



CHECKLIST OF MAMMALS, BIRDS, REPTILES AND AMPHIBIANS OF SINDH

*Syed Ali Ghalib, Roohi Kanwal, Babar Hussain, Afsheen Zehra, Saima Siddiqui, Ghazala Yasmeen, Ubaid Ullah, Uzma Manzoor, Noreen Raza, Tahira A Lateef and Abeda Begum
Department of Zoology, University of Karachi, Karachi-75270, Pakistan

ABSTRACT

Based on present field surveys and review of published literature, as many as 82 species of mammals, 420 species of birds, 103 species of reptiles and 07 species of amphibians have been recorded so far in the province. The information presented is based on our field surveys, observations and collections done from Jan 2010 to April 2018. The present paper puts the information together, and provides a comprehensive and updated checklist of mammals, birds, reptiles and amphibians that occur in the Sindh province.

Keywords: Sindh, mammals, birds, reptiles, amphibians.

INTRODUCTION

Pakistan is blessed with diverse range of ecosystems with the extensive biodiversity and rich ecological habitats. Published literature reveals that as many as 198 species of mammals, 670 species of birds, 189 species of reptiles and 19 species of amphibians have been recorded from Pakistan (Roberts, 1991; Sheikh, and Molur, 2004).

Based on land area Sindh is the third largest province of Pakistan with a great variety of wild fauna and flora. A broad view of the wildlife of Sindh has been given by Minton, (1966), Firdous (1985, 1988), Ahmed (1986), Roberts (1986, 1977), Khan (2004), Asrar (1999), Siddiqui (2001), Ghalib *et al.* (2002, 2004, 2014), Sheikh and Molur, (2004), Khan (2006), Rais *et al.* (2008, 2009, 2010), Abbas *et al.* (2010), Khan *et al.* (2010), Chang *et al.* (2012, 2015), Khan *et al.* (2012), Begum *et al.* (2014), Zehra *et al.* (2014), Chang *et al.* (2012, 2015), Khan *et al.* (2015), Kanwal and Khan (2018), and Khan *et al.* (2018). The objective of the present study is to update the existing information regarding the occurrence of wildlife in the province.

MATERIALS AND METHODS

Field surveys were conducted during summer and winter seasons spanning over a period of eight years from 2010 to 2018 at various wildlife areas/ localities of province of Sindh. Observations were made during different seasons to maximize the documentation of the species. Data were also collected during Wildlife Monitoring studies

undertaken in the Gharo and Jhimpir wind Corridors in Thatta and Jamshoro districts. Data on waterbirds and wetlands have come through the studies under taken for AWC during these years.

RESULTS AND DISCUSSION

In this study, time to time surveys have been done from 2010 to 2018 to update the previous reported data about the species of wildlife present in the Sindh province. As far as Sindh is concerned, 82 species of mammals, 420 species of birds, 103 species of reptiles and 07 species of amphibians were recorded. Large numbers of birds have been recorded due to the presence of variety of aquatic ecosystems in Sindh while the abundance of arid lands and deserts in Sindh leads to the large number of species of reptiles. Some species of reptiles like Fat tailed geckos and Freshwater turtles are declining due to their commercial exploitation and illegal trade. The natural habitat of mammals have been degraded due to developmental projects and urbanization in Sindh so the terrestrial mammals are confined to remote areas. The population of amphibians is also declining due to the increasing draught conditions in Sindh.

The conservation status has been mentioned in the checklist of mammals while the seasonal status has been mentioned in the checklist of birds. The status of reptiles and amphibians is being worked out by collecting further data. Following are the tables showing the checklist of mammals (Table 1), birds (Table 2), reptiles (Table3) and amphibians (Table 4).

*Corresponding author e-mail: drghalib14@gmail.com

Table 1. Checklist of the Mammals of Sindh.

S. No.	Order	Family	Scientific name	Common name	Status
1	Insectivora	Erinaceidae	<i>Hemiechinus collaris</i>	Indian Long-eared Hedgehog	LC
2	Insectivora	Erinaceidae	<i>Paraechinus micropus</i>	Indian or Pale Hedgehog	LC
3	Insectivora	Erinaceidae	<i>Paraechinus hypomelas</i>	Brandt's Hedgehog	LC
3	Insectivora	Soricidae	<i>Suncus etruscus</i>	Pygmy Shrew	LC
4	Insectivora	Soricidae	<i>Suncus murinus</i>	House Shrew	LC
6	Insectivora	Soricidae	<i>Suncus stoliczkanus</i>	Anderson's Shrew	LC
7	Chiroptera	Pteropodidae	<i>Rousettus aegyptiacus</i>	Egyptian Fruit Bat	VU
8	Chiroptera	Pteropodidae	<i>Rousettus leschenaulti</i>	Fulvous Fruit Bat	LC
9	Chiroptera	Pteropodidae	<i>Pteropus giganteus</i>	Indian Flying-Fox	LC
10	Chiroptera	Pteropodidae	<i>Cynopterus sphinx</i>	Short-nosed Fruit Bat	DD
11	Chiroptera	Pteropodidae	<i>Rhinopoma microphyllum</i>	Large Rat Tailed Bat	LC
12	Chiroptera	Pteropodidae	<i>Rhinopoma hardwickei</i>	Lesser rat Tailed Bat	LC
13	Chiroptera	Pteropodidae	<i>Taphozous perforatus</i>	Tomb Bat	LC
14	Chiroptera	Pteropodidae	<i>Taphozous nudiventris</i>	Naked-rumped Tomb Bat	LC
15	Chiroptera	Megadermatidae	<i>Megaderma lyra</i>	Indian False Vampire	LC
16	Chiroptera	Rhinolophidae	<i>Hipposideros fulvus</i>	Fulvus leaf-nosed Bat	LC
17	Chiroptera	Rhinolophidae	<i>Triaenops persicus</i>	Persian Trident Bat	VV
18	Chiroptera	Rhinolophidae	<i>Asellia tridens</i>	Trident Leaf-nosed Bat	LC
19	Chiroptera	Molossidae	<i>Tadarida aegyptica</i>	Egyptian Free-tailed Bat	LC
20	Chiroptera	Vespertilionidae	<i>Eptesicus nasutus</i>	Sind Bat	DD
21	Chiroptera	Vespertilionidae	<i>Pipistrellus ceylonicus</i>	Kelaart's Pipistrelle	LC
22	Chiroptera	Vespertilionidae	<i>Pipistrellus tenuis</i>	Indian Pygmy Pipistrelle	LC
23	Chiroptera	Vespertilionidae	<i>Pipistrellus kuhlii</i>	Kuhl's Pipistrelle	LC
24	Chiroptera	Vespertilionidae	<i>Scotoecus pallidus</i>	Desert Yellow Bat	NT
25	Chiroptera	Vespertilionidae	<i>Scotophilus heathi</i>	Common Yellow-bellied Bat	LC
26	Chiroptera	Vespertilionidae	<i>Scotophilus kuhlii</i>	Temminck's House Bat or Lesser House Yellow Bat	LC
27	Carnivora	Hyaenidae	<i>Hyaena hyaena</i>	Striped Hyena	CE
28	Carnivora	Canidae	<i>Canis lupus</i>	Wolf	E
29	Carnivora	Canidae	<i>Canis aureus</i>	Jackal	NT
30	Carnivora	Canidae	<i>Vulpes vulpes</i>	Desert Fox	NT
31	Carnivora	Canidae	<i>Vulpes bengalensis</i>	Indian Fox	NT
32	Carnivora	Mustelidae	<i>Mellivora capensis</i>	Ratel or Honey Badger	CE
33	Carnivora	Mustelidae	<i>Lutrogale perspicillata</i>	Smooth Indian Otter	NT
34	Carnivora	Viverridae	<i>Viverricula indica</i>	Small Indian Civet	NT
35	Carnivora	Herpestidae	<i>Herpestes edwardsii</i>	Common Mongoose	LT
36	Carnivora	Herpestidae	<i>Herpestes javanicus</i>	Small Indian Mongoose	LC
37	Carnivora	Felidae	<i>Felis silvestris</i>	Desert cat	DD
38	Carnivora	Felidae	<i>Felis chaus</i>	Jungle Cat	LC
39	Carnivora	Felidae	<i>Felis caracal</i>	Caracal	CE
40	Carnivora	Felidae	<i>Prionailurus viverrinus</i>	Fishing Cat	NT
41	Carnivora	Felidae	<i>Panthera pardus</i>	Leopard	CE
42	Pholidota	Manidae	<i>Manis crassicaudata</i>	Indian Pangolin	V
43	Perissodactyla	Equidae	<i>Equus hemionus</i>	Indian Wild Ass	CE
44	Artiodactyla	Suidae	<i>Sus scrofa</i>	Indian Wild Boar	LC
45	Artiodactyla	Cervidae	<i>Axis porcinus</i>	Hog Deer	V
46	Artiodactyla	Bovidae	<i>Boselaphus tragocamelus</i>	Nilgai	E
47	Artiodactyla	Bovidae	<i>Gazella bennettii</i>	Chinkara	V
48	Artiodactyla	Bovidae	<i>Capra aegagrus</i>	Sindh Wild Goat	NT
49	Artiodactyla	Bovidae	<i>Ovis vignei</i>	Urrial	V

50	Lagomorpha	Leporidae	<i>Lepus nigricollis</i>	Indian Hare	LC
51	Rodentia	Sciuridae	<i>Funambulus pennantii</i>	Five Striped Palm Squirrel	LC
52	Rodentia	Hystricidae	<i>Hystrix indica</i>	Indian Crested Porcupine	NT
53	Rodentia	Muridae	<i>Millardia meltada</i>	Soft-furred Field Rat	LC
54	Rodentia	Muridae	<i>Millardia gleadowi</i>	Sand-coloured Rat	LC
55	Rodentia	Muridae	<i>Rattus rattus</i>	Roof Rat	LC
56	Rodentia	Muridae	<i>Rattus norvegicus</i>	Brown Rat or Sewer Rat	LC
57	Rodentia	Muridae	<i>Mus musculus</i>	House Mouse	LC
58	Rodentia	Muridae	<i>Mus booduga</i>	Little Indian Field Mouse	LC
59	Rodentia	Muridae	<i>Mus saxicola</i>	Grey spine mouse	DD
60	Rodentia	Muridae	<i>Golunda ellioti</i>	Indian Bush Rat	LC
61	Rodentia	Muridae	<i>Acomys cahirinus</i>	Spiny Mouse	NT
62	Rodentia	Muridae	<i>Bandicota bengalensis</i>	Indian Mole Rat	LC
63	Rodentia	Muridae	<i>Nesokia indica</i>	Short-tailed Mole Rat	LC
64	Rodentia	Muridae	<i>Cremnomys cutchicys</i>	Cutch Rock Rat	LC
65	Rodentia	Muridae	<i>Calomyscus bailwanli</i>	Mouse like Hamster	LC
66	Rodentia	Muridae	<i>Gerbillus nanus</i>	Balochistan Gerbil	NT
67	Rodentia	Muridae	<i>Gerbillus geadovi</i>	Indian Hairy-Footed Gerbil	NT
68	Rodentia	Muridae	<i>Tatera indica</i>	Indian Gerbil	LC
69	Rodentia	Muridae	<i>Meriones hurrianae</i>	Indian Desert Gerbil	NT
70	Cetacea	Balaenopteridae	<i>Balaenoptera musculus</i>	Blue Whale	EN
71	Cetacea	Balaenopteridae	<i>Balaenoptera edeni</i>	Bryde's Whale	DD
72	Cetacea	Balaenopteridae	<i>Balaenoptera physalis</i>	Fin Whale	DD
73	Cetacea	Balaenopteridae	<i>Megaptera novaeangliae</i>	Humpback Whale	VU
74	Cetacea	Platanistidae	<i>Platanista minor</i>	Indus Dolphin	E
75	Cetacea	Physetridae	<i>Neophocaena</i>	Dwarf Sperm Whale	LC
76	Cetacea	Phocoenidae	<i>Neophocaena phocaenoides</i>	Finless Porpoise	DD
77	Cetacea	Delphinidae	<i>Delphinus tropicalis</i>	Long-backed Dolphin	DD
78	Cetacea	Delphinidae	<i>Sousa plumbia</i>	Indian Humpbacked Dolphin or Plumbeous Dolphin	DD
79	Cetacea	Delphinidae	<i>Stenella longirostris</i>	Spinner Dolphin	DD
80	Cetacea	Delphinidae	<i>Tursiops truncatus</i>	Bottle-nose Dolphin	DD
81	Cetacea	Delphinidae	<i>Peponocephala electra</i>	Melon-headed Whale or Electric Dolphin	LC
82	Cetacea	Delphinidae	<i>Pseudorca crassidens</i>	False Killer Whale	LC

Table 2. A Checklist of the Birds of Sindh.

S. No.	Order	Family	Scientific name	Common name	Status
01	Podicipediformes	Podicipedidae	<i>Podiceps cristatus</i>	Great Crested Grebe	WV
02	Podicipediformes	Podicipedidae	<i>Podiceps nigricollis</i>	Black necked Grebe	WV
03	Podicipediformes	Podicipedidae	<i>Tachybaptus ruficollis</i>	Little Grebe	R
04	Podicipediformes	Podicipedidae	<i>Podiceps auritus</i>	Salvonian Grebe or Horned Grebe	WV
05	Procellariiformes	Procellariidae	<i>Procellaria therminieri</i>	Persian Shear Water	V
06	Procellariiformes	Procellariidae	<i>Bulweria fallax</i>	Jouanine's Petrel	WV
07	Procellariiformes	Hydrobatidae	<i>Oceanites oceanicus</i>	Wilson's Storm Petrel	WV
08	Pelecaniformes	Phaethontidae	<i>Phaethon aethereus</i>	Red-billed Tropic Bird	WV
09	Pelecaniformes	Pelecanidae	<i>Pelecanus onocrotalus</i>	White or Rosy Pelican	WV
10	Pelecaniformes	Pelecanidae	<i>Pelecanus crispus</i>	Dalmatian Pelican	WV

11	Pelecaniformes	Sulidae	<i>Sula dactylatra</i>	Masked Booby	WV
12	Pelecaniformes	Phalacrocoracidae	<i>Phalacrocorax carbo</i>	Large Cormorant	WV
13	Pelecaniformes	Phalacrocoracidae	<i>Phalacrocorax fuscicollis</i>	Indian Shag or Indian Cormorant	R
14	Pelecaniformes	Phalacrocoracidae	<i>Phalacrocorax niger</i>	Little Cormorant	R
15	Pelecaniformes	Anhingidae	<i>Anhinga rufa</i>	Indian Darter	R
16	Ciconiiformes	Ardeidae	<i>Ardea cinerea</i>	Grey Heron	WV
17	Ciconiiformes	Ardeidae	<i>Ardea purpurea</i>	Purple Heron	R
18	Ciconiiformes	Ardeidae	<i>Butoroides striatus</i>	Little Green Heron	R
19	Ciconiiformes	Ardeidae	<i>Ardeola grayii</i>	Indian Pond Heron	R
20	Ciconiiformes	Ardeidae	<i>Bubulcus ibis</i>	Cattle Egret	R
21	Ciconiiformes	Ardeidae	<i>Carmerodius alba</i>	Great Egret	WV
22	Ciconiiformes	Ardeidae	<i>Egretta intermedia</i>	Smaller or Median Egret	R
23	Ciconiiformes	Ardeidae	<i>Egretta garzetta</i>	Little Egret	R
24	Ciconiiformes	Ardeidae	<i>Egretta gularis</i>	Indian Reef Heron	R
25	Ciconiiformes	Ardeidae	<i>Nycticorax nycticorax</i>	Night Heron	R
26	Ciconiiformes	Ardeidae	<i>Lxobrychus minutus</i>	Little Bittern	R
27	Ciconiiformes	Ardeidae	<i>Lxobrychus cinnamomeus</i>	Chestnut or Cinnamon Bittern	SBV
28	Ciconiiformes	Ardeidae	<i>Lxobrychus sinensis</i>	Yellow Bittern	R
29	Ciconiiformes	Ardeidae	<i>Dupetor flavicollis</i>	Black Bittern	SBV
30	Ciconiiformes	Ardeidae	<i>Botaurus stellaris</i>	Great Bittern	WV
31	Ciconiiformes	Ciconiidae	<i>Ibis leuoocephalus</i>	Painted Stork	R
32	Ciconiiformes	Ciconiidae	<i>Anastomus oscitans</i>	Asian Open bill Stork	V
33	Ciconiiformes	Ciconiidae	<i>Ciconia nigra</i>	Black Stork	WV
34	Ciconiiformes	Ciconiidae	<i>Ciconia episcopus</i>	Woolly necked Stork	Extirpated
35	Ciconiiformes	Ciconiidae	<i>Ciconia ciconia</i>	White Stork	WV
36	Ciconiiformes	Ciconiidae	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	V/IRV
37	Ciconiiformes	Ciconiidae	<i>Leptoptilos dubius</i>	Greater Adjutant	V
38	Ciconiiformes	Threskiornithidae	<i>Threskiornis melanocephala</i>	Oriental White Ibis / Blackheaded Ibis	R
39	Ciconiiformes	Threskiornithidae	<i>Pseudibis papillosa</i>	Black Ibis	WV
40	Ciconiiformes	Threskiornithidae	<i>Plegadis falcinellus</i>	Glossy Ibis	R/WV
41	Ciconiiformes	Threskiornithidae	<i>Platalea leucorodia</i>	Spoonbill	WV/R
42	Ciconiiformes	Phoenicopteridae	<i>Phoenicopterus roseus</i>	Flamingo	WV
43	Ciconiiformes	Phoenicopteridae	<i>Phoenicopterus minor</i>	Lesser Flamingo	WV/R
44	Anseriformes	Anatidae	<i>Anser albifrons</i>	Greater White-fronted Goose	V
45	Anseriformes	Anatidae	<i>Anser erythropus</i>	Lesser White-fronted Goose	V
46	Anseriformes	Anatidae	<i>Anser anser</i>	Greylag Goose	WV
47	Anseriformes	Anatidae	<i>Anser indicus</i>	Barheaded Goose	WV
48	Anseriformes	Anatidae	<i>Cygnus olor</i>	Mute Swan	V
49	Anseriformes	Anatidae	<i>Cygnus cygnus</i>	Whooper Swan	V
50	Anseriformes	Anatidae	<i>Cygnus columbianus</i>	Bewick's or Western Whistling Swan	V
51	Anseriformes	Anatidae	<i>Dendrocygna bicolor</i>	Large Whistling Teal	M
52	Anseriformes	Anatidae	<i>Dendrocygna</i>	Lesser Whistling Teal	SBV

			<i>javanica</i>		
53	Anseriformes	Anatidae	<i>Tadorna ferruginea</i>	Ruddy Shelduck	WV
54	Anseriformes	Anatidae	<i>Tadorna tadorna</i>	Common Shelduck	WV
55	Anseriformes	Anatidae	<i>Marmarangustiros tris</i>	Marbled Teal	R/WV
56	Anseriformes	Anatidae	<i>Anas acuta</i>	Pintail	WV
57	Anseriformes	Anatidae	<i>Anas crecca</i>	Common Teal	WV
58	Anseriformes	Anatidae	<i>Anas formosa</i>	Baikal, Teal	V
59	Anseriformes	Anatidae	<i>Anas poecilorhyncha</i>	Spotbill Duck	SV
60	Anseriformes	Anatidae	<i>Anas platyrhynchos</i>	Mallard	WV
61	Anseriformes	Anatidae	<i>Anas strepera</i>	Gadwall	WV
62	Anseriformes	Anatidae	<i>Anas falcate</i>	Falcated Duck	V
63	Anseriformes	Anatidae	<i>Anas Penelope</i>	Wigeon	WV
64	Anseriformes	Anatidae	<i>Anas querquedula</i>	Garganey	PM
65	Anseriformes	Anatidae	<i>Anas clypeata</i>	Shoveller	WV
66	Anseriformes	Anatidae	<i>Netta rufina</i>	Red Crested Pochard	WV
67	Anseriformes	Anatidae	<i>Aythya ferina</i>	Common Pochard	WV
68	Anseriformes	Anatidae	<i>Aythya nyroca</i>	White-eyed pochard or Ferrugineus Duck	WV
69	Anseriformes	Anatidae	<i>Aythya fuligula</i>	Tufted Duck	WV
70	Anseriformes	Anatidae	<i>Aythya marila</i>	Scaup Duck	WV
71	Anseriformes	Anatidae	<i>Nettapus coromandelianus</i>	Cotton Teal	M
72	Anseriformes	Anatidae	<i>Sarkidiornis melanotes</i>	Nakta or Comb Duck	E
73	Anseriformes	Anatidae	<i>Clangula hyemalis</i>	Longtail Duck or Old Squaw	V
74	Anseriformes	Anatidae	<i>Bucephala clangula</i>	Common Golden-eyed Duck	V
75	Anseriformes	Anatidae	<i>Mergus albellus</i>	Smew	WV
76	Anseriformes	Anatidae	<i>Mergus merganser</i>	Goosander or Common Merganser	WV
77	Anseriformes	Anatidae	<i>Mergus serrator</i>	Red Breasted Merganser	WV
78	Anseriformes	Anatidae	<i>Oxyura leucocephala</i>	White headed Stiff tailed Duck	V
79	Accipitriformes	Accipitridae	<i>Elanus caeruleus</i>	Black winged Kite	R
80	Accipitriformes	Accipitridae	<i>Pernis ptilorhynchus</i>	Oriental Honey Buzzard	M
81	Accipitriformes	Accipitridae	<i>Milvus migrans</i>	Black Kite	R
82	Accipitriformes	Accipitridae	<i>Haliastur Indus</i>	Brahminy Kite	R
83	Accipitriformes	Accipitridae	<i>Accipiter gentilis</i>	Northern Goshawk	WV
84	Accipitriformes	Accipitridae	<i>Accipiter badius</i>	Central Asian Shikra	R
85	Accipitriformes	Accipitridae	<i>Accipiter nisus</i>	Eurasian Sparrow-Hawk	WV
86	Accipitriformes	Accipitridae	<i>Buteo buteo</i>	Common Buzzard	WV
87	Accipitriformes	Accipitridae	<i>Buteo rufinus</i>	Longlegged Buzzard	WV
88	Accipitriformes	Accipitridae	<i>Buteo vulpinus</i>	Desert Buzzard	WV
89	Accipitriformes	Accipitridae	<i>Butastur teesa</i>	White-eyed Buzzard Eagle	R
90	Accipitriformes	Accipitridae	<i>Hieraatus fasciatus</i>	Bonelli's or Slender Hawk Eagle	R
91	Accipitriformes	Accipitridae	<i>Hieraatus pennatus</i>	Booted Eagle	WV
92	Accipitriformes	Accipitridae	<i>Aquila chrysaetos</i>	Golden Eagle	WV
93	Accipitriformes	Accipitridae	<i>Aquila heliaca</i>	Imperial Eagle	WV

94	Accipitriformes	Accipitridae	<i>Aquila rapax</i>	Tawny Eagle	R
95	Accipitriformes	Accipitridae	<i>Aquila nipalensis</i>	Steppe Eagle	WV
96	Accipitriformes	Accipitridae	<i>Aquila clanga</i>	Greater Spotted Eagle	WV
97	Accipitriformes	Accipitridae	<i>Haliaeetus albicilla</i>	White-tailed Sea Eagle	WV
98	Accipitriformes	Accipitridae	<i>Haliaeetus leucoryphus</i>	Pallas's Fishing Eagle	R
99	Accipitriformes	Accipitridae	<i>Torgos calvus</i>	Redheaded Black or King Vulture	WV
100	Accipitriformes	Accipitridae	<i>Aegypius monachus</i>	Cinereous Vulture	R
101	Accipitriformes	Accipitridae	<i>Gyps fulvus</i>	Indian Griffon Vulture	R
102	Accipitriformes	Accipitridae	<i>Gyps begalensis</i>	Indian Whitebacked Vulture	R
103	Accipitriformes	Accipitridae	<i>Neophron percnopterus</i>	Egyptian Vulture	R
104	Accipitriformes	Accipitridae	<i>Gypaetus barbatus</i>	Himalayan Bearded Vulture or Lammergeier	WV
105	Accipitriformes	Accipitridae	<i>Gyps indicus</i>	Long billed or Indian Vulture	R
106	Accipitriformes	Accipitridae	<i>Circus cyaneus</i>	Hen Harrier	WV
107	Accipitriformes	Accipitridae	<i>Circus macrourus</i>	Pale or Pallid Harrier	WV
108	Accipitriformes	Accipitridae	<i>Circus pygargus</i>	Montagu's Harrier	WV
109	Accipitriformes	Accipitridae	<i>Circus aeruginosus</i>	Eurasian Marsh Harrier	WV
110	Accipitriformes	Accipitridae	<i>Circaetus gallicus</i>	Short-toed Eagle	R
111	Accipitriformes	Accipitridae	<i>Spilornis cheela</i>	Crested Serpent Eagle	V
112	Falconiformes	Pandionidae	<i>Pandion haliaetus</i>	Osprey	WV
113	Falconiformes	Falconidae	<i>Falco cherrug</i>	Saker or Cherrug Falcon	WV
114	Falconiformes	Falconidae	<i>Falco jugger</i>	Lagger Falcon	R
115	Falconiformes	Falconidae	<i>Falco peregrinus</i>	Peregrine Falcon	WV
116	Falconiformes	Falconidae	<i>Falco pelegrinoides</i>	Red Capped Falcon	WV
117	Falconiformes	Falconidae	<i>Falco subbuteo</i>	Hobby	WV
118	Falconiformes	Falconidae	<i>Falco columbarius</i>	Merlin	WV
119	Falconiformes	Falconidae	<i>Falco chicquera</i>	Red Headed Merlin	R
120	Falconiformes	Falconidae	<i>Falco tinnunculus</i>	Kestrel	R/WV
121	Galliformes	Phasianidae	<i>Ammoperdix griseogularis</i>	See-see Partridge	R
122	Galliformes	Phasianidae	<i>Alectoris chukar</i>	Chukor	R
123	Galliformes	Phasianidae	<i>Francolinus Francolinus</i>	Black Partridge	R
124	Galliformes	Phasianidae	<i>Francolinus pondicerianus</i>	Grey Partridge	R
125	Galliformes	Phasianidae	<i>Conturnix conturnix</i>	Grey Quail	M/PM
126	Galliformes	Phasianidae	<i>Conturnix coromandelica</i>	Black breasted or Rain Quail	SBV
127	Galliformes	Phasianidae	<i>Pavo cristatus</i>	Indian Peafowl	R
128	Gruiformes	Turnicidae	<i>Turnix sylvatica</i>	Little Bustard Quail	SBV
129	Gruiformes	Turnicidae	<i>Turnix tanki</i>	Indian Yellow Legged Button Quail	SBV
130	Gruiformes	Gruidae	<i>Grus grus</i>	Common Crane	PM
131	Gruiformes	Gruidae	<i>Grus leucogeranus</i>	Siberian Crane	M
132	Gruiformes	Gruidae	<i>Grus antigone</i>	Sarus Crane	V
133	Gruiformes	Gruidae	<i>Anthropoids virgo</i>	Demoiselle Crane	PM
134	Gruiformes	Rallidae	<i>Rallus aquaticus</i>	Water Rail	WV
135	Gruiformes	Rallidae	<i>Porzana parva</i>	Little Crake	WV
136	Gruiformes	Rallidae	<i>Porzana pusilla</i>	Baillon's Crake	WV
137	Gruiformes	Rallidae	<i>Porzana porzana</i>	Spotted Crake	WV

138	Gruiformes	Rallidae	<i>Amaurornis phoenicurus</i>	White-breasted Water Hen	R
139	Gruiformes	Rallidae	<i>Gallixrex cinerea</i>	Kora or Watercock	SBV
140	Gruiformes	Rallidae	<i>Gallinula chloropus</i>	Indian Moorhen	R
141	Gruiformes	Rallidae	<i>Porphyrio porphyrio</i>	Indian Purple Moorhen	R
142	Gruiformes	Rallidae	<i>Fulica atra</i>	Coot	WV
143	Gruiformes	Otididae	<i>Choriotis nigriceps</i>	Great Indian Bustard	V
144	Gruiformes	Otididae	<i>Chlamydotis undulate</i>	Houbara Bustard *	WV
145	Gruiformes	Otididae	<i>Sypheotides indica</i>	Leekh or Lesser Florican	V
146	Charadriiformes	Jacaniidae	<i>Hydrophasianus chirurgus</i>	Pheasant-tailed Jacana	R
147	Charadriiformes	Jacaniidae	<i>Metopidius indicus</i>	Bronze-winged Jacana	V
148	Charadriiformes	Haematopodidae	<i>Haematopus ostralegus</i>	Oyster Catcher	WV
149	Charadriiformes	Charadriidae	<i>Vanellus leucurus</i>	White-tailed Lapwing	WV
150	Charadriiformes	Charadriidae	<i>Vanellus gregarius</i>	Sociable Lapwing	WV
151	Charadriiformes	Charadriidae	<i>Vanellus vanellus</i>	Lapwing or Green Plover	WV
152	Charadriiformes	Charadriidae	<i>Vanellus indicus</i>	Red Wattled Lapwing	R
153	Charadriiformes	Charadriidae	<i>Vanellus malabaricus</i>	Yellow-wattled Lapwing	SBV
154	Charadriiformes	Charadriidae	<i>Pluvialis squatarola</i>	Grey Plover	WV
155	Charadriiformes	Charadriidae	<i>Pluvialis fulva</i>	Eastern or Pacific Golden Plover	WV
156	Charadriiformes	Charadriidae	<i>Eudomias morinellus</i>	Dotterel	V
157	Charadriiformes	Charadriidae	<i>Charadrius leschenaultia</i>	Large Sand Plover	WV
158	Charadriiformes	Charadriidae	<i>Charadrius hiaticula</i>	Ringed Plover	WV
159 159 (a)	Charadriiformes Charadriiformes	Charadriidae Charadriidae	<i>Charadrius dubius curonicus</i> <i>Charadrius dubius jerdoni</i>	European Little Ringed Plover Indian Little Ringed Plover	WV R
160	Charadriiformes	Charadriidae	<i>Charadrius alexandrinus</i>	Kentish Plover	SBV/WV/PM
161	Charadriiformes	Charadriidae	<i>Charadrius mongolus</i>	Lesser Sand Plover	WV
162	Charadriiformes	Scolopacidae	<i>Numenius phaeopus</i>	Whimbrel	WV
163	Charadriiformes	Scolopacidae	<i>Numenius arquata</i>	Eurasian Curlew	WV
164	Charadriiformes	Scolopacidae	<i>Limosa limosa</i>	Black tailed Godwit	WV
165	Charadriiformes	Scolopacidae	<i>Limosa lapponica</i>	Bartailed Godwit	WV
166	Charadriiformes	Scolopacidae	<i>Tringa erythropus</i>	Spotted or Dusky Redshank	WV
167	Charadriiformes	Scolopacidae	<i>Tringa totanus</i>	Common Redshank	WV
168	Charadriiformes	Scolopacidae	<i>Tringa stagnatilis</i>	Marsh Sandpiper	WV
169	Charadriiformes	Scolopacidae	<i>Tringa nebularia</i>	Greenshank	WV
170	Charadriiformes	Scolopacidae	<i>Tringa ochropus</i>	Green Sandpiper	WV
171	Charadriiformes	Scolopacidae	<i>Tringa glareola</i>	Wood or Spotted Sandpiper	WV
172	Charadriiformes	Scolopacidae	<i>Xenus cinereus</i>	Terek Sandpiper	WV
173	Charadriiformes	Scolopacidae	<i>Tringa hypoleucos</i>	Common Sandpiper	WV

174	Charadriiformes	Scolopacidae	<i>Arenaria interpres</i>	Ruddy Turnstone	WV
175	Charadriiformes	Scolopacidae	<i>Capella stenura</i>	Pintail Snipe	M
176	Charadriiformes	Scolopacidae	<i>Capella gallinago</i>	Common or Fantail Snipe	WV
177	Charadriiformes	Scolopacidae	<i>Capella minima</i>	Jack Snipe	WV
178	Charadriiformes	Scolopacidae	<i>Scolopax rusticola</i>	Wood Cock *	V
179	Charadriiformes	Scolopacidae	<i>Calidris tenuirostris</i>	Eastern Knot / Great Knot	WV
180	Charadriiformes	Scolopacidae	<i>Calidris albus</i>	Sanderling	WV
181	Charadriiformes	Scolopacidae	<i>Calidris minutus</i>	Little Stint	WV
182	Charadriiformes	Scolopacidae	<i>Calidris temminckii</i>	Temminck's Stint	WV
183	Charadriiformes	Scolopacidae	<i>Calidris alpinus</i>	Dunlin	WV
184	Charadriiformes	Scolopacidae	<i>Calidris testaceus</i>	Curlew-Sandpiper	WV
185	Charadriiformes	Scolopacidae	<i>Limicola falcinellus</i>	Broadbilled Sandpiper	WV
186	Charadriiformes	Scolopacidae	<i>Philomachus pugnax</i>	Ruff	WV
187	Charadriiformes	Scolopacidae	<i>Phalaropus lobatus</i>	Rednecked Phalarope	WV
188	Charadriiformes	Rostratulidae	<i>Rostratula benghalensis</i>	Painted Snipe	R
189	Charadriiformes	Stercorariidae	<i>Stercorarius pomarinus</i>	Pomarine Skua	WV
190	Charadriiformes	Stercorariidae	<i>Stercorarius parasiticus</i>	Arctic Skua	WV
191	Charadriiformes	Recurvirostridae	<i>Himantopus himantopus</i>	Indian Blackwinged Stilt	R
192	Charadriiformes	Recurvirostridae	<i>Recurvirostra avosetta</i>	Avocet	WV
193	Charadriiformes	Dromadidae	<i>Dromas ardeola</i>	Crab Plover	M
194	Charadriiformes	Burhinidae	<i>Burhinus oedicnemus</i>	Eurasian Thick-knee or Indian Stone Curlew	R
195	Charadriiformes	Burhinidae	<i>Esacus recurvirostris</i>	Great Thick- knee or Stone Plover	R
196	Charadriiformes	Glareolidae	<i>Cursorius cursor</i>	Cream coloured or Desert Courser	WV
197	Charadriiformes	Glareolidae	<i>Cursorius coromandelicus</i>	Indian Courser	R
198	Charadriiformes	Glareolidae	<i>Glareola pratincola</i>	Collared Pranticole or Swallow-Plover	SBV
199	Charadriiformes	Glareolidae	<i>Glareola lactea</i>	Small Indian Pranticole	SBV
200	Charadriiformes	Glareolidae	<i>Glareola maldivarum</i>	Oriental Pranticole	V
201	Charadriiformes	Laridae	<i>Larus hemprichii</i>	Sooty Gull	SV
202	Charadriiformes	Laridae	<i>Larus argentatus</i>	Herring Gull	WV
203	Charadriiformes	Laridae	<i>Larus fuscus</i>	Lesser Black backed Gull	WV
204	Charadriiformes	Laridae	<i>Larus ichthyaetus</i>	Great Black headed Gull	WV
205	Charadriiformes	Laridae	<i>Larus brunnicephalus</i>	Brown headed Gull	WV
206	Charadriiformes	Laridae	<i>Larus ridibundus</i>	Black headed Gull	WV
207	Charadriiformes	Laridae	<i>Larus genei</i>	Slenderbilled Gull	R
208	Charadriiformes	Laridae	<i>Larus canus</i>	Common or Mew Gull	WV
209	Charadriiformes	Sternidae	<i>Chlidonias hybrida</i>	Indian whiskered Tern	M
210	Charadriiformes	Sternidae	<i>Chlidonias leucopterus</i>	White-winged Black Tern	PM
211	Charadriiformes	Sternidae	<i>Gelochelidon</i>	Gullbilled Tern	WV

			<i>nilotica</i>		
212	Charadriiformes	Sternidae	<i>Hydroprogne caspia</i>	Caspian Tern	M
213	Charadriiformes	Sternidae	<i>Sterna aurantia</i>	Indian River Tern	R
214	Charadriiformes	Sternidae	<i>Sterna hirundo</i>	Common Tern	SV
215	Charadriiformes	Sternidae	<i>Sterna repressa</i>	White checked Tern	SV
216	Charadriiformes	Sternidae	<i>Sterna acuticauda</i>	Black-bellied Tern	R
217	Charadriiformes	Sternidae	<i>Sterna albifrons</i>	Little Tern	R
218	Charadriiformes	Sternidae	<i>Sterna saundersi</i>	Black shafted Ternlet	R
219	Charadriiformes	Sternidae	<i>Sterna bergii</i>	Large Crested Tern or Swift Tern	M
220	Charadriiformes	Sternidae	<i>Sterna bengalensis</i>	Indian Lesser Crested Tern	R
221	Charadriiformes	Sternidae	<i>Sterna sandvicensis</i>	Sandwich Tern	Mss
222	Charadriiformes	Sternidae	<i>Sterna anaethetus</i>	Bridled Tern	M
223	Charadriiformes	Rhynchopidae	<i>Rynchops albicollis</i>	Indian Skimmer or Scissorbill	SBV
224	Columbiformes	Pteroclididae	<i>Pterocles exustus</i>	Chestnut-bellied or Common or Indian Sandgrouse	R
225	Columbiformes	Pteroclididae	<i>Pterocles senegallus</i>	Spotted Sandgrouse	WV
226	Columbiformes	Pteroclididae	<i>Pterocles orientalis</i>	Imperial or Black bellied Sandgrouse	WV
227	Columbiformes	Pteroclididae	<i>Pterocles coronatus</i>	Coroneted Sandgrouse	R
228	Columbiformes	Pteroclididae	<i>Pterocles lichtensteinii</i>	Close-barred Sandgrouse	R
229	Columbiformes	Pteroclididae	<i>Pterocles alchata</i>	Large Pintailed Sandgrouse	R
230	Columbiformes	Columbidae	<i>Treron bicincta</i>	Orange breasted Green Pigeon	V
231	Columbiformes	Columbidae	<i>Columba livia</i>	Blue Rock Pigeon	R
232	Columbiformes	Columbidae	<i>Columba eversmanni</i>	Eastern Stock Pigeon or Pale-backed Pigeon	WV
233	Columbiformes	Columbidae	<i>Treron phoenicoptera</i>	Yellow-footed Green Pigeon	YRV
234	Columbiformes	Columbidae	<i>Streptopelia decaocto</i>	Ring Dove	R
235	Columbiformes	Columbidae	<i>Streptopelia tranquebarica</i>	Red Turtle Dove	R
236	Columbiformes	Columbidae	<i>Streptopelia senegalensis</i>	Little Brown or Senegal Dove	R
237	Psittaciformes	Psittacidae	<i>Psittacula eupatria</i>	Large Indian Parakeet	R
238	Psittaciformes	Psittacidae	<i>Psittacula krameri</i>	Rose ringed Parakeet	R
239	Cuculiformes	Cuculidae	<i>Clamator jacobinus</i>	Pied Crested Cuckoo	SBV
240	Cuculiformes	Cuculidae	<i>Cuculus canorus</i>	Asiatic Cuckoo	PM
241	Cuculiformes	Cuculidae	<i>Eudynamis scolopacea</i>	Indian Koel	R
242	Cuculiformes	Cuculidae	<i>Taccocua leschenaultia</i>	Western Sirkeer Cuckoo	R
243	Cuculiformes	Cuculidae	<i>Centropus sinensis</i>	Common Crow-Pheasant or Coucal	R
244	Strigiformes	Tytonidae	<i>Tyto alba</i>	Indian Barn Owl	R
245	Strigiformes	Strigidae	<i>Otus brucei</i>	Striated or Pallid Scops Owl	WV

246	Strigiformes	Strigidae	<i>Otus scops</i>	Eastern Scops Owl	WV
247	Strigiformes	Strigidae	<i>Otus bakkamoena</i>	West Pakistan Collared Scops Owl	R
248	Strigiformes	Strigidae	<i>Bubo bubo</i>	Indian Great Horned or Eagle Owl	R
249	Strigiformes	Strigidae	<i>Bubo coromandus</i>	Dusky Horned Owl	R
250	Strigiformes	Strigidae	<i>Ketupa zeylonensis</i>	Indian Brown Fish Owl	WV
251	Strigiformes	Strigidae	<i>Athene brama</i>	Spotted Owlet	R
252	Strigiformes	Strigidae	<i>Asio otus</i>	Longeared Owl	WV
253	Strigiformes	Strigidae	<i>Asio flammeus</i>	Shorteared Owl	WV
254	Caprimulgiformes	Caprimulgidae	<i>Caprimulgus europaeus</i>	Eurasian Nightjar	SBV/PM
255	Caprimulgiformes	Caprimulgidae	<i>Caprimulgus mahrattensis</i>	Syke's or Sind Nightjar	R
256	Caprimulgiformes	Caprimulgidae	<i>Caprimulgus asiaticus</i>	Indian Little Nightjar	R
257	Apodiformes	Apodidae	<i>Apus melba</i>	Indian Alpine Swift	M
258	Apodiformes	Apodidae	<i>Apus pallidus</i>	Pale Brown Swift	WV
259	Apodiformes	Apodidae	<i>Apus affinis</i>	House Swift	R
260	Coraciiformes	Alcedinidae	<i>Ceryle rudis</i>	Indian Pied Kingfisher	R
261	Coraciiformes	Alcedinidae	<i>Alcedo atthis</i>	Indian Small Blue Kingfisher	R
262	Coraciiformes	Alcedinidae	<i>Halcyon smyrensis</i>	White breasted Kingfisher	R
263	Coraciiformes	Alcedinidae	<i>Halcyon pileata</i>	Black-capped Kingfisher	V
264	Coraciiformes	Meropidae	<i>Merops superciliosus</i>	Blue cheeked Bee-eater	SBV/PM
265	Coraciiformes	Meropidae	<i>Merops orientalis</i>	Sind Small Green Bee-eater	R
266	Coraciiformes	Meropidae	<i>Merops apiaster</i>	European Bee-eater	R
267	Coraciiformes	Coraciidae	<i>Coracias garrulous</i>	European Roller	PM
268	Coraciiformes	Coraciidae	<i>Coracias benghalensis</i>	Indian Roller	R
269	Coraciiformes	Upupidae	<i>Upupa epops</i>	Common Hoopoe	WV
270	Piciformes	Capitonidae	<i>Megalaima hacmacephala</i>	Crimson-breasted Barbet	R
271	Piciformes	Picidae	<i>Jynx torquilla</i>	European Wryneck	PM
272	Piciformes	Picidae	<i>Dinopium benghalensis</i>	Sind Goldenbacked Woodpecker	R
273	Piciformes	Picidae	<i>Picoides ssimillis</i>	Sind Pied Woodpecker	R
274	Piciformes	Picidae	<i>Picoides mahrattensis</i>	Yellow-fronted Pied or Mahratta Woodpecker	R
275	Passeriformes	Alaudidae	<i>Mirafra cantillans</i>	Singing Bush Lark	R
276	Passeriformes	Alaudidae	<i>Mirafra erythroptera</i>	Sind Redwinged Bush Lark/ Indian Bush Lark	R
277	Passeriformes	Alaudidae	<i>Eremopterix grisea</i>	Ashycrowned Sparrow Lark	R
278	Passeriformes	Alaudidae	<i>Eremopterix nigriceps</i>	Blackcrowked Sparrow Lark	R
279	Passeriformes	Alaudidae	<i>Ammomanes deserti</i>	Desert Lark	R
280	Passeriformes	Alaudidae	<i>Ammomanes cinturus</i>	Bartailed Desert Lark	R
281	Passeriformes	Alaudidae	<i>Alaemon alaudipes</i>	Greater Hoopoe Lark	R
282	Passeriformes	Alaudidae	<i>Calandrella</i>	Hume's Short-toed Lark	SBV

			<i>acutirostris</i>		
283	Passeriformes	Alaudidae	<i>Calandrella rufescens</i>	Lesser Short-toed Lark	WV
284	Passeriformes	Alaudidae	<i>Calandrella raytal</i>	Sand Lark	R
285	Passeriformes	Alaudidae	<i>Calandrella brachydactyla</i>	Greater Short-toed Lark	WV
286	Passeriformes	Alaudidae	<i>Melanocorypha bimaculata</i>	Bimaculated Lark	WV
287	Passeriformes	Alaudidae	<i>Galerida cristata</i>	Crested Lark	R
288	Passeriformes	Alaudidae	<i>Alauda arvensis</i>	Eurasian Skylark	WV
289	Passeriformes	Alaudidae	<i>Alauda gulgula</i>	Oriental Skylark	R
290	Passeriformes	Alaudidae	<i>Mirafra crythroptera</i>	Indian Bush Lark	R
291	Passeriformes	Alaudidae	<i>Mirafra cantilleus</i>	Singing Bush Lark	R
292	Passeriformes	Hirundinidae	<i>Riparia diluta</i>	Pale Martin	WV
293	Passeriformes	Hirundinidae	<i>Riparia paludicola</i>	Plain or Grey throated Sand Martin	R
294	Passeriformes	Hirundinidae	<i>Hirundo fuligula</i>	Rock Martin	YRV
295	Passeriformes	Hirundinidae	<i>Hirundo concolor</i>	Dusky Crag Martin	R
296	Passeriformes	Hirundinidae	<i>Hirundo smithi</i>	Wire-tailed Swallow	R
297	Passeriformes	Hirundinidae	<i>Hirundo rustica</i>	Barn or Common Swallow	WV
298	Passeriformes	Hirundinidae	<i>Hirundo fluvicola</i>	Cliff Swallow/ Streak – throated Swallow	R
299	Passeriformes	Hirundinidae	<i>Hirundo daurica</i>	Redrumped Swallow	WV
300	Passeriformes	Laniidae	<i>Lanius isabellinus</i>	Rufous-tailed or Isabelline Shrike	PM
301	Passeriformes	Laniidae	<i>Lanius meridionatis</i>	Southern Grey Shrike	R
302	Passeriformes	Laniidae	<i>Lanius vittatus</i>	Baybacked Shrike	R
303	Passeriformes	Laniidae	<i>Lanius collurio</i>	Redbacked Shrike	PM
304	Passeriformes	Laniidae	<i>Lanius schach</i>	Rufous-backed Shrike/Longtailed Shrike	R
305	Passeriformes	Laniidae	<i>Lanius serrator</i>	Woodchat Shrike	V
306	Passeriformes	Oriolidae	<i>Oriolus oriolus</i>	Golden Oriole	PM
307	Passeriformes	Dicruridae	<i>Dicrurus adsimilis</i>	Black Drongo	R
308	Passeriformes	Sturnidae	<i>Sturnus roseus</i>	Rosy Pastor	DPM
309	Passeriformes	Sturnidae	<i>Acridotheres ginginianus</i>	Bank Myna	R
310	Passeriformes	Sturnidae	<i>Sturnus malabaricus</i>	Grey-headed Myna	V
311	Passeriformes	Sturnidae	<i>Sturnus vulgaris</i>	Common Sind Starling	R
312	Passeriformes	Sturnidae	<i>Acridotheres tristis</i>	Indian Myna	R
313	Passeriformes	Sturnidae	<i>Sturnus pagodarum</i>	Brahminy Starling or Black-headed Myna	R
314	Passeriformes	Corvidae	<i>Dendrocitta vagabunda</i>	Tree Pie	R
315	Passeriformes	Corvidae	<i>Corvus splendens</i>	Sind House Crow	R
316	Passeriformes	Corvidae	<i>Corvus corax</i>	Raven	R/WV
317	Passeriformes	Corvidae	<i>Corvus corone</i>	Carrion Crow	WV
318	Passeriformes	Corvidae	<i>Corvus ruficollis</i>	Desert Raven	WV
319	Passeriformes	Bombycillidae	<i>Hypocoluis ampelinus</i>	Grey Hypocolilis	WV
320	Passeriformes	Bombycillidae	<i>Bombycilla</i>	Wax Wing	V

			<i>garrulus</i>		
321	Passeriformes	Campephagidae	<i>Tephrodornis pondicerianus</i>	Sind Wood Shrike	R
322	Passeriformes	Campephagidae	<i>Pericrocotus ethologus</i>	West Himalayan Longtailed Minivet	WV
323	Passeriformes	Campephagidae	<i>Pericrocotus roseus</i>	Rosy Minivet	WV
324	Passeriformes	Campephagidae	<i>Pericrocotus cinnamomeus</i>	Sind Small Minivet	R
325	Passeriformes	Campephagidae	<i>Pericrocotus erythropygus</i>	White bellied Minivet	V
326	Passeriformes	Pyconotidae	<i>Pycnonotus leucogenys</i>	White-cheeked Bulbul	R
327	Passeriformes	Pyconotidae	<i>Pycnonotus cafer</i>	Red-vented Bulbul	R
328	Passeriformes	Timaliidae	<i>Chrysomma sinense</i>	Western Yellow-eyed Babbler	R
329	Passeriformes	Timaliidae	<i>Chrysomma altirostre</i>	Sind Babbler / Jerdon's Babbler	R
330	Passeriformes	Timaliidae	<i>Turdoides caudatus</i>	Common Babbler	R
331	Passeriformes	Timaliidae	<i>Turdoides earlei</i>	Striated Babbler	R
332	Passeriformes	Timaliidae	<i>Turdoides striatus</i>	Sind Jungle Babbler	R
333	Passeriformes	Muscicapidae	<i>Muscicapa striata</i>	Spotted Flycatcher	M
334	Passeriformes	Muscicapidae	<i>Ficedula parva</i>	Red throated Flycatcher	WV
335	Passeriformes	Muscicapidae	<i>Ficedula superciliaris</i>	Ultramarine Flycatcher	WV
336	Passeriformes	Muscicapidae	<i>Ficedula subrubra</i>	Kashmir Flycatcher	WV
337	Passeriformes	Muscicapidae	<i>Culicicapa ceylonensis</i>	Northern Greyheaded Flycatcher	WV
338	Passeriformes	Rhipiduridae	<i>Rhipidura aureola</i>	White browed Fantail	R
339	Passeriformes	Monarchidae	<i>Terpsiphone paradise</i>	Asian Paradise Flycatcher	PM
340	Passeriformes	Monarchidae	<i>Hypothymis azurea</i>	Black-naped Monarch	V
341	Passeriformes	Sylviidae	<i>Acrocephalus Agricola</i>	Paddy field Warbler	WV
342	Passeriformes	Sylviidae	<i>Acrocephalus melanopogon</i>	Moustached Sedge Warbler	WV
343	Passeriformes	Sylviidae	<i>Cettia cetti</i>	Cett's Warbler	WV
344	Passeriformes	Sylviidae	<i>Acrocephalus stentoreus</i>	Clamorous Reed Warbler	WV
345	Passeriformes	Sylviidae	<i>Acrocephalus dumetorum</i>	Blyth's Reed Warbler	PM
346	Passeriformes	Sylviidae	<i>Cisticola Juncidus</i>	Streaked Fantail Warbler	R
347	Passeriformes	Sylviidae	<i>Prinia buchanani</i>	Rufousfronted Wren-Warbler	R
348	Passeriformes	Sylviidae	<i>Prinia gracilis</i>	Indian Streaked Wren-Warbler / Long tailed Warbler	R
349	Passeriformes	Sylviidae	<i>Prinia inornata</i>	North Western Plain Wren-Warbler	R
350	Passeriformes	Sylviidae	<i>Prinia flaviventris</i>	Yellow-bellied Prinia	R
351	Passeriformes	Sylviidae	<i>Prinia burnesii</i>	Long tailed Grass Warbler/ Rufous- vented Prinia	R
352	Passeriformes	Sylviidae	<i>Prinia criniger</i>	Brown Hill Warbler	R
353	Passeriformes	Sylviidae	<i>Scotocerca inquieta</i>	Streaked Scrub Warbler	R

354	Passeriformes	Sylviidae	<i>Orthotomus sutorius</i>	Tailor Bird	R
355	Passeriformes	Sylviidae	<i>Locustella naevia</i>	Grasshopper Warbler	V
356	Passeriformes	Sylviidae	<i>Chaetornis striatus</i>	Bristled Grass Warbler	V
357	Passeriformes	Sylviidae	<i>Hippolais caligata</i>	Booted Tree Warbler	WV
358	Passeriformes	Sylviidae	<i>Sylvia hortensis</i>	Orphaen Warbler	PM
359	Passeriformes	Sylviidae	<i>Sylvia curruca</i>	Lesser White throat	WV
360	Passeriformes	Sylviidae	<i>Sylvia communis</i>	Greater White throat	M
361	Passeriformes	Sylviidae	<i>Sylvia nana</i>	Desert Warbler	WV
362	Passeriformes	Sylviidae	<i>Phylloscopus collybita</i>	Common Chiffchaff	WV
363	Passeriformes	Sylviidae	<i>Phylloscopus sindianus</i>	Sind Chiffchaff / Mountain Chiff Chaff	WV
364	Passeriformes	Sylviidae	<i>Phylloscopus neglectus</i>	Plain Leaf Warbler	WV
365	Passeriformes	Sylviidae	<i>Phylloscopus trochiloides</i>	Greenish Warbler	WV/PM
366	Passeriformes	Turdidae	<i>Cercotrichas galacototes</i>	Rufous Chat or Greybacked Warbler	PM
367	Passeriformes	Turdidae	<i>Luscinia svecicus</i>	Bluethroat	WV
368	Passeriformes	Turdidae	<i>Phoenicurus ochruros</i>	Black Redstart	WV
369	Passeriformes	Turdidae	<i>Saxicola torquata</i>	Collared Indian Bush Chat / Stone Chat	PM
370	Passeriformes	Turdidae	<i>Saxicola leucura</i>	White-tailed Bush Chat	R
371	Passeriformes	Turdidae	<i>Saxicola caprata</i>	Pied Bush Chat	R
372	Passeriformes	Turdidae	<i>Oenanthe isabellina</i>	Isabelline Wheatear	WV
373	Passeriformes	Turdidae	<i>Oenanthe xanthopyrma</i>	Rufous tailed Wheatear	WV
374	Passeriformes	Turdidae	<i>Oenanthe deserti</i>	Desert Chat or Desert Wheatear	WV
375	Passeriformes	Turdidae	<i>Oenanthe picata</i>	Pied Chat / Variable Wheatear	WV
376	Passeriformes	Turdidae	<i>Oenanthe monacha</i>	Hooded Chat or Wheatear	R
377	Passeriformes	Turdidae	<i>Oenanthe alboniger</i>	Hume's Chat or Wheatear	R
378	Passeriformes	Turdidae	<i>Saxicoloides fulicata</i>	Indian Robin	R
379	Passeriformes	Turdidae	<i>Monticola saxatilis</i>	Rock Thrush	PM
380	Passeriformes	Turdidae	<i>Monticola cinclorhyncha</i>	Blue headed Rock Thrush	WV
381	Passeriformes	Turdidae	<i>Monticola solitarius</i>	Blue Rock Thrush	WV
382	Passeriformes	Turdidae	<i>Turdus ruficollis</i>	Black throated Thrush	WV
383	Passeriformes	Turdidae	<i>Hypothymus azurea</i>	Black-necked Monarch	V
384	Passeriformes	Bombycillidae	<i>Bombycilla gorrulus</i>	Bohemian Waxwing	V
385	Passeriformes	Turdidae	<i>Turdus philomelos</i>	Song Thrush	V
386	Passeriformes	Remizidae	<i>Remiz coronatus</i>	White-crowned Penduline Tit	WV
387	Passeriformes	Motacillidae	<i>Anthus trivialis</i>	Tree Pipit	PM
388	Passeriformes	Motacillidae	<i>Anthus cervinus</i>	Red-throated Pipit	PM
389	Passeriformes	Motacillidae	<i>Anthus rufulus</i>	Paddy field Pipit	R
390	Passeriformes	Motacillidae	<i>Anthus subescent</i>	Ruff-bellied Pipit	WV
391	Passeriformes	Motacillidae	<i>Anthus campestris</i>	Tawny Pipit	WV
392	Passeriformes	Motacillidae	<i>Anthus similis</i>	Long billed Rock Pipit	R

393	Passeriformes	Motacillidae	<i>Anthus spinoletta</i>	Water Pipit	WV
394	Passeriformes	Motacillidae	<i>Motacilla flava</i>	Yellow Wagtail	PM
395	Passeriformes	Motacillidae	<i>Motacilla citreola</i>	Yellow-headed Wagtail	WV
396	Passeriformes	Motacillidae	<i>Motacilla maderaspatensis</i>	Large Pied Wagtail/ White-browed Wagtail	R
397	Passeriformes	Motacillidae	<i>Motacilla alba</i>	White or Pied Wagtail	WV
398	Passeriformes	Motacillidae	<i>Motacilla cinerea</i>	Grey Wagtail	WV
399	Passeriformes	Motacillidae	<i>Dendronanthus indica</i>	Forest Wagtail	V
400	Passeriformes	Nectariniidae	<i>Nectarinia asiatica</i>	Purple Sunbird	R
401	Passeriformes	Passeridae	<i>Zosterops palpebrosa</i>	White Eye	R
402	Passeriformes	Passeridae	<i>Passer domesticus</i>	House Sparrow	R
403	Passeriformes	Passeridae	<i>Passer hispaniolensis</i>	Spanish Sparrow	WV
404	Passeriformes	Passeridae	<i>Passer pyrrhonotus</i>	Sind Jungle Sparrow	R
405	Passeriformes	Passeridae	<i>Petronia xanthocollis</i>	Sind Yellow headed Sparrow	R
406	Passeriformes	Ploceidae	<i>Ploceus philippinus</i>	Indian Baya	R
407	Passeriformes	Ploceidae	<i>Ploceus benghalensis</i>	Black throated Weaver Bird	R
408	Passeriformes	Ploceidae	<i>Ploceus manyar</i>	Streaked Weaver Bird	R
409	Passeriformes	Estrildidae	<i>Estrilda amandava</i>	Red Munia or Avadant	R
410	Passeriformes	Estrildidae	<i>Lonchura malabarica</i>	Common Silverbill or White throated Munia	R
411	Passeriformes	Fringillidae	<i>Fringilla montifringilla</i>	Brambling	WV
412	Passeriformes	Fringillidae	<i>Serinus pusillus</i>	Goldfronted Finch	V
413	Passeriformes	Fringillidae	<i>Bucanetes githaginea</i>	Trumpeter Bullfinch	PM
414	Passeriformes	Fringillidae	<i>Carpodacus erythrinus</i>	Rosefinch	PM
415	Passeriformes	Emberizidae	<i>Emberiza melanocephala</i>	Blackheaded Bunting	PM
416	Passeriformes	Emberizidae	<i>Emberiza bruniceps</i>	Redheaded Bunting	PM
417	Passeriformes	Emberizidae	<i>Emberiza stewarti</i>	White capped Bunting	SBV
418	Passeriformes	Emberizidae	<i>Emberiza buchanani</i>	Greynecked Bunting	WV
419	Passeriformes	Emberizidae	<i>Emberiza striolata</i>	Striped or House Bunting	R
420	Passeriformes	Emberizidae	<i>Emberiza schoeniclus</i>	Reed Bunting	WV

Legend:

R: Resident WV: Winter Visitor
SBV: Summer Breeding Visitor

M: Migratory PM: Passage Migrant
SV: Summer Visitor YRV: Year-round visitor

V: Vagrant

Table 3. Checklist of Reptiles of Sindh.

S. No.	Order	Family	Scientific name	Common name
01	Chelonia	Cheloniidae	<i>Caretta caretta</i>	Loggerhead Sea Turtle
02	Chelonia	Cheloniidae	<i>Chelonia mydas</i>	Green sea Turtle
03	Chelonia	Cheloniidae	<i>Eretmochelys imbricata</i>	Hawksbill Turtle
04	Chelonia	Cheloniidae	<i>Lepidochelys olivacea</i>	Olive Ridley
05	Chelonia	Dermochelyidae	<i>Dermochelys coriacea</i>	Leatherback Sea Turtle
06	Chelonia	Emydidae	<i>Geoclemys hamiltonii</i>	Yellow Spotted Mud Turtle/ Spotted Pond Turtle
07	Chelonia	Emydidae	<i>Hardella thurjii</i>	Common River Turtle/ Crowned River Turtle
08	Chelonia	Emydidae	<i>Pangshura tecta</i>	Indian Sawback Turtle /Indian Roofed Turtle
09	Chelonia	Emydidae	<i>Pangshura smithii</i>	Brown River Turtle
10	Chelonia	Trionychidae	<i>Lissemys punctata</i>	Indian Flapshell Turtle
11	Chelonia	Trionychidae	<i>Nilssonina gangeticus</i>	Indian Softshell Turtle
12	Chelonia	Trionychidae	<i>Nilssonina hurum</i>	Peacock Softshel
13	Chelonia	Trionychidae	<i>Chitra indica</i>	Narrow-headed Softshell Turtle
14	Chelonia	Testudinidae	<i>Geochelone elegans</i>	Star Tortoise
15	Crocodylia	Crocodylidae	<i>Crocodylus palustris</i>	The Mugger
16	Crocodylia	Gavialidae	<i>Gavialis gangeticus</i>	Gharial
17	Squamata	Agamidae	<i>Brachysaura minor</i>	Short-tail Ground Agama
18	Squamata	Agamidae	<i>Calotes versicolor</i>	Common Tree Lizard
19	Squamata	Agamidae	<i>Laudakia lirata</i>	Yellow-head Spotted Rock Agama
20	Squamata	Agamidae	<i>Laudakia fusca</i>	Yellow-headed Rock Agama
21	Squamata	Agamidae	<i>Laudakia melanura</i>	Black Rock Agama
22	Squamata	Agamidae	<i>Laudakia nupta</i>	Spiny-head Rock Agama
23	Squamata	Agamidae	<i>Trapelus agilis</i>	Common Field Agama/ Brilliant Agama
24	Squamata	Agamidae	<i>Trapelus megalonyx</i>	Ocellete Ground Agama
25	Squamata	Agamidae	<i>Trapelus rubrigularis</i>	Red throated Ground Agama
26	Squamata	Chamaeleonidae	<i>Chamaeleo zeylanicus</i>	Casque Lizard
27	Squamata	Eublepharidae	<i>Eublepharis macularius</i>	Fat-tailed Gecko
28	Squamata	Gekkonidae	<i>Agamura persica</i>	Persian Spider Gecko
29	Squamata	Gekkonidae	<i>Bunopus tuberculatus</i>	Tuberculated Desert Gecko
30	Squamata	Gekkonidae	<i>Cyrtopodion kachhensie</i>	Kachh Spotted Ground Gecko
31	Squamata	Gekkonidae	<i>Cyrtopodion scabrum</i>	Common Tuberculate Ground Gecko
32	Squamata	Gekkonidae	<i>Cyrtopodion dehakroense</i>	Thin-toed Gecko
33	Squamata	Gekkonidae	<i>Crossobamon orientalis</i>	Yellow-tailed Sand Gecko
34	Squamata	Gekkonidae	<i>Hemidactylus brookii</i>	Spotted Barn Gecko
35	Squamata	Gekkonidae	<i>Hemidactylus flaviviridis</i>	Yellow-belly Common House Gecko
36	Squamata	Gekkonidae	<i>Hemidactylus frenatus</i>	Waif Gecko
37	Squamata	Gekkonidae	<i>Hemidactylus leschenaultii</i>	Tree-bark Gecko
38	Squamata	Gekkonidae	<i>Hemidactylus persicus</i>	Persian House Gecko
39	Squamata	Gekkonidae	<i>Hemidactylus triedrus</i>	Blotched House Gecko
40	Squamata	Gekkonidae	<i>Hemidactylus turcicus</i>	Mediterranean Gecko
41	Squamata	Gekkonidae	<i>Teratolepis fasciata</i>	Flat-tail Gecko
42	Squamata	Gekkonidae	<i>Tropicolotes persicus</i>	Sindh Dwarf Gecko

43	Squamata	Gekkonidae	<i>Ptyodactylus homolepis</i>	Fan-toed Gecko
44	Squamata	Lacertidae	<i>Acanthodactylus cantoris</i>	Blue-tail Sand Lizard
45	Squamata	Lacertidae	<i>Mesalina watsonana</i>	Spotted Lacerta
46	Squamata	Lacertidae	<i>Ophisops jerdoni</i>	Spectacled Lacerta
47	Squamata	Scincidae	<i>Chalcides ocellatus</i>	Ocellated Skink
48	Squamata	Scincidae	<i>Eutropis dissimilis</i>	Striped Grass Skink
49	Squamata	Scincidae	<i>Eutropis macularia</i>	Bronze Grass Skink
50	Squamata	Scincidae	<i>Eurylepis taeniolatus</i>	Common Mole Skink
51	Squamata	Scincidae	<i>Novoeumeces blythianus</i>	Orange-tail Skink
52	Squamata	Scincidae	<i>Ophiomorus raithmai</i>	Tree fringed Sand-fish
53	Squamata	Scincidae	<i>Ophiomorus tridactylus</i>	3-toed Sand Swimmer
54	Squamata	Uromastycidae	<i>Saara hardwickii</i>	Spiny-tail Ground Lizard
55	Squamata	Uromastycidae	<i>Saara asmussi Seistan</i>	Spiny-tailed Ground Lizard
56	Squamata	Varanidae	<i>Varanus bengalensis</i>	Bengal Monitor
57	Squamata	Varanidae	<i>Varanus flavescens</i>	Yellow Monitor
58	Squamata	Varanidae	<i>Varanus griseus</i>	Desert Monitor
59	Squamata	Leptotyphlopidae	<i>Leptotyphlops blanfordii</i>	Sindh Thread Snake
60	Squamata	Leptotyphlopidae	<i>Leptotyphlops Macrorhynchus</i>	Beaked Thread Snake
61	Squamata	Typhlopidae	<i>Ramphotyphlops braminus</i>	Brahminy Blind Snake
62	Squamata	Typhlopidae	<i>Typhlops ductuliformes</i>	Slender Blind Snake
63	Squamata	Boidae	<i>Eryx conicus</i>	Chain Sand Boa
64	Squamata	Boidae	<i>Eryx johnii</i>	Common Sand Boa
65	Squamata	Boidae	<i>Python molurus</i>	Rock Python
66	Squamata	Colubridae	<i>Amphiesma stolatum</i>	Striped Keelback
67	Squamata	Colubridae	<i>Argyrogena fasciolata</i>	Banded Racer
68	Squamata	Colubridae	<i>Boiga trigonata</i>	Common Cat Snake
69	Squamata	Colubridae	<i>Enhydris pakistanica</i>	Sindhi Ditch Snake
70	Squamata	Colubridae	<i>Lycodon aulicus</i>	White-spotted Wolf Snake
71	Squamata	Colubridae	<i>Lycodon striatus</i>	Indus Valley Wolf Snake
72	Squamata	Colubridae	<i>Lycodon travancoricus</i>	South Indian Wolf Snake
73	Squamata	Colubridae	<i>Lytorhynchus paradoxus</i>	Sindh Awl-headed Snake
74	Squamata	Colubridae	<i>Oligodon arnensis</i>	Banded Kukri Snake
75	Squamata	Colubridae	<i>Oligodon taeniolatus</i>	Streaked Kukri Snake
76	Squamata	Colubridae	<i>Platyceps rhodorachis</i>	Cliff Racer
77	Squamata	Colubridae	<i>Platyceps ventromaculatus</i>	Plain's Racer
78	Squamata	Colubridae	<i>Psammophis condanars</i>	Indo Burmese Sand Snake
79	Squamata	Colubridae	<i>Psammophis leithii</i>	Sindhi Ribbon Snake
80	Squamata	Colubridae	<i>Psammophis schokari</i>	Saharo-sindian Ribbon Snake
81	Squamata	Colubridae	<i>Pseudocyclophis persicus</i>	Dark-head Dwarf Racer
82	Squamata	Colubridae	<i>Ptyas mucosus</i>	Rope Snake/Dhaman
83	Squamata	Colubridae	<i>Spalerosophis arenarius</i>	Red-spotted Diadem Snake

84	Squamata	Colubridae	<i>Spalerosophis diadema</i>	Blotched Diadem Snake
85	Squamata	Colubridae	<i>Xenochrophis cerasogaster</i>	Red-bellied Marsh Snake
86	Squamata	Colubridae	<i>Xenochrophis piscator</i>	Checkered Keelback
87	Squamata	Elapidae	<i>Bungarus caeruleus</i>	Common Krait
88	Squamata	Elapidae	<i>Bungarus sindanus</i>	Sindhi Krait
89	Squamata	Elapidae	<i>Naja naja</i>	Black Cobra
90	Squamata	Viperidae	<i>Daboia russelii</i>	Russell's Chain Viper
91	Squamata	Viperidae	<i>Echis carinatus</i>	Saw-scaled Viper
92	Squamata	Hydrophiidae	<i>Enhydrina schistosa</i>	Beaked Sea Snake
93	Squamata	Hydrophiidae	<i>Hydrophis caeruleus</i>	Blue-green Sea Snake
94	Squamata	Hydrophiidae	<i>Hydrophis cyanocinctus</i>	Annulated Sea Snake
95	Squamata	Hydrophiidae	<i>Hydrophis fasciatus</i>	Small-head Banded Sea Snake
96	Squamata	Hydrophiidae	<i>Hydrophis lapemoides</i>	Persian Sea Snake
97	Squamata	Hydrophiidae	<i>Hydrophis mamillaris</i>	Broad-band Sea Snake
98	Squamata	Hydrophiidae	<i>Hydrophis spiralis</i>	Yellow Sea Snake
99	Squamata	Hydrophiidae	<i>Hydrophis ornatus</i>	Reef Sea Snake
100	Squamata	Hydrophiidae	<i>Lapemis curtus</i>	Pygmy Sea Snake
101	Squamata	Hydrophiidae	<i>Microcephalophis cantoris</i>	Spotted Small-head Sea Snake
102	Squamata	Hydrophiidae	<i>Microcephalophis gracilis</i>	Banded Small-head Sea Snake
103	Squamata	Hydrophiidae	<i>Pelamis platurus</i>	Pelagic Sea snake

Table 4. Checklist of Amphibians.

S. No.	Order	Family	Scientific name	Common name
1	Anura	Bufonidae	<i>Bufo stomaticus</i>	Indus Valley Toad
2			<i>Bufo melanostictus</i>	Common Asian Toad
3		Ranidae	<i>Euphlyctis cyanophlyctis</i>	Skittering Frog
4			<i>Hoplobatrachus tigerinus</i>	Tiger Frog/ Bull Frog
5			<i>Sphaeroteuca breviceps</i>	Burrowing Frog
6			<i>Limnonectes limnocharis</i>	Indian Cricket Frog
7			<i>Fejervaria syhadrensis</i>	Southern Cricket Frog

Legend: C= Common LC= Less Common Sc = Scarce

REFERENCES

- Abbas, D., Rais, M., Ghalib, S. A. and Khan, M. Z. 2010. First Record of Spotted Munia (*Lonchura punctulata*) from Karachi. Pakistan J. Zool. 42(4):503-505.
- Ahmed, A. 1986. The distribution and population of Crocodiles in the province of Sindh and Baluchistan (Pakistan). Journal of Bombay Natural Society 83: 220-223.
- Asrar, F. F. 1999. Decline of Marine Turtle Nesting Population in Pakistan. Marine Turtle Newsletter 83:13-14.
- Begum, A., Ghalib, S. A., Khan, M. Z., Zehra, A., Khan, A. R., Babar, H., Latif, T. and Tabbassum, F. 2014. An overview of the current status and distribution of amphibians in Sindh. African Journal of Science and Research 3(4):21-23.
- Chang, M. S., Gachal, G. . S., Qadri, AH. and Sheikh, MY. 2012. Bio-ecological status, management and conservation of Marsh Crocodiles (*Crocodylus palustris*) in Deh Akro 2, Sindh–Pakistan. Sindh University Research Journal (Science Series). 44(2):209-214.
- Chang, MS., Gachal, GS., Qadri, AH., Memon, KH., Sheikh, MY. and Nawaz, Rab. 2015. Distribution, population status and threats of Marsh Crocodiles in

- Chotiari Wetland Complex Sanghar, Sindh-Pakistan. *Biharean Biologist*. 9(1):22-28.
- Firdous, F. 1985. Research and Conservation of Marine Turtle along Karachi Coast. In: *Endangered Marine Animals and Parks, India*. Proc. Symp. Ed. Silas, EG. Marine Biological Association of India. 1:280-282.
- Firdous, F. 1988. Conservation of Turtles at Sandspit and Hawkes Bay, Karachi. In: *Proc. of International Conference on Marine Sciences of the Arabian Sea*. Eds. Thompson, MF. and Tirmizi, NT. American Institute of Biological Sciences, Washington, DC, USA. .217-222.
- Ghalib, SA., Hasnain, SA. and Khan, AR. 2004. Current status of the Mammals of Sindh. *J. Nat. Hist. Wild*. 3(1):1-6.
- Ghalib, SA., Hasnain, SA., Perveen, S. and Khan, AR. 2002. Current status of the Birds of Sindh. *J. Nat. Hist. Wild*. 1:37-57.
- Ghalib, SA., Khan, MZ., Ahmed, SM., Begum, A., Hussain, B. and Ahmed, W. 2014. Study of the wildlife of Jhimpir wind Corridor; district Thatta, Sindh and development of bird monitoring strategy in the area. *African Journal of Science and Research*. 3(6):01-09.
- Kanwal, R. and Khan, MZ. 2018. A Study of Status and Recent Conservation Measures of Sindh Province Freshwater Turtles. *Journal of Entomology and Zoology Studies*. 6(2):953-960.
- Khan, MS. 2004. Annotated checklist of amphibians and reptiles of Pakistan. *Asiat. Herpetol. Res*. 10:191-201.
- Khan, MZ. 2006. Current Status and Biodiversity of Indus Dolphin Reserve and Indus Delta Wetlands (Ramsar Sites). Proc. 9th International River Symposium, Brisbane, Australia. 01-26.
- Khan, MZ., Ghalib, SA. and Hussain, B. 2010. Status and New Nesting Sites of Sea Turtles of Pakistan. *Chelonian Conservation and Biology*. 9(1):119-123. DOI: 10.2744/CCB-0767.1
- Khan, MZ., Ghalib, SA., Siddiqui, S., Siddiqui, TF., Farooq, RY., Yasmeen, G., Abbas, D. and Zehra, A. 2012. Current status and distribution of Reptiles of Sindh. *Journal of Base and Applied Sciences*. 8:160-168.
- Khan, AZ., Khan, WA. and Chaudhry, AA. 2015. Mammalian Diversity in Thar Desert Habitat of Tharparkar District, Sindh, Pakistan. *Pakistan J. Zool*. 47(5):1205-1211.
- Khan, MZ., Kanwal, R. and Ghalib, SA. 2018. Study of Freshwater Turtles in selected Districts of Sindh-Pakistan: Threats, Illegal trade and Conservation. *The Journal of Animal and Plant Sciences*. 28(3):915-926.
- Minton, SA., 1966. A contribution to the Herpetology of West Pakistan. *Bulletin of the American Museum of Nat. Hist*. 134:27-184.
- Rais, M., Abbass, D., Khan, MZ., Khan, IS., Ghalib, SA., Tabbassum, F., Akber, G. and Nawaz, R. 2008. Changes in the avifauna of the wetlands of District Sanghar, Sindh, Pakistan. *Berkut Ukrainian Journal of Ornithology*. 17(1-2):13-24.
- Rais, M., Khan, MZ., Ghalib, SA., Abbass, D., Khan, WA., Islam, S. and Husnain, A. 2009. Recent Records of Smooth-Coated Otter (*Lutrogale perspicillata*) from Sindh, Pakistan. *Pakistan J. Zool*. 41(5):413-414.
- Rais, M., Khan, MZ., Abass, D. and Akber, G. 2010. Study on Some Medium-sized and Large Mammals of Chotiari Wetlands Complex, Sanghar, Sindh, Pakistan. *Journal of Basic and Applied Sciences*. 6(1):63-67.
- Roberts, TJ., Passburg, R. and Zalinge, NPV. 1986. A Checklist of Birds of Karachi and Lower Sindh., Pakistan. WWF Pakistan. pp37.
- Roberts, TJ. 1977. The mammals of Pakistan. Ernest Benn, Ltd., London, England. 195-199.
- Siddiqui, PA., Saqib, TA. and Kazmi, MA. 2001. Birds Population in Different Coastal Areas of Sindh. *Pakistan Journal of Marines Science*. 10 (1):49-60.
- Sheikh, KM. and Molur, S. 2004. (eds.) Status and Red List of Pakistan's Mammals. Based on the Conservation Assessment and Management Plan. IUCN Pakistan. pp312.
- Zehra, A., Ghalib, SA., Khan, MZ., Hussain, B., Begum, A., Khan, AR., Tabbassum, F. and Lateef, TA. 2014. Current Distribution and Status of the Wildlife of Deh Akro-2 Wildlife Sanctuary, District Shaheed Benazirabad, Sindh, Pakistan. *Int. J. Biol. Biotech*. 11(2-3):351-356.

Received: April 27, 2018; Revised: May 23, 2018;
Accepted: May 29, 2018

Copyright©2017, This is an open access article distributed under the Creative Commons Attribution Non Commercial License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.