January-March 2003 A B O UT NATURE AND US BOMBAY NATURAL HISTORY SOCIETY

HORNBILL

January-March, 2003



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IN THIS ISSUE...



The dainty Indian fox Ranjit Manakadan

Cunning and crafty is what one assumes a fox to be, but the much more that one needs to know about the personality of dainty little mammal. The author chose Rollapadu Wildlife Sanctuary to reveal some of the true colours of this misunderstood animal.

Tragic end of a bull tusker

A.J.T. Johnsingh

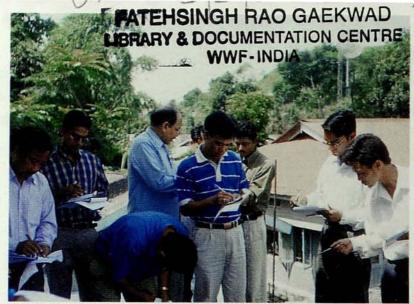
The forest officials of Rajaji National Park took up the difficult tack of curing a bull tusker that had been roaming injured, in their area for two years. Little did they know then that their efforts were sho blived, as the days of this giant were numbered.



25. Green careers

V. Shubhalaxmi

Growing demands and the wish to do something different has opened up a new set of career opportunities for the youngsters of today. Though not amongst the most sought after careers yet, the rising awareness for nature has resulted in new courses for those interested.





20 Shooting tigers

Michael Swamy Fernandes

Capturing moments on film is something that we all do regularly, but photographing wildlife is not that easy, as a moment lost may never come again. Some tips on wildlife photography is what amateurs need and that is exactly what the author has done. So, arm yourself with the information and capture those important moments that you've always wanted to.

OTHER FEATURES...

NATURE WATCH 13	BIRD WATCHER20
READERS' SPACE 18	NEWS NOTES26
ABOUT BOOKS 19	NEWS BRIEFS31

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J.C. DANIEL

Treasure Islands

There are 306 islands in the Andaman and Nicobar group, closely scattered in the Bay of Bengal, a thousand kilometres from both Kolkata and Chennai. An area of global significance, and a biological hot spot with over 3,000 species of plants and 5,000 animals, it is a veritable treasure house with many of the islands untouched by the hands of man. But, wherever man has been, this fragile ecosystem has been damaged beyond repair by agricultural activities, encroachment, sand mining, inappropriate fisheries, forest plantations, tourism, pollution, poaching and the introduction of exotics. Finally, the Supreme Court, responding to the appeal of local and mainland environmentalists, including BNHS, has called a halt to this pillage of national wealth and world heritage.





HIRA PUNJABI

THE DAINTY INDIAN FOX

RANJIT MANAKADAN

Ranjit Manakadan is a biologist of the Society who has worked on the great Indian bustard, grassland fauna, waterbirds and currently on vertebrate biodiversity.

Rollapadu was given the status of a sanctuary to

protect the great Indian bustard, but this

protection was not to be limited to it.

The protection also extended to the other inhabitants

of the area and one among them was the

dainty Indian fox.

T WAS AN EVENING during the monsoon of 1981 at Nannaj, in Solapur district, Maharashtra. The scenery was spectacular - dark rain clouds, occasional drizzle, streaks of sparkling sunlight escaping through the gaps in the clouds, a vibrant rainbow, the verdant expanse of rolling grasslands, herds of happy playful blackbuck Antilope cervicapra and the invigorating clean fresh air. Asad R. Rahmani (presently, Director of the BNHS) and I were jotting down notes on the imposing courtship display of a grand male great Indian bustard Ardeotis nigriceps in his 'arena'. As we watched, listening in awe to his booming call reverberating across the grassland, two small greyish canids with black tipped bushy tails scampered into the range of our binoculars. A few moments of silence elapsed before both of us simultaneously exclaimed, "Fox!" with the same childish enthusiasm we used to display while seeing our 'lifers' (term usually used to describe one's new bird records), during the early days of our research careers. The foxes were loafing about, moving in the direction of the bustard. What would happen next, we wondered? The cock looked unperturbed and continued displaying, till the foxes came too close for his comfort. Then, expressing his annoyance by puffing himself up all the more, he shooed them off his arena, and quickly returned to his pompous display, probably with hopes of 'bedding' a hen or two before nightfall!

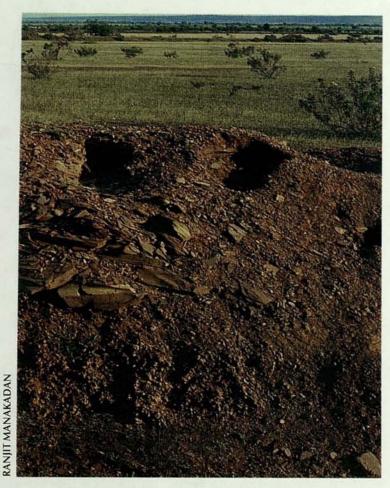
The Indian fox *Vulpes bengalensis*, the common fox of the Indian plains, is encountered from the foothills of the Himalaya to the southernmost tip of India. It keeps to open country, grasslands, wasteland, marginal cultivation, rocky hills and broken country. Similar to a Pomeranian dog, though slimmer and slender bodied, the Indian fox is an overall grey with a rufous wash on the limbs. Its black tipped tail helps to differentiate it from its larger and only congener in India, the red fox *Vulpes vulpes*, which has a white tip to the tail. The red fox is confined to the Himalayas, with a

subspecies, the desert fox, found in the Thar Desert.

After this first sighting at Nannaj, I came across the Indian fox quite frequently during the almost decade long U.S. Fish and Wildlife Service (USFWS) funded BNHS project on the great Indian bustard at the Nannaj and Rollapadu (Kurnool district, Andhra Pradesh) Wildlife Sanctuaries in the 1980s. After a four-year break to study the impact of salt works on water birds in the Great Vedaranyam Swamp, Tamil Nadu, for my doctoral degree, I was back at Rollapadu, studying its grassland flora and fauna as part of another USFWS funded project between 1992 and 1995.

Rollapadu Wildlife Sanctuary (RWS) owes its genesis to the discovery of the endangered great Indian bustard in its grasslands, in 1982. Followup steps taken by the Forest Department to protect the species, including the setting up of safe and livestock-free grassland enclosures for the bustards, generally benefited the other wildlife in the area also, and over the years, in 1989, the area was declared a Wildlife Sanctuary. Two things immediately struck me on my return to RWS. One was that the population of the great Indian bustard had apparently not increased; in all likelihood it had probably declined. In fact, the flock of 17-22 bachelors that we used to encounter earlier was now reduced to a little more than half a dozen individuals. Secondly, there had been a dramatic increase in the fox population. Earlier, I was aware of dens of 3 or 4 pairs of foxes in the area; now, however, the trench-cum-mound (TCM) walls of the enclosures were extensively pockmarked with dens. Why had the foxes become so plentiful? The Indian fox is a known predator of eggs (and possibly chicks) of the bustard. Could the increase in fox populations be responsible for the decline of the bustard at RWS? These were questions that required investigation.

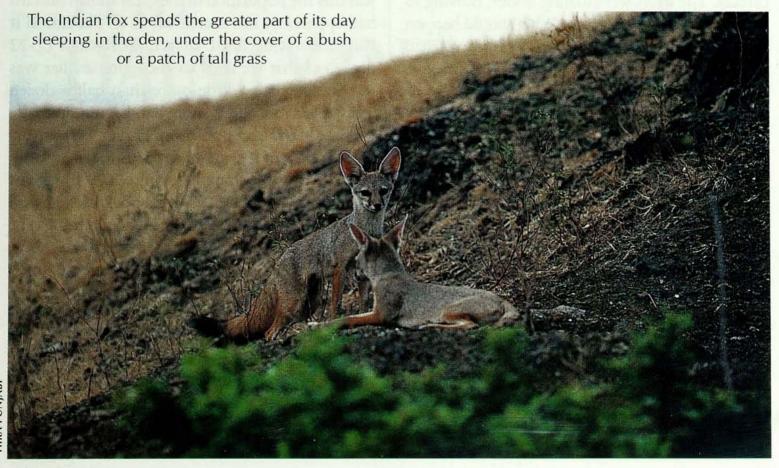
Studying the fox is easier said than done. Being largely nocturnal, it spends most of the day sleeping in its den, under cover of a bush, or a patch of tall grass. Most of my observations, therefore, had to be confined to late evenings and



A number of fox dens had appeared in the Sanctuary when the author came back

cloudy days, or were carried out on flushed somnambulant animals, probably cursing me for disturbing their sleep. Additionally, due to its small size, the fox frequently tended to become 'lost' in the tall grass, making individual identification of the animals quite impossible. Collar marking could help, we thought, but as soon as necessary permissions to trap the animals were obtained, most of the population was wiped out by an epidemic (probably canine distemper).

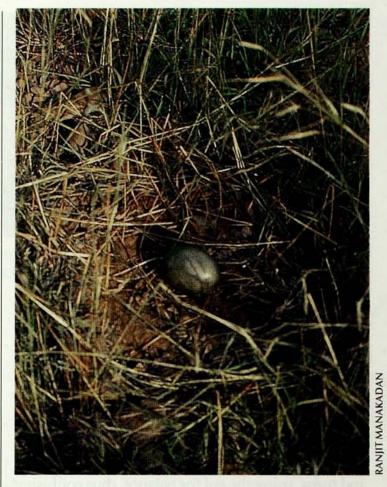
Nevertheless, it is results and not excuses that people want, as my father used to chide me, and I knew I had to do my best in spite of these handicaps. My companion in the field, Chinna Narayana (meaning small Narayana, he was aptly named for his size!) did his job fairly well, and was an all-rounder (tailor, milkman, electrician, painter and cook), though he did not really fancy wildlife. P. Adisheshaiah (my local assistant in the earlier Bustard Project) and Jampa (a former trapper), both Forest Department watchmen, had keen eyes and noses for wildlife and provided excellent field assistance on a time-to-time basis. And there was my trusty MMI-7754, a 350 cc Bullet Motorcycle, which was sheer joy to ride



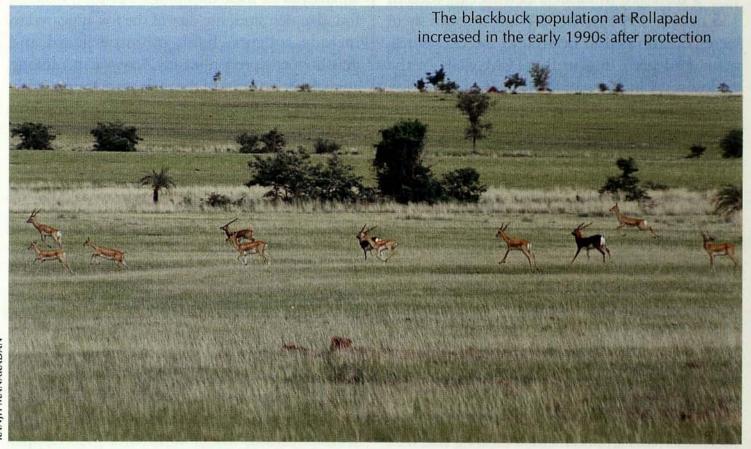
RA PLINIARI

across the dirt tracks cutting through the grasslands, though its size and the noise it made earned it the rather unflattering nickname of the 'bullock-cart' from one of the old ladies in the village! All five of us, animate and inanimate, formed a great team to study and throw light on various aspects of the ecology of the Indian fox, a species relatively unstudied till then.

From enumeration and monitoring of dens, as well as direct sightings at den sites, the population of the fox at RWS was estimated at about 40-50 animals during 1992-94 - a significant increase from the half dozen animals estimated during 1985-87. This increase could have been natural, or probably was the result of protection and habitat improvement by the creation of protected enclosures. However, as mentioned earlier, fox numbers crashed to around 10 individuals in 1995 due to an epidemic. Seeing dying or dead foxes (and wolves) during my field trips was not a pleasant sight, but then, that is how nature works. Epidemics like canine distemper and rabies are an important factor in controlling numbers, after a sharp rise in the population of a species.



Eggs of the great Indian bustard are the favourite food of the fox



SANJIT MANAKADAN

The breeding and pup-rearing season of the Indian fox in RWS is from February to May. Breeding is heralded by the reexcavation of old dens or digging of new ones, which are then abandoned by June when they are prone to flooding, caused by the onset of the southwest monsoon. During the study, dens



Fox cubs often fall prey to other predators like the jackals and wolves

were mostly located by combing areas after dividing them into blocks, or by walking up 'fox trails'. These trails, 'maintained' by constant use, are recognisable by the long lines of flattened grass or bare ground (especially conspicuous during the dry season) bordered by tall, undisturbed grass. Keeping to these trails helps the fox escape from predators, as it can run dexterously along the twists and turns, using the tail for balance, thus confusing pursuing land predators such as the wolf *Canis lupus* and jackal *Canis aureus* and putting them off-course.

I managed to locate a bewildering total of 135 dens in 1994 at RWS! While most of them were concentrated in or around the enclosures, many had been dug in the TCM walls of the enclosures. Clumping of fox dens is an indication of good habitat, and foxes probably preferred the TCM walls for dens, as digging is easier due to the loose soil and rubble. Of the 135 dens located, 52 were active, with young being recorded only in eight of them. From observations of the animals and dens used by them, it was evident that the foxes tended to use more than one den. This is a known strategy in foxes to confuse predators, such as jackals and wolves, and also for sanitation. The number of openings in dens varied from one to as many as 43, but two to seven holes per den were common. Dens with a higher number of openings, had probably been used by the same pair for many years.

Many dens in the grazing land had abandoned rodent burrows around them, indicating that they had been appropriated from rodents. In a few cases, the rodents continued to live happily (?) in some of the burrows adjoining the fox dens! Foxes were not always the victors in den piracies, however, as seven fox dens had been enlarged and were being used by jackals and wolves. On two occasions, large monitor lizards *Varanus bengalensis*

were recorded entering active fox dens — whether they prey on foxes or their young, or the two species cohabit, could not be ascertained. One observation while monitoring dens still remains the weirdest in my wildlife career. Arriving at a den, I saw a disturbed large monitor lizard run into a multiple-hole fox den. Upon this, a family of gerbils rushed out of the many other holes of the den and scurried away into their own burrows, a few metres from the fox den! What was going on, I wondered! A case of 'mice at play while the cat (fox) is away?'

From direct observations of the animals, and an analysis of their droppings and food remains found at den sites, the diet of the fox appeared to include rodents, hare, monitor lizard and grasshoppers (predominantly *Acorypha* sp.) among animal matter. Scats of the pups were almost solely made up of rodent fur, indicating that rodents form an important part of the diet of the young. Among vegetable matter, seeds of groundnut, melon, *Zizyphus mauritiana* and *Cassia fistula* were recorded. During monsoon, pairs would have a busy time, snapping at the bounty of termite swarms as they emerged from their mounds.

Abundance of the fox was significantly higher in the enclosures than in the grazing lands due to a combination of protection, lack of disturbance and increased food supplies. For example, there were more trees and/or higher yields of *Cassia fistula*, *Zizyphus mauritiana*, *Morinda tinctoria* and *Phoenix sylvestris* fruit within the enclosures, due to the control of tree cutting and collecting of fruits. Among insect food, the grasshopper

Acorypha sp., which was commonly recorded in scats, was found to be much more abundant in enclosures. Only rodent populations were fewer within enclosures than in the grazing lands, probably due to the presence of crop fields in the latter. Foxes probably went out to hunt in the fields and grazing lands in the night, as suggested by the scats of cubs, which were largely made up of rodent fur.

Excess of scrub, which provides cover for its land predators, is said to be detrimental for the fox and could be a negative aspect of the establishment of enclosures. Scrub vegetation had increased significantly in the enclosures, especially bordering streams, due to the control of woodcutting. However, isolated patches of light scrub (or tall grass) is necessary for shelter during the day (especially during the non-breeding season), and may be vital for the species to escape aerial predators such as eagles.

Among the potential predators of the fox at RWS are the wolf, jackal, jungle cat Felis chaus, large monitor lizards (especially of young foxes), and large raptors. Wolves, jackals and large monitor lizards were seen digging or entering dens during the breeding season. Could they have been after the cubs? Remains of foxes with the flesh neatly stripped off the skeleton were found on a few occasions, indicating kills by birds of prey. A case of a dog killing a fox was also reported during the epidemic, and I once observed a game of cat and mouse between a fox and a half grown dog (but they were a good distance from each other). The local people do not eat the fox, but two communities, the Pardhis based at Nandikotkur, and a nomadic beggar community do hunt and eat them. They capture or kill foxes with the help of dogs and nets, or by smoking them out of their dens.

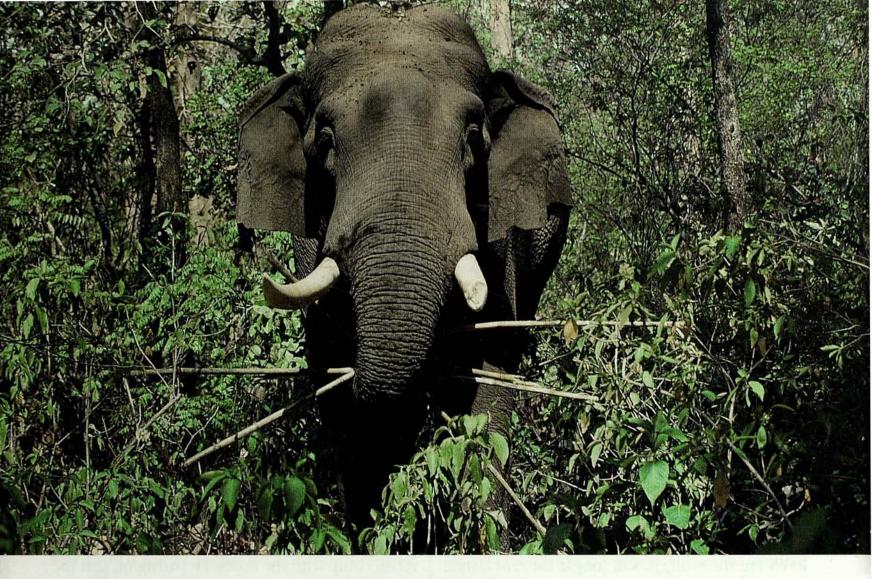
The study could not establish predation by the fox on bustard eggs and chicks. Remains of eggs or chicks were not recorded in the scats analysed, but that could be because most scats were not collected in the major breeding season of the bustard. It is also unlikely for eggshell pieces to be recorded in the scats, as the fox would probably lick off the egg contents and not eat the eggshell. Again, in the case of chicks, except for the bill or feet, not much identifiable matter could be expected in the scats. However, from general observations, we do not think the fox is responsible for the decline of the great Indian bustard at Rollapadu Wildlife Sanctuary.

Leaving Rollapadu after the project ended was not easy. Besides my love for the place, my relations with the Forest Department and the locals had been very cordial and, to my good fortune, some of the staff of RWS had taken an instant and continued liking for me. In fact, so close was my relationship with the Forest Department, that the Field Director passed an unwritten order making me a sort of de facto Officer-in-Charge of the Sanctuary, except when he or the DFO were around! But all good things come to an end, and on the fateful day, I was given a grand farewell party, complete with a feast, exchange of garlands and group photo sessions. And to help keep alive my memories of RWS, the Forest Department presented me with a 22 carat gold ring with a great Indian bustard engraved on it. Rollapadu is a great place and I hope it will always remain so, or become even better as a sanctuary for the great Indian bustard, lesser florican Sypheotides indica, Indian wolf, blackbuck, and of course, the dainty Indian fox.

We are grateful to the

MEHTA SCIENTIFIC EDUCATION & RESEARCH TRUST

for a generous corpus grant to constitute the *Pratap Saraiya Hornbill Fund* to support the publication of *Hornbill*



TRAGIC END OF A BULL TUSKER

Text and Photographs: A.J.T. JOHNSINGH

The trail

left by the wounded elephant was almost as clear as a well-used game path. Flattened bushes and the drag marks of his left hind foot on the wet ground, enabled us to track him down easily. In numerous places, the ground was marked with drops of dried blood, and on a few wooden stumps he had even rubbed his wound, leaving smears of blood and pus.

Dr. A.J.T. Johnsingh is the Deputy Director of the Wildlife Institute of India. He is a well-known wildlife scientist and is a life member of the BNHS.

The trail was also littered with signs of his feeding — broken branches of shrubs and trees. There were signs that he had gathered earth with his trunk, possibly to throw it on the wound to keep away the flies tormenting him. When I saw him after three hours of tracking, he stood in a well-shaded area,

amidst the shrubbery, perfectly camouflaged. I pointed out his presence to the armed guard accompanying me, who took a few seconds to spot him.

Slowly and quietly, we made our presence known to him. His first reaction on sensing us was to cock his ears, lift his tail, and raising his body to its full height, lurch towards us. But the wounded leg hampered his speed. The wildlife guards, who had seen him earlier, however, told me that one could approach him as close as eight metres.

Soon the bull settled down, feeding and throwing earth over his body and the wound. He was a magnificent tusker, about 45 years old. His left tusk was broken at the tip. The wound was approximately 30 cm above the right foot, where the bullet had pierced through a tendon. The ruptured tendon, swollen and jutting out, was as big as a coconut husk, and pus and blood dripped from the wound. In spite of the wound received by him nearly two years ago, the elephant did not look at all rundown.

According to a reliable report, this tusker had been raiding crops outside Rajaji National Park in mid April 1990, when he happened to kill a villager. Then, chased by other villagers, he sought refuge in a patch of sugarcane. The enraged villagers called in the police to shoot down the elephant. The police, however, were reluctant to do so and this led to an altercation between them and the villagers. At last, possibly just to placate the villagers, the police fired a few shots into the sugarcane field, one of which found its mark. The wounded animal eventually sought asylum in the Park.

The wounded tusker presented park officials with a dilemma. A possible solution was

to tranquillize the elephant, treat the wound, and then revive him. But the fear that the bull would not be able to get up after going down, led to this plan being abandoned. The second option, that of treating the animal with drugs administered by embedding them in balls of jaggery, and spraying the wound with antibiotics and fly repellents, was therefore opted for.

The decision once made, the park officials swung into action. Guards were posted to keep track of the elephant's whereabouts, and to protect him from ivory poachers for whom a wounded tusker would be an easy and hard to resist target. Armed with an inexhaustible supply of sugarcane, the guards started to befriend their patient. Regular administration of drugs in sugarcoated doses, and spraying of the wound with antibiotics and fly repellents,

helped the elephant who started making a rapid recovery. Within a week, as the wound healed, the daily cruising distance of the elephant increased from 500 to 3,000 m, so that everyone involved in the operation was hopeful of his complete recovery. Although he would not be able to traverse difficult terrain such as steep ridges and compete with other bulls for cows, we still hoped that he would live out his normal life like any other elephant in the wild. Sometimes we pondered about the possible relationship that this elephant would share with man in the future. Would he remember the unpleasant incident in the field and charge at people whenever he encountered them? Or would the kindness bestowed on him in the Park demand its due, so that he would become tolerant of humans, allowing them to approach him?

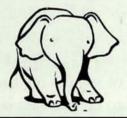


The wounded tusker recovered very fast under the watchful eye of the forest guards

These questions remained unanswered however, as the tusker met a tragic end quite unexpectedly, on the night of 7th May. Wildlife Guards on routine duty found him dead the next morning, gored in several parts of his body. A fresh deep wound could be seen just a little above the well-healed old wound. The bull had been killed by another tusker!

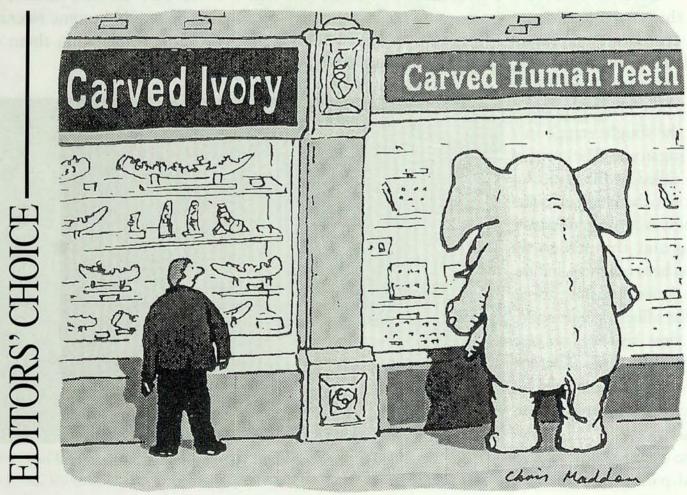
Raiding of crops by elephants is not a new phenomenon in India. Crops such as wheat and sugarcane are grown near forests, which are inhabited by the elephants. As they get much more palatable and nutritious food from a crop field than they do from the forest, the elephants are tempted to raid them.

This incident in Rajaji
National Park and
similar incidents
elsewhere, should
make all those
interested in wildlife
conservation realize
the gravity of the
conservation problems
sweeping across the
country.



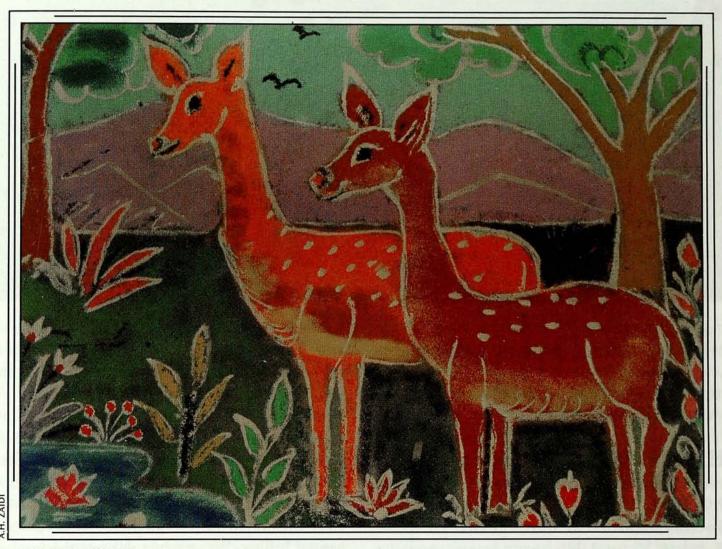
As bull elephants are not permanent members of a herd, and as a result not burdened with the task of caring for calves like the mothers, they often go raiding crops in the field. In the ensuing clash, it is not uncommon for people to shoot at them. At least 100 elephants are maimed and killed in this way, every year, in India.

Fighting among bull elephants is also a common occurrence, though it is rare for one to die as a result of such a fight. This incident in Rajaji National Park and similar incidents elsewhere, should make all those interested in wildlife conservation realize the gravity of the conservation problems sweeping across the country.



Courtesy: Chris Madden

ART IN CONSERVATION OF NATURE



ANIL KUMAR NAIR

Anil Kumar Nair is a keen wildlifer

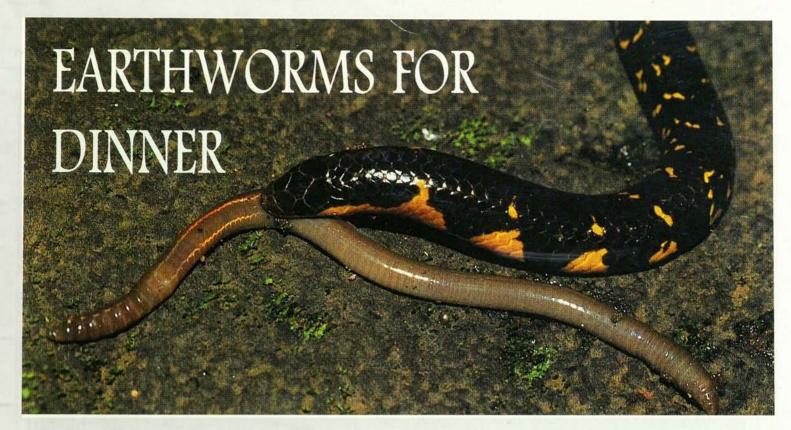
THE MYRIAD FORMS and colours of nature have always fascinated man. The proof of this can be seen in the various paintings, murals, sculptures and cultures of different communities around the country.

Wildlife enthusiasts have used different means to spread awareness for the protection and the conservation of Nature among the masses. Rangoli, an ephemeral art form that uses powder, flowers etc., is practised throughout India. It was first used by the Bombay Natural History Society (BNHS) in Mumbai around the early 1990s to spread the message of conservation. Influenced by the success of the exhibition organised by the BNHS, the Hadoti Naturalist Society decided to celebrate a wildlife week with a difference, by organising a Rangoli competition.

In the first year all the necessary information regarding a species and its environment that would help the participants learn more about the species was given. The event was divided into two categories: open for all and for senior school students.

The Rangoli competition has since been organised year after year, and now the participants do the initial research work that the Society had provided them in the first year. The members of the Maharashtra Samaj are the most active participants.

This is just a beginning, one never knows when this form of expression may leave a lasting impression and we might be able to spread the message of conservation to every corner of our society through the diverse art and cultural forms of our country.



Text: VARAD GIRI

Photographs: VARAD GIRI & SAMEER KEHIMKAR

Varad Giri is a Research Assistant, Herpetology Section at the BNHS and a wildlife photographer

HERPETOFAUNA, which includes amphibians and reptiles, is one of the most fascinating yet least known group of vertebrates. To create awareness for this 'neglected' group, the Bombay Natural History Society started a Correspondence Course in Basic Herpetology in 2002. As a convenor of the course, I had accompanied the participants to Matheran, a popular hill station in Maharashtra, in August 2002. Suitable environmental conditions, like

semi-evergreen forest patches and, good rainfall and humidity has resulted in this region supporting an unique herpetofaunal diversity including Leith's frog *Indirana leithii*, Humayun's wrinkled frog *Nyctibatrachus humayunii*, Deccan ground gecko *Geckoella deccanensis*, Travancore wolf snake *Lycodon travancoricus* and Bombay shieldtail *Uropeltis macrolepis macrolepis*. A trip to a place that harbours such rich floral and faunal diversity is an ideal situation to learn about these animals in their natural habitat. We searched the area thoroughly, including the microhabitats, all through the day.

During one of our night trails, we heard a participant shouting 'Look at this beautiful snake!' Everyone rushed towards the snake that was under a big rock. It was a Bombay shieldtail. Sheildtails





are a secretive and least studied group of snakes popularly known so because of their flat, shield-like tails. These snakes are fossorial i.e. burrowing, and require loose soil in which they can burrow easily using their snout. They are, therefore, seen in soil, under rocks and logs, sharing the same habitat as that of earthworms. As it had rained earlier, the soil was wet and the earthworms were active and in plenty under each rock and log turned over by us.

A closer look, and we realised that we had caught the snake dining. And the earthworms, its favourite dish, were on the menu! In two minutes, the shieldtail had swallowed three earthworms. Its mode of feeding was also interesting. On sensing the earthworm, the snake grabbed it in the middle,

held it firmly and slowly started chewing, while moving towards its head. After locating the head it started swallowing so that, within a few seconds, the earthworm disappeared like a noodle. The snake ate at great speed compared to other snakes. I was photographing the entire sequence and on one occasion, as the snake started to swallow its meal, I was focusing my lens and in the little time that it took me to focus and click, the earthworm had disappeared into the snake's belly and the snake had moved into a nearby burrow.

For further details on the
Correspondence Course in Basic Herpetology
Contact: Mr. Varad Giri
at Bombay Natural History Society.





Let's do it ourselves

FURTHER TO MY LETTER "A new angle to the debate" published in *Hornbill*, Jan.-Mar., 2002, I reiterate that it is the Government that is

responsible for completely destroying India's natural environment. Recently, in Jharkhand, thousands of roadside trees, including mature, healthy fruit and shade giving ones, were cut down almost overnight, supposedly to widen roads. Kalpavriksh and Indian National Trust for Art & Cultural Heritage (INTACH) Hazaribagh Chapter jointly sent a letter to the Prime Minister, but it is doubtful if any notice was taken. A World Bank loan of Rs. 1,000 crores is indirectly responsible for the cutting down of 200 year old barh, neem, pipal, imli, jamun, aam, mahua and other roadside trees on the Grand Trunk Road from Dhanbad to Aurangabad, 350 km.

In Hazaribagh, dozens of beautiful old trees with venerable shade and floral attributes have been mercilessly cut down by the Forest Department with orders from the District Administration. The Forest Minister Mr. Yamuna Singh has openly admitted in the media, that he is floating tenders to have Hazaribagh's great trees stripped. I believe all concerned citizens should join hands and protest against the rape of our natural heritage. Our commitment to the cause of environmental conservation demands this of us. Otherwise what will we leave for the future generations of our country?

Bulu Imam, Hazaribagh.



Does curiosity always kill the cat?

NO ONE seemed to know why the redwattled lapwing or 'titeeri' pair made so much noise every year, during late summer on the terrace of our institute. 2001, when I joined the institute, was not any different from the earlier years. Being an



amateur bird watcher, the noise made by the birds intrigued me and I decided to investigate. I saw two redwattled lapwing chicks along with an adult moving impatiently while a pariah

kite hovered above. The birds panicked when they saw me on the edge of the terrace, which we used occasionally to dry lichen specimens before photographing them under sunlight.

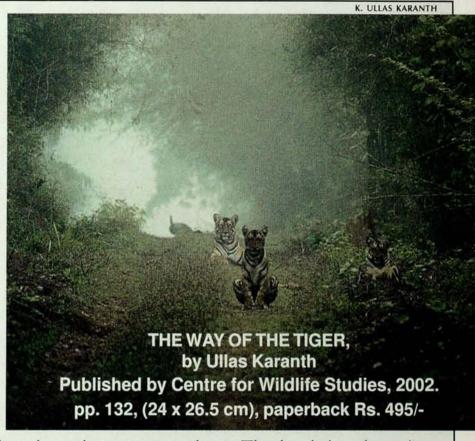
It was not until a hot afternoon in July 2002 when, as we were going down after finishing the photography, that I saw these birds again. My friend excitedly called me back about something. On looking, I saw a small mound of concrete and cement pieces and could not believe my eyes when I saw four, beautiful brownish black-blotched eggs well camouflaged among the cement pieces. I remembered having heard the 'did-he-do-it?' call of the bird as we had entered the terrace. I could not resist clicking photographs of the eggs and decided that I would return every day to observe their progress. Three eggs hatched exactly six days after we had first seen them. However, next day to my surprise, there was only one chick and an unhatched egg in the nest. One chick was seen in a corner of the terrace, while the third had completely vanished without any clue. On the 8th day the last egg had hatched, and the vanished chick had returned. All the four chicks were safe in a shady corner of the terrace, nicely camouflaged among the cement and 'tar' pebbles. By the 11th day one chick died while one had disappeared again. On the 13th day, all the chicks and the adults were missing. I searched all corners of the terrace thoroughly. I failed to hear any call even from the terrace of the neighbouring building. I wonder whether the chicks were transferred to a safer place, or had they fallen prey to a predator? My regular visits to make observations must have disturbed the birds and I doubt whether they will come back the next season.

Sanjeeva Nayaka, Lucknow.



REVIEWED BY J.C. DANIEL

DURING the last two centuries the tiger has been chronicled first as an unmitigated villain and in the recent past as a much misunderstood large hearted gentleman. The first look at the tiger through the dispassionate eyes of science was the seminal study by George Schaller on the tigers of Kanha in his book "The Deer and the Tiger" published in 1967. Ullas Karanth has continued the scientific enquiry on the life and habits of the tiger. In this excellent publication he looks at the many faces of the tiger in words and pictures. Written mainly for the layman by one of India's best field biologists, it covers the history of the tiger from its origin to its present near extinction

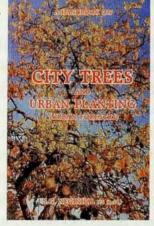


Rs. 495/- and an additional attraction is the fact that the sale proceeds will help in the conservation of the tiger.

A HANDBOOK ON CITY TREES AND URBAN PLANTING

by S.G. Neginhal, IFS (Retd). Published by the author, pp. 190, 56 colour plates, (21.8 x 13 cm), paperback Rs. 450/-

REVIEWED BY GAYATRI UGRA



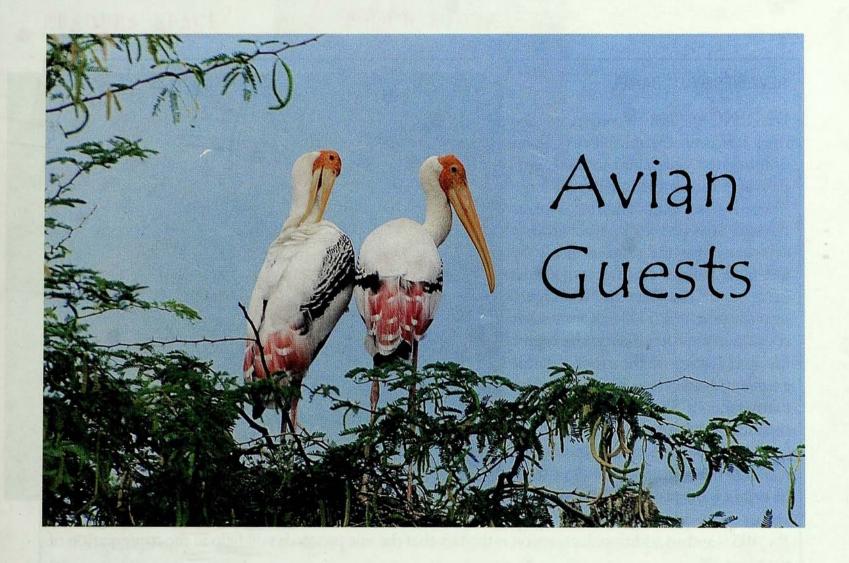
S.G. NEGINHAL is a familiar name to anyone looking for excellent photographs of Indian trees. His long experience as a forest officer and his contribution to urban forestry in India, particularly in Bangalore, have provided the basis for a very useful and informative guide to urban trees and planting.

The book describes in detail 102 among the most useful and aesthetically valuable tree species commonly found in urban areas in India. The

author has provided important information, based on personal experience, on the common names, habits, habitat and distribution, along with detailed descriptions and colour photographs, illustrating the most typical features of each species, to enable easy recognition. The author has taken pains to avoid jargon, and has provided simple line drawings explaining the terms that have been used in descriptions (p. xix).

It would have been appropriate to uniformly italicise the scientific names, as is the convention, particularly because they appear in lists mixed with common English and vernacular names. This was noted in the annexures as well as in the main body of the book. Care should also have been taken to eliminate typographical errors and editorial oversights, particularly in scientific names, as these detract from the value of the work.

It is a pity that such a sterling effort has had to be produced on a restricted budget, which does no justice to the excellent photographs in the book.



Text and Photographs: K. RAMACHANDRAN

K. Ramachandran is a freelance photographer and a keen naturalist

32 km from Tirunelveli town is Koonthakulam, a small village dominated by farmers, that is still free from air, water and noise pollution. Around 1992, this place was declared a sanctuary by the Tamil Nadu Government. One can reach it by taking the single zigzag road touching the villages of Reddiarpatty, Moolakkaraipatty and Muninjipatty, a right turn at Kadankulam junction 4 km after Muninjipatty and a further 2 km will take you to Koonthakulam. Though there are public transport buses to the village, their frequency is very poor.

I visited Koonthakulam in March 2000. The call of the many

nesting painted storks welcomed me from the numerous silk cotton (Salmalia malabarica), tamarind (Tamarindus indicus), neem (Azadirachta indica) and other trees. In fact, most trees in the village were occupied by members of the stork family. Earlier, in January, these had been occupied by nesting egrets and cormorants. The birds' main prey species, frogs, fishes, molluscs and weeds are abundant in the nearby tanks.

Spot-billed pelicans (Pelecanus philippensis) also called grey pelicans, Eurasian spoonbills (Platalea leucorodia) and little cormorants (Phalacrocorax niger)

also inhabited the acacia (Acacia nilotica) plantations in the tank filled with water. There was plenty of food for the birds who lived harmoniously, nesting and breeding in colonies. Towards the end of March, when I visited the Sanctuary, half the tank had dried up and I could walk up to the acacia trees, where the spoonbills, pelicans, ibises, and cormorants were nesting. Pelican chicks were waiting impatiently, flopping their pouches, making screeching sounds and demanding the day's ration brought by their parents from far and wide.

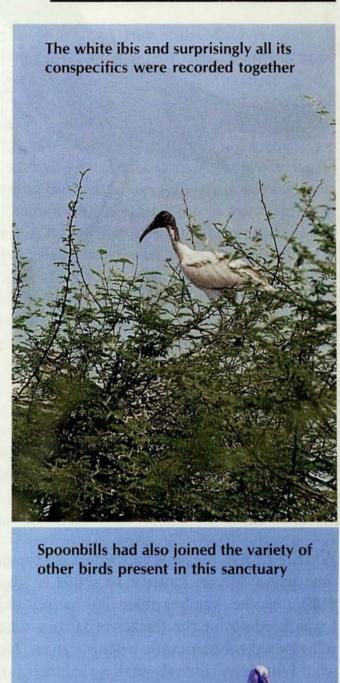
I counted 24 pelican nests with chicks on a single tree, which was also shared by the nesting cormorants and ibises. While pelicans prefer to fish on the surface of deeper water, cormorants dive under the water; storks and egrets on the other hand generally frequent shallow water. As a result, each species utilises its individual niche and none of them suffer prey scarcity. It was a surprise to record all three species of ibis: black, white and glossy migrating to this small sanctuary for nesting and breeding. The only predators of these birds are the village dogs and toddy cats.

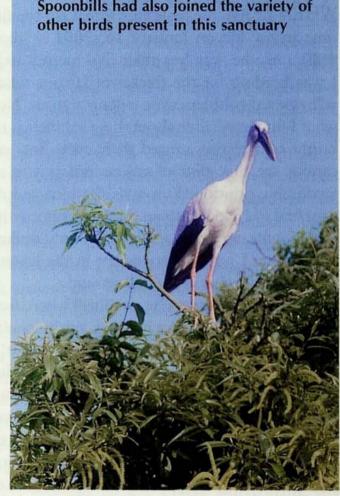
Lesser flamingos (*Phoenicopterus minor*) are the other main winter visitors of Koonthakulam. These long-necked and long-legged rose coloured birds have only one breeding ground in the Indian subcontinent, the great Rann of Kutch in Gujarat. Cotton teals (*Nettapus coromandelianus*) and common teals (*Anas crecca*) are two of the other winter migrants to Koonthakulam. Common teals breed in the Palaearctic region of North Europe to East Siberia.

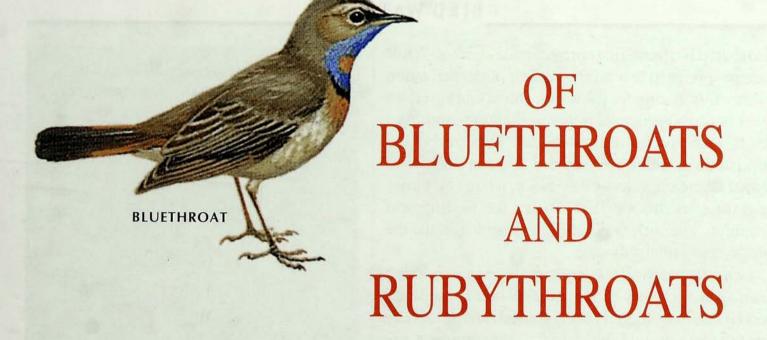
The bar-headed goose (Anser indicus) is another regular winter visitor to Koonthakulam from north of the Himalaya. They also do not breed here. According to Dr. Sálim Ali, this species is migrant throughout north India, but rare in central India and a straggler as far south as Mysore. He adds that they come to India in October, flying back north in March to breed in Ladakh and Tibet between April and June. I had counted more than 1,000 bar-headed geese and 500 lesser flamingos at Koonthakulam on an earlier visit in December 1999. During this visit in March 2000, however, they were hardly to be seen.

The other visitors to this Sanctuary include darters, sandpipers, white-necked storks, Asian openbill storks, little grebes, white-breasted and small blue kingfishers, river terns, pond herons, coots and pintails.

The villagers are aware of their avian guests and very eager to protect them. They do not allow any harassment of the birds and have banned bursting of crackers on Diwali and other festive occasions, in the village. The nature club here, and the forest department are also doing their best to maintain this pristine habitat by planting trees, strengthening the bund and creating public awareness. Koonthakulam is indeed a paradise for birds.







Text: LT. GEN. BALJIT SINGH (RETD.)

Paintings: CARL D'SILVA

Lt. Gen. Baljit Singh (Retd.) is a keen naturalist and a

BNHS member

WHEN I SAW the male rubythroat for the first time in my life on January 16, 2001 at about 8:30 a.m., he was less than five metres away. I was heading for the thicket of lantana where yellow-eyed babblers were trilling actively. Now what I find irresistible about these babblers is the bright orange rim around their eyes. But, you cannot see this glint of colour unless you are favourably positioned vis-a-vis the bird and the sun. And so I had just about finished manoeuvring myself, butt resting on the handle of my walking stick, when I noticed movement in the lantana, barely a few inches above the ground.

Imagine my surprise and thrill when, from up so close and in perfect lighting, the binoculars had in fact trapped the image of a rubythroat! It came scuttling in my direction, head on, providing that rare joy which comes from instant identification of a bird on first eye contact with the bird. And was not this the most perfectly cut and polished ruby! In that same flash my faculties also assimilated the distinct white supercilium, the

somewhat dull white moustachial stripe, the olivebrown upper parts and a light rufous wash to the underparts.

RUBYTHROAT

Returning home and scanning books, I was puzzled to find the texts silent about two very pertinent characteristics of the rubythroat. Firstly, the bird I saw had a very distinct black lore; secondly, it had an unmistakable dull, whitish-grey eye stripe. But the high point of the excitement was that this was probably the first record of the rubythroat in Bihar at Mcluskie-Ganj (60 km NW of Ranchi, direct distance, latitude 84° 57′ E, longitude 23° 38′ N and 472 m above msl). Though a known winter migrant to these parts, the bird distribution map in the BIRDS OF THE INDIAN SUBCONTINENT (BIS) on page 647 does not record any sighting of this bird at all anywhere in Bihar-now Jharkhand.

Nothing is ever replicated in nature; no two sunrises, nor the chance encounter with a musk deer trapped in a narrow mountain-gully packed with fresh, loose snow, nostrils flared, liquid black eyes bulging with panic at your approach, yet trusting your actions help him break free to liberty once again. Knowing this and yet heading for the same spot the next morning had to be an act of wishful optimism. If luck favours the brave on the battlefield, then persistence surely is a rewarding virtue to the bird watcher. For, at 7:55 a.m., a male rubythroat scuttled even closer to me than yesterday, providing confirmation of the ruby over the throat, a mascara pencil drawn through his eyelids, leaving a thick black smear glinting over the lores, just the mere suggestion of chestnut tint over the primaries and the long, rufous tail, fanned occasionally and oscillated frequently to several angles. Unbelievable, but there it was at the same spot, at almost the same time! Before I could slip into reflections, two other birds came flitting by and claimed my attention. There was simply no doubt about the ashy prinia. And had I not just been watching the male rubythroat, I would have put down the second bird as the plain prinia whom I have met earlier. But today I wondered - was I watching the female rubythroat? Such are the pitfalls of the indisciplined fancies of an amateur.

About two years ago, I had chanced upon an article "On the Avifauna of the Chotta Nagpur Division SW Frontier of Bengal", by V Ball, MA, Geological Survey of India published by the *JBNHS* in the 1890s¹. On page 413, reporting on the rubythroat, Ball first quotes Tickell's observation, "Rare, solitary, silent, haunts thickets²". As for his own two excursions, Ball writes conclusively, "I have never seen this bird in Chotta Nagpur³". And now comes my sighting of the rubythroat in Chotta Nagpur, more than a hundred years after Ball's observation. The distribution map on page 647 of the BIS not only affirms the views of both Tickell and Ball but also upholds my claim to the uncommon, maybe even the first, sighting here.

The map shows two individual records of rubythroat in what is now west Orissa but none in Bihar - Jharkhand.

Maybe the shrinkage of bird habitats all around, is forcing the rubythroats to adopt new areas. This current spot, no bigger than two basketball courts and cornered by rice fields, overrun by thick clumps of lantana, having moist soil with a shallow depression of matted grass in the middle, and fringed by a few sal trees, obviously appeals to the rubythroat. Because when I chanced to go by the area on January 29, 2001, I saw a male bird yet again! How on earth will this rubythroat complete his cycle to and from Europe, I wondered, when he is still lingering on the circuits of my morning walk.

A surprise of another kind lay in store for me yet. Consulting the Chambers 20th Century Dictionary (1978 reprint), I chanced upon this entry under ruby: Ruby Throat, a humming-bird with a ruby gorget". I wonder how many birds there are of different species and from different Continents but with a common name?

My first encounter with the bluethroat goes back to 1983. My army outfit was out on training manoeuvres in the desert, midway between Jodhpur and Barmer (Rajasthan). After years of living in a tent, I had recently graduated to a princely perk, in the form of a motorised caravan. It was parked in a depression between two sand dunes. Nearby was a 'Johad' (shallow rain water pond) fringed by 'khejdi' (Prosopis cineraria) trees. In the frosty desert nights, the steel bodied caravan, sans insulation, was a virtual ice-chamber, but by 3:00 p.m. it was pleasant to sit inside the sunbaked caravan. Besides, there was interesting bird life around the 'Johad'. One afternoon, a small, jaunty bird like an Indian robin came hopping and sprinting, finally perching in the middle of the caravan window. As he rocked gently, the impact of the exquisite blue patch over his throat and breast was stunning. At certain angles it glinted like the fabled blue of the peacock. Whistler and Sálim Ali being permanent inventory in the Caravan, I was accustomed to these books and went straight to the plates illustrating the

¹Orissa and Jharkhand of today and much of Bihar were in the 19th Century a part of Bengal.

²Tickell's observations pertain to the districts of Mayurbhanj (now in Orissa) and Singbhum (now in Jharkhand) both on the Eastern extremity of the Chotta Nagpur Plateau.

³Ball had operated in the Palamu and Daltonganj districts which are today more commonly understood as the Chotta Nagpur region.

bluethroat. On reading the texts, I felt a twinge of regret for I had neglected sufficient attention to detail and was at a loss to know whether my visitor was from Europe or Ladakh? As luck would have it, during the winter of 1984-85, in the cantonment at Bhatinda (Punjab) I found the bluethroat foraging every afternoon among the parsley and celery raised by my wife.

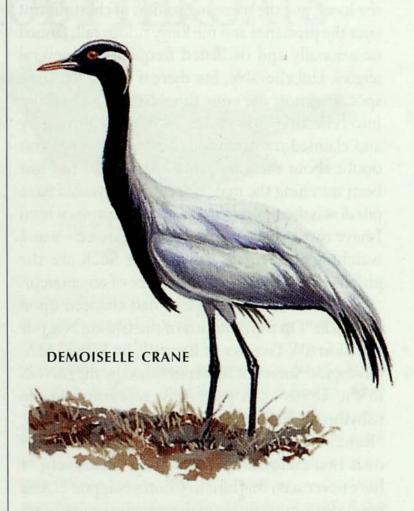
There was no doubting his European origins now, revealed not by his fondness for herbs, but by the absence of white in the centre of the blue patch. Much as I tried, I could never photograph this bird, either from the caravan, or later from among the herbs. I also lost the chance of recording the bird's call. So when a few months ago I acquired an audiocassette of bird calls recorded by the Nature Club Surat, I marvelled at the pleasing and penetrating call of the bluethroat.

The distribution map in the BIS (page 648) shows that both, the eastern half of Rajasthan, and Bhatinda (Punjab) where I had earlier observed the bluethroat, have now been relegated to this bird's "former distribution" territory. Alas, the bluethroat too has had to shift its wintering range due to shrinkage of its earlier habitat.

Linked with the encounter with the bluethroat in the desert, is the memory of stumbling, quite literally, on a congregation of demoiselle cranes so vast that I could not gather them all in the range of my vision without panning the eyes from one end to the other. My gut feeling estimated them at thousands and I just could not restrain the impulse to walk into the middle of this black and shimmering silver-grey mass against the golden yellow sand dune. I must have been some fifty metres short of the congregation when, as though on cue, the birds took to wing, their trumpeting calls growing louder with each flap of the wing. The sound and its consonant echo created a booming crescendo in the vast, silent pit of the desert. The horizon and the sky above were a floating fleece of Demoiselle cranes. It was

an experience of a lifetime's happiness.

That night I wrote to Mr. J.C. Daniel but the BNHS was deep into its Centenary and no one could be deputed to witness this great crane show. In time these cranes of Kheechan acquired a benefactor, Mallu Ram Jain, whose efforts at feeding and safeguarding them have gained universal acclaim. Let us hope that the Demoiselles will hold their vast presence at Kheechan into 2026 when the *Hornbill* gets to celebrate its 50th anniversary.



As for me, Rubythroats, Bluethroats and Demoiselle cranes shall, till memory serves, recall the verse:

"He that has been in such a scene, That scene shall ne'er forget In silent mood, in solitude Its dreams shall haunt him yet."

The best things of life are free or dear: they are not very cheap

- Anon

GREEN CAREERS

V. SHUBHALAXMI

V. Shubhalaxmi is an Education Officer at the Society

LOOKS like the 'Green Bug' is really catching up, with every other individual wanting to be a 'green person'. Over years, the science stream has diversified greatly, and today it has much more to offer besides the sought after professional degrees, which was the case when I graduated in 1990.

If you are a junior college science faculty student you are probably as confused as any other student who misses a seat for a professional course. Do not fret, for reputable jobs with a noble cause are available even after a degree in pure science.

Careers in Wildlife biology

If you are a nature buff, then you have the right ingredients to pursue such a career. Ideally, you should try your luck at competitive exams such as the Indian Forest Service (IFS) for which you can appear immediately after your twelfth standard examination. A basic knowledge of environmental issues and natural history is a must for this exam. Practical knowledge always outweighs theoretical knowledge, so try to be field oriented. Frequent visits to wild areas along with experts from institutions such as the Bombay Natural History Society (BNHS) and World Wide Fund for Nature-India (WWF), that conduct regular field programmes for their members, could be of great help. An IFS officer works for the Department of Environment and Forests, in the Government. Don't lose heart if you cannot cross



the competitive barriers of IFS, major in any of the life sciences at the under graduation level before you can set out for a Masters degree. Besides the regular colleges that offer a Masters seat there are organizations like the BNHS that are affiliated to Universities and offer seats for Masters and Doctoral Studies. Remember, a Masters degree is a must if you intend to procure a reputable job in a good organization.

By doing any one of the courses mentioned below, you can become a field biologist in wildlife research organizations such as the BNHS and Wildlife Institute of India. Several universities need lecturers for such specialised subjects. Institutions like the Centre for Environment Education (CEE), Ahmedabad, BNHS, WWF-India need people to work in the field of environment education (without doing B.Ed). You can also act as a resource person for various schools and colleges, conducting programmes for nature clubs such as lectures and nature camps. And if you aspire to go abroad, then a degree in Wildlife Biology helps in the competition for specialized jobs in universities, national parks and wildlife sanctuaries.

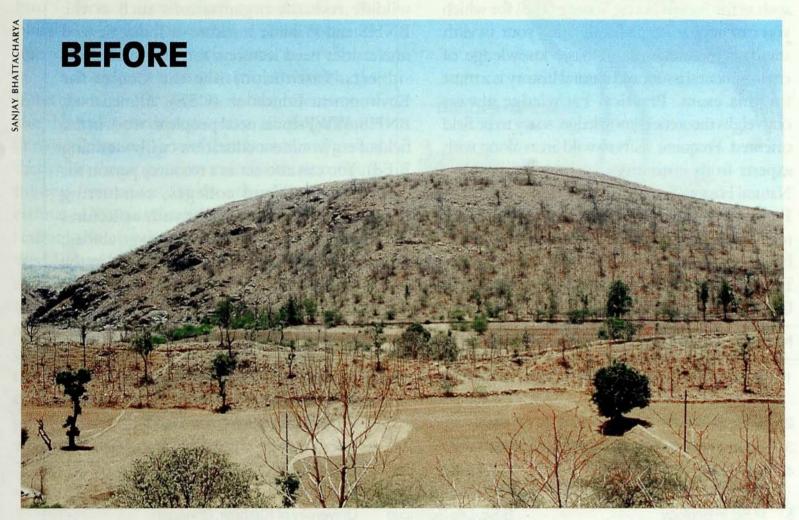
Na	me of the Course	Eligibility	Conducted by
1.	M. Sc. in Life Sciences	B.Sc. in Life Sciences	Mumbai, Delhi, Tanjavur Universities, Bombay Natural History Society (by research)
2.	M. Sc. in Wildlife	-do-	Aligarh Muslim University, Aligarh
3.	M. Sc. in Wildlife Biology	-do-	Wildlife Institute of India (WII), Dehra Dun
4.	B.Sc. in Forestry (Also offers M. Sc. and Ph. D.)	Std. XII (Sc)	University of Horticulture & Forestry, Uttar Pradesh
5.	M.Sc. in Ecology	B.Sc. Life Sciences	University of Kashmir, Srinagar; Pondicherry Central University; Universities of Kerala, Calicut; Vikram (Ujjain), Jodhpur and Nagarjuna.
6.	P.G. Diploma in Forestry Management	-do-	Indian Institute of Forest Management, Bhopal

Foundation for Ecological Security

he Foundation for Ecological Security was set up to address the critical task of ecological restoration, in India, through the concerted and collective efforts of rural communities, by restoring the biomass productive capacity of the natural resource base of village common property. By concentrating efforts, and working on local governance institutions and ecosystem restoration processes, the Foundation seeks to contribute to restoring the well-being and integrity of our 'living environment'.

While the Foundation came into existence only in February 2001, the group and its body of work was born 16 years ago. It started as a project of the National Dairy Development Board (NDDB) in 1986, when at a request from the National Wastelands Development Board, a pilot

project on Tree Growers' Cooperatives was initiated in selected districts in five states. It was an attempt to apply the institutional template of Cooperatives at the village level to bring together village communities, in an effort to revegetate degraded lands, at the same time, to help them create and govern village wood-lots to meet their requirements of fuel wood and fodder. Two years later, in 1988, an apex federation, the National Tree Growers' Cooperative Federation (NTGCF) was created, and the implementation of a full-scale project handed over to it. The project was supported by the Swedish International Development Authority (SIDA) from 1991 to 2002, and continues to be supported by the Canadian International Development Agency from 1993 onwards. The project is now working in 23



A view of the forest land being protected by Kotra village, Dahod, Gujarat in 1999

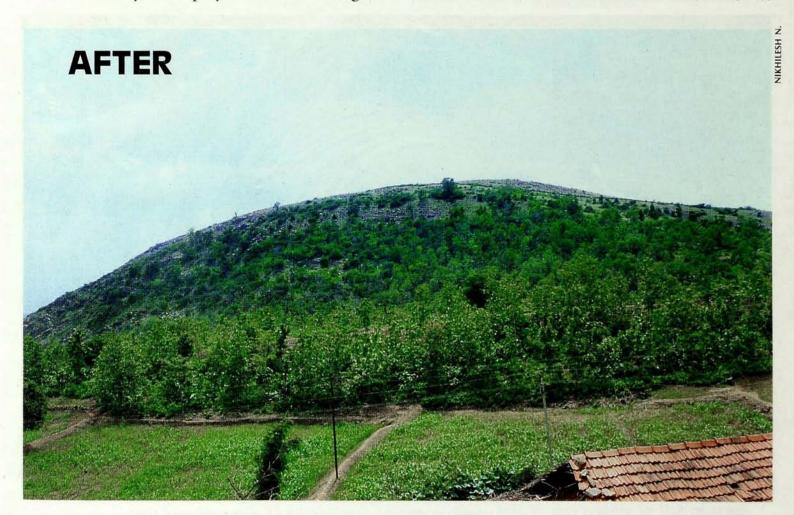
districts from seven states: Andhra Pradesh, Karnataka, Rajasthan, Gujarat, Orissa, Madhya Pradesh and Uttaranchal.

The Foundation is working through various physical and institutional interventions to halt and reverse ecological degradation by revegetating fragile lands and reducing soil, nutrient and water run off. These efforts are beginning to yield results, and in many villages in Andhra Pradesh, Rajasthan and Madhya Pradesh water and fodder were available for the animals even during the critical periods of drought.

The Foundation is working with 879 village institutions involving 1,05,598 members. Of these, 507 are Tree Growers' Cooperatives and 372 are other village level institutions. Of the 63,462 hectares of common land made available to them, these institutions have brought 21,772 hectares under regeneration activities and planted nearly 14.2 million trees on their common lands, as well as their private lands. This work has generated about 3.6 million workdays of employment in these villages.

One of the foremost concerns of the project in each state has been to ensure an improved status of tenure and ownership of village communities over the commons. Experience informed by theory validates that commons are best protected and governed by local communities, and that both ecological goals as well as livelihood concerns can find a sustainable match when tenure is clear, and rights and responsibilities of the communities are commonly understood. Growing from efforts to develop the natural surroundings in a contiguous patch defined by topographical and sociocultural domains; the processes of assessing the biomass, water, diversity and energy capacities of the areas are being initiated. Community needs and present patterns of production, use and the sustainability of various options would gradually follow. Depending upon the context and capabilities, some teams have begun to comprehend and systematically analyse information on specific components of the ecosystem.

[Source: Annual Report 2002 Foundation for Ecological Security]



The same area in 2002

Shooting TEGENS

Text and Photographs:

MICHAEL SWAMY FERNANDES

Michael Swamy Fernandes is a member of the BNHS and a keen wildlife photographer

I or the uninitiated the tiger is safest viewed in a zoo. It certainly is a sad proposition, but very soon that may be the last resort for the tiger. Considering the vastness of this country, the fact that India is left with only around 2,000 tigers in the wild is disturbing. At the estimated poaching of one a day... well, the calculations I leave to you.

The best places to see tigers are at the reserves of Kanha and Ranthambore where some efforts

are still on to give them a last bit of sanctuary and hope. A tiger in the wild is something truly wondrous to behold. From my first to my nth sighting, I shall continue to watch this great cat with awe, its sheer beauty arousing a magnitude of feeling that is an experience by itself. Its form and symmetry of movement exude power. As its eyes lock with yours, it seems to read your soul. You can hear your heart beat, and, even as the forest goes silent, you blink and it is gone.

My first visit to find this gorgeous animal was to Kanha. We searched for the elusive and magnificent mammal for five days, but it was only on the eve of our departure, in the last few minutes of the game drive, that I glimpsed my first tiger. Those few minutes hooked me on for a lifetime of shooting with a camera. As a friend then pointed out, the tiger is more valuable alive than dead.

Years after that first visit I still return to Kanha and have been rewarded by more and more sightings each time. The joys of Kanha unfold even



Know your subject and equipment well before you set out on a shooting expedition



Waterholes set the perfect stage for photographing animals in protected areas

before you enter the game drive. Hills flow into each other and the forest of sal covers you like a canopy; as you drive through, it opens out into the famous Kanha meadows, which once again give way to hilly terrain. Water, in pockets all around, creates perfect settings for chital, as it did, long ago, for a few blackbuck. The call of the barking deer can be heard, though it is seldom seen; graceful barasingha and sambar can be found near the watering holes and in dense foliage. Gaur, the largest cattle in the world, stand six feet at the shoulder and could topple your jeep over if they so desired. Wild dogs and jackals abound here. Vultures circling on thermals lead you to a kill and, for a keen bird watcher, the manic call of the brain fever bird is thrilling.

Kanha, for a keen photographer, is paradise. A second-hand manual camera will do for beginners, but what you really need for wildlife is a good SLR with a motor drive. Yes, it's expensive, and comes with loads of gadgets. And be warned if you think you will have the time and leisure to

use the gadgets; the animal will have moved off before you can even blink!

One camera to shoot with and a standby in the bag are enough. A set of interchangeable lenses up to 300 mm, a monopod anywhere from 300 mm and up, some film in the camera and you are ready to set off. As for a tripod, leave it at home — three quarters of the time you will see a tiger from the back of an elephant that sways about anyway. A simple skylight filter is the best for the lens. As for film, carry lots of it. It is the cheapest need you will have, and good opportunities come by rarely. There is nothing more disheartening than missing a good shot, either because you haven't loaded your camera or have just one frame left.

Slide film has many advantages; the disadvantage — every mistake you make is clearly visible. Film speed of 200 or 400 ASA is best. Using fast film eliminates the need for using the flash. Not only do animals intensely dislike the camera flash, but it also results in flat pictures.

Also, some national parks and sanctuaries now prohibit its use.

When using the camera rely on your eyes and not on the auto focus. At times a twig or leaf in front of the subject confuses the camera and the end result is far from satisfactory. Don't be ruled by your camera, rule it. Work on your manual focusing before you set out. Read all you can about your camera and your subject in advance. There is a saying in the forest "For every tiger you spot, ten have spotted you." Listen and look, and above all, be patient. Patience is really the key to photographing wildlife. There are times when you might be so close to a tiger that you might be tempted to stroke the overgrown tabby as it sprawls with abandon. Well, don't. There is nothing an animal hates more than appendages being waved in its face. Respect your subject. Animals like to keep a distance, approach any closer and they are gone in a blink.

Dress for the shoot in the wild. Colours are for peacocks; pastels and shades of the forest are best for visitors. Be quiet, sound carries and disturbs the peace of the forest and its inhabitants. Perfume, after shave, or make up is another "no

no". The senses of animals are more sensitive than ours. They can smell their prey from miles. And when they smell you they set off in the other direction.

When you do see a tiger, make sure to make the most of the opportunity, especially if you're not as wealthy as Croesus and the BBC or National Geographic. Take photographs from every perspective. Horizontally, vertically, zoom in or out; try and get interesting pictures. In good wildlife photography, getting the gleam of the eyes brightens the picture and gives character to the image.

Some camera companies have come out with new lenses, which compensate for camera shake. If you, like me, cannot afford them, click anyway, and hope for the best. So, take off on a wildlife shoot, pack your gear well, don't forget the extra set of batteries, mind your forest manners, and enjoy yourself as you would in another's home. Shoot away, and when your holiday is over don't stick those pictures in an album. Blow them up, give them to friends as presents, frame them up, share the experience, for who knows if our grandchildren will be able to see a tiger in the wild!



Share these captured moments with as many as you can, for who knows whether they will be seen in the future

Book on Humayun Abdulali Released

A BOOK HUMAYUN ABDULALI – NATURALIST on the life of Humayun Abdulali (1914-2001), a doyen of Indian ornithology, was released on January 31, 2003 at Hornbill House. The book is compiled and edited by Dr. Rachel Reuben, former Director, Centre for Research in Medical Entomology.

The book is a fascinating account of the life of Humayun Abdulali, a pioneer naturalist and conservationist. It begins with three chapters of an unfinished autobiography. His projected outline for the rest has been worked up from his notes and scientific papers, as well as the reminiscences of many who knew him. A final section looks at his personality and achievements. It includes a bibliography compiled by



Dr. Rachel Reuben autographing the book for Mr. Rishad Naoroji, EC Member, BNHS

Dr. Salman Abdulali, and an appraisal of his scientific contributions by Dr. Pamela Rasmussen, who is a leading authority on the birds of South Asia. The book traces how an insatiable curiosity, about all things natural, transformed a young man with a love of speed and shikar into one of the most significant naturalists of modern India.

Published by the Mosaic Books, New Delhi, the book is priced at Rs. 280 and is available at the Hornbill House. BNHS members will get a 25% discount.

Nature on Wheels



Mrs. Asha V. Sheth, Chairperson, Vasant J. Sheth Memorial Foundation handing over the keys of the Mobile Education Van to Ms. Pheroza Godrej, Vice President, BNHS

ON FEBRUARY 2, 2003, as part of the World Wetlands Day Celebrations, Mrs. Asha V. Sheth, Chairperson, Vasant J. Sheth Memorial Foundation handed over the keys of a Mobile Education Van to Ms. Pheroza Godrej, Vice President, BNHS

at a function held at the Soonabai Pirojsha Godrej Marine Ecology Centre at Vikhroli, Mumbai.

As part of the Society's Conservation Education Centre's outreach activities, a conservation education project was implemented at Manori village near Malad, which was funded by the Vasant J. Sheth Memorial Foundation. The project succeeded in creating awareness about mangrove conservation among children and locals of Manori village. During the project appraisal meeting held with Trustees of the Foundation, it was realized that the Manori experience needed to be disseminated in other parts of Mumbai. The concept of a Mobile Education Van was discussed and the Foundation decided to support it.

The van will help in reaching out to maximum number of people. It will carry thematic, self-explanatory posters, displayed on either side. A screen, fixed at the rear of the van, will be used for slide or film shows. The van will visit schools, colleges, residential urban areas and villages situated near mangrove forests, as part of the ongoing conservation education activities of the BNHS.

BNHS Scientist receives Marsh Award

DR. VIBHU PRAKASH, Principal Scientist at the Society is the recipient of the Marsh Award 2003. The function was held on February 26, at Nehru Centre, attached to the Indian High Commission in London. Mr. Brian Marsh, Chairman, Marsh Christian Trust, gave away the award which included a citation and a cheque of £1000. The Marsh Christian Trust established in 1981, aims to acknowledge individuals and sometimes groups for their dedicated commitment in their chosen field.

Mr. Graham Wynne, Chief Executive, RSPB, lauded the BNHS's role in bird conservation for over a century, and spoke of its close cooperation with the RSPB for the last many years and the fact that BNHS was now the India partner of BirdLife International. He was very appreciative of the Society's efforts in initiating long term monitoring of bird populations in India, the excellent documentation of the crash in vulture population being a good example, and added that the RSPB

THE WINDIEST, highest, driest, coldest and loneliest continent — Antarctica, captured in a camera in all its pristine glory by Mr. Shrenik Baldota, during his recent expedition, was exhibited at Hornbill House from February 20-28, 2003.

Shrenik had enhanced the beauty of the continent by giving it a totally different perspective through his lens without compromising on the picture value. The sheer magnitude and magnificence of the photographs of the albatross in flight, millions of penguins breeding, giant icebergs and elephant seals kindle an urge to actually visit the continent. There were over ninety photographs, yet each one was distinctly different and a treat to the eye. In fact, the display made one feel a little cooler in spite of the humid and hot Mumbai climate.

was proud to be associated with the BNHS.

Mr. Elliot Morley, Minister for Nature Protection, U.K., said that he was impressed by the implementation of the vulture project in India, and found the Vulture Care Center at Pinjore, which he had inaugurated on February 7, professionally developed and maintained. He assured all help to the project and BNHS in their efforts to save the vultures. He commented that although Darwin projects are not extended beyond three years, considering the importance and effective implementation in this case, they would find ways to extend it. He also appreciated RSPB for recognizing the vulture work in India.

The function was attended by over 60 distinguished people including Officers from the Department of Food and Agriculture, representatives from the Darwin Initiative for the Survival of Species, Executives and Scientists from RSPB and BirdLife International and BNHS life members.

Frozen Frames



(L-R) Mr. Shrenik Baldota, Dr. A.R. Rahmani, Director BNHS and some of the frozen frames from the lonely continent

Errata: The photograph of Mr. Gerry Martin at the CEC, in the Sep-Dec, 2002 issue of the Hornbill, was taken by Mr. Kedar Bhat. The inadvertent omission of the photo credit is regretted.

The Book of INDIAN SHELLS

Deepak Apte

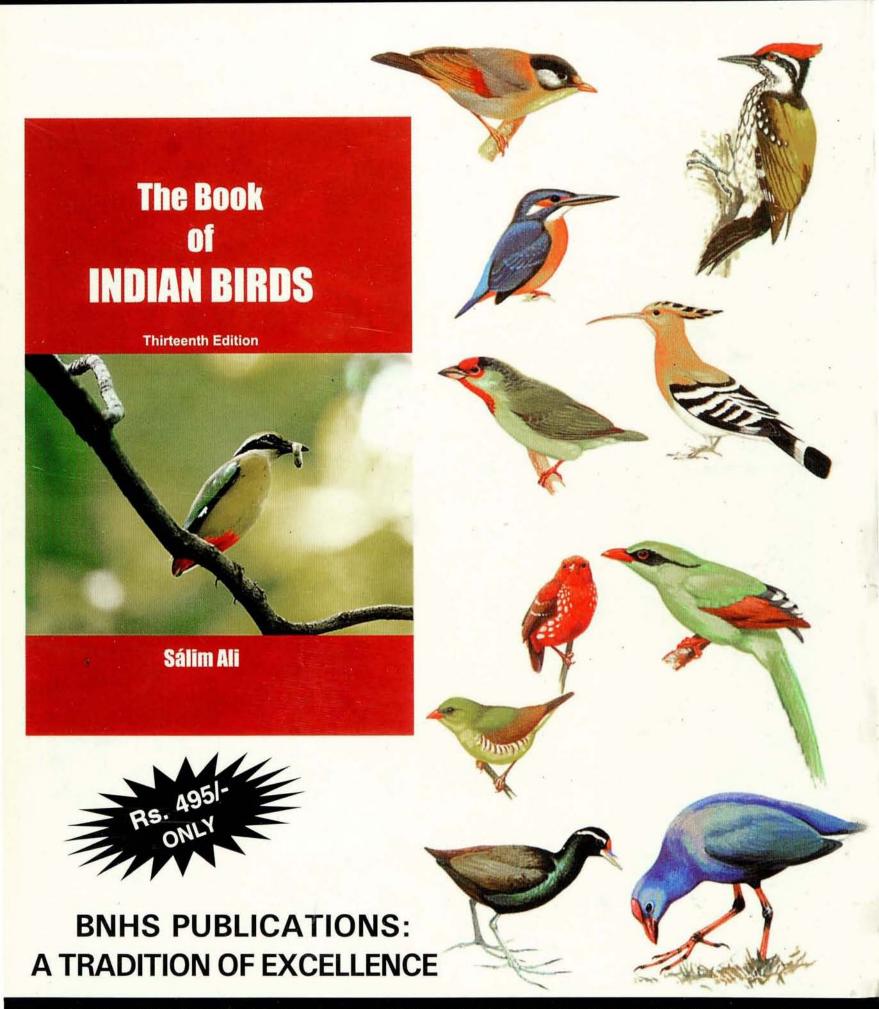




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