Checklist of birds of Karnala Bird Sanctuary, District Raigad, Maharashtra Raju Kasambe^{1,2} and Asif Khan²

- 1. B-205, Trimurti Apartment, Borkar Gully, Tilak Nagar, Dombivli (East)- 421201, Distt. Thane, Maharashtra.E-mail: raju.bnhs@gmail.com.
- 2. Bombay Natural History Society, Shaheed Bhagat Singh Road, Mumbai-400001, Maharashtra. E-mail: khanasif36@gmail.com.

Introduction:

Karnala Bird Sanctuary (18°53'N and 73°7'E) situated in Panvel taluka of Raigad district and is about 60 km from Mumbai on the Mumbai-Goa Highway (NH-17), with an elevation range of approximately 20 mts to 450 mts. It was declared as a sanctuary in 1968 with an area of 4.48 sq.km. In 1975 the area was increased to 12.11 sq.km (or 1,211 hectares). The highway passes right through the Sanctuary (about 2.5 Km of highway falls within the sanctuary area) dividing it into two unequal parts, the larger part with the fort and the smaller part on the West side of the Highway. Situated in the Biogeographic province of Malabar Plains Region the Sanctuary is part of one of the spurs of the Northern Sahyadri Range in the Western Ghats. The highest point of the sanctuary is the Karnala Fort at 450 mts. The Sanctuary shows a 40% tree cover.

Habitats:

The habitat of Karnala Bird Sanctuary can be divided into five distinct habitat types:
Hill Forests: Mostly Southern Dry Mix deciduous forest are seen along the slopes of the hill, mainly composed of plant species like, Kakad (*Garunga pinnata*), Beheda (*Terminalia bellerica*) Kusum (*Schleichera oleosa*).
Open Forest: Open forest of Teak (*Tectona grandis*) found in small patches at the base of the Karnala Hill.

Riverine Fringe Forest: Seen along the nonperennial streams, locally known as *nallas*, mainly composing of Umbar (*Ficus glomerata* syn. *F. racemosa*) Jambul (*Syzygium cumini*), Karanj (*Pongamia pinnata*), Tamhan or Queens's Flowers (*Lagerstroemia speciosa*) and Mango (*Mangifera indica*).

Grassland: There are isolated patches of Grassland in the Sanctuary, locally known as

'Maal' There are three important grassland patches, namely, Garmal, Mohormal and Rithamal (see Map).

Water Bodies: Apart from the non-perennial streams, the park has check dam which collects rainwater and has water till the month of December.

Methodology:

Opportunistic visits and surveys were carried out in the sanctuary on multiple occasions during the five year span of 2010-2015. All the observations were compiled together and a checklist of birds was prepared. We also included important sighting records of birds by many peer birders from various other sources like the photographs on Oriental Bird Images (http://orientalbirdimages.org) as well as www.indianaturewatch.com websites, checklists posted online on the eBird website (as accessed on 5 August 2015). A bird checklist published by the Forest Department enlists 134 species of birds (Anon. 2008) whereas the book "National Park and Sanctuaries in Maharashtra" by Pande (2005) containing 158 species. A paper by Joshi et al. (2013) and an abstract by Joshi and Raut (2013) mentions occurrence of 144 bird species, but these publications did not provide full checklist of birds. Prasad (2003) had compiled an annotated checklist of birds of Western Maharashtra listing important sightings of birds and their references. The eBird website (www.ebird.org) has a checklist of 143 species of birds reported by many peer birders over a period last few years in Karnala (with some impossible sighting records, which were removed). The purpose of this paper is to prepare a comprehensive checklist for this very

important bird habitat in Western Ghats. Western Ghats has a great avifaunal diversity found in various habitats, harboring ca. 580 species of Birds (Pramod, *et al.* 1997, Pandey *et al.* 2003). The brochure published by Forest Department (Anon. 2008) mention that 642 species of plants were found during a survey carried out by Botanical Survey of India.

Status of birds:

The status was classified as following after distributions as explained in Ali and Ripley (1983), Grimmett *et al.* (2011) and Rasmussen and Anderton (2012), however, the last was considered as the final in making a decision in species with confusing status. The classification and nomenclature was followed as per Rasmussen and Anderton (2012) in this paper.

R- Resident species, which are found in the study area throughout the year.WM- Winter Migrant, species, which are found in the study area only during winter.

LM- Local Migrant, species, which is found in the study area irregularly, but is resident of India.

BM- Breeding Migrant, species, which visit the study area only for or during its breeding season.

PM- Passage migrant, species, which are sighted on the passage from their wintering grounds to the breeding grounds or vice versa.

V-Vagrant, species, which is not regularly sighted, nor winter migrant nor breeding migrant and hence supposed to be a stray bird sighting.

Results:

The comprehensive checklist of birds given here consists of 222 species recorded from the Sanctuary belonging to 50 families. Out of which 161 are resident, 46 winter migrant species, three are breeding migrants, seven are passage migrants and five are vagrant species. Family Rallidae, Threskiornithidae, Tytonidae, Coraciidae, Upupidae, Scolopacinae, Pittidae, Sittidae, Zosteropidae, Fringillidae, Ploceinae show the lowest representation with only one

species each. Family Accipitridae shows the highest number of representatives of 17 species in the area.

Species like, Black-backed (Oriental) Dwarf Kingfisher (*Ceyx erithaca*), Pied or Jacobin Cuckoo (*Clamator jacobinus*), Indian Pitta (*Pitta brachyuran*) migrate to the area only during their breeding season, i.e. in monsoon. The list consists of 5 species listed in the IUCN threatened list, and 8 Western Ghats endemics.

Threatened Species:

Four species of vultures, namely, White-rumped Vulture Gyps bengalensis (Critically Endangered), Indian Vulture (*Gyps indicus*) (Critically Endangered), Egyptian Vulture (Neophron percnopterus) (Endangered), Cinereous Vulture (Aegypius monachus) (Near Threatened) were reported from the Sanctuary. But none of these were sighted during at least last ten years. The last records of a Egyptian Vulture was in 2001 when a single bird was sighted (Prasad, 2003) Alexandrine Parakeet (Psittacula eupatria) (Near Threatened) which did not have its formal distribution in western Maharashtra, is now being seen here (it has already spread everywhere in Mumbai city and its suburbs). Endemic species: Following eight species endemic to Western

Ghats has been found in Karnala: Grey-fronted Green-pigeon (*Treron affinis*), Nilgiri Woodpigeon (*Columba elphinstonii*), Malabar (Blue-winged) Parakeet (*Psittacula columboides*), Malabar Grey Hornbill (*Ocyceros griseus*), White-cheeked Barbet (*Megalaima viridis*), Malabar Lark (*Galerida malabarica*), Small Sunbird (*Leptocoma minima*), Vigor's Sunbird (*Aethopyga vigorsii*).

Taxonomical Changes:

Following taxonomical changes has upgraded some sub-species to species or split to create new species after Rasmussen and Anderton (2012), resulting into addition of these species into the list of endemic species of Western Ghats: Scarlet Minivet (*Pericrocotus flammeus*)

was split into two species, Scarlet Minivet (*P. speciosus*) and Orange Minivet (*P. flammeus*) the latter being an endemic of the Western Ghats. Black Bulbul (*Hypsipetes leucocephalus*) was split into two species, Himalayan Black Bulbul (*H. leucocephalus*) and the Square-tailed Bulbul (*Hypsipetss ganeesa*), the latter being an endemic to Western Ghats. Pompadour Greenpigeon (*Treron pompadora*) was split into four species and the one endemic to Western Ghats is Grey-fronted Green-pigeon (*Treron affinis*).

Important sighting records:

Eurasian Crag Martin (*Hirundo rupestris*) was reported by Salim Ali and Humayun Abdulali (1938) on 16 February 1936.

Blue-faced Malkoha (*Phaenicophaeus* viridirostris) (then called Green-billed Malkoha) was reported by Abdulali (1953) when he saw a bird at the Karnala Fort on 10 May 1953. Sangeeta Dhanuka reported sighting of Alpine Swift (*Tachymarptis melba*) on 4 March 2001 and Malabar Grey Hornbill (*Ocyceros griseus*) was reported by Stairmand on 17 February 1970 (Stairmand 1970) and then by Sunjoy Monga in 2001.

Ashy Minivet (*Pericrocotus divaricatus*) which is a rare winter visitor to India was first reported from Karnala on 31 January1965 when six birds were seen, out of which one was shot and presented to BNHS collection (Navarro 1965 a, b). The species was sighted here almost after a gap of 46 years on 26 February 2012 by avid birders Ritesh Bagul and Alok Bhave. It has been sighted by many bird watchers since then. Navarro (1965b) reported the sighting of Eurasian Blackbird (*Turdus merula nigropileus*). It was reported again by Monga (2001) and then Joshi *et al.* (2013).

Forest Wagtail (*Dendronanthus indicus*) and Jerdon's Nightjar *Caprimulgus atripennis* were reported recently by Joshi *et al.* (2013). Black-naped Oriole (*Oriolus chinensis*) which is a rare winter visitor, was reported here on 25

November 1985 when 4 females or immature birds were seen (Banerjee 1987). Sunjoy Monga reported sighting of three Malabar Parakeets (*Psittacula columboides*) on 22 August 2001 (Prasad 2003). A Slaty-legged Crake (*Rallina eurizonoides*) was sighted by Asif Khan on 4 May 2014 in forest undergrowth. A Rufous-bellied Eagle (*Lophotriorchis kienerii*) was sighted by avid birder Adesh

A Rufous-bellied Eagle (*Lophotriorchis kienerii*) was sighted by avid birder Adesh Shivkar and Santosh Gulavani here on 6 July 2014. This is the first record of the species around Mumbai, which is mostly found in Western Ghats south of Goa. We feel that Sri Lanka Frogmouth (*Batrachostomus moniliger*) and few other species of nocturnal birds (like owls, nightjars *etc.*) also could be found if surveys are

conducted in the night. This is looking into the

fact that the frogmouth has been found northwards in Sanjay Gandhi National Park (Kasambe, 2012) as well as in the nearby Phansad Wildlife Sanctuary (Rahmani *et al.* 2013) in similar habitats. **Other Fauna:**The sanctuary is also home to the Four-horned Antelope (*Tetracerus quadricornis*), Wild Boar (*Sus scrofa*), Jungle Cat (*Felis chaus*), Indian Fox (*Vulpes bengalensis*), Indian Muntjac or Barking Deer (*Muntiacus muntjak*), Black-naped Hare (*Lepus nigricollis*), Common Langur (*Semnopithecus entellus*),

Common Grey Mongoose (*Herpestes edwardsii*) and the endangered Leopard (*Panthera pardus*) as well as Common Indian Monitor (*Varanus bengalensis*) (Anon 2008).

Threats and Conservation Measures:

Currently, the NH-17 has a two lane highway passing through the bird sanctuary and it falls on the 84-km Panvel-Indapur stretch of the Mumbai-Goa Highway. There was a proposal for widening of this highway into a four lane road. This proposal was already rejected twice. However, the newly formed National Board for

inside the sanctuary area.

Wildlife (NBWL), headed by Prakash Javadekar, the Minister of Environment, Forests and Climate Change (MOEF&CC) cleared the project proposal in June 2015. It must be mentioned here that unlike in the past, the NBWL now has only a few non-governmental members.

(http://www.dnaindia.com/india/report-green-nod-to-nh-widening-cutting-through-karnala-bird-haven-2092168 as accessed on 25 June 2015)

After the news of approval of road widening, news came that the Sanctuary area will be expanded from the present 1,211 hectares to 1,896 hectares. Mr. Devendra Fadnavis, Chief Minister of Maharashtra approved the recommendation of the advisory board of the State Wildlife Advisory Board to expand the Karnala Bird Sanctuary by declaring an adjoining 685 hectares of reserved forest as a sanctuary

(http://timesofindia.indiatimes.com/city/mumbai/Karnala-bird-sanctuary-will-get-another-685-hectares/articleshow/47793691.cms as accessed on 25 June 2015).

The existing two-lanes of the NH-17 already pose threats to the conservation of this sanctuary in the form of pollution, littering of solid waste and illegal resorts. There is tremendous tourist pressure on this small sanctuary, as it is considered as a tourist destination for Mumbai. The sanctuary attracts hundreds of picnickers, especially on weekends, due to its proximity to the metropolitan Mumbai city. Unfortunately, visitors do not respect tranquility of the sanctuary. Many ruthless picnickers only add sound, plastic and other garbage to the place creating major disturbance (http://www.sanctuaryasia.com as accessed on 25 June 2015).

The invasive plant species *Lantana canara* locally called *Ranmodi* or *Tantani* is spreading fast and overtaking some of the beautiful forest patches. It needs to be controlled (Anon. 2008). The villagers from nearby villages depend on the forest for their requirement of ful wood, thus exerting heavy pressure on the habitat. The Forest Department has a team of devoted staff which controls the visitors and ensure that visitors do not take plastic waste with them

There are few troops of Bonnet Macaque (*Macaca radiata*) in the sanctuary which are fed by the people passing by the National Highway. This has resulted into the macaques staying along the road and even attacking the tourists.

The Forest Department has taken an initiative and started canteen inside the sanctuary, which are managed by the local communities. This will benefit in the long run as the community involvement in the conservation is increasing.

Acknowledgements:

Thanks to all the bird watchers who contribute their observations on various social networking sites and website. Thanks to websites, especially, Oriental Bird Images (http://orientalbirdimages.org), India Nature Watch (www.indianaturewatch.com) and eBird website (www.ebird.org) as well as various facebook and e-groups (especially indianbirds and birdsofbombay@yahoogroup.com) groups from where information was taken.

References:

Abdulali, H. (1953): The distribution of the Green-billed Malkoha (*Rhopodytes viridirostris* Jerdon). *J. Bombay Nat. Hist. Soc.* 51(3): 737-738.

Ali, S. and Abdulali, H. (1938): The birds of Bombay and Salsette. Part IV. *J. Bombay Nat. Hist. Soc.* 40(2): 148–173.

Ali, S. and Ripley, S.D. (1983): Handbook of the

birds of India and Pakistan. Compact Edition. New Delhi: Oxford University Press.

Anon. (2008): Karnala Bird Sanctuary: Information Brochure with checklist of birds and plants found in the Sanctuary. Published by the Assistant Conservator of Forests, Wildlife Wing, Forest Department, Thane Maharashtra. Pp.16.

Banerjee, D.P. (1987): Sighting of Black-napped Oriole. *J. Bombay Nat. Hist. Soc.* 84(1): 209.

Joshi, J., Raut, N.B., Khanolkar, C. and Kumar, P. (2013): Avifaunal Distribution within Different Habitats of Karnala Bird Sanctuary, Maharashtra. *National Conference on Biodiversity: Status and Challenges in Conservation*- 'FAVEO'. Pp.34–38.

Joshi, P. and Raut, N.B. (2013): Avifaunal Diversity and Distribution in Karnala Bird Sanctuary, Panvel, Maharashtra. Conference: International Conference on Indian Ornithology. Sálim Ali Centre for Ornithology and Natural History (SACON), Coimbatore.

Kasambe, R. (2012): Range extension of Sri Lankan Frogmouth (*Batrachostomus moniliger*) upto Mumbai. *Newsletter for Birdwatchers*. 52(3): 37.

Monga, S. (2001): Checklist of Birds of the Mumbai Region (with notes on status). Files of birdsof bombay@yahoogroup.com.

Navarro, A. (1965a): The Ashy Minivet [*Pericrocotus divaricatus* (Raffles)]: an addition to the Indian avifauna. *J. Bombay Nat. Hist. Soc.* 62(2): 303.

Navarro, A. (1965b): The Ashy Minivet *Pericrocotus cinereus* Lafresn: an addition to the Indian Avifauna. *Newsletter for Birdwatchers* 5(4): 1-3.

Pande, P. (2005): National Parks and Sanctuaries in Maharashtra. Reference Guide: Individual Profile and Management Status. Bombay Natural History Society, Bombay. Pande, S., Tambe, S., Francis, C. and Sant, N. (2004): *Birds of Western Ghats, Kokan & Malabar (Including Birds of Goa)*. Oxford University Press. Pp.390.

Pramod, P.R., Daniels, J.R., Joshi, N.V. and Gadgil, M. (1997): Evaluating the bird communities of the Western Ghats to plan for biodiversity friendly development. *Current Science*, 73(2): 156–162.

Prasad, A. (2003): Annotated checklist of the birds of Western Maharashtra. *Buceros*. ENVIS Newsletter: Avian Ecology & Inland Wetlands. 8(2&3):1–174.

Rahmani, A.R., Islam, Z.U., Kasambe, R. and Wadatkar, J. (2013): *Important Bird Areas in Maharashtra: Priority Sites for their Conservation*. Indian Bird Conservation Network, Bombay Natural History Society, Wildlife & Environment Conservation Society, Royal Society for the Protection of Birds and BirdLife International. Oxford University Press. Pp. viii+174.

Rasmussen, P.C. and Anderton, J.C. (2012): *Birds of South Asia: The Ripley Guide Vol. 1: Field Guide. Vol. 2: Attributes and Status.* Smithsonian Institution and Lynx Edicions, Washington, D.C. & Barcelona.

Stairmand, D.A. (1970): Field excursion to Karnala and World Wildlife Fund. *Newsletter for Birdwatchers*. 10: (2) 8–10.

Recommended citation:

Kasambe, R. and Khan, A. (2015) Checklist of birds of Karnala Bird Sanctuary, District Raigad, Maharashtra. *Newsletter for Birdwatchers*. 55(2): 15-22 (Published January 2016).

	Table - Checklist of bir	rds of Karnala Bird Sanctuary		23	Shikra	Accipiter badius (part)	R
Sr. No.	Group/ Name of the Bird	Family/ Scientific Name	Status	24	Eurasian Sparrowhawk	Accipiter nisus	V
	Family	Ardeidae		25	White-eyed Buzzard	Butastur teesa	R
1	Little Egret	Egretta garzetta	R	26	Long-legged Buzzard	Buteo rufinus	WM
2	Eastern Cattle Egret	Bubulcus coromandus	R	27	Booted Eagle	Hieraaetus pinnatus	WM
3	Great Egret	Ardea alba	R		Family	Falconidae	
4	Indian Pond-heron	Ardeola grayii	R	28	Common Kestrel	Falco tinnunculus	R
5	Striated Heron	Butorides striata	R	29	Peregrine Falcon (Shaheen)	Falco peregrinus perigrenator	
6	Black-crowned Night-heron	Nycticorax nycticorax	R	30	Peregrine Falcon	Falco peregrinus calidus	R
7	Chestnut Bittern	Ixobrychus cinnamomeus	R			Falco subbuteo	WM
	Family	Threskiornithidae		31	Eurasian Hobby		V
8	Red-naped Ibis	Pseudibis papillosa	D		Family	Phasianidae	
	Family	Accipitridae	R	32	Painted Francolin	Francolinus pictus	R
9	Oriental Honey-buzzard	Pernis ptilorhynchus		33	Rain Quail	Coturnix coromandelica	WM
10	Black-winged Kite	Elanus caeruleus	R	34	Jungle Bush-quail	Perdicula asiatica	R
	9		R	35	Red Spurfowl	Galloperdix spadicea	R
11	Black Kite	Milvus migrans migrans/govinda	R	36	Grey Junglefowl	Gallus sonneratii	R
12	Black-eared Kite	Milvus [migrans] lineatus	WM	37	Indian Peafowl	Pavo cristatus	R
13	Egyptian Vulture	Neophron percnopterus	R		Family	Rallidae	
14	White-rumped Vulture	Gyps bengalensis	R	38	Slaty-legged Crake Family	Rallina eurizonoides Charadriidae	V
15	Indian Vulture	Gyps indicus	R	39	Red-wattled Lapwing	Vanellus indicus	
16	Cinereous Vulture	Aegypius monachus	R	40	Little Ringed Plover	Charadrius dubius	R
17	Short-toed Eagle	Circaetus gallicus	R		Family	Scolopacinae Scolopacinae	R
18	Crested Serpent-eagle	Spilornis cheela	R	41	Common Sandpiper	Actitis hypoleucos	
19	Crested Hawk Eagle	Nisaetus cirrhatus	R	+1	Family	Columbidae	WM
20	Rufous-bellied Eagle	Lophotriorchis kienerii	V	42	Rock Pigeon	Columba livia	
21	Tawny Eagle	Aquila rapax	R		•		R
22	Western Marsh Harrier	Circus aeruginosus		43	Spotted Dove	Streptopelia chinensis	R
			WM	44	Red Collared Dove	Streptopelia tranquebarica	R

45	Laughing Dove	Streptopelia senegalensis	D 69	Indian Eagle-owl	Bubo bengalensis	
	<u> </u>		R	-	~	R
46	Emerald Dove	Chalcophaps indica	R 70	Jungle Owlet	Glaucidium radiatum	R
47	Grey-fronted Green-pigeon	Treron affinis	R 71	Spotted Owlet	Athene brama	R
48	Yellow-footed Green-pigeon	Treron phoenicopterus	R	Family	Caprimulgidae	
49	Green Imperial-pigeon	Ducula aenea	R 72	Indian Jungle Nightjar	Caprimulgus indicus	R
50	Nilgiri Woodpigeon	Columba elphinstonii	R 73	Indian Little Nightjar	Caprimulgus asiaticus	R
	Family	Psittacidae	74	Jerdon's Nightjar	Caprimulgus atripennis	R
51	Vernal Hanging-parrot	Loriculus vernalis	R	Family	Apodidae	
52	Rose-ringed Parakeet	Psittacula krameri	R 75	Asian Palm-swift	Cypsiurus balasiensis	R
53	Alexandrine Parakeet	Psittacula eupatria	R 76	Little Swift	Apus affinis	R
54	Plum-headed Parakeet	Psittacula cyanocephala	R 77	Crested Treeswift	Hemiprocne coronate	R
55	Malabar Parakeet	Psittacula columboides	R 78	Alpine Swift	Tachymarptis melba	R
	Family	Cuculidae		Family	Alcedinidae	
56	Jacobin or Pied Cuckoo	Clamator jacobinus	BM 79	Common Kingfisher	Alcedo atthis	R
57	Chestnut-winged Cuckoo	Clamator coromandus	WM 80	Black-backed (Oriental) Dwarf Kingfisher	Ceyx erithaca	BM
58	Common Hawk-cuckoo	Hierococcyx varius	R 81	White-throated Kingfisher	Halcyon smyrnensis	
59	Banded Bay Cuckoo	Cacomantis sonneratii	R 82	Stork-billed Kingfisher	Pelargopsis capemsis	R V
60	Grey-bellied Cuckoo	Cacomantis passerines	R	Family	Meropidae	V
61	Indian Cuckoo	Cuculus micropterus	PM 83	Green Bee-eater	Merops orientalis	D.
62	Common Cuckoo	Cuculus canorus	PM 84	Blue-tailed Bee-eater	Merops philippinus	R
63	Small Cuckoo	Cuculus poliocephalus	PM	Family	Coraciidae	WM
64	Asian Koel	Eudynamys scolopaceus	R 85	Indian Roller	Coracias benghalensis	
65	Blue-faced Malkoha	Phaenicophaeus viridirostris	R	Family	Upupidae	R
66	'Southern' Coucal	Centropus [sinensis] parroti	R 86	Common Hoopoe	Upupa epops	T.
	Family	Tytonidae	87	Malabar Trogon	Harpactes fasciatus	R
67	Common Barn-owl	Tyto alba	R	Family	Bucerotidae	R
	Family	Strigidae	88	Malabar Grey Hornbill	Ocyceros griseus	R

	Family	Capitonidae		112	White Wagtail	Motacilla alba dukhunensis	WM
90	Brown-headed Barbet	Megalaima zeylanica	R	113	Citrine Wagtail	Motacilla citreola	WM
91	Coppersmith Barbet	Xantholaema haemacephala	R	114	Grey Wagtail	Motacilla cinerea	WM
92	White-cheeked Barbet	Megalaima viridis	R	115	Forest Wagtail	Dendronanthus indicus	PM
	Family	Picidae		116	White-browed Wagtail	Motacilla maderaspatensis	R
93	Eurasian Wryneck	Jynx torquilla	WM	117	Tree Pipit	Anthus t. trivialis	WM
94	Heart-spotted Woodpecker	Hemicircus canente	R	118	Paddyfield Pipit	Anthus rufulus	R
95	Indian Pygmy Woodpecker	Dendrocopos nanus	R		Family	Campephagidae	IX.
96	Yellow-fronted Pied Woodpecker	Dendrocopos mahrattensis	R	119	Common Woodshrike	Tephrodornis pondicerianus	
97	Rufous Woodpecker	Micropternus brachyurus	R	120	Large Cuckooshrike	Coracina macei	R
98	White-bellied Woodpecker	Dryocopus javensis	R	121	Black-headed Cuckooshrike	Lalage melanoptera	R
99	Black-rumped Flameback	Dinopium benghalense	R	122	Ashy Minivet	Pericrocotus divaricatus	R
100	Common Flameback	Dinopium javanensis	R	123	Small Minivet		WM
101	White-naped Woodpecker	Crysocolaptes festivus	R			Pericrocotus cinnamomeus	R
	Family	Pittidae	IX.	124	Long-tailed Minivet	Pericrocotus ethologus	WM
102	Indian Pitta	Pitta brachyura	BM	125	Orange Minivet	Pericrocotus flammeus	R
	Family	Alaudidae	DIVI		Family	Pycnonotidae	
103	Oriental Skylark	Alauda gulgula	D	126	Red-vented Bulbul	Pycnonotus cafer	R
104	Malabar Lark	Galerida malabarica	R	127	Red-whiskered Bulbul	Pycnonotus jocosus	R
105	Ashy-crowned Finch-lark	Eremopterix griseus	R	128	White-browed Bulbul	Pycnonotus luteolus	R
106	Rufous-tailed Lark	Ammomanes phoenicura	R	129	White-eared Bulbul	Pycnonotus leucotis	R
100	Family	Hirundinidae	R	130	Square-tailed Bulbul	Hypsipetus ganeesa	R
107	Eurasian Crag-martin	Ptyonoprogne rupestris			Family	Irenidae	
107	Dusky Crag-martin	Ptyonoprogne concolor	WM	131	Common Iora	Aegithina tiphia	
	Barn Swallow	Hirundo rustica	R	132	Gold-fronted Leafbird	Chloropsis aurifrons	R
109	Wire-tailed Swallow	Hirundo rustica Hirundo smithii	WM	133	Jerdon's Leafbird	Chloropsis jerdoni	R
110			R	133	Family	Laniidae	R
111	Red-rumped Swallow	Cecropis daurica	R	10.1	,		
	Family	Motacillidae		134	Brown Shrike	Lanius c. cristatus	WM

135	Bay-backed Shrike	Lanius vittatus	R 159	Plain Prinia	Prinia inornata	R
136	'Rufous-backed' Long-tailed	Lanius schach erythronotus	160	Jungle Prinia	Prinia sylvatica	R
	Shrike	group	R 161	Blyth's Reed-warbler	Acrocephalus dumetorum	WM
	Family	Turdinae	162	,	Orthotomus sutorius	
137	Blue-capped Rock-thrush	Monticola cinclorhynchus	WM 163	Siberian Chiffchaff	Phylloscopus collybita tristis	R
138	Blue Rock-thrush	Monticola solitarius	WM 164		Phylloscopus affinis	WM
139	Malabar Whistling-thrush	Myiophonus horsfieldii	R 165		Phylloscopus griseolus	WM
140	Orange-headed Thrush	Zoothera (Geokichla) citrina	R 166		Phylloscopus humei	WM
141	Indian Blackbird	Turdus simillimus			Phylloscopus trochiloides	WM
142	Indian Blue Robin	Luscinia brunnea	1.		Phylloscopus occipitalis	WM
143	Bluethroat	Luscinia svecica	1111			WM
144	Oriental Magpie-robin	Copsychus saularis	WM 169	6 . 6	Phylloscopus nitidus	WM
			R	Family	Sittidae	
145	White-rumped Shama	Copsychus malabaricus	R 170	Indian Nuthatch	Sitta castanea	R
146	Indian Black Robin	Copsychus fulicatus	R	Family	Paridae	
147	Black Redstart	Phoenicurus ochruros	WM 171	Cinereous Tit	Parus cinereus	R
148	Siberian Stonechat	Saxicola maurus	WM 172	Indian Yellow Tit	Parus aplonotus	R
149	Pied Bushchat	Saxicola caprata	R	Family	Muscicapinae	K
	Family	Timaliinae	173	Asian Brown Flycatcher	Muscicapa latirostris	WM
150	Puff-throated Babbler	Pellorneum ruficeps	R 174	Red-throated Flycatcher	Ficedula albicilla	WM
151	Indian Scimitar-babbler	Pomatorhinus horsfieldii	R 175	Red-breasted Flycatcher	Ficedula parva	WM
152	Tawny-bellied Babbler	Dumetia hyperythra	R 176	Ultramarine Flycatcher	Ficedula superciliaris	WM
153	Yellow-eyed Babbler	Chrysomma sinense	R 177	Verditer Flycatcher	Eumyias thalassinus	WM
154	Jungle Babbler	Turdoides striata	R 178	Blue-throated Flycatcher	Cyornis rubeculoides	WM
155	Brown-cheeked Fulvetta	Alcippe poioicephala	R 179	White-bellied Blue Flycatcher	Cyornis pallipes	R
	Family	Sylviinae	180	Tickell's Blue Flycatcher	Cyornis tickelliae	R
156	Lesser Whitethroat	Sylvia curruca	WM 181	Grey-headed Canary-flycatcher	Culicicapa ceylonensis	WM
	Grey-breasted Prinia	Prinia hodgsonii		I I DI DI	* *	VV IVI
157	Grey-breasted Prima	1 Tittia noagsonii	R 182	Indian Blue Robin	Luscinia brunnea	PM

100				202	T ** 0	T	
183	Asian Paradise Flycatcher	Terpsiphone paradisi	R	202	House Sparrow	Passer domesticus	R
184	Black-naped Blue Monarch	Hypothymis azurea	R	203	Chestnut-shouldered Petronia	Gymnoris xanthocollis	R
	Family	Rhipidurinae			Family	Ploceinae	
185	White-browed Fantail	Rhipidura aureola	R	204	'Indian' Baya Weaver	Ploceus p. philippinus	R
186	White-spotted Fantail	Rhipidura albogularis	R		Family	Sturnidae	
	Family	Dicaeidae		205	Grey-headed (Chestnut-tailed)	Sturnia malabarica	DM
187	Thick-billed Flowerpecker	Pachyglossa agile	R	206	Starling Brahminy Starling	Sturnia pagodarum	PM
188	Pale-billed Flowerpecker	Dicaeum erythrorhynchos	R	207	Asian Pied Starling	Gracupica contra	R R
	Family	Nectariniidae		208	Rosy Starling	Pastor roseus	WM
189	Purple-rumped Sunbird	Leptocoma zeylonica	R	209	Common Myna	Acridotheres tristis	R
190	Small Sunbird	Leptocoma minima	R	210	Jungle Myna	Acridotheres fuscus	
191	Purple Sunbird	Cinnyris asiaticus	R	211	Bank Myna	Acridotheres ginginianus	R R
192	Loten's Sunbird	Cinnyris lotenius	R		Family	Oriolidae	K
193	Vigor's Sunbird	Aethopyga vigorsii	R	212	Indian Golden Oriole	Oriolus kundoo	R
	Family	Zosteropidae		213	Black-naped Oriole	Oriolus chinensis	
194	Oriental White-eye	Zosterops palpebrosus	R	214	Black-hooded Oriole	Oriolus xanthornus	WM
	Family	Emberizinae			Family	Dicruridae	R
195	Crested Bunting	Emberiza lathami	R	215	Black Drongo	Edolius macrocercus	-
196	Black-headed Bunting	Emberiza melanocephala	WM	216	Ashy Drongo	Edolius leucophaeus	R
197	Red-headed Bunting	Emberiza bruniceps	WM	217	White-bellied Drongo	Edolius caerulescens	WM
	Family	Fringillidae		218	Bronzed Drongo	Chaptia aeneus	R
198	Common Rosefinch	Carpodacus erythrinus		219	Greater Racket-tailed Drongo	Dicrurus paradiseus	R
	E2-	E-4-21323-	WM		Family	Corvidae	R
	Family	Estrildidae		220	J.		
199	Indian Silverbill	Euodice malabarica	R	220	Rufous Treepie	Dendrocitta vagabunda	R
200	White-rumped Munia	Lonchura striata	R	221	House Crow	Corvus splendens	R
201	Scaly-breasted Munia	Lonchura punctulata	R	222	Large-billed Crow	Corvus [macrorhynchos] culminatus	R
	Family	Passerinae				Cumututus	IX