinolophidae						
76	Blyth's horseshoe bat	<i>Rhinolophus lepidus</i>	LC	NT	Literature review	P,B Baral & Shah 2008; Srinivasulu et al. 2019

Note: Location: P = Parsa, B = Bara, R = Rautahat, S = Sarlahi, M = Mahotari, D = Dhanusha, Si = Siraha, Sp = Saptari; VU – Vulnerable, EN – Endangered, CR – Critically Endangered, NT – Near Threatened, LC – Least Concern, DD – Data deficient, NE – Not evaluated

Rivers recorded – TY = Triyuga, KM = Kamala, BG = Bagmati, LB = Lal Bakaiya, Koshi=KS. (S) = This study; (L) = previously reported from that river; (S/L) = both., Blank cells: Common names not available