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BIRDS OF LADAKH AND ANALYSIS OF THEIR STATUS

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INTRODUCTION

The Trans-Himalayan cold desert of Ladakh is located on the border between the Palaearctic and the Indo-Malayan zoogeographic zones and it harbours characteristic avifauna of both the regions (Pfister, 2004).

Ladakh is a land of high mountains, deep valleys and vast arid plains with a network of internal drainage system that opens into numerous marshes and lakes. These marshes and lakes provide foraging and breeding ground for a variety of resident and migratory birds like endangered Black-necked Crane, Bar-headed Goose, Great Crested Grebe, *etc.* (Islam and Rahmani, 2004).

Studies on the birds of Ladakh started way back in the second half of nineteenth century when Tibetan Plateau was open to the outsiders. Many workers such as Hume (1873), Richmond (1895), Ward (1906, 1908), Ludlow (1920, 1950), Wathen (1923), Whistler (1935, 1936), Osmaston (1925, 1926, 1927 a & b, and 1930); Meinertzhagen (1927), LaPearson (1928 a & b), Sillem (1935), Koelz (1939), Biswas (1950), Vaurie (1972), Gole (1978, 1992), Williams and Delaney (1985, 1986), Delaney *et al.* (1982), Holmes *et al.* (1983), Holmes (1986), Naryan *et al.* (1986), Jamdar (1987), Mallon (1987), Akhtar (1990), Fily and Perennou (1990), Pfister (1997, 1998, 1999 and 2004), Singh and Jaypal (2001), Sangha *et al.* (2003), Sanga and Naorji (2005), Namgail (2005), *etc.* have explored the region for its avifauna.

Pfister (2004), based on the published literature as well as his own field observations, provided a checklist of 310 bird species for Ladakh, which has been utilised here but with the nomenclature after Manakadan and Pittie (2001).

Recently, the Zoological Survey of India, Solan conducted two general faunistic surveys in the eastern Ladakh : one in 2002 and the other in 2005. The survey parties sighted and recorded a total

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of 92 bird species, which are marked with an asterisk prefixed to their respective serial number (Table 1).

The present communication is, basically, an attempt to analyse the status of these 310 bird species in light of the recent literature (Tables 1-3).

STUDY AREA

Ladakh (La = Pass; dakh = Land), the secluded wonderland of passes covers an area of 97,872 sq. km. It is situated in the northeastern part of the state of Jammu & Kashmir. It is located in the Trans-Himalayan region (2700 m to 6100 m) at coordinate 32°15'–36° N and 75°15'–80°15' E. It is sandwiched between two giant mountain ranges, viz., the Himalayas and the Karakoram. It is bounded by China (Tibet) in the east, Himachal Pradesh (Lahaul & Spiti district) in the south, valley of Kashmir in the west and by Pakistan in the north.

The area is broadly divisible in to two major topographical subdivisions, viz., the eastern plateau and the western mountainous. Due to its entire hilly rugged terrain, inhospitable semi-arctic climate, heavy snowfall, ultraviolet radiation, lack of moisture, very low rainfall (9.6 cm annually) and scanty vegetation Ladakh is also known as '*High Altitude Cold Desert*'.

The River Indus is the mainstay and the life giver for Ladakh. The principal tributaries of which are Zaskar, Shyok, Nubra and Hanle. It is bestowed with some very large brackish water lakes, viz., Pangong Tso, Tso Moriri (Ramsar site number 1213), Tso Kar etc. and many small and large freshwater lakes accompanied by vast marshes in the river valleys.

Floristically, Ladakh comes under "*Alpine Desert Flora*", and its natural vegetation can be described as shrubs (*Hippophae rhamnoides*, *Caragana pygmaea*) and thorny bushes, and herbaceous plants. The natural tree elements are largely lacking, except for more humid regions of Nubra valley and other river valleys. The most common trees in area are the Poplar and Willows.

METHODOLOGY

As stated above that recently two field surveys were undertaken in the eastern Ladakh using a departmental vehicle : one for 15 days in 2002 and the other for 20 days in 2005. Approximately 1000 km distance was covered in August 2002 and 1500 km in August-September 2005. The main localities surveyed were : Pang, Tanglang La (Moor Plains), Leh, Nyoma, Loma, Chushul, Thakum, Pangong Tso, Tangtse (Parma Valley), Lo Yogma, Dungti, Tigermala (Dumchock/upper Indus), Hanle (Neelamkhul Plains), Kalang Tar Tar Valley), Mahe, Tso Moriri, Sumdo and Tsokar.

The birds were observed with the aid of a 10 × 50 prismatic field binocular and identified with the help of various field guides (Ali & Ripley 1983 a & b, Grimmett *et al.* 1999, Krys 2000, and Kumar *et al.* 2005). For convenience, the classification at order level and at some places at family level, as given by Ali and Ripley (1983b), has also been added in the Table 1.

Table 1. : Showing systematic list and status of the birds recorded from Ladakh.

Sl. No.	Common names	Scientific names	Residentail status	Abundance status	Breeding status	BirdLife Int. 2004	Wiidlife (P) Act 1972	Jhunjunwala et al. (2001)
1	2	3	4	5	6	7	8	9
	I. Order 1. Grebes	PODICIPEDIFORMES Podicipedidae						
1.	Little Grebe (5)	<i>Tachybaptus ruficollis</i> (Pallas, 1764)	SV	1			IV	
*2.	Great Crested Grebe (3)	<i>Podiceps cristatus</i> (Linnaeus, 1758)	SV	3	br+		IV	
3.	Black-necked Grebe (4)	<i>Podiceps nigricollis</i> Brehm, 1831	SV	1			IV	
	II. Order 2. Cormorants/Shags	PELECANIFORMES Phalacrocoracidae						
4.	Little Cormorant (28)	<i>Phalacrocorax niger</i> (Vieillot, 1817)	SV	1			IV	
*5.	Great Cormorant (26)	<i>Phalacrocorax carbo</i> (Linnaeus, 1758)	PM	3			IV	
	III. Order 3. Herons, Egrets & Bitterns	CICONIIFORMES Ardeidae						
6.	Little Egret (49)	<i>Egretta garzetta</i> (Linnaeus, 1766)	PM	2			IV	
7.	Grey Heron (35-36)	<i>Ardea cinerea</i> Linnaeus, 1758	PM	3			IV	
8.	Large Egret (45-46)	<i>Casmerodius albus</i> (Linnaeus, 1758)	PM	2			IV	
9.	Cattle Egret (44)	<i>Bubulcus ibis</i> (Linnaeus, 1758)	SV	1			IV	
10.	Indian Pond-Heron (42-42a)	<i>Ardeola grayii</i> (Sykes, 1832)	SV	2	br+		IV	
11.	Black-crowned Night-Heron (52)	<i>Nycticorax nycticorax</i> (Linnaeus, 1758)	SV	2			IV	
12.	Little Bittern (55)	<i>Ixobrychus minutus</i> (Linnaeus, 1766)	PM	1			IV	
13.	Great Bittern (59)	<i>Botaurus stellaris</i> (Linnaeus, 1758)	WV	1		IV		
	4. Storks	Ciconiidae						
14.	Black Stork (65)	<i>Ciconia nigra</i> (Linnaeus, 1758)	PM	3			IV	
	5. Ibises & Spoonbills	Threskiornithidae						
15.	Glossy Ibis (71)	<i>Plegadis falcinellus</i> (Linnaeus, 1766)	SV	1			IV	

Table 1. : (Cont'd.).

Sl. No.	Common names	Scientific names	Residentail status	Abundance status	Breeding status	BirdLife Int. 2004	Wiidlife (P) Act 1972	Jhunjunwala et al. (2001)
1	2	3	4	5	6	7	8	9
	IV. Order 6. Swans, Geese & Ducks	ANSERIFORMES Anatidae						
16.	Greylag Goose (81)	<i>Anser anser</i> (Linnaeus, 1758)	PM	2			IV	
*17.	Bar-headed Goose (82)	<i>Anser indicus</i> (Latham, 1790)	SV	4	br+		IV	
*18.	Brahminy Shelduck (90)	<i>Tadorna ferruginea</i> (Pallas, 1764)	SV	4	br+		IV	
*19.	Gadwall (101)	<i>Anas strepera</i> Linnaeus, 1758	PM	3	br+		IV	
*20.	Eurasian Wigeon (103)	<i>Anas penelope</i> Linnaeus, 1758	PM	3	br+		IV	
21.	Mallard (100)	<i>Anas platyrhynchos</i> Linnaeus, 1758	PM	5	br+		IV	
22.	Northern Shoveller (105)	<i>Anas clypeata</i> Linnaeus, 1758	PM	4			IV	
23.	Northern Pintail (93)	<i>Anas acuta</i> Linnaeus, 1758	PM	4			IV	
*24.	Garganey (104)	<i>Anas querquedula</i> Linnaeus, 1758	PM	4	br+		IV	
25.	Common Teal (94)	<i>Anas crecca</i> Linnaeus, 1758	PM	4			IV	
*26.	Red-crested Pochard (107)	<i>Rhodonessa rufina</i> (Pallas, 1773)	PM	3	br+		IV	
*27.	Common Pochard (108)	<i>Aythya ferina</i> (Linnaeus, 1758)	PM	3	br+		IV	
28.	Ferruginous Pochard (109)	<i>Aythya nyroca</i> (Guldenstadt, 1770)	SV	2	br+	NT	IV	
29.	Tufted Pochard (111)	<i>Aythya fuligula</i> (Linnaeus, 1758)	PM	3	br+		IV	
*30.	Common Merganser (120-121)	<i>Mergus merganser</i> Linnaeus, 1758	R	3	br+		IV	
	V. Order Old World Vultures, Kites, Harriers	FALCONIFORMES Accipitridae						
31.	Oriental Honey-Buzzard (129-130)	<i>Pernis ptilorhynchus</i> (Temminck, 1821)	PM	2			I	
32.	Black-shouldered Kite (124)	<i>Elanus caeruleus</i> (Desfontaines, 1789)	PM	1			I	
33.	Red Kite (131)	<i>Milvus milvus</i> Linnaeus, 1758	SV	1			I	
*34.	Black Kite (132-134)	<i>Milvus migrans</i> (Boddaert, 1783)	SV	3	br+		I	

Table 1. : (Cont'd.).

Sl. No.	Common names	Scientific names	Residentail status	Abundance status	Breeding status	BirdLife Int. 2004	Wiidlife (P) Act 1972	Jhunjunwala et al. (2001)
1	2	3	4	5	6	7	8	9
35.	Pallas's Fish-Eagle (174)	<i>Haliaeetus leucoryphus</i> (Pallas, 1771)	PM	2		VU	I	
*36.	Bearded Vulture (188)	<i>Gypaetus barbatus</i> (Linnaeus, 1758)	R	3	br+		I	
37.	Egyptian Vulture (186-187)	<i>Neophron percnopterus</i> (Linnaeus, 1758)	PM	2			IV	
*38.	Himalayan Griffon (181)	<i>Gyps himalayensis</i> Hume, 1869	R	3	br+		IV	BRS (05)
39.	Cinereous Vulture (179)	<i>Aegypius monachus</i> (Linnaeus, 1766)	PM	1		NT	IV	
40.	Short-toed Snake-Eagle (195)	<i>Circaetus gallicus</i> (Gmelin, 1788)	PM	2			?	
41.	Western Marsh-Harrier (193)	<i>Circus aeruginosus</i> (Linnaeus, 1758)	PM	4			I	
42.	Hen Harrier (189) <i>Circus cyaneus</i> (Linnaeus, 1766)	PM	2			I		
43.	Pallid Harrier (190)	<i>Circus macrourus</i> (S.G. Gmelin, 1770)	PM	3		NT	I	
44.	Montagu's Harrier (191)	<i>Circus pygargus</i> (Linnaeus, 1758)	PM	3			I	
45.	Eurasian Sparrowhawk (147-148)	<i>Accipiter nisus</i> (Linnaeus, 1758)	SV	3	br+		I	
46.	Northern Goshawk (136)	<i>Accipiter gentilis</i> (Linnaeus, 1758)	PM	4			I	
47.	Long-legged Buzzard (153)	<i>Buteo rufinus</i> (Cretzschmar, 1827)	SV	2			I	
48.	Upland Buzzard (154)	<i>Buteo hemilasius</i> Temminck & Schlegel, 1845	SV	2	br+		I	
49.	Greater Spotted Eagle (170)	<i>Aquila clanga</i> Pallas, 1811	PM	1		VU	I	
50.	Steppe Eagle (169)	<i>Aquila nipalensis</i> Hodgson, 1833	PM	2			I	
*51.	Golden Eagle (166)	<i>Aquila chrysaetos</i> (Linnaeus, 1758)	R	3	br+		I	
52.	Booted Eagle (164)	<i>Hieraaetus pennatus</i> (Gmelin, 1788)	PM	3			I	
	8. Osprey	Pandionidae						
53.	Osprey (203)	<i>Pandion haliaetus</i> (Linnaeus, 1758)	PM	2			I	
	9. Falcons	Falconidae						
*54.	Common Kestrel (222-224)	<i>Falco tinnunculus</i> Linnaeus, 1758	SV	4	br+		IV	
55.	Merlin (217-218)	<i>Falco columbarius</i> Linnaeus, 1758	PM	2			IV	

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
56.	Eurasian Hobby (212-213)	<i>Falco subbuteo</i> Linnaeus, 1758	SV	3	br+		IV	
57.	Saker (206-207)	<i>Falco cherrug</i> J.E. Gray, 1834	PM	3		EN	I	
58.	Peregrine Falcon (209-211)	<i>Falco peregrinus</i> Tunstall, 1771	PM	2			I	
	VI. Order 10.Pheasants, Partridges, Quails	GALIFORMES Phasianidae						
59.	Snow Partridge (227)	<i>Lerwa lerwa</i> (Hodgson, 1833)	**	?			IV	BRS (05)
60.	Tibetan Snowcock (229-231)	<i>Tetraogallus tibetanus</i> Gould, 1854	R	3	br+		I	BRS (05)
61.	Himalayan Snowcock (232)	<i>Tetraogallus himalayensis</i> G.R. Gray, 1843	R	3	br+		IV	BRS (05)
*62.	Chukor (234-236) <i>Alectoris chukar</i> (J.E	Gray, 1830) R	4	br+		IV		
*63.	Tibetan Partridge (248-249)	<i>Perdix hodgsoniae</i> (Hodgson, 1857)	R	3	br+		IV	BRS (05)
64.	Common Quail (250)	<i>Coturnix coturnix</i> (Linnaeus, 1758)	SV	2			IV	
65.	Rain Quail (252)	<i>Coturnix coromandelica</i> (Gmelin, 1789)	**	?			IV	BRS (11)
	VII. Order 11. Cranes	GRUIFORMES Gruidae						
66.	Siberian Crane (325)	<i>Grus leucogeranus</i> Pallas, 1773	**	?		CR	I	
67.	Demoiselle Crane (326)	<i>Grus virgo</i> (Linnaeus, 1758)	PM	1			IV	
*68.	Black-necked Crane (321)	<i>Grus nigricollis</i> Przevalski, 1876	SV	2	br+	VU	I	BRS (05)
	12. Rails, Crakes, Moorhens, Coots	Rallidae						
69.	Water Rail (327-328)	<i>Rallus aquaticus</i> Linnaeus, 1758	WV	2			IV	
70.	Corn Crake (334) <i>Crex crex</i> (Linnaeus,	1758) PM	1			IV		
71.	Baillon's Crake (337)	<i>Porzana pusilla</i> (Pallas, 1776)	PM	3			IV	
72.	Spotted Crake (338)	<i>Porzana porzana</i> (Linnaeus, 1766)	PM	2			IV	
73.	Common Moorhen (347-347a)	<i>Gallinula chloropus</i> (Linnaeus, 1758)	PM	3			IV	
*74.	Common Coot (350)	<i>Fulica atra</i> Linnaeus, 1758	PM	3	br+		IV	

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
	VIII. Order 13. Jacanas	CHARADRIIFORMES Jacanidae						
75.	Pheasant-tailed Jacana (358)	<i>Hydrophasianus chirurgus</i> (Scopoli, 1786)	SV	1			IV	
	14. Plovers, Dotterels, Lapwings	Charadriidae						
76.	Pacific Golden-Plover (373)	<i>Pluvialis fulva</i> (Gmelin, 1789)	PM	3			IV	
77.	Grey Plover (371) <i>Pluvialis squatarola</i>	Linnaeus, 1758) PM	2			IV		
78.	Common Ringed Plover (378)	<i>Charadrius hiaticula</i> Linnaeus, 1758	PM	1			IV	
*79.	Little Ringed Plover (379-380)	<i>Charadrius dubius</i> Scopoli, 1786	PM	3			IV	
80.	Kentish Plover (381-382)	<i>Charadrius alexandrinus</i> Linnaeus, 1758	PM	3			IV	
*81.	Lesser Sand Plover (384-384a)	<i>Charadrius mongolus</i> Pallas, 1776	SV	4	br+		IV	
82.	Greater Sand Plover (374)	<i>Charadrius leschenaultii</i> Lesson, 1826	**	?			IV	
83.	Northern Lapwing (364)	<i>Vanellus vanellus</i> (Linnaeus, 1758)	PM	3			IV	
	15. Sandpipers, Stints, Snipes, Godwits & Curlews	Scolopacidae						
84.	Solitary Snipe (404)	<i>Gallinago solitaria</i> Hodgson, 1831	PM	4			IV	BRS (05)
85.	Pintail Snipe (406)	<i>Gallinago stenura</i> (Bonaparte, 1830)	PM	2			IV	
86.	Common Snipe (409)	<i>Gallinago gallinago</i> (Linnaeus, 1758)	PM	4			IV	
87.	Black-tailed Godwit (389-390)	<i>Limosa limosa</i> (Linnaeus, 1758)	PM	2			IV	
*88.	Whimbrel (385-386)	<i>Numenius phaeopus</i> (Linnaeus, 1758)	PM	2			IV	
*89.	Eurasian Curlew (387-388)	<i>Numenius arquata</i> (Linnaeus, 1758)	PM	3			IV	
90.	Spotted Redshank (392)	<i>Tringa erythropus</i> (Pallas, 1764)	?	?			IV	
*91.	Common Redshank (393, 394)	<i>Tringa totanus</i> (Linnaeus, 1758)	SV	4	br+		IV	
92.	Marsh Sandpiper (395)	<i>Tringa stagnatilis</i> (Bechstein, 1803)	PM	2			IV	
93.	Common Greenshank (396)	<i>Tringa nebularia</i> (Gunner, 1767)	PM	3			IV	

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
94.	Green Sandpiper (397)	<i>Tringa ochropus</i> Linnaeus, 1758	PM	3	br+		IV	
95.	Wood Sandpiper (398)	<i>Tringa glareola</i> Linnaeus, 1758	PM	3			IV	
96.	Terek Sandpiper (400)	<i>Xenus cinereus</i> (Guldenstadt, 1774)	PM	2			IV	
*97.	Common Sandpiper (401)	<i>Actitis hypoleucos</i> Linnaeus, 1758	PM	4	br+		IV	
98.	Ruddy Turnstone (402)	<i>Arenaria interpres</i> (Linnaeus, 1758)	PM	2			IV	
99.	Little Stint (416)	<i>Calidris minuta</i> (Leisler, 1812)	PM	2			IV	
100.	Temminck's Stint (417)	<i>Calidris temminckii</i> (Leisler, 1812)	PM	4			IV	
101.	Dunlin (420, 421)	<i>Calidris alpina</i> (Linnaeus, 1758)	PM			IV		
102.	Curlew Sandpiper (422)	<i>Calidris ferruginea</i> (Pontoppidan, 1813)	PM	3			IV	
*103.	Ruff (426)	<i>Philomachus pugnax</i> (Linnaeus, 1758)	PM	3			IV	
	16. Ibisbill, Avocets & Stilts	Recurvirostridae						
*104.	Ibisbill (433)	<i>Ibidorhyncha struthersii</i> Vigors, 1832	R	2			IV	BRS (05)
*105.	Black-winged Stilt (430-431)	<i>Himantopus himantopus</i> (Linnaeus, 1758)	PM	3			IV	
*106.	Pied Avocet (432)	<i>Recurvirostra avosetta</i> Linnaeus, 1758	PM	2			IV	
	17. Phalaropes	Phalaropidae						
107.	Red-necked Phalarope (428)	<i>Phalaropus lobatus</i> (Linnaeus, 1758)	PM	2			NLA	
	18. Coursers & Pratincoles	Glareolidae						
108.	Collared Pratincole (442)	<i>Glareola pratincola</i> (Linnaeus, 1766)	PM	2			NLA	
	19. Skuas & Jaegers	Stercorariidae						
109.	Parasitic Jaeger (448)	<i>Stercorarius parasiticus</i> (Linnaeus, 1758)	PM	1			NLA	
	20. Gulls, Terns & Noddies	Laridae						
110.	Heuglin's Gull (450)	<i>Larus heuglini</i> Bree, 1876	**	?			IV	
111.	Pallas's Gull (453)	<i>Larus ichthyaetus</i> Pallas, 1773	PM	4			IV	
*112.	Brown-headed Gull (454)	<i>Larus brunnicephalus</i> Jerdon, 1840	SV	4	br+		IV	BRS (05)

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
113.	Black-headed Gull (455)	<i>Larus ridibundus</i> Linnaeus, 1766	PM	3			IV	
114.	Little Gull (457)	<i>Larus minutus</i> Pallas, 1776	PM	2			IV	
115.	Gull-billed Tern (460-461)	<i>Gelochelidon nilotica</i> (Gmelin, 1789)	PM	3			IV	
116.	River Tern (463)	<i>Sterna aurantia</i> J.E. Gray, 1831	SV	1			IV	
*117.	Common Tern (464-465)	<i>Sterna hirundo</i> Linnaeus, 1758	SV	4	br+		IV	
118.	Arctic Tern (466a)	<i>Sterna paradisaea</i> Pontoppidan, 1763	**	?			IV	
119.	Little Tern (475-476)	<i>Sterna albifrons</i> Pallas, 1764	PM	2			IV	
120.	Whiskered Tern (458)	<i>Chlidonias hybridus</i> (Pallas, 1811)	PM	3	br+		IV	
121.	White-winged Black Tern (459)	<i>Chlidonias leucopterus</i> (Temminck, 1815)	PM	2			IV	
	IX. Order 21. Sandgrouse	COLUMBIFORMES Pteroclididae						
122.	Tibetan Sandgrouse (485)	<i>Syrrhaptes tibetanus</i> Gould, 1850	R	3	br+		IV	BRS (05)
	22. Pigeons & Doves	Columbidae						
*123.	Blue Rock Pigeon (516-517)	<i>Columba livia</i> Gmelin, 1789	R	4	br+		?	
*124.	Hill Pigeon (515)	<i>Columba rupestris</i> Pallas, 1811	R	4	br+		IV	
*125.	Snow Pigeon (513-514)	<i>Columba leuconota</i> Vigors, 1831	R	4	br+		IV	BRS (05)
126.	Eastern Stock Pigeon (518)	<i>Columba eversmanni</i> Bonaparte, 1856	**	?		VU	IV	
127.	European Turtle-Dove (529)	<i>Streptopelia turtur</i> (Linnaeus, 1758)	PM	2			IV	
*128.	Oriental Turtle-Dove (530-533)	<i>Streptopelia orientalis</i> (Latham, 1790)	SV	4	br+		IV	
129.	Little Brown Dove (541)	<i>Streptopelia senegalensis</i> (Linnaeus, 1766)	PM	2			IV	
130.	Spotted Dove (537-540)	<i>Streptopelia chinensis</i> (Scopoli, 1786)	**	?			IV	
131.	Red Collared-Dove (535-536)	<i>Streptopelia tranquebarica</i> (Hermann, 1804)	**	?			IV	
132.	Eurasian Collared-Dove (534)	<i>Streptopelia decaocto</i> (Frisvaldszky, 1838)	PM	3			IV	

Table 1. : (Cont'd.).

Sl. No.	Common names	Scientific names	Residentail status	Abundance status	Breeding status	BirdLife Int. 2004	Wiidlife (P) Act 1972	Jhunjunwala et al. (2001)
1	2	3	4	5	6	7	8	9
	X. Order 23. Cuckoos, Malkohas & Coucals	CUCULIFORMES Cuculidae						
133.	Pied Crested Cuckoo (570-571)	<i>Clamator jacobinus</i> (Boddaert, 1783)	SV	1			IV	
*134.	Common Cuckoo (577-579)	<i>Cuculus canorus</i> Linnaeus, 1758	SV	3	br+		IV	
135.	Asian Koel (590-592)	<i>Eudynamis scolopacea</i> (Linnaeus, 1758)	PM	1			IV	
	XI. Order 24. Owls	STRIGIFORMES Strigidae						
136.	Pallid Scops-Owl (614)	<i>Otus brucei</i> (Hume, 1872)	PM	2			IV	
137.	Eurasian Eagle-Owl (625-627)	<i>Bubo bubo</i> (Linnaeus, 1758)	R	2	br+		IV	
138.	Little Owl (648-649)	<i>Athene noctua</i> (Scopoli, 1769)	PM	3	br+		IV	
139.	Long-eared Owl (663)	<i>Asio otus</i> (Linnaeus, 1758)	PM	2			IV	
140.	Short-eared Owl (664)	<i>Asio flammeus</i> (Pontoppidan, 1763)	PM	2			IV	
	XII. Order 25. Nightjars	CAPRIMULGIFORMES Caprimulgidae						
141.	European Nightjar (673)	<i>Caprimulgus europaeus</i> Linnaeus, 1758	PM	1			IV	
	XIII. Order 26. Swifts	APODIFORMES Apodidae						
142.	Alpine Swift (693-695)	<i>Tachymarptis melba</i> (Linnaeus, 1758)	PM	3			NLA	
*143.	Common Swift (696)	<i>Apus apus</i> (Linnaeus, 1758)	SV	4	br+		NLA	
144.	Pacific Swift (699-700)	<i>Apus pacificus</i> (Latham, 1801)	SV	3	br+		NLA	
145.	House Swift (702-706)	<i>Apus affinis</i> (J.E. Gray, 1830)	**	?			NLA	
	XIV. Order 27. Kingfishers	CORACIIFORMES Alcedinidae						
146.	Small Blue Kingfisher (722-724)	<i>Alcedo atthis</i> (Linnaeus, 1758)	SV	3			IV	

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
	28. Bee-eaters	Meropidae						
147.	Blue-cheeked Bee-eater (747)	<i>Merops persicus</i> Pallas, 1773	PM	2			NLA	
148.	European Bee-eater (746)	<i>Merops apiaster</i> Linnaeus, 1758	PM	2			NLA	
	29. Rollers	Coraciidae						
*149.	European Roller (754)	<i>Coracias garrulus</i> Linnaeus, 1758	PM	2			IV	
150.	Indian Roller (755-757)	<i>Coracias benghalensis</i> (Linnaeus, 1758)	**	?			IV	
	30. Hoopoes	Upupidae						
*151.	Common Hoopoe (763-766)	<i>Upupa epops</i> Linnaeus, 1758	SV	4	br+		NLA	
	XV. Order 31. Woodpeckers	PCICIFORMES Picidae						
152.	Eurasian Wryneck (796)	<i>Jynx torquilla</i> Linnaeus, 1758	SV	3	br+		IV	
153.	Large Scaly-bellied Green Woodpecker (806-807)	<i>Picus squamatus</i> Vigors, 1831	SV	2			IV	
	XVI. Order 32. Larks	PASSERIFORMES Alaudidae						
154.	Eastern Calandra-Lark (892)	<i>Melanocorypha bimaculata</i> (Ménétrières, 1832)	PM	1			IV	
155.	Long-billed Calandra-Lark (893-894)	<i>Melanocorypha maxima</i> Blyth, 1867	SV	3	br+		IV	BRS (05)
*156.	Greater Short-toed Lark (885-886)	<i>Calandrella brachydactyla</i> (Leisler, 1814)	PM	4			IV	
*157.	Hume's Short-toed Lark (887-888)	<i>Calandrella acutirostris</i> Hume, 1872	SV	4	br+		IV	BRS (05)
158.	Asian Short-toed Lark (888b)	<i>Calandrella cheleensis</i> (Swinhoe, 1871)	**	?			IV	
159.	Common Crested Lark (898-900)	<i>Galerida cristata</i> (Linnaeus, 1758)	SV	1			IV	
*160.	Eastern Skylark (904-909)	<i>Alauda gulgula</i> Franklin, 1831	SV	4	br+		IV	
*161.	Horned Lark (895-897)	<i>Eremophila alpestris</i> (Linnaeus, 1758)	AM/LM	4	br+		IV	

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
	33. Swallows & Martins	Hirundinidae						
162.	Sand Martin (911)	<i>Riparia riparia</i> (Linnaeus, 1758)	SV	3			NLA	
163.	Plain Martin (912)	<i>Riparia paludicola</i> (Vieillot, 1817)	PM	3			NLA	
*164.	Eurasian Crag-Martin (913)	<i>Hirundo rupestris</i> Scopoli, 1769	SV	4	br+		NLA	
165.	Common Swallow (916-918)	<i>Hirundo rustica</i> Linnaeus, 1758	PM	4	br+		NLA	
166.	Wire-tailed Swallow (921)	<i>Hirundo smithii</i> Leach, 1818	SV	1	br+		NLA	
167.	Red-rumped Swallow (923-928)	<i>Hirundo daurica</i> Linnaeus, 1771	PM	3			NLA	
*168.	Northern House-Martin (930)	<i>Delichon urbica</i> (Linnaeus, 1758)	SV	4	br+		NLA	
*169.	Asian House-Martin (931)	<i>Delichon dasypus</i> (Bonaparte, 1850)	?	?			NLA	
	34. Wagtails & Pipits	Motacillidae						
170.	Forest Wagtail (1874)	<i>Dendronanthus indicus</i> (Gmelin, 1789)	PM	1			IV	
*171.	White Wagtail (1885-1890)	<i>Motacilla alba</i> Linnaeus, 1758	SV	4	br+		IV	
172.	Large Pied Wagtail (1891)	<i>Motacilla maderaspatensis</i> Gmelin, 1789	SV	1			IV	
*173.	Citrine Wagtail (1881-1883)	<i>Motacilla citreola</i> Pallas, 1776	SV	4	br+		IV	
*174.	Yellow Wagtail (1875-1880)	<i>Motacilla flava</i> Linnaeus, 1758	PM	3	br+		IV	
*175.	Grey Wagtail (1884)	<i>Motacilla cinerea</i> Tunstall, 1771	SV	3	br+		IV	
176.	Eurasian Tree Pipit (1854-1855)	<i>Anthus trivialis</i> (Linnaeus, 1758)	PM	4			IV	
177.	Oriental Tree Pipit (1852-1853)	<i>Anthus hodgsoni</i> Richmond, 1907	**	?			IV	
178.	Red-throated Pipit (1864)	<i>Anthus cervinus</i> (Pallas, 1811)	PM	2			IV	
179.	Rosy Pipit (1865) <i>Anthus roseatus</i> Blyth, 1847	PM	3			IV	BRS (05)	
180.	Water Pipit (1871)	<i>Anthus spinoletta</i> (Linnaeus, 1758)	PM	2			IV	BRS (05)
	35. Shrikes	Laniidae						
181.	Red-backed Shrike (941)	<i>Lanius collurio</i> Linnaeus, 1758	PM	2			NLA	

Table 1. : (Cont'd.).

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182.	Rufous-tailed Shrike (942-943)	<i>Lanius isabellinus</i> Hemprich & Ehrenberg, 1833	PM	3			NLA	
*183.	Rufous-backed Shrike (946-948)	<i>Lanius schach</i> Linnaeus, 1758	SV	3	br+		NLA	
184.	Grey-backed Shrike (944-945)	<i>Lanius tephronotus</i> (Vigors, 1831)	SV	3	br+		NLA	BRS (05)
185.	Lesser Grey Shrike (937)	<i>Lanius minor</i> Gmelin, 1788	PM	2			NLA	
186.	Southern Grey Shrike (933-935)	<i>Lanius meridionalis</i> Temminck, 1820	PM	1			NLA	
	36. Dippers	Cinclidae						
*187.	White-throated Dipper (1772-1774)	<i>Cinclus cinclus</i> (Linnaeus, 1758)	AM/LM	3	br+		NLA	
*188.	Brown Dipper (1775-1776)	<i>Cinclus pallasii</i> Temminck, 1820	R	4	br+		NLA	
	37. Wrens	Troglodytidae						
189.	Winter Wren (1769-1771)	<i>Troglodytes troglodytes</i> (Linnaeus, 1758)	R	3	br+		IV	
	38. Accentors	Prunellidae						
*190.	Alpine Accentor (1777-1779)	<i>Prunella collaris</i> (Scopoli, 1769)	R	3			NLA	BRS (05)
191.	Altai Accentor (1780)	<i>Prunella himalayana</i> (Blyth, 1842)	WV	1			NLA	BRS (05)
*192.	Robin Accentor (1781)	<i>Prunella rubeculoides</i> (Moore, 1854)	AM/LM	4	br+		NLA	BRS (05)
193.	Rufous-breasted Accentor (1782-1783)	<i>Prunella strophiata</i> (Blyth, 1843)	R	3			NLA	BRS (07)
194.	Siberian Accentor (1787a) (EL)	<i>Prunella montanella</i> (Pallas, 1776)	**	?			NLA	
195.	Brown Accentor (1784-1785)	<i>Prunella fulvescens</i> (Severtzov, 1873)	AM/LM	4	br+		NLA	BRS (05)
196.	Black-throated Accentor (1786-1787)	<i>Prunella atrogularis</i> (Brandt, 1844)	PM	3			NLA	BRS (07)
	39. Thrushes, Warblers, Flycatchers, etc.	Muscicapidae						
	39a. Thrushes, Forktals, Wheaters, etc.	Turdinae						
197.	Rufous-tailed Rock-Thrush (1722)	<i>Monticola saxatilis</i> (Linnaeus, 1766)	PM	3			IV	
*198.	Blue Rock-Thrush (1725-1726)	<i>Monticola solitarius</i> (Linnaeus, 1758)	SV	4	br+		IV	

Table 1. : (Cont'd.).

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*199.	Blue Whistling-Thrush (1729-1730)	<i>Myiophonus caeruleus</i> (Scopoli, 1786)	SV	4	br+		IV	
200.	Tickell's Thrush (1748)	<i>Turdus unicolor</i> Tickell, 1833	PM	2			IV	BRS (08)
201.	Eurasian Blackbird (1751-1757)	<i>Turdus merula</i> Linnaeus, 1758	PM	1			IV	
202.	Dark-throated Thrush (1763-1764)	<i>Turdus ruficollis</i> Pallas, 1776	WV	4			IV	
203.	Dusky Thrush (1765)	<i>Turdus naumanni</i> Temminck, 1820	WV	2			IV	
204.	Song Thrush (N)	<i>Turdus philomelos</i> Brehm, 1831	WV	1			IV	
*205.	Himalayan Rubythroat (1647-1649)	<i>Luscinia pectoralis</i> (Gould, 1837)	?	?	br+		IV	BRS (07)
*206.	Bluethroat (1644-1646a)	<i>Luscinia svecica</i> (Linnaeus, 1758)	SV	4	br+		IV	
207.	Orange-flanked Bush-Robin (1654-1656)	<i>Tarsiger cyanurus</i> (Pallas, 1773)	PM	1			IV	
208.	Rufous-tailed Scrub-Robin (1641)	<i>Cercotrichas galactotes</i> (Temminck, 1820)	SV	1			IV	
209.	Eversmann's Redstart (1669)	<i>Phoenicurus erythronotus</i> (Eversmann, 1841)	PM	2			IV	BRS (07)
*210.	Blue-capped Redstart (1670)	<i>Phoenicurus caeruleocephalus</i> (Vigors, 1831)	SV	1	br+		IV	BRS (07)
*211.	Black Redstart (1671-1672)	<i>Phoenicurus ochruros</i> (Gmelin, 1774)	SV	4	br+		IV	
212.	Common Redstart (1673)	<i>Phoenicurus phoenicurus</i> (Linnaeus, 1758)	PM	2			?	
213.	Hodgson's Redstart (1674)	<i>Phoenicurus hodgsoni</i> (Moore, 1854)	**	?			IV	BRS (05)
*214.	Guldenstadt's Redstart (1678)	<i>Phoenicurus erythrogaster</i> (Guldenstadt, 1775)	AM/LM	4	br+		IV	BRS (05)
215.	Blue-fronted Redstart (1675)	<i>Phoenicurus frontalis</i> (Vigors, 1832)	SV	1			IV	
*216.	White-capped Redstart (1716)	<i>Chaimarrornis leucocephalus</i> (Vigors, 1831)	SV	4	br+		IV	
217.	Grandala (1683)	<i>Grandala coelicolor</i> Hodgson, 1843	?	?			IV	BRS (05)
*218.	Little Forktail (1684)	<i>Enicurus scouleri</i> Vigors, 1832	SV	2			IV	

Table 1. : (Cont'd.).

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1	2	3	4	5	6	7	8	9
*219.	Common Stonechat (1695-1698)	<i>Saxicola torquata</i> (Linnaeus, 1766)	SV	3			IV	
220.	Hume's Wheatear (1714)	<i>Oenanthe alboniger</i> (Hume, 1872)	**	?			IV	
221.	Variable Wheatear (1712)	<i>Oenanthe picata</i> (Blyth, 1847)	SV	3	br+		IV	
222.	Pied Wheatear (1715)	<i>Oenanthe pleschanka</i> (Lepechin, 1770)	SV	3	br+		?	
*223.	Desert Wheatear (1709-1710)	<i>Oenanthe deserti</i> (Temminck, 1825)	SV	4	br+		IV	
224.	Isabelline Wheatear (1706)	<i>Oenanthe isabellina</i> (Temminck, 1829)	PM	3			IV	
	39b. Laughingthrushes, etc.	Timaliinae						
225.	Streaked Laughingthrush (1312-1316)	<i>Garrulax lineatus</i> (Vigors, 1831)	**	?			IV	BRS (07)
226.	Variogated Laughingthrush (1289-1290)	<i>Garrulax variegatus</i> (Vigors, 1831)	**	?			IV	BRS (07)
	39c. Goldcrest, Warblers, etc.	Sylviinae						
227.	Goldcrest (1628-1631)	<i>Regulus regulus</i> (Linnaeus, 1758)	PM	1			IV	
228.	Long-billed Bush-Warbler (1491)	<i>Bradypterus major</i> (Brooks, 1871)	SV	3		NT	IV	BRS (07)
229.	Sedge Warbler (N)	<i>Acrocephalus schoenobaenus</i> (Linnaeus, 1758)	PM	1			IV	
230.	Black-browed Reed-Warbler (1555)	<i>Acrocephalus bistrigiceps</i> Swinhoe, 1860	PM	1			IV	
231.	Paddyfield Warbler (1557-1558)	<i>Acrocephalus agricola</i> (Jerdon, 1845)	PM	2			IV	
232.	Blyth's Reed-Warbler (1556)	<i>Acrocephalus dumetorum</i> Blyth, 1849	PM	3			IV	
233.	Eurasian Great Reed-Warbler (1553)	<i>Acrocephalus arundinaceus</i> (Linnaeus, 1758)	PM	1			?	
234.	Stoliczka's Tit-Warbler (1633-1634)	<i>Leptopoeile sophiae</i> Severtzov, 1873	R	3			IV	BRS (05)
*235.	Common Chiffchaff (1574-1575)	<i>Phylloscopus collybita</i> (Vieillot, 1817)	PM	3			IV	
*236.	Mountain Chiffchaff (1576)	<i>Phylloscopus sindianus</i> Brooks, 1879	SV	4	br+		IV	
237.	Plain Leaf-Warbler (1577)	<i>Phylloscopus neglectus</i> Hume, 1870	**	?			IV	

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238.	Dusky Warbler (1584-1586)	<i>Phylloscopus fuscatus</i> (Blyth, 1842)	PM	1			IV	
239.	Tickell's Warbler (1579)	<i>Phylloscopus affinis</i> (Tickell, 1833)	SV	4	br+		IV	BRS (05)
*240.	Olivaceous Leaf-Warbler (1581)	<i>Phylloscopus griseolus</i> Blyth, 1847	SV	4	br+		IV	BRS (05)
241.	Orange-barred Leaf-Warbler (1587-1589)	<i>Phylloscopus pulcher</i> Blyth, 1845	?	?			IV	BRS (07)
242.	Hume's Warbler (1590-1591)	<i>Phylloscopus humei</i> (Brooks, 1878)	PM	4	br+		IV	
243.	Greenish Leaf-Warbler (1602-1605)	<i>Phylloscopus trochiloides</i> (Sundevall, 1837)	SV	3			IV	
244.	Large-billed Leaf-Warbler (1601)	<i>Phylloscopus magnirostris</i> Blyth, 1843	SV	3			IV	BRS (07)
245.	Tytler's Leaf-Warbler (1578)	<i>Phylloscopus tytleri</i> Brooks, 1872	**	?		NT	IV	RRS (4)
246.	Western Crowned Warbler (1606)	<i>Phylloscopus occipitalis</i> (Blyth, 1845)	?	?			IV	BRS (07)
247.	Garden Warbler (N)	<i>Sylvia borin</i> (Boddaert, 1783)	PM	2			IV	
248.	Greater Whitethroat (1566)	<i>Sylvia communis</i> (Latham, 1787)	PM	2			IV	
249.	Common Lesser Whitethroat (1567-1568)	<i>Sylvia curruca</i> (Linnaeus, 1758)	SV	4	br+		IV	
250.	Barred Warbler (1564a)	<i>Sylvia nisoria</i> (Bechstein, 1795)	PM	2			IV	
	39d. Flycatchers	Muscicapinae						
251.	Spotted Flycatcher (1403, 1404)	<i>Muscicapa striata</i> (Pallas, 1764)	PM	3			IV	
252.	Sooty Flycatcher (1405-1406)	<i>Muscicapa sibirica</i> Gmelin, 1789	PM	1			IV	
253.	Asian Brown Flycatcher (1407)	<i>Muscicapa dauurica</i> Pallas, 1811	**	?			IV	
254.	Rusty-tailed Flycatcher (1409)	<i>Muscicapa ruficauda</i> Swainson, 1838	SV	1			IV	BRS (07)
255.	Red-throated Flycatcher (1411-1412)	<i>Ficedula parva</i> (Bechstein, 1792)	PM	2			IV	
	40. Penduline-Tits	Remizidae						
256.	Eurasian Penduline-Tit (1817)	<i>Remiz pendulinus</i> (Linnaeus, 1758)	**	?			IV	
257.	Fire-capped Tit (1815-1816)	<i>Cephalopyrus flammiceps</i> (Burton, 1836)	SV	3			IV	BRS (07)

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1	2	3	4	5	6	7	8	9
	41. Tits	Paridae						
258.	Simla Crested Tit (1804)	<i>Parus rufonuchalis</i> Blyth, 1849	WV	1			IV	BRS (07)
*259.	Great Tit (1790-1797)	<i>Parus major</i> Linnaeus, 1758	R	4	br+		IV	
260.	Green-backed Tit (1799)	<i>Parus monticolus</i> Vigors, 1831	SV	2			IV	BRS (07)
261.	Yellow-browed Tit (1813-1814)	<i>Sylviparus modestus</i> Burton, 1836	**	?			IV	BRS (07)
	42. Nuthatches, Wallcreeper	Sittidae						
*262.	Wallcreeper (1839)	<i>Tichodroma muraria</i> (Linnaeus, 1766)	SV	3	br+		NLA	BRS (05)
	43. Tree-Creepers, Creepers	Certhiidae						
*263.	Bar-tailed Tree-Creeper (1845-1848)	<i>Certhia himalayana</i> Vigors, 1832	WV	1			?	BRS (07)
	44. Buntings	Emberizidae Emberizinae						
264.	Yellowhammer (N)	<i>Emberiza citrinella</i> (Linnaeus, 1758)	WV	1			IV	
265.	Pine Bunting (2042)	<i>Emberiza leucocephalus</i> Gmelin, 1771	WV	3			IV	
*266.	Rock Bunting (2051-2052)	<i>Emberiza cia</i> Linnaeus, 1766	SV	3	br+		IV	
267.	Grey-necked Bunting (2050)	<i>Emberiza buchanani</i> Blyth, 1845	**	?			IV	
268.	Ortolan Bunting (2049)	<i>Emberiza hortulana</i> Linnaeus, 1758	PM	1			IV	
269.	Little Bunting (2056)	<i>Emberiza pusilla</i> Pallas, 1776	PM	1			IV	
270.	Chestnut Bunting (2045)	<i>Emberiza rutila</i> Pallas, 1776	**	?			IV	
271.	Red-headed Bunting (2044)	<i>Emberiza bruniceps</i> Brandt, 1841	PM	2			IV	
272.	Reed Bunting (2058-2059)	<i>Emberiza schoeniclus</i> (Linnaeus, 1758)	WV	2			IV	
	45. Finches	Fringillidae						
273.	Brambling (1980) <i>Fringilla montifringilla</i>	<i>Fringilla montifringilla</i> Linnaeus, 1758	PM	1		IV		
*274.	Fire-fronted Serin (1998)	<i>Serinus pusillus</i> (Pallas, 1811)	R	4	br+		IV	

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*275.	Eurasian Goldfinch (1987-1989)	<i>Carduelis carduelis</i> (Linnaeus, 1758)	SV	3	br+		IV	
*276.	Twite (1995-1996)	<i>Carduelis flavirostris</i> (Linnaeus, 1758)	AM/LM	4	br+		IV	
277.	Eurasian Linnet (1994)	<i>Carduelis cannabina</i> (Linnaeus, 1758)	PM	1			IV	
*278.	Hodgson's Mountain-Finch (1999-2000)	<i>Leucosticte nemoricola</i> (Hodgson, 1836)	SV	4	br+		IV	BRS (05)
*279.	Black-headed Mountain-Finch (2001-2005)	<i>Leucosticte brandti</i> Bonaparte, 1850	R	4	br+		IV	BRS (05)
280.	Crimson-winged Finch (2009)	<i>Rhodopechys sanguinea</i> (Gould, 1838)	**	?			IV	BRS (05)
281.	Mongolian Finch (2007)	<i>Bucanetes mongolicus</i> (Swinhoe, 1870)	R	3	br+		IV	
*282.	Common Rosefinch (2010-2013)	<i>Carpodacus erythrinus</i> (Pallas, 1770)	SV	4	br+		IV	
*283.	Red-mantled Rosefinch (2018)	<i>Carpodacus rhodochlamys</i> (Brandt, 1843)	SV	1			IV	BRS (05)
284.	White-browed Rosefinch (2020-2022)	<i>Carpodacus thura</i> Bonaparte & Schlegel, 1850	SV	1			IV	BRS (07)
*285.	Streaked Great Rosefinch (2028)	<i>Carpodacus rubicilloides</i> Przevalski, 1876	AM/LM	4	br+		IV	BRS (05)
*286.	Common Great Rosefinch (2027)	<i>Carpodacus rubicilla</i> (Guldenstadt, 1775)	R	3	br+		IV	BRS (05)
287.	Red-fronted Rosefinch (2029-2031)	<i>Carpodacus puniceus</i> (Blyth, 1845)	R	2			IV	BRS (05)
	46. Weaver Birds 46a. Sparrows & Snowfinches	Ploceidae Passerinae						
*288.	House Sparrow (1938-1939a)	<i>Passer domesticus</i> (Linnaeus, 1758)	R	4	br+		IV	
289.	Spanish Sparrow (1940)	<i>Passer hispaniolensis</i> (Temminck, 1820)	SV	1			IV	
290.	Tibetan Snowfinch (1952)	<i>Montifringilla adamsi</i> Adams, 1858	AM/LM	4	br+		IV	BRS (05)
*291.	Mandelli's Snowfinch (1953)	<i>Pyrgilauda taczanowskii</i> (Przevalski, 1876)	SV	2	br+		IV	BRS (05)
292.	Rufous-necked Snowfinch (1954)	<i>Pyrgilauda ruficollis</i> Blanford, 1871	?	?			IV	BRS (05)
293.	Plain-backed Snowfinch (1955)	<i>Pyrgilauda blanfordi</i> Hume, 1876	SV	2	br+		IV	BRS (05)
	47. Starlings & Mynas	Sturnidae						
294.	Brahminy Starling (994)	<i>Sturnus pagodarum</i> (Gmelin, 1789)	SV	3	br+		IV	BRS (11)

Table 1. : (Cont'd.).

Sl. No.	Common names	Scientific names	Residentail status	Abundance status	Breeding status	BirdLife Int. 2004	Wildlife (P) Act 1972	Jhunjunwala et al. (2001)
1	2	3	4	5	6	7	8	9
*295.	Rosy Starling (996)	<i>Sturnus roseus</i> (Linnaeus, 1758)	PM	3			IV	
*296.	Common Starling (997-1001)	<i>Sturnus vulgaris</i> Linnaeus, 1758	PM	3			IV	
	48. Orioles	Oriolidae						
297.	Eurasian Golden Oriole (952-953)	<i>Oriolus oriolus</i> (Linnaeus, 1758)	SV	3	br+		IV	
	49. Drongos	Dicruridae						
*298.	Black Drongo (962-964)	<i>Dicrurus macrocercus</i> Vieillot, 1817	SV	1			IV	
	50. Crows, Jays, Treepies, Magpies	Corvidae						
299.	Eurasian Jay (1020-1021)	<i>Garrulus glandarius</i> (Linnaeus, 1758)	**	?			IV	
300.	Black-headed Jay (1022)	<i>Garrulus lanceolatus</i> Vigors, 1831	**	?			IV	BRS (08)
301.	Yellow-billed Blue Magpie (1025-1026)	<i>Urocissa flavirostris</i> (Blyth, 1846)	**	?			IV	BRS (07)
*302.	Black-billed Magpie (1029-1030)	<i>Pica pica</i> (Linnaeus, 1758)	R	4	br+		IV	
303.	Hume's Groundpecker (1041)	<i>Pseudopodoces humilis</i> (Hume, 1871)	SV	3			IV	BRS (05)
*304.	Red-billed Chough (1046-1047)	<i>Pyrrhocorax pyrrhocorax</i> (Linnaeus, 1758)	R	4	br+		IV	
*305.	Yellow-billed Chough (1045)	<i>Pyrrhocorax graculus</i> (Linnaeus, 1766)	R	4	br+		IV	BRS (05)
306.	Eurasian Jackdaw (1053)	<i>Corvus monedula</i> Linnaeus, 1758	SV	3			IV	
307.	House Crow (1048-1051)	<i>Corvus splendens</i> Vieillot, 1817	SV	1	br+		V	
308.	Carrion Crow (1058, 1058a)	<i>Corvus corone</i> Linnaeus, 1758	R	4	br+		IV	
*309.	Jungle Crow (1054-1057)	<i>Corvus macrorhynchos</i> Wagler, 1827	SV	3	br+		IV	
*310.	Common Raven (1059-1060)	<i>Corvus corax</i> Linnaeus, 1758	R	4	br+		IV	

Note : * = Species observed during field surveys undertaken in 2002 and 2005; ** Species not recorded after 1960; R = Resident; AM/LM = Altitudinal or local migrant; SV = Summer visitor; WV = Winter visitor; PM = Passage migrant; ? = Information not available; br+ = after Singh & Jaypal (2001) and Sanga & Naoroji (2005); 5 = Abundant/Very common, 4 = Common, 3 = Occasional, 2 = Rare, 1 = Vagrant, ? = records need further; CR = Critical; EN = Endangered; VU = Vulnerable; NT = Near Threatened; I = Schedule I, IV = Schedule IV, V = Schedule V of the Wildlife (Protection) Act 1972 (amended up to 1993) as given BNHS (2002); NLA = Not Listed in the Act; RRS (4) = Species occur in Endemic area number 4 i.e. Western Himalayas; BRS (05) = Eurasian High Montane (Alpine and Tibetan), BRS (07) = Sino-Himalayan Temperate Forest, BRS (08) = Sino-Himalayan Subtropical Forest, BRS (11) = Indo-Malayan Tropical Dry Zone.

The residential and abundant status presented here is after Pfister (2004). The breeding status is from the recent publications by Singh and Jaypal (2001), and Snaga and Naoroji (2005). The conservation status has been worked out at two levels, viz., the threatened and the protection. For threatened level status, the data provided by BirdLife International (2004) have been used. While for protection level status, the information pertinent to Wildlife (Protection) Act, 1972 (amended up to 1993) as given in BNHS (2002), and for Restricted Range Species (RRS) and the Biome Restricted Species (BRS) the data provided by Jhunjhunwala *et al.* (2001) have been utilized.

ANALYSIS AND RESULTS

The present checklist on birds of Ladakh region incorporates a total of 310 species (25% of the Indian bird diversity 1240 species) belonging to 150 genera, 6 subfamilies, 50 families and 16 Orders. Of these, 29 species have not been seen after 1960, which are highlighted with double asterisks (**). Of the 310 species, 153 are non-passerines and the remaining 157 passerines (Table 1 & 2 and Fig. 3).

Table 2. : Avian Diversity of Ladakh.

Sl. No.	Order	Family	Subfamily	Genera	Species
I	PODICIPEDIFORMES	1	–	2	3
II	PELECANIFORMES	1	–	1	2
III	CICONIIFORMES	3	–	10	10
IV	ANSERIFORMES	1	–	6	15
V	FALCONIFORMES	3	–	16	28
VI	GALIFORMES	1	–	5	7
VII	GRUIFORMES	2	–	6	9
VIII	CHARADRIIFORMES	8	–	23	47
IX	COLUMBIFORMES	2	–	3	11
X	CUCULIFORMES	1	–	3	3
XI	STRIGIFORMES	1	–	4	5
XII	CAPRIMULGIFORMES	1	–	1	1
XIII	APODIFORMES	1	–	2	4
XIV	CORACIIFORMES	4	–	4	6
XV	PCICIFORMES	1	–	2	2
XVI	PASSERIFORMES	19	6	62	157
	TOTAL : 16	50	6	150	310
	*(21)	*(88)	*(11)	*(423)	*(1342)

Note : * = Avian diversity in Indian Subcontinent in parenthesis is after Ali and Ripley (1983 a & b).

The family-wise analysis indicates that family Muscicapidae, the most crowded and the most diverse family of the passerine birds, dominates the scene with 59 species, followed by Accipitridae (22), Scolopacidae (20), Anatidae and Fringillidae (15 each), Laridae and Corvidae (12 each), Motacillidae (11), Emberizidae (09), Alaudidae (08), and so on (Table 1).

Residential status : The various subcategories of the residential status are as follows (*vide* Table 1 and Fig. 1) :

Status	No. of species	Percentage
Resident (R)	31 species	(10.0%)
Altitudinal/local migrant (AM/LM)	08 species	(02.5%)
Winter visitor (WV)	11 species	(03.5%)
Summer visitor (SV)	89 species	(28.7%)
Passage migrant (PM)	135 species	(43.5%)
Species not recorded after 1960 (**)	29 species	(09.4%)
Information not available (?)	07 species	(02.3%)
Total	310 species	(99.9%)

Abundance status : The various subcategories of abundance are given below (*vide* Table 1 and Fig. 2) :

Very common (5)	01 species
Common (4)	65 species
Occasional (3)	89 species
Rare (2)	66 species
Vagrant (1)	53 species
Information not available (?)	36 species
Total	310 species

Breeding status (br+) : presented here for 106 species is after Singh and Jaypal (2001), and Snaga and Naoroji (2005) (Table 1).

Conservation status : The following eleven species are treated as Threatened (Six Globally Threatened : one Critical, one Endangered, four Vulnerable; and five Near Threatened) by the BirdLife International (2004). Therefore, these species are significant from the conservation point of view (Table 3). Of these, three species, *viz.*, Siberian Crane, Eastern Stock Pigeon, and Tytler's Leaf-Warbler have not been recorded after 1960 (Pfister 2004).

Of the 310 species, 24 species are listed under Schedule I of the Indian Wildlife (Protection) Act 1972 amended up to 2003, 245 under Schedule IV, and one under Schedule V, while 34

species are not listed under the Act (NLA) (Bombay Natural History Society 2002). Information on the remaining six species is not available, which is indicated with the help of question mark (?) (Bombay Natural History Society 2002) (Table 1).

Only one Species, viz., Tytler's Leaf-Warbler (*Phylloscopus tytleri*) is a Restricted Range Species and categorized as RRS (4), which means that it occurs in Endemic area number 4 i.e., Western Himalayas. A total of 63 species from the area are categorized as the Biome Restricted Species (BRS). Of these, 40 species are from the Eurasian High Montane (Alpine and Tibetan)-Biome (05); 19 from the Sino-Himalayan Temperate Forest-. Biome (07); two from the Sino-Himalayan Subtropical Forest-Biome (08); and two from the Indo-Malayan Tropical Dry Zone-Biome (11) Jhunjhunwala *et al.* (2001) (Table 1).

REMARKS

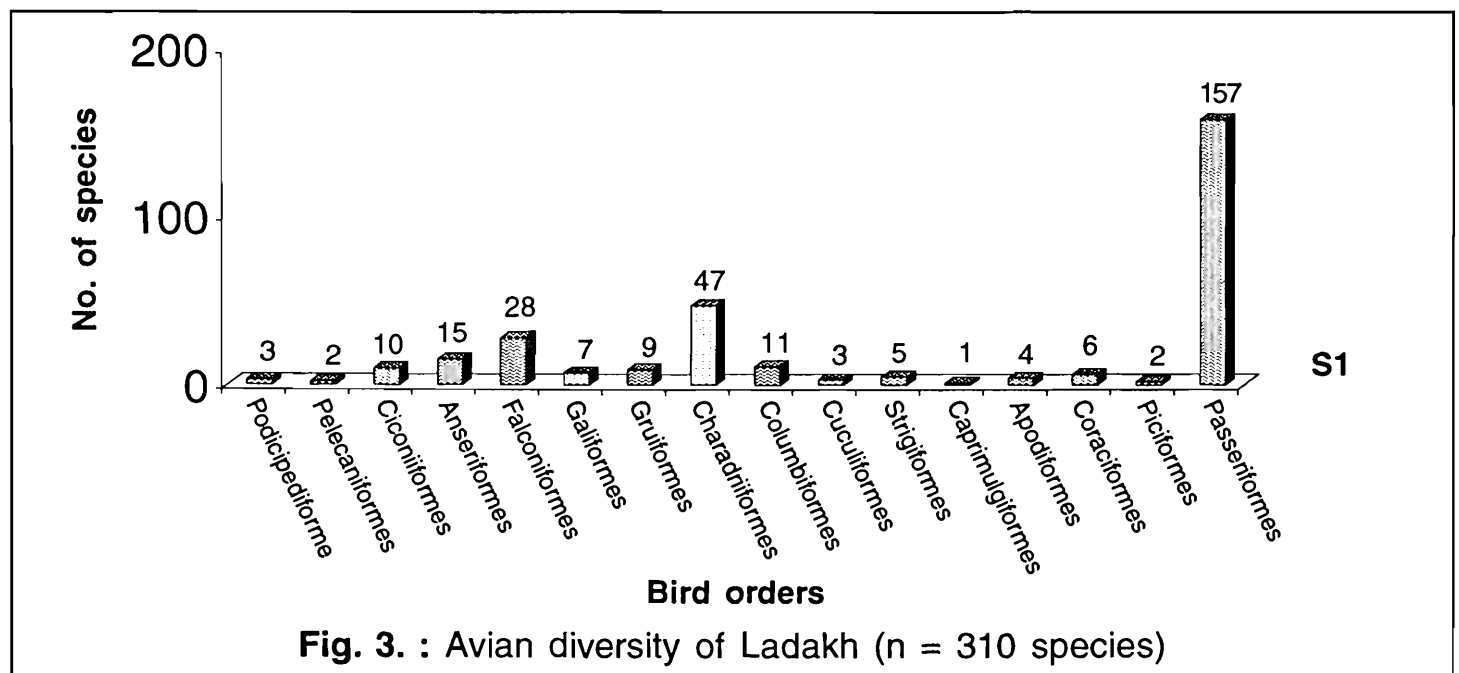
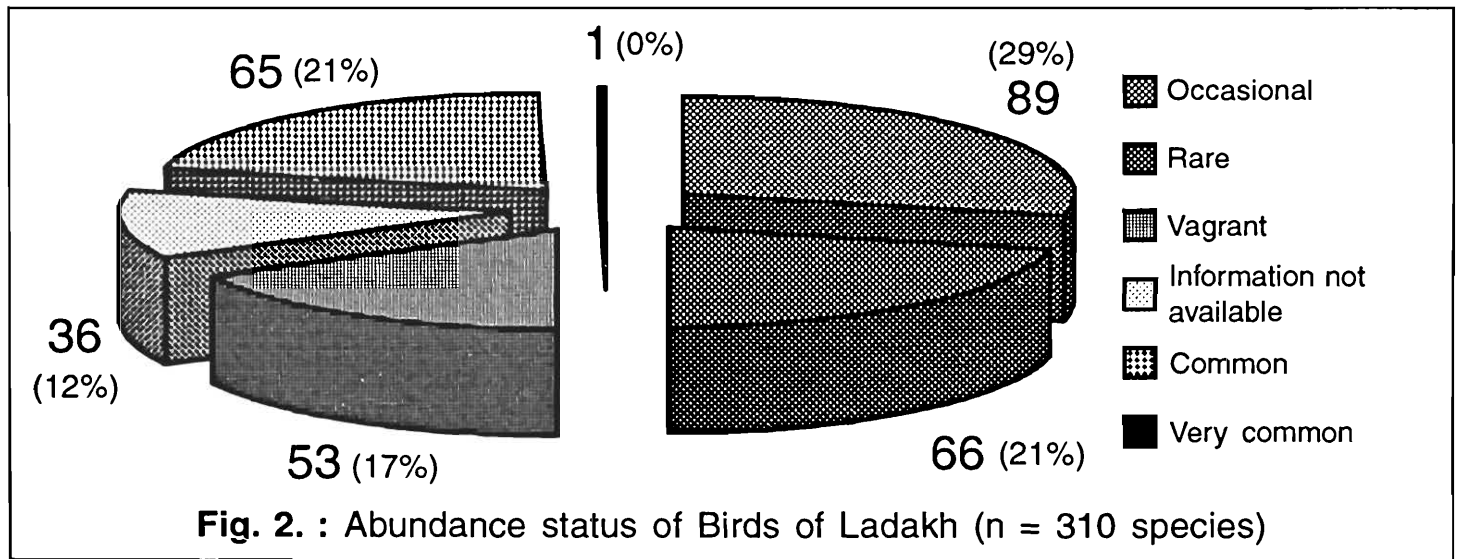
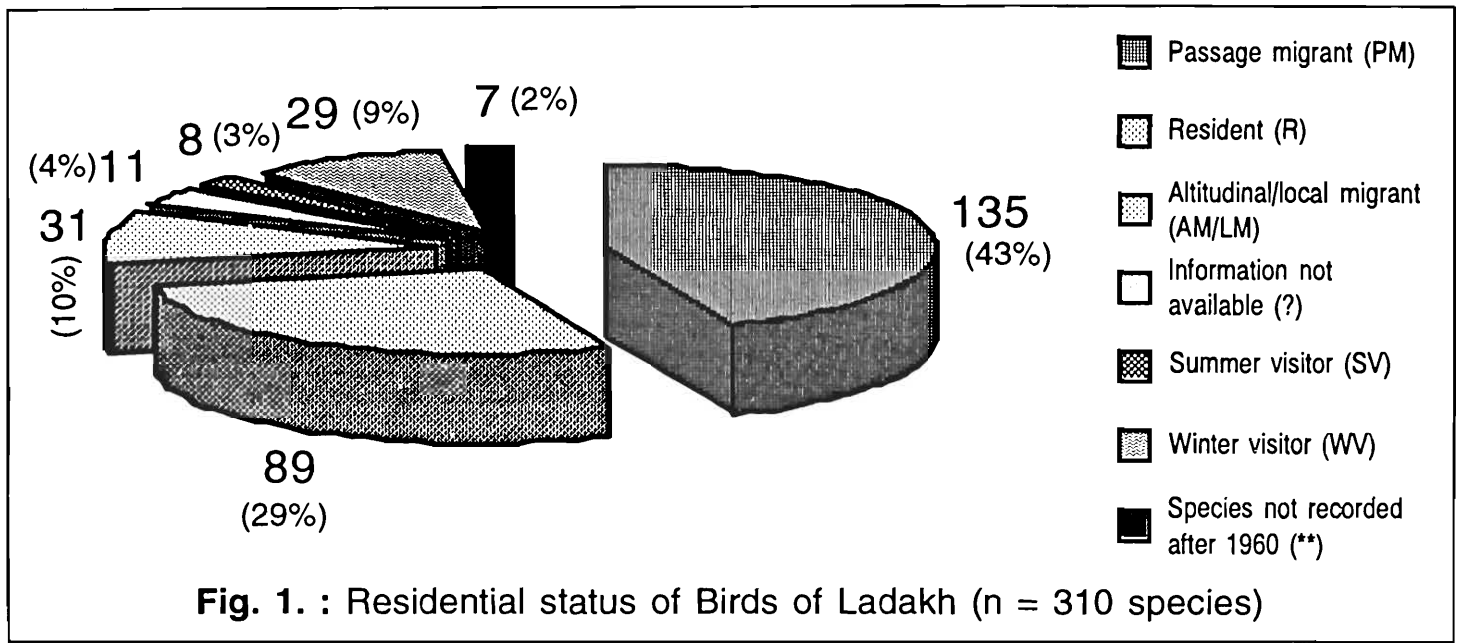
Ladakh constitutes over 80% of the Trans-Himalayan tract in India. As a National Policy on wildlife conservation, the Govt. of Jammu & Kashmir State has already established a Protected Area Network of 13 Wildlife Sanctuaries, one National Park (Hemis National Park) covering an area of approximately 14,500 km² (nearly 15% of its geographical area), and one Ramsar site no. 1213, namely, Tsomoriri (120 km²). Ladakh hosts typical bird species from the Palaearctic and the Indo-Malayan zoogeographic regions. In addition, characteristic Tibetan birds extend their home ranges well into eastern Ladakh. The dry sunny summer months, again, attract a multitude of breeders and being the last or first accessible place during spring and autumn migration, it is an important stage for aggregations of birds while crossing the lofty Himalayan range. These diverse ornithological influences make Ladakh a real melting pot of bird movement (Pfister 2004).

The region provides habitat for more than 25% of the Indian bird diversity (310 out of 1240 species) and preferred breeding ground to more than one-third bird species (106 species) of the area. The avian community of this area is dominated by the passage migrants (135 out of 310 species), followed by the summer visitors (89), residents (31), winter visitors (11), and the altitudinal or local migrants (08). Further, the occurrence of 11 Threatened species (six Globally five Near Threatened), 24 Schedule I species, one RRS and a total of 63 BRS is, perhaps, an indication towards some better management as well as developmental practices in the area by the competent authorities. There is an immediate need to develop a strategy and action plan for the conservation and management of Ladakh's natural heritage, especially the high altitude wetlands and lakes throughout Changthang and Rupshu, namely Tso Moriri, Tso Kar and Nuro Sumdo. Prompt steps need to be initiated by involving all the stakeholders-local communities, tour operators, development agencies and defence forces (Sanga and Naoroji, 2005).

Table 3. : Showing status of the threatened birds reported from Ladakh.

Sl. No.	Common name	Scientific name	Status					
			Residential	Abundance	Breeding	BirdLife International 2004	Wlidlife (P) Act 1972	Jhunhunwala et al. (2001)
1.	Siberian Crane	<i>Grus leucogeranus</i>	**	?		CR	I	
2.	Saker	<i>Falco cherrug</i>	PM	3		EN	I	
3.	Pallas's Fish-Eagle	<i>Haliaeetus leucoryphus</i>	PM	2		VU	I	
4.	Greater Spotted Eagle	<i>Aquila clanga</i>	PM	1		VU	I	
5.	Black-necked Crane	<i>Grus nigricollis</i>	SV	2	br+	VU	I	BRS (05)
6.	Eastern Stock Pigeon	<i>Columba eversmanni</i>	**	?		VU	IV	
7.	Ferruginous Pochard	<i>Aythya nyroca</i>	SV	2	br+	NT	IV	
8.	Cinereous Vulture	<i>Aegypius monachus</i>	PM	1		NT	IV	
9.	Pallid Harrier	<i>Circus macrourus</i>	PM	3		NT	I	
10.	Long-billed Bush-Warbler	<i>Bradypterus major</i>	SV	3		NT	IV	BRS (07)
11.	Tytler's Leaf-Warbler	<i>Phylloscopus tytleri</i>	**	?		NT	IV	RRS (4)

Note : For details of the abbreviations used in the Table 3 vide the footnote given for the Table 1.



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