Indian Birds

Vol. 1 No. 4 July-August 2005

READY-RECKONER

Bird conservation organisations

BOMBAY NATURAL HISTORY SOCIETY: Honorary Secretary, Hornbill House, Shaheed Bhagat Singh Marg, Mumbai 400023, Maharashtra. Website: www.bnhs.org. Email: bnhs@bom3.vsnl.net.in. **Publish:** *Journal of the Bombay Natural History Society*; *Hornbill*. **Contact above for:** INDIAN BIRD CONSERVATION NETWORK: **Publish:** *Mistnet*. ENVIS CENTRE: **Publish:** *Buceros.*

SALIM ALI CENTRE FOR ORNITHOLOGY AND NATURAL HISTORY: Director, Anaikatty P.O., Coimbatore 641108, India. Website: www.saconindia.org. Email: salimali@vsnl.com

BIRDWATCHERS' SOCIETY OF ANDHRA PRADESH: Honorary Secretary, P.O. Box 45, Banjara Hills, Hyderabad 500034, India. Website: www.bsaponline.org. Email: aasheesh@vsnl.in. **Publish:** *Mayura*; *Pitta.*

MADRAS NATURALISTS' SOCIETY: Honorary Secretary, No. 8, Janaki Avenue, Abhirampuram, Chennai 600018, India. Website: www.blackbuck.org. Email: info@blackbuck.org. **Publish:** *Blackbuck.*

INSTITUTE OF BIRD STUDIES & NATURAL HISTORY: Director, Rishi Valley, Chittoor District, India 517352. Email: birds@rishivalley.org. **Conduct:** Home Study Course in Ornithology.

ORIENTAL BIRD CLUB: P.O. Box 324, Bedford, MK42 0WG, U.K. Website: www.orientalbirdclub.org. **Publish:** *Forktail*; *OBC Bulletin.*

WILDLIFE INSTITUTE OF INDIA: Post Bag # 18, Chandrabani, Dehradun 248001, India. Website: www.wii.gov.in.

WILDLIFE TRUST OF INDIA: Wildlife Trust of India, A-220, New Friends Colony, New Delhi 110065, India. Website: www.wti.org.in.

WORLD WIDE FUND FOR NATURE-INDIA: 172-B, Lodi Estate, New Delhi 110003, India. Website: www.wwfindia.org.

Web-based email groups

To join, send email to:

BANGALORE: bngbirds-subscribe@yahoogroups.com

BOMBAY: birdsofbombay-subscribe@yahoogroups.com

DELHI: delhibird-subscribe@yahoogroups.com

KERALA: keralabirder-subscribe@yahoogroups.com

NORTHEAST INDIA: birdsofNEindia-subscribe@yahoogroups.com

ORIENTAL BIRD CLUB: orientalbirding-subscribe@yahoogroups.com

NAT-HISTORY INDIA: vivek@ee.princeton.edu

WEST BENGAL: bengalbird-subscribe@yahoogroups.com

Internet Resources

India Birds: http://www.indiabirds.com/

Birds of Kerala: http://birdskerala.com/

BirdLife International: http://www.birdlife.net/

Indian Jungles: http://www.indianjungles.com/

Birds of Kolkata: http://www.kolkatabirds.com/

Sanctuary Asia: http://www.sanctuaryasia.com/

Red Data Book: http://www.rdb.or.id/index.html/

The Northern India Bird Network: http://www.delhibird.com/

Zoological Nomenclature Resource: http://www.zoonomen.net/

N.C.L. Centre for Biodiversity Informatics: http://www.ncbi.org.in/biota/fauna/

John Penhallurick's Bird Data Project: http://worldbirdinfo.net/

Saving Asia's threatened birds: http://www.birdlife.net/action/science/species/asia_strategy/pdfs.html/

Optics: http://www.betterviewdesired.com/

Library

Ali, Salim, 2002. *The book of Indian birds.* 13th revised edition. Mumbai: Bombay Natural History Society.

Ali, Salim & S. Dillon Ripley, 2001. *Handbook of the birds of India and Pakistan, together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. 10 vols. New Delhi: Oxford University Press.

Grimmett, Richard, Carol Inskipp and Tim Inskipp, 1998. *Birds of the Indian subcontinent*. London: Christopher Helm.

Harrison, John, 1999. *A field guide to the birds of Sri Lanka.* Oxford: Oxford University Press.

Inskipp, Carol & Tim Inskipp, 1985. *A guide to the birds of Nepal*. London: Croom Helm.

Inskipp, Carol, Tim Inskipp & Richard Grimmett, 1999. *Birds of Bhutan.* New Delhi: Oxford University Press.

Kazmierczak, Krys, 2000. *A field guide to the birds of India, Sri Lanka, Pakistan, Nepal, Bhutan, Bangladesh and the Maldives.* New Delhi: Om Book Service.

Roberts, T. J. 1991-92. *The birds of Pakistan.* 2 vols. Karachi: Oxford University Press.

Robson, Craig, 2000. *A field guide to the birds of South-East Asia.* London: New Holland.

English and scientific names should follow Manakadan, R., and Pittie, A. 2001. Standardised common and scientific names of the birds of the Indian Subcontinent. *Buceros* 6 (1): i-ix, 1-38.

Guidelines to contributors of *Indian Birds*

Indian Birds publishes original articles and notes about birds and birdwatching with an emphasis on South Asian birds (South Asia: Afghanistan, Bangladesh, Bhutan, India, the Maldives, Myanmar, Nepal, Pakistan and Sri Lanka). We welcome articles on behaviour, ecology and conservation, counts and censuses (particularly those covering multiple years), annotated checklists, trip reports, book reviews, reviews of audio recordings, letters, announcements, notices, news from the birding world, etc. Authors proposing reviews of published material should first discuss this with the editor. All manuscripts should be easy to read and understand. Manuscripts will be edited for length, content and style, and will be sent to referees when appropriate. The Editor will discuss contributions with authors and advise on modifications. Some basic guidelines are given below:

General When a bird species is first mentioned, both the English and scientific name must be given, thereafter the English name only. English and scientific names should follow Manakadan, R., and Pittie, A. 2001. Standardised common and scientific names of the birds of the Indian Subcontinent. *Buceros* 6 (1): i-ix, 1-38. Metric units and their international symbols must be used; dates and times should be of the form 1.i.2005 and 13:45hrs respectively. Numbers one to ten should be written in full, except when used with a measurement abbreviation or higher number, thus: five birds, but 5km and 5-15 birds. Numerals are used for all numbers greater than ten: 12, 120, 1,200 and 12,000.

Preparation and submission of manuscripts These should preferably be sent electronically as an email attachment or mailed on a PC-formatted floppy disk or CD-ROM to the contact addresses given below. The text, tables, figure legends (which must be self-explanatory) and appendices should be combined in one MS Word file. Alternatively, hard copies of typescripts, original maps and diagrams can be sent by mail, but this should be an option of last resort.

Images Photographs, artwork, maps, diagrams, etc. should be digitised and sent either as an email attachment or on CD-ROM. These should be in TIFF and at least 8"x11" in 300dpi resolution. JPEG files must be "maximum" quality, that is, at their minimum compression. Maps should be marked with a scale and north arrow.

Disclaimer While every care is taken, *Indian Birds* cannot be held responsible for accidental loss or damage of any material sent for publication or for their return whether they are accepted for publication or not. Material published in *Indian Birds* reflects the views of the authors and not necessarily those of the publishers. The Editor reserves the right to make necessary changes in manuscripts in consultation with the author. All contributors submitting material to *Indian Birds* also give permission for its use on the New Ornis Foundation website. All submissions are evaluated under the assumption that the conditions listed here have been understood and accepted by the author(s).

Contact addresses The Editor, *Indian Birds*, P.O. Box 2, Banjara Hills, Hyderabad 500034, India. Email: *editor@indianbirds.in*

Indian Birds

ISSN 0973-1407

Editor Emeritus
Zafar Futehally

Editor
Aasheesh Pittie

Associate Editor
V. Santharam, PhD.

Subscription information
Six issues will be published annually in February, April, June, August, October, and December.

Type	Annual	3-year
Individual	Rs. 100	Rs. 300
Student (Up to 10th)	Rs. 75	Rs. 225
Institution	Rs. 300	Rs. 900
Foreign Individual	$10	$30
Foreign Institution	$50	$150

Please make payments favouring
New Ornis Foundation
Add Rs.25/- for outstation cheques.

Send manuscripts and subscriptions to
Editor, Indian Birds
New Ornis Foundation
P.O. Box # 2, Banjara Hills
Hyderabad 500034, India
Email: *editor@indianbirds.in*

Indian Birds

Vol. 1 No. 4. July-August 2005. Date of publication: 30 August 2005.

Contents

Front Cover Picture: Male Citrine Wagtail *Motacilla citreola*, Tikse Marshes, Ladakh, Jammu & Kashmir (12.vii.2005).

Photographer: Clement Francis.

Editorial

Let's flock together for Indian ornithology

Indian ornithology requires a consistent long-term effort at surveys that build up data over several years. Without concrete data it is impossible to indicate trends of bird populations, which in turn are increasingly being used as a reflection of the state of the environment. Britain has a long history of such surveys like, Common Bird Census (1962-2000) and Breeding Bird Survey (started in 1994), to name just two, which have been used judiciously to mould government policy. "The UK government uses an annually-updated indicator based on trends in over 100 breeding bird species as one of its 20 'framework indicators' of progress towards sustainable development. Since it was first launched by the Department for Environment, Food and Rural Affairs (Defra) in 1998, the wild bird indicator has become valuable as a tool for communicating the status of bird populations in the UK to a wide audience, as a surrogate measure of the health of the environment and for recognising that contact with birds enriches people's lives," (RSPB. 2005. *The state of the UK's birds 2004.*).

I believe that there are enough birdwatchers in India to make such surveys meaningful. The highly participatory Annual Waterbird Census, commenced in 1987, is an example of what can be achieved. All that is needed is serious commitment to channelise volunteer birdwatchers' efforts towards a coordinated nation-wide programme. Such surveys will alert us towards changes in bird populations. The Bombay Natural History Society is suitably positioned to take up such a task, perhaps as a project of the Indian Bird Conservation Network.

Records Committee

It is high time too that India had a Records Committee. Among South Asian countries, only Sri Lanka has one for some time now. Records Committees scrutinise sighting reports of rare and unusual birds from an area and convert sighting reports of rare and unusual birds into authenticated records and information that can be reliably used for scientific studies, such as determining species distributions and patterns of avian vagrancy. To do this it has to first determine the adequacy of the documentation of submitted reports. Records Committees also maintain an 'official list of birds' of the area(s) they are responsible for. Complimentary goals of Record Committees include: Publishing periodic findings reports; maintaining an information repository, consisting of: (a) submitted reports, (b) the deliberations of the Committee, (c) opinions received from outside experts, and (d) copies of some of the relevant literature.

In fact, given the size of the country, there is scope for a Records Committee in each state of India.

- Aasheesh Pittie

Birds of Katerniaghat Wildlife Sanctuary, Bahraich district, Uttar Pradesh

Abdul Kalam

Department of Wildlife Sciences, Aligarh Muslim University, Aligarh 202002, Uttar Pradesh, India. Email: Kalam_a1@rediffmail.com

Katerniaghat Wildlife Sanctuary (28°15'N, 81°61'E; *c.* 400km^2) is located on the Indo-Nepal border, in Bahraich district (Uttar Pradesh). It is *c.* 30km east of Dudhwa National Park and was declared a sanctuary in 1976. It lies in the Tarai-Bhabhar biogeographic subdivision of the upper Gangetic Plain and supports a variety of habitats. I recorded seven types of habitats while working on my M.Sc. dissertation (31.i.2003-8.iii.2003). These are:

1. Sal Forest: Dominated by Sal *Shorea robusta* and to a lesser extent by asna *Terminalia alata*, haldu *Adina cardifolia*, kusum, *Schleichea oleosa* and rohini *Mallotus phillipensis*.
2. Teak forest: Dominated by Teak *Tectona grandis*. The others being, rohini, chamraudhi *Ehretia laevis* and jamun *Syzygium cumini*.
3. Scrub forest: Main flora comprising of ber *Zyzyphus jujuba*, khair *Acacia catechu*, rohini, and *Eucalyptus* spp.
4. Grassland: Alluvial grassland, with specifics like *Saccharum munja*, *Shaccharum spontaneum*, and *Antidon* spp. In the Katerniaghat range the grassland is planted with khair *Acacia catechu*, semal *Bombax cieba* and shisham *Dalbergia sisso* trees.
5. Mixed forest: Dominated by *Terminalia alata*, *D. sisso*, *T. grandis* and *S. cumini*.
6. Forest edge: Zone between grassland and forest, forest and PWD road. Grassland and forest edge is a good area for sightings of Oriental Pied Hornbill.
7. Riverine: Girwa River, flows through the sanctuary, and provides habitat for migratory waterfowl and other waterbirds. Dense cane-brakes *Dendrocalamus* sp., dominate this habitat.

Birds were recorded from all the seven types of habitat. It was found that some birds were specific to a particular habitat, but in most of the cases some overlap was found in utilization of habitat by different species of birds. A checklist was made and birds were classified according to order and species. Status of a particular species of bird was assigned on the basis of number of sightings. The occurrence of species in different types of habitats is also given in the checklist.

Some interesting species sighted were: The Critically Endangered White-rumped Vulture *Gyps bengalensis* breeds on tall *Bombax* sp., trees, planted on the river bank. The Vulnerable Swamp Francolin *Francolinus gularis* was seen once in the Katernighat range, while its call was heard most of the time. The Sarus Crane *Grus antigone*, also Vulnerable, is uncommon in the sanctuary. The Near Threatened Great Pied Hornbill *Buceros bicornis* is very rare in the sanctuary. Oriental Pied Hornbill *Anthraceros albirostris* was sighted 4-5 times in flocks of 12-16 birds. Great Crested Grebe *Podiceps cristatus* is not common, and was sighted thrice on Girwa River.

Checklist of birds of Katarniaghat Wildlife Sanctuary

Podicipedidae (Grebes)		
Little Grebe *Tachybaptus ruficollis*	7	C
Great Crested Grebe Podiceps cristatus	7	UC
Phalacrocoracidae (Cormorants)		
Little Cormoant *Phalacrocorax niger*	7	C
Greater Cormorant *P. carbo*	7	UC
Anhingidae (Darters)		
Darter *Anhinga melanogaster*	7	UC
Ardeidae (Heron, Egrets, Bitterns)		
Little Egret *Egretta garzetta*	7	C
Grey Heron *Ardea cinerea*	7	UC
Purple Heron *A. purpurea*	7	UC
Large Egret *Casmerodius albus*	7	UC
Median Egret *Mesophoyx intermedia*	7	C
Cattle Egret *Bubulcus ibis*	3,7	C
Indian Pond Heron *Ardeola grayii*	7	C
Ciconiidae (Storks)		
Painted Stork *Mycteria leucocephala*	7	UC
Asian Openbill-Stork *Anastomus oscitans*	7	C
White-necked Stork *Ciconia episcopus*	7	C
Threskiornithidae (Ibises, Spoonbill)		
Black Ibis *Pseudibis papillosa*	7	C
Eurasian Spoonbill *Platalea leucorodia*	7	UC
Anatidae (Geese, Ducks)		
Lesser Whistling-Duck *Dendrocygna javanica*	C	
Brahminy Shelduck *Tadorna ferruginea*	7	C
Northern Shoveller *Anas clypeata*	7	C
Northern Pintail *A. acuta*	7	C
Red-crested Pochard *Rhodonessa rufina*	7	C
Accipitridae (Hawks, Vultures)		
Oriental Honey-Buzzard Pernis ptilorhyncus	3	UC
Black Kite *Milvus migrans*	3,6,7	C
Egyptian vulture *Neophron percnopterus*	3,7	C
Indian White-backed Vulture *Gyps bengalensis*	3,7	C
Crested Serpent-Eagle *Spilornis cheela*	3	UC
Western Marsh-Harrier *Circus aeruginosus*	3	C
Shikra *Accipiter badius*	2,4	C
Tawny Eagle *Aquila rapax*	3	C
Steppe Eagle *A. nipalensis*	3,6	UC
Changeable Hawk-Eagle *Spizaetus cirrhatus*	3,4	C
Falconidae (Falcons)		
Common Kestrel *Falco tinnunculus*	4	UC
Phasianidae (Pheasants, Partridges, Quails)		
Black Francolin *Francolinus francolinus*	3	C
Grey Francolin *F. pondicerianus*	3	C
Swamp Francolin *F. gularis*	3	VU, UC
Red Juglefowl *Gallus gallus*	1,2,4,5,6	C
Indian Peafowl *Pavo cristatus*	4,6	C
Gruidae (Cranes)		
Sarus Crane *Grus antigone*	3	VU, UC
Rallidae (Rails and Coots)		
White-breasted Waterhen *Amaurornis phoenicurus*	7	C
Purple Moorhen *Porphyrio porphyrio*	7	C
Common Moorhen *Gallinula chloropus*	7	UC
Common Coot *Fulica atra*	7	C
Charadriidae (Plovers, Lapwings)		
River Lapwing *Vanellus duvaucelli*	7	C
Red-wattled Lapwing *V. indicus*	3,7	C
Scolopacidae (Sandpipers)		
Common Greenshank *Tringa nebularia*	7	C
Common Sandpiper *Actis hypoleucos*	7	C
Recurvirostridae (Stilts, Avocets)		
Black-winged Stilt *Himantopus himantopus*	7	C
Glareolidae (Pratincoles)		
Small Pratincole *Glareola lactea*	7	C
Laridae (Gulls and Terns)		
Caspian Tern *Sterna caspia*	7	UC
River Tern *S. aurantia*	7	C
Columbidae (Pigeons, Doves)		
Blue Rock Pigeon *Columba livia*	6	C
Oriental Turtle-Dove *Streptopelia orientalis*	2,6	C
Spotted Dove *S. chinensis*	1,2,3,4,5,6,7	C
Eurasian Collared-Dove *S. decaocto*	2,3,6	C
Emerald Dove *Chalcophaps indica*	1,2,3,4,5,6	C
Orange-breasted Green-Pigeon *Treron bicinta*	6	R
Yellow-legged Green-Pigeon *T. phoenicoptera*	2,3,6	C
Psittacidae (Parakeets)		
Alexandrine Parakeet *Psittacula eupatria*	1,2,4,5,6	C
Rose-ringed Parakeet *P. krameri*	1,2,3,4,5,6,7	C
Plum-headed Parakeet *P. cyanocephala*	3,6	C
Cuculidae (Cuckoos, Malkohas, Coucals)		
Brainfever Bird *Hierococcyx varius*	2,6	C
Drongo Cuckoo *Surniculus lugubris*	6	UC
Asian Koel *Eudynamys scolopacea*	2,6	C
Large Green-billed Malkoha *Phaenicophaeus tristis*	4,6	C
Greater Coucal *Centropus sinensis*	6,7	C
Lesser Coucal *C. bengalensis*	3,6	C
Strigidae (Owls)		
Collared Scops-Owl *Otus bakkamoena*	1	UC
Eurasian Eagle-Owl *Bubo bubo*	6	UC
Asian Barred Owlet *Glaucidium cuculoides*	1,5,6	C
Jungle Owlet *G. radiatum*	1,2,5,6	C
Spotted Owlet *Athene brama*	1,2	C
Caprimulgidae (Nightjars)		
Large-tailed Nightjar *Caprimulgus macrurus*	2,6	C
Common Indian Nightjar *C. asiaticus*	2,6	C
Alcedinidae (Kingfishers)		
Stork-billed kingfisher *Halcyon capensis*	3,7	C
White-breasted Kingfisher *H. smyrnensis*	3,6,7	C
Lesser Pied Kingfisher *Ceryle rudis*	3,7	UC
Meropidae (Bee-Eaters)		
Small Bee-eater *Merops orientalis*	3,6,7	C
Coraciidae (Rollers)		
Indian Roller *Coracias benghalensis*	3,6	C
Upupidae (Hoopoes)		
Common Hoopoe *Upupa epops*	6	C
Bucerotidae (Hornbills)		
Indian Grey Hornbill *Ocyceros birostris*	2,6	C
Oriental Pied Hornbill *Anthracoceros albirostris*	2,3,6	C
Great Pied Hornbill *Buceros bicornis*	3	R
Capitonidae (Barbets)		
Brown-headed Barbet *Megalaima zeylanica*	3,6	C

Coppersmith Barbet *M. haemacephala*	6	C
Picidae (Woodpeckers)		
Brown-capped Pygmy Woodpecker *Dendrocopos nanus*	1	UC
Rufous Woodpecker *Celeus brachyurus*	3	UC
Little Scaly-bellied Green Woodpecker *Picus xanthopygaeus*	4,5,6	C
Black-naped Green Woodpecker *Picus canus*	4	UC
Lesser Golden-backed Woodpecker *Dinopium benghalense*	1,2,3,4,5,6	C
Greater Golden-backed Woodpecker *Chrysocolaptes lucidus*	1,2,4,5,6	C
Alaudidae (Larks)		
Common Crested Lark *Galerida cristata*	3,6	C
Hirundinidae (Swallows)		
Common Swallow *Hirundo rustica*	7	C
Red-rumped Swallow *H. duarica*	6,7	C
Motacillidae (Pipits, Wagtails)		
White wagtail *Motacilla alba*	6,7	C
Large Pied Wagtail *M. maderaspatensis*	7	UC
Yellow Wagtail *M. flava*	7	C
Grey Wagtail *M. cinerea*	6,7	C
Richard's Pipit *Anthus richardi*	6	C
Eurasian Tree Pipit *A. trivialis*	4,6	C
Campephagidae (Minivets)		
Small Minivet *Pericrocotus cinnamomeus*	4	UC
Long-tailed Minivet *P. ethologus*	2,4,5,6	C
Scarlet Minivet *P. flammeus*	2,4,5,6	C
Pycnonotidae (Bulbuls)		
Red-whiskered Bulbul *Pycnonotus jocosus*	1,2,3,4,5,6	C
Red-vented Bulbul *P. cafer*	2,3,4	C
Muscicapidae: Turdinae (Thrushes, etc.)		
Orange-headed Thrush *Zoothera citrina*	1,4,5	C
Eurasian Blackbird *Turdus merula*	4,5,6	C
Oriental Magpie-Robin *Copsychus saularis*	2,6	C
White-rumped Shama *C. malabaricus*	4,5,6	C
Indian Robin *Saxicoloides fulicata*	2	C
Blue-capped Redstart *Phoenicurus caeruleucocephalus*	6	UC
Black Redstart *P. ochruros*	1,2,6,5	C
Blue-fronted Redstart *P. frontalis*	1,3,6	C
Common Stonechat *S. torquata*	3	C
Pied Bushchat *Saxicola caprata*	3	C
Muscicapidae: Timaliinae (Babblers, etc.)		
Striated Babbler *Turdoids earlei*	3	UC
Jungle Babbler *T. striatus*	2,6	C
Muscicapidae: Sylviinae (Prinias, Warblers)		
Yellow-bellied Prinia *Prinia flaviventris*	3	UC
Ashy Prinia *P. socialis*	2,3,6	C
Plain Prinia *P. inornata*	2,3,6	C
Common Tailorbird *Orthotomus sutorius*	1,2,4,5,6	C
Hume's Warbler *Phylloscopus humei*	1,2,4,6	C
Greenish Leaf-Warbler *P. trochiloides*	2,4	C
Common Lesser Whitethroat *Sylvia curruca*	2,4,6	C
Muscicapidae: Muscicapinae (Flycatchers)		
Red-throated Flycatcher *Ficedula parva*	1,6	C
Verditer Flycatcher *Eumyias thalassina*	2,4	C
Grey-headed Flycatcher *Culcicapa ceylonensis*	6	UC
Muscicapidae: Monarchinae (Paradise-Flycatchers)		
Asian Paradise-Flycatcher *Terpsiphone paradisi*	2	UC
Remizidae (Penduline-Tits)		
Fire-capped Tit *Cephalopyrus flammiceps*	2	R
Paridae (Tits)		
Great Tit *Parus major*	1,2,3,4,5,6	C
Sittidae (Nuthatches)		
Chestnut-bellied Nuthatch *Sitta castanea*	2,4,5,6	C
Wallcreeper *Tichodroma muraria*	4	UC
Dicaeidae (Flowerpeckers)		
Tickell's Flowerpecker *Dicaeum erythrorynchos*	2	UC
Nectariniidae (Sunbirds)		
Purple Sunbird *Nectarina asiatica*	2,6	C
Crimson Sunbird *Aethopyga siparaja*	2	UC
Zosteropidae (White-eyes)		
Oriental White-eye *Zosterops palpebrosus*	4,5,6	C
Estrildidae (Munias)		
Red Munia *Amandava amandava*	3,6	C
White-throated Munia *Lonchura malabarica*	3	UC
Spotted Munia *L. punctulata*	3	C
Ploceidae: Passerinae (Sparrows)		
House Sparrow *Passer domesticus*	6	C
Yellow-throated Sparrow *Petronia xanthocollis*	6	UC
Ploceidae: Ploceinae (Weavers)		
Baya Weaver *Ploceus phillippinus*		C
Sturnidae (Starlings, Mynas)		
Brahminy Starling *Sturnus pagodarum*	6	UC
Common Starling *S. vulgaris*	3,7	C
Asian Pied Starling *S. contra*	3,6	C
Common Myna *Acridotheres tristis*	6	C
Bank Myna *A. ginginianus*	6	C
Jungle Myna *A. fuscus*	6	UC
Dicruridae (Drongos)		
Black Drongo *Dicrurus macrocercus*	6	C
Ashy Drongo *D. leucophaeus*	2,4,5,6	C
White-bellied Drongo *D. caerulescens*	4,5,6	C
Lesser Racket-tailed Drongo *D. remifer*	2	C
Spangled Drongo *D. hottentottus*	1,2,3,4	C
Greater Racket-tailed Drongo *D. paradiseus*	1,2,4,5,6	C
Corvidae (Crows, Treepies)		
Indian Treepie *Dendrocitta vagabunda*	1,2,3,4,5,6	C
House Crow *Corvus splendens*	2,6	C
Jungle Crow *C. macrorhynchos*	2,6	C

Habitat

1 = Teak forest
2 = Scrub forest
3 = Grassland
4 = Sal forest
5 = Mixed forest
6 = Edge forest

Status

C = Common (Sighted more than five times).
UC = Uncommon (Sighted less than five times).
R = Rare (Sighted once).
VU=Vulnerable.

Acknowledgements

I would like to thank Department of Wildlife Sciences, AMU, Aligarh for sponsoring the study. My sincere thanks to Forest Department, Katerniaghat for providing accommodation in the forest rest house and other help.

References

Ali, S. and S. D. Ripley 1987. *A pictorial guide of birds of Indian Subcontinent*. Oxford University Press.

Grimmett, R., C. Inskipp and T. Inskipp. 2001. *Pocket guide to the birds of Indian Subcontinent*. Oxford University Press.

Munias of Mt. Abu (Rajasthan, India) with special emphasis on threatened Green Munia *Amandava formosa*

Satya P. Mehra[1], Sarita Sharma[2] and Reena Mathur[3]

[1]*Kesar Bhawan, 90, B/D Saraswati Hosp., Ganeshnagar, Pahada, Udaipur 313001, Rajasthan, India. Email: spmehra@sancharnet.in.*

[2]*C/O Mr. L. L. Sharma, village Gol, via Jawal, Sirohi, Rajasthan, India.*

[3]*Professor, Department of Zoology, University of Rajasthan, Jaipur, Rajasthan, India. Email: rmzooprof@sify.com.*

Introduction

McCann (1942) spent a short holiday at Mt. Abu and wrote, "It is an 'oasis' in the Rajputana desert, and a delightful place for a holiday". On the one hand, the rain-fed eastern side is full of semi-evergreen and deciduous flora, on the other, the drier western side gives way to xerophytic and deciduous plants (Champion 1961). In this varied habitat is found a diverse avifauna (Mehra & Sharma, in prep.). The Munias (Estrildinae) form an important part of this diversity, especially as this is the western limit of the distribution of the Globally Threatened Green Munia *Amandava formosa*. Mt. Abu has been assessed as an Important Bird Area due to the presence of this species. (Islam & Rahmani 2004).

Seven species of munias namely Red Munia *Amandava amandava*, Green Munia *A. formosa*, White-throated Munia *Lonchura malabarica*, White-rumped Munia *L. striata*, Black-throated Munia *L. kelaarti*, Spotted Munia *L. punctulata* and Black-headed Munia *L. malacca* are reported from India (Ali and Ripley 1987). Five of these, namely, Red, Green, White-throated, Spotted and Black-headed Munias are present at Mt. Abu. Grimmett et al. (1999) show that White-throated Munia is the most widely distributed munia in India followed by Spotted, Red, White-rumped and Black-headed, whereas distribution of Black-throated is restricted to the hills of southwest and east India, and that of Green Munia to patches of central India. Mt. Abu is the western limit of the Green Munia's distribution.

Study Area

Mt. Abu (*Ar-Booda*, "the hill of wisdom"; Shyamaldas 1886) (24°36'N, 72°45'E, Sirohi district, Rajasthan) is the only hill station (unnotified) in Rajasthan or Gujarat and is situated at the average height of 1,219 m.s.l. in the Abu Hills, on the south-western extremity of the Aravalis. Mt. Abu was declared as a 'closed area' in the early 1960s (pers. comm., Karan Singh Rathore, RFO, Mt. Abu Wildlife Sanctuary). Although the entire 328km^2 of Abu Hills have been declared as protected, officially only 112.98km^2 is under unnotified sanctuary area (Anonymous 2003). Mt. Abu Wildlife Sanctuary is long and narrow in shape, but the top spreads out into a picturesque plateau, which is about 19km in length and 5-8km in breadth.

Methodology

Regular seasonal surveys were conducted from January 2004 – August 15, 2005. Notes were taken on different species and the altitude and habitat they occupied. For convenience, five altitudinal zones were created and the study area along with its altitudinal zones was mapped (Figures 1 and 2).

The status of a species was established upon the following criteria: Very Common - More than ten birds of a species during a survey or at any time of the day; Common - More than five birds of a species during a survey or at any time of the day; Rare - Less than five birds during a survey or at any time of the day; Very Rare - One or two sightings of a bird or two during the entire study period.

Observations

White-throated Munia was sighted almost in every part of the Abu Hills irrespective of the altitudes. Itwas observed from the highest peak, Gurushikhar (1,722m), to the foothills of Mt. Abu. Spotted Munia was commonly sighted in the agricultural fields in the altitudinal range of 600-1,500m. Green Munia and Red Munia were found at the altitudinal range of 900-1,500m. Green Munia was very common on almost the entire plateau region above 900m, whereas Red Munia was rare and found in a few limited patches of dense bushes. Black-headed Munia was very rare and this is the first recorded sighting at Mt. Abu. Only three birds were sighted during June-July 2004. Except Green Munia, all the four species of munias were sighted throughout the day. Green Munias were seen during morning and evening, mainly on open ground, in the short dense bushes of *Lantana camara* or *Carissa spinarum*, as well in ripe maize and *jowar* fields. On overcast days we sighted them throughout the day.

Distribution of Munias

Above 1,500m: Gurushikhar and Bhairon ka Pathar are two prominent points within this range. Only White-throated Munia was sighted within this altitudinal range. Green Munia was sighted around *Taramandal* (Planetarium), at 1,630m.

1,200-1,500m: Charlie Point (Jalara Fields), Achalgarh, Oriya Village, Trevor's Tank, Palanpur Point, Jawai Dam, Shergaon, Kodra Dam and Sunset Point are important points within this range. First five sites were selected for the avifaunal studies. Except Black-headed Munia, all the other four specie were sighted in this range. Red Munia was rare and only sighted at Achalgarh whereas Green, White-throated and Spotted were very common in this zone. Achalgarh is important for the number of Green Munias sighted there.

900-1,200m: The main city along with Delwara, Sunrise Valley, Salgaon, Nesting Valley and Arna Village are important points within this range. All of them were selected as study sites. In this zone all five species were sighted from different points. Delwara was the main site for Green Munia.

600-900m: No prominent point was present within this zone. Only White-throated and Scaly-breasted Munias were sighted within these limits. Scaly-breasted were mainly sighted in and around agricultural fields whereas White-throated were common everywhere.

Below 600m: Chipaberi and Rishikesh temple are among the important points of this zone. Only White-throated and Spotted Munias were abundant in the lower area of Abu Hills.

Threats

The major threat for munias especially the Green Munia, is habitat alteration. Although construction activities are banned by the Honorable Supreme Court from 2002, illegal clearing of land is still rampant. Being a tourist spot, the development of hotels, and temporary camping grounds or parking lots on the feeding areas of this bird are constant threats. The activities of religious pilgrims also tend to disturb Green Munias.

There have been unconfirmed reports of poaching of this species (Mehra and Sharma

2004). This has now been confirmed by the tribals of village Gopala Nana, Saroopganj. Although the trapping of this species is not intensive, they are occasionally trapped for traditional medicinal use (remedial properties were not disclosed to us) as well as to meet the demand for aviary birds (?)from Gujarat.

Results and Discussions

Five species of munias, out of the seven reported from India, were sighted in the study area. The Black-headed Munia is reported for the first time from Mt. Abu. Butler (1875-1876) documented four species from here, excluding Black-headed Munia. Other works on the avifauna of Mt. Abu record the presence of Green, White-throated and Spotted Munias (Prakash and Singh 1995; Sharma 2002). Devarshi and Trigunayat (1989) mention only White-throated Munia.

The overall status of munias in the Abu Hills is: Red Munia *Amandava amandava* - Rare; Green Munia *A. formosa* - Common; White-throated Munia *Lonchura malabarica* - Very Common; Spotted Munia *L. punctulata* - Common; Black-headed Munia *L. malacca* - Very Rare.

Ahmed (1997, 1998) considered trade a major threat to Green Munia, and as a result of continued trapping, its populations appears to have been wiped out in many areas (Bhargava 1996). Although trapping is prevalent at Mt. Abu, it cannot be considered a major threat to the species. Its population can be monitored by regular patrolling and involving local residents in protecting its habitat. Increasing human population pressurises the sites where Green Munias feed. Strict implementation of the order of the Honorable Supreme Court is the only solution to check the human activities in the forest area.

Conclusions

At Abu Hills the Green Munia is restricted to the altitudinal range which is highly prone to anthropogenic activities like construction and habitat alteration. This needs immediate action if the dwindling population of the species is to be protected.

Acknowledgements

We thank Dr Asad R. Rahmani, Director BNHS, who encouraged us to study the Globally Threatened Green Munia in southern Rajasthan. We are thankful to the Department of Forest (Wildlife Division), Mt. Abu, especially to Mr Karan Singh Rathore and Mr Mahendra Saxena for their kind and generous help during the study. Further we are thankful to Mr Ramesh Mali for helping and making arrangements for our study. Special thanks to Mr Ainsley Priestman, Mr Walter Aubert and their families for providing us with historic information on the birds. We are also grateful to Dr A. K. Sharma, Mr Ajay Mehta, Mr Pradip Dave and Mr Praveen Mehra for their kind assistance. Last but not least, we thank our friends Shambhu Sharma and Praveen Sharma for their technical assistance and help in photography.

References

Ahmed, A. 1997. *Live bird trade in northern India*. Delhi: TRAFFIC-India.

Ahmed, A. 1998. Some observations of the Green Munia in the Indian bird trade. *Oriental Bird Club Bulletin* 27: 21–25.

Ali, Salim, and S. Dillon Ripley. 1987. *Compact handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. 2nd ed. (Sponsored by the Bombay Natural History Society.) Delhi: Oxford University Press.

Anonymous. 2003. *Rajasthan forest statistics*, 2003. Forest Department, Rajasthan.

Bhargava, R. 1996. Notes on Green Munia. *J. Bombay Nat. Hist. Soc.* 93: 588.

Birdlife International 2001. *Threatened birds of Asia: the Birdlife International Red Data Book*. Cambridge, UK: Birdlife International.

Butler, E. A. 1875–1877. Notes on the avifauna of Mount Aboo and northern Guzerat. *Stray Feathers* 3: 437–500; 4: 1–41; 5: 207–235.

Champion, H. G. 1961. A preliminary survey of the forest types of India. *Indian Forest Records, Silviculture* 1 (1): 123-125.

Devarshi, D. and Trigunayat, M. M. 1989. Checklist of the birds of Mt. Abu (Rajasthan). *Pavo* 27 (1&2): 59-63.

Grimmett, R, Inskipp, C. and Inskipp, T. 1999. *Birds of the Indian Subcontinent*. Oxford University Press, New Delhi.

Islam, M. Z. and Rahmani, A. R. 2004. *Important Bird Areas: Priority sites for conservation*. Indian Bird Conservation Network: Bombay Natural History Society and Birdlife International (UK).

McCann, C. 1942. A Bushman's Holiday in the Abu Hills. *J. Bombay Nat. Hist. Soc.* 43: 206-217.

Mehra, S. P.and Sharma, S. (in prep.). Altitudinal distribution of avifauna of Mt. Abu, Rajasthan, India.

Mehra, S. P. and Sharma, S. 2004. Additional site records of Green Munia *Amandava formosa* (Latham) from Mt. Abu, Sirohi. *Newsl. Ornithologists* 1(6): 84-85.

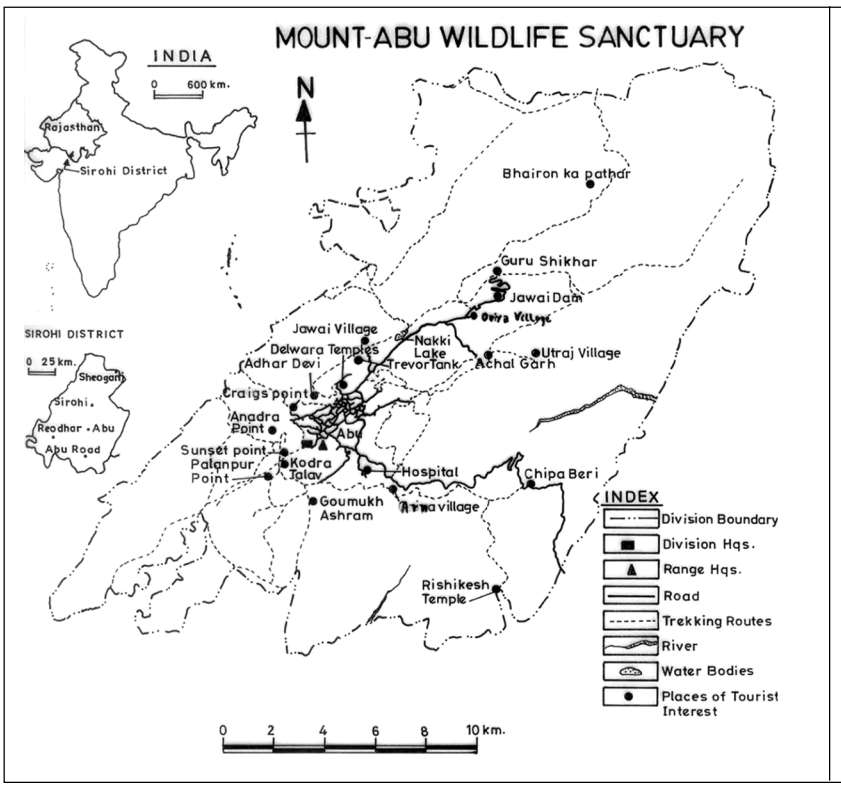
Prakash, I. and Singh, P. 1995. Some observations on the birds of Abu hill, Aravalli ranges. *Pavo* 33 (1–2): 99–110.

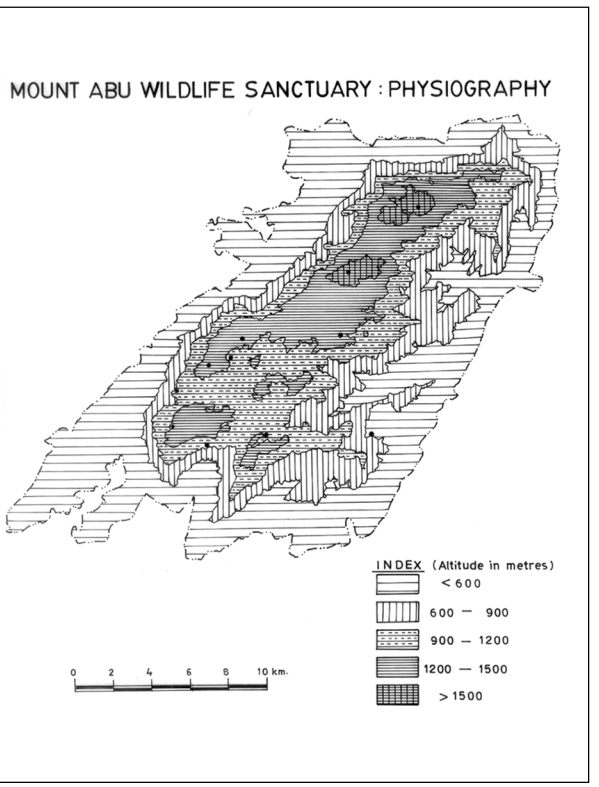
Sharma, S. K. 2002. Preliminary biodiversity survey of protected areas of southern Rajasthan. Unpublished. Pp 24.

Shyamaldas. 1886. *Veer Vinod - Mewar ka Itihaas* (in Hindi). Vol 1-3. Motilal Banarsidas, Delhi.

Table 1: Status of Munias (Estrildidae) at Mt. Abu

Altitude	Red Munia *Amandava amandava*	Green Munia *A. formosa*	White-throated Munia *Lonchura malabarica*	Spotted Munia *L. punctulata*	Black-headed Munia *L. malacca*
Above 1,500m	Not sighted	Rare	Common	Not sighted	Not sighted
1,200-1,500m	Rare	Common	Common	Common	Not sighted
900-1,200m	Rare	Common	Common	Common	Very rare
600-900m	Not sighted	Not sighted	Common	Common	Not sighted
Below 600m	Not sighted	Not sighted	Common	Common	Not sighted





Bird ringing around Hyderabad city, Andhra Pradesh, India

Humayun Taher[1], Hyder Jaffer[2] & Hatim Jaffer[2]

[1]*2-B Atlas Apartments, Road No. 10, Banjara Hills, Hyderabad 500034, India. Email: baazdaar@yahoo.co.uk.* Corresponding author.

[2]*18-7-360/8 Yakhutpura, Hyderabad 500023, India. Email: indianfalconer@rediffmail.com*

The Birdwatcher's Society of Andhra Pradesh (BSAP), in conjunction with the Bombay Natural History Society (BNHS), has been conducting bird ringing activities around Hyderabad city (Andhra Pradesh, India) for five years (from 1998 through 2002). Most of the birds so far ringed have been raptors, particularly Common Kestrel *Falco tinnunculus*, with one Red-headed Falcon *Falco chiquera*, three Shikras *Accipiter badius*, one Black-shouldered Kite *Elanus caeruleus*, one Western Marsh-Harrier *Circus aeruginosus* and one Barn Owl *Tyto alba*. In addition to these, we have also ringed, at various times, two Pied Crested Cuckoos *Clamator jacobinus*, two Indian Pittas *Pitta brachyura* and one Common Quail *Coturnix coturnix*, plus a few Baya Weaver *Ploceus philippinus*. Some of the birds which we have ringed from time to time are given in Table 1.

Below is given a brief account of ringing activities, with specific reference to raptorial birds (Table 1). All the data collected from the birds so far ringed is not presented. This will form the subject matter of a future article. The non-raptorial birds that were ringed were mostly acquired from the illegal bird market near Charminar, in the 'Old City'. Most of the raptors were trapped by us for the express purpose of ringing.

Bearing in mind that, with the exception of *Falco tinnunculus*, none of the other smaller raptors found around the city were migratory, we confined our activities to the Common Kestrel. The other birds of prey (*Falco chiquera, Accipiter badius*, *Elanus caeruleus*, *Tyto alba* and *Circus aeruginosus*) that we ringed, had either been purchased or inadvertently caught, as we were rather new to ringing at that stage and tended to become a trifle over-enthusiastic.

Ringing was mostly conducted in the areas around Nadergul, Jalpally, Mamidipally, Tukkuguda and Balapur, (all in Rangareddi district), within a 10-15km radius, east of Hyderabad. This area has suitable habitat for small raptors, particularly Common Kestrel, because of the open grass areas and an abundance of locusts and other small prey species that form the staple diet of this falcon. As a result, there is always a sizeable population of this species in the area during the season when the birds migrate to south India.

Unfortunately, none of the ringed birds has been recovered from outside India. However, a few interesting aspects have emerged from our ringing activities, which we describe below:

1. One of the main things that we have noticed is that Common Kestrels are highly territorial birds, and this territoriality is seen in successive years. The territoriality has also apparently given rise to a strong homing instinct. These observations are based on our trapping and re-trapping records. We have only twice managed to actually re-trap an earlier ringed bird (see below), but we have seen the ringed birds in the area from where they had originally been trapped. For example, a first year male Common Kestrel which was trapped and ringed (ring no. 44920) in Balapur on 5.xii.1999, was seen later in the same area for over three months from that date. Our last sighting of the bird was on 23.iii.2000. Another Common Kestrel bearing ring number C-44909 was caught near Nadergul on 11.i.1999, ringed and released. It was again trapped in the same locality on 21.xi.1999. This indicates that the birds return each season to the same locality.

2. Territoriality also appears to have developed a good homing instinct in this species. On one occasion, an adult male, which had been trapped in Nadergul on 28.xi.1998, was brought to the city and released near the Kasu Brahmananda Reddy (K.B.R.) National Park in Jubilee Hills.

Subsequent to this, the bird was re-trapped on 5.xii.1999 in Nadergul, in fact from the same electricity pylon from which we had affected the first capture! (Ring No. C-56009).

3. In the winter of 1999-2000 we recorded (saw) a Lesser Kestrel *Falco naumanii* near Nadergul. Despite several attempts, we were unable to catch that bird and so cannot confirm its sex. However, the many sight records that we have of it seem to indicate that it was an immature bird.

4. The Indian Pitta and the Pied Crested Cuckoo were acquired by one of us (HJ) from the Charminar bird market in Hyderabad.

5. The Common Quail was acquired by chance at the house of one of the authors (HT) on the night of 3.iv.2001. The bird was seen sitting on the veranda of a second floor in an apartment block. Using a towel and a powerful torch, we were able to secure the bird and keep it for the night. It was ringed and released the next morning at the Kasu Brahmananda Reddy National Park in Jubilee Hills (Hyderabad city).

6. Baya Weavers were ringed by BSAP member Suhel Quader who was at that time involved with studies on the breeding of this species at the ICRISAT Centre. The birds were ringed in the course of his studies, and the details have been communicated to the BNHS, as part of the BSAP bird ringing data.

Discussion

The area near Nadergul is rich in raptorial birds and deserves to be protected. At various times we have seen several species of raptorial birds here, including, at one time, a sighting of over fifty Indian White-backed Vultures *Gyps bengalensis* (14.iv.2000). Some of these sightings are extremely interesting and of uncommon / rare species – of particular interest are the Bonelli's Eagle *Hieraaetus fasciatus*, Booted Eagle *H. pennatus*, Lesser Kestrel, Laggar *Falco jugger*, Eurasian Eagle-Owl *Bubo bubo* and Short-eared Owl *Asio flammeus*. This is one of the few areas around Hyderabad where we have seen three species of mammals: chinkara *Gazella bennettii*, jackal *Canis aureus* and striped hyena *Hyaena hyaena*.

Details of the ringing activities are given in Table 1.

Table 1: Ringing data.

Ring No.	Species	Sex	Age	Moult	Phu.	Brd. Ptch.	Wing	Bill	Tars.	Tail	Wt.	Locality	Habitat	Date	Remarks	Recaptured
56001	*Falco chiquera*	M	5	4	4	1	200	20	40	160	170			15.04.98	Jalpally	
56002	*Accipiter badius*	M	5	1	4	1	180	20	55	140	170			26.04.98	Balapur	
56003	*Accipiter badius*	M	5	1	4	1	185	20	55	140	175			26.04.98	Jalpally	
56004	*Falco tinnunculus*	F	2	1	2	1	233	20	40	175	200			19.10.98	Nadergul	
56005	*Falco tinnunculus*	F	5	1	4	1	243	10	40	159	200	A	X	22.10.98	H. Sagar	
56006	*Falco tinnunculus*	F	5	1	4	1	245	12	40	165	210	B	X	22.10.98	Mamidipally	
56007	*Falco tinnunculus*	F	5	1	4	1	245	12	40	164	200			24.11.98	Nadergul	
56008	*Falco tinnunculus*	F	4	1	2	1	249	12	40	170	215			24.11.98	Nadergul	
56009	*Falco tinnunculus*	M	5	1	4	1	250	22	33	182	220			28.11.98	Nadergul	05.12.99
56010	*Falco tinnunculus*	F	3	6	3	1	243	22	40	180	215			31.01.99	Nadergul	
44903	*Circus aeruginosus*	M	2	4	2	1	356	30	81	160	550	A	X	23.11.90	B.Hills (c.f.m.)	
44904	*Accipiter badius*	F	6	4	8	1	196	18	52	149	175	A	X	22.01.91	B.Hills (c.f.m.)	
44905	*Falco tinnunculus*	M	5	8	4	1	256	19	43	178	155	A	X	22.03.92	B.Hills (c.f.m.)	
44906	*Tyto alba*	F	6	1	5	1	300	43	80	138	300	A	X	13.02.93	B.Hills (c.f.m.)	
44909	*Falco tinnunculus*	M	5	1	4	1	247	20	40	176	205			11.01.99	Nadergul	21.11.99
44910	*Falco tinnunculus*	F	5	1	4	1	260	20	40	180	250			10.02.99	B. Hills	
44911	*Falco tinnunculus*	F	2	1	2	1	243	20	40	173	220			24.03.99	Nadergul	
44912	*Falco tinnunculus*	M	5	1	4	1	238	20	40	170	210			29.03.99	Nadergul	
44913	*Falco tinnunculus*	M	4	1	3	1	245	20	40	184	190			06.11.99	Nadergul	
44914	*Falco tinnunculus*	F	5	1	4	1	265	20	40	179	250			06.11.99	Nadergul	
44915	*Falco tinnunculus*	F	3	7	3	1	250	20	36	170	200			21.11.99	Nadergul	
44916	*Falco tinnunculus*	F	5	1	4	1	257	20	40	175	275			05.12.99	Nadergul	
44917	*Falco tinnunculus*	M	5	4	4	1	247	21	40	180	180			05.12.99	Balapur	
44918	*Falco tinnunculus*	F	2	7	2	1	250	22	40	190	250			05.12.99	Balapur	
44920	*Falco tinnunculus*	M	2	7	2	1	240	20	40	166	180			05.12.99	Balapur	
44921	*Falco tinnunculus*	M	5	1	4	1	245	20	40	165	200			09.01.00	Nadergul	
44922	*Falco tinnunculus*	M	2	7	2	1	250	20	41	185	275			15.01.00	Nadergul	
44923	*Falco tinnunculus*	M	3	1	3	1	240	20	40	170	250			10.04.00	Tukkuguda	
44924	*Falco tinnunculus*	M	3	4	3	1	252	20	40	170	250			12.02.00	Nadergul	
44925	*Falco tinnunculus*	M	2	1	2	1	245	22	36	180	260			14.04.00	Tukkuguda	
44926	*Falco tinnunculus*	M	5	1	4	1	240	22	37	190	180			13.12.01	Keesaragutta	
44927	*Falco tinnunculus*	M	3	1	3	1	235	22	38	190	185			02.01.02	Nadergul	
44928	*Falco tinnunculus*	F	2	1	2	1	245	22	40	193	200			12.01.02	Badangpet	
44929	*Falco tinnunculus*	M	3	1	3	1	240	22	38	192	180			12.01.02	Badangpet	
56017	*Falco tinnunculus*	F	2	1	3	1	261	15	46	173	205			31.12.01	Balapur	
AB-147510	*Coturnix coturnix*	F	5	1	4	1	105	29	12	41				3.04.01	B. Hills	
Z-27901	*Ploceus benghalensis*	M	5	1	4	1	73	12.1	21.5	45	22			21.06.97	Icrisat	
Z-27902	*Ploceus benghalensis*	M	5	1	4	1	72	12.6	21	41	22.5			21.06.97	Icrisat	
AB-147501	*Pitta brachyura*	?	6	1	4	1	108	26	39	27	40			08.10.98	B. Hills (c.f.m.)	
B-44501	*Clamator jacobinus*	F	6	1	4	1	144	25	32	158	60			03.07.98	B. Hills (c.f.m.)	

Abbreviation
Brd. Ptch. = Brood patch.
c.f.m = Captive from market.
Plu = Plumage.
Tars. = Tarsus.
Wt. = Weight in grams.

Key to table

Age
1=Nestling.
2=Juvenile (First Year).
3=Subadult.
4=Immature - stage unknown.
5=Adult.
6=Full grown but stage unknown.

Moult
1=No moult.
2=Wing.
3=Tail.
4=Wing & tail.
5=Head.
6=Body.
7=Head & body.
8=General moult.

Plumage
1=Down.
2=First year (Juvenile).
3=Intermediate.
4=Adult.
5=Eclipse.
6=Breeding.
7=Partial breeding.
8=Stage unknown.

Brood patch
1=Absent.
2=Present but details not recorded.
3=Skin smooth, glossy, free of feathers.
4=Skin smooth, network of blood vessels noticeable.
5=Skin thickened, blood vessels not seen, fluid layer under epidermis, brood patch resembles second degree burn.
6=Skin wrinkled, dried up, begins to form scales.
7=Skin becomes smooth, feather calami formed, brood patch begins to be covered up.

Distribution of White-winged Tern *Chlidonias leucopterus* in India and a new record from Andhra Pradesh

Aasheesh Pittie[1], Suhel Quader[2] and Prakriti Pittie[3]

[1, 3]*8-2-545 Road No. 7, Banjara Hills, Hyderabad 500034, India.* [1]*Email: aasheesh.pittie@gmail.com*

[2]*Department of Zoology, University of Cambridge, Downing Street, Cambridge CB2 3EJ, United Kingdom. Email: sq210@cam.ac.uk*

The White-winged Tern *Chlidonias leucopterus* has been described as a winter visitor to "Assam, Bangladesh and Sri Lanka, irregularly in the rest of the Indian peninsula and in the Maldive and Andaman Is." (Ripley 1982). Ali and Ripley (2001) give a few additional references of sightings from Pakistan. Surprisingly, without any supporting evidence, Baker (1929) stated, "In India…common all down the East coast." This, despite Blanford's (1898) statement, "This Tern has not been clearly identified from any part of India west of Tipperah [=Tripura]…". Whistler and Kinnear (1937) also emphasised this discrepancy. When Abdulali and others spotted it on Mahim Causeway, Bombay city (=Mumbai) on 26.iii.1950, he wrote, "…has not been recorded before from anywhere in peninsular India," (1950).

Since Abdulali's observation, several records of this square-tailed marsh tern have been published from India and we summarize these here, placing them roughly into three zones: western coast, eastern coast and inland records.

Western Coast

Gujarat: On 12.v.1955, it was spotted at Jasdan, purportedly the second such record from the area (Shivrajkumar 1955). Mundkur (1987) saw it on 14.v.1985 at Jamnagar. Parasharya and Mukherjee (2001) spotted three birds at Porbander on 27.iv.1997. On 6.vi.2004, Varu (2004) reported it from Devisar Tank, Bhuj.

Maharashtra: Twenty-seven years after Abdulali's record, it was reported once again from Bombay (Mumbai), this time from Colaba Point by Sinclair (1977). Prasad (2004) gives a summary of records from western Maharashtra.

Goa: Lainer (2004) reports sightings between August-September 1998.

Kerala: On 27.iv.1997, Ravindran (2001) saw up to three birds on different occasions between 12-15.ix.1998 at Kole wetlands, Thrissur. On 25.iv.2003, Mathew (2003) saw one at Thattekkad. Ravindran (2004) reports sightings from Kole wetlands in March, April and September 1998-2000.

Eastern Coast

Eastern Coast: Perennou and Santharam (1990) recorded it as "a regular and common passage migrant along the Coromandel (i.e., East) coast," including "a large roost of *c.* 50,000 migrant terns in Kaliveli (Tamil Nadu) (which) held over 2,000 whitewinged black terns." ["During late 1989 and 1991, the Whiskered Tern congregation at Kaliveli was not more than 5,000 birds," (*in litt.* S. Balachandran).]

Orissa: Rao et al. (1994) include it in their checklist of birds for Chilika Lake. ["Occurs regularly in small numbers of 100-200. Seen throughout the year except May-June. In July-August 10-30 birds would be seen in breeding plumage. Was difficult to differentiate from September onwards, from Whiskered Terns, due to its wintering plumage," (*in litt.* S. Balachandran).]

Tamil Nadu: Melluish (1966) saw it on 30.iv.1966 at Pulicat Lake, Chennai and described it as "…something extraordinary and entirely unfamiliar". Fifty birds were ringed in December 1970 at Point Calimere (Raju and Shekar 1971). Sugathan (1983) lists it as a common migrant at Point Calimere Sanctuary. Kannan (1986) recorded about "a hundred" on 17.iv.1983 at Adyar Estuary in Chennai. See Perennou and Satharam's (1990) record, below. ["Present in Point Calimere, but none have been ringed even though 500 Whiskered Terns have, between 1980-2000," (*in litt.* S. Balachandran).]

Inland

Jammu and Kashmir (J&K): Pfister (2001) records one on 23.vi.1995 in Ladakh. Naoroji and Sangha (2004) saw two birds on 3.ix.2000, at Trishul Tso, Ladakh, one of which was in breeding plumage and the other a juvenile. They did not see any other terns.

Punjab: Undeland also recorded three and four birds on 10.v.1998 and 26.vii.1998 at Harike Bird Sanctuary (Robson 1998a).

Rajasthan: On 9.iv.1996, a male in breeding dress was seen at Phulera Lake, Jaipur by Sangha and Vardhan (1998). Craig Robson spotted a single bird at Suriwal Lake near Ranthambhor Tiger Reserve on 6.xii.2001 (Robson 2002).

Jharkhand: Baillie (1946) reported a single bird on "Lakes" from 6-11.v.1945, Hazaribagh town.

Delhi: Jackson (1969) reported it form Najafgarh Jheel on 5.v.1968. Vyas (1996) saw one bird in breeding plumage on 9.vi.1986 at Okhla Barrage. He also saw one in first winter plumage on 20.x.1996, again at Okhla and three on 30.viii.1997, at Madanpur village (Vyas 2002). Undeland reported (Robson 1998a) four birds at Okhla on 25.viii.1997 and one on 9.viii.1998 (Robson 1998b).

Karnataka: Thejaswi (2005) observed six birds in September 1999, at Kunthur Lake (Chamarajanagar district, Karnataka) amidst a "huge flock of over 2,500 Whiskered Terns *Chlidonias hybridus*, all in flight…"

On 9.v.2005, we had gone birdwatching (06:30-08:30hrs) to Osman Sagar (17º22'N, 78º18'E; a.k.a. Gandipet), one of the lakes that supply water to Hyderabad city (Andhra

Pradesh). This was primarily to investigate a newspaper report about the presence of flamingos (Phoenicopteridae) there. The water-spread had shrunk drastically and standing on the bund we could easily see the opposite shoreline and count the birds on it through a scope. Flying about over the water were four or five River Terns *Sterna aurantia* and 10-12 Whiskered Terns *Chlidonias hybridus*, both in breeding plumage. As we watched them, we saw a smallish tern that, on first glance, looked like a Black-bellied Tern *Sterna acuticauda*. However, this one was different. Its square white tail glistened against the darker shades of its remaining plumage. Black feathers covered its entire belly, chest, throat, head, nape, back, and under-wing coverts. Its wings were grey. The plumage was a combination of vividly contrasting shades of white, grey and black. What we were seeing was a White-winged Tern *Chlidonias leucopterus* in full breeding plumage! The bird worked an area of water close to us and all three of us had excellent, long and repeated views as it flew about. This is the first report of this species from Andhra Pradesh, and thus it should be added to the state's checklist (Raju 1985, Taher and Pittie 1989).

It is clear that on migration the White-winged Tern is more common along the eastern (EC) and western coasts (WC) of India, than it is in central (inland) India, and recent reports of its presence on the eastern coast support Baker's (1929) assumption (Table 1). Records from central India are few. The first was from Raipur (Madhya Pradesh) from before 1929, most probably on the authority of D'Abreu (Baker 1929). Ali and Ripley (2001) erred in dating D'Abreu's record from 1935, based on his paper in the *Journal* of the Bombay Natural History Society (D'Abreu 1935), when it had already been reported by Baker from before 1929. The other records from inland locations are from Jammu and Kashmir, Punjab, Rajasthan, Delhi and Karnataka (Table 1).

Ali and Ripley (2001) state, "Possibly less vagrant than appears, as liable to be overlooked among the numerous Whiskered terns with which it keeps in winter, and is impossible to distinguish from satisfactorily before it starts moulting into its distinctive summer dress." Its gregarious nature and the fact that it "keeps" with Whiskered Terns is well-documented (Henry 1971, Roberts 1991, Grimmett et al. 1998, Harrison 1999, Kennedy et al. 2000) and is reinforced in Table 1 where 50% of the observers recorded seeing White-winged Terns accompanying a flock of the commoner Whiskered Terns. This emphasises the cardinal rule of observing every single bird, even in a flock!

Table 1: White-winged Tern: Inland vs. coastal records and presence of other terns when it was sighted.

Author (Year)	Observation date	Other terns present	Coastal	Inland
Abdulali 1950	26.iii.1950	Gull-billed	Mumbai (WC)	—
Baillie 1946	6-11.v.1945	No information	—	Hazaribagh
Baker 1929	—	No information	—	Raipur
Jackson 1969	5.v.1968	Whiskered	—	Delhi
Kannan 1986	10-29.iv.1983	Whiskered, Little	Chennai (EC)	—
Lainer 2004	18.viii.1998, mid-Sept.			
and 1st week of Oct.	No information	Goa (WC)	—	
Mathew 2003	25.iv.2003	No information	Thattekad (WC)	—
Melluish 1966	30.iv.1966	Gull-billed	Pulicat Lake (EC)	—
Mundkur 1987	14.v.1985	Whiskered	Jamnagar (WC)	—
Naoroji & Sangha 2004	3.ix.2000	No other tern	—	Ladakh
Parasharya & Mukherjee 2001	27.iv.1997	Whiskered	Porbander (WC)	—
Pfister 2001	23.vi.1995	No information	—	Ladakh
Raju & Shekar 1971	xii.1970	No information	Pt. Calimere (EC)	—
Ravindran 2001	12-15.ix.1998	Whiskered	Kole (WC)	—
Ravindran 2004	iii-iv.2000	Whiskered	Malappuram (WC)	—
Robson 1998a	25.viii.1997	No information	—	Okhla
Robson 1998b	10.v; 26.vii; 9.viii.1998	No information	—	Harike; Okhla
Robson 2002	22-26.i.2002	No information	—	Suriwal Lake
Sangha & Vardhan 1998	9-10.iv.1996	No information	—	Jaipur
Shivrajkumar 1955	12.v.1955	Whiskered	Jasdan (WC)	—
Sinclair 1977	27.x.1974	Whiskered	Mumbai (WC)	—
Thejaswi 2005	ix.1999	Whiskered		Chamarajanagar district, Karnataka
Varu 2004	6.vi.2004	Whiskered	Bhuj (WC)	—
Vyas 1996	9.vi.1986	Whiskered	—	Okhla
Vyas 2002	20.x.1996; 30.viii.1997	Whiskered, Gull-billed	—	Delhi
This study	9.v.2005	Whiskered	—	Hyderabad

Acknowledgements

We would like to thank S. Balachandran for commenting on an earlier version of this note.

References

Abdulali, H. 1950. Occurrence of the Whitewinged Black Tern [*Chlidonias leucopterus* (Temm.)] in Bombay. *J. Bombay Nat. Hist. Soc.* 49 (2): 310-311.

Ali, S. and S. D. Ripley. 2001. *Handbook of the*

birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Ceylon. 2nd ed. Vol. 3 (Stone Curlews to Owls). Delhi: Oxford University Press .

Baillie, R. H. 1946. Hazaribagh bird recordings. *J. Bengal Nat. Hist. Soc.* XX (4): 111-127.

Baker, E. C. S. (Ed.) 1929. The *fauna of British India, including Ceylon and Burma. Birds*. 2nd ed. Vol. 6. London: Taylor and Francis.

Blanford, W. T. (Ed.) 1898. The *fauna of British India, including Ceylon and Burma (Birds)*. Vol. 4. London: Taylor and Francis.

D'Abreu, E. A. 1935. A list of the birds of the Central Provinces. *J. Bombay Nat. Hist. Soc.* 38 (1) (15 August): 95-116.

Grimmett, R., C. Inskipp, and T. Inskipp. 1998. *Birds of the Indian Subcontinent*. 1st ed. London: Christopher Helm, A & C Black.

Harrison, J. 1999. *A Field Guide to the Birds of Sri Lanka*. 1st ed. Oxford, U.K.: Oxford University Presss.

Henry, G. M. (Ed.) 1978. *A Guide to the Birds of Ceylon*. Reissued 2nd ed. London: Oxford University Press.

Jackson, P. 1969. Some new bird records for Delhi. *J. Bombay Nat. Hist. Soc*. 65 (3): 780-782. (1968).

Kannan, R. 1986. The Whitewinged Black Tern *Chlidonias leucopterus* in the Coromandel Coast. *Newsletter for Birdwatchers* 26 (1-2): 11-12.

Kennedy, R. S., P. C. Gonzales, E. C. Dickinson, H. C. Miranda Jr. and T. H. Fisher. 2000. *A guide to the birds of the Philippines*. Oxford: Oxford University Press.

Lainer, H. 2004. Additions to 'The birds of Goa' (Lainer 1999). *J. Bombay Nat. Hist. Soc*. 101 (1) (20 May): 163-165.

Mathew, M. J. 2003. Birds of Thattekkad. *Newsletter for Birdwatchers* 43 (4) (July-August): 60.

Melluish, R. A. S. 1966. Unfamiliar visitors to Madras. *Newsletter for Birdwatchers* 6 (6): 1-2.

Mundkur, T. 1987. The Whitewinged Black Tern *Chlidonias leucopterus* (Temminck) in Saurashtra, Gujarat. *J. Bombay Nat. Hist. Soc*. 84 (1): 208.

Naoroji, R. and Harkirat Sangha. 2004. Project Golden Eagle: Raptor surveys in Ladakh 1997-2003 (In collaboration with the Indian Army). Unpublished report.

Parasharya, B. M., and A. Mukherjee. 2001. Sightings of Whitecheeked Tern *Sterna repressa*, Whitewinged Black Tern *Chlidonias leucopterus* and Saunder's Little Tern *Sterna saundersi* at Porbander coast, Gujarat. *J. Bombay Nat. Hist. Soc*. 98 (1): 113-114.

Perennou, C., and V. Santharam. 1990. Status of some birds in southeastern India. *J. Bombay Nat. Hist. Soc*. 87 (2): 306-307.

Pfister, O. 2001. Birds recorded during visits to Ladakh, India, from 1994 to 1997. *Forktail*. 17: 81-90.

Prasad, A. 2004. Annotated checklist of the birds of Western Maharashtra. *Buceros* 8 (2&3): i-ii, 1-174 (2003).

Raju, K. S. R. K. 1985. *Checklist of Birds of Visakhapatnam Region*. Visakhapatnam: Andhra Pradesh Natural History Society.

Raju, K. S. R. K. and P. B. Shekar. 1971. Some interesting bird records from Point Calimere. *J. Bombay Nat. Hist. S*oc. 68 (2): 457-459.

Ravindran, P. K. 2001. Occurrence of the White-winged Black Tern *Chlidonias leucopterus* in Kerala. *J. Bombay Nat. Hist. Soc.* 98 (1): 112-113.

—. 2004. Random notes. *Newsletter for Birdwatchers* 44 (4) (July-August): 62.

Ripley, S. D. 1982. *A synopsis of the birds of India and Pakistan together with those of Nepal, Sikkim, Bhutan and Ceylon*. 2nd ed. Bombay; Oxford: Bombay Natural History Society; Oxford University Press.

Roberts, T. J. 1991. *The Birds of Pakistan: Regional Studies and non-passeriformes*. Vol. 1. 2 vols. Karachi: Oxford University Press.

Robson, C. 1998a. From the field: India. *O. B. C. Bull.* 27: 61-66 (62).

—. 1998b. From the field: India. *O. B. C. Bull.* 28: 44.

—. 2002. From the field: India. *O. B. C. Bull.* 35 (June): 84-86.

Sangha, H. S. and H. Vardhan. 1998. Occurrence of the Whitewinged Black Tern *Chlidonias leucopterus* in Rajasthan. *J. Bombay Nat. Hist. Soc.* 95 (1): 113-114.

Shivrajkumar. 1955. Occurrence of the Whitewinged Black Tern (*Chlidonias leucopterus* Temm.) in Saurashtra. *J. Bombay Nat. Hist. Soc.* 53 (1): 130.

Sinclair, J. C. 1977. Sight records of unusual birds from Colaba Point, Bombay, Maharashtra. *J. Bombay Nat. Hist. Soc*. 73 (3): 530-531. (1976).

Sugathan, R. 1983. Some interesting aspects of the avifauna of the Point Calimere Sanctuary, Thanjavur District, Tamil Nadu. *J. Bombay Nat. Hist. Soc.* 79 (3): 567-575 (1982).

Taher, S. A. and A. Pittie. 1989. *A Checklist of Birds of Andhra Pradesh*. Hyderabad, India: Published by the authors.

Thejaswi, S. 2005. Black Tern *Chlidonias niger* (Linn.) in Mysore, Karnataka: First record from inland southern India. *J. Bombay Nat. Hist. Soc.* 101 (3) (27 April): 454-455 (2004).

Varu, S. N. 2004. White-winged Black Tern *Chlidonias leucopterus* in Kutch. *Newsletter for Ornithologists* 1 (5): 77.

Vyas, S. 1996. Checklist of the birds of the Delhi region: an update. *J. Bombay Nat. Hist. Soc.* 93 (2): 219-237.

—. 2002. Some interesting bird records from the Delhi area. *J. Bombay Nat. Hist. Soc.* 99 (2): 325-330.

Whistler, H. and N. B. Kinnear. 1937. The Vernay Scientific Survey of the Eastern Ghats. (Ornithological section). Part XV. *J. Bombay Nat. Hist. Soc.* 39 (2): 246-263.

Horned Lark *Eremophila alpestris* in Arunachal Pradesh

Ramana Athreya

National Centre for Radio Astrophysics, (Post Bag 3), Pune University Campus, Pune 411007, Maharashtra, India. Email: rathreya@ncra.tifr.res.in

On 11.x.2004 I photographed a Horned Lark *Eremophila alpestris* in Arunachal Pradesh. While Ali and Ripley (1987) report the species from all along the Himalayas including Bhutan and NEFA (earlier name for Arunachal), Grimmett, et al. (1998), and Kazmierczak (2000) have completely excluded Bhutan from its range and put a question mark on Arunachal Pradesh. Whatever be the reason for this change in status it suggests that sightings of this species in Arunachal have been very scarce at best.

The photographs accompanying this note speak for the identification and I will not delve on it in detail. The bird appears to be a sub-adult / first-winter female, from the thinness of the gorget and the lack of the forecrown black band. The races *elwesi* and *longirostris* differ in body size and length of beak (Ali and Ripley 1987).

Not having the bird in hand and not having seen any *longirostris* I can only say that the beak length did not appear to be incompatible with it being *elwesi* as indeed the distribution as per Ali and Ripley (1987).

The bird was seen early in the morning at 3,600m altitude along a road cutting in a well-wooded (and well-watered) conifer forest, quite unlike the "Tibetan facies" that this species is partial to. However, there is a record of this species even from Delhi (Kelsey, et al. 2001: http://www.delhibird.org). The bird allowed close views for several minutes. On flying away to the top of a dead tree it uttered a subdued lark-like warbling. (Photo: www.indianbirds.in).

References

Ali, S., & S. D. Ripley. 1987. *Handbook of the birds of India and Pakistan*. Compact edition. Delhi: Oxford University Press.

Grimmett R., C. Inskipp and T. Inskipp. 1998. *A guide to the birds of India, Pakistan, Nepal, Bangladesh, Bhutan, Sri Lanka, and the Maldives*. Princeton University Press.

Kazmierczak, K. 2000. *A field guide to the birds of the Indian Subcontinent*. Pica Press.

Sightings of Sociable Lapwing *Vanellus gregarius* in Rajasthan, excluding Bharatpur records

Harkirat Singh Sangha
B-27, Gautam Marg, Hanuman Nagar, Jaipur 302021. Email: sangha@datainfosys.net

The Sociable Lapwing *Vanellus gregarius* is a monotypic species of the sub-family Vanellinae (family Charadriidae) and a winter migrant to north-west India. The species is classified as Vulnerable because it has suffered a rapid decline and range contraction (BirdLife International 2000).

There are very few records of the species from Rajasthan, except from Keoladeo National Park, Bharatpur. The prevailing dry conditions in the park facilitated by an unprecedented water shortage since last four-five years seem to have favoured Sociable Lapwing and other species. The Yellow-wattled Lapwing *Vanellus malabaricus* is commoner in the park than before and the Indian Courser *Cursorius coromandelicus* is breeding in the park this year (Bholu Khan, verbally). Regular sightings of Sociable Lapwing in recent years at Bharatpur suggest that today it is the most consistently visited site, by the species, in India. However, from other suitable areas in Rjasthan, like Tal Chhapar, records are few and far between. Unlike Keoladeo there is too much ground to cover there. Moreover, such sites have generally remained under-observed.

This paper reviews and supplements historical, published, data on this declining species. Keoladeo records have been deliberatey excluded as these have been generally well documented (BirdLife International 2001).

The first record from Rajasthan is more than 135 years old (Adam 1873). Although Adam collected four specimens on 5.xii.1869, 5.xii.1872, 17.x.1873 and 6.xii.1873 from Sambhar, he found the species "not very common; during the cold weather it is to be met with sparingly about the plains," (Adam 1873). A January 1912 record is from Bikaner (specimen in BMNH) and A. E. Jones collected a specimen on 30.xii.1937 from Nasirabad, Ajmer (BirdLife International 2001). Whistler (1938) merely described it as "a cold weather visitor and common according to Hume." Many of the refrences in Whistler's paper (1938) are "in very general terms", for he has not mentioned any date or site and his sources are R. M. Adam, Dr King (who collected birds at Mt. Abu and Jodhpur for nearly two years, but published no account of his observations, except for supplying specimens to Hume), and A. O. Hume. Of the fourteen specimens in the collection of the Bombay Natural History Society none is from Rajasthan (Abdulali 1970).

Table 1: Records of Sociable Lapwing in Rajasthan (excluding Bharatpur)

No. of birds	Date	Site	Source
5	14.x.1995	Tal Chhapar, Churu	Sangha 2000
1	11.i.1998	Revasa, Sikar	Sangha 2000
15	28.i.1998	Tal Chhapar, Churu	Sangha 2000
11	1.ii.1998	Tal Chhapar, Churu	Sangha 2000
2	18.i.1999	Jaisalmer	Sangha 2002

All other published records from Rajasthan are shown in Table 1.

Unpublished records of Sociable Lapwing in Rajasthan are from Jaisalmer, Bikaner and Hanumangarh districts. I observed a flock on 18.x.2003 comprising of six birds including one juvenile, foraging on a sward at Baramsar depression west of Jaisalmer. Shantanu Kumar (verbally) recorded an individual at Badopal, Hanumangarh district in December 2000 / January 2001. Manoj Kulshreshtha (verbally), Bryan Bland and members of a birding group observed seven birds on 26.xii.1998 at Ganga village on way to Sudasri, Desert National Park, Jaisalmer. R. G. Soni (verbally) observed / photographed one juvenile on 22.x.1991, foraging on the edge of Jor-Bir depression, Bikaner.

Acknowledgements

I thank Shantanu Kumar, R. G. Soni, Manoj Kulshreshtha and Bholu Khan for supplying their unpublished data.

References

Adam, R. M. 1873. Notes on the birds of the Sambhur Lake and its vicinity. *Stray Feathers* 1: 361-404.

Abdulali, H. 1970. A catalogue of the birds in the collection of the Bombay Natural History Society-5. *J. Bombay Nat. Hist. Soc.* 66 (3): 542-559.

BirdLife International. 2000. *Threatened birds of the world*. Barcelona and Cambridge.: Lynx Edicions and BirdLife International.

BirdLife International. 2001. *Threatened birds of Asia: The BirdLife International Red Data Book*. Cambridge: BirdLife International.

Sangha, H. S. 2000. Recent sightings of *Vanellus gregarius* (Pallas) at Tal Chhapar and Revasa, Rajasthan. *J. Bombay Nat. Hist. Soc.* 97 (2): 278-279.

Sangha, H. S. 2002. A supplementary note on the avifauna of the Thar Desert (Rajasthan) *J. Bombay Nat. Hist. Soc.* 99 (1): 120-126.

Whistler, H. 1938. The ornithological survey of Jodhpur State. *J. Bombay Nat. Hist. Soc.* 40 (2): 213-235.

Some vocalizations of the Jungle Prinia *Prinia sylvatica* during the breeding season in Maharashtra

Sharad Apte
"Ushahkal", 1766 Ganeshnagar, Dr Ambedkar Road, Sangli 416416. Email: sharadapte@yahoo.co.uk

Introduction

Bird vocalizations are of interest for at least two reasons. First, in taxonomy and systematics, similarities and differences in the structure of vocalizations can help resolve disputes about whether a taxon is a "good" species, and can provide information on the degree of relatedness between species and subspecies, Second, the study of vocalizations tells us about the behaviour of birds: we can ask what information is being transmitted through these sounds, to whom, and under what circumstances. Much remains to be learnt about the structure of bird vocalizations and

the contexts in which these are made. I studied the songs and calls of the Jungle Prinia to elucidate these aspects of their vocalizations.

Study Area

Sagareshwar Wildlife Sanctuary (16º5'-17º9'N, 73º-74º22.5'E) is situated in Kadegaon taluka of Sangli district in southern Maharashtra, India. The 1,087.75ha sanctuary is devoid of human habitation and is covered by southern tropical thorn forest (type 6a; Champion and Seth 1967). The climate is hot and dry. The area lies at an average of about 500m above m.s.l. The highest point is at about 900m above m.s.l. Annual temperatures vary from a minimum of 8ºC to a maximum of 41ºC. The average rainfall is about 400mm, most of which falls from June to October. July and August are the wettest months.

I carried out an extensive study of bird life in Sagareshwar sanctuary from August 1997 to November 2000 (Unpublished). Total taxa, including subspecies, include 114 forms representing 50 families. Out of these 114, 47 are residents, 22 are winter migrants, 15 are breeding migrants and 30 are represented by stray records within the sanctuary, but are resident in neighbouring areas. During my study, I made a particular effort to investigate the nesting, vocalizations and behaviour of the Jungle Prinia *Prinia sylvatica*.

Study Species

Four geographical races of the Jungle Prinia occur in the Indian region: 1) *P. s. gangetica*, Kangra district of Himachal Pradesh, Punjab, and Northern Madhya Pradesh; 2) *P. s. sylvatica*, the Indian peninsula from Maharashtra and nothern Madhya Pradesh south to Kanyakumari; 3) *P. s. valida* of Sri Lanka; 4) *P. s. insignis*, Kutch and Rajasthan; and 5) *P. s. mahendrae* of Mahendragiri, Orissa (Ali and Ripley 1973). All these five races are strictly resident (Whistler 1963).

The subspecies of concern here, *P. s. sylvatica*, is distributed in peninsular India (Ali and Ripley 1973). This bird breeds at very high density in Sagareshwar sanctuary. Except for deep ravines and hill tops, nests are spread all over the sanctuary, the highest densities occurring around the guest house and dormitory. *P. s. sylvatica* prefers arid, bushy, fallow land and bushy hills. Because such fallow lands are considered unproductive they are always under threat of encroachment by humans for horticulture or construction of industrial estates, townships or housing colonies. The Banjar Bhoomi Vikas Yojana, a project of the central government, has brought thousands of acres of land under cultivation, destroying the breeding and feeding grounds of such species.

Materials and Methods

The sanctuary was visited fortnightly during the main study period (a total of 55 overnight stays). Thereafter, I made monthly visits in the breeding season until November 2002. The vocalizations of the Jungle Prinia were recorded. These were digitised and spectrographs were prepared in the sound analysis program Syrinx, version 2.4s.

Results and Discussion

The breeding season of the Jungle Prinia extended from March to November, with a peak from June to September. The material used in nest construction was grass and nests were always situated in a thorny bush or in an *Agave* plant. The nests seemed largely located alongside forest roads or footpaths well-traversed by humans. This may indicate that the birds get protection from predators from proximity to human activity. Two nests were found within 100m from each other along the main road of the sanctuary. Of eight nests found (Table 1), six were located near the rest house. On 28.viii.1998, a nest under construction was found and it was observed that a single individual (sex?) did all the construction work; its partner was nearby throughout. No distinctive vocalizations were heard during nest construction.

Table 1: Seasonal changes in number of Jungle Prinia nests found

Month	Number of active nests found
August	4
September	2
October	1
November	1

It appeared that only one bird (female?) of a pair feeds chicks, while the other (male?) guards the nest. While young, the chicks were fed with insect larvae. Older chicks were fed with adult insects as well. Food selection in relation to the age of the chicks needs further study.

Three distinct vocalizations were heard (Fig. 1).

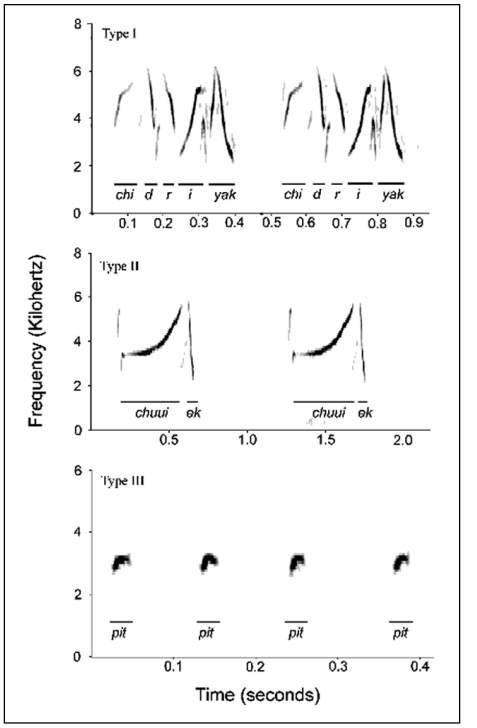


Figure 1: Spectographs of the three vocalizations recorded. The frequency describes the pitch of the sound; darker pixels indicate louder sound. Note that the time scale (on the horizontal axis) is not the same for the three calls. Lines are drawn under each syllable, together with a verbal description.

Call type I: This call is described as *pit pretty*, a loud triple note with *pit* subdued, by Ali and Ripley (1973). I verbalise it in Marathi as "*chidriyak chidriyak chidriyak*". Although the call sounds like a triple note, the spectrograph shows that there are at least five syllables in each phrase (Fig. 1).

This song starts to be heard in March, but remains sporadic until the end of May. Upon the arrival of the monsoon, singing activity becomes vigorous. This song is presumably given by males; these individuals select a high perch such as tall bush or sapling, or electric poles and wires to deliver the song. The song continues for 5 to 7 minutes with short pause of a few seconds. Every now and then the bird changes its perch; thus it sings from various parts of its territory. This song is presumably used to demarcate the boundaries of the territory and to attract females. Singing males are often seen driving intruders out of the territory.

When the pairs are formed, males show an elaborate courtship flight. The male rises some distance up in the air, nosedives and jerks up again. This up and down movement is repeated several times until male alights

in a bush. During this flight, a snapping sound is made either by wing or beak, but I was unable to record it. Most of these courtship flights were observed in July and August.

Call type II: This call is delivered when the nest has hatchlings. The male (?) selects a perch in the canopy or crown of a bush or tree to deliver this call. Exposed perches are avoided. As the observer approaches the nest, the bird becomes restless and increases the tempo of the call. I verbalise this call as a long-drawn *chuui-ek chuui-ek* (Fig. 1).

This vocalization seems to be an alarm call, but the precise function needs further study. This call allowed me to locate several nests (Table 2).

Call type III: I transcribe this as *pit pit pit* (Fig. 1). The male selects a high perch in the vicinity of the nest and delivers this call from an exposed branch. The bird appears restless while delivering the call. Like type II, this too appears to be an alarm call. On close observation, I noticed the following points.

1. When the female (?) approaches the nest with food, the male (?) starts calling.
2. When the female (?) is away and out of the male's (?) sight, the calling bird becomes silent.
3. The female (?) collects food from a certain area and uses a particular route to approach the nest. Male (?) select a high perch along this route.

Discussion

Several aspects of the ecology of these birds can be studied with the help of the calls they make. First, by basing censuses on the call type I, one can estimate the population size and density of territorial males. It should also be possible to measure the sizes of territories by mapping the singing locations of individual males. Second, one can use call types II and III to locate nests to estimate the density of active nests to study parental feeding behaviour, and to measure the success rate of broods.

Table 2: Nests found by locating individuals giving call type II.

Date	Notes on nest
15.viii.1997	With two chicks
25.viii.1997	With two chicks
15.x.1997	With two chicks
01.xi.1998	Female seen carrying larvae but nest remained untraced
24.viii.2002	One chick; almost fledged
29.ix.2002	Nest with three chicks
22.ix.2002	Female seen carrying larvae but nest remained untraced

References

Ali, Salim, and S. Dillon Ripley. 1973. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Ceylon*. Vol. 8 (Warblers to redstarts). 10 vols. Delhi: (Sponsored by Bombay Natural History Society.) Oxford University Press (2001).

Champion, H. G. and S. K. Seth. 1968. *A revised survey of the forest types of India*. Govt. of India Press: New Delhi, India.

Whistler, Hugh. 1963. *Popular handbook of Indian birds*. Reprint of Revised & Enlarged 4th ed. London: Oliver & Boyd Ltd.

[**Editors' note**: Sound files of the three calls (MP3 format) have been uploaded on our website (www.indianbirds.in).]

Melanism in Spotted Owlet *Athene brama*

Satish Pande[1], Amit Pawashe[1], Anil Mahabal[2]

[1]Ela Foundation, C-9, Bhosale Park, Sahakarnagar-2, Pune 411009, India. Email: satishpande@hotmail.com

[2]*Zoological Survey of India Western Region Station, Akurdi, Pune, Maharashtra, India.*

Melanism is the occurrence of abnormally black coloured individuals due to the excess presence of a pigment called melanin in their skin, hair, feathers, etc. Colours of feathers in birds depend on combinations of the bichrome pigments such as melanin, porphyrin and carotinoids. Genetic, hormonal and environmental ultimately dictate their expression. In contrast to melanism, albinism is the total absence of pigment melanin from the feathers, eyes, and skin. Detection of the absence of a particular pigment is often not possible, the generalized terms leucism or isabelline are preferred. Reports of melanism in birds are rare and in nocturnal species are sparse. Pande et al. (2003) report partial melanism in the following Indian birds: Brahminy Starling *Sturnus pagodarum* and Jungle Babbler *Turdoides striatus* near Pune and Chiplun, Maharashtra, respectively.

A study of the population, ecology and breeding biology of the Spotted Owlet *Athene brama* was initiated near Pune, beginning from January 2002. During this study, the authors noticed a melanistic form of this owlet in the year 2003. The exact location of the nest hole where the melanistic owl was recorded was 18^{0}20'64"N, 74^{0}01'41"E at 800m near Saswad, Purandar taluk, Pune district, Maharashtra. The nest was in a 75-year old *Ficus bengalensis* tree, at a height of 8m, measuring 30x20cm with a depth of 45cm. In June 2003, four owlets were first seen near the nest, of which two were chicks and both were melanistic. One parent was of normal plumage and the other parent was partially melanistic. No photographs were taken at that time. The observations were however continued.

In February 2004, two adult spotted owlets of normal plumage occupied the same nest. Two chicks hatched from two eggs and both the chicks were of normal plumage. These chicks were ringed. Two, plastic, lemon yellow coloured rings with numbers 261 and 262 were placed in right and left tarsus respectively. In April 2004, the chicks fledged and subsequently the nest site was unoccupied. In July 2004, three owlets were again seen to be occupying the same nest. Two were adults and one was juvenile. One adult was normal and the other was partially melanistic but the juvenile was melanistic. Photographs were taken this time (Uploaded on www.indianbirds.in), and it was assumed that the pair that was seen in June 2003 had returned. This was a conjecture since ringing was not done earlier. It was also assumed that the pair nesting and fledging normal owlets from February until April 2004 was different from the pair that fledged a melanistic owlet, even though both the pairs used the same nest.

The distribution of Southern Spotted Owlet *A. b. brama* is confined to peninsular India south of 20^{0}N latitude and has not been reported from Sri Lanka. The Northern Spotted Owlet *A. b. indica* is seen north of this arbitrary line but overlap is seen around

20^0N latitude. The species is resident and affects ruins, old buildings, groves and ancient trees near human habitation and cropland. Southern race is about 21 cm. in length, is darker grey and slightly smaller than the northern race. The plumage differences between the normal (Ali and Ripley 1969, Grimmett et al. 1998) and melanistic plumages in the owlet that we recorded are shown in Table 1.

The irides of both were golden-yellow; however, it appeared that the eyes of the melanistic form were smaller.

Partially melanistic plumage of parent: One parent with this plumage was darker overall than the other, which had a normal plumage. There were black to dark brown coloured patches on the pale colored chest and abdomen, instead of brown streaks. The facial disc was dark with smoky eyebrows. White spots on the crown, mantle and wing coverts and the tail bars, though visible, were not very prominent.

We observed an interesting behavior in the melanistic owlet. When the nest tree was approached for observations and collecting pellets, the owlet with normal plumage first took wing, followed after closer approach by the partially melanistic parent, while the juvenile melanistic owlet only reluctantly flew away on even closer approach. It was often difficult to locate the melanistic owlet when it was perched and immobile. In our study of several nests of the spotted owlets with normal plumage in the same locality, the chicks and parents took wing almost simultaneously.

For obvious reasons, it is extremely difficult to identify melanism in nocturnal birds. True incidence of melanism in nocturnal birds is unknown. We report in this paper, probably the first instance of melanis, in wild population of any owl from India, in this case, in the Southern Spotted Owlet.

References

Ali, Salim and S. Dillon Ripley. 1969. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. Vol. 3. New Delhi: Oxford University Press.

Duncan, James. 2003. *Owls of the world*. Canada: Key Porter Books.

Grimmett, Richard, Carol Inskipp and Tim Inskipp. 1998. *Birds of the Indian Subcontinent*. Christopher Helm: London.

Pande, S., S. Tambe, C. M. Francis and N. Sant. 2003. *Birds of Western Ghats, Kokan and Malabar (including birds of Goa)*. Oxford University Press: India.

Table 1: Normal and melanistic plumage

Normal plumage	Melanistic plumage
Plumage: grey brown.	Dark brown to black.
Facial disc and hind collar: white.	Dark, collar not seen.
Eyebrows: white, distinct.	Indistinct.
Crown, mantle, wing coverts: white spotted.	Indistinct white spotting.
Chest and belly: pale white with brown streaks.	Uniformly dark with indistinct bars.
Beak, feet and claws: grey.	Dark black.
Tail: conspicuously barred.	Bars indistinct.
Cere: smoky green.	Dark.

Recoveries from *Newsletter for Birdwatchers* – 7

Zafar Futehally

#2005 Oakwood Apartments, Jakkasandra Layout, Koramangala, 3rd Block, 8th Main, Bangalore 560034, India. Email: zafar123@vsnl.net

My pace has been too slow, and the Editor is right in suggesting that I write about the main happenings not on a monthly but on a yearly basis. My last contribution brought the story up to July 1961. This note covers the period up to December 1961.

The August 1961 issue carried extracts from a lecture by Salim Ali on "Birds and Plants", to the Singapore Branch of the Malayan Nature Society. It is a fascinating piece and I quote one paragraph which will be of interest not merely to ornithologists but also to our sportsmen.

"On the credit side of the bird's seed dispersal account, also, two significant entries may be cited. The flourishing sandalwood and oil industry of Southern India, which yields a substantial revenue to the State of Mysore, owes its existence largely to frugivorous birds like bulbuls and barbets which swallow the berries of the sandalwood tree (*Santalum album*) and disseminate the seeds far and wide, thus ensuring widespread natural regeneration of the tree. And such are the complex chains of cause and effect in Nature that one feels almost tempted to give vicarious credit to our native birds, at least in part, for India's supremacy in the sport of hockey. The links in this chain are as follows: The basis of the comparatively young but vigorous sports goods industry in the Punjab, which supplied all the championship-winning hockey sticks, is the mulberry tree (*Morus indica*). When the desert areas of the Punjab were first colonized by the introduction of the vast network of irrigation canals, the mulberry tree was planted along their banks as a fast-growing soil binder.

"The local birds took to the fruit with such zest that within a very short period the mulberry tree became abundant and paved the way for the flourishing plantations which furnish the raw materials for badminton and tennis rackets, cricket bats, hockey sticks and numerous sports requisites. The bird-assisted industry now not only caters for practically the entire needs of the country, but also earns a sizeable amount of much-needed foreign exchange by exports abroad."

"Some birds around Badrinath", in two parts, (Aug. 1961 and Oct. 1961, by K. S. Lavkumar) describes many of the common birds which visitors are certain to come across – white-capped redstarts, Plumbeous restarts, Himalayan whistling thrush, little Forktail, and the extraordinary brown dipper, which procures its meal by "plunging into the eddying water straight to the bottom; then if the water is clear it can be seen walking on the floor against the current…This suicidal feat of the little bird has always been rather alarming to watch…"

Among the land birds described is the wall creeper, "about the size of a large sparrow, with round full wings like a hoopoe and the same uncertain flight of a butterfly…but it is the habit of alighting and running up sheer walls that is diagnostic of the wall creeper, and it lives its perpendicular life on cliff faces above 14,000 ft…descending to the foothills in winter…"

No one can fail to be impressed by the

antics of the two species of choughs, one with its coral red bill and legs, (*Pyrrhocorax pyrrhocorax*), and the other with a yellow bill and red legs (*P. graculus*). "…A chough is a bird of the unfettered Himalayan elements, forever circling and tossing, rising and falling, and as free as the winds that breathe across these magnificent mountains."

In July 1961, I accompanied Salim Ali to Rudrapur, in Uttar Pradesh, from where there was news about the recently re-discovered large-billed weaver bird (Finn's Baya). Our host was Mr C. M. Chaudhri, a retired Chief Conservator of Forests from Orissa. His farm of 350 acres, covered with grass and reeds, typical of "Bhabar" country, was an especially good habitat for warblers, and from elephant-back we listed 85 species within the confines of the farm. Among these was the yellow-headed fantail warbler (*Cisticola exilis*) recorded for the first time in Kumaon a few years ago. Three species of bayas were nesting on the farm, the common, the striated and the black-throated, and it was instructive to see the differing architecture of each species. My only disappointment was that we had not seen a tiger. These beasts are frequent visitors to the farm and our host showed us a few damp and shady spots where they occasionally have their afternoon siesta. However, not having come across tigers on the premises also has its advantages.

One of the keenest and most reliable birders of this period was Mrs Usha Ganguli. On 28.v.1961, she waded through knee-deep water at Najafgarh Jheel to find live nests of black-winged stilts, and she gave a very useful account of birds present there in May – where she had "never seen as much water", and again on 23.vii.1961, when "the waters had been drained to a very great extent". In spite of this she was able to say that the place was "not only a paradise for water birds but the greatest variety of raptors is to be found here. I have seen 7 kinds of eagles, apart from buzzards, harriers, falcons."

Capt. N. S. Tyabji (October 1961) expressed his surprise at Mrs Ganguli not mentioning the little Indian pratincole (*Glareola lactea*), seen by him in large flocks of 3,000-5,000 birds. Among the several other birds reported by Tyabji was a flock of about 200 pheasant-tailed jacanas, 20 sarus cranes and 50 black-necked storks.

Salim Ali followed up Tyabji's note in the November 1961 issue, questioning some of the identifications. Rain Quail: "Is it not more likely that the 'small flock (about 12 birds) observed in a newly ploughed field' were in fact bush quails? The place and habit certainly suggest that latter. For the benefit of future observers it seems desirable to straighten out these doubts."

In the September 1961 issue Salim Ali produced a useful note on "Field Identifications of some Migratory Song Birds". In this "a beginning (was) made with a group of wagtails in whose plumage yellow is predominant." This should be of great interest to birders even today, for in spite of several illustrated books which are now available, the different races of migratory wagtails are difficult to separate one from the other. With his characteristic caution he wrote "Subspecies of individual examples of wagtails are often impossible to determine with certainty even from museum skins in breeding plumage; in the field it would be rash and of doubtful scientific value to attempt to do so…" If any wagtail-ophile is interested in a copy I will be glad to forward it.

In 1961 the *Newsletter* was sent free to all "subscribers". When we wrote to the Postmaster General for a concessional postal rate because the publication was of "educational value", his reply was that since the *Newsletter* was being sent free, there can be no question of concession. From January 1961, the subscription was Rs. 5/- per annum for 12 issues. In spite of its not being "free" all subsequent attempts to get the concession failed. I hope we have better luck with *Indian Birds*.

Many of the persons who encouraged the *Newsletter* during its initial year by letters / articles have fallen by the way or are out of sight, but I mention them here as a mark of gratitude. I am listing only those who have not featured in Recoveries. So far Prof. K. K. Neelakantan, Y. S. Shivrajkumar, M. K. Fatehsinhji, M. Sasikumaran, C. Nandini, George P. V., S. Thomas Satyamurti, Lalsinh M. Raol, R. A. Stewart Melluish, R. N. Chatterjee, P. V. Bole, M. M. Mistry, Anwar Khan, Naresh Singh (WLW UP), Ahi Rudra (DFO Darjeeling), P. K. Rajagopalan (Virus Research Centre, Shimoga), J. T. M. Gibson, K. Janaskuraman, P. W. Soman, Amir J. Ali, M. Sasaikumar, R. S. Prasad (Haffkine Institute, Bombay), Mrs Desiree Proud (Kathmandu), Dr W. Rydzewski (Editor, *The Ring*), H. G. Acharya, Dr J. P. Joshua (Liberia, West Africa), A. S. Tyabji (Jamshedpur), Mrs Jamal Ara (Ranchi), B. A. Palkhiwala and, B. G. Ghate.

International Conference on Bird and Environment, Haridwar, India

Vinaya Kumar Sethi[1], Vivek Saxena[1] & Dinesh Bhatt[1]*

[1]*Avian Diversity & Bioacoustics Lab., Dept. of Zoology & Environmental Sciences, Gurukula Kangri University, Haridwar, Uttaranchal, India.*

** Corresponding author (dd_bhatt@yahoo.com) and Organising Secretary of the Conference.*

A four-day international conference on 'Bird and Environment' was held in Gurukula Kangri University, Haridwar from 21-24.xi.2004. Over 160 ornithologists, conservation biologists, government representatives and naturalists, including 31 from 17 countries, participated in the meeting. There were 9 plenary lectures, 25 invited talks, 60 oral and, 51 poster presentations during the sessions.

In the first and second sessions namely, "The biology of avian vocal behaviour" and "Advances in avian bioacoustics", speakers examined numerous biological aspects of vocal behaviour such as diversity of acoustic communication, sexual selection and neurobiology of bird song, discrimination of temporal fine structures of songs by birds, etc.

In his Plenary, in the first session, entitled, "The science of bird songs: nature's music", Peter Marler (University of California, Davis, USA), the father of 'avian communication system', said, "Environmental factors influence the communicative efficiency of acoustic signals and thus their evolution with consequences for their use by conservationists in monitoring population of endangered species." In the first session, presentations were made on various aspects of the uses of songs and calls in the social life of birds by Dietmar Todt (Free University, Berlin Germany), J. E. Vielliard (University Estadual de Campins, Brazil), Ole Neasbye Larsen (University of Southern Denmark, Denmark), Nicolas Mathevon (University Jean Monnet-Saint-Etienne, France, Anil

Kumar (Wildlife Institute of India, Dehradun) and Vinaya Kumar Sethi (Gurukula Kangri University, Haridwar).

The second session began with a Plenary by Clive K. Catchpole (University of London, UK) on the neurobiology of birdsong. He pointed out that the main driving force behind the evolution of song is sexual selection and female choice has exerted pressure to make male songs more complex and attractive to females. Maria Lusia da Silva (University do Guama, Belem, Brazil), R. A. Suthers (Indiana University, Bloomington, USA), Theirry Aubin (University of Paris, France), Robert Dooling (University of Maryland, USA), Kazuo Okanoya (Chiba University, Japan), Miki Takahashi (Chiba University, Japan), K K Sharma (Jamshedpur Cooperative College, Jamshedpur) and Christina B. Castelino (Johns Hopkins University, Baltimore, USA) contributed significantly to the theme of the session.

The role of birds in agricultural ecosystem is well known. In the session, "Agriculture Ornithology", participants discussed and developed strategies for the management of avian diversity in agricultural ecosystem so that the requirements of all the species are met, benefits of insectivorous birds in pest control could be explored and the pressure of granivorous birds on crops could be minimized. In his invited talk, B. M. Parasharya (Anand Agricultural University, Anand, Gujarat) pointed out that for the conservation of birds found in agricultural areas, eco-friendly management of agricultural landscapes is required. K. L. Mathew (Gujarat Agricultural University, Jamnagar, Gujarat), V. R. Reddy (A.N.G.R. Agricultural University, Rajendranagar, Hyderabad), Mani Chellappan (Kerala Agricultural University, Thrissur, Kerala), and C. S. Malhi (Punjab Agricultural University, Ludhiyana) presented their findings in this session.

With increasing industrialization and urbanization of the landscapes in India and abroad it has become important to protect ecologically important habitats from further human impacts. Under the sessions, "Avian biodiversity and conservation" I and II, this conference discussed the current status and distribution of birds in IBAs (Important Bird Areas) and other landscapes. In addition, the presentations provided an update on the situation in India highlighting a number of critically threatened sites of high biodiversity values. It has been realized that a systematic and regular biomonitoring of the wetlands in bird sanctuaries and wildlife habitats of India is required.

Lei Fumin (Chinese Academy of Sciences, Beijing) delivered a Plenary lecture in the session, "Avian biodiversity conservation I" on the topic 'An alternative hotspot for the avian diversity conservation priority' and emphasized that Hengduan Mountains to Qinling Mountains in south eastern China along the eastern, southeastern and northeastern Tibetan Plateau should be promoted as the hottest area of Chinese biodiversity with the highest conservation priority. Lalitha Vijayan (SACON, Coimbatore), H. S. A. Yahya (Aligarh Muslim University, Aligarh) described the avifauna of Andaman and Narcondom Islands respectively and suggested that some mangrove forests and moist deciduous forests in Middle Andaman may be declared as protected area. Other speakers of the session such as Shwartz Assaf (The Hebrew University of Jerusalem, Israel), S. Somasundaram (SACON, Coimbatore), Anika Tere (Gujarat Agricultural University, Anand), Romesh Kr. Sharma (Z.S.I., Dehradun) presented data on avian biodiversity of different parts from India / Israel.

Under the session, "Avian biodiversity and conservation II", the Plenary was delivered by Lalitha Vijayan (SACON, Coimbatore) on the conservation of wetland birds in India. She pointed out that a total of 655 wetlands were identified and surveyed for birds all over India and all the wetlands showed contamination by heavy metals and pesticide residues. Aeshita Mukherjee (University of Capetown, South Africa), Arun Kumar (Z.S.I., Dehradun), P. K. Saikia (Guwahati University, Guwahati), P. C. Tak (Z.S.I., Dehradun), R. C. Gupta (Kurukshetra University, Kurukshetra), Kailash Chandra (Z.S.I., Jabalpur) presented papers.

The session "Avian endocrinology, photoperiodism and seasonal reproduction", highlighted the role of hormones, annual changes in day length, temperature and humidity in causing or phasing seasonal events in birds, like migration and reproduction. This knowledge has implications to issues related to conservation and management of threatened and endangered species and adaptation of birds to the threat of global warming. The Plenary lecture was delivered by Prof. Asha Chandola-Saklani (Garhwal University, Srinagar) on seasonal reproduction in birds of tropics. In her lecture through two superb models, namely Baya Weaver *Ploceus philippinus* and Spotted Munia *Lonchura punctulata*, she explained how tropical / subtropical birds have provided significant insights into environmental control of seasonal reproduction in birds. During this session Vinod Kumar (Univeristy of Lucknow, Lucknow) in his invited talk, pointed out that melatonin, which is a part of the avian circadian system, did not play a direct role in photoperiodic induction of circadian rhythms mediated seasonal reproduction. Saumen Kumar Maitra (Viswa Bharti University, Shantiniketan) showed that the seasonal recovery of gametogenesis might not be a function of photoperiods and / or the pineal organ in Rose-ringed Parakeet. Besides these invited talks in this session oral presentations were made by B. K. Tripathi (Regional Institute of Education, Bhopal) Sangeeta Rani, Sudhi Singh, Amit Kumar Trivedi (University of Lucknow, Lucknow) and Anushi (Meerut University, Meerut).

Global climatic change is probably the most important environmental challenge that faces our planet. In the session "Avian ecology and breeding biology I", this conference discussed the impact of these changes on birds' lives. In her invited talk, Michele Loneux (Zoological Institute, Van Beneden, Belgium) reported the effect of climatic fluctuations and global warming on European Black Grouse population dynamics. Lo-Liu-Chih (Shu-Te University, Taiwan) and Anoop Das (SACON, Coimbatore) also presented their findings on avian ecology and breeding biology. It was discussed that aspects of avian behaviour and ecology could be used as informative indicators of large scale climatic change.

Under the session "Avian ecology and breeding biology II", Wina Meckvichai (Chulalongkorn University, Bankok, Thialand) and T Shivanandappa (Central Food Technology Reseach Institute, Mysore) delivered invited talks on the breeding biology of island birds of the Andaman Sea and Ranganathittu Bird Sanctuary respectively. Other speakers, namely, N. Gomathi (B.N.H.S., Mumbai), K. C. Soni (Lohia Post Graduate College, Rajasthan), V. C. Soni (Saurashtra University, Rajkot) also presented their data. In her studies Gomathi found a decreasing trend

in the population of Long-billed Vulture, a most critically endangered species, at Bayana, Bharatpur (Rajasthan).

The senior Indian ornithologist, S. A. Hussain (Karkala, Karnataka) and, Hans Winkler (Austrian Academy of Sciences, Austria) delivered invited talks in the session, "Avian migration, habitat use and general behaviour". S.A. Hussain described the bird migration pattern in the Indian Subcontinent. He gave an overview of the most recent research work conducted in this field. Hans Winkler reported that migrants possessed smaller brains than residents. The other participants of this session, A. Mukherjee (University of Cape town, South Africa), Sangeeta Rani (Lucknow University, Lucknow), Pratyush Patankar (M S University of Baroda, Vadodara), Mohd. Arshad (B. Z. University, Pakistan), V. K. Tomar (I.A.R.I., New Delhi), D. M. Jathewa (Junagarh Agriculture University, Jamnagar), and M. Soma (University of Tokyo, Japan) highlighted research in the field of habitat use and behavioural biology.

Three poster sessions (51 participants) exhibited avian biodiversity on a global scale including reports from deteriorating habitats of the world and their impact on bird biodiversity.

In the valedictory session, chief guest R. S. Tolia (Chief Secretary of Uttaranchal) stated that India is one of the 12 mega-biodiversity countries of the world which provide suitable habitat for the conservation of all kinds of biodiversity. Peter Marler (University of California, Davis), Co-chairperson of the International Advisory Committee of the conference presented the conference report and suggested that there is need for such conferences to fill the large-gap in the conservation efforts at global level. The recommendations of the conference were presented by S. A. Hussain (Karkala, Karnataka). It was recommended that:

(a) There is a need to increase knowledge and awareness of wetlands and their values and all wetland-type habitats should be conserved through legislation and government policies.
(b) Studies should concentrate on satellite tracking of migratory birds involving both laboratory and field scientists in developing a richer understanding of the subject and for the conservation of migratory birds.
(c) The state and central government should establish an integrated conservation and development network for newly identified IBAs and strengthen national legislation for the protection of sites that are of exceptional importance for biodiversity.
(d) Detailed studies on the ecology and breeding behaviour of endangered avian species should be undertaken for better conservation and management measures.

Indian White-backed Vulture *Gyps bengalensis* nesting in Sakrohar village, Khagaria district, Bihar, India

Sunil K. Choudhary, Santosh Kr. Tiwari, Sushant Dey & Subhasis Dey

University Department of Botany, T. M. Bhagalpur University, Bhagalpur 812007, Bihar, India. Email: *sunil_vikramshila@yahoo.co.in*

On 3.iii.2004 while on a distribution survey of Greater Adjutant-Stork *Leptoptilos dubius*, we saw 20 Indian White-backed Vultures *Gyps bengalensis* in Sakrohar village (25°36'26.0"N, 86°49'53.7"E), which is located in the floodplain area of the Kosi River in Khagaria district of Bihar, about 107km north-east of Bhagalpur. Local people reported that the vultures had arrived in the village 10-12 days ago, around 20-22.ii.2004. We located two nests on Palmyra Palms *Borassus flabellifer*. We could not see inside the nests at that time, as we were on a different mission.

We visited the village again on 11.iv.2004, especially to document the details of the nesting of the vultures. Both the nests, one each on a Palmyra, were located at a height of about 20m. The nests were built at the junction of three fronds' bases. The insides of the nests were not visible from the ground. A bamboo ladder was erected close to the palms that could be climbed up to a height that matched that of the nest. This was done with great difficulty with the help of local people. One researcher climbed up to peep into the nests. Each nest was 90cm long, 45cm wide and 12cm deep and had no distinct shape. The base of the nest was made up of haphazardly arranged dried twigs and leaves of Arjuna *Terminalia arjuna*, palm trees, and of other unidentified plant material. Only one chick (*c.* 70cm long) was present in each of the two nests. The chicks were able to move around the nest on their own. A parent attacked the researcher and his palm was injured in defending himself. We watched the nests for three days after this observation and found to our satisfaction that the vultures did not desert the nests. From interviews with local residents about the vulture's arrival in the village (around 20-22.ii.2004), and our first sighting of the vultures in the village on 3.iii.2004, when the nests were already built, we estimated the age of the chicks as one-month old. At great risk we were able to take some photographs and took some video-footage of the nests, chicks and the surrounding place in general. It will be interesting to mention that we had spotted a group of 50 Indian White-backed Vultures feeding on a buffalo carcass, in an Navtola (25°31'48"N, 86°41'45"E, Khagaria district, *c.* 80km from Bhagalpur), adjacent to the present sighting on 8.vii.2002. That flock had many juveniles in it.

Our present observation of two Indian White-backed Vultures in north-east Bihar has been documented by The Peregrine Fund, as part of their Asian Vulture Population Project (http://www.peregrinefund.org/vulture/coverage.asp?speciesID=2). A map on this website displays active nesting sites of *Gyps* vultures in India (26 in all, 1985/86-2003/04). This record was the first one from Bihar.

We have numerous secondary reports about the sighting of *Gyps* vultures in this locality. In view of the Critically Endangered status of Indian White-backed Vultures (Islam and Rahmani 2002), more search trips in the locality are required to establish its range of distribution in the area, and a study on annual basis on its habitat, population abundance and nesting.

Acknowledgements

We are grateful to Wildlife Trust of India for financial assistance in the Greater Adjutant Stork Search Project under RAP. Our observation on *Gyps bengalensis* is an offshoot of this project. We are also thankful to Mr Harischandra Singh and Mr Arun Kumar, owners of the two Palmyra palms in Sakrohar village, who permitted and helped us to investigate the nests.

Reference

Islam, M. Zafar-ul, and Asad R. Rahmani. 2002. Threatened birds of India. *Buceros* 7 (1&2): 6 pr.ll., iii-x, 1-102.

A record of Oriental Bay-owl *Phodilus badius* from Kaziranga National Park, Assam, India

Rathin Barman

Wildlife Trust of India, Centre for Wildlife Rehabilitation and Conservation, Kaziranga National Park, Borjuri, Bokakhat, Assam, India.
Email: rathinbarman@sify.com

Oriental Bay-owl *Phodilus badius* is scarce and uncommon in the forests of north-east India. Baker (1901) reported this bird from the bamboo forests of North Cachar and mentioned that at times it may stray into secondary forest. Stevens (1915) recorded it once from the plains of Dibrugarh in 1904 and once from Pathalipam of north Lakhimpur in 1908. It was recorded in in February 1998 in Namdapha National Park, Arunachal Pradesh (Paul Holt, verbally, to Maan Barua) and from Pakee Tiger Reserve, Arunachal Pradesh (Aparajita Dutta, verbally, to Maan Barua). In 1999 Maan Barua had an unconfirmed record of this bird from the eastern range of Kaziranaga National Park, Assam. Choudhury (2000) listed this bird as rare and uncommon and had no sightings from Assam himself.

On the morning of 29.i.2003 an adult Oriental Bay-owl was rescued by some villagers when it was strayed into a house in Bokakhat Town, Assam. It was immediately brought to the Centre for Wildlife Rehabilitation and Conservation (CWRC), which is a facility to rescue and rehabilitate wild animals, established by Wildlife Trust of India and Assam Forest Department at Borjuri, near Bokkhat, the head quarters of Kaziranga National Park. Eyewitnesses said they saw an uncommon bird being chased by a crow (Corvidae) in the morning. The bird tried to fly away, but somehow dropped into the courtyard of a house on the outskirts of the town. It was picked up by residents who realized it was an owl. The bird was examined at CWRC and no external injury was found. It was then kept in a carton for further observations for any internal injuries, if any. At the end of the day, none were apparent. The bird was perfectly healthy and it was decided to release it at night. Photographs were taken and it was released at night. It waited for five minutes in the open carton before vanishing into the darkness. The photographs taken during its brief stay at CWRC were the first ever photographs taken of this bird, in Assam and probably in India, as few experts said.

Acknowledgements

Kaziranga Park Authority, Assam Forest Department, Mr L. N. Barua, ACF, Kaziranga National Park, Mr Maan Barua, Dr A. U. Choudhury, Mr Vivek Menon, and Mr Bhupendra Nath Talukdar.

References

Baker, E. C. Stuart. 1897. The birds of north Cachar. Part VIII. *J. Bombay Nat. Hist. Soc.* XI (2) (1 November): 222-233.

Choudhury, A. 2000. *The birds of Assam.* Gibbon Books and WWF-I-NERO.

Stevens, H. 1914-15. Notes on the birds of upper Assam. 3 parts. *J. Bombay Nat. Hist. Soc.* 23: 234-268, 547-570, 721-736.

Range extension of Blue-eared Kingfisher *Alcedo meninting* in the northern Western Ghats, Maharashtra, India.

A. Shivaprakash

478, "Bidadi", 3rd Cross, 8th Main, 'H' Block, Ramakrishna Nagar, Mysore 570022, Karnataka, India. Email: adavanne@rediffmail.com

While on a trek in the northern Western Ghats in Pune district of Maharashtra, a solitary Blue-eared Kingfisher *Alcedo meninting* was observed at the Mangala Ganga stream, a tributary of River Mula near Payalichiwadi village, at the foothills of Kalad Gad Hill. This place is located in the valley between Kalad Gad and Ganachakkar range of hills, the eastern expanse of the Western Ghats. The forest type that is seen here is a stunted evergreen forest. The bird was seen at 07:30hrs on a cold morning. It was almost the size of the Small Blue Kingfisher *Alcedo atthis* but with an intense blue back, distinct blue ear coverts and deep rufous under parts.

The bird was busy fishing, and behaved like a Small Blue Kingfisher. It was perched on a low overhanging branch of a tree, keenly watching the water below. It made several unsuccessful attempts to catch fish. After each dive, it flew to a new position on a rock nearby or to other low branches of the tree. The bird was observed for twelve minutes when the harsh sound of a diesel pump startled it and it flew away.

Ali & Ripley (1987) list this kingfisher's domain as the humid Western Ghats strip in Goa, Mysore, Tamil Nadu (Nilgiri hills) and Kerala. Prasad (2004) lists it from Hedvi Konkan and Sindhudurg district (Maharashtra). This sighting is noteworthy to establish the range extension of the Blue-eared Kingfisher to the northern Western Ghats in Maharashtra. It also indicates that the kingfisher could possibly occur in the intervening ghat forests in the state where suitable habitat is present.

Reference

Ali, Salim, and S. Dillon Ripley. 1987. *Compact handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. (Sponsored by the Bombay Natural History Society.) Delhi: Oxford University Press.

Prasad, Anand. 2004. Annotated checklist of the birds of Western Maharashtra. *Buceros* 8 (2&3): i-ii, 1-174 (2003).

Northern Lapwings *Vanellus vanellus* in an agricultural field in Manipur, India.

Laishangbam Sanjit
Department of Zoology & Environmental Science, Gurukula Kangri University, Haridwar, Uttaranchal, India.

On 1.i.2000, I did a census of birds in the agricultural fields near Uyung Makhong village (24°28'N, 93°40'E), which lies on the periphery of the Thangjing Hill ranges in the east Himalayan state of Manipur (India). Some local boys, who were working in the field, had caught a bird with a crested head. They told me that the bird was called "*Salangkhak*". This is a Manipuri name for all species of the lapwing family. I took the bird from them and realised that the lapwing with the crested head was a Northern Lapwing *Vanellus vanellus*. I then looked around for more birds of this species. I found ten more individuals sitting / standing on the raised paths (locally called "*loubuk louri*") in the agricultural field. The mild breeze made their crests very prominent.

Locals informed me that it was common in winter and quite numerous in the month of January, particularly in this area. The bird was observed during the winter of 2001-2003, in the same field or area. Grimmett et al. (1998) mentioned it as an erratic visitor in the area. My rescued bird was nursed and set free after 5 days.

Reference

Grimmett, Richard, Carol Inskipp, and Tim Inskipp. 1998. *Birds of the Indian Subcontinent*. 1st ed. (With the collaboration of Sarath Kotagama and Shahid Ali.) (Helm Identification Guides.) London: Christopher Helm, A & C Black.

Egg cannibalism in Jungle Babbler *Turdoides striata*

Laishangbam Sanjit and Dinesh Bhatt
Avian Biodiversity and Bioacoustic Lab, Department of Zoology and Environmental Sciences, Gurukula Kangri University, Hardwar 249404.
Email: sanjitlai@yahoo.com

Jungle Babbler *Turdoides striata* is a resident bird, endemic to the Indian Subcontinent. Jungle Babblers are chiefly insectivorous, augmenting their diet with fruits, seeds and nectar. They feed chiefly on the ground, hopping about and buisily turning over leaves (Grimmett et al. 1998). On 2.ix.2003, we found a cup-shaped nest of dry grass and twigs of *Turdoides striata* in Kankhal area of Hardwar (29° 57'N, 78°12'E). It was about 4m above ground, on top of a bush and seemed quite exposed to predators (birds of prey) which were aplenty in the area. On 4.ix.2003 at 08:30hrs, we observed an unusual behavior. As soon as the female laid an egg, she broke the shell of the egg and ate its contents. (Egg-eating is apparently prevalent in poultry and is supposed to result from a calcium-defficient diet. In poultry, stress is also a cause for egg-eating.) She then picked up the lovely green-coloured shell with her beak and flew away with it. She leaves the egg-shell on the roof of a nearby house.

This entire sequence was recorded in a ten-minute video which has been deposited with the Records of Avian Biodiversity and Bioacoustic Laboratory, Department of Zoology and Environmental Sciences, Gurukula Kangri University, Hardwar (India).

Reference

Grimmett, Richard, Carol Inskipp and Tim Inskipp. 1998. *Birds of the Indian Subcontinent*. Oxford University Press, New Delhi.

Reviews

Birds of South Asia. The Ripley Guide. Field guide. Vol. 1; ***Birds of South Asia. The Ripley Guide. Attributes and status***. Vol. 2. — By Pamela C. Rasmussen and John C. Anderton. 2005. Barcelona: Lynx Edicions. ISBN: Vol. 1: 84-87334-65-2; Vol. 2: 84-87334-66-0; Vols. 1&2: 84-87334-67-9. Copies can be ordered from: www.lynx.com. Price for the set: • 75/- [= *c*. Rs 4,000/-].

Vol. 1: Hardback (15.0 x 22.0cm, with illustrated cover), pp. 1-378+6, plates I-II (endpapers, front), III-IV (endpapers, rear), plates 1-180, 1,450+ maps (colour, distribution). Vol. 2: Hardback (15.0 x 22.0cm, with illustrated cover), pp. 1-683+5, endpapers [Maps (front: South Asia, physical; back: South Asia, main regional habitat zones)], 3 portraits [b&w: S. D. Ripley (p. 8), Pamela Rasmussen (p. 11), John C. Anderton (p. 11)], text-figs. 1-5 (Fig. 1: Bird topology; fig. 2: Geographic and political names mentioned in text; fig. 3: Number of breeding species; fig. 4: Number of regional endemic species; fig. 5: sample sonagrams); 1,000+ sonagrams.

Pamela Rasmussen and John Anderton's long-awaited *Birds of South Asia* (2005) has finally arrived. This two-volume set magnificently caps a decade of high-quality ornithological publications on the avifauna of South Asia (Inskipp et al. 1996; Kazmierczak & Singh 1998; Grimmett et al. 1998, 1999; Kazmierczak 2000). The first volume comprises a field guide while the second, entitled "Attributes and status", detailed information about species. The authors include the following political areas within the ambit of "South Asia": Afghanistan, Pakistan, India, Nepal, Bhutan, Bangladesh, Sri Lanka, Maldives and Chagos Archipelago. This is the first field guide to cover Afghanistan or Chagos Archipelago.

The field guide (vol. 1) contains over 3,400 illustrations in 180 colour plates painted especially for this book. These depict virtually all species and most distinctive subspecies and plumages, some of which appear in no other guide. The plates are largely of a very high standard and are placed on the right-hand-side (*recto*) of an open book while on facing pages (*verso*) are colour range maps, 1,450 in all, annotated as to geographic variation, status (breeding visitor, endemics, geographic variation, year-round resident, two-way migration,

spring migration, fall migration, winter visitor, isolated record, etc.), and habitat. On the verso too are concise texts giving the information necessary to identify each species. The endpapers have keys to the main plates for quick access.

Birdwatchers in India may have become familiar, by now, with the field guides of Grimmett et al. (1998) and Kazmierczak (2000). Let me assure you that the book under review is a march ahead of both. It has a convenient layout that includes plates, distribution maps, and texts, on facing pages. There is no need to flip pages to look at maps. Neither of the earlier books achieved this. On the text and map page, families are broken further into convenient sections, based either on genera and/or physical characters, with light blue bands, thereby reducing the searchable options in the field. The judicious use of space is astounding. The exquisite plates are by leading artists of the world, (none is from South Asia). But it is gratifying to note that there are several Asian ornithologists, e.g., Pratap Singh, Dhananjaya Katju and Deepal Warakagoda, who have made important contributions to the work. The acknowledgements (Vol. 2, pp. 36-38) brim with many more names of South Asian ornithologists. If I had to choose favourite plates from this volume, it would have to be the works of John Schmitt (birds of prey) and L. McQueen (owls), and those are not necessarily my favourite bird families! John Anderton's plates grow on you. Initially, I must confess, I did not take to them. Gradually I realised that he lends the illustrated bird a remarkable volume and life that imparts it a very realistic three-dimensional quality. However, some like plate 132 do not depict the true plumage colour of the *Turdoides* species, which tend generally towards a dirty brown rather than the grey shown. On some plates, plumages are depicted much darker than actual colours (e.g., plates 84 and 104), giving a wrong impression of some taxa (e.g. *Coracina melanoptera* on pl. 104). I daresay, given the fabulous jizz that Anderton has breathed into his birds, his colouring too would be scrupulous. This could well be a case where the printed plates do not do justice to the originals!

The distribution range maps may disappoint some users and may indeed be deemed inaccurate by others, which were the general verdicts for those in Grimmett (1998) and Kazmierczak (2000). In all fairness, maps of the scale and size used in field guides, by their very nature, cannot be completely accurate nor to everyone's satisfaction. Frankly, more detailed ones would end up being cluttered and messy. The maps in the Ripley Guide are based largely on verified specimens, which fact might reduce the range of species when compared with those in the other books, but one could say they are more defensible in their accuracy. Too, they are usefully annotated and, for the first time (another first!), differentiate winter from spring and fall records. The authors are quite clear about what they have done. They categorically state, "Records routinely admitted elsewhere to checklists and maps are of various types and often of uncertain reliability and provenance. The backbone of our knowledge of distributions of birds in South Asia has always been based on museum specimens. Specimens form much of the most reliable source of distributional data because they are tangible evidence that (theoretically) may be re-evaluated by any researcher at any time. However, our knowledge of bird distributions has long been compromised by the fact that statements based on specimen data have been confounded by statements not based on such data but on surmise…as well as on mistaken identifications and localities, and confused taxonomies. In more recent years, specimen collecting has largely been replaced by observational data (sight records). We consider that sight reports have too often been taken as reliable without adequate documentation (for the entire region, only Sri Lanka has had a long-standing records committee). We have taken the conservative position of considering that important records warranting inclusion as definite here are those supported by extant specimens or clearly identifiable, extant photographs that may be re-examined as necessary, accompanied by published details that confirm the identity of the bird without question and provide additional corroborative data," (vol. 2, p. 27). They however clarify that, "…the absence of indication for a given region on a map cannot be taken as absolute proof that a species has never been recorded in a given area; original research is required to document each case history. We believe this book will facilitate such research and will provide the background for understanding problems in the historic record of bird distributions within South Asia," (ibid.). In the present work, more details of distribution are provided in the second volume, including questionable records, frauds, etc.

The second volume contains detailed attributes and status of each taxon. It is arranged in the following order: Contents (p. 5); List of families (p. 6); Preface: An appreciation of S. Dillon Ripley (by Bruce Beehler, pp. 8-10); About the authors (p. 11); Introduction [pp. 12-35: Coverage of the book; Geography and avifauna; Moult and plumages; Measurements; Illustrations; Identification (ID); Vocalisations; Taxonomy; Names; Maps; Records; History of ornithology in South Asia; Conservation]; Acknowledgements (pp. 36-38); Species accounts and sonagrams (pp. 39-601); Appendix 1: Hypothetical species (pp. 603-604); Appendix 2: Rejected species (p. 605); Appendix 3: Taxonomic changes (pp. 606-613; Appendix 4: Glossary (pp. 614-616); Appendix 5: Gazetteer of localities mentioned in text (pp. 617-623); Appendix 6: Major birding localities (pp. 624-625); Appendix 7: Useful addresses and contacts (p. 626); Appendix 8: Brief regional histories (pp. 627-629); Appendix 9: Major regional specimen holdings by museum (p. 630); Appendix 10: Threatened species (p. 631); References (pp. 633-640); Main index (pp. 641-683).

Species accounts have sub-sections that deal with identification (including variation and size), occurrence, habits, voice, and taxonomy. They are cross-referenced to Ali and Ripley's *Handbook* (1983) by the serial numbers used by the latter, and to the plates in volume one.

Volume two, entitled "Attributes and status," is, according to this reviewer, what makes the two-volume set so special. The print is small, no doubt, but the wealth of information that is packed into it is phenomenal, making it an ideal lodestone to return to after a day of field-work. Splitting the work into two volumes is a brilliant idea for it provides the best of both worlds to a user – a highly portable classic field guide and a road-worthy, information-packed data-bank, for reference. Bruce Beehler's "Appreciation of S. Dillon Ripley" is a neat summation of the phenomenal ornithological work that Ripley has left behind. More than that, it gives tantalising views of the man behind the scientist.

Some of the important aspects of this volume are as follows: Taxonomy: The authors state that, "During preparation of

this book, we realised that it was counterproductive to retain many taxa as subspecies when it became obvious through comparisons of morphology and vocalisations that they would not continue to be thus treated in the future… Remembering that the decisions to lump species were made in the absence (or without consideration) of much of the data now available, we propose, in a number of instances, a different taxonomic arrangement from that currently accepted by most sources," (p. 25). This has resulted in 198 species-level differences from the taxonomic treatment of Ali and Ripley (1983) and 128 species-level differences from that of Inskipp et al. (1996)! These changes fall under five categories: those split from extralimital species, splits within region, new or overlooked taxon, reallocation of race(s), and those that have been deleted. An example is the polytypic Golden Oriole *Oriolus oriolus*, treated in Ali and Ripley (1983) as *O. o. oriolus* and *O. o. kundoo*. The present work treats them as two separate species, the "European Golden Oriole *O. oriolus*" and "Indian Golden Oriole *O. kundoo*" and states that the latter "Does not appear to intergrade with *O. oriolus*, despite proximity of breeding ranges. Differences in morphology and (evidently) vocalisations are comparable or greater than those between certain other oriole species; hence *kundoo* treated here as full species," (p. 586). Brief justifications are provided for all such taxonomic decisions, and in most cases detailed vocal analyses and sonagrams are also provided as substantiation.

Vocalisations: The study of avian vocalisations has advanced considerably in the past decade and is being used increasingly in taxonomy and systematics the world over. The work under review presents, for the first time, over a thousand detailed sonagrams of bird vocalisations from South Asia. It might take a while before we get used to sonagrams and adept at using them as tools for study and identification. This is a good place to start, for the introduction gives samples of the main types of bird vocalisations (vol. 2, p. 24, figure 5), depicting whether a squiggle on the graph is a trill or a warble or indeed a buzz! Ideally, bird vocalisations are more useful in a field guide, for on-the-spot reference in the field. However, the elaboration meted vocalisations in volume two, wherein detailed analyses for most species are made directly from tape recordings, would not have been possible there.

Names: The authors have taken pains to ensure that the genders of specific and subspecific names agree with generic names as suggested by David and Gosselin (2002a, b). In addition, "All specific and subspecific names used herein have been reviewed by N. David and M. Gosselin, whose additional unpublished suggestions for gender agreement have been enacted herein," (p. 26). It is heartening to read that the authors have prudently "chosen to follow the relatively familiar order used by the Bombay Natural History Society ENVIS list (Manakadan and Pittie 2001)," having "enacted a few minor well-corroborated modifications to the order indicated by present data…Where we have not introduced any taxonomic changes, common (English) names used mainly follow the ENVIS list…"

This volume also contains a list of 85 taxon that are "Hypothetical in [the] region", i.e. those that might occur or have actually been reported to occur within the region without adequate supportive evidence of the claim. This is the first time that such a list has been compiled for South Asia, where, unfortunately, records have been generally either accepted or rejected quite summarily in the past. This list sets a consistent standard for the acceptance of each species. Such records should ideally be vetted by national records committees, which are inexplicably lacking in all countries except Sri Lanka.

There are interesting sections on the innumerable serious frauds committed by Col. Richard Meinertzhagen and the lapses of Stuart Baker, one of the most prolific of writers on matters ornithological, and a very educative history of ornithology of South Asia as well as brief regional histories.

The one flame that illuminates this stupendous work is the amount of original research that has been assimilated into it. Almost every aspect of south Asian ornithology has been re-evaluated after studying original sources and nothing seems to have been accepted just because it was published earlier! The authors are to be commended for this rigourous scrutiny, which sets a remarkably high standard of scientific accuracy among publications on south Asian ornithology. A brief view of this laborious process was revealed by the lead author in the last issue of *Indian Birds* (Rasmussen 2005). All-in-all this is a splendid set, and is highly recommended.

References

Ali, Salim, and S. Dillon Ripley. 1983. *Handbook of the birds of India and Pakistan together with those of Bangladesh, Nepal, Bhutan and Sri Lanka*. Compact ed. (Sponsored by the Bombay Natural History Society.) Delhi: Oxford University Press.

David, Normand, and Michel Gosselin. 2002a. Gender agreement of avian species names. *Bulletin of the British Ornithologists' Club* 122 (1): 14-49.

David, Normand, and Michel Gosselin. 2002b. The grammatical gender of avian genera. *Bulletin of the British Ornithologists' Club* 122 (4): 257-282.

Grimmett, Richard, Carol Inskipp, and Tim Inskipp. 1998. *Birds of the Indian Subcontinent*. 1st ed. London: Christopher Helm, A & C Black.

Grimmett, Richard, Carol Inskipp, and Tim Inskipp. 1999. *Pocket guide to the birds of the Indian Subcontinent*. 1st Ed. New Delhi: Oxford University Press.

Inskipp, Tim, Nigel Lindsey, and William Duckworth. 1996. *An annotated checklist of the birds of the Oriental Region*. Bedfordshire, U.K.: Oriental Bird Club.

Kazmierczak, Krys, and Raj Singh. 1998. *A birdwatchers' guide to India*. 1st ed. Sandy, U.K.: Prion Ltd.

Kazmierczak, Krys. 2000. *A field guide to birds of the Indian Subcontinent*. 1st ed. London: Pica Press / Christopher Helm.

Manakadan, Ranjit, and Aasheesh Pittie. 2001. Standardised common and scientific names of the birds of the Indian Subcontinent. *Buceros* 6 (1): i-ix, 1-37.

Rasmussen, Pamela C. 2005. On producing *Birds of South Asia*. *Indian Birds* 1 (3): 50-56.

-Aasheesh Pittie

Handbook of Indian wetland birds and their conservation. By Arun Kumar, J. P. Sati, P. C. Tak, and J. R. B. Alfred. 2005. 1st ed. Kolkata: Director, Zoological Survey of India. Price: Rs 1,500; $80; £60. 35% discount to students, scholars and amateur birders. Available from: http://www.weblineinfosoft.com/zsi/hbiwb.pdf.

Having participated every year in the Asian Waterbird Census, since its inception in 1987, I feel a surge of happiness within me whenever a publication on wetlands comes to hand. If it deals with birds it is a double-blessing. In those early days of coordinated effort (and yet so individual), it was difficult to come by a book with good illustrations of wetland birds. Gradually, better quality material got published, till we had the fabulously portable "Waterbirds of

Asia" [Sonobe & Usui (Eds.) 1993] and the subsequent general field guides of Grimmett et al. (1999) and Kazmierczak (2000). These invariably had brief texts containing identification notes, no more. The work under review has a great deal more to offer in the areas of status and conservation of wetland birds and comes at an opportune time when wetlands are under threat all over the country either from overuse, abuse or draining for agriculture.

This work can be divided into two distinct parts. The first part (comprising chapters one and two) is a field guide of 310 taxa of wetland birds (as defined by the authors), with species accounts that include information on diagnostics, voice, habitat, habits, food, status and distribution, remarks and threshold number. A distribution map is provided alongside each species. One or more colour photographs illustrate these accounts, interspersed with colour plates.

The second part, which is truly the strength of this book, is a compilation of original as well as previously published material ranging from the status of wetland birds (chapter 3), the socio-economics of wetlands (chapter 4), to the wide network of protected areas in India (chapter 5). The authors also provide the student of wetland birds with information on the framework for conservation that is present in the country. Various conventions on wetlands and migratory species and an overview of Indian Ramsar sites are listed in several appendices at the end, which might be eye-openers for many who do not realise the amount of work that goes into making countries agree on ways and means of protecting migrating species and their habitats. The entire section is replete with graphs, tables and maps used to convey data graphically.

Some criticisms that surface are:

The following wetland-dependant taxa have not been included in this work: The families *Ploceidae* (Weavers) and *Estrildidae* (Munias), and the reed-loving warblers (*Locustella* and *Acrocephalus* spp.) of the *Sylviidae*. Inclusion of *Troglodytes troglodytes* seems unnecessary.

Page numbers of plates are not included in the species accounts, making them difficult to find, as they are not gathered together, but scattered throughout the book.

The distribution maps for Western Marsh-Harrier *Circus aeruginosus* and Eastern Marsh-Harrier *C. spilonotus* are the same (p. 251). This is wrong as the latter is reported from the extreme NE of the country. The map for Peregrine Falcon *Falco prergrinus* (sic) (=*peregrinus*) (p. 255), is also incorrect, in that it depicts the species to be a resident of most of the country. On the contrary, the race that not only frequents wetlands more but also spreads across the country (*F. p. calidus*, earlier treated erroneously under *F. p. japonicus*) is migratory. The map should have had a wash of blue colour (denoting a migrant) instead of green, or ideally, a mixture of both, for the resident Shaheen (*F. p. peregrinator*) though prefering hilly regions and foothills, uses wetlands opportunistically.

"Accentors (Family Prunellidae)" is wrongly given as the title of the Turdinae (Muscicapidae), on p. 284, even though it is correctly placed as that on p. 41. As a consequence, the description of the family Prunellidae (p. 284) becomes irrelevant.

Several of the photographs have been taken outside India, and therefore may depict races that are not found within India. An example is the photograph of *Ceyx erithaca rufidorsa* (p. 263), which is often treated as a conspecific of the dark-backed nominate race. Now each is elevated to species status, *C. erithaca* and *C. rufidorsa*. *C. rufidorsa* is a vagrant in Sikkim, but is commoner in SE-Asia. *C. erithaca* is the one found widely in the Western Ghats and in NE India, whose picture would have been more relevant. At least *C. erithaca* is depicted on pl. 37 (p. 270). This does not however, dim the spotlight from several top-class photographs from within and outside the country sprinkled throughout the work. Gehan's magnificent full-page portrait of the Large Egret (penultimate page) shows a bird in courting colours with flaming red legs and blue-black bill [not "nbr" (= non-breeding) as stated]. Vijay Cavale's pair of Bar-headed Geese (p. 108) captures the graceful lines of this most delicate bird, even though the pair sits in grass.

The Glossary (p. xxi) contains several initial abbreviations, "R/LM" to "V Com", that are repeated with some extra explanation, from the preceding "Terms and abbreviations used" (pp. xix-xx). Quite a few photos are also repeatedly used, which could have been avoided.

All these glitches can be easily overcome in a second edition. For all students of wetland birds this book is a must and for every budding ornithologist, all biodiversity-, irrigation- and tourism-related departments of various state and central government fora, this book contains vital information, conveniently compiled in one place.

-Aasheesh Pittie

Correspondence

Was this a 12-hour Tsunami warning?

On 25.xii.2004 I observed an unusual behavior of birds in Neelangarai, a coastal suburban locality of Chennai (Tamil Nadu). In a locality full of parakeets, treepie, grey shrike, crows, pariah kites, egrets, bulbuls, green bee-eater, kingfishers, the occasional hoopoe, the pet peacock next door and many more, this unusual activity caused alarm.

It all started with a murder of about 100 crows gathering on the electricity transmission wires. There was an unusual calm. I had initially reckoned it was a carcass in the vicinity that brought them together. A dog fed in the dustbin, but none of the crows came down alongside it to feed. In a matter of minutes the number of birds began to grow as mynas, drongos, parakeets and several other species started to gather on the coconut trees nearby. Yet there was an unusual lull, but they were restless. There might have been at least 500 birds of various species. It was also seen that they continued to look around in an alert way.

This behavior was observed between 17:30—17:45hrs on 25.xii.2004.They then flew away towards the shore, grouping together again and again on top of hoardings, buildings, etc., at every 200-300m intervals.

On the ill-fated day of 26.xii.2004, the chirping of birds, which starts early in the morning was absent. The familiar crow, with a hooked beak, which comes every morning for its mandatory rice, failed to turn up at 05:45hrs.

The earthquake occurred at 06:28hrs off the Sumatran coast (magnitude 9.0, one of the most powerful ever in the world). The Tsunami then struck the coast 2-3hrs later.

The birds did not resume their normal activity till late in the afternoon the same

day.

There were reports on television that the Tsunami would recur due to after shocks. I failed to believe the meteorology department, the birds were moving about normally. There have been no Tsunamis, aftershocks on our coast since.

As early as 1961 similar observations on behaviour of birds and animals were made by Laurens van der Post, in his book, '*The heart of the hunter*'. I wonder whether this was, in some unfathomable way, a warning of things to come.

Kaushik Krishnan
New #2/775, Old # 3/458A, Kazura Gardens, 1st Street, Nellangarai, Chennai 600041, India.

Sighting of Steppe Eagles *Aquila nipalensis* near Belgaum, Maharashtra, India

On 25.xii.2004, I was 20km east of Belgaum (Maharshtra, India). About 07:00hrs I noticed seven large *Aquila* eagles sitting on the top of a tree, basking. A closer look revealed that their cere clearly reached beyond the pupil, which identified all of them as Steppe Eagles *Aquila nipalensis*. The surrounding landscape consisted of fallow agricultural land with some scrubby areas. A garbage dump, used by neighbouring villages and poultry farms, was also present.

The eagles were seen in the company of Black Kites *Milvus migrans*, Brahminy Kites *Haliastur indus* and Cattle Egrets *Bubulcus ibis*. All eagles were perched on mango *Mangifera indica* and tamarind *Tamarindus indus* tree.

I visited the area six times, with intervals of two to three days in between each visit. The number of eagles remained the same and I saw hardly any activity. Once in a while they chased a kite and pirated a morsel from it.

These eagles were seen in the area for a little over three weeks till 23.i.2005. Three years ago, I had seen more than 25 eagles (? sp.) in this area, when they had remained in the vicinity for less than one week.

Niranjan Sant
Email: niranjansant@yahoo.co.uk

Storm-blown Shikra family rehabilitated

A Shikra *Accipiter badius* family was reunited (9.v.2005) after a storm had knocked down the nesting tree. There were three young at various stages of development. We made a basket nest and placed that in an adjoining tree. The parents came back and started feeding the young the next day.

Taej Mundkur
Swarankit, Plot No 6, Mahatma Housing Society, Kothrud, Pune City 411029, India.
Email: taejmundkur.wi@vsnl.net

Nesting of Common Moorhen *Gallinula chloropus* in Kerala

I am very happy to get the *Newsletter for Ornithologists* as *Indian Birds*, and to learn about the New Ornis Foundation.

This is a response to the note on the nesting of Common Moorhen *Gallinula chloropus* in Kerala by P. K. Ravindran (*Indian Birds* 1: 17). On reading it, it would appear that this is the first record of nesting from Kerala. The nesting of this species was first recorded by K. K. Neelakantan from Munnar in April 1974 (*J.Bombay Nat. Hist. Soc.* 72: 537). Again it was found nesting in Sultan's Battery in the Wynaad district in October 1984, 1985, 1986 by P. K. Uthaman. Three-four chicks were found then at a reed-filled tank in Poomala. They are also breeding in Brahmakulam in Palghat district. In many of the "*chalees*" (lagoons) and at the famous large "*chalee*" in Thirunnavaya they are regularly seen and occasional breeding is recorded by local birdwatchers.

L. Namassivayan
Kerala Natural History Society, Elappully, Palakkad 678622, Kerala.

An incident between a Black Drongo *Dicrurus macrocercus* and an Indian Courser *Cursorius coromandelicus*

On 11.i.2005, at 10:30hrs, while watching a pair of Indian Coursers *Cursorius coromandelicus* at Pandavleni grasslands (Nashik district, Maharashtra) we saw that one of the birds had caught a large caterpillar and hurried off in one direction in order to prevent (?) its mate from taking it away.

A Black Drongo *Dicrurus macrocercus* was sitting ten feet away on an *Acacia arabica* bush at a height of five feet. It saw the courser carrying this caterpillar, and swooped down at it, coming face to face with courser. On landing, it flattened itself on the ground, simultaneously beating its wings in slow motion, constantly staring at the courser with its bill open. The courser dropped the caterpillar, which the drongo grabbed and flew back to the bush it had come from.

It is difficult to say whether the drongo was begging for the caterpillar or threatening the courser. However as this behaviour was indeed strange we felt that it was worth recording.

B. Raha & N. Bhure
Email: wolfajay@hotmail.com

Agumbe, Karnataka, India

I was one of four people on a recce between 12-14.ii.2005 to establish a multi-purpose field base in the Western Ghats at Agumbe (670m above m.s.l., Shimoga district, Karnataka). The base was initially intended for herpetology, ornithology and botany. The location was previously cleared to farm paddy and areca-nut. The site is well known for its heavy annual rainfall. Being the dry season, the area and its surroundings were extremely dry, with recorded relative humidity below 40% with temperatures between 17ºC-32ºC.

On 12.ii.2005 we noticed a flock of five Spotted Doves *Streptopelia chinensis* foraging at the base of a creeper. Out of nowhere, a Besra Sparrowhawk *Accipiter virgatus* scattered the flock and struck what appeared to be a sub-adult dove, after which the victim hid within the creeper. Some two minutes later, visibly shaken and possibly injured, it flew out of the bush and was immediately grabbed by the hawk and spirited away. A White-necked Stork *Ciconia episcopus* was observed amongst riparian vegetation at a nearby stream. The sole ophidian observed was the non-venomous and endemic Bedomme's Keelback *Amphiesma beddomei* at around 10:00hrs on 13.ii.2005.

The location for the field station has huge potential for study on a variety of organisms, and while my colleagues' and my own interest largely relates to herpetofauna, birds of the region have to be documented and ornithologists are welcome to assist in gathering baseline information on the avifauna. Please contact me for details.

Nikhil Whitaker
Madras Crocodile Bank / Centre for Herpetology, P. O. Box 4, Mamallapuram, Tamil Nadu 603104.
Email: nikhil.whitaker@gmail.com

With Compliments of

G. B. K. Charitable Trust

Rajan House, 2nd Floor, A. M. Marg, Prabhadevi, Mumbai 400025.

Oriental Bay-owl *Phodilus badius* Photo : Rathin Barman

Stepppe Eagle *Aquila nipalensis* Photo : Niranjan Sant