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October-December, 2002





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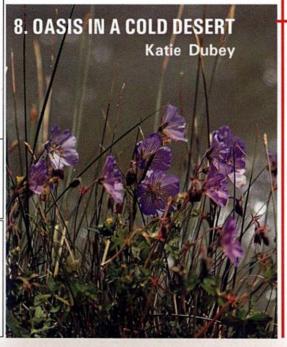
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The striped hyenas of India have not been studied for a long time because of their nocturnal habits, but telemetry studies by Dr. Jhala and his team promise to unravel in the near future the mysterious life of these striped ghosts of Kutch.

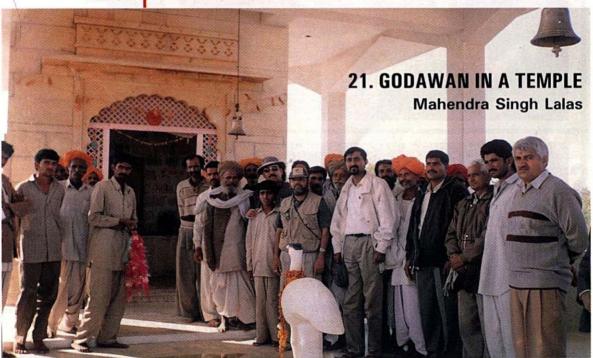


Would you make a trip to a cold desert prompted just by the written words of a stranger? The author did just that. Read on to find out how fruitful this trip was where she saw life propagating in different forms in the oasis amongst the barren lands of the desert.

TURNARY COPY FOR REFERENCES 3 03. V.

National Parks and sanctuaries are probably the only areas in our country where the wild flora and fauna are still safe. Blatant abuse of these protected areas by powerful individuals might deprive them of this small bit of area also if immediate measures are not taken.





The 'Save the Bustard' Campaign aims at restoring the great Indian bustard to its past glory in the Thar. As a part of this campaign, recently, a life-size statue of the bustard was installed in a temple, in a small village of Rajasthan.

OTHERS...

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THE CANCER OF ENCROACHMENT



2002

VIEW POINT

J.C. DANIEL

Day by day, year by year, India keeps losing its national natural wealth by the conversion of its forest lands to agriculture and urbanisation. The Forest Department, the custodian, watches and probably connives with this disastrous, and rarely recorded destruction. Kukal Shola in the Kodaikanal hills, 33 km from Kodaikanal town in Tamil Nadu, provides a singular example. In 1921, when the late Charles McCann, the Society's then Asst. Curator, did a mammal survey of the area, it was a beautiful evergreen Shola forest. Sixty years later, in 1981, when the Society had a Bird Ringing Programme, it was still good Shola forest. In 2002, 81 years later, it had become a carrot and cabbage field. In terms of economic and environmental value we have lost heavily. This is but one recorded instance of the continuing, creeping cancer that affects the whole country.

The Striped ghosts of Kutch



YADVENDRADEV V. JHALA

Y.V. Jhala is a well-known mammalogist and an excellent wildlife photographer. He is presently working at the Wildlife Institute of India

started studying hyenas out of curiosity

to find out how wolves and hyenas, both similar sized carnivores, could coexist in high densities in areas with little wild prey. In more forested ecosystems, striped hyenas rely on large predators like tigers, lions, and leopards to provide them with kills of large ungulates on which they scavenge. Kutch, my study area, is characterized by the absence of large carnivores and large wild ungulates. There are a few leopards and some nilgai antelope in Kutch, but neither occur in sufficient numbers to provide the needed food for the large hyena population. In Kutch, hyenas subsist primarily on dead livestock. Hyenas perform an efficient function of sanitizing the

ecosystem and recycling the precious nutrients like calcium and phosphorus locked up in the carcasses by chewing up even the large bones, using their specially adapted molars.

Of the four extant species of hyenas only the striped hyena (Hyaena hyaena) occurs in India. Interestingly, even though the striped hyena is distributed over Northern Africa, Arabia, Iraq, Iran into Afghanistan, Pakistan and much of India, little is known about its ecology, social organization and behaviour. The striped hyena is a large carnivore, with adults weighing between 30 to 45 kg. The sparse body coat is covered by characteristic stripes giving the animal its name. The stripes are more prominent in cubs and young adults and fade slightly with age. The striped hyena is adorned with long hair on the neck and along



It is hard to believe that this scavenger stalks and hunts dogs, for whom it has a special taste, in the darkness of the night

ARUMUGAN



PAINTING: PAUL BARRUEL, ©BNHS

"A dog-like build, massive head and fore-body, weak hindquarters, and a heavy dorsal crest of long hairs, sharply defined from the rest of the coat, distinguish the hyena. Its colour varies from cream, buff. or tawny to the grey or dirty white of the harsh scanty summer coat. The transverse stripes on the body and limbs are usually well defined. but less so in the full winter coat. The hyena is rare in forested districts, abundant in open country, especially where low hills and ravines offer convenient holes and caves for shelter."

- S.H. PRATER

the spine forming a mane. These hairs and those on the bushy tail are erected when the hyena is excited - in fright, fight, and during social interactions. This makes the hyena look larger than it really is. The fore quarters of hyenas are taller and more powerful than the hind quarters, giving them their characteristic loping gait. Their spoor is easily recognized in the field, with the forefoot print being much larger than the hindfoot print. The pads of the foot form a rosette like pattern in soft soil. Like other canids, hyenas cannot retract their claws and these are visible in prints left on a good substrate. When hyenas have fed on a diet of bones, their scats are pellet-like and whitish. These scats resemble camel dung. The more bulky scats originating from a meat diet and secretions from their anal sac are pasted on vegetation and prominent landscape features and serve the purpose of scent marking.

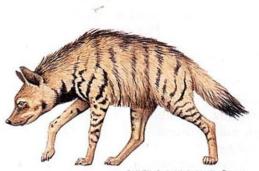
The crunch period for hyenas comes when much of the livestock migrates out of Kutch. Fortunately, the hyenas harvest an alternate abundant source of food — village dogs. Hyena have a special taste for dogs. We have radio-tracked hyenas stalking the bazaar streets of villages and towns in the darkness of the night, hunting dogs! This alternate abundant food source permits hyenas to achieve and maintain high densities in Kutch. The habit of visiting village cemeteries, garbage dumps, and hadda-khodis (dump yard for dead animals) in the dead of night gives the Jarakh (Kutchi for hyenas) a mystical ghost-like reputation.

Hyenas occasionally do predate on goats and sheep as well as Indian gazelle, hare, jackals and nilgai antelope calves. They also raid and feast on the desert melon crop. Hyenas are sometimes reported to indulge in wanton killing when they manage to enter livestock corrals. In some parts of India and in Arabia, attacks on children and sleeping adults by striped hyenas have been reported. In Kutch, people do not consider the hyenas to be a threat, but continue to be wary of wolves even though there has been no documented wolf attack on people in the region.

The hyenas venture out of dark, deep dungeons like ghosts, to haunt the arid landscape only under the cover of darkness. During the day there is a slim chance of finding a hyena on the surface. Hyenas spend the daylight hours in limestone caverns and deep burrows dug by themselves or by other animals. This behaviour permits them to have an almost conflict-free existence with humans in Kutch. Except for an occasional road kill at night and some persecution by pastoralists, hyenas live in harmony with the current land use practices. Human activity in Kutch is primarily restricted to daylight hours, the night belongs to the hyena! This behaviour also makes them difficult to study. Even radio signals from radio-collared hyenas do not make it to the surface during the day. Several long nights of hard work and patience have made us privy to some aspects of the secret life of the striped hyena.

Like wolves, striped hyenas are social and live in colonies of five to fifteen individuals. Hyena colonies have well defined home ranges with little overlap between ranges of neighbouring colonies. We believe that the colony is comprised of related female hyenas and their cubs, but would need to await confirmation from our genetic study of these colonies. Younger females assist mothers in baby-sitting and bring food for the young and lactating females. Male hyenas lead a more peripheral existence. Some male hyenas are nomadic, visiting several colonies in search for receptive females, while some males restrict their movements within the range of a single colony, patrolling and scent marking actively. It seems likely that there is little parental investment by males in rearing cubs, this task being left exclusively to females in the hyena society.

These are some of the preliminary research findings from our telemetry study of striped hyena ecology and behaviour. In the years to come, our research is likely to unravel many more interesting aspects of the mysterious life of hyenas.



PAINTING: PAUL BARRUEL, ©BNHS

"A scavenger by profession, the hyena seeks its food by scent. Sight plays little part in its search; hearing none at all. Those sensitive organs, the facial vibrissae or whiskers, so large and conspicuous in cats and civets, used by them when hunting to discern the nature of food. are poorly developed in hyenas. Hyenas are not hunters. They live chiefly on the carcasses of animals, more truly on what is left of a carcass after a tiger or panther has done with it and the vultures and jackals have eaten their full. The hyena's share is then mostly bones and coarse remains."

- S.H. PRATER

is the most wonderful month of the year to be in the mountains of Ladakh. It is that time of the year, when summer is well entrenched in the seasonal course. The sun moves up quickly, brightening the night sky by 4.30 a.m. Quite suddenly the chill of the night dissipates, clouds scurry away and the day turns burning hot, as the rocks absorb the heat and the sand throws it off. Equally suddenly, the clouds will abruptly return and a drizzle will cool the burning atmosphere.

I too had set my heart upon this destination, having discovered it tucked away in a book on the shelves of the BNHS library. So, along with my husband and a friend, the three of us set out for destination Pangong Tso.

Summer comes at leisure but departs in haste from the heights of the Ladakh Himalayas. By the end of March, the summer solstice arrives. The sun blazes through the bleached Himalayan Text and Photographs:

KATIE DUBEY

Katie Dubey is an avid traveller, a prolific writer, and a BNHS member.

OASIS IN A COLD DESERT



sky, days lengthen, heat inundates the mountainscape during the first half of each day from April to July. Snow on the lower slopes melts and courses down in streams large and small to the parched and hardened earth of the valleys and plateau below.

The Changthang plateau situated at heights between 4,000 and 5,200 m, spans a thousand kilometres of the trans-Himalayan region. A cold, barren desert of massive sand dunes and wind tortured rocks with large dry steppes in open valleys, the Chanthang plateau is sporadically dotted with marshes and pools formed by meltwaters in summer. To this wasteland come the elusive black-necked cranes every summer, across the Tibetan plateau, to nest among the bogs. Migratory birds travel great distances seeking out the oasis in this cold desert, its magnificent high altitude lakes, particularly the marsh around it that blooms with stout grass and wild shrubs. It is here that the birds repair to breed in undisturbed privacy through the short summer, when life-forms of every kind are multiplying, creating an abundance of food for birds and beasts.

Panning the Indo-Chinese border, and nestling in the Himalayas at over 3,000 m on the eastern end of the Karakoram range, the Pangong Tso is a glacial basin carved out millions of years ago, by the passage of flowing glaciers. Tso is Ladakhi for lake. Pangong Tso lies like a broad, silky blue and green ribbon, stretched out upon the warm breeze. Its still waters, when teased by the summer breeze, break into shimmers. The sun beams shower it with golden flecks, creating a vision of ethereal beauty. Its crystal waters that are a clear sapphire blue at mid-depth, vignette to pale green at the edges on mingling with the bright yellow of the sand. Not a leaf sullies its surface, no weeds intrude its water and no insects disturb its silver sanded shores! The mountains cradle it lovingly within the valley lending it their own colours, and passing clouds look down upon their image reflected within. To the front lies a range of sand dunes of incredible colours, ranging from hues of



Geraniums with shades of pink to red or purple with a pale centre bloom from June onwards



The common stonechat breeds in this oasis during the warmer months

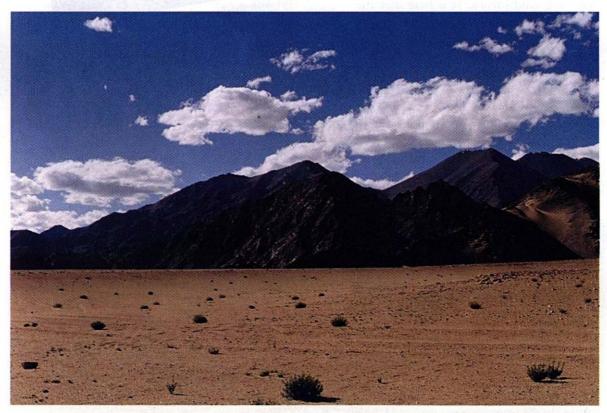
red, pink and purple to green and ochre, or in piles of black and brown sand contrasting with the yellows. On the opposite side lies a range of towering heights, stark deep-brown and black rock, caped with glinting snow.

134 km long, and 8 km wide, only 45 km of it belongs to India, while the rest is with China. Five rivers of snow-melt feed it at the Indian end, nevertheless the waters are brackish to saline in various parts, particularly at the western end. This end of the lake is covered with large alpine meadows, where the wild rose and flowering shrubs grow in clumps on the sand dunes set back from the lake's shores. It is the favourite haunt of the rust-red flanked Brahminy shelducks, who come in droves by the end of May to breed by the clear unpolluted waters of the lake. Some barheaded geese and a pair or two of black-necked cranes also frequent the lake to breed, while the Tibetan sandgrouse flock to the shores once a day

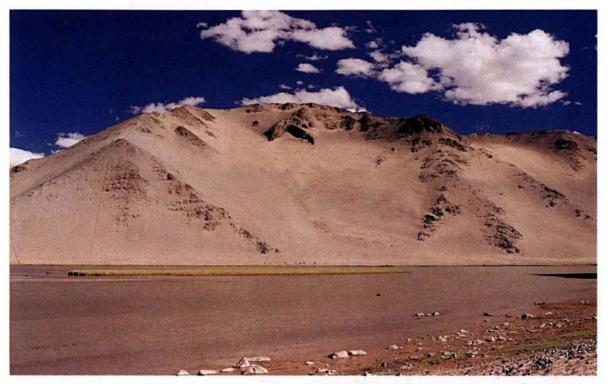
for a drink before moving on to the sandy wastes to forage.

A few kilometres away from it, at a higher and more open location on the Rupshu plateau lies Tso Morari at about 5,380 m, the highest and the largest in Ladakh: 30 km long, 9 km wide and over 30 m deep. This lake is the favourite haunt of several species of migratory birds that arrive each summer in vast numbers to breed.

Skirted along the north and east by the cold desert and to the south and west by perennial heights, Tso Morari resembles an ocean in the mountains, so vast and wide is the expanse of its brackish water shimmering with hues of blue, green, deep purple and an almost opaque brown in the deeper parts. The mountains fringing it are austere, gigantic black sand dunes with pale slashes of lemon. Many rock formations carry distinct claw marks of a glacier that had scratched its way down the slope, while on the far north is



Sandy stretches with stubby growth can be seen all along the Changthang plateau



Tso Morari is a favourite breeding habitat for migratory birds

a long snow-covered ridge. Its seasonally flooding and receding waters have created an enormous marshy bank and some shallow pools where wading birds hunt for insects and build their nests in the soft mud, where tough short grasses grow. Inland, an intricate web of tiny wild flowers in shades of pink, purple, yellow and white, bloom like tiny dots on the earth. Roots and stems mat the grey clayey ground.

Two springs of meltwater — one from the north and the other from the south — nurture the lake, creating extensive marshes en route. Barheaded geese, great crested grebes, lesser sand plovers, brown-headed gulls and common terns arrive in waves and seek their niches along the extended shoreline to breed throughout the summer. By August, when the chill sets in, the bird families will be ready to move further down south within the country to more salubrious wintering grounds.

The end of August heralds the arrival of winter and the first flurries of snow dot the ground. The last remaining stragglers then flee the heights. Resident members — man, beast, and plants — ready themselves for a long winter hibernation. By October, the lakes of Ladakh harden into sheets of ice, over which one can walk throughout the freezing winter. At the best of times, it is a very fragile ecosystem of climatic extremes, virtually no rainfall, extremes of terrain and slow growing stubby vegetation.

Only 41 villages and hamlets with a total population of approximately 8,000 used to dwell on the Changthang and Rupshu plateaus. Most of them nomadic or semi-nomadic, grazed their sheep and yaks in the regions where pasture was lush during the summer and moved to the lower slopes during the winter. Tourist traffic was unheard of and only the army remained throughout the year.

Over years, pressure on this tenuous ecosystem has increased manifold, and human interference is exacting its toll. The increasing domestic livestock is degrading the vegetation



Gujars pitch their tents by a stream along with their livestock during the warmer months

cover, which is unable to bounce back quickly. Population growth is on the rise and new settlements are springing up, claiming more farmlands in the wetlands. Added to this are the Tibetan refugees who cross over to graze their yaks on the sparse, but lush streamside pastures, decreasing the grazing grounds for the rare Tibetan gazelle, blue sheep, and the kiang or Tibetan wild ass and mountain goats. The overgrazed lands are eroded by wind.

By far the most destructive influence in recent years has been the tourist traffic that has found its way into the inner limits. Very few visitors to Ladakh are aware of the ecological sensitivity of the area and the enormous damage caused by the disturbance of vehicles and noise to the fauna. Birds are fleeing their traditional breeding grounds, unaccustomed to human intrusions. The endangered black-necked crane, which breeds only in the wetlands of Ladakh and lays small clutches,

is often robbed of its eggs by visitors, further reducing the population of this threatened species.

Camp sites have been designated and tent accommodation given to visitors, but no adequate facilities for garbage disposal are provided. Consequently, by the end of the tourist season the area is littered with empty plastic packs and tin cans, adding to the environmental damage.

Opening the area to unrestricted tourism can only spell disaster for the flora and fauna of this unmatched trans-Himalayan area and its condition will soon deteriorate to that of the Nanda Devi basin, which was described by a mountaineer as being mid-way between a public toilet and garbage dump, through the indiscriminate passage of great numbers of expeditions. Tourism maybe a prized exchange earner, but in terms of dollars, the figure generated is not huge enough to justify the opening of the area for unrestricted tourism.

Pelicans and People: The two-tier village of Kokkare Bellur, Karnataka, India By K. Manu and Sara Jolly Published by Kalpavriksh, 2000. 22 x 14 cm, pp. 33.

Reviewed by Farah Ishtiaq

OKKARE Bellur is one of the finest examples of community based conservation in India. Of the ten known breeding sites of spot-billed pelican, Kokkare Bellur is one of the most significant. This small booklet gives us a guided tour of the history, social life and ecology of the globally threatened spot-billed pelican *Pelecanus philippensis* of Kokkare Bellur. The booklet clearly highlights human induced activities, which have resulted in the dwindling population of spot-billed pelicans. The role of NGOs like the Mysore Amateur Naturalists (MAN) in raising money for the 'harvested nestling' is remarkable and the need for such support is emphasised very clearly. It also

highlights the various threats, which directly or indirectly affect the pelicans. Since Kokkare Bellur does not have any legal status as a protected area, the site is under threat from development of adjoining areas, pesticides and industrial effluents at the foraging tanks (outside Kokkare Bellur), which may lead to lower fertility rates and eggshell thinning, and to poaching. Need for intensive research on these aspects has been identified. There is a clear mention of the non-cooperation between the Forest Department and the villagers of Kokkare Bellur and members of MAN. Protection of such a site needs money and support from the Government and the local community.

On the whole, it is a very succinctly written case study, except for a few formatting errors and missing figure numbers from the maps of the study area. This case study on Kokkare Bellur can be a model for other species such as the greater adjutant stork *Leptoptilos dubius*, where the local community can play a vital role in the long term conservation of the species.

EDITORS' CHOICE



'And where would you get the wood pulp to manufacture the newsprint for your complaints about de-forestation?'

We are grateful to the

MEHTA SCIENTIFIC EDUCATION & RESEARCH TRUST

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Karbanwadi, home of the chinkara?



Chinkara can be seen throughout the year on the meadows surrounding Karbanwadi (about 120 km from Pune), Nimgao, Shelgao and Kalas villages. They have been roaming these plains for hundreds of years. A temple in Kalas has even been named as the Harneshwar (Deer) Shiva Temple.

Today, in the competition for survival, it is obvious that the chinkara, a protected species under Schedule I of the Wildlife Protection Act, that have lived here for hundreds of years prior to man, will ultimately lose, because:

Most of the meadows, which are privately owned, are now being used for agriculture. Wire fences are being put up to restrict the movement of the chinkara, who are considered pests.

A lot of land is being developed for an industrial zone and factories are coming up in these areas. The resulting vehicular and human traffic and tall wall fencing will severely restrict the migration of the chinkara to its grazing grounds. The 5 sq. km area at Supa, with patches of surrounding areas as wildlife reserves, which has recently been declared as a sanctuary for the chinkara, is too small for this wandering animal.

Karbanwadi and its surrounding area should instead be developed for wildlife tourism. The open plains and meadows in the area afford an extended range of vision, and watch towers, if put up, would be an excellent means to observe the wildlife.

Wolves are abundant in the region and act as a natural check on the chinkara population. Early morning or near sunset are the best time for sighting this carnivore.

The Government should declare more green zones and prevent grazing by wandering shepherd tribes (*Dhangars*). Besides overgrazing, the domestic flocks often carry liver fluke, and foot and mouth disease, which can decimate an entire population of chinkara almost overnight.

Sattyasheel Naik Pune.

Music of the forests

I am a student of Springdales School, Dhaula Kuan, South Delhi and live on the campus of Indian Institute of Technology (IIT), Delhi.

The campus is surrounded by a green zone on three sides: the Deer Park in the north, Jawaharlal Nehru University (JNU) Forest in the west and Sanjay Van in the south, all of which are an extension of the green belt in IIT, Delhi.

On frequent walks with my parents to the contiguous green belts of IIT and JNU forest, we see different varieties of trees, shrubs, flowers and many birds. The peace and quiet of the forest, away from the traffic, interspersed by the calls of birds, is the most refreshing part of the walk. I have observed the following birds and heard them call during my walks:

- The loud 'kutroo' of green barbets
- The continuous 'hook, hook, hook' of coppersmiths
- The screeching 'honks' of peacocks
- The musical whistling of magpie robins
- The melodious 'koo...koo' of koels
- The tinkling 'troink' of tree pies
- The high-pitched 'brain-fever' of the papeeha
- The questioning 'did you do it?' of lapwings
- The trilling 'kur-r-r-r' of kingfishers

These sounds grow distinctly louder at sunset, and when four or five groups of birds exchange

calls, it's almost like an orchestra, which is different from the music one hears on FM radio or television. Discontinuous yet soothing, this is the 'music of the forest'. Most of us, caught up in the hustle and bustle of city life miss this music, yet, if one wishes to listen then early mornings and late evenings in the parks or forests around your city is where you should be.

I wish the BNHS would open a Delhi chapter and organise nature walks for the youngsters to enable them to also experience and enjoy the music of our feathered friends.

Sneha Datta (Student) By email. **₹=**"

Save our natural heritage

I

Ponds and talaos, a familiar part of Mumbai's suburban landscape, make a colourful sight with women washing and drying clothes while exchanging news, views and gossip. Most of these, however, are fast disappearing, due to neglect, garbage dumping, or encroachment by slumlords.

One such pond, near INS Hamla in Malad west, its banks invaded by profusely growing wild bushes and weeds, is a favourite haunt of wild ducks and waterfowl. But it is a big talao, near Bageecha gardens on Marve Road, between the Rathodi and Malwani villages, that attracts most attention. Fully covered with white and red lotuses, it is a beautiful sight when the flowers

are in full bloom. A closer look, however, reveals that it is in dire straits! Water hyacinths and other weeds are so dense that the water cannot be seen.

Numerous shops and garages have mushroomed on the road along it's banks, obstructing the view of the lake from passing vehicles, and garlands, pots and other refuse thrown by visitors make the sight an eyesore. From the rear of the shops, all kinds of toxic and polluting waste finds its way directly into the talao.

Kolis and other residents of Malwani village ritually clear a part of the bank and offer pooja, but it does little to arrest the degradation of this tank, surrounded by virgin country with a variety of trees and targola palms in the background.

Another small pond near St. Anthony's Church, used since ages for washing clothes, is now almost fully covered with weeds, and looks as if it will disappear in the not too distant future.

These are a few examples of what man has lost of what he inherited from his forefathers. Our earth has limited supplies, so, each one of us needs to be a conservationist, and seek solutions to problems of pollution, waste disposal, and urban decay; preserve natural and scenic spots like our ponds and enhance their beauty.

Organisations working on environmental issues should collaborate with the authorities to protect these natural spots by declaring them as tourist sites. They should also approach multinationals and industrial houses to sponsor their maintenance.

Let us remember that the quality of our life depends on the health of the environment!

Gerald K. Misquitta Mumbai. ≢≣

II

'Tiger tiger burning bright...!'
Does it deserve to be out of sight?

Tigers, the largest members of the cat family are the pride of Asia, the Royal Bengal tiger being the pride of India. Our pride should be protected, not exploited. Extinction of the tiger, which is at the top of the food chain, will surely disturb the delicate balance of this chain.

It is our greed that has led to the decline of tigers in the wild, and their poor condition in captivity. And it is we who should together restore them to their old glory.

Many species, close to extinction, have been saved by determined efforts. For example, the giant panda of China is now well protected. The black rhino of Africa is making a slow but definite return. Tourists all over the world visit Africa for its natural splendour and variety of wildlife. I'm sure that they will also visit India to see the elusive tiger, in its natural environment. Determined efforts and definite measures is the only way we can save the precious life of this magnificent species, which happens to be our national animal.

Janki Dalal (Student) by email. **≣**■

Bandhavgarh Alert!

Text and Photographs:

SHAKIR RANDERIAN

Shakir Randerian is a keen wildlife observer, photographer and environmental conservationist. He is greatly influenced by Dr. Sálim Ali's work

The Bandhavgarh National Park, set among the Vindhya hills of Madhya Pradesh, is one park where you can enjoy the sight of the endangered tiger in its natural habitat. This blissful set up might become a thing of the past if the blatant abuse of the Park premises, which the author saw, are not checked.

T was at the Umaria check post at around 8 p.m. heading towards Tala. The unusually long queue of people and taxi jeeps, overflowing with passengers, at the check post surprised me. On enquiring, my driver informed me that these were Kabir Panthi pilgrims who had come to attend a function, the first of its kind, at the Bandhavgarh National famous Park where the 16th century saint, Kabir Das, had lived and composed his verses. It was not until next morning, when on my way to the Park, that I felt the full effect of this gathering. At first, I truly thought that the driver was taking me elsewhere. There were scores of people swarming towards the Park, setting up camp wherever they found a little space. Some were cooking meals, using the trickle of water that the Charanganga river provided, while others were having a bath or washing clothes or dishes. This was not what one would expect to see while approaching a protected area! Things, however, did not end here; while we were queuing up to enter the gate, in our jeeps, a more overwhelming group of pilgrims on foot and jeeps started queuing up beside us. They were going to trek a distance in about two hours, up the mountain to the Bandhavgarh Fort to pay homage at the temple. Though this route is open from sunrise to sunset everyday for anyone who wishes to visit the temple, it was evident for all to see that the serenity of the Park was about to be invaded by 50-60 thousand pilgrims. Over the next 3-4 days



Bandhavgarh National Park is one place where you can still watch and photograph this magnificent animal in the wild some of the effects of this 'invasion' would start to become apparent and the seriousness of it would unfold over time.

The Bandhavgarh National Park, set among the Vindhya hills of Madhya Pradesh, was to me the only protected area where I could enjoy watching and photographing the endangered tiger in its natural habitat. Bandhavgarh is known for its large number of tigers from the days of the Maharaja of Rewa, before the British rule. This place shamelessly boasts of hunting the largest number of tigers (a total of 109) by each Maharaja. In the early 1960s, Maharaja Martand Singh, distressed by the state of the forest, offered it special protection and brought the rampant killing and poaching under control.

Later that day, I saw two young tigers at the Chakradhara grasslands. These magnificent young animals peeped out of the tall grass one by one, casually yawned at us and crossed our path, at a safe distance from our jeeps, to go to a small trickle of water amidst a patch of soft green grass.

After quenching their thirst they settled on the moist grass. Though our presence did not seem to disturb them; they never let us out of their sight for a single moment.

I was busy trying to watch and photograph them as they crossed the road, when I noticed the pilgrims arriving in a constant chain, passing our jeeps on foot; this when tourists to the Park are forbidden to even get off their vehicles. They were asked to scurry quietly, which they did nervously. But, the excitement of spotting a tiger in the open is the same for one and all. The pilgrims with total disregard for the possible danger stopped to get a better look.

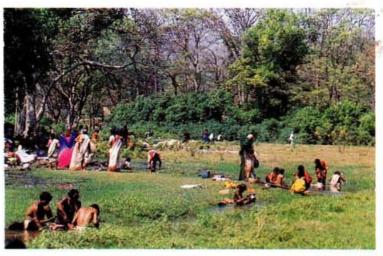
A couple of days later, we noticed the same cubs react cautiously to passing pedestrians, as they crouched low on the ground behind the elephant grass. I thank God that everything passed off smoothly with no mishap. The animals and the Park would have had to bear the brunt of it, if things did happen to take an ugly turn.

The blatant abuse of the Park was evident for all to see. The blare of speeches and songs over loud speakers "round the clock" at decibels that are considered to be of pollution level in most cities added to nuisance already caused by the tents, stages and stalls that

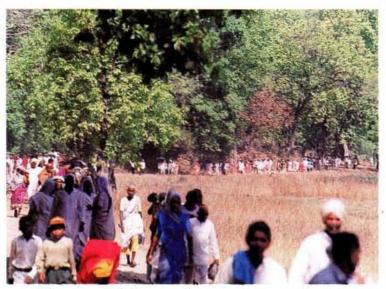
were located just outside the Park's main entrance.

The organizers, who lacked concern towards essential human needs like sufficient shelter, cooking area, drinking water, and most importantly sanitation, must have surely overlooked the needs of the inhabitants of the Park. The pilgrims would rush to any source of water that was available in and around the Park. The litter apart from the dirt, dust and grime that was being left behind by this massive crowd was sad to see. The stench that arose was unbearable.

The forest authorities had a tough time controlling the crowd from straying and taking short cuts, and had to finally call the police, who were posted around in pairs to control the crowd. Here, amusingly, one of the two cops would be perched on a tree to alert his buddy if a tiger strayed towards them. The other would then try and divert the pilgrims away to other parts of



The organisers had overlooked the need for basic amenities that a crowd of this magnitude would require



A huge crowd of pilgrims on foot and in jeeps were disturbing the serenity of the Park

the forest. No one appeared to be keeping a head count of the number of people entering and leaving the Park at the end of the day. The possibility of animals getting used to pedestrians cannot be ignored, as this makes them—more vulnerable to poachers who are known to move around on foot.

I have nothing against the pilgrims, but fear that this may become an annual affair. I voice my concern, especially as there were VIPs who arrived by helicopter, to attend this function on the final day, I suppose they probably hope to slowly nurture it into a potential vote bank.

Our parks and sanctuaries are protected areas for the other denizens that occupy this planet with us and should not be abused in this manner, no matter where they are or how insignificant they may be.

Proper arrangements for the pilgrims, and restoring the Park to its original state after they have left must be made. The number of pilgrims and vehicles in the Park should be restricted as is done for tourists. Jeeps with pilgrims shuttled from one end to the other, speeding through in order to get as many trips across as possible. If the organizers cannot control an

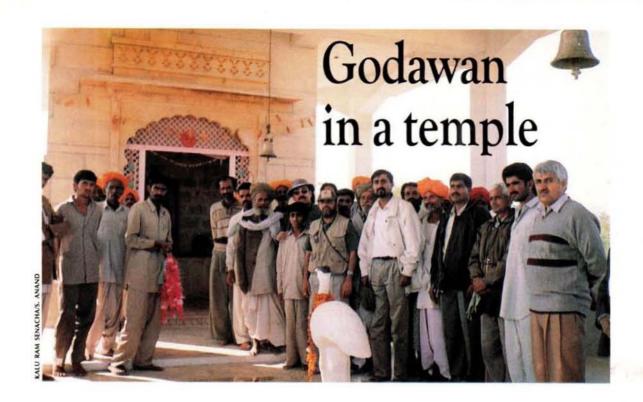
event of this magnitude then they should desist from it and more importantly avoid abusing the Park. Parks and sanctuaries are all that are left for the wild flora and fauna, that incidentally, we should not forget, are the ones that contribute towards the existence of the human race.

Sant Kabir Das would have definitely come up with a couplet that would advise all not to inconvenience the balance of nature en route to being a saintly or religious person.

I have tried to highlight the dangers to our parks and sanctuaries that are being misused by some individuals possibly for personal gains. It would indeed be a shame to see such important national as well as international treasures die out. If this were to happen, then the entire human race would suffer and eventually perish, all for our selfish reasons. I would consider myself lucky if the right people in the right places share my concern and take corrective measures while we still have time. We must not forget that we owe our existence and the existence of our future generations to this biosphere, which we so desperately need to maintain, of which the Tiger is a vital supervisor and regulator.

"To her fair works did Nature link
The human soul that through me ran;
And much it grieved my heart to think
What man has made of man."

- William Wordsworth



MAHENDRA SINGH LALAS

Mahendra Singh Lalas is a keen birder and is presently associated with All India Radio, Jodhpur as a broadcaster

The 'Save the Bustard' Campaign, initiated by Dr. A.R. Rahmani in 1999, to improve the status of the great Indian bustard in the Thar, moved a step further when a life-size statue of the bird was installed in a temple in Sankhla. One hopes that the presence of the statue will better the future of the state bird of Rajasthan

HE MEETING on the Desert National Park over, Dr. Asad R. Rahmani offered me a cup of tea. Not being aware of his plans for his next visit to the Thar, when he said to me, "Tumhe chalna hai" (you have to come), my instant reaction was, "My pleasure, Sir."

On the sunny afternoon of 12th December 2001, I went to receive Dr. Rahmani at the Jodhpur Airport. It was very amusing to hear him retort "Arre bhai hame angrez mat samjho" (don't take me to be a foreigner), on being overcharged at a taxi stand. Soon we were at the guesthouse run by an old friend of Dr. Rahmani, Y.D. Singh, who is also dedicated to saving the Godawan, where Manoj Kulshrestha joined us, coming straight from Jaipur. At the office of the Zoological Survey of India, on the outskirts of Jodhpur, Dr. Rahmani gave a wonderful presentation on the Godawan. Kalu Ram, who is working on bats, also joined us and we decided that the convoy would leave for Jaisalmer early the next morning.

Dr. Rahmani is very particular about punctuality, amongst other things, and we knew he would be leaving at the decided time of 9 a.m. However, though late by about half an hour, we were excused because I had taken Manoj to the All India Radio studio in the morning in connection with a radio broadcast, explaining this phase of the 'Godawan Bachao Abhiyaan' (Save the Bustard) campaign, to listeners. Very soon we were on the road, birding, where we found a dead Eurasian eagle-owl (Bubo bubo) and a steppe eagle (Aquila nipalensis).

By evening we were in the forest guesthouse of Jaisalmer, making preparations for the *Shobha yatra* (procession). Manoj, in particular, had worked very hard, meeting people, going to schools and talking to local journalists. By the end of 15th December we were ready with our plans and began distributing invitations along with press notes to all the local journalists.

Getting up early the next day (though not as early as Dr. Rahmani, who would often be up and working even at 4 a.m.), we left for Gadisar pond from where the procession of the Godawan statue

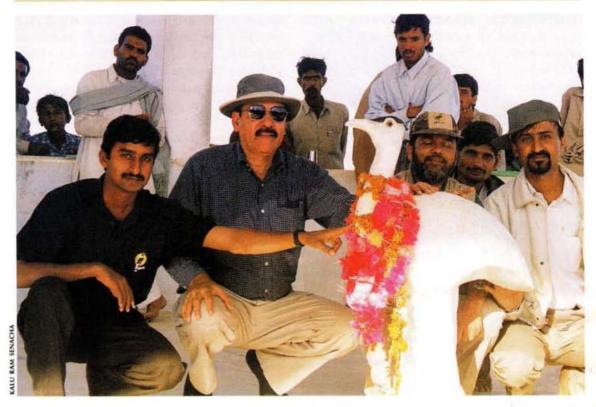
was to start. All of us decorated a hand pulled cart on which the beautiful marble statue was placed and soon the convoy was on its way.

Children raising slogans of "Aao aaj kasam ye khaye, Godawan ko sada bachaye", (we swear today that we will always save the bustard), shopkeepers peeping out of their shops, women looking out of the jharokhas of their houses, it was like a festival on the streets of Jaisalmer! On reaching Hanuman Chowk, the statue was transferred into a jeep and soon we were on the road, leaving Jaisalmer behind us. Our first stop was Lanela at 2 p.m. followed by Bhadasar, Mokla and Sanu. Whenever we stopped, Kalu Ram and Narayan Singh Ratnoo quickly gathered an audience and even Anand, who didn't quite understand a word of either Hindi or Rajasthani, never stopped using his body language to convince people of the need to save the Godawan! Our day finally ended at Habour (also known as Poonam Nagar) where we had a great reception.

Next morning, in the beautiful village of Leela, we were taken to the local school, where the teacher offered us a cup of tea. After stopping



The locals and school children participated very enthusiastically in the procession of the Godawan statue



The Godawan statue finally reached the temple in Sankhla its destination after a long journey

at Parewar and Khiyan we entered Mandha. Dr. Rahmani went to a local grocery shop owned by Khet Singh, whom he had given a poster of the *Godawan* to display during his last visit here. Fortunately, the poster was still there on the wall and Khet Singh was heard saying "Thank God the poster is intact otherwise the *Godawan wala sahab* (Dr. Rahmani) would have been upset with me!" At Nehrai, our next stop, I tried my skills as a broadcaster making announcements from a jeep for the conservation of the *Godawan*.

We were now headed for our final destination where the statue of the *Godawan* was to be installed, in the village of Sankhla. By 2.30 p.m. we entered the village and went straight to the temple of Harbuji where at least 50 villagers had been waiting for us. The floor of the temple

was then washed and with due veneration the statue was mounted in front of the deity. I had never seen Dr. Rahmani so happy! He knew that the local people and their faith in conservation, alone, could save the bustard.

The ceremonies over, as we sipped tea at the residence of Prayag Singh, a villager deeply committed to our cause, I heard Dr. Rahmani telling the villagers, "Godawan hain tab tak hi ham yahan aayenge" (I'll keep coming only as long as the bustard is here). Knowing about his unique bond with the Thar, its people and the Godawan, I sensed that he was sharing both his love and his fear! Many people in the Thar are now interested in saving the Godawan because they know that they'll be asked about it by the 'Godawan wala sahab'. Long live Godawan!

"Man has learnt to fly like a bird and swim like a fish, but he has not yet learnt to walk like a man" — Maxim Gorki



The common rose-ringed parakeet has been around for years, but the Alexandrine that was once seen in the wild had disappeared for many years.

suburb of Bandra is surrounded by coconut palms, fish tail palms and bellflower trees, and overlooks the crowns of a group of pongam trees, watching birds has become a part of our daily life. Of these, the common rose-ringed parakeets (Psittacula krameri) have been around for years, feasting on buds, perching on wires, and flying or calling in noisy parties. They probably nest in holes in the building, but are discreet about it. It was in August 2001 that we first saw a parakeet, which looked and sounded quite different. With binoculars, we identified it as a male Alexandrine parakeet (Psittacula eupatria), characterised by its large size, red shoulder patches and a prominent pink collar. Next day it was back with two companions and then several more, and we soon became used to their loud, rather harsh shrieks of kee-ah kee-ah as they flew and wheeled about in small parties. Though they breed in the Sanjay Gandhi National Park, Alexandrine parakeets have not been seen around here for many years. It is possible, however, that they were once found wild in Bandra when it was part of Salsette Island north of Bombay (=Mumbai). As they are popular cage birds, one likely explanation for their sudden reappearance could be that these are birds that have escaped from captivity. Alexandrine parakeets believed to be cage escapees, perhaps released by a trader fearing a raid, have been seen in different parts of Mumbai before. The skewed sex ratio supports this theory, since buyers prefer the more showy male birds.

Right from the time they first appeared, the parakeets took a great deal of interest in a dead coconut palm, about 15 m high with its crown fallen off and tip tilted to one side. It had a crack in the trunk, wide enough for them to enter from the opposite side. Four or five of the birds would investigate it all at once, shrieking all the while. In early January 2002, with courtship activity in full swing, we noticed that two of the females were in much demand, while the third was ignored. Perhaps she was too young and not in breeding condition? Mating and courtship feeding took place on the cable wire, and in the trees, and one pair seemed to take possession of the dead tree. It was much later, however, that we realised that there were two nests, one had an entrance hole excavated about a foot and a half below the natural crack, nearly out of sight on the opposite side.

Eggs were laid probably between the 5th and 8th of January. On these days, as the male parakeets sat quietly on top of the tree during the morning hours, the female was seen flying out of the crack, twice. The weeks that followed saw the parents quietly slipping in and out of the nests, though sometimes small flocks made an appearance and very noisily advertised their presence in the palms around the nest tree. By the end of February we would see heads peering out of the nests, then disappearing inside again.

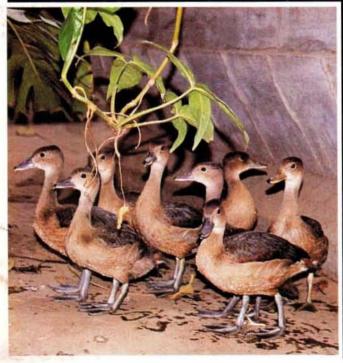
The 12th of March was marked by a flurry of activity around the nests. While a female sat on the cable wire, the male sat outside the nest, calling repeatedly, and often putting his head into the crack without entering. The second male joined him and started calling at the hole on the other side.

When this went on for some time without anything happening, we were sure that the nestlings must be ready to fly. Next day, however, the nests seemed deserted, and as no parakeets came near this particular coconut grove for two days, we thought we had missed the opportunity of finding out if the young had fledged successfully. Then on the 15th, four Alexandrine parakeets suddenly appeared on the wire. One was a brightly collared male, while two others had distinctly stumpy tails though they were only slightly smaller than the adults. More parakeets soon arrived, and we counted 11 birds in all, of which three seemed to be juveniles.

So, have Alexandrine parakeets established themselves in Bandra? We hope so, as these birds are no exotics, and must have been part of the original bird fauna of this area. But it is difficult to be sure yet. Next year there will be more pairs to be accommodated, and it remains to be seen whether there are sufficient breeding sites to sustain a viable population. Till then the birds are still keeping a territorial eye on the area, calling incessantly when kites settle on or near the old nest tree. What is encouraging to note, however, is that there seems to be no conflict between the Alexandrine, and the smaller rose-ringed, parakeets. The two groups keep apart and the roseringed seem to be interested only in holes in the buildings around us.

The common rose-ringed parakeet group kept away from the Alexandrine parakeet group. They seemed to be interested only in holes in the buildings.





Success Story

Text and Photographs:

AMRITA PATEL

Amrita Patel is presently the Chairman of the Foundation for Ecological Security at Anand

THIS IS AN ACCOUNT

of the eight whistling teals that I raised and can be seen in the pictures. These were raised from a clutch of eggs laid and hatched by a pair of wild teal that nested, for the second year in succession, on the roof of my home in Vallabh Vidyanagar. The hatchlings fell off the roof, but fortunately into a thick bush in my garden. To save them from the feral domestic cats that infest the surrounding area, I rescued and raised them to adulthood on a diet of bajra, earthworm and poultry feed fish meal, in the courtyard of my house. For weeks, the wild parents would fly into the courtyard everyday to spend the day with their young, unmindful of people in their proximity walking back and forth along one side of the courtyard. At night, the parents left when the young had to be collected and put away in a cage to save them from the cats. The parents would return predawn every day and would take turns to be with their young. Once fully fledged, they all took off on their own to join the wild teals in nearby waterbodies.

I also raised white-breasted waterhen chicks. The parent birds have hatched chicks in my garden for ten years. All of them have been taken by crows.

Unusual Partners



The meeting of land and water birds at the same feeding ground is indeed an unusual sight

Text and photograph: BHARAT RUGHANI

Bharat Rughani is a wildlife enthusiast, photographer and a BNHS member

I am lucky to be a resident of Porbandar, which is known as a haven for birds. For the last ten years I go to Chopati (sea coast of Porbandar), daily, to feed grains to pigeons. In the first week of November 2000 during one such visit, I realized that the pigeons were not the only birds present. The black-tailed godwits (Limosa limosa), who are waders, were also picking at the grains on the ground! I was surprised to see water birds amidst these land birds, and thought that their presence was just an accident. But the godwits returned the next day and the next, and each time they arrived in greater numbers than the previous day. Slowly their number reached about 150, which was more than the pigeons. I saw the godwits mostly in the evening from 5 to 6 p.m.

After ten or fifteen days there were new guests at the party — ruff (*Philomachus pugnax*). In the beginning, there were about eight to ten of them, but within a week their numbers gradually

increased to about a hundred. The new arrivals fed faster than the pigeons and the godwits.

My presence did not seem to bother the hungry birds who would come as close as a metre, while I was still parking my bike. Even the slightest movement from my side was ignored. The birds were so familiar with the place that the passage of people and vehicular traffic a short distance away did not seem to affect them.

As a photographer and bird watcher I am used to visiting birds in the wild, but never did my subjects allow me to get so close. In this case, not only could I get stills from close quarters, but I could also video shoot them.

This unusual gathering continued into the next year, but by the second week of February the godwits had departed, while the ruff left by the end of March. The birds were all back and together again in March 2002. The godwits were, however, fewer in number than last time, but I am certain that their tally will soon equal that of last year.

HAS THE **PIED TIT** POPULATION

IN WESTERN KUTCH RECOVERED?



Text and Photograph: J.K. TIWARI

J.K. Tiwari is presently working at the Seawater Farms, Eritrea, East Africa

The Kutch district of Gujarat was hit by cyclones for two consecutive years. The first one struck on June 8, 1998, while the second, which was more destructive, hit Abdasa and Lakhpat areas in western Kutch on May 19 & 20, 1999. Both the areas are well-known for their pockets of good tropical thorn forest and scanty scrubland. Several Acacia forests, a favourite of the pied tit (Parus nuchalis), were uprooted in this cyclone. Thousands of passerines and ground roosting birds were killed in the heavy rains, accompanied by strong winds of 80 to 240 km/hr, that continued for 48 hours. After the 1999 cyclone till June 2000, i.e. for about 13 months, not a single sighting of the pied tit was made either by me or any other bird watcher of Kutch.

Kutch district is blessed with some of the best bird watchers like M.K. Himmatsinhji, S.N. Varu, Navin Bapat, Kavi Taej, Ashwin Pomal and Forest Guard A.O. Langa, none of whom had come across the pied tit in western Kutch in those 13 months. It was thus presumed that the pied tit could not survive this natural calamity, at least in western Kutch. The recovery in population will take some time. Till then a long term monitoring study on the presence of the tit in these areas is necessary.

Observations on the status of the pied tit in India indicate that the survival of this endemic species is dependent on the conservation of the tropical thorn forest and protection of dead and decaying Acacia trees.

The main causes of deforestation in Gujarat and Rajasthan are illegal charcoal making, gathering of fuel wood, invasion of exotic plants into the habitat of the tit and many other forest bird species. Exotic plants like *Prosopis juliflora* and *Lantana camara* have infected many parts of Gujarat, Rajasthan and Biligirirangan hills. These plants have spread like weeds and should be used for fuel wood and charcoal making under strict supervision of the Forest Department and help of village headmen.

Rising global temperatures: a cause for concern

LESTER R. BROWN

Sent by: Earth Policy Institute

emperature data for the first 11 months, from the Goddard Institute for Space Studies, indicate that 2002 would most likely be the second warmest on record, exceeded only by 1998. The temperature for the first 11 months averaged 14.65 °C, down slightly from the record high of 14.69 °C in 1998, but well above the average temperature of 14 °C that prevailed from 1951 to 1980.

Studying these annual temperature data, one gets the unmistakable feeling that temperature is rising and that the rise is gaining momentum. A year ago, we noted that the 15 warmest years, since record keeping began in 1867, had occurred since 1980. Barring a dramatic drop in temperature for December, we can now say that the three warmest years on record have come in the last five years.

In addition to the long-term annual temperature trend, recent monthly data also indicate an accelerating rise. In contrast to local temperatures, which fluctuate widely from season to season, the global average temperature is remarkably stable throughout the year because the seasonal contrasts of the northern and southern hemispheres offset each other. The temperature for January 2002 of 14.72 °C was the highest on record for January. The 14.91 degrees for March made it the warmest March on record. And in seven of the next eight months — April through November — the temperature was either the second or the third warmest. October was the fourth warmest.

Since 1980, decadal average temperatures have risen well above the 14 °C average for the span from 1951 to 1980, which is defined as the



norm. During the 1980s, the global temperature averaged 14.26°. In the 1990s, it was 14.38°. During the first three years of this decade (2000-2002), it has been 14.52°.

Rising temperature does not come as a surprise to atmospheric scientists who analyze the climate effects of rising atmospheric levels of carbon dioxide (CO₂), the principal greenhouse gas. Each year, since detailed record keeping began in 1959, the concentration of CO₂ in the atmosphere has climbed to a new high, making it one of the most predictable of all global environmental trends.

The rise in atmospheric CO₂ levels is the result of massive fossil fuel burning that has simply overwhelmed nature's capacity to absorb carbon dioxide. The temperature rises observed over the last two decades are in line with the results of research using computerized global climate models to project the effects of rising CO₂ levels on the earth's climate.

The Intergovernmental Panel on Climate Change (IPCC), a group of more than 1,500 of the world's leading climate scientists, report that if atmospheric CO₂ levels continue to rise as projected, the earth's average temperature will rise by 1.4-5.8 °C during this century. The lower

end of the projected increases would lead to a 0.14 degree rise in temperature per decade during this century, roughly the same as during each of the last two decades of the last century. But the higher end of the projected temperature range means an increase of nearly 0.6 degrees per decade, a rate that could be extraordinarily disruptive to both the earth's ecosystem and the economy that depends upon it.

There are many manifestations of a higher temperature other than thermometer readings, including deadly heat waves, scorched crops, and melting ice. In May 2002, a record heat wave in southern India with the temperature reaching 45.6 °C claimed more than 1,000 lives in the state of Andhra Pradesh alone. In societies without air conditioning [or even other means of cooling — Eds], there is no ready escape from the dangerous heat. To India's north, the temperatures in Islamabad, the capital of Pakistan, soared to 47 °C during June.

Farmers now may be facing higher temperatures than any generation of farmers since agriculture began 11,000 years ago. Crop yields have fallen as temperatures have climbed in key food-producing countries, such as the United States and India. Many weeks of record or near-record temperatures this past summer in the northern hemisphere, combined with low rainfall, withered crops in many countries and reduced the 2002 world grain harvest to 1,813 million tonnes, which was well below the projected consumption of 1,895 million tonnes.

Crop ecologists at the International Rice Research Institute in the Philippines have recently reported that rice fertilization falls from 100 percent at 34 °C to essentially zero at 40 °C. Scientists in the U.S. Department of Agriculture are seeing a similar effect of high temperature on other grains. The scientific rule of thumb is that a 1 °C rise in temperature above the optimum reduces grain yield by 10 percent.

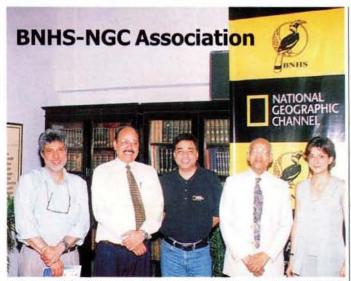
One of the most sensitive indicators of higher temperature is ice melting. Scientists now report ice melting in all the world's major mountain ranges, including the Rocky Mountains, the Andes, the Alps, and the Himalayas. In Alaska, where temperatures in some regions have risen 5-10 °C over the normal, ice is melting far faster than had earlier been reported.

On Africa's snow-covered Kilimanjaro, the area covered by snow and ice has shrunk by 80 percent since 1900. Lonnie Thompson, Ohio State University glaciologist, reports that all the snow and ice there may disappear by 2020. For Americans, another landmark — Glacier National Park — may be forced to change its name. Half of its glaciers have already disappeared, and the U.S. Geological Survey projects that the remaining ones will disappear within the next 30 years.

Scientists report that ice cover in the Arctic Ocean shrank to 2 million square miles this summer compared with an average of 2.4 million square miles during the preceding 23 years. The thinning of the ice is proceeding even faster. Since this ice is already in the water, its loss will not affect sea level, but when incoming sunlight strikes snow and ice, 80 percent of it bounces back into space and 20 percent is converted to heat. Conversely, when the incoming sunlight hits open water, only 20 percent is reflected and 80 percent is converted into heat, warming the region.

Scientists are concerned with this warming because Greenland lies largely within the Arctic Sea. This past summer ice melting occurred over 686,350 sq. km of the Greenland ice sheet — 9 percent more than the previous maximum. If the Greenland ice sheet, which is 2.41 km thick in some areas, were to melt entirely, sea level would rise 7 m. What happens to the ice in the Arctic Sea and the climate in the region is of concern to the entire world.

Changing the earth's climate is a serious matter, one that should not be taken lightly. The risk is that climate change could soon spiral out of control, leaving future generations with soaring temperatures, withered harvests, deadly heat waves, melting ice, and rising seas. If we do not act quickly to stabilize climate, our grandchildren may never forgive us.



L-R: Mr. Rishad Naoroji, EC Member, BNHS, Dr. A.R. Rahmani, Director, BNHS, Mr. Zubin Gandevia, Managing Director, NGC, Mr. B.G. Deshmukh, President, BNHS and Ms. Dilshad Master, Senior Vice President, NGC at the launch party

The BNHS-NGC Association was launched, in October 2002, to promote and support each other in mutually beneficial initiatives. Speaking on the occasion, Mr. Zubin Gandevia, Managing Director, National Geographic Channel said, "We are delighted to associate ourselves with the Bombay Natural History Society — an institution that is 120 years old and has

dedicated itself to the cause of nature conservation in India. The alliance between BNHS and NGC will concentrate on creating awareness and increasing interest in various aspects of natural history in India. We look forward to your active participation as esteemed members of the BNHS to make this association a resounding success...with our combined strength we hope to reach out to more people like you who believe in the 'Spirit of Exploration and Adventure' - the spirit, which embodies both our organisations". The BNHS-NGC Association aims to promote activities of the BNHS in a three-pronged integrated approach on ground, on air and online. Interactive events, screenings, camps and guest lectures will be held, natural history causes will be supported on the Channel through Public Service Announcements and an Explorer's Club will be set up on the National Geographic website to bring together like minded individuals

Gerry Martin in Mumbai

BNHS in collaboration with the National Geographic Channel (NGC) had arranged 'A day with Gerry Martin' — NGC's Indian Adventurer, at the BNHS Conservation Education Centre (CEC) in Goregaon, Mumbai on a Sunday morning in December, 2002.

It was truly a bonus for Gerry Martin's fans in Mumbai, who came with friends and families at the CEC. The day began early with a nature walk. Though no reptiles were encountered during the walk, the members had a good opportunity to interact with Gerry who on returning introduced them to some captive live snakes. He answered a volley of queries and myths about these most misunderstood creatures and also gave a slide show. The programme concluded with a quiz on reptiles with winners getting NGC caps and T-shirts.

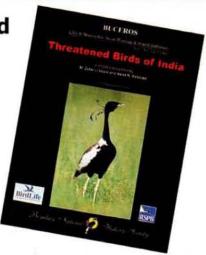


Book on Threatened Birds Released

Seventy-eight out of the 1,224 species of birds in India are in danger of extinction, mainly due to habitat destruction, habitat fragmentation, poaching and trapping. The Bombay Natural History Society (BNHS), along with other conservation organizations and the Government, is working to prevent this extinction.

THREATENED BIRDS OF INDIA by Zafar-ul Islam and Asad R. Rahmani briefly describes all the 78 bird species that are threatened, including the 8 species considered as Critical and in immediate danger of extinction. In the critical list are the pink-headed duck *Rhodonessa caryophyllacea* last seen in 1935, the mountain or Himalayan quail *Ophrysia superciliosa*, last seen in 1876 near Mussorie in Uttaranchal.

The book has been published under the Environment Information System (ENVIS) of the Ministry of Environment and Forests, Government



of India. Mr. S.C. Sharma, Addl. Inspector General of Forests (Wildlife), Ministry of Environment and Forests, released the book at a gathering of leading conservationists and ornithologists of India.

The book is available at the BNHS for Rs. 100/- (Includes postage). For further details write to: IBAbnhs@vsnl.net :



Mr. B.G. Deshmukh, President, BNHS felicitated the Aureus member Mr. F.D. Gheyara at the AGM

Senior Members Felicitated

while we worry about the dwindling membership of the Society, it is very heartening to know that there are several who have been members of the Society for more than 50 years. To acknowledge their continuing association with the Society, some of them who could attend were felicitated at the Annual General Meeting of the Society held in November, 2002.

I wish to purchase	copies of
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A contemporary fieldguide, the book covers 179 species of reptiles and amphibians all of which are illustrated with line drawings, photographs and paintings from the Journal of the BNHS. Interesting snippets of historical information add to the rich text.



BNHS PUBLICATIONS: A TRADITION OF EXCELLENCE