



DISTRIBUTION, STATUS AND CURRENT TRENDS IN THE POPULATION OF COASTAL BIRDS OF BALOCHISTAN

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ABSTRACT

Studies were carried out on Balochistan Coast to record the distribution, status and current trends in the population of coastal birds. The birds were observed in the coastal areas along with their preferred habitats and status. As many as 133 species of birds were recorded from the area, out of which 83 species were migratory. Major threats to coastal birds are habitat degradation, loss of habitat due to land reclamation, hunting and some other anthropogenic activities. The population of Oyster catcher *Haematopus ostralegus*, Sanderling *Calidris albus*, Curlew Sandpiper *Calidris testaceus*, Broadbilled Sandpiper *Calidris falcinellus*, Great Knot *Calidris tenuirostris*, Marbled Teal *Marmaronetta angustirostris*, Golden Plover *Pluvialis apricaria* and Grey Plover *Pluvialis squatarola* has been declining on the coast in recent years. Based on the present study, species of special conservation interest have been listed and priority actions for the conservation of threatened coastal birds and their habitats are suggested. Possible proposed actions include development of coastal bird's network, appropriate management of network site, monitoring of coastal birds population and initiation of projects on coastal bird's migration.

Keywords: Balochistan, coastal birds, migratory waterbirds, population trends.

INTRODUCTION

The coastline of Pakistan lies in the provinces of Sindh and Balochistan. The coastal morphology is characterized by a network of the tidal creeks and several small islands with scattered mangrove vegetation (UNESCAP, 1996). Balochistan is geographically the largest of the four provinces with an area of about 347,000 km², comprising 44% of the total area of Pakistan (Survey of Pakistan, 1985). Balochistan is generally recognized as a land of diversity. About 80% of the area is classified as mountainous, and the remaining 20% is comprised of flood plains and alluvial deposits with high potential for cultivation (Noor, 1989).

The Balochistan coast extends 760 km from the mouth of the Hub River in the east to the Iranian Border in the west. Administratively, the coastal belt falls into two districts viz Gwadar (The Makran Coast) and Lasbella, each with its distinctive physical, biological, social and economic environment. The coastline in Gwadar district (Fig. 1 and 2) is about 600km long running from the Iranian border Ras Jiwani to the Hingol River in the east. Bays, beaches and hand lands characterize the coast. Gwadar, Ormara (Fig. 3), Jiwani and Pasni are the four main urban centers on this part of the coast. The second

coastal belt, Lasbella, lies between the Hingol River and the Hub River which forms the border with Sindh. The coastline is dominated by Sonmiani Bay and Miani Hor, a large lagoon formed at the mouth of the Porali River, is a distinctive feature of the Sonmiani Bay. Some of the work done on wetlands and the coastal birds of Balochistan includes Ahmed *et al.* (1992), Arshad *et al.* (2002), Ghalib and Hasnain (1997, 1999), Ghalib *et al.* (2004, 2006, 2008, 2009), Grimmitt *et al.* (2008), Groombridge (1989), Hassan and Khan (2005, 2009), Khan and Ghalib (2006), Khurshid *et al.* (1995), Khurshid and Jabeen (2000), Pandrani *et al.* (2005), Rasool and Hasnain (2008, 2009), Scott (1989), Scott and Poole (1989) and Siddiqui *et al.* (2008). Some useful data about coastal areas and their biodiversity have also come through UNESCAP, (1996). The objective of the present study was to review the distribution, status and current trends in the population of coastal birds of Balochistan.

MATERIALS AND METHODS

The important habitats for the biodiversity were found to be the sand flats, salt marshes, brackish pools, lagoons, sand dunes, mangrove areas, gravel and pebbles, rocky beaches, cliffs, rocky islands, wastelands and built up areas. Field surveys were undertaken along the Balochistan Coast from Miani Hor to Ras Malan to

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Ormara, Pasni, Astola Island, Gwadar, and up to Jiwani (Fig. 4).

Line Transect method was used to record the species along the coast above the high tide water marks taking into consideration the half km parallel area towards the land ward side. Point Transect count method was also employed to record the species of water birds found in large concentrations and along inaccessible sites. Binoculars with 999980 XS power had been used for

spotting the birds quite far away or high up in the sky. Identification of birds was made from calls and sight records. Secondary information had been collected from local communities and published materials.

RESULTS AND DISCUSSION

Pakistan has 670 bird species (Grimmett *et al.*, 2008) including 380 species in Balochistan (Khan *et al.*, 2010). In this study, a total of 133 species of birds have been



Fig. 1. Coastal area of Gwadar (Courtesy by: <http://visitpak.com/>).



Fig. 2. View of Gwadar- A coastal city.



Fig. 3. Coastal area of Ormara (Courtesy by: <http://www.savairacity.com/>).



Fig. 4. Map Coastal areas of Balochistan.

recorded from the coastal and allied areas (Table 1). These comprise of five main groups including the water birds, birds of prey, game birds, passerines and others. The Waders are the dominant and widespread group on the coastal areas, followed by the Ardeids and the birds of prey. The other group of birds available in the nearby and offshore areas comprises of Seabirds including the Wilson's Storm Petrel, Red billed Tropic Bird, Masked Booby, Arctic Skua and Pomarine Skua.

Balochistan Coast

Lasbella Coast

Miani Hor

Miani Hor is an important site for coastal birds along the Lasbella Coast. It is a large shallow sea bay and estuarine area with several low-lying islands and extensive mangrove swamps and intertidal mudflats, separated from the adjacent Sonmiani Bay by a broad peninsula of sand dunes. The Hor receives freshwater input from a number



Fig. 5. Little Egret (*Egretta garzetta*) in Gwadar coastal area.



Fig. 6. Heuglin's Gull (*Larus heuglini*) in Gwadar coastal area.

of seasonal streams rising in the hills of eastern Balochistan to the north, and empties into Sonmiani Bay through broad channel at its eastern end.

It is a very important area for staging and wintering water birds (Scott, 1989). It is a Ramsar site. In Miani Hor, Oystercatcher is observed in abundance from December to January. Common and Demoiselle Cranes use the area on passage. Pelicans stay here from September to March every year. Great Knot is a rare winter visitor and is

observed on inter-tidal mudflats and the estuaries. Flamingos have been recorded nesting in the area and the evidence of breeding of Greater Flamingos has been recorded on the mudflats during May to August. In one study 70 species of birds have been recorded from the area (Rasool and Hasnain, 2008).

The Makran Coast

It forms the western part of Makran from Lasbella Coast to Jiwani. The following are the main sites on this coast.

Hingol National Park

It is located 252 km west of Karachi on the Arabian Seacoast. There are arid rocky hills down to the sea, with the Hingol River providing some scattered *Oleander* and deciduous *Tamarisk*. *Artemisia* and dwarf *Mazri palm* grow on the surrounding hills.

The bird fauna consists of Pallid Swift, Black-bellied Sandgrouse, Sooty Falcon, Brown-necked Raven, Hooded Wheatear, Chestnut-shouldered Petronia. In winter, Dalmatian Pelican, Great White Pelican, Laggar Falcon, Eurasian Hobby, Finsche's Wheatear and many waders are recorded (Grimmett *et al.*, 2008).

Ormara

It is situated on a sandy strip of land 10 km in length, connecting a large mountain block-Ras Ormara, some 20km long and about 8km wide on the mainland. There is an extensive bay on each side- the West and the East Bay. The West Bay has cliffs of low mountain range-Kamgar Hills at its western end and a 25 km long coastal ridge on the eastern end known as Ras Sakani. Both Bays are flanked by a sandy beach extending for about 24km between Ormara and Kamgar hills on the western bay (Goombidge, 1989). The site is very important for marine turtles but it also supports a large number of waterbirds such as Oystercatchers, Avocets, Plovers, Sandpipers, Gulls and Terns. It is a Ramsar site.

Pasni

The coast is sandy cum rocky at Ras Juddi. The upper margin of the shoreline has sand with small patches of vegetation. The sandy beach with shallow bays, lagoons and channels is known as Pasni Hor. There is also a wide mudflat near the mouth of river Shadi Kaur. These sites are important for the water birds.

Sur Bunder

This is a village situated near Jabal Sur. It is the main fishing village located at East Bay at about 18km from Gwadar.

The waterbirds recorded from the area during January 2016 include: Bartailed Godwit, Common Redshank, Greenshank, Green Sandpiper, Terek Sandpiper, Common Sandpiper, Little Stint, Dunlin, Curlew Sandpiper, Oystercatcher, Kentish Plover, Lesser Sand Plover, Greater Sand Plover, Redwattled Lapwing, Caspian Gull, Pallas's Gull, Brownheaded Gull, Blackheaded Gull, Slenderbilled Gull, Gullbilled Tern, Caspian Tern, Sandwich Tern, Common Tern, Whitecheeked Tern, Little Tern and Blackshafted Ternlet.

Pishukan

It is an area of cliffs, straight sandy beaches locked by ridges and sand dunes with large shallow bay. Here are two headlands separated by a small pocket beach. Very

low population of Gulls and Terns are recorded during the migratory season extending from October to April.

Ganz

It is a small coastal village with long sandy beach connected with Pishukan in the east. Small groups of water birds mainly gulls and terns are found visiting the coast during the migratory season.

Jiwani

The Jiwani Coast provides important passage and wintering in habitats for the migratory waterbirds. Arshad *et al.* (2002) recorded 125 species of birds from Jiwani Wetland Complex and Pandrani *et al.* (2005) recorded 81 species of waterbirds from this area. Pelicans, Flamingos, Waders, Gulls and Terns are commonly seen in winter. Migratory Ducks also visit the nearby water ponds and reservoirs in the area in winter. See-see Partridge, Grey Partridge and Sand grouses are important game birds being widely distributed and quite common (Rasool and Hasnain, 2009). Jiwani Coastal Wetland is also a Ramsar site.

Astola Island

It is situated at a distance of about 20 nautical miles east of Pasni. It is locally known as "Haft Talar". The major portion of the island consists of rocky hills which are about 200 m above sea level and cover an area about three km in length and about one km in width. The eastern portion of the cliffs is mostly sandy and faces continuous process of erosion by the strong wave action. The coastline along the cliffs is a small area with sandy cum rocky beach. The sandy area of the beach is the nesting site for marine turtles as well as a staging and wintering ground for the water birds. The upper plain area of the island is also rocky cum sandy. Most of the area is flat with some depressions and crevices towards the northern edge of the cliffs (IUCN, 2000).

Grey Heron, Grey Plover, Black-tailed Godwit, Eurasian Curlew, Little Stint, Herring Gull, Slender-billed Gull, Crested Lark and Desert Warbler have been recorded from this area. Quails are commonly reported during September and October. Sooty Gull used to breed here sometimes ago (Khurshid *et al.*, 1995). It is a Ramsar site.

Status of the Coastal Birds

The most common, dominant and widespread waterbirds on the Coast are the waders or the shorebirds including the gulls and terns. Majority of these birds are found in shallow water habitats during the non-breeding period.

The species found to be restricted to (marine) Coastal areas, seven species of birds have been recorded from this particular habitat. These include: Sooty Gull, Sandwich Tern, Saunder's Tern / Black shafted Ternlet, Great

Crested Tern, Lesser Crested Tern, White-cheeked Tern and Common Brown Noddy.

Nine species of birds have been recorded either to be localized over the coast. These include: Red breasted Merganser, Marbled Teal, Black Stork, White Ibis, Glossy Ibis, Sooty Gull, White winged Black Tern, White cheeked Tern and Black shafted Ternlet.

Only three coastal sites on the Balochistan Coast now support large concentrations of waterbirds. These are Jiwani Coastal Area, Hingol National Park and Miani Hor. Other sites such as Ormara, Pasni, Gwadar, Sur Bandar, Pishukan and Ganz have lost their significance as important waterbird sites (Figs. 5-7) due to large scale disturbance on account of developmental activities in the area.

As regards the seasonal status of the coastal birds, 50 species were recorded as resident, while 83 species were found to be migrant (Table 1). Wilson's Storm Petrel,

Crab Plover, Great Crested Tern, Lesser Crested Tern and Sandwich Tern were recorded as Year Round Visitors. Yellow-wattled Lapwing and Blackshafted Ternlet were recorded as Summer Breeding Visitors while Sooty Gull, Common Tern, White Cheeked Tern and Bridled Tern were recorded as Summer Visitors and Yellow Wagtail was recorded as Passage Migrant (Table 2).

Threats

There is a significant decline in the numbers of majority of waterbirds visiting the coastal areas mainly due to disturbance arising out of developing activities along the coastal areas, particularly at Gwadar.

Threatened Species

The threatened birds recorded from the Coastal area include: Egyptian Vulture (E), Dalmatian Pelican (V), Marbled Teal (V) and Rufous vented Prinia (NT), (Figs. 8-11).



Fig. 7. White Wagtail (*Motacilla alba*) in Miani Hor coastal area.

Table 1. Seasonal Status of the Coastal Birds.

S. No.	Seasonal Status	No. of Species
1	Resident (R)	50
2	Winter Visitor (WV)	72
3	Passage Migrant (PM)	01
4	Migrant (M) / Year Round Visitor	04
5	Summer Breeding Visitor (SBV)	02
6	Summer Visitor (SV)	04



Fig. 8. Egyptian Vulture.



Fig. 9. Dalmatian Pelican.

Protected Areas

There are two Protected Areas along the coast viz, Hingol National Park and Buzi Makola Wildlife Sanctuary. The Hingol National Park contains rich biodiversity and

diversified fauna of terrestrial, freshwater and marine ecosystems (Khan *et al.*, 2010). The Sanctuary contains vanishing populations of Wild goat and Sheep. Very few Gulls and Terns are observed during the Season.



Fig. 10. Marbled Teal.



Fig. 11. Rufous vented Prinia.

CONCLUSION

Major threats to coastal birds are habitat degradation, loss of habitat due to land reclamation, hunting and some other anthropogenic activities. In recent years, the population of several species of birds has been declining on the coast such as Oystercatcher, Sanderling, Curlew Sandpiper, Broadbilled Sandpiper, Great Knot, Marbled Teal and Golden Plover and Grey Plover. The trends in their

population decline needs to be monitored. There is a need to develop a network of Coastal bird sites including the Ramsar Sites such as Miani Hor (Sonmiani), Ormara, Jiwani and Astola Island along with important Bird Areas (IBAs) such as Astola, Jiwani and Hingol. These areas may be monitored regularly to safeguard the potential habitats. Effects of Coastal Erosion and Sea water intrusion at Pasni, Gwadar and Jiwani may also be studied.

Table 2. A Checklist of Coastal Birds of Balochistan.

S. No.	Order	Family	Scientific Name	Common Name	Seasonal Status
1	Procellariiformes	Procellariidae	<i>Oceanites oceanicus</i>	Wilson's Storm Petrel	YRV
2	Procellariiformes	Phaethontidae	<i>Phaethon aethereus</i>	Redbilled Tropic Bird	WV
3	Podicipediformes	Podicipedidae	<i>Podiceps cristatus</i>	Great Crested Grebe	WV
4	Podicipediformes	Podicipedidae	<i>Tachybaptus ruficollis</i>	Little Grebe	R
5	Pelecaniformes	Pelecanidae	<i>Pelecanus onocrotalus</i>	White or Rosy Pink Pelican	WV
6	Pelecaniformes	Pelecanidae	<i>Pelecanus crispus</i>	Dalmatian Pelican	WV
7	Pelecaniformes	Phalacrocoracidae	<i>Phalacrocorax carbo</i>	Large Cormorant	WV
8	Pelecaniformes	Phalacrocoracidae	<i>Phalacrocorax fuscicollis</i>	Indian Shag	R
09	Pelecaniformes	Phalacrocoracidae	<i>Phalacrocorax niger</i>	Little Cormorant	R
10	Ciconiiformes	Ardeidae	<i>Ardeola grayii</i>	Indian Pond Heron	R
11	Ciconiiformes	Ardeidae	<i>Butoroides striatus</i>	Little Green Heron	R
12	Ciconiiformes	Ardeidae	<i>Egretta garzetta</i>	Little Egret	R
13	Ciconiiformes	Ardeidae	<i>Egretta gularis</i>	Indian Reef Heron	R
14	Ciconiiformes	Ciconiidae	<i>Ibis leucocephalus</i>	Painted Stork	R
15	Ciconiiformes	Threskiornithidae	<i>Plegadis falcinellus</i>	Glossy Ibis	R/WV
16	Ciconiiformes	Threskiornithidae	<i>Platalea leucorodia</i>	Eurasian Spoonbill	R+WV
17	Ciconiiformes	Phoenicopteridae	<i>Phoenicopterus roseus</i>	Flamingo	WV
18	Anseriformes	Anatidae	<i>Tadorna tadorna</i>	Common Shelduck	WV
19	Anseriformes	Anatidae	<i>Anas acuta</i>	Pintail	WV
20	Anseriformes	Anatidae	<i>Anas crecca</i>	Common Teal	WV
21	Anseriformes	Anatidae	<i>Anas platyhynchos</i>	Mallard	WV
22	Anseriformes	Anatidae	<i>Anas strepera</i>	Gadwall	WV
23	Anseriformes	Anatidae	<i>Anas penelope</i>	Wigeon	WV
24	Anseriformes	Anatidae	<i>Anas clypeata</i>	Shoveller	WV
25	Anseriformes	Anatidae	<i>Aythya ferina</i>	Common Pochard	WV
26	Anseriformes	Anatidae	<i>Aythya fuligula</i>	Tufted Duck	WV
27	Falconiformes	Accipitridae	<i>Mergus serrator</i>	Redbreasted Merganser	WV
28	Falconiformes	Accipitridae	<i>Milvus migrans</i>	Black Kite	R
29	Falconiformes	Accipitridae	<i>Haliastur indus</i>	Brahminy Kite	R
30	Falconiformes	Accipitridae	<i>Aegyptius monachus</i>	Cinereous Vulture	WV
31	Falconiformes	Accipitridae	<i>Neophron percnopterus</i>	Egyptian Vulture	R
32	Falconiformes	Pandionidae	<i>Pandion haliaetus</i>	Osprey	WV
33	Falconiformes	Accipitridae	<i>Circus aeruginosus</i>	Marsh Harrier	WV
34	Falconiformes	Falconidae	<i>Falco tinnunculus</i>	Common Kestrel	WV
35	Falconiformes	Falconidae	<i>Falco peregrinus</i>	Peregrine Falcon	WV
36	Gruiformes	Rallidae	<i>Fulica atra</i>	Common Coot	WV
37	Charadriiformes	Haematopodidae	<i>Haematopus ostralegus</i>	Oyster Catcher/Sea-Pie	WV
38	Charadriiformes	Charadriidae	<i>Vanellus indicus</i>	Red Wattled Lapwing	R
39	Charadriiformes	Charadriidae	<i>Vanellus malsabaricus</i>	Yellow Wattled Lapwing	SBV
40	Charadriiformes	Charadriidae	<i>Pluvialis squatarola</i>	Grey Plover	WV
41	Charadriiformes	Charadriidae	<i>Charadrius leschenaultia</i>	Large Sand Plover	WV
42	Charadriiformes	Charadriidae	<i>Charadrius hiaticula</i>	Ringed Plover	WV
43	Charadriiformes	Charadriidae	<i>Charadrius dubius</i>	Little Ringed Plover	WV
44	Charadriiformes	Charadriidae	<i>Charadrius alexandrinus</i>	Kentish Plover	WV
45	Charadriiformes	Charadriidae	<i>Charadrius mongolus</i>	Lesser Sand Plover	WV
46	Charadriiformes	Scolopacidae	<i>Calidristenuirostris</i>	Great Knot	WV
47	Charadriiformes	Scolopacidae	<i>Numenius phaeopsis</i>	Whimbrel	WV
48	Charadriiformes	Scolopacidae	<i>Numenius arquata</i>	Eurasian Curlew	WV
49	Charadriiformes	Scolopacidae	<i>Limosa limosa</i>	Black tailed Godwit	WV
50	Charadriiformes	Scolopacidae	<i>Limosa lapponica</i>	Bartailed Godwit	WV
51	Charadriiformes	Scolopacidae	<i>Tringa totanus</i>	Common Redshank	WV
52	Charadriiformes	Scolopacidae	<i>Tringa stagnatilis</i>	Marsh Sandpiper	WV
53	Charadriiformes	Scolopacidae	<i>Tringa nebularia</i>	Greenshank	WV
54	Charadriiformes	Scolopacidae	<i>Tringa terek</i>	Terek Sandpiper	WV
55	Charadriiformes	Scolopacidae	<i>Tringa hypoleucos</i>	Common Sandpiper	WV
56	Charadriiformes	Scolopacidae	<i>Arenaria interpres</i>	Turnstone	WV

Continued...

Table 2 continued...

S. No.	Order	Family	Scientific Name	Common Name	Seasonal Status
57	Charadriiformes	Scolopacidae	<i>Gallinago gallinago</i>	Common or Fantail Snipe	WV
58	Charadriiformes	Scolopacidae	<i>Calidris albus</i>	Sanderling	WV
59	Charadriiformes	Scolopacidae	<i>Calidris minutus</i>	Little Stint	WV
60	Charadriiformes	Scolopacidae	<i>Calidris alpinus</i>	Dunlin	WV
61	Charadriiformes	Scolopacidae	<i>Calidris testaceus</i>	Curlew-Sandpiper	WV
62	Charadriiformes	Scolopacidae	<i>Philomachus pugnax</i>	Ruff	WV
63	Charadriiformes	Scolopacidae	<i>Phalaropus lobatus</i>	Rednecked Phalarope	WV
64	Charadriiformes	Rostratulidae	<i>Rostratula benghalensis</i>	Painted Snipe	R
65	Charadriiformes	Stercorariidae	<i>Stercorarius pomarinus</i>	Pomarine Skua / Jaeger	WV
66	Charadriiformes	Stercorariidae	<i>Stercorarius parasiticus</i>	Arctic Skua / Jaeger	WV
67	Charadriiformes	Recurvirostridae	<i>Himantopus himantopus</i>	Blackwinged Stilt	R
68	Charadriiformes	Recurvirostridae	<i>Recurvirostra avosetta</i>	Avocet	WV
69	Charadriiformes	Dromadidae	<i>Dromas ardeola</i>	Crab Plover	M / YRV
70	Charadriiformes	Burhinidae	<i>Esacus recurvirostris</i>	Great Thick-Knee	R
71	Charadriiformes	Laridae	<i>Larus hemprichii</i>	Sooty Gull	SV
72	Charadriiformes	Laridae	<i>Larus cachinnans</i>	Caspian Gull	WV
73	Charadriiformes	Laridae	<i>Larus heuglini</i>	Huglin's Gull	WV
74	Charadriiformes	Laridae	<i>Larus ichthyaetus</i>	Great Black headed Gull / Pallas's Gull	WV
75	Charadriiformes	Laridae	<i>Larus brunnicephalus</i>	Brown headed Gull	WV
76	Charadriiformes	Laridae	<i>Larus ridibundus</i>	Black headed Gull	WV
77	Charadriiformes	Laridae	<i>Larus genei</i>	Slenderbilled Gull	R
78	Charadriiformes	Sternidae	<i>Gelochelidon nilotica</i>	Gullbilled Tern	WV
79	Charadriiformes	Sternidae	<i>Hydroprogne caspia</i>	Caspian Tern	M
80	Charadriiformes	Sternidae	<i>Sterna hirundo</i>	Common Tern	SV
81	Charadriiformes	Sternidae	<i>Sterna repressa</i>	White checked Tern	SV
82	Charadriiformes	Sternidae	<i>Sterna albifrons</i>	Little Tern	R
83	Charadriiformes	Sternidae	<i>Sterna saundersi</i>	Black shafted Ternlet / Saunder's Tern	SBV
84	Charadriiformes	Sternidae	<i>Sterna bergii</i>	Great Crested Tern or Swift Tern	M/ YRV
85	Charadriiformes	Sternidae	<i>Sterna bengalensis</i>	Indian Lesser Crested Tern	M/ YRV
86	Charadriiformes	Sternidae	<i>Sterna anaethetus</i>	Birdled Tern	SV
87	Charadriiformes	Sternidae	<i>Sterna sandvicensis</i>	Sandwich Tern	M
88	Columbiformes	Columbidae	<i>Columba livia</i>	Blue Rock Pigeon	R
89	Apodiformes	Apodidae	<i>Apus affinis</i>	House Swift	R
90	Coraciiformes	Coraciidae	<i>Coracias benghalensis</i>	Indian Roller or Blue Jay	R
91	Coraciiformes	Alcedinidae	<i>Ceryle rudis</i>	Indian Pied Kingfisher	R
92	Coraciiformes	Alcedinidae	<i>Alcedo atthis</i>	Indian Small Blue Kingfisher	R
93	Coraciiformes	Alcedinidae	<i>Halcyon smyrnensis</i>	White breasted Kingfisher	R
94	Coraciiformes	Meropidae	<i>Merops orientalis</i>	Green Bee-eater	R
95	Coraciiformes	Upupidae	<i>Upupa epops</i>	Hoopoe	WV
96	Passeriformes	Alaudidae	<i>Ammomanes deserti</i>	Desert Finch-Lark	R
97	Passeriformes	Alaudidae	<i>Ammomanes cincturus</i>	Bar-tailed Lark	R
98	Passeriformes	Alaudidae	<i>Alaemon alaudipes</i>	Greater Hoopoe Lark	R
99	Passeriformes	Alaudidae	<i>Calandrella acutirostris</i>	Hume's Short toed Lark	WV
100	Passeriformes	Alaudidae	<i>Galerida cristata</i>	Crested Lark	R
101	Passeriformes	Alaudidae	<i>Calandrella raytal</i>	Sand Lark	R
102	Passeriformes	Hirundinidae	<i>Riparia paludicola</i>	Indus Sand Martin	R
103	Passeriformes	Hirundinidae	<i>Riparia diluta</i>	Pale Martin	WV
104	Passeriformes	Hirundinidae	<i>Hirundo rustica</i>	Barn Swallow	WV
105	Passeriformes	Hirundinidae	<i>Hirundo fuligula</i>	Rock Martin	R
106	Passeriformes	Lanidae	<i>Lanius excubitor</i>	Southern Grey Shrike	R
107	Passeriformes	Lanidae	<i>Lanius vitatus</i>	Baybacked Shrike	R
108	Passeriformes	Lanidae	<i>Lanius isabellinus</i>	Isabelline Shrike / Rufous tailed Shrike	R
109	Passeriformes	Sturnidae	<i>Acridotheres ginginianus</i>	Bank Myna	R

Continued...

Table 2 continued...

S. No.	Order	Family	Scientific Name	Common Name	Seasonal Status
110	Passeriformes	Sturnidae	<i>Acridotheres tristis</i>	Indian Myna	R
111	Passeriformes	Corvidae	<i>Corvus splendens</i>	Sind House Crow	
112	Passeriformes	Corvidae	<i>Corvus ruficollis</i>	Brown-necked Raven	R
113	Passeriformes	Pyconotidae	<i>Pycnonotus leucogenys</i>	White-cheeked Bulbul	R
114	Passeriformes	Pyconotidae	<i>Pycnonotus cafer</i>	Red-vented Bulbul	R
115	Passeriformes	Pyconotidae	<i>Prinia burchanani</i>	Rufousfronted Wren-Warbler	R
116	Passeriformes	Sylviidae	<i>Sylvia nana</i>	Desert Warbler	WV
117	Passeriformes	Turdidae	<i>Prinia burnesii</i>	Long tailed Grass Warbler/ Rufousvented Prinia	R
118	Passeriformes	Turdidae	<i>Saxicola picata</i>	Pied Chat / Pied Wheatear	R
119	Passeriformes	Turdidae	<i>Oenanthe isabellina</i>	Isabelline Wheatear	WV
120	Passeriformes	Turdidae	<i>Oenanthe deserti</i>	Desert Wheatear	WV
121	Passeriformes	Turdidae	<i>Oenanthe monacha</i>	Hooded Wheatear	R
122	Passeriformes	Turdidae	<i>Saxicoloides fulvicata</i>	Indian Robin	R
123	Passeriformes	Timallidae	<i>Turdoides caudatus</i>	Common Babbler	R
124	Passeriformes	Dicruridae	<i>Dicrurus macrocerus</i>	Black Drongo	R
125	Passeriformes	Motacillidae	<i>Motacilla cinerea</i>	Grey Wagtail	WV
126	Passeriformes	Motacillidae	<i>Motacilla flava</i>	Yellow Wagtail	PM
127	Passeriformes	Motacillidae	<i>Motacilla citreola</i>	Yellowheaded Wagtail	WV
128	Passeriformes	Motacillidae	<i>Motacilla alba</i>	White or Pied Wagtail	WV
129	Passeriformes	Motacillidae	<i>Anthus compestris</i>	Tawny Pipit	WV
130	Passeriformes	Nectariniidae	<i>Nectarinia asiatica</i>	Sind Purple Sunbird	R
131	Passeriformes	Passeridae	<i>Zosterops palpebroza</i>	White Eye	R
132	Passeriformes	Passeridae	<i>Passer domesticus</i>	House Sparrow	R
133	Passeriformes	Passeridae	<i>Emberiza striolata</i>	House Bunting	R

Legend:

R = Resident

WV = Winter Visitor

M = Migratory / Year Round Visitor

PM = Passage Migrant

SBV = Summer Breeding Visitor

SV = Summer Visitor

E = Endangered

V = Vulnerable

NT= Near-threatened

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