HORNBILL

DISCOVER THE LIVING WORLD

APRIL-JUNE, 2014







BOMBAY NATURAL HISTORY SOCIETY

For great experiences, experience the smallest detail.

This is the moment we work for.



Corporate Office:

Carl Zeiss India (Bangalore) Pvt. Ltd,

Plot No.3, Bommasandra Industrial Area, Bangalore-560 099, India Customer Support: sportsoptics-photo@zeiss.com • Tel: 011-45156000

Visit us at http://www.zeiss.com/sportsoptics

Distributors:

West India

Ria Enterprises (Mumbai), Tel.: 9930155660 / 9820055660

Tinnu International (Ahmedabad) Tel.: 9819046742 / 9819122662

North India

Avit Digital Pvt. Ltd. (New Delhi), Tel.:9811017774

East India

Srishti Digilife Pvt. Ltd. (Kolkata), Tel.: 8100001382

South India

Hansa Cine Equipments Pvt. Ltd. (Chennai), Tel.: 9444085508 Srishti Digilife Pvt. Ltd. (Hyderabad), Tel.: 9399973935 Foto Circle (Bangalore), Tel.: 9844217788 / 9845022654 Fourtek Systems (Cochin), Tel.: 9447039709



the perfect companion for anyone with a lust for life. Available in sizes 8×42 and 10×42 and in Deep Blue and Cool Grey. www.zeiss.com/sportsoptics

We make it visible.

HORNBILL

April-June, 2014



GOVERNING COUNCIL

President

Mr. Homi R. Khusrokhan

Vice Presidents

Ms. Usha Thorat

Dr. Ravi Chellam

Mr. Praveensingh Pardeshi (IAS)

Honorary Secretary

Ms. Sumaira Abdulali

Honorary Treasurer

Mr. E.A. Kshirsagar

Director

Dr. A.R. Rahmani Members

Prof. (Dr.) M.R. Almeida Lt. Gen. V.K. Ahluwalia (Retd.)

Dr. A.M. Bhagwat

Dr. Bharat Bhushan

Ms. Tara Gandhi

Dr. A.J.T. Johnsingh

Mr. Rishad Naoroji

Ms. Pratibha Pande Mr. Satish Pradhan

Mr. Bibhab Kumar Talukdar

The Joint Secretary, Ministry of Environment & Forests, Govt of India The Addl. IG Forests (WL) Ministry of Environment & Forests, Govt of India The Director of Archaeology & Museums,

Govt of Maharashtra

Editors

Asad R. Rahmani Isaac Kehimkar Vibhuti Dedhia

Consultant Editors

Gayatri W. Ugra Ranjit Manakadan

Editorial Assistants

Sonali Vadhavkar Janhavi Rajan

Layout

V. Gopi Najdu

Cover: Rufous-necked Laughingthrush Dryonastes ruficollis

Pushpal Goswami

Published and printed quarterly by Ms. Sumaira Abdulali for the Bombay Natural History Society, Printed at Parth Enterprise, Goregaon, Mumbai.

Reg. No. RN 35749/79, ISSN 0441-2370.

For more information on the Society and its activities

write to the Honorary Secretary, Bombay Natural History Society, Dr. Sálim Ali Chowk, S.B. Singh Road, Mumbai 400 001, Maharashtra, India.

> Tel.: (91-22) 2282 1811 Fax: (91-22) 2283 7615 E-mail: info@bnhs.org Website: www.bnhs.org

Views expressed by the contributors in the Hornbill are not necessarily those of the BNHS. Unsolicited articles and photographs, and materials lost or damaged are not our responsibility and no claims will be entertained.

CONTENTS



FEATURES

Saving the Rajaji-Corbett Corridor

- A.J.T. Johnsingh, Meraj Anwar, and Shah Mohammed Belal

Some existing wildlife corridors are under threat because of the ever-expanding human population. The authors discuss the Rajaji-Corbett corridor and wonder if it can be protected?



10. Kaiga and its Hornbills

- J. Devaprakash

Can nature and development co-exist? Read about Kaiga and its environs and you may want to change your mind.



Bird Mascots

- Lt. Gen. (Retd.) Baljit Singh

The states and union territories of India have a 'bird mascot' each. This does put the spotlight on birds, but did the decision-makers put a thought on who the spotlight should be on?

PHOTOFEATURE



26. The Forest Guardian

- Salimjavid Mulla

The forest through the eyes of the one who guards it.

Others

Others	
Book Reviews	
Nature Watch	
Readers' Space	
Conservation Notes	
News Briefs	

© Bombay Natural History Society 2014

Conservation of EDGE species

he Zoological Society of London (ZSL) is perhaps the oldest research and conservation organisation in the world. Established in 1826, its most famous early Fellow was Charles Darwin, Like the BNHS, ZSL too has transformed from a learned society in zoology, documenting animal life forms, to a leading conservation organisation in the world, with conservation research as its foundation. Its website says, "An international science, education, and conservation organisation, ZSL is dedicated to achieving and promoting the worldwide conservation of animals and their habitats." Along with the Royal Society for the Protection of Birds (RSPB), ZSL was among the first organisations to collaborate with BNHS on its Vulture Conservation Programme. Recently, ZSL has declared a list of Evolutionary Distinct and Globally Endangered (EDGE) birds. Scientists of ZSL and other organisations analysed 9,993 bird species, recognised by BirdLife International, for their evolutionary distinctiveness (ED) and rated them. To this, they added the global status of each species (GE). As ZSL writes, "Evolutionarily Distinct and Globally Endangered (EDGE) species have few close relatives and are often extremely distinct in the way they look, live, and behave. These unique species are also on the verge of extinction, and if they disappear there will be nothing like them left on the planet." For more details, I request readers to visit the ZSL website http://www.edgeofexistence.org/birds/top_100.php

ZSL has identified 100 of the 9,993 evaluated species as EDGE species. The 15 EDGE bird species occurring in India are the Bengal Florican, Forest Owlet, Christmas Island Frigatebird (one record from Andamans), Spoon-billed Sandpiper (migratory species with a few records), Red-headed Vulture, Egyptian Vulture, Jerdon's Courser, Great Indian Bustard, Lesser Florican, Masked Finfoot, Sociable Lapwing, Siberian Crane (now extinct in India), Greater Adjutant, White-bellied Heron, and Wood Snipe. Of the 15 species identified, BNHS and its partners are working towards the protection of 12 species. Many of these Critically Endangered EDGE species are found in grasslands and wetlands. This further proves that we have to go beyond tiger and rhino protection if we want to conserve all species and all habitats. The Indian government should give more attention to the protection of birds and other taxa.

As the ZSL document states, "Some EDGE species such as elephants and pandas are well-known, but others, such as the extraordinary Chinese Giant Salamanders and the peculiar Long-beaked Echidnas, remain poorly understood. Sadly, the majority of EDGE species are currently being overlooked by existing conservation initiatives." This statement is perfectly valid for India. Our conservation priority is fixated on a few mega-vertebrates, with little or no conservation attention to unique species, like Purple Frog *Nasikabatrachus sahyadrensis*. This species was described in 2003, and is the only member of a totally





new family of frogs. Another example is the Gangetic River Dolphin *Platanista gangetica*, which is struggling to survive in a few areas of the mighty Ganga and Brahmaputra river systems. The Chinese Pangolin *Manis pentadactyla* is another EDGE species found in India, suffering from the massive trade of its scales for the Chinese markets.

According to the ZSL, two-thirds of the top 100 EDGE mammals are currently receiving little or no conservation attention. The situation is even more alarming for amphibians, with a staggering 85% currently receiving little or no conservation attention. With its limited funds, the ZSL has initiated projects for a subset of the top 100 EDGE species. They are not necessarily the most glamorous species. Will the Indian government, MoEF, Indian conservation NGOs, and corporates wake up to the extinction crisis that Indian wildlife is facing, or will they remain smug in their belief that the protection of a few so-called "umbrella species" will save all of India's wildlife? This is the big question.

Asad R. Rahmani

SAVING THE RAJAJI-CORBETT CORRIDOR

Text: A.J.T. Johnsingh, Meraj Anwar, and Shah Mohammed Belal



10-foot-long King Cobra was lying on a rock amidst roots and curled around the trunk of a tree, by the side of the trail that lies between Rajaji National Park and Rawason nadi. The Gujjar boy accompanying us was the first to see it, and when we gathered on the trail to take a closer look, and possibly to photograph it, it raised its hood to the height of about a foot, perhaps to have a better look at us, and then crawled over the rock and disappeared into the jungle. It was as though the mighty king was not willing to allow us to have a darshan of him, intruders as we were in his kingdom.

Rawason nadi, arising from Nallikal, flows for a distance of nearly 28 km in

profoundly impacted by Gujjars who lop all the palatable tree species to feed their large herds of buffaloes, the valley still holds pieces of its past glory.

There were large Ficus glomerata trees with claw marks of a Sloth Bear, which indicated that the bear had gone up the tree when its fruit was ripe. Bivash Panday, faculty from Wildlife Institute of India, who has been camera trapping in the corridor area found the occurrence of Black Bear.

Even in summer, in Rawason nadi there was a profuse flow of clean and cool water which had formed many beautiful deep pools all along its course. The mercury levels began to soar during our walk, and we drank copious amounts

Whistling-Thrushes Myophonus caeruleus, Himalayan Pied Kingfishers Ceryle lugubris, a solitary female Common Merganser Mergus merganser and a Brown Dipper Cinclus pallasii. The crowing of Red Junglefowl Gallus gallus cocks and the piao piao calls of Great Barbets Megalaima virens reverberated through the valley. Although we walked for nearly 30 km in different valleys during the survey of the corridor forests, only in Rawason did we see a pair of Barking Deer. Sambar tracks were common all along. The valley, only about a kilometre wide in most places, was clothed with mixed vegetation, indicating the possibility of supporting a high density of Sambar, which in turn can enable the breeding of one or two



A Black Bear photographed upstream of Rawason nadi



The corridor being a hilly area can support a high density of Sambar

the outer Himalayan hills. The initial four kilometres are flanked by community forests or Van Panchayats, as they are called, and the rest by reserve forests. The reserve forests on the right bank are part of the Chilla range of Rajaji National Park, and those on the left bank are part of the Laldhang range of the Lansdowne Forest Division. The time we spent in Rawason valley in April 2013 while surveying the Rajaji-Corbett wildlife corridor was rather brief. Although

of water from the river, suffering no ill effects. We wondered how many places there are in India where we could drink straight from a river like this. In bygone days, possibly, the river and the pools would have served as spawning grounds for a large number of Golden Mahseer during the monsoons from the Ganga, which is about 15 km away.

The bird species we encountered indicated that Rawason is indeed a Himalayan river, as we found Blue tigresses in the area. This can, however, happen only if we can resettle all the Gujjars from the valley to a suitable site with an attractive package that they cannot refuse. The Gujjars seem to obey the law: the right bank was free from lopping as it falls in the national park but the trees on the left bank and beyond in the Laldhang range were heavily lopped. The Gujjar child, with his boyish innocence, confessed that they occasionally sneaked into nallahs of the national park to gather quality fodder for their buffaloes with the least effort.

The Rajaji-Corbett corridor, composed of two stretches of forest, connects two tiger-elephant protected areas in northern India. The southern stretch (c. 300 sq. km) includes the forests of the Haridwar Forest Division (Shyampur-Chiriyampur ranges, Uttarakhand) and the Bijnor Plantation Division (Uttar Pradesh). Although heavily disturbed by problems associated with the presence of villages, Gujjar dheras (shelters) and mining for stones and sand, elephants use this corridor. Recent findings by Abishek Harihar of the Wildlife Institute of India indicate that even tigers occasionally stray through this corridor.

The 200 sq. km northern corridor, composed of the Laldhang and Kotdwar ranges, along the outer Himalayan hills of Lansdowne Forest Division, however, is used more frequently by the tiger and elephant. Some of the nallahs in the hills provide water for elephants even in summer and all the nallahs afford hideouts to tigers. The conservation status of these two ranges varies significantly, because along the southern boundary of the Kotdwar range, abutting the forests, confined to the hills, is a large human population (c. 30,000) that heavily impacts the forests. On the contrary, the Laldhang range has a buffer plantation forest, largely composed of Tectona grandis and Haplophragma adenophyllum, separating it from two nearby villages - Laldhang and Chamaria. Sadly, both ranges have been devastated by Gujjars who stay throughout the year, and by Bhotias who come for a brief period in winter with a large number of goats and sheep.

In the upper reaches of Maili sot in Laldhang range, we found water and signs of the presence of elephants and tigers. Bivash Pandav obtained a picture of a male tiger in Maili sot on April 28, 2013. He had earlier photographed this male on April 13, 2012, on a fireline between Morghati and Kalagarh in the Kalagarh Forest Division



Male tiger photographed in Maili sot on April 13, 2013

of Corbett Tiger Reserve. The distance between the two locations, as the crow flies, is about 70 km. Our search in Jaspur *rau* yielded signs of the presence of leopards (has been camera-trapped by Bivash Pandav), tigers, and elephants. In the hills, we came across lopped branches of Ziziphus xylopyrus, an excellent forage tree for sambar and elephants, left by Bhotias who had cut them to feed their goats. All the palatable tree species had their branches lopped by Gujjars, and with no scope for flowering and fruiting these species face a grim future.



A habitat that can revive splendidly within five years, if there is protection from Gujjars and Bhotias



Perennial water in Sigadi sot, an important summer habitat for elephants, has attracted large number of Gujjars

As we walked in Sigadi sot, which had many large pools and flowing water, elephants feeding on a densely-wooded slope rumbled and trumpeted, indicating their presence to us. Embelia tsjeriam-cottam, a straggler and a red-listed medicinal plant, attracted our attention with its striking red

fruits which are eaten by several species of birds. This sot, extremely valuable to elephants because of the abundance of water in summer, is used heavily by Gujjars. In the Kotdwar range, we walked along the Gwalgod sot (where we saw a likely black bear track), went along an

Ensuring protection of wildlife corridors like the Rajaji-Corbett corridor is the need of the hour (Image Courtesy: Wildlife Institute of India, Dehradun)

elephant trail to the ridge top in the southeast, descended into Jamun sot and came out at Sattichaur, where vehicles were waiting for us. In Gwalgod sot, there was a spring under the cool shade provided by trees like Jamun Syzigium cumini and Mango Mangifera indica. Neha Varma, the young DFO accompanying us, pointed out the need for protecting such springs by planting shade-giving species, including Putranjiva roxburghii, and assiduously protecting the area from fire and grazing.

Wesley Sundarraj, a researcher from the Wildlife Institute of India, who, after studying elephant use of the corridor area in the late 1980s, had stated that the steep western slopes of Gwalgod sot were a barrier that prevented family herds from moving across the sot to other areas, as calves cannot negotiate the steep slopes. Therefore, he hypothesised that the groups in the corridor area did not mingle, and that genetic exchange was brought about only by the bulls. His observations may be true as the western slopes of Gwalgod sot did appear to be too steep for calves to negotiate. However, Bivash Panday, during his recent surveys, found a trail north of Gwalgod sot which may be used by family herds too. We also drove along the Kotdwar-Dogudda road till Amsod village; this road runs parallel to the Koh river. Along the river, the tract between Amsod and the iron bridge near Kotdwar is extremely important as it enables large mammals to move between the Lansdowne forests on either side of the river. The habitat on either side looked intact - but for the establishment of two restaurants, which should have been prevented. The firewood needs of the restaurants and the garbage they generate will gradually grow and pose a threat to the corridor.

During our survey, we were not able to get a single glimpse of Chital or Nilgai, even in the forested foothills of the Laldhang range. In addition to walking, we drove 30 km through the forests. We spotted a Wild Pig, groups of Common Langur,

HORNBILL 7

How can we ensure that the Rawason-Laldhang-Kotdwar-Koh corridor is protected?

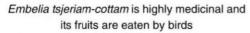
The recent decision of the Uttarakhand the support of this population in planting and is used by tigers and leopards, should government to give Rajaji National Park a and protecting vegetation, we will have a never be developed as a tarred highway. Tiger Reserve (1,150 sq. km) status, which will include the Shyampur range of the Haridwar Forest Division and Kotdwar and Laldhang ranges of the Lansdowne Forest firewood, and attempts should be made to could be used to resettle all the Gujjars Division, could go a long way in strengthening this corridor. The help. Cultivation of species like Dalbergia Park. Sufficient water should be brought conservation roles of the corridor are to ensure the continuous flow of water in the Rawason, Malan, and Koh rivers, provide a should be considered. Eucalyptus trees in the resettled Gujjars should be made home to species like the Tiger and this landscape should be felled and comfortable with a new way of life: Elephant, and ensure a safe and easy distributed to the locals living near the agriculture, stall feeding, education, passage for wildlife between the forest Kotdwar range for firewood, so that their healthcare, and small families. It is the duty patches. The primary task is to protect the dependency on the forest can be reduced of everyone interested in conservation in habitat and animals that live there. to some extent, at least for a while. Protection and rejuvenation of the forests As roads and associated developments are which will provide a much more secure in the Kotdwar range is much more difficult the greatest enemies of forest future for the Gujjars, and also help to because of the large human population conservation, the 11.5 km Chillarkhal- protect the corridor forests from further adjacent to it. But if we are able to obtain Laldhang road that goes through the forest, degradation.

greater chance of safeguarding the future Fortunately, there is sufficient land in of these forests. The people in this area will Uttarakhand (the land south of the east continue to require an increasing supply of Ganga canal in the Chiriapur range) which grow firewood-bearing species with their from the forests west of Corbett National sissoo and even Acacia auriculiformis in the to the resettlement sites from the Haridwar forest areas adjacent to the settlements barrage, and with an enviable package, this landscape to work towards this goal,



Crataeva religiosa, a valuable medicinal tree, blooming in a devastated landscape







Himalayan Agama Laudakia himalayana in its breeding colours at Rawason nadi

Leopard tracks in six places, and heard Sambar alarm calls in the hills. Goral was not seen (not even its pellets), although there is extensive habitat for this mountain ungulate. All these signs indicate that the area has been under heavy poaching pressure in the past, and even currently. There is an urgent need for protection in the form of collaborative efforts of the forest department and village communities.

In October 1983, when one of us (A.J.T. Johnsingh) stayed in Laldhang forest rest house for a night, he heard elephants in Rawason river. But now, because of the increasing disturbances arising from Laldhang village, elephants use the river 3 km upstream of the rest house. The disturbances seem to affect even the nightjars, as during our five-night stay, we heard only one distant chaunk...chaunk call of the Large-tailed Nightjar Caprimulgus macrurus, which should have been fairly common in summer in the location of the

WHY ARE WILDLIFE CORRIDORS IMPORTANT?

- Corridors provide crucial links between forests/habitats, facilitating safe and easy movements/migrations of wildlife between them.
- 2. Help maintain genetic biodiversity.
- 3. Help minimise human-wildlife conflict.
- Large mammals may get access to food and other natural resources that the core habitat may not be able to provide them with throughout the year.
- Migratory species can move across landscapes safely.

forest rest house. The chweez chweez call of the Savanna Nightjar C. affinis was never heard, although the habitat south of Laldhang, with the broad rocky bed of Rawason river, is suitable for this species. The call of a Leopard, however, was heard near the rest house one night. Pugmarks were seen near the rest house in the morning. It may have visited Laldhang village in search of a meal, an unwary dog perhaps. It is obvious that there is gradual habitat degradation in the entire corridor landscape, yet, in this devastated landscape, there were many Three-leaved Capers Crataeva religiosa, a valuable medicinal tree, blooming profusely. Wildlife corridors, like the Rajaji-Corbett corridor, form crucial links for conserving species and ensuring a healthy gene flow, and aid in mitigating conflict between local communities and wildlife. An in-depth understanding of how they work and ensuring their protection is the need of the hour.



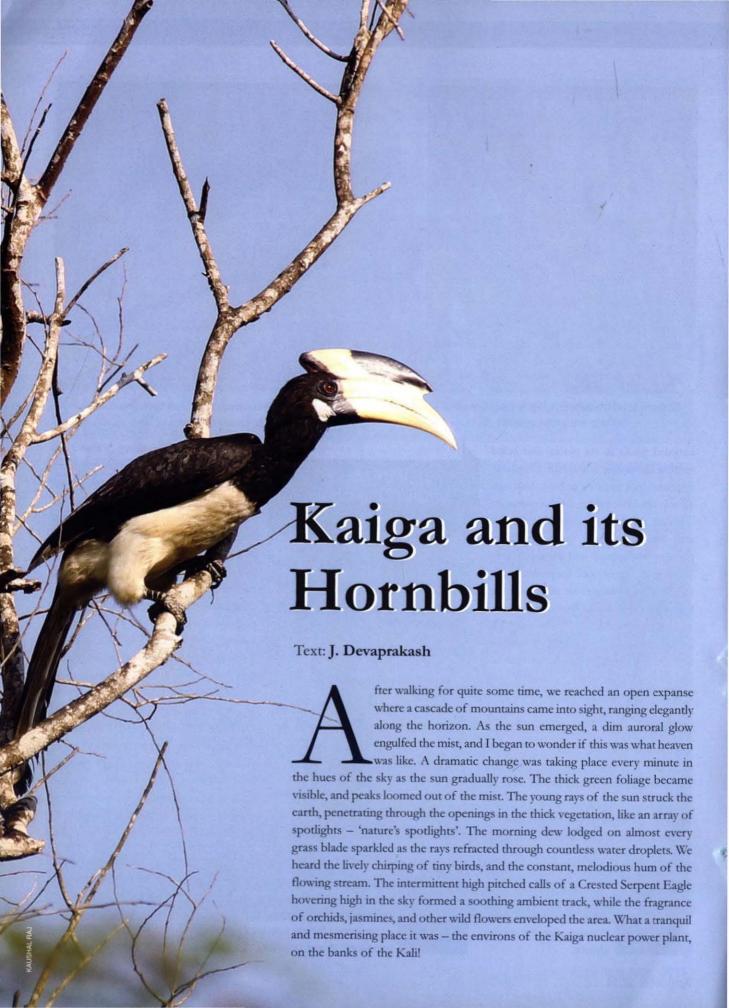
A.J.T. Johnsingh is working with WWF-India and Nature Conservation Foundation, Mysore.



Meraj Anwar works with WWF-India in the Terai Arc Landscape Project. He has received Master of Philosophy in Wildlife Science from Aligarh Muslim University.



Shah Mohammed Belal has been working with WWF-India for the last four years. He has completed his PG from Aligarh Muslim University.



With the monsoon having just completed its spell in this lush green area, we, a team of four – two being members of the Kaiga Nature Club and quite experienced birdwatchers, and my colleague and I, from Mumbai – visited the area with a mission – to spot the Malabar Pied Hornbill *Anthracoceros coronatus*. Kaiga Nature Club, established as a part of the Environment Stewardship Programme (ESP) of the Nuclear Power Corporation of India Limited (NPCIL), has been studying the natural history of this region, particularly the avifauna since 2006. One of the notable exercises of the programme has been the Kaiga Bird Marathon conducted in January every year since 2011 to generate a comprehensive database on the birds of the Kaiga region. Studying hornbills

in the Exclusion Zone (EZ) of the Kaiga nuclear plant is another major exercise, and our visit to Kaiga was part of this.

The jungle where we were, a part of the EZ, was lit now that the sun had ascended. We started walking along a stream, probably about two feet deep, looking for *Ficus* trees. Wild figs are a favourite of hornbills; about 60% of their food intake is figs, even though they are omnivorous. After walking for about 10 minutes, we were stopped suddenly by Rajeev, one of our team members and a contributing member of the Indian Tiger Census. He pointed to a pair of footprints imprinted finely in the dried sand. "Tiger pugmarks!" he exclaimed. We instinctively looked at each other and then





Hornbills are known for their massive decurved bills, which help them grab large-sized food easily. The Malabar Pied Hornbill is a large bird, with black upperparts and white underparts. Its bill is surmounted by a huge casque, with a large black patch. Its outer tail feathers are fully white – visible in flight – unlike the similar-looking Oriental Pied Hornbill, which has white at the tail end only. During its breeding season, largely from March to April, the Malabar Pied Hornbill builds its nest in the hollow of a large tree. The female goes inside the cavity and locks herself up by cementing the entrance with a blend of mud, fruit pulp, and droppings. She leaves a small opening through which she and her young can be fed by the male. The female comes out by breaking the wall when the chicks have grown to a certain age, after which she partially re-plasters the 'wall', leaving a small opening, through which both male and female feed their young.

looked around with trepidation, but were relieved when he added, "probably a few weeks old!" The habitat was ideal for tigers: large bamboos provided the perfect camouflage and the gurgling stream nearby could mask the sound of a tiger walking on the grass; some open areas were interspersed with thick forest patches. The morning mist was disappearing gradually. With a sense of mild fear, we continued walking slowly along the stream in search of hornbills and *Ficus* trees. After a while, we reached a place where the stream joins the River Kali.

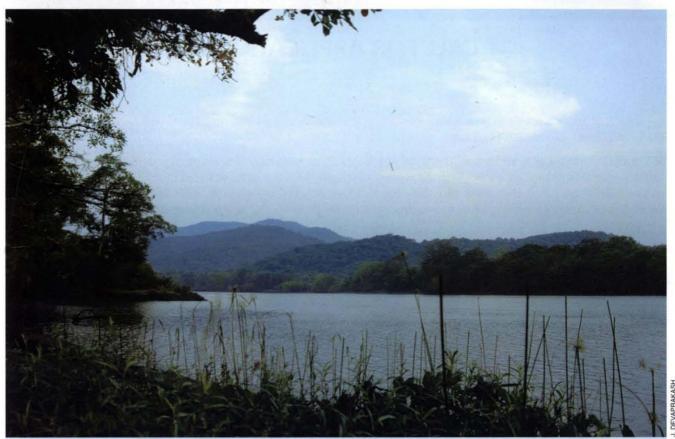
Four species of hornbills are found in this area. Among them, the Malabar Pied Hornbill *Anthracoceros coronatus*, a Near Threatened species in the IUCN Red List, has been sighted regularly in the EZ of the Kaiga plant. On the banks, there were several fruit-bearing trees, including wild figs. "Sshh...", whispered my colleague drawing our attention towards a tree with rustling leaves. "There!" cried Mohan, "it is a hornbill, definitely". We turned spontaneously to

focus on the tree Mohan was pointing at. Amidst the foliage we saw the prominent horn-like yellow bill, busily plucking at fig fruits.

The fear of encountering a tiger disappeared, as our attention was now on these magical birds. The tree on which the hornbill was feeding was on the other side of the stream. Since the stream was not too deep, we decided to cross it to get a closer view of the bird. Having crossed the stream, we were now standing under the tree. There were actually three Malabar Pied Hornbills, feeding on the figs, while from across the river, we had seen only one! Being arboreal, hornbills prefer to perch on treetops and occasionally descend to the ground to pick fallen fruits or insects.

The water in the stream was glistening. The cool breeze, laden with the aroma of forest flowers, embraced us. The area, a part of the moist deciduous forest of the Western Ghats, is surrounded by large and small trees, bushes, grasses, creepers and waterbodies, and forms a perfect habitat for

12 HORNBILL April-June, 2014



Kali, a well-known river of the Western Ghats, originates from Diggi in the Uttar Kannada district of Karnataka. With a length of about 185 km, she flows westward to join the Arabian Sea near the town of Karwar. On the banks of this perennial river, where a wide spectrum of flora and fauna thrive, there are two things to admire – the majestic Malabar Pied Hornbill *Anthracoceros coronatus*, and a nuclear power plant. Can there be any connection between them? Unbelievably, there is! The Exclusion Zone (EZ) of the Kaiga Nuclear Plant, an area of 1.6 km radius that surrounds the power plant, is home to four species of hornbills namely, Malabar Pied Hornbill *Anthracoceros coronatus*, Malabar Grey Hornbill *Ocyceros griseus*, Great Pied Hornbill *Buceros bicornis*, and Indian Grey Hornbill *Ocyceros birostris*, and several other species of birds. There are a few reasons why this area, a part of the biodiversity-rich Western Ghats, is still serene. One, only a small area of the power plant is used for the reactor and other buildings, while the rest is left undisturbed. Two, native plants are planted to supplement the natural forest. Thus, this wilderness attracts several wild inhabitants. The Kaiga region is known to harbour about 200 species of birds, about 300 species of butterflies, besides a variety of mammals and other fauna, and a wide range of flora.

hornbills. The Malabar Pied Hornbill is found in a variety of habitats like open forests, evergreen forests, mango groves, the countryside, and also dense forests. The Western Ghats provide major habitats for the Malabar Pied Hornbill in India. Besides, the species is also found in the extreme south-east of Uttar Pradesh, Bihar, West Bengal, and south through Orissa and north Andhra Pradesh.

As we watched, a hornbill that was feeding at the treetop descended to the branches beneath, probably to pick fruits. It saw us while coming down and took off, gliding away elegantly, while the other two flew off rather hurriedly. We stood still, amazed by their flight. Our hearts contented, we left the place. While returning, we stopped at a place where we saw a hornbill nest, a natural hollow in the trunk of a huge tree. "Could be an old nest," said Rajeev, "the mud

around the hole is completely dry and scattered, which indicates that this is old."

The nest was old, but we could imagine a pair nesting in this hole safely in the midst of a dense forest. With indelible memories of the picturesque place, the flowing stream, heavenly mist, pugmarks, hornbill sightings, and an old nest, we came out of the EZ. No doubt, Kaiga is an ideal example of the coexistence of nature and technology.



J. Devaprakash, Manager (Corporate Communication) at NPCIL, Mumbai, is a birdwatcher and amateur wildlife photographer.

April-June, 2014 HORNBILL 13

RBS Earth Heroes Awards 2014

CALL FOR APPLICATIONS

Hello!

The Royal Bank of Scotland (RBS) in association with World Association of Zoos and Aquariums (WAZA) conference will present the RBS Earth Heroes Awards 2014 in November in New Delhi.

The RBS Foundation India, as a not-for-profit entity of RBS is actively supporting conservation by providing sustainable livelihoods to forest dependent communities, especially in the ecologically fragile landscapes and other locations in the country. The livelihood projects are helping poor households enhance their incomes from alternative sources of livelihoods, undertake natural resource management and thereby pave way for a constructive relationship between communities and efforts towards conservation.

As an extension of work done by us, we have instituted the RBS 'Earth Heroes' Awards from 2011 to recognise and honour individuals and institutions that work exceptionally hard to preserve and protect our critical ecosystems.

Award categories include:-

RBS 'Earth Hero' Award (Felicitation) Individual 1.

This award recognises extraordinary achievements of an individual who has worked for a life time in conservation of wildlife, natural resource management, and environment and has influenced policy. No nominations will be accepted as this will be the Jury's choice.

RBS 'Earth Guardian' Award (INR 1,50,000) - Institution 2.

This award recognises an institution (NGO/Corporate/Government) that has made exceptional contributions in the field of conservation of wildlife, human life and property in wild habitats, natural resource management, environment, wildlife research and awareness building.

RBS 'Save The Species' Award (INR 1,50,000) - 2 Individuals 3.

This award recognises an individual who has been involved, directly or indirectly, in protecting any endangered species and has also contributed to education, awareness programs, capacity building and resolving man-animal conflict.

4. RBS 'Inspire' Award - (INR 1,50,000) - Individual or Institutional

This award recognises an individual (journalist/filmmaker/artist) who has inspired action on conservation of wildlife, natural resource management and environmental protection through his/her creative expression.

5. RBS 'Green Warrior' Award - (INR 1,50,000 each) - 2 Individuals

This award recognises two individuals who have done commendable work in conservation of wildlife, natural resource management, environment protection, human lives and property.

The Selection Process

The jury will include experts from the field of conservation, biodiversity, science, government, media, The Royal Bank of Scotland N.V, National Biodiversity Authority, and Bombay Natural History Society. The jury will evaluate the nominations and select a finalist for each award.

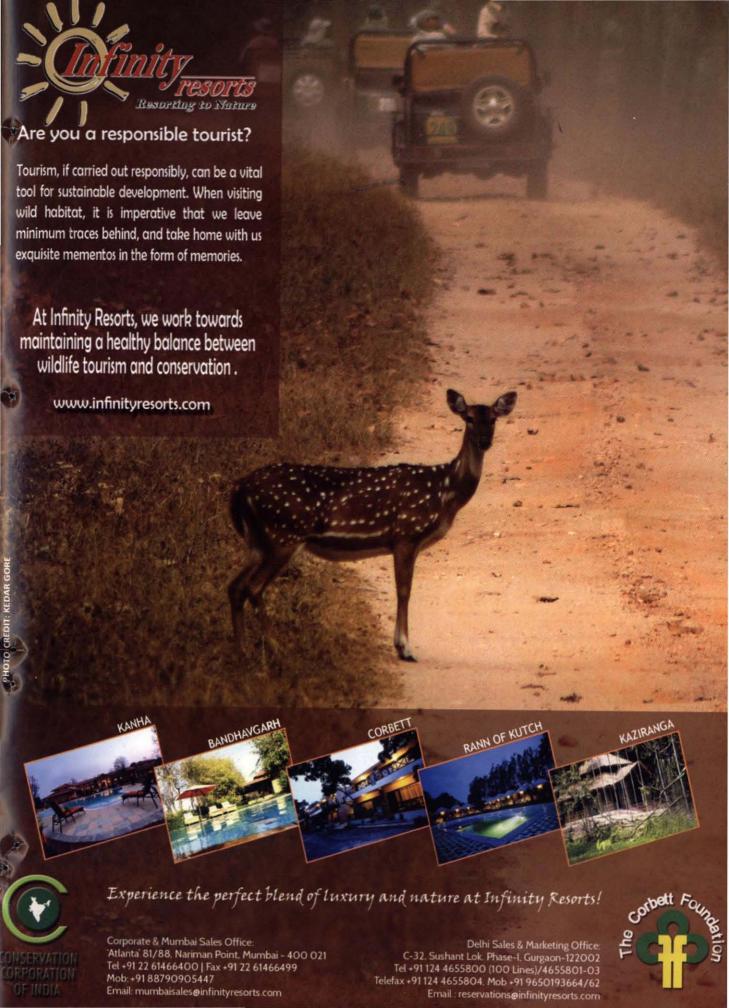
The timelines for the selection process are as follows:

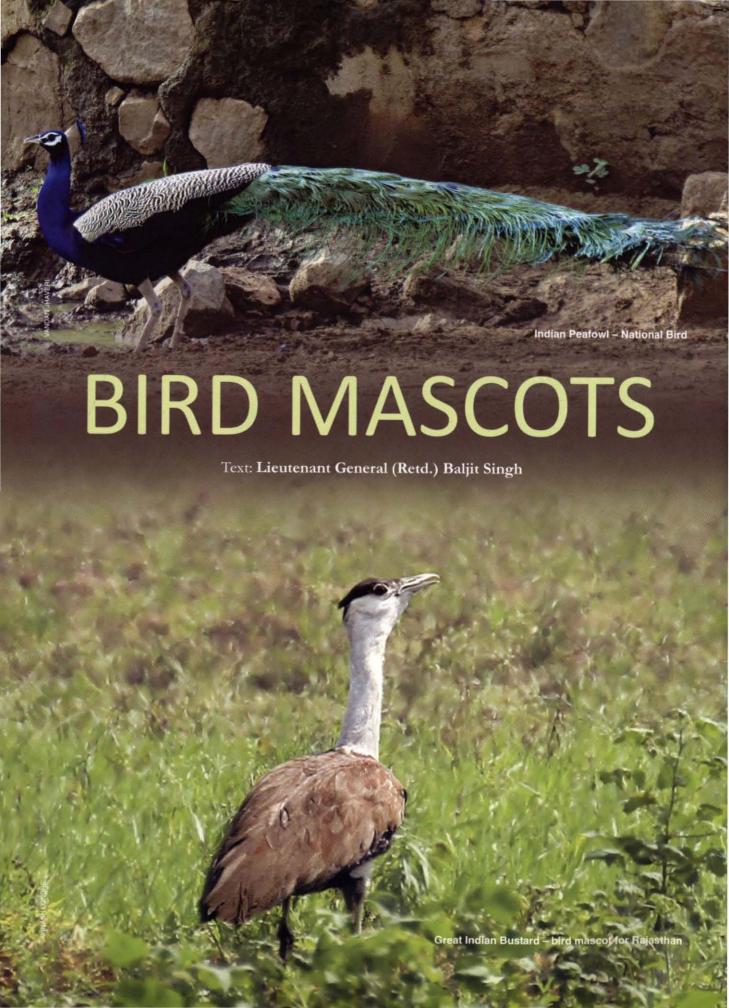
Last date for submitting nominations: - 1st July, 2014 Award winners to be informed by: - 30th September, 2014 To request a nomination form, please contact



RBS Foundation India Email - foundation@rbs.com Phone - +91 -22 - 66232469













Indian Roller - bird mascot for Andhra Pradesh

It would be interesting to briefly scan the subsequent

choices made by the respective states for their avian symbol.

Admittedly, it is easier said than done to pick one bird as the

symbol from the several hundred species inhabiting a particular

state. For instance, a group of bird enthusiasts in Chandigarh

had listed 325 species within a radius of about 50 km from

the city's centre. When asked about their choice of the State

Bird, the question was politely deflected! Nevertheless, some

forty years later, the bureaucracy declared the Indian Grey

Hornbill as this union territory's Bird, when commemorating

National Wildlife Week in October 2010. When I dared to

enquire the reasoning behind the choice, promptly came the

answer, "It is the bird favoured by the Chief Wildlife

s I reached out for my copy of the BNHS desk-calendar, 2014 (State Birds of India), my mind shifted to the inception of the Indian Board for Wildlife in 1954, and what brought Indian birds to the national centre stage. At the fundamental level, the Board conceded that public concern for wildlife was almost non-existent, and in their collective wisdom, they decided to focus on the aesthetic appeal element of wild creatures rather than the scientific imperatives of nature conservation per se, to arouse public awareness. And in the event, the Great Indian Bustard and the Peacock (Indian Peafowl) emerged as the front runners for the National Bird, but ultimately the Peacock clinched the honour, both on account of its countrywide presence and for its feathered beauty.

Blood Pheasant - bird mascot for Sikkim





April-June, 2014 HORNBILL | 17

Warden"!



Emerald Dove - bird mascot for Tamil Nadu



Black-necked Crane - bird mascot for Jammu & Kashmir

Whether to ingratiate the Central Government or from sheer laziness, Odisha had earlier plumbed for the Peacock. A more informed choice would have been the Red Junglefowl, as Odisha alone can boast of the largest surviving population. Its neighbour, Andhra Pradesh, opted for the Indian Roller, as did Bihar and Karnataka. Their choice was rather unimaginative, as this bird can be encountered in every other state.

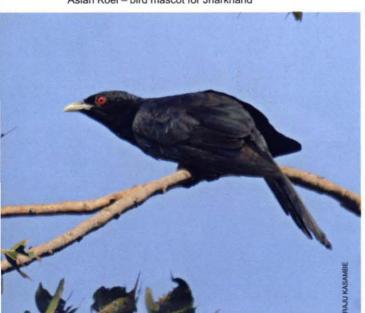
Tamil Nadu has five species of doves including the Eurasian Collared-Dove, the iconic Bird-of-Peace, but the state settled for the Emerald Dove. It is decidedly the least known, and hardly ever seen except by the venturesome few who penetrate the evergreen forests. Even then, its green upper plumage makes detection a challenge, despite the waxy, red bill.

The Great Pied Hornbill is the largest of our seven species,

and is confined to the Western Ghats and along the Himalayan foothills. The bird was an obvious choice for Kerala, but surprisingly, Arunachal Pradesh also adopted it. Arunachal's obvious choice ought to have been the Rufous-necked Hornbill because of its near exclusive presence in the state and its attractive, multicoloured plumage. Similarly, by common perception, Maharashtra too should have opted for the Green Imperial-Pigeon, but settled for the Yellow-footed.

Madhya Pradesh picked the Asian Paradise-Flycatcher (male), even though the bird only transits through the state during autumn and spring. Those who happen to see the male flitting about in green surroundings, with its snow-white body and long tail streamers, will be reminded of a Christian bride in her wedding gown, fleet-footing to the altar to receive the

Asian Koel - bird mascot for Jharkhand



Yellow-footed Green-Pigeon – bird mascot for Maharashtra



18 HORNBILL April-June, 2014



Great Pied Hornbill - bird mascot for Arunachal Pradesh/Kerala



Sarus Crane - bird mascot for Uttar Pradesh

wedding vows! However, if you are thinking of the traditional Hindu wedding trousseau, move to the Rann of Kutch and watch a flight of Greater Flamingos splashing the sky in bridal pink. That is the bird of Gujarat!

As we move northwards and eastwards, we enter the avian realm of the globally threatened/critically endangered. The Great Indian Bustard (Rajasthan) is on the brink of extinction; less than 300 of this species exist today. The population of the Sarus of Uttar Pradesh is still in four digits, even though more than half of its habitat has been lost to industry and agriculture. The Black-necked Crane, which used to visit and breed in Ladakh, are now down to about twenty pairs. The Indian Army and the ITBP have long protected its breeding sites, chiefly the marshes of Chushul and Hanle; but lately,

the march of agriculture and animal husbandry have usurped these swamps.

Haryana was the first in the country to name its state-run hospitality ventures after birds and more than one have the Black Partridge as the emblem. Punjab chose the Common Hoopoe because it dug deep in soil to pick worms harmful to crops. Unfortunately, it was replaced with the Northern Goshawk, a mistaken identity for the falcon kept by the tenth Sikh Guru.

Now the world of pheasants includes some of the most exotically coloured birds. And their preference for cold and forested environment leads them to inhabit our Hill States, as is the case with the Western Tragopan (Himachal Pradesh), Himalayan Monal (Uttarakhand), Blood Pheasant (Sikkim),

House Sparrow - bird mascot for Delhi



White-throated Kingfisher - bird mascot for West Bengal



April-June, 2014 HORNBILL 19



Asian Paradise-Flycatcher - bird mascot for Madhya Pradeh

Blyth's Tragopan (Nagaland), and Mrs. Hume's Pheasant (Manipur and Mizoram). Looking at these birds, and the people of these states, one is faced with the predicament of the Queen in the tale of Snow White: "Mirror, mirror, on the wall, who is prettier..."

Left in the balance are four State Birds and two birds of Union Territories. By all accounts, the population of Assam's White-winged Duck is the lowest of any of the bird species occurring in the state and most certainly deserves state patronage for its survival. The Common Hill-Myna is the mascot of Meghalaya and Chhattisgarh, the White-throated Kingfisher for West Bengal, and Asian Koel (female) for Jharkhand. Our island territories are the least frequented by our countrymen, and so their birds are seldom spoken about.

Andaman Woodpigeon - bird mascot for Andaman & Nicobar Islands



Black Francolin - bird mascot for Haryana

While Lakshadweep has the elegant Sooty Tern, the Andaman and Nicobar Islands opted for the exclusive Nicobar Pigeon. However, considering the diverse avifauna of this huge archipelago, they ought to have had two State Birds, the other being the endemic Narcondam Hornbill. What a gorgeous bird to end this account with. May they all survive into the 22nd century. ■



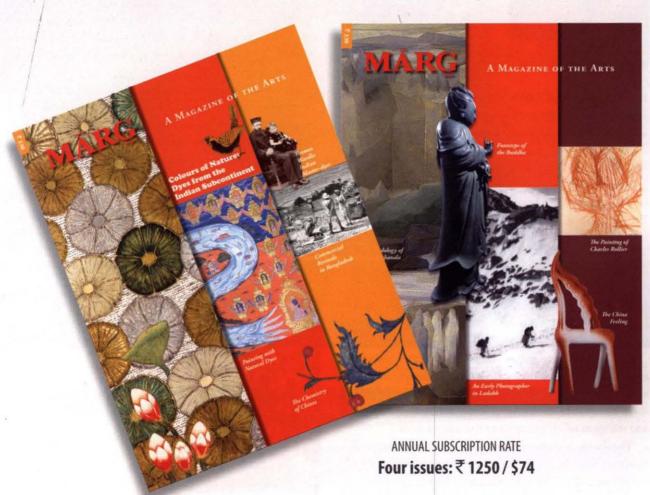
Lt. Gen. (Retd.) Baljit Singh is an active promoter of nature conservation, particularly within and by the Armed Forces, over the last 35 years.

Himalayan Monal - bird mascot for Uttarakhand



20 HORNBILL



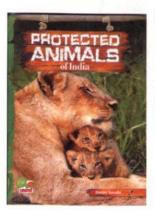


Marg magazine presents evocative essays and photographs that reflect new scholarship of artistic and cultural traditions

The Marg Foundation, Army & Navy Building, 3rd Floor, 148 M.G. Road, Mumbai 400 001 Phone: (022) 22842520, 22821151, 22045947/48, 22024904, 22020782 Fax: (022) 22047102 E-mail: margfound@vsnl.net

www.marg-art.org





Protected Animals of India

by Sanjay Sondhi Published by: TERI, 2012 Size: 25x18.5 cm Pages: 120 Price: Rs. 395/-Hardcover

Reviewed by: Atul Sathe

Books for children on wildlife and nature are always welcome, since it is important to make the younger generation aware of our rich natural heritage and the threats faced by the same. This can go a long way in creating 'green' engineers, managers, politicians, civil servants, and teachers.

This informative book is part of the Terrapin series of The Energy and Resources Institute (TERI); it has a colourful layout and an attractive cover of a lioness with her two cubs. Targeted at children in the 12–14 age group, it takes the young reader on an exciting tour of India's wildlife. The Introduction by R.K. Pachauri, Chairman, Inter-governmental Panel on Climate Change (IPCC), rightly points out that urbanisation and toxic pollution are endangering wildlife and their habitats.

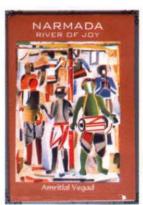
The author's note gives some astonishing facts about the animal world, such as the fact that 60 new amphibian species were discovered in the past 10 years in India. The book talks about the need to save wildlife, ecosystem services received, and the spirit of co-existence in the natural world.

The book includes an interesting practical game for children, depicting the intricate web of life on earth, and the individual and collective importance of each entity therein. There are write-ups on threats to wildlife such as habitat loss, pollution, poaching, and human-animal conflict. Legal, scientific, and educational measures for conservation that are underway have been mentioned. Various levels of threat ranging from Least Concern to Extinct have been succinctly explained.

Among the major protected species of mammals discussed are the Tiger, Snow Leopard, Wolf, Nilgiri Tahr, Hoolock Gibbon, Slender Loris, Red Panda, Wild Buffalo, and Wild Ass. Reptile and amphibian species include Gharial, Indian Golden Gecko, Burmese Python, King Cobra, and Olive Ridley Turtle. Protected bird species include those from diverse habitats, such as Siberian Crane, Sri Lankan Frogmouth, Himalayan Monal, Great Pied Hornbill, Great Indian Bustard, and Gyps species of vultures. Several species among insects, crustaceans, and corals are covered, such as Peal's Palmfly and Silver Royal, Coconut Crab, and Lesser Valley Coral.

The book ends on a positive note with some partial success stories, such as Asiatic Lion (protection by government and communities in and around Gir), Whale Shark (through outreach efforts using a spiritual angle to stop its slaughter), Pygmy Hog (habitat conservation), and Indian One-horned Rhinoceros (protection against poaching).

As for criticism, the book should have included more regional language names for species. Cheetah is wrongly mentioned as the Hindi name of Leopard, and the correct spelling of the Marathi name of Wolf should be Laandga and not Langda.



Narmada - River of Joy

Translated by: Amritlal Vegad Published by: Banyan Tree, 2014

Size: 22x15 cm Pages: 220 Price: Rs. 300/-Paperback

NARMADA – RIVER OF JOY is an interesting travelogue of journeys along the Narmada river. It has been translated from the original, in Hindi, by the Sahitya Akademi award winner Amritlal Vegad. ■

We are grateful to

SETH PURSHOTAMDAS THAKURDAS & DIVALIBA CHARITABLE TRUST

for a generous donation to the Pratap Saraiya Hornbill Fund to support the publication of Hornbill

22 HORNBILL April-June, 2014

BNHS Beyond Borders

Explore Africa





For details contact us at bnhs.programmes@gmail.com or call us on 022-22821811

ABOUT THE POSTER

The Hog Badger Arctonyx collaris is distributed primarily in parts of eastern India, central and southern China, Myanmar, Thailand, Indochina (Vietnam, Laos, Cambodia), and Sumatra. It is found in grasslands, hills, mountains, tropical rainforests, tropical evergreen and semi-evergreen forests. It is listed as Near Threatened in the IUCN Red List of Threatened Species, as it occurs patchily and is declining in numbers.

Most notably, it possesses an elongated pig-like snout and modified teeth, which point forward and are used for turning over the soil. Its body fur is dark grey to brownish, and its tail pale yellow to white. The throat and face are white, and there are two thick dark stripes



Hog Badger Arctonyx collaris

on the face. There is little known about the habits of this animal in the wild.

Hog badgers are solitary and nocturnal, feeding mainly on roots, tubers and fallen fruits. This diet is supplemented by forest floor invertebrates and small vertebrates, if available. By day, it remains concealed in its burrow. Apparently it is dull of sight, and in its quest for food, relies more on scent.

April-June, 2014 HORNBILL



The Forest Guardian

Photographs: Salimjavid Mulla

Aharashtra, with a geographical area of 3,07,713 sq. km, has 61,939 sq. km as forest area. The State's forest cover is estimated to be over 20 per cent of its geographical area. Maharashtra Forest Department plays an important role in conserving these forests and their inhabitants. And this would not be possible without the assistance of the several hundred foot-soldiers that guard its biodiversity.

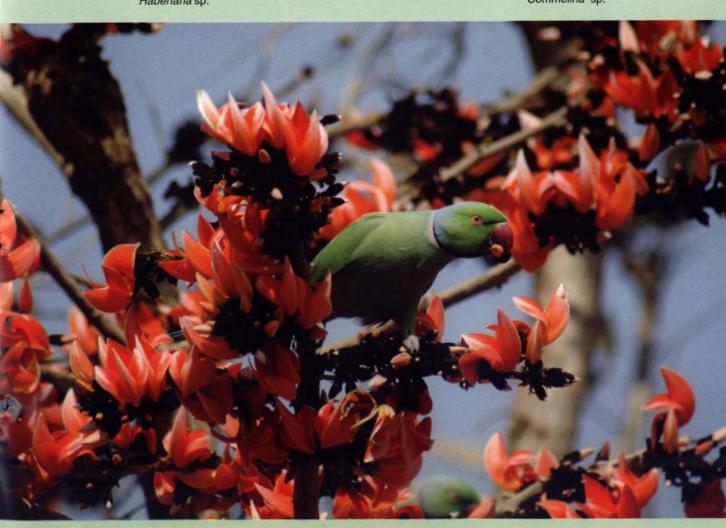
Salimjavid Mulla is one such foot-soldier, who also documents the biodiversity he guards. His passion for the natural world and photography runs so deep that he has taken a loan and bought a Nikon D300 to capture moments in the wild. He has been sharing his experiences of the forest, since 1988, through his poems and articles which have been published in Marathi publications like *Sakal*, *Ubhari*, *Kesari*, *Lokmat*, and *Lokrajya*.





Habenaria sp.

Commelina sp.



Rose-ringed Parakeet on the Flame of the Forest



Common Map Cyrestis thyodamas

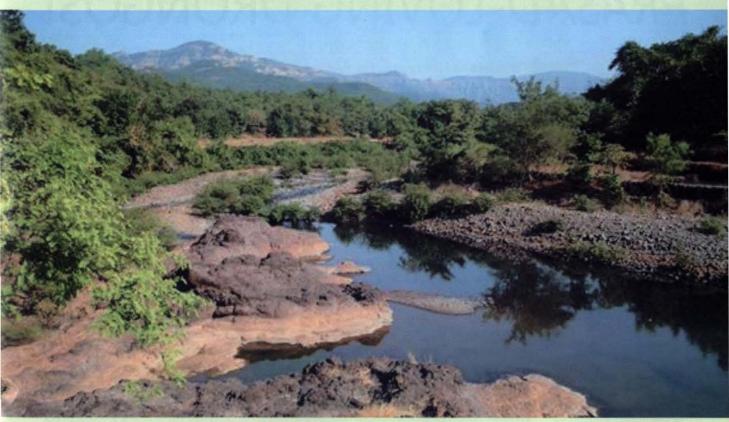


Golden-flowered Ginger Zingiber chrysanthum

Jacobin Cuckoo (Pied Crested Cuckoo) Clamator jacobinus



Termite mound Watchtower



Naturally sculpted landscape

Salimjavid S. Mulla works as a Forest Guard with the Maharashtra Forest Dept. He is a graduate in Arts, and has a Diploma in Civil Engineering, and Interior Design and Decoration. He enjoys studying the medicinal properties of plants.





PRASAD-LOVING DRONGOS!

Text: Rajat Bhargava and Pradip Kumar

Photographs: Rajat Bhargava

On January 22, 2013, on our way to Harike Bird Sanctuary, we halted at the Golden Temple (Gurdwara Harmandir Sahib), Amritsar, Punjab. While waiting in the Gurdwara premises for sunrise, we were intrigued by the presence of more than 50 Black Drongos Dicrurus macrocercus, especially around where the karah prasad (a mixture of ghee, sugar, and whole grain flour) was being distributed to the devotees. As it was foggy and chilly, most of the drongos looked quite fluffy and dull, and we presumed that they had roosted in the Gurdwara premises and would leave at sunrise. However, as there were not many trees around, we also wondered where the birds had roosted (if they did so).

On closer observation, as the fog cleared, we observed that the drongos would often come to the ground (in spite of the crowds), and quickly fly back to perch on wires or railings. It soon became obvious that the drongos were picking something from the ground. The marble floor was clean and there were no signs of insects on it or in the pond inside the Gurdwara. On closer observation, we saw that the drongos were picking up small bits of *prasad* dropped by devotees, and flying away. That they were indeed feeding on *prasad* was confirmed when we saw two birds feeding inside the premises, where some devotees offered a portion of the *prasad* to the birds, among the grains put out. As soon as the *prasad* was put on the feeder, several drongos would descend to feed on it. We also saw a House Crow *Corvus splendens*, a Rock Pigeon *Columba livia*, a few Red-vented Bulbuls *Pycnonotus cafer*, and some House Sparrows *Passer domesticus* come to the feeder, but they were dominated by the aggressive drongos. What was more surprisingly interesting was that there were no generalist species, such as Common Myna *Acridotheres tristis* and Bank Myna *Acridotheres ginginianus*, as one would expect them to be more likely to feed on cooked food items at the Gurdwara.

30 HORNBILL April-June, 2014



Drongos pick small pieces of prasad dropped by the devotees

Ali and Ripley's HANDBOOK OF BIRDS OF INDIA AND PAKISTAN (1983) mentions that the main food of the Black Drongo is predominantly insects, and on occasion, lizards, small birds, small bats, and nectar. The HANDBOOK OF THE BIRDS OF THE WORLD by del Hoyo et al. (2009) mentions a feeding record of a Black Drongo on Sorghum Sorghhum vulgare in Gujarat. There are no reports of drongo species feeding on cooked food or snacks, unlike crows and mynas. However, prior to the ban on domestic trade and export of birds from India in 1989, the first author had observed bird exporters feeding preparations similar to prasad, made from roasted gram flour (sattu) mixed with ghee and jaggery, to Greater Racket-tailed Drongos Dicrurus paradiseus in captivity, after the birds got acclimatised to feeding on crickets mixed with minced meat. This process, referred to as "meating-off" by softbill bird keepers, was practiced on some insectivorous birds, especially when such species were to be transported on long journeys. Once the birds reached their destinations, they were again given their 'normal' diet of insects and minced meat.

Our observations of an insectivorous bird feeding on prasad both surprised and amused us. It needs to be checked if the



The drongos at the Harmandir Sahib Gurudwara have added a new item in their diet - is this a localised phenomena



birds visit the Gurdwara only during winter (when we visited it), or throughout the year. Is this also happening in other gurdwaras and religious sites in the area,

and elsewhere? To end on a lighter note, it looks like drongos have quite a sweet tooth, or maybe even religious leanings. Holy cows and drongos! ■



Rajat Bhargava is an Omithologist with the Bombay Natural History Society, currently working on the birds of Soheldev and Sohagi Barwa Wildlife sanctuaries in Uttar Pradesh.

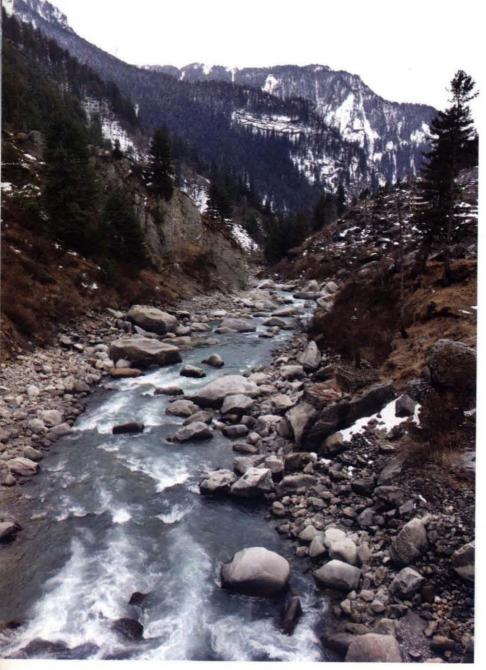


Pradip Kumar is an Associate Professor in Department of Biotechnology, Meerut. He also works as a Scientist for Scientific Training Program with BASE Association, an NGO.

A standoff on the Bhagirathi

Text and Photographs: Gunjan Arora and Puja Sharma





t was early in the evening. A vicious snowstorm obscured our vision, and a struggling vehicle past Dabrani forced us to abort an attempt to cross Sukki Top en route to Harsil. We spent the evening birding, with Yasuhisa Tanaka and Gopal Rawat, a little lower than planned instead, at 2,000 m, amidst the verdant foliage and the hot water spring nullahs of Gangnani. Ominous, dark clouds loomed and hid the white mantle of snow on the mountain peaks. Down in the valley, a drop of a few hundred metres, the Bhagirathi flowed calmly as it wound its way around stones and tree litter. She seemed rested after the menace and fury she had unleashed a couple of months ago. Yet signs of her wrath and destruction were painted on the high walls she had eroded, and the land she had washed away. Uprooted trees lay strewn like matchsticks everywhere, with huge boulders thrown up at the most bizarre of places. She, however, had moved on since, and all that she destroyed now seemed to have recovered, as though her mayhem was history.

The Himalaya is one of the most inhospitable and untamed mountain ranges on our planet. Despite being the tallest, it is paradoxically the youngest among ranges. In winters, as snow accumulates even at the lower reaches, scarcity of food and subzero temperatures oppose all forms of life.



The atmosphere got tense and time stood still for a while during the face-off between the Martens and the Cat

Sustenance is tough and food is scarce. The struggle for survival in these hostile conditions pushes all to their virtual limits. Yet the extraordinary creatures that inhabit these regions teach us the beauty and fragility of life. Most migrate to lower heights in winter, and some stray close to human habitation in an effort to forage for food. At times, the stakes are high and species clash for survival.

We were admiring a female Redheaded Bullfinch Pyrrhula erythrocephala meticulously nibbling seeds of the Himalayan Stinging Nettle Girardinia diversifolia, and as we panned through our binoculars, we witnessed an incredible sighting of a pair of robust Yellowthroated Martens Martes flavigula on the opposite bank of the icy green river. On

closer examination, we realised what was actually keeping them occupied. They had driven a Leopard Cat Prionailurus bengalensis onto a rock in the fast-flowing river!

The cat looked absolutely distraught. The Martens approached the Cat, and it appeared to be frightened, with its furry, long tail dangling in the freezing water between its hind legs. It stared at them meekly, unsure of their next move.

Martens are fearless hunters and are known to kill cats. As they drew near, the Leopard Cat arched its body and let out an aggressive snarl, exposing its canines. The atmosphere got tense and time stood still. No one knew what would happen next. The face-off was brief. The martens backtracked, leaving the cat alone. We initially thought they might wait it out and ambush it, but they moved on and were seen roaming far away. The cat stood frozen on the rock for a long time, until some villagers showed up and it bolted away with their shouts reverberating in the background!



Gunjan Arora grew up in Dehradun where he spent his childhood frequenting untamed jungles of the terai and the sublime Western Himalaya. He enjoys birdwatching.



Puja Sharma is a keen birdwatcher from Delhi, and is on an ongoing quest to explore India's wilderness for avian sounds and sights.

Birds of Vizae

Text and Photographs: Shakti Bishnoi and A.S. Bishnoi



the nip in the air signalled the onset of winter in Vizag (short for Visakhapatnam), the wellknown 'port and steel city' on the Andhra Pradesh coast. The chilly weather had brought a few winged visitors from distant lands. Come winter, Vizag is home to a multitude of migratory birds. One site in Vizag, which is especially known for its birdlife, is a wetland adjacent to the Visakhapatnam Airport!

When we first came to Visakhapatnam in 2011, we were disappointed as there were few signs of avian life - except for some garrulous mynas and rowdy crows - around our home near the airport, surrounded by the green hills of Simhachalma. One fine day, however, as we were heading towards the market, we saw 5-10 ducks flying overhead. We were eager to find out where they were heading, and we started looking for waterbodies. After a lot of searching, we finally found the ducks (and other waterbirds) in a small canal just a kilometre away from our residence! The canal, which originates from Megadhripeta dam, merges into the sea after crossing the Airport area. On the other side of the airport is an industrial belt consisting of HPCL, BPL, Andhra Refineries, and other smaller units. It was a puzzle how the birds had adjusted to life



Grey-headed Lapwing feeds in shallow water on insects and worms



Largely crepuscular and solitary, the Purple Heron keeps to dense cover



Small parties or large flocks of Black-tailed Godwit can be seen on marshy iheels and tidal mudflat



The long, pointed pin-like feathers at the tail-end are diagnostic of the Northern Pintail

in and around the canal amidst the hustle and bustle of aircraft landing and taking off, and with all the activities and disturbance in the industrial zone. This site soon became our favourite birding and picnic spot on weekends.

Airports, in general, can provide a wide variety of natural and manmade habitats that offer food, water, and cover for wildlife. Some of our airports are located along the migratory routes of winter migrants, such as ducks, plovers, sandpipers, gulls, and terns. The area around Visakhapatnam airport too attracts many bird species due to the presence of grass, seeds, berries, insects, and waterbodies. The presence of birds so close to an airport could be detrimental for an aircraft landing or taking off, but fortunately, so far, not a single bird hit has been reported. One reason

for this could be that the runway runs in a direction opposite to the canal.

The interesting birdlife of the area prompted us to document species and their numbers, and study their habitats and the threats

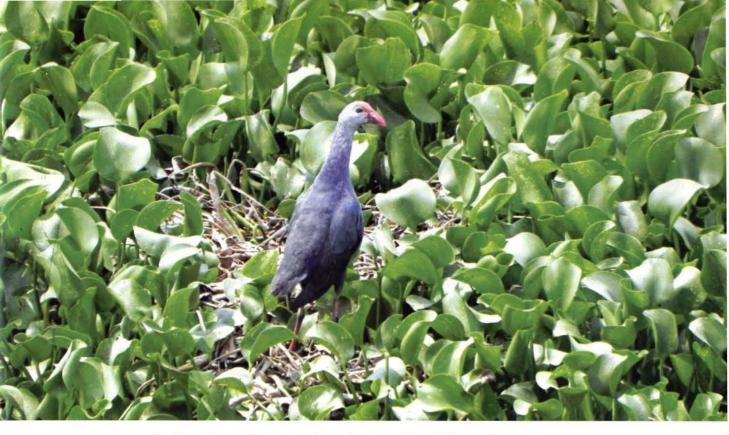


The Little Egret acquires a long drooping crest of two plumes during the breeding season, in addition to the aigrettes on its breast and back

facing them. We made frequent visits to the area in the mornings, for at least two hours, armed with notepads and binoculars, from 2011 to 2013. Our observations have provided us with a profile of the birds of the area and the conservation issues facing them. Since both of us had trained at Point Calimere, as students of the ornithology course conducted by BNHS, we had a fair idea of how to go about collecting data on birds. We would dedicate our weekends to observing birds in shifts. The checklist of the birds of the area, waterbirds and landbirds, stands at 130, including residents and migrants, till date. The more common species are:

Waterbirds: Pied Avocet, Ruddy Shelduck, Greenshank, Great Egret, Intermediate Egret, Eastern Cattle-Egret, Little Egret Indian Pond-Heron, Watercock, Common Sandpiper, Black-tailed Godwit

Little Stint, Bronze-winged Jacana, and Oriental White Ibis. *Land Birds*: Black Kite, Black Drongo, Indian Roller, Asian Koel, Little Green Bee-eater, White-breasted Kingfisher, Pied Kingfisher, House Crow, Common Myna, and Shikra.



The Purple Swamphen is a handsome but clumsy bird with long red legs and toes

The canal and its surroundings are like a shallow coastal wetland habitat, which is especially attractive to migratory waterbirds. It is an assemblage of marine, brackish, and freshwater ecosystems. The vegetation includes submergent, emergent, mixed reed beds, and grassland. The waterspread of the canal area varies with the season and tide. The birds seen in this area are otherwise rare sightings in Vizag. Due to this wetland, birdwatchers in and around Vizag need not go to Chilika or elsewhere to see waterbirds! The best season for birding is between October and May. By March, the numbers gradually start to decline, as the birds begin their journey back to their breeding grounds in Siberia and the northern European and Asian nations.

An expert diver and swimmer, the Little Cormorant lives exclusively on fish

However, things are not as rosy as they appear. The birds have made this small patch their habitat and are surviving amidst industrial waste, polluted water and air, and vehicular traffic and noise. As if that is not enough, fishermen and other locals, too, demand their share from this small patch, for fish, reeds, etc. The opening through which sea water enters the wetland is now getting blocked. Two large roads on the sides of the waterbody are threatening the survival of these birds, though surprisingly, they still continue to visit every year, in small or large numbers. sometimes Dumping of effluents and other activities detrimental to the birds and their habitats has increased over the last three years. There is heavy traffic of large trucks carrying cargo for the HPCL/BPL refinery in the area. In fact, the area is so polluted that one cannot even roll down one's car window while passing by. Seeing all this, we often contemplate what will happen to our favourite birding cum picnic spot in Vizag in the future.



Shakti Bishnoi and A.S. Bishnoi are members of the BNHS. Avid naturalists, they enjoy watching birds, and rearing butterflies in their backyard.

April-June, 2014 HORNBILL 37

Avian Master of Camouflage

A Sunday birdwatching trip at the Nagawali talab in Chittorgarh district, Rajasthan, in December last year, revealed a rare sighting of the master of camouflage, the Eurasian Bittern Botaurus stellaris. As we birded around midday, the bird flew out of its hiding place among dense reed beds of Typha angustata on the shore of the wetland. The bird was sighted by three bird enthusiasts: Vijendra Prakash Parmar, Alok Upadhyay, and their friend from Ireland, Paul Patrick Cullen. Paul, having seen this bird in Europe, immediately identified it as the Eurasian Bittern – and the photographs taken further confirmed this.

Like its relatives, the herons and egrets, bitterns are nonswimming, highly cryptic waterbirds. They are solitary, secretive, and crepuscular, seldom seen during the day due to their perfect camouflage. When disturbed, they quickly take off, fly above the reeds and settle down again in dense reeds, a short distance away. They are discreet during flight and keep their neck retracted. While sitting in cover, they assume a characteristic hunchback posture with the neck retracted.

The Eurasian Bittern is a winter visitor to Rajasthan (and other parts of the Indian region), and prefers relatively large



and undisturbed wetlands with extensive reed beds along the margins. It breeds in the temperate Palaearctic region throughout Europe and Asia, from Great Britain to Japan. There is also a breeding population in South Africa. In India, breeding is not proven but the species may possibly breed in thick reed beds in Anchar Lake in the Kashmir Valley, as asserted by local shikaris. In the breeding season, the male becomes vocal and produces a booming sound to attract its mate. It feeds on fishes, frogs, molluscs, and insects.

Nihal Jain via email

Strange behaviour of Lesser Sand Ployer

It was a unique evening at Modhava beach, near Mandvi in Kachchh. While returning to my room early in the evening, I saw some Lesser Sand Plovers foraging at small ponds near the coast, along with a couple of Western Reef-Egrets, Slender-billed Gulls, hundreds of Greater Flamingo, and some small waders.



The beach was very clean, with a gorgeous stretch of sparkling white sand, but it was extremely hot that day with mercury levels soaring to a blistering 44 °C. It was also rather windy, which made it difficult to take good photographs.

Late in the evening, at one corner of the beach, I saw a huge flock of small waders. Most of them were Lesser Sand Plovers in breeding plumage. Many of them were sitting on wet sand patches on the beach, and some had partially or almost totally buried themselves under the sand with only their heads visible. I have never observed such behaviour earlier. Were they cooling themselves, resting, or dust bathing? I have no idea, and I am curious to know the reason for this puzzling activity.

Jaysukh Parekh via email

Editors' Note: Judging by the extremely hot weather (44 °C) the birds most likely were cooling off in the damp soil.

What do you, our readers, believe caused this behaviour? If any of you have made a similar observation, do share it with us.

8 HORNBILL April-June, 2014

TVS Motors' Nature Park

Constantly lock horns since industrial development usually impacts the environment. In an ideal situation, industry and nature would thrive side by side. This is precisely what is happening at the TVS Motors' Hosur estate in Tamil Nadu. This vehicle-manufacturing company has provided the local wildlife with a safe haven by nurturing a natural forest within its premises.

About 14 years ago, while landscaping the land for the factory, shallow ponds were dug and existing clumps of the exotic Subabul were extricated and replaced with native plant species. This resulted in a natural 'wonderland', which now supports a teeming population of urban wildlife, comprising more than 80 species of birds, 15 species of reptiles, and several mammals.

A visit to the main pond area convinces a visitor that he is in the middle of a small bird sanctuary. The incessant cackle of nestlings and the sight of Painted Storks, Grey Herons, Blackcrowned Night-Herons, and Little Cormorants enhance this effect. For the last 12 years, these birds have been visiting this site in hundreds during winter to breed in this safe refuge. Spotbilled Pelicans too have started appearing, but are yet to breed. Resident waterbirds like herons, moorhens, darters, Little Grebe, kingfishers, and egrets are common, while Grey Wagtail, sandpipers, and Garganey are seen in the migratory season. The Purple Swamphen and Common Coot have also been recorded. A variety of land birds also occur in and around this 'bird sanctuary'. A large hide has been constructed at one end of the main pond for visitors to comfortably view the birds without disturbing them.

What makes this environmentally friendly giant corporate tick? The catalyst



is the passion of the Chairman, Mr. Venu Srinivasan, under whose influence the company has reserved a third of its premises for landscaping and natural forest. To promote interest in nature, school-children are invited to visit the park and plans are underway to open it to the general public as well. Under the

guidance of its Chairman, the company could well influence similar industries to create such eco-spots within their premises, thus expanding the facility of urban habitats for wildlife and promoting a muchneeded, healthy urban ecological set-up.

Preston Ahimas via email

Increasing Human-Wildlife Conflict

A full grown, majestic bull elephant was electrocuted recently in the Pengaree-Dibrujan area of Doomdooma Forest Division, Tinsukia, Assam. He fell victim to the negligence of the Electricity Board that laid a high voltage wire within the reach of an elephant. Such power cables have taken the lives of elephants earlier, electrocution occurring as they emerge out of the forests to the surrounding areas in search of fodder.

Human-wildlife conflict is increasing steadily in the Pengaree-Dibrujan area due to habitat loss, fragmentation, and degradation. Many cases of human-wildlife conflict are reported each year, and the villages situated in and around the forest are the most affected, with injury and loss of human life, crop damage, and destruction of property. The incidents of



elephants venturing out of forests in search of food, and human-wildlife conflict (including being killed by power cables), are expected to increase with the years. The concerned departments should urgently take up preventive measures to tackle the conservation issues facing the elephants, address the problem of human-wildlife conflict, and elephant deaths.

Trinayan Gogoi via email

April-June, 20 14 HORNBILL 39

OF LAGOONS AND TRADITIONAL WISDOM

Text: Neha Sinha

Pulicat Lagoon IBA in danger

n the map of India, Pulicat looks like a little nook, a cranny. If you drew the map of India with pencils as a child, you would make a little curve, a little inlet on the Coromandel Coast, just above Chennai. This little curve is India's second largest lagoon, spanning several kilometres over Andhra Pradesh and Tamil Nadu.

With a curious and fascinating mix of brackish and fresh water, the large expanse (720 sq. km) of Pulicat looks like the edge of the world. This is one of those rare sites where you can see waders (sandpipers, plovers, curlews), wading birds (herons, egrets, storks) and other waterbirds, not by the dozens but by the thousands. Pulicat is a feeding site and a refuge for a multitude of migratory and resident birds every year. For these and other reasons, Pulicat has been recognised as an Important Bird Area of India. Pulicat supports a number of heronries, and waterbirds such as the Spot-billed Pelican, Asian Openbill, Painted Stork, cormorants, and egrets, besides others, that arrive in winter to sustain themselves and their young on the abundant fish

resources that Pulicat offers. Besides birds, it also has a high species diversity of fish, including brackish, marine, and freshwater species, which supports around 30,000 fishermen spread over 50 settlements. Pulicat Lake has 20 islands. The largest is Sriharikota Island (c. 181 sq. km) at its eastern edge. The proximity to Sriharikota has accorded some protection to Pulicat, though the lagoon is now in danger inspite of two bird sanctuaries existing within the confines of Pulicat Lake!

Pulicat has a remarkable array of avifauna and fish diversity, it provides refuge to several species, and has huge congregations of migratory birds, making it fulfill several Ramsar (globally important wetland) criteria. These crucial factors should give no room for endangering the habitat by establishing a port at a site to the north of Pulicat, especially since there are two existing ports to the north and south of Pulicat, that is the Krishnapatnam and Chennai ports. Last year, the Central Government announced that a 'major' port would be established near Pulicat. Significantly, this announcement was made before any environmental impact assessment was done, or any





Pulicat lagoon stretches as far as the eye can see

environmental clearances were obtained. State machineries appeared more than accommodating to the idea of the port. The Cabinet Committee for Economic Affairs 'approved' the port, though the environmental clearances were not in place. In January this year, the Ministry of Environment and Forests put out a draft notification, proposing the creation of a tiny two-kilometre eco-sensitive zone for the Pulicat sanctuary in Andhra Pradesh. This was a climb down from an earlier proposal by the Andhra government, which in 2007 had suggested a ten-kilometre eco-sensitive zone and this new declaration of a smaller eco-sensitive zone appears to be engineered to clear the way for the port.

The major port, which will have an artificial deep sea harbour, has been proposed near the northern mouth of Pulicat lagoon. The direct impacts of a port here are clear – this will most likely interfere with the water regime, altering the mix of saline and fresh water, the mix which is a nutrient rich pull for the astonishing numbers of fish and birds. There will also be indirect impacts — ancillary industries will come up and cause pollution, affecting the livelihoods of artisanal fishermen.

The justification for the need to build a major port at Pulicat is also questionable, since there are existing ports in the vicinity, such as the Krishnapatnam port, ϵ . 88 km to its north, and the Chennai port ϵ . 142 km to its south. Further, the practice of announcing projects before they have secured the required environmental clearances is one that needs to be questioned. The issue here is not just of environmental destruction of a truly important site. There are also issues of transparency, good governance, and accountability. In the face of big projects, it is important that environmental impact assessments and public hearings are still carried out.

Responding to the government's ostensible intent, several members of the Indian Bird Conservation Network wrote to the Ministry of Environment and Forests on making a larger and more functionally useful eco-sensitive area for Pulicat. Noting the number of representations that came in, the Government has constituted a committee to reconsider the project. BNHS has also written to the Government to shift the port to a site away from the Pulicat ecosystem.

Birds do not have a vote, nor do they sit on committees, but the unusual curve on India's coastline which they have favoured and flocked to for centuries certainly belongs to them as much as it does to us.

April-June, 2014 HORNBILL 41

The best thing in life is fresh air. It is not free



Ghoda Ghodi IBA, Nepal – a Ramsar wetland that stretches like a mirror into forested patches, and is a habitat for the Cotton Teal

The concept of ecosystem services is a relatively new one. In a nutshell, it seeks to economically evaluate services provided by nature. In oral lore, in several parts of India, this sort of evaluation is traditional: the worth of trees in cleaning the air is well-known, artisanal fishermen who follow self-imposed bans on fishing during the breeding season to allow marine systems to recuperate, among others. Ecosystem services underline resilient ecosystems, and they also form the bedrock for the economy. Ecosystem services emphasise the building blocks nature provides us, without which life is impossible, such as clean air, pollination of crops, and hydrological cycles.

Ecosystem services are also those which cannot easily be quantified, like the cultural value of a site, and the service provided by that site or ecosystem type. I had travelled to Nepal to see how ecosystem services can be quantified and captured in economic terms, or relative measures



The Shukla Phanta IBA, Nepal, is an incredible grassland IBA interspersed with small waterbodies. This is a habitat for Critically Endangered Bengal Florican. There are only a few hundred birds remaining in the world

42 HORNBILL April-June, 2014

of value. Interacting in chaste Nepali and broken Hindi, a group of Nepali women, brought together by our BirdLife Nepal partners, Bird Conservation Nepal, had important contributions to make. They spoke about their local IBAs (Important Bird Areas), Sukla Phanta and Ghoda Ghodi, and the seasonality of water in these two wetland ecosystems. They understood that the ecosystem services provided by wetlands were different in different seasons, depending on where villages were located in the catchment of the waterbody, and the amount of rainfall. To me, this is an important measure in understanding ecosystem services. Ecosystems function throughout the year, but they may not provide services which are useful to us each day of the year. People close to nature understand this inherently, and often tend to demonstrate a wise and long-term view of nature, but what of policy makers and developers? They are an important target audience in the exercise of evaluating natural ecosystems and the services they provide, and they need to appreciate ecosystem services better.

There are other evaluations (schemes or mechanisms) on natural resources – such as the Compensatory Afforestation Fund, where trees are allowed to be felled on the condition that the developer pays for conservation or planting of trees elsewhere in lieu of those felled. But here, the idea is that the trees cut – and the forest ecosystem they constitute – can be replaced. The inherent difference in the ecosystem approach is that ecosystem services are naturally linked to healthy ecosystems. Ecosystem services cannot exist unless healthy ecosystems exist. These services, and the goods humans get from them, cannot be easily transferred in the way money is, as it takes years for healthy ecosystems to be created, and only then can they give us goods and services. Ecosystem



The village women living near Ghoda Ghodi IBA share thoughts on the role of natural water and water cycles in their lives

services like pollination and fresh air should not be taken for granted just because they appear to be free. They will be 'free' only as long as we allow functional ecosystems to exist, recover, and grow.

In my mind, a blend of traditional knowledge (as demonstrated by the Nepali women, who appreciate natural ecosystems as giving, but on the terms of nature, not of man), combined with a modern ecosystem services approach, can help us evaluate our natural spaces better. BirdLife International has created a simple ecosystem services kit, which we hope can be used in quick assessments of provisional, supporting, cultural, and regulating services provided by ecosystems.

IBAs in NBAP

Important Bird Areas are places of remarkable significance for birds. These are hotspots for bird breeding, congregation, and survival, and remind us of the importance of a wide variety of habitats – wetlands, intertidal mudflats, grasslands, agropastoral landscapes, forest pools, and others. Birds have shown us the important spots on terra firma and in inland, coastal, and maritime waters for them and other biodiversity. IBAs also are an inspiring and informative atlas on some of the last wild places in the world. We have, however, been faced with an uphill task in convincing policy makers to accord protection or management attention to IBAs, particularly those which are outside the protected area network.

India has recently created its National Biodiversity Action Plan (NBAP), which it has submitted to the United Nations Convention on Biological Diversity. For the first time, the NBAP outlines IBAs as crucial to biodiversity conservation in India. "The IBAs are conservation areas of international significance for conservation of birds at the global, regional or sub-regional level. IBAs (i) hold significant numbers of one or more globally threatened bird species, (ii) are one or part of a set of sites that together hold a suite of restricted-range species or biome-restricted species or (iii) have exceptionally large numbers of migratory and congregatory birds. IBAs are an excellent indicators for biodiversity richness," the NBAP points out.

For the first time, India has also worked on its National Biodiversity Targets. Unlike other conservation related targets, these are part of an agreement made with the Convention on

April-June, 2014 HORNBILL 43



Loktak Lake IBA with its unique floating phumdi vegetation (seen here in circular formation) harbours unique biodiversity, such as the Sangai or Dancing Deer. It is diversity such as these that the new National Biodiversity Targets seeks to protect

Biological Diversity (CBD) and are strictly time-bound. Of the new targets, Target No. 6 says:

Ecologically representative areas on land and in inland waters, as well as coastal and marine zones, especially those of particular importance for species, biodiversity and ecosystem services, are conserved effectively and equitably, on the basis of PA designation and management and other area-based conservation measures and are integrated into the wider landscapes and seascapes, covering over 20% of the geographic area of the country, by 2020.

Part of this target is monitoring and conserving IBAs, which has been primarily entrusted to BNHS and its partners. Two aspects stand out in these targets at the policy level. One: unlike traditional conservation targets, the National Biodiversity Targets are derived from the CBD Aichi targets that look not just to alleviate conservation as a goal, but also to integrate conservation into national and global priorities. Thus, the targets include information dissemination, food security, and protecting

under-represented ecosystems such as grasslands. This is crucial as biodiversity conservation needs to be mainstreamed into national planning processes. One of the targets set by India also includes conserving IBAs, which is good news for our grasslands, historically classified in government records as wastelands, but which serve important roles for both biodiversity and people. Secondly, these targets are time-bound, in a manner in which biodiversity targets have never been before. India is set to achieve these targets by 2020. The policy tone has been set, and now for the complicated matter of carrying out some serious conservation!



Neha Sinha is Policy and Advocacy Officer with the Bombay Natural History Society. She works on securing sites with a special emphasis on Important Bird Areas.

44 | HORNBILL April-June, 2014

Help a noble cause of nature conservation today

Adult T-Shirts, Sizes: S, M, L & XL, Colour: available only in Black







WC - 027 ₹ 450



WC - 014 ₹ 370



WC - 010 ₹ 370

20% Special discount on T-Shirts till 31st August 2014

Kids T-Shirts, Sizes: 2, 4, 6, 8, 10 & 12 years



WC 006 ₹ 330 Colour: Blue, Black, & Green



WC 005 ₹ 330 Colour: Blue, Black, Red, & Yellow



WC 014 ₹ 330 Colour: Black & Red



WC 020 ₹ 330 Colour: Blue

Cap - B ₹ 150

Hat - A ₹ 200



WC - 006 ₹ 180



WC - 007 ₹ 180







WC - 021 ₹ 180



HM - 101 ₹ 250 EACH





WC - 020 ₹ 180



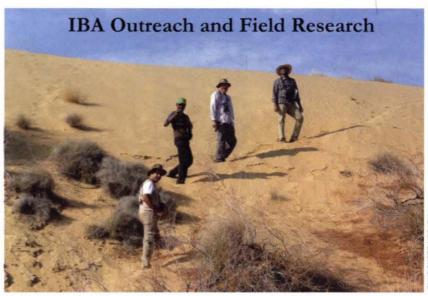
HM - 112 ₹ 250 EACH



BNHS India • Tel.: 022 22025481 / 82 • Email: bnhs.cmd@gmail.com • Website: www.bnhs.org

The Important Bird Areas (IBA) Department was involved in a number of research activities and outreach programmes during the last quarter. The IBA team conducted a bird and mammal survey of the Thar Desert in Rajasthan under the guidance of Dr. Asad Rahmani from January 23 to February 14, 2014.

Dr. Raju Kasambe, Project Manager, IBA Programme, and Neha Sinha, Advocacy Officer conducted a Capacity Building and Advocacy Workshop at Aizawl, Mizoram, in association with Pachhunga University College. The workshop was attended by 60 delegates, including the Education Minister of Mizoram, and forest officers. A similar workshop organised at Keibul Lamjao National Park, Manipur was attended by 30 delegates. Mr. Ibobi Singh, Chief Wildlife Warden, Manipur, guided the delegates. The BNHS team met the Naga tribals of Leimanai village in Churachandpur district of Manipur to discuss the important concept of



BNHS team conducted a mammal and bird survey in the Thar Desert

community-based conservation in forests surrounding the village for implementation in future.

A workshop for State Coordinators of IBCN (Indian Bird Conservation Network) was organised from March 8– 10, 2014, in the verdant Chorla Ghats area of Goa. IBCN Coordinators from 11 states participated in the workshop and shared information on IBCN activities and potential IBAs identified in their states. The workshop also discussed the role of State Coordinators in helping BNHS-IBCN achieve the Asia Regional Targets set by BirdLife International.

GIB Conservation Workshop

The Great Indian Bustard (GIB) is a threatened species inhabiting the fast disappearing grasslands on the plains of India. Maharashtra is one of the few states where it still survives. In order to secure the future of this majestic bird, the Pune Wildlife Division of Maharashtra Forest Department and BNHS, under the GIB Advocacy Program, conducted a state level workshop on *in situ* conservation plans for GIB and Lesser

TISCIANT BOME OF THE PARTY OF T

The Wildlife Division of Maharashtra Forest Department has set up a Task Force to monitor and conserve the GIB and its grassland habitat

Florican for Maharashtra on March 12, 2014, in Pune. Senior state forest department officials, including Shri Praveen Pardeshi, Principal Secretary – Forests, Maharashtra; Shri Sarjan Bhagat, PCCF (Wildlife); Shri Vinay Sinha, Additional PCCF (Wildlife), Nagpur; Shri Suresh Thorat, Additional PCCF (Wildlife), Borivali; Shri Thakare, CCF, Chandrapur; Shri Sunil Limaye, CCF (Wildlife), Pune; Shri Sheshrao Patil, CCF, Nagpur;

Shri Badave, DFO, Solapur; Shri Hinge, DFO, Bustard Sanctuary, Solapur; Shri Nale, ACF, Bustard Sanctuary, Solapur, and veteran bird experts participated in the workshop. Discussions focused on issues such as habitat protection and management, community involvement in conservation, securing new habitats, monitoring, controlling kills by feral dogs, and study of pesticide impact on the birds. A State Recovery Plan was discussed and approved during the Workshop, which gives priority to bustard and grassland conservation. A first of its kind state level Task Force was set up, in association with BNHS, to implement and monitor conservation action in the bustard areas of the state.

BNHS Flamingo Festival



BNHS Flamingo Festival 2014: thousands arrived at Sewri Jetty for a glimpse of the Flamingos and other waders

his year, once again, the popular BNHS Flamingo Festival was a great attraction for nature-loving Mumbaikars. The Festival, organised by BNHS, in association with Mumbai Port Trust (MbPT), saw thousands of people from all walks of life make a bee-line to the Sewri Jetty on March 29, 2014. The Festival was inaugurated by Shri Rajeev Gupta, Chairman, MbPT. The twin objectives of the Flamingo Festival, as during the previous years, were to introduce Mumbaikars to the world of flamingos and to pass on the message of conservation. BNHS bird experts and volunteers provided information on flamingos to the

visitors, throughout the day. Apart from the sea of pink, of nearly 30,000+, mostly Lesser and some Greater Flamingos, bird lovers also got to see other waterbirds, such as Grey Heron, Western Reef-Egret, Black-headed Ibis, Common Redshank, Little Ringed Plover, and Marsh Sandpiper. The Festival also included an exhibition on flamingos and activities for kids, such as face painting, bird tattoos, and 'span your wings'.

PHIA - THE FLAMINGO, an illustrated book for children by Shamim Padamsee, on the habits of birds, was released on the occasion.

Wildlife Conservation and Monitoring Plan (WCMP)

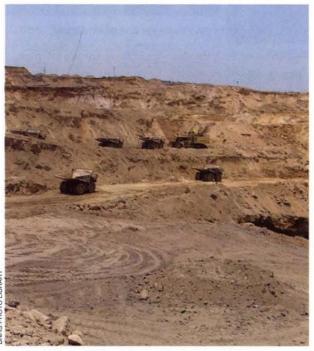
The National Thermal Power Corporation (NTPC) has plans to set up a power plant at Aherwadi in south Solapur, 30 km from the core area of the Great Indian Bustard Sanctuary (Nannaj-Mardi) of Maharashtra. NTPC had to submit to the MoEF a wildlife conservation plan, along with provisions for conservation of Critically Endangered species for the project's clearance. The biodiversity survey required for this Plan, within a 10 km radius of the proposed thermal power plant, was undertaken by BNHS. So far, about 31 varieties of crops, 41 families of spiders, 205 plant, 130 insect, 41 fish, 7 amphibian, 15 reptile, 165 bird, and 10 mammal species have been documented. The Wildlife Conservation Plan submitted to the MoEF is to be implemented by the Forest Department in association with BNHS. The Plan includes biodiversity conservation, impact assessment studies, awareness programmes, habitat management, and involvement of locals in conservation.



The proposed power plants await clearance from the MoEF

Great Indian Bustard surveys in Maharashtra

arnataka Emta Coal Mines Ltd (KECML) approached BNHS to conduct a survey of the Great Indian Bustard (GIB). Regular monitoring, with the help of local volunteers, has been conducted in the GIB areas of Chandrapur and Nagpur districts of Maharashtra from April 2012 to May 2013. From the surveys, BNHS estimates the population of GIB to be around six or seven birds in the Vidarbha region, occurring mainly in fallow lands and crop fields. Even this



The small Great Indian Bustard population in the Vidarbha region is under severe threat

small population is under severe threat from upcoming mines and power plants. The BNHS report on the status and conservation issues of the birds in the Vidarbha region has been submitted to the Forest Department. Among the recommendations in the report is the development of an alternative habitat by restoring some grassland patches, providing incentives to the locals to conserve the birds and their habitat, encouraging farmers to shift to organic farming, initiate a satellite tracking study to understand the local and seasonal movements of GIB, and establish a National GIB Conservation Breeding Programme.

Birds of Hampi

On April 05, 2014, Shri G.V. Sugur, IFS, Principal Chief Conservator of Forests, Government of Karnataka, released the book BIRDS OF HAMPI by Samad Kottur at IISC, Bengaluru. The book describes 230 avian species found in and around the famous Hampi ruins in Karnataka. BNHS and BirdLife International have selected Hampi as an



BIRDS OF HAMPI was released by Shri Q.V. Sugur at IISc, Bengaluru

Important Bird Area as it holds a significant population of the Yellow-throated Bulbul *Pycnonotus xantholaemus*, a globally threatened species. As the area attracts a large number of national and international tourists, the book will serve as an accurate and informative guide to the birds of the region. It is equally useful for students, researchers, ornithologists, and bird lovers.

Kala Ghoda Art Festival 2014



Ecofriendly products and publications exhibited at the BNHS stall during the Kala Ghoda Art Festival

Published on June 09, 2014, by Ms. Sumaira Abdulali for Bombay Natural History Society, Hornbill House, Dr. Sálim Ali Chowk, Shaheed Bhagat Singh Road, Mumbai 400 001, Maharashtra, India.

Explore the Woods

Come closer to nature where the best things in life are free.

Be a member and support nature conservation. Enjoy camping and trekking in the wilderness, nature education activities and a rare nature library. Select from a new range of greeting cards and calendars; our creative impressions of nature.

For further enquiries, contact:



Bombay Natural History Society

Dr. Salim Ali Chowk, S.B. Singh Road, Mumbai 400 001, Maharashtra, India. Tel.: (91-22) 2282 1811 Fax: (91-22) 2283 7615 E-mail: bnhs@bom4.vsnl.net.in Website: www.bnhs.org

Dedicated to the preservation, protection and enhancement of nature and the spirit of all living beings



Decisions of today will shape the world of tomorrow.



Representing future generations and their interests in today's decision-making processes is ingrained in the ethos of MSPL. Our approach therefore transcends regulatory, programmatic and jurisdictional constraints, and emphasizes on synergizing ecology and economy.

It is this responsibility towards mother earth and its future residents that has led us to invest in wind energy. An initiative which shall ensure availability of much-needed power for accelerated progress, at a minimal environmental footprint. Today, we are one of the largest producers of wind energy in the country with a total installed generation capacity of 216 MW and are on course to double this capacity by 2015.

At MSPL, we want to make a difference and it is our endeavour to gift our children a more sustainable world than the one we inherited.



MSPL LIMITED

Baldota Enclave, Abheraj Baldota Road Hospet-583203, Karnataka, India. www.mspllimited.com