

BIRDS
IN THE SUN





Frontispiece

WHITE-BREADED KINGFISHER

BIRDS IN
THE SUN
Beautiful Birds of India

TEXT BY

The Rt. Hon.

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PHOTOGRAPHS BY

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Contents

	<i>page</i>		<i>page</i>
PHOTOGRAPHER'S FOREWORD	7	GREEN BEE-EATER	76
A SUMMER OF PHOTOGRAPHY	9	INDIAN ROLLER	78
LARGE EGRET	32	INDIAN HOOPOE	80
LESSER EGRET	34	CRIMSON-BREASTED BARBET	82
PADDY-BIRD	36	GREEN BARBET	86
WHITE-NECKED STORK	38	GOLDEN-BACKED WOODPECKER	88
PAINTED STORK	40	GOLDEN ORIOLE	90
BLACK IBIS	42	BLACK DRONGO	94
NEOPHRON	44	RED-WHISKERED BULBUL	96
WHITE-BACKED VULTURE	46	RED-VENTED BULBUL	98
TAWNY EAGLE	48	YELLOW-EYED BABBLER	100
WHITE-EYED BUZZARD	52	JUNGLE BABBLER	102
COMMON PARIAH KITE	54	ASHY WREN-WARBLER	104
SHORT-TOED EAGLE	56	MAGPIE ROBIN	106
PEAFOWL	60	INDIAN ROBIN	108
RED-WATTLED LAPWING	62	TAILOR-BIRD	110
BLUE ROCK PIGEON	64	BAY-BACKED SHRIKE	112
LITTLE BROWN DOVE AND INDIAN RING DOVE	66	PURPLE SUNBIRD	114
GREEN PARAKEET	68	WHITE-EYE	118
CROW PHEASANT	70	BAYA WEAVER-BIRD	120
PIED KINGFISHER	72	BRAHMINY MYNAH	122
WHITE-BREASTED KINGFISHER	74	COMMON MYNAH	126
		INDEX	128

Illustrations

	<i>page</i>		<i>page</i>
LARGE EGRET	33	INDIAN ROLLER	79
LESSER EGRET	35	INDIAN HOOPOE	81
PADDY-BIRD	37	CRIMSON-BREASTED BARBET	83, 85
WHITE-NECKED STORK	39	GREEN BARBET	87
PAINTED STORK	41	GOLDEN-BACKED WOODPECKER	89
BLACK IBIS	43	GOLDEN ORIOLE	91, 93
NEOPHRON	45	BLACK DRONGO	95
WHITE-BACKED VULTURE	47	RED-WHISKERED BULBUL	97
TAWNY EAGLE	49, 51	RED-VENTED BULBUL	99
WHITE-EYED BUZZARD	53	YELLOW-EYED BABBLER	101
COMMON PARIAH KITE	55	JUNGLE BABBLER	103
SHORT-TOED EAGLE	57, 59	ASHY WREN-WARBLER	105
PEAHEN	61	MAGPIE ROBIN	107
RED-WATTLED LAPWING	63	INDIAN ROBIN	109
BLUE ROCK PIGEON	65	TAILOR-BIRD	111
LITTLE BROWN DOVE—RING DOVE	67	BAY-BACKED SHRIKE	112, 113
GREEN PARAKEET	69	PURPLE SUNBIRD	114, 115, 116, 117
CROW PHEASANT	71	WHITE-EYE	119
PIED KINGFISHER	73	BAYA WEAVER-BIRD	121
WHITE-BREASTED KINGFISHER	2, 75	BRAHMINY MYNAH	123, 125
GREEN BEE-EATER	77	COMMON MYNAH	127

Photographer's Foreword

by Christina Loke

FOR the photographs in this book I used a 3×4 Speed Graphic camera fitted with three different lenses—8 inches, 10 inches and 14 inches. The 10-inch lens is my favourite, and I make my calculations according to it. The hide containing the camera is placed at various distances from the nests according to the size of the bird. For instance, if the bird is 12 inches long, my camera using the 10-inch lens is placed 6 feet away. In other words, I divide the length of the bird measured in inches by two, and place the hide at the resultant number of feet away from the nest. However, in the cases of very small birds, such as a 4 inches long Purple Sunbird, I use an 8-inch lens, otherwise I find that I am too close to the subject. My positioning of the hide depends on the sunlight. Most birds choose to nest in dark places in trees or shrubberies. To supplement the daylight, I use an Ascor flash equipment with two lamps which, apart from giving me adequate light, also gives me a speed of approximately $1/5000$ th of a second. A 6-volt car battery is used to charge it.

In circumstances where there is enough sunlight on the subject, I place my hide so that the sun rises slightly to my right. For a hide placed in this position I find the time for the most worth-while photography is from dawn until 11.00 a.m.

I prefer to use flashlamps for colour photography. I discovered that flashlight gives a more consistent colour than daylight, and it is possible with very careful calculation to get an accurate colour rendering. Sometimes I combine sunlight with flash. When the sunlight is very strong I use my flash as the fill-in light to eliminate dark shadows. This system has been fairly successful with a number of my coloured as well as black-and-white photographs.

Photography in India during the summer months is extremely hot work. The temperature in the shade is for long periods around 109 degrees, and in the hide it is several degrees hotter. I always bring one extra set of clothes, because before very long I find that I am soaked through. It is important to keep one's dripping perspiration away from the flash equipment. Early on in my photography my perspiration used to drip on to my power-pack, with the result that I got nasty electric shocks when I touched the cable release to get a picture. My most unnerving experience was when I was photographing the Common Pariah Kite. I experienced three electric shocks that morning, and it took all my determination to touch the cable release the fourth time. However, I learned very quickly what caused the shocks, and always made sure afterwards that the power-pack was placed to one side of me, so that my perspiration did not drip on it. In July when the monsoon began I found photography much more trying, even though the temperature fell by 8 or 9 degrees. The humidity rose so greatly that I gave up all idea of changing in the

hide, because I could never keep myself dry. I was constantly soaked from head to foot by my own perspiration.

Other paraphernalia which I brought with me to the hide, apart from my camera, exposure meter, tripods (three in all—two for the flash lamps and one for my camera), motor-car battery, power-pack, brush to clean the lenses (this was very important, as during the summer, before the rains started, there used to be terrible dust storms), were a white floral nylon scarf, three rubber bases, a stool (to sit on), a big Thermos full of ice, plus large bottles of ginger-beer, my lunch consisting of either cold roast chicken or sandwiches, large safety pins or clothes-pegs to cover up old peep-holes which had been cut in the hide wall where they were not now wanted, a bottle of Elizabeth Arden Velva cream which I applied generously both on my lips and on my face to prevent chapping, and a small face mirror which was not used on myself but to read and adjust the exposures on the camera.

The white floral nylon scarf which I used constantly was one of my most important discoveries. I found out that I could make a fairly large hole in the hide to enable me to watch the bird with a certain amount of comfort for my watching eye, without the bird noticing me, by covering the hole with the nylon scarf pulled taut across the hole.

I used the rubber bases (taken from the legs of beds), on the legs of my camera tripod to prevent the camera from moving during the severe wind and dust storms. Of course, I did not attempt to photograph when the dust was too thick on my lens; but at times when I was 20 feet or more above the ground and not too much of the dust rose above that height, I continued with my photography.

I hope I have not made bird photography in India sound too gruesome, but I must say that apart from the heat, for quite a lot of the time, photography was comparatively easy, particularly when the photography was done in Mr. MacDonald's garden, or in the garden of Mr. R. R. Hadow, Mr. K. P. Mithrani and Mr. Nehru. However, the more difficult the photography, the more rewarding the results seem to be; and I do not think one can find finer pleasure than the thrilling pleasure of a bird photograph which luckily turns out well.

Acknowledgements

We are grateful to MRS. USHA GANGULI of Delhi for interesting information about some species described in this book, which has helped in the writing of the text; to the illustrious DR. SALIM ALI for much encouragement and guidance; to MR. ERIC HOSKING, perhaps the greatest of all bird photographers, for friendly advice in connection with the pictures; and to MR. I. J. FERGUSON-LEES, for authoritative help on various scientific ornithological matters

MALCOLM MACDONALD
CHRISTINA LOKE

A Summer of Photography

by Malcolm MacDonald

THIS book is a portrait gallery of Indian birds by that unique camera-woman, Christina Loke. There are many fine masculine photographers of wild birds, but she is one of the few members of the supposedly weaker sex who practise the art. Their rarity probably springs from the fact that bird photography requires of its devotees not only marked technical and artistic skill, but also considerable powers of solitary, patient, uncomfortable and dizzy physical endurance in tree-top "hides". It is perhaps all the more remarkable that Christina Loke possesses those testing qualities because she is a Chinese lady famous in South-East Asia for her delicate beauty. Her slim figure and serene features seem as fragile as a lotus flower. However, the frail loveliness of the lotus is in some ways deceptive, since the bloom has a hidden strength which enables it to survive many storms. So the comparison is just.

Chris Loke came to India for nearly four months in 1959 to take photographs for a book I was writing about the birds of Delhi.* My wife and family had escaped from the excessive heat of the Indian summer, and gone on holiday elsewhere; so our house was turned temporarily into a photographers' studio. Chris was accompanied by her expert technical assistant, Mr. C. Y. Hwang, who developed and printed all her films. She should have been joined also by her husband, the renowned bird-photographer Loke Wan Tho, who was to share equally with her the task of providing illustrations for our volume; but his anxiety about political prospects in Singapore—the centre of his vast business interests—following the victory of the People's Action Party in the General Elections there that year made him cancel his visit at the last moment. As a result Chris had to double her efforts, for she must now secure not only all the pictures of species which she intended to take, but also all those which he had planned to photograph. It meant a formidable increase in her work in the extremely trying conditions of a Delhi summer.

She worked unflaggingly, often from sunrise until sunset, and took more than three thousand photographs of nearly sixty different species of birds. Six hundred of the pictures were in colour, and the rest were black-and-white shots. Dr. Salim Ali, the greatest of Indian ornithologists, says of them: "Many of them are the finest pictures of Indian birds in existence."

Throughout her busy hundred days Chris was usually cooped up in a bird-photographer's "hide"—a small, tent-like canvas structure measuring four feet square and five feet high—with a camera and other photographic equipment as her sole companions. The hides were built anywhere from ground-level to eighty feet up in the air, according to the elevation of the nest which she happened to be "shooting"

* *Birds in my Indian Garden*, by Malcolm MacDonald, illustrated by Christina Loke, published by Jonathan Cape.

at the time. Much of her work was done in villages scattered here and there for twenty miles around Delhi, where lordly creatures like eagles, storks, ibises and egrets reared their young in tall trees amidst the rustic peace.

Such activity by any woman would have aroused curiosity amongst the incorrigibly inquisitive Indians, but that she should be a Chinese female greatly magnified their astonishment. The peasants were amazed that an exquisite, sylph-like girl with strange, slanting black eyes and an ivory complexion should climb the rickety ladder to a lofty hide and sit all day alone there, contemplating only a bird's nest a few feet away—like some particularly eccentric and unusually beautiful sadhu. Her fame spread through the countryside, and in bucolic gossip she became a sort of legendary figure. Whenever she arrived friendly, enquiring and nonplussed crowds turned out to meet her and the attendant Indian bearer who carried her heavy camera, tripods, flashlamps, battery and picnic basket. The village women in particular found her exotic appearance and unorthodox occupation subjects for ceaseless, fascinated feminine chatter; and their children were similarly uninhibited in frank, wide-eyed curiosity. But those simple and charming, if insatiably inquisitive, folk were always inspired by boundless goodwill. They and Chris became warm friends—though they perhaps never quite made up their minds whether she was an inspired genius or a pathetic lunatic.

Their interest was sometimes embarrassing, since it could seriously impede the work of photography. For example, the nest where Chris got her remarkable pictures of Short-toed Eagles was built in a low tree surrounded by fields a mile or so from two villages. When the local maids and matrons heard that she had arrived and settled in the hide there, they trooped in large numbers across the fields to see her. Processions from both hamlets wended their ways like pilgrimages along sunny footpaths, talking and laughing as they went; and they finally met and squatted on the ground beside a hedge thirty yards from the eagles' retreat. They showed every sign of having come to spend the day there, where they could sit and gossip and catch occasional glimpses of Chris as she peered through her spy-hole in the tent, or adjusted the flashlamps on the platform, or performed some other odd antic of a bird-photographer. Naturally, as long as they remained, no parent eagle would pluck up courage to descend from the skies with food for its nestling; so a bearer guarding the hide from a discreet distance approached them to explain this awkward situation. They took a lot of persuading; and only after much lively argument and counter-argument did they reluctantly consent to rise, retrace their steps, and disappear from the scene.

II

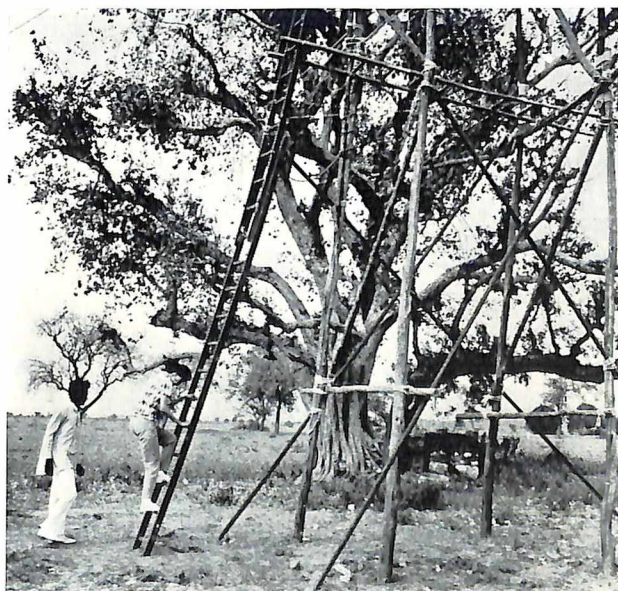
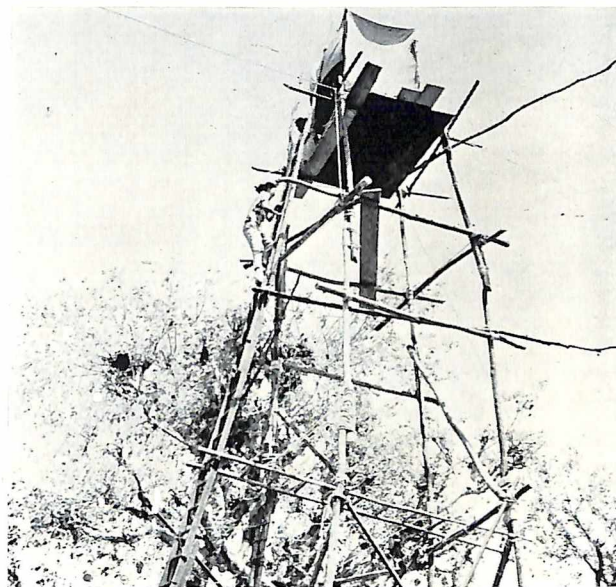
It was high summer in northern India. Always in the middle of the day the temperature registered over 100°F. in the shade, and sometimes it rose as high as 112° or 114°. Inside a hide the air was several degrees hotter, usually without even

the gentlest breath of wind to afford a little relief. The photographer had no choice but to endure such roastings hour after hour, day after day, and week after week, because most of Delhi's birds breed in the scorching months between March and September. So she crouched in her cramped, oven-like cell, making scarcely any movement, gazing unblinking through a peep-hole in its canvas wall, and dripping with perspiration as she waited for her winged models to arrive and strike suitable poses. She needed the zeal of a crusader, the patience of a saint, and the concentration of a fanatic to endure the ordeal.

At the opening of her campaign she weighed 104 lb., but after a few days she reported that her avoirdupois had dropped to 92 lb.

Nor was the customary merciless sunshine the only hazard provided by Nature. Sometimes other elemental scourges came to chastise and test her. Occasionally the sky darkened and a dust storm blew clouds of sand from the nearby Rajasthan desert

over her and her equipment; and later in the summer, after the monsoon broke, there were apt to be abrupt, unheralded torrents of rain. On other days hurricanes of wind arose to make sport with the hide and its occupant. I remember a sultry Sunday afternoon when I motored out to observe the photography of a White-backed Vultures' nest near Khanpur village, a dozen miles from Delhi. I settled on the ground in the shade of a tree some distance from the hide. Two hours earlier Chris had climbed (as is shown in the photographs of her on this page) to her tiny, tented perch forty



feet above the earth. A few yards away from her sat a solitary vulture chick on the pile of sticks which was its birthplace (see page 47).

As I scanned the heavens for any sign of a parent bird bringing food, a strong wind suddenly began to blow, and before long it waxed violent. It made Chris's high pinnacle sway somewhat, and the canvas walls and roof of her tent kept bulging, contracting and flapping in the breeze. I expected to see her emerge quickly, descend the ladder, and send a bearer up to rescue her camera. But she did not appear. The force of the gale increased, and the gaunt, precarious-looking scaffolding-poles on which the hide was propped strained sideways under its lash. Still there was no sign of retreat by the photographer. I thought she must be having difficulty in keeping her camera steady, and that her hopes of getting pictures must by now have vanished. Indeed, I feared she might be worried about not only her comfort but even her safety; so—having ascertained that there was no glimpse of a vulture anywhere in the sky, and that I therefore would not deter one from coming at that moment to have its portrait taken—I walked to the foot of the tower and called up to Chris that the tempest looked like persisting, and that she had better come down to solid earth. She answered in a brief phrase that she would stay where she was. I returned to my observation post, full of admiration for her courage—but expecting an early change in her resolution.

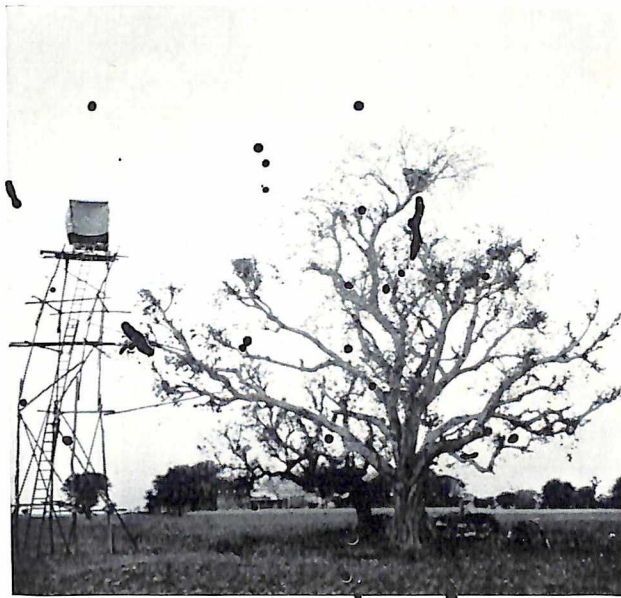
For the next three hours the wind continued to blow, and during that time it gradually bent the hide's tower alarmingly askew, as is illustrated in a snapshot on the next page; but Chris never so much as poked her nose outside her swaying, puffing and blowing tent. I had no means of divining how she felt, and only knew that I myself was distinctly anxious about her security. I expected every minute that she would quit; but I did not make any further enquiry of her, for we had an understanding that (except in case of dire necessity) she should never be disturbed by talk or other interference whilst she was in her hide, lest by mischance this occurred at some crucial moment in the photography. For all I knew she might be managing to get some interesting snaps of the storm-tossed young vulture in its tree-top; yet I could not help apprehending that she was receiving such a tossing herself that she was lying incapacitated on the floor of the hide. I would not have blamed her if she had been prostrate and dumb with fright.

Often two or three adult vultures soared in the sky above us; and I hoped that one of them would prove to be an owner of the nest, and that it would plane downward to its home. After three hours that was exactly what happened. A bulky, wide-winged, bald-headed bird circled leisurely for five minutes high above the nest, then began to drop towards the tree, and finally alighted at the nest-edge. In the meantime its hungry youngster had spied it from afar, and became very excited. Crouching with all its feathers extended and quivering in greedy anticipation of a meal, it called many times aloud to its parent to come as quickly as possible. When the elder arrived at its side, it screamed with glee as it opened wide its beak for food.

The grown-up vulture stayed a few minutes with the chick, feeding it by regurgitation, whilst a still vehemently blowing wind added an extra touch of wild abandon

to this voracious scene in the domestic life of the great scavengers. As soon as the adult bird had disgorged the meal, it spread its wings and leaped to a nearby bough. Then it departed; and immediately afterwards Chris appeared and hastily followed its excellent example.

By the time she arrived at the foot of her ladder I was there to greet her. She looked pale and exhausted, and told me that throughout the afternoon she had experienced great difficulty in preventing her camera on its tripod from



crashing overboard at every particularly furious gust of wind. She said she sometimes felt she had no alternative but to abandon her efforts, yet that she was so determined to get a picture of the adult bird's arrival—if it ever did arrive—that she stayed.

In the middle of a sentence she stopped speaking, walked a few yards away from me to a broken wall of a disused well, and bowed her head and bent her body there as if she were suffering agitation. Thinking she might be shedding a few quiet tears as a delayed reaction from her grim ordeal, I went to speak soothing words of congratulations to her—and found that she was giving an even more eloquent expression of delayed reaction. She was being air-sick! When she had completed that operation she told me she had succeeded in taking half a dozen black-and-white pictures of the two vultures together.

There was reason for her brave obstinacy that afternoon. Through three previous calm, quiet, almost wholly uneventful days she had sat in the hide awaiting an adult vulture's return to nourish the youngster—and the bird never put in an appearance. During those long sessions she made some attractive portraits of the nestling; but

she did not catch sight of either parent. Periodically she knew that one of them must be overhead, for at those times the chick would crouch with wings half spread and body quivering excitedly as it gazed beseechingly towards the sky and uttered heart-rending yells of hunger at its hovering elder. But the family breadwinner never summoned up enough resolution to descend. Gliding indecisively aloft, it gazed down dubiously at the strange wooden tower reared alongside the nest. Was this apparition friend or foe? The vulture could not tell. The phenomenon was beyond its experience, and its instinct was uninstructed as to what to do in such a circumstance. It wished to descend to appease its youngster's hunger—but that rude, new, forbidding structure made it hesitate. Why was the tower there? What was its purpose? Did it intend any harm? Unable to make up its mind, the old bird circled round and round in the heavens, sometimes starting to spiral downwards—which Chris could tell from the mounting crescendo of agitation affecting the youngster at those moments—but then resolving that discretion was the better part of valour, ascending again, and eventually flying away with the meat it had brought still stored in its gullet. At that the chick in the nest would look frustrated and cease its greedy calls—and Chris in her hide would fully share its sense of frustration.

For three long days the parent vultures could not pluck up courage to descend, and stayed prudently on high throughout the daylight hours. And for three long days the photographer had waited too, scarcely daring to move, hardly blinking an eyelid as she peered hopefully through her peep-hole, dripping perspiration and fighting fatigue.

Presumably the old birds visited their offspring after dark each evening, and fed it then; for every morning it appeared hale and hearty, filled with fresh juvenile energy, betraying no hint of galloping emaciation.

Only by the storm-wracked fourth day had one of the adults learned to regard the hide as a sufficiently normal, harmless feature of the landscape to treat it with indifference in daylight—in the circumstances which I have already described.

III

Different species of birds revealed different temperaments whilst they were being photographed. Some became extremely shy, not to say frightened, when a hide first appeared beside their nest, and these stayed away from the vicinity for many hours or even days before daring to come near. Others showed complete disregard for the new structure, and returned with food for their chicks immediately after a hide had been installed. Like the White-backed Vultures, a pair of King Vultures showed remarkable nervousness, and did not descend to feed their offspring in daylight for three days after the tower-top tent had been raised opposite their skyscraper apartment. Storks, ibises and eagles were other hypersensitive, reluctant models, though they usually overcame their apprehensions by the second day. Common Pariah Kites were less alarmed, revisiting at first cautiously and then confidently their nestlings within a few hours of a hide's erection. No doubt a factor influencing the diverse

conduct of different species was the frequency or infrequency with which they were accustomed to feed their young. It seemed that vultures perhaps brought an ample repast only once a day, whereas storks and eagles fetched fresh provisions several times each twenty-four hours. In the former case there was, therefore, not the same urgent compulsion to replenish a chick, for by habit its appetite could remain unappeased much longer.

Amongst the smaller species feeding took place more frequently, partly because there were usually more mouths to feed in a nest, partly because the individual rations were much tinier, and partly because the nestlings would stay in their cradles considerably shorter periods before flying into the outer world, and so had to mature more rapidly in comparison with their bigger contemporaries. But these creatures also displayed interesting contrasts in temperament. In some cases a difference appeared between the two sexes of the same species. Hen Golden Orioles and Magpie Robins, for example, after perhaps two or three hours of nervous absenteeism following the completion of a hide, were then persuaded by the chicks' pathetic cries for food to take the risk of visiting their homes; and when they learned that they could do this with impunity they quickly resumed regular calls. On the other hand, the cocks of those species would stay away for a day or more before resuming their customary share in the labour. Several times on the first day of a hide's establishment I saw a male Golden Oriole or Magpie Robin come to the nest-tree with a grub dangling from its beak, eye the hide apprehensively, hop indecisively from branch to branch progressively nearer the nest, and then turn tail and flee without delivering its gift—taking no chances of hostile action by the wood-and-canvas monster so closely spying on its family. It was an interesting demonstration of the greater strength of the maternal than of the paternal instinct in some—though not all—birds.

Jungle Babblers, whether male or female, showed little or no disinclination to come to a nest at once after a hide began to overlook it; and the same unconcern appeared in the cases of Green and Crimson-breasted Barbets. In contrast, Green Parakeets in similar circumstances showed long reluctance to enter their nest-holes. Both birds of a pair would stand around on nearby branches, looking beautiful, but staying maddeningly just out of range of the ready-focused camera, taking hours to make up their minds to satisfy their youngsters' hunger. And amongst the smallest species the same diversities appeared. White-eyes seemed utterly indifferent to the sudden appearance of a gigantic hide only three feet from their tiny nest. Purple Sunbirds—especially the males—were rather shy, and Ashy Wren-Warblers were apt at first to be acutely apprehensive.

IV

During those months of bird-photography, when Chris took pictures at many scores of varied sites, we experienced few mishaps. Once a young Common Pariah Kite in a nest where our team of workmen was building a hide took fright, shuffled

to the edge of its untidy home, and tumbled to the ground fifty feet below. There it lay unhurt, but gasping and helpless, until one of the men retrieved it, climbed the tree, and replaced it on the nest—at the risk of having his head viciously clawed by a parent bird dive-bombing him in misplaced protest at this kindly act. The youngster never again grew unduly alarmed, and survived into lusty maturity.

Otherwise there were only two accidents throughout those months. The first was amongst a colony of Painted Storks whose nests were lodged in tall trees in a remote village called Faridabad. It was an enchanting hamlet where large communities not only of storks and men but also of wild peacocks lived with mutual tolerance as neighbours together. We selected a likely storks' nest some sixty feet up in the air, and our zealous gang of labourers built a hide alongside it. Next day Chris was occupied elsewhere at a White-breasted Kingfishers' nest, so we left the birds at Faridabad undisturbed for thirty-six hours, trusting they would get used to the new structure and resume normal family life.

When a bearer climbed to the hide for a reconnaissance on the following morning he saw a sad sight. The chosen nest was deserted except for corpses of two chicks lying on it. The chicks had been so young that their sprouting quills had not yet burst into feathers; and they were thus insufficiently clad for their tender flesh's protection against the heat of a mid-day sun. Their parents customarily stood beside them with wings outspread like sunshades to shield them until they were fledged; but through the previous day those elders, frightened by the hide, had not dared to do so. So the youngsters were literally roasted alive. The tragedy lay heavy on our consciences; and our next essay at photographing Painted Storks—elsewhere in the same attractive village—was more prudently organised. The result was a magnificent set of pictures of stork family life, such as the photograph on page 41.

The second casualty had a similar cause. A nest of a pair of Crested Honey Buzzards was skied eighty feet in the air, and on it squatted a solitary youngster not yet fully fledged. I instructed our workmen to start building a hide, but to complete it gradually over three or four days, toiling only in the cool two or three hours in the early mornings and again in the last hour or two of daylight in the evenings, so that the parent birds were not alarmed, and came in the heat of each day to protect their chick. The plan worked well for the first three days; but owing to excess of zeal on the fourth, the men continued labouring far into the scorching daylight. They thus prevented the adult buzzards from visiting the nest—and again the young bird died of sunburn.

This second tragedy, following fairly close upon the first, had an almost disastrous effect on Chris. It upset her dreadfully. For more than two months by then she had worked many hours each day, day after day, with a patience and concentration that were very wearing, and in discomfort and heat that were exhausting. She had shown astonishing powers of endurance, being sustained not only by the intrinsic interest of her task, but also by the gratifying results attending it. Every evening C. Y. Hwang developed some of her latest crop of films, and the pictures usually appeared fine rewards for her trials and tribulations. But she was straining herself more severely

than she or we realised—and at the death of the young Crested Honey Buzzard her nerves snapped. She burst into tears and sobs, and for two days remained inconsolable. Her heart had gone out to every family of wild creatures whom she photographed; she felt partly responsible for the well-being of each one of them; and she blamed herself and the rest of us bitterly for the tragic end to the young bird of prey. Declaring repeatedly that she would take no more pictures, she was on the verge of making an irrevocable decision to that effect.

Fortunately on the following day our friend Khiman came to my house with news that he had discovered a new, compensating nest belonging to another pair of handsome Crested Honey Buzzards. Khiman was a sweeper—a member therefore of one of the lowliest castes in India—who earned a few rupees a day at his menial duties. In his spare time he searched for nests for us, partly from love of wild nature in general and of me in particular, but mostly in return for suitable financial reward. Whilst being the humblest type of servant, he was also a gay and perfect gentleman. He wore a high-crowned, long-tailed turban above a cheerful face in which sparkling eyes, flamboyant moustachios, and smiling lips were ingratiating features. His vanity was considerable, but forgivable; and I reciprocated his affection—again, partly for his own sake, and partly because of valuable services rendered.

With a self-satisfied twinkle in his eyes and a grin tilting his moustachios, he announced to me that he had found another, identical buzzards' nest. When I cross-examined him, two or three possible flaws appeared in his confident assertion. First, he said the nest lay in a small tree only twenty feet from the ground, which seemed to me a very un-Honey Buzzardly situation. Second, he proved incapable of describing the particular features by which he knew that the birds concerned were unmistakably of that same breed, merely declaring that they were big animals like the ones with which we had just suffered disappointment. Finally, he confessed that he had not himself seen the nest or the birds at all; they had only been reported to him by a brother who kept watch for him in a village some distance from Delhi.

The fact was that he himself found very few of the many nests of which he proudly claimed to be the discoverer. Like the head of some widespread Private Detective Organisation, he engaged a team of subordinates scattered through the countryside to act as his agents in uncovering confidential information about the private lives of hawks, egrets, owls, bee-eaters, and other winged creatures. What share his useful aides ever received of the considerable largess that I handed out to him for his (and their) valuable reports was one of his bits of confidential information which I never learned.

I now asked him the exact whereabouts of the new nest, and he said it lay in its tree beyond a village called Tilphata, more than twenty miles from Delhi. I felt discouraged, for I had regarded the alleged Honey Buzzards' nursery as a bait with which to tempt Chris back to interest in bird-photography; but a score of miles seemed a risky distance to lead her on an expedition of doubtful worth which might end in her complete and final disillusionment. Although many of Khiman's earlier "discoveries" had been valuable, others had proved over-optimistic. Not a trained

ornithologist, he was liable to describe every goose as a swan. Nor were any in his troupe of assistants more expertly knowledgeable. A nest which they alleged to belong to rare White Ibises was apt to be the property of familiar Cattle Egrets; the home of common Red-whiskered Bulbuls could be transformed by their ambitious imaginations into a residence of Paradise Fly-catchers; and so the new Crested Honey Buzzards' lodge might on inspection become a mere Common Pariah Kites' lair.

However, Chris agreed to make the journey to Tilphata, and we drove with mixed hopes and fears through the streets of Imperial Delhi, across the crowded Jumna bridge, over the dozen miles to Ghaziabad, past eight more miles of rural scenery to Dadhri, amongst a throng of bullock-carts in that little market township, along a further two miles to Tilphata, and thence into the Promised Land beyond. At a certain spot Khiman and his brother (who acted as our guides) told us to leave the car and walk through fields. We obeyed their command and, after a few hundred yards, approached sceptically a lonely, stunted tree in which lay a formidable pile of sticks reminiscent of a kite's untidy house. In it, evidently reciprocating our uncertain state of mind, stood a single bulky fledgling.

Imagine our surprise when we recognised that it was neither a Common Pariah Kite nor a Crested Honey Buzzard, but the precious heir of a pair of Short-toed Eagles!

"Surprise" was a mild word for our emotion. We were delighted and excited, for the most authoritative books on Delhi birds described that particular eagle as a rare visitor, or a doubtful resident, in the region—and here before our eyes was irrefutable evidence of its regular habitation.

We had a hide built the next day, and watched with satisfaction its successful completion that evening. So enthusiastic was Chris at the prospect of good sport with her camera that she woke at four o'clock the following morning, banged on my bedroom door soon afterwards, and called a bearer to pack her photographic equipment. Long before sunrise we left Delhi for Tilphata, so that at dawn she could start a long session of photography.

As we drove along the country roads in the half-light we were surprised to see large branches of trees strewn here and there in the fields, and an occasional entire tree uprooted and lying prostrate. When we approached the eagles' eyrie an awful sight met our eyes. At first we could see no hide at all—as if the twenty-foot, tent-topped tower had vanished into thin air—and then we saw it sprawling in a state of collapse on the ground. A wind-storm of remarkable fury had blown it down during the night. In falling it had struck a bough only a foot away from the nest, for the tree-bark there was badly torn, and a cluster of foliage had been ripped from the branch. By a stroke of good fortune, however, the nest itself was untouched; and its occupant sat eyeing us with innocent curiosity.

Chris had not yet fully recovered from the nervous shock produced by the young Honey Buzzard's death, and this fresh mishap deeply affected her.

"It's another sign," she exclaimed, "that Heaven doesn't approve any more of my

disturbing the birds by photography"; and she declared that she would never take another picture.

I tried to reason with her, observing, "If you think the blowing-down of the hide is a sign of disapproval of your photography, then you can just as well interpret the escape of the eagles' nest as a sign of approval. It's really a miracle that it wasn't destroyed by the crashing hide."

But she would not listen to such special pleading by a professional diplomat, and remained adamant in her conviction that this was an evil omen.

I looked appealingly at the eaglet on the nest to support my argument, but it stayed silent, favouring us only with fierce glances from its cold yellow eyes.

In utter dejection we drove back to Delhi, where Chris retired to her room suffering from a fit of awful depression. She flatly refused to alter her gloomy resolution.

Secretly I asked Gian Singh, the foreman of our team of workmen, to raise the hide again that evening, and to anchor its feet so securely to the solid Tilphata earth that no elemental fury whatever could tumble it.

When I sent Chris a scribbled message on her breakfast tray next morning, announcing that the resurrected hide was standing firm and true, and that the Short-toed Eagles awaited her pleasure, she was touched by my faith in the ultimate goodness of things, relented, and agreed to take her camera and other photographic paraphernalia to Tilphata. Little more than an hour later I left her there, whilst I returned to Delhi to do my duty as a High Commissioner. She was then already concealed inside the hide, two bearers were squatting behind a hedge fifty yards away to be at her beck and call in case of need, the young eagle was snoozing on its nest twelve feet in front of her, and a light rain was falling from a grey sky. As I drove back to Delhi I whispered a prayer that the rain would cease, so that Chris could get some good pictures.

But I was wrong; the rain was a blessing in disguise. It continued to fall fitfully, with sufficient dry intervals to enable her to take photographs, but often enough to prevent the peasants from working in the surrounding fields that day. So after a while the unsuspecting parent eagles felt they could make several visits with impunity to their nestling—and Chris secured a superb set of portraits of them, such as those on pages 57 and 59.

Thus Heaven made amends for its indiscretion in destroying the hide two days earlier.

V

The rest of the photography proceeded through the summer's length without a hitch. Only one other disappointment disturbed its ceaseless, arduous, sizzling, and successful course. We discovered a White-breasted Waterhens' nest twelve feet from

the ground in a tree overlooking a pond of water. In it the piebald mother-bird was sitting on four eggs—a most glamorous photographer's model.

Later that day we cautiously approached the spot with Gian Singh, to show him the nest, and to explain exactly where a hide should be raised. In the tree an unusual spectacle greeted our eyes. No White-breasted Waterhen sat on the nest; but instead a grey monkey crouched there. In one paw it held an egg as it carefully cracked the shell with its teeth, and in the other hand it clasped a second egg. Nonchalantly it began to suck the first egg's contents. Horrified, we ran forward to drive the little gourmet away; and it leapt from the tree and scampered through the undergrowth. But we were too late. The nest was empty, and afterwards we found shells of its two other pilfered eggs lying on the ground below the tree.

We never found another White-breasted Waterhens' nest.

VI

Usually Chris did her work on her own. Apart from the fact that there was no room for a second human being in her hide, C. Y. Hwang was fully engaged every day in processing her photographs in the darkroom which we had improvised in our house, whilst I had to perform my official diplomatic tasks. Sometimes my capable Comptroller, Major Charles Law, or some other house guest accompanied Chris on her expeditions, to observe from a discreet distance her remarkable vigils, to support her bearer in keeping away inquisitive villagers who would otherwise have wandered to the hide's foot and rendered all her efforts useless, and to help in any other way.

Occasionally on an early morning or at a week-end I also assisted in the field. For example, if Chris were taking pictures of an unshy species of bird which was not disturbed by a periodic exchange of spoken words between the occupant of a hide and a colleague on the ground below, I acted as an intelligence officer informing her of the approaches and departures of her quarry. Cooped-up in her tent, enclosed by its canvas walls and ceiling, with only a tiny peep-hole on its front facing the nest, she could not herself tell when an adult bird was about to arrive with food for its family—except in the unusual cases when a fledgling gave her warning of the event by its excited conduct, as did the young White-backed Vulture. Most chicks lay doggo until their parents actually landed beside them.

It was, therefore, occasionally useful for me or someone else to sit concealed within talking distance of the hide, and to utter a staccato phrase now and then to prepare Chris for an impending arrival. I would mutter softly but clearly such things as, "Hen approaching from left", or "Male arriving from right", or "Bird has landed ten feet above nest", or "It's hopping towards you". Such sounds would have been sufficient to make many species fly away in terror, but other characters were indifferent to them, presumably regarding them (if they noticed them at all) as insignificant interjections in the constant medley of Nature's noises.

I was able to give this aid in the cases of Grey Hornbills, Golden-backed Woodpeckers, Indian Rollers, Purple Sunbirds, and one or two other types.

My most useful co-operation was in connection with two families of Spotted Owlets. Their photography took place in the late evenings, when I could escape from my duty with human beings and volunteer for service with birds. In each case the nest was lodged about ten feet from the ground in a deep hole in a thick tree-trunk. Chris's camera stood concealed in a hide five feet in front of the entrance to the owlets' home.

At the first nest two parents were feeding a chick so young that it was still incapable of joining them on hunts for food; so the old birds brought beetles, lizards, frogs, and other small game to it in the tree. Their sport started as darkness began to fall. Chris, a bearer, and I would arrive at the spot half an hour earlier, to make ready for our work. We could see the pair of adult owlets asleep side by side on a leafy bough several yards from the entrance to the nest where their fluffy youngster lay hidden from view. Chris slipped into the hide on its platform whilst they still snoozed, to prepare for their awakening. I sat motionless on the ground immediately below, whilst the bearer kept watch beneath a nearby tree.

Soon I saw first one owlet and then the other open its eyes, glance around inquisitively, and start to preen its feathers. There was still enough light to watch them perform these nightly toilets. Each would stretch its wings, shake its feathers, and stroke its breast with its beak. Occasionally one would lean across to its mate and give it what appeared to be an affectionate kiss, though the gesture was no doubt just a comradely, helpful extra wipe of its plumage to assist in the dry-cleaning. Now and then one or the other bird would make a loud exclamation, chattering a phrase or two, jibbering a whole sentence, or shrieking as if to advertise its presence. Possibly these were notifications to the chick in the nest that its parents were awake and would shortly bring food to break its long fast.

Daylight faded quickly, and the brief twilight preceding night grew steadily more obscure. Suddenly one owlet fluttered from its bedroom-bough to another branch in the tree. I froze into absolute stillness in the hope that I would not attract its attention. The squat little bird hesitated for a few moments, made another brief guttural utterance, and then launched itself on shadowy wings into the air. It disappeared into a neighbouring field to start foraging. Shortly afterwards the second owlet followed suit, flitting silent and ghost-like through the dusk.

Within a few minutes we were in complete darkness. Chris sitting alert on her platform, and I crouching on the open ground below, dared not move a muscle or make a sound. But there was no need for speech between us, for we each knew our respective, co-ordinated parts, having rehearsed them carefully as a result of trial and error on one or two previous nights. Tense with expectation, we awaited developments.

All of a sudden we heard a momentary, slight tap of claws alighting on the tree-trunk just opposite us. An owlet had arrived at the entrance to its nest with food for the youngster. Normally it would halt there so briefly that even if Chris touched off

her flashlamps instantaneously, her camera would only get a confusing glimpse of the bird's back as it disappeared into the inner darkness. That was where I could help. I held in my hands an unlighted electric torch pointing directly at the doorway to the nest; and as soon as I heard the owlet land on the tree I switched this on. Startled by the abrupt beam of light, the bird looked round. I kept the strong ray firmly on it, and in its curiosity the owlet continued gazing down towards me. Fascinated, it posed there as long as I kept the light shining, its large round eyes gleaming, and its catch of a frog or other prey dangling from its hooked beak. Chris could take her time, choosing a good moment to flash her lamps and make a picture. As soon as she had done so, I extinguished my torch, the obliging bird turned to carry its booty indoors, and Chris relaxed for a few moments. The situation was repeated when we heard the faint sound of the owlet making its exit from the nest, except that I did not then need to use the torch. Chris's eye and judgment were so swift that she caught some marvellous shots of the little night-prowler flying away.

On the birds' first few successive visits each evening we were able to secure satisfactory pictures quite quickly, Chris, the owlets, and I all playing our parts so faultlessly that we needed no prompter.

The circumstances at the second Spotted Owlets' nest were different. That family contained three nestlings already so fully fledged that they left their nursery each evening and joined their parents on the nightly hunting expeditions.

Having collected fine portraits of adult birds at the first nest, we wished to get equally good pictures of immature birds on this occasion. As before, we took up our positions half an hour before sunset. Soon afterwards we heard the noisy exclamations of the old owlets awaking, performing their toilets, and calling to the youngsters from a neighbouring tree where those adults slumbered through each day. Then from the invisible interior of the nest-tree came responding mutters from the juvenile trio. We prepared for action, knowing that before many minutes had passed we would catch sounds of a young owlet climbing the inside wall of the hollowed tree-trunk to make its get-away into the dusk. Sure enough, those faint noises soon floated up from the tree's cavity—and then we glimpsed the face of an owlet peering cautiously through the entrance. Reassured that no unfriendly spectre was abroad, the whole bird hopped into view and posed charmingly there, as if the chief purpose of its existence were to have its photograph taken by Christina Loke. When her flashlamps seared the twilight like strokes of lightning, the innocent creature showed some astonishment, but no fright.

Our ambition was to get a picture of at least two of the nestlings, if not all three, grouped together; but they would not co-operate. Always they made their respective exits at intervals, the first bird to emerge climbing higher up the tree into concealing foliage before the second ventured from the depths below; and the second likewise preceding the third by quite a distance. Sometimes, in an effort to delay the top bird's upward progress until a brother or sister would join it, I gave a yell to attract its attention and shock it into a halt; but that only made it, after a moment's startled

hesitation, either scramble all the faster up the trunk, or else tumble quickly back into the nest-shaft below. Only once did Chris manage to catch a shot of the face of a lower bird just appearing whilst the whole figure of its forerunner still remained in view.

She took none but black-and-white pictures of the owlets, so unfortunately those attractive animals do not appear in this book, except in the miniature portrait which is reproduced below.



VII.

The sustained and victorious campaign of bird-photography was conducted by a team, almost a small army, of zealous volunteers. Foremost amongst them was C. Y. Hwang, who toiled for hours every day developing, printing, enlarging, and cataloguing Chris's gradually accumulating thousands of pictures. For him, too, working conditions were very trying through the Indian summer, for it was difficult to regulate with precision the temperature of tap-water, and to discipline all the other essential technical elements, in our rather ramshackle, improvised, even though air-conditioned darkroom. Nor was his own temperature always under control. He suffered considerably in the oppressive Delhi heat. But in spite of all these troubles he maintained with unfailing skill the highest standards of achievement in his vital department of our joint efforts. To him, and to his experienced aide Mr. M. J. Vyerawalla, belongs a distinct measure of the credit for our excellent results.

Many friends lent help by reporting to us the existence of nests of this or that species in their gardens, or in other places where they spotted a likely cup of grasses or pile of sticks. Amongst these informants were Mrs. Usha Ganguli, who is perhaps

Delhi's most knowledgeable ornithologist; Sir Raghaven Pillai, then Secretary-General in the Ministry of Foreign Affairs, who kept an eye on the antics of mynahs, babblers, and lapwings in moments of relaxation from studying the acrobatics of the world's statesmen; Shri Rashid Baig, the Chief of Protocol, and his wife Tara, who were almost as wise about the habits of kites and eagles as they were about the eccentricities of Ambassadors and High Commissioners; Mr. Victor Martin of my own High Commission, whose advice on the affairs of both birds and men was invariably sound; Mr. Peter Jackson, who represented Reuters in India at that time, and who is himself an accomplished bird-photographer, and Mr. and Mrs. Haddow, whose love for birds made their little garden a rich Nature sanctuary. I have already paid tribute to the valuable contribution of our good colleague Khiman and his troupe of nest-spotters.

Our friends who strove hardest were the team of workmen who built the innumerable hides. Employees of the Ministry of Works, they were busily engaged throughout each day in helping to erect the imposing new buildings of the United Kingdom High Commission in the Diplomatic Enclave; but they nevertheless willingly spent many early mornings, evenings, and week-ends raising the towers and fixing the tents of hides. It was labour requiring sure skill in the safe construction of slim, tall, skimpy, Heath-Robinson-style pinnacles of scaffolding up which no one but a zealot would trust himself for a moment. The men needed nice senses of balance even to stand idle on those piles, let alone to jump around like circus gymnasts, superimposing pole on top of pole, fixing crossbars to upright timbers, lashing these together with bits of rope, and pegging tents to little more than thin air. They acquitted themselves magnificently, and with an enthusiasm that was touching. In all those months they only suffered one casualty—a pair of broken wrists when a member of the gang fell by mistake from an unconscionable height.

One of the workmen was named Gopi. He was a typical member of the crew, toiling long hours with reliable efficiency and unruffled good temper. The possessor of a shy, charming smile, he was an unassuming, obliging, friendly man who learnt to share some of our interest in the lives of birds. Nimble at climbing trees, he thought nothing of stepping, twisting, and pushing his way carefully upwards through a maze of boughs to a nest skied several score feet in the air; so he was ever ready to volunteer to take a knife or saw and cut away foliage or branches which would otherwise impede the camera's view of a target. As I watched him scale those giddy heights I often wondered whether he owed his pleasing name to a heroine of Hindu mythology. Could he be a descendant of one of the beguiling Gopis, or milkmaids, with whom the glorious god Krishna romantically dallied? Sometimes when those damsels were bathing in a stream, Krishna would steal their clothes, climb with the garments into a high tree overlooking the water, and invite the young ladies to come and reclaim the dresses there. I speculated whether our friend Gopi could have inherited his prowess at climbing trees from one of those earlier namesakes. His good-looking face, with long black lashes shading dark, limpid eyes, could be evidence supporting the theory.

The team were directed by two overseers, a pair of strapping, handsome, bearded Sikhs called Bhalwant Singh and Gian Singh respectively. The loud-voiced, brusque, rather swaggering leadership of the former, and the gentle-voiced, modest, courteous captaincy of the latter were equally effective. No trouble was too much for them, and their subordinates treated them with the respect due to fine chiefs. Amongst higher officials who played helpful directing parts in the engineering section of the campaign—without efficiency in which victory would have been turned into defeat at almost every skirmish with a nest—were our excellent ally Eric Constable, and two able, successive heads of the British Ministry of Works in Delhi, Ronald Adams and John Banks.

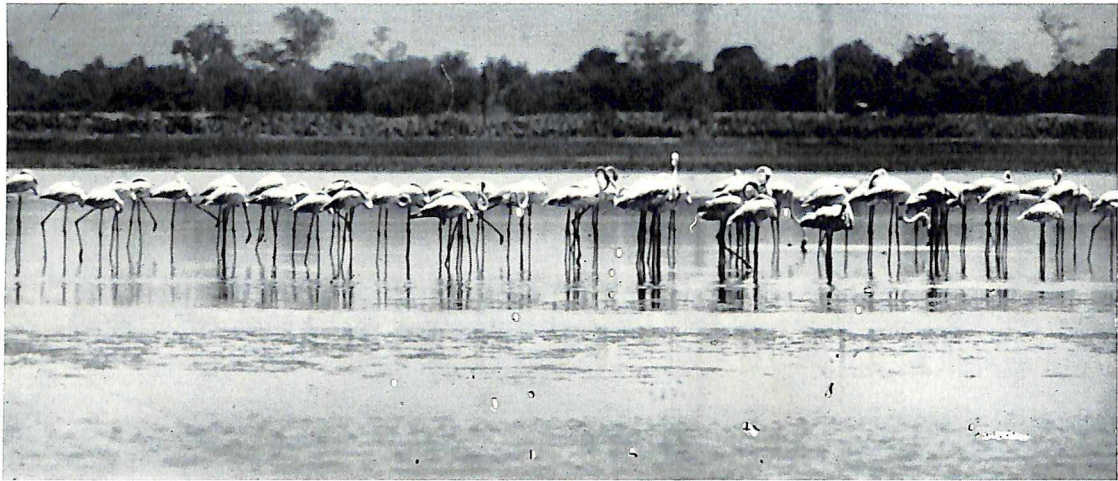
Another indispensable arm of the services devoted to our cause was a trio of my bearers—the ever-smiling Gopal, the indefatigable Munilal, and the unassuming Kacharu. One or more of them accompanied Chris wherever she went, carrying her camera and other equipment up and down the ladders of the hides, helping her to set the flashlamps, and keeping an eye on her well-being from some prudently distant hedge throughout her long, hot days of toil. And after she left each field of labour in the evening, one of them would camp there through the night, guarding the hide from interference until the next day's work began.

At times these three bearers took a more positive part in the operations, going into action in valiant aid of Chris's "shooting". On those occasions they showed themselves no mean tacticians and strategists. For example, we erected a hide on the shore of the extensive lake at Dasna, where a flock of eighty flamingoes were spending the summer. The elegant birds were naturally suspicious of this sudden strange intruder in the otherwise empty landscape, and gave it a wide berth. They strutted majestically, contorted their necks gracefully, and swept the shallows nonchalantly with their beaks near the opposite shore of the mere—far, far beyond recognisable range of Chris's camera. So Gopal, Munilal, and Kacharu tucked up the trousers of their white uniforms, waded into the water, and tried to look as much like an extra trinity of flamingoes as they could. Dispersed like beaters in a forest driving game towards a sportsman's machan, they slowly induced the grand herd of birds to advance, step by step, in the direction of Chris's hide-out. But unlike beaters, they had to do this by quiet, gentle, and tactful persuasion, for flamingoes are sensitive, independent creatures who quickly take umbrage and fly away at what they regard as uninvited dictation of their movements. I directed the operation from a distance by hand-waves, beckons, and other dumb-show at the bearers. Sometimes the birds did take offence and, craning their necks until they almost overbalanced, and spreading their long, leisurely wings, rose like a storm of gigantic snowflakes into the sky, and floated around in the upper air until they decided in which even more remote corner of the lake they should re-settle. Then we had to revise our whole well-laid plan, and start the manœuvres all over again.

When Gopal, Munilal, and Kacharu managed to be superlatively discreet, the flamingoes became amenable to their unobtrusive suasions. Gradually, then, the flock would do a slow-march in the desired direction, alternately paddling and

nuzzling the waters, until eventually, after perhaps half an hour's patient driving, they approached near enough to the hide for Chris to get their pictures. One of the results is reproduced on this page.

It was the most exotic act of herding animals that I have ever witnessed.



VIII

Amongst those who gave encouragement to our efforts were India's Prime Minister, Mr. Jawaharlal Nehru, and his daughter, Mrs. Indira Gandhi. One of Mr. Nehru's many remarkable qualities is the sincere and helpful interest he displays in all sorts of odd activities by many kinds of enthusiastic but unimportant individuals unconnected with his own weighty political preoccupations. Indira Gandhi has inherited from him this capacity for sympathetic and active concern in countless different aspects of human endeavour. They kindly permitted us to take photographs at nests in their richly birded garden.

Another of Mr. Nehru's habits often surprised me. No man has ever worked harder and more continuously over many years at supremely important, wearing tasks. The burdens borne by a Prime Minister of India are colossal, and sometimes he grew extremely fatigued. Instead of withdrawing then to the quiet of his rooms, and spending two or three days resting (as most people do in such circumstances), he sought refreshment in a bout of particularly hectic, hurly-burly activities which would have completed the exhaustion of anyone less Titanic. Setting forth on a tour of this or that region of India, he would make speeches to multitudinous audiences in villages, towns and cities, and hob-nob all day long and half the nights with many thousands of his enthusiastic fellow countrymen. Always he returned from those expeditions rested and recreated. This result was an extraordinary tribute to both his

and their qualities. As regards him, it was a sign that, unlike most political leaders who express their devotion to "the masses", but who in fact merely use them as a means to their own advancement, he really cared about them, loved them, and enjoyed mixing with them; and as regards the people, it was evidence that they possessed sturdy qualities which gave their noble chieftain constant solace and inspiration.

I learned something of those qualities for myself as a result of bird-watching. As I have mentioned, the need to get photographs of many species at their nests took us into numerous villages around Delhi; and there we made close personal acquaintance with the local inhabitants. For example, whenever we wished to build a hide, we of course sought permission from the farmer or peasant who tilled the local soil. Not only did these individuals always readily give their consent, regardless of any inconvenience to themselves, but they added every possible form of help they could in the further execution of our project. They made us feel that, temporarily at least, the place was ours to do as we liked with. I remember, for instance, an occasion when Chris had occupied for several days a hide in the middle of a field. Crops were ripening round her tower, and in due course the time came for the cultivator to gather them. That morning he asked me whether it would hinder us if he started work, explaining that if he and his helpmates might disturb us or the birds whom Chris was photographing, they would postpone their labours until the next day, or the day after, or any following day that suited us. He spoke with such consideration that he made me feel that we were doing him a kindness in letting him gather his harvest, rather than that he had done us a kindness in allowing us to build a hide on his land.

Not only the proprietors of fields where Chris worked, but many of their neighbours also spontaneously aided her in every possible way. Often when her car arrived in a village, men, women, and children would run out of their houses to greet her. They would not let her carry anything from the vehicle to the hide, but themselves picked up the tripods, battery, picnic basket, or other bits and pieces of baggage which her bearer could not manage in one journey, and bore them to the foot of the hide's ladder, chattering and laughing as they went. At the end of each day, too, when they saw Chris packing-up and descending from her platform, they again hastened from their homes to join in carrying her equipment back to the car. Whenever she or I offered these very poor people financial reward for their assistance, they refused it. They would not accept a single rupee or nayer-pais. Their help was an act of unqualified goodwill and friendship.

The headman of a village often asked us into his house for drinks and bites of food. His hospitality was bounteous, and other villagers joined in his friendly concern for our well-being. They would gather round, gaze at us with curiosity, and start to question us about our identities, origins, interests, activities, and every other subject under the sun that struck them at the moment.

On a later occasion I was discussing with a prominent Indian State politician these experiences in Indian villages. I remarked that they had taught me a great deal about

the simple but grand qualities of India's peasantry; but I added that I had also learned a little about the less congenial traits in those admirable people's natures.

"What traits?" asked my companion.

"Well, their absolutely ceaseless inquisitiveness," I answered; and I described the long cross-examinations which I had often endured.

The politician laughed and expressed agreement with my criticism. He said that whenever he journeyed through the countryside, crowds of talkative, questioning citizens surrounded him wherever he moved. All day, at a succession of places and gatherings, they would hurl a perpetual series of queries at him. That was all right, and fair enough, so long as he was actively engaged on his political mission, but it became excessive when, at the end of a long, tiring day, he wished to relax and rest. No relaxation or rest was allowed him! When he retired to his host's house, a throng of people followed him, sat around in the dining-room, and continued to fire questions at him whilst he ate a meal. After dinner they would settle down as if for the night, and persevere with their enquiries. If he sought escape by withdrawing to his bedroom, before long the bedroom door would open, faces would peer through it and when they discovered that he was idle, they would enter the apartment and resume their inquisition. He remarked that he believed they would have followed him into his bathroom, squatted on the floor whilst he was bathing, and maintained their cross-examination of him there, a convention had not frowned upon such undue intimacy.

Perhaps the Indian villagers' ceaseless curiosity is not a bad quality. It shows an insatiable thirst for knowledge; and if Mankind were not impelled by a restless inquisitiveness about anything and everything, including all the secrets of Creation not only on this planet but throughout the Universe, we should not now be preparing to venture on pioneering jaunts to the Moon, Mars, Jupiter, Venus, the Milky Way, and an infinity of other as yet unconquered worlds.

In their talks with us the villagers were as invariably courteous as they were perpetually inquisitive. Nor were they subservient. They had self-respect as well as respect for us, and treated us with natural ease as equal, if rather eccentric, members of the same varied human family to which they themselves belonged.

Their simple, strong qualities of honesty, kindness and friendliness, and their constant desire to improve their knowledge of affairs, made me understand Mr. Nehru's great liking for them, and his pride in commanding their multitudinous trust and affection.

IX

Through the summer of 1959 we must have built nearly a hundred different hides. Most of them were raised beside various birds' nests; but others stood alongside a Fantail Pigeons' feeding-ground on my lawn where Turtle Doves, Green Parakeets, Jungle Babblers, and other wild birds also ate their breakfasts; at the edge of a small

lake in Roshanara Gardens in Old Delhi where several species of egrets and herons used to fish; on a shore of the large jheel at Dasna where the flock of flamingoes waded and fed; beside dead cows whose flesh provided banquets for quarrelsome rabbles of vultures; and at other popular gathering places for birds. The hides were of many varied statures. The actual tent itself, where the photographer hid, was always the same very restricted size; but sometimes it was planted firmly on the ground, whilst at other times it was superimposed on the summit of a tower rising anything from two to eighty feet up in the air. The higher nests belonged to House Crows, White-backed Vultures, Tawny Eagles, White-necked Storks, Painted Storks, and King Vultures, whilst the highest belonged to the Crested Honey Buzzards.

The platform bearing Chris and her camera stood at about nest level, and at a distance from the nest which varied in relation to the size of the bird who owned the place (as she describes in her Photographer's Foreword). She usually sat aloft for about six hours every day, but often stayed there round the clock—when her models were either so completely unco-operative that they kept her endlessly but hopefully waiting, or else so pleasingly co-operative that she could not resist the temptation to continue taking shots of them. She never emerged to stretch her legs, and rarely descended to eat a meal. Not wishing to miss any pictures of rare interest (which might be staged by the birds at any unheralded moment), she always took food and drinks with her into the hide; and so she normally ate, as she watched, in solitude. How she maintained this régime for so long I cannot think. My patience would have worn threadbare several times a day, every day; and I learned to have the highest respect for a bird-photographer's patience and fortitude.

Many of her pictures were taken by natural light, without the aid of flashlamps. That was better, because sudden blinding strokes of artificial light from lamps were apt to throw the more distant background of a scene into shadow, making the resulting photograph appear a study of night-life instead of daytime existence in avian society. But in most circumstances she had to use flash, such as when a nest was built in a shadowy place, or when she wished to get a portrait of a bird in rapid flight. In the latter instance the exposure could not be miraculously swift enough in unaided daylight to fix the fast-moving wings in precise focus. Naturally Chris also had to employ flashlamps when she took her photographs of Spotted Owlets in the pitch dark.

Occasionally the battery working the lamps behaved in an unorthodox manner not to be expected of a respectable, well-behaved instrument. Something went wrong with its anatomy—and then when Chris pressed the button to bring it to sudden, potent life it gave an electric-shock not to the lamps, but to herself! Sometimes she received two or three such shocks at successive attempts to get a picture; but even that did not deter her. Apparently she was prepared to risk life and limb to secure a masterpiece of a kingfisher, a bee-eater, an oriole, or some other winged beauty.

Her technical knowledge and skill with a camera and its numerous appurtenances

are great. The photographs in the books she has illustrated prove that. By themselves those are remarkable achievements, especially in a singularly gracious lady who is renowned in South-East Asia, where she is best known, as an exponent of the gentler, more feminine arts of organising charity shows, dancing the cha-cha, collecting choice Chinese porcelains and jades, playing mahjong, making intelligent, witty speeches at women's luncheon clubs, and being a perfect hostess at countless social gatherings. But a rarer accomplishment than her expert handling of a camera is her artistic production from it. Photography has become one of the minor arts, and it is not difficult for a talented amateur to take beautiful pictures of landscapes, still-life objects, and even human portraits. Bird-photography, however, is a more difficult, challenging occupation. In addition to mechanical competence it demands calm patience, obstinate perseverance, and sometimes high courage in its practitioners. Yet all those qualities together are inadequate unless one also possesses a fine sensitivity to Nature, an eye for beauty in animal life, and superb judgment about the right moments at which to flick a camera shutter so as to secure masterly compositions. Christina Loke is evidently endowed with all those virtues.

I am not competent to assess her achievements in a professional way, nor to discuss learnedly the technical merits or demerits of her works. Many qualified critics have given unstinting praise to her productions. I shall venture only this opinion: perhaps her finest asset as a Nature photographer is extraordinary quickness of eye. More often than not she takes her pictures at exactly the right fractions of moments when a bird's pose—even when it is hurtling through space in swift motion—is most beautiful from the aesthetic point of view, or most interesting from an ornithological viewpoint. A larger percentage of her negatives are successes than is the case with almost any other bird-photographer I know. She waits patiently for a bird to arrive at its nest, watches coolly as it goes through its motions there, anticipates cunningly its interesting, graceful or dramatic stances—and then instantaneously presses a button to capture another masterpiece.

She is as quick to catch the unexpected as the expected. For example, one morning she was photographing a male Grey Hornbill bringing food to its mate incarcerated in a nest-hole high in a tree. The comical-looking creature came to the spot with almost exact regularity every half-hour, carrying each time a few berries, a beetle, or some other titbit. On one visit it brought a lizard to tickle the palate of its spouse. The lizard was averse to doing this favour for a mother hornbill, and wriggled in protest as it lay gripped near the tip of the cock's gigantic beak. So forcefully did the lively little animal express its reluctance that the bird parted its mandibles for a moment to get a firmer hold on its prey—and in that tiny fragment of time the lizard escaped from the imprisoning jaws and dropped like a stone towards the ground. At once the hornbill dived after it, recapturing it in mid-air. The whole movement was sudden, unexpected, and extremely high speed—but it was not swifter than Chris's eyesight. Watching carefully for any and every eventuality, she flicked her camera at almost the identical instant when the bird made its plunge, and caught its image upside-down only a few inches below its perch.

Unfortunately the camera's exposure was not set at the time for action pictures, but for studies of a more or less stationary bird; and so its response was not speedy and intense enough to record the diving hornbill in focus. The negative is therefore unclear; but I include a print of the picture on this page as impressive evidence of Chris's astonishing swiftness of sight, decision, and action.

It is an honour to introduce this selection of her colour portraits of "Birds in the Sun" to fellow enthusiasts about cameras and birds.



*The photographs of Flamingoes, a Spotted Owllet and a Grey Hornbill were taken by Christina Loke.
Those of bird hides were taken by Malcolm MacDonald.*



Large Egret

THE Large Egret stands nearly three feet high. Long legged, long necked and long beaked, with a most elegant figure, it is an immaculate white heron of grand proportions.

Some other species of egrets and herons tend to gather in small flocks; but the Large Egret is usually solitary. Whether travelling on leisurely wings across a blue sky, like a sailing-boat on an infinite ocean, or watching for fish beside a lake, like any other patient angler, it lives alone most of the year. No sight in nature gives a more serene impression than that of a Large Egret poised beside a pool towards sunset on a summer's evening waiting for its supper to be served in the water below. For minutes on end it will stand as motionless as a statue, its long stilts dipped ankle-deep in the shallows, its graceful body bent slightly forwards, its eyes gazing intently into the depths, and its long beak held ready, like a harpoon, to strike. At last a fish appears, not suspecting that the tall apparition overhead has life, energy and hostility—until the beak plunges, and the victim struggles too late to escape.

Only when the colour of that efficient bill changes from yellow to black does its owner abandon solitude, and seek a mate; for the transformation marks the beginning of the breeding season. Then pairs of Large Egrets resort to high trees to rear their young. The nest illustrated here was situated in a colony of dozens of nests; but only two or three of the others belonged to Large Egrets. The rest were the property of Little Egrets, Cattle Egrets and Common Cormorants. They were scattered in a group of trees growing in the centre of a rustic hamlet; and twenty feet below the lowest tiers of nests strolled, squatted, gossiped and mooed a throng of villagers and their cattle.

The birds never felt the slightest alarm for themselves, their eggs or their chicks by the presence of their human neighbours. Partly because of the teachings of the Hindu religion, Indians are very tolerant of wild creatures living in their midst. Neither grown-ups nor children in that or any other village would think of stealing eggs, catapulting fledglings, or molesting in any other way the residents in the bird colony. They respect all forms of life.



Lesser Egret

IN the midst of Old Delhi are the Roshanara Gardens, in the midst of the gardens is a modest lake, and in the midst of the lake is a small island. During the breeding season large numbers of birds resort to this sanctuary to produce their young. The islet's crowded trees and bushes are then as full of families of various species of egrets and herons as a block of skyscraper flats is crowded with families of human beings. After the chicks hatch, the mixed conversations of the adults and youngsters make as much noise as the babble in a monkey-house in a zoo.

The shores and shallows of the island are then populous with attractive birds. An ornithologist can study in ideal conditions there the different plumages and habits of Large Egrets, Lesser Egrets, Little Egrets, Cattle Egrets, Pond Herons and Night Herons, with cormorants, storks, vultures and other types occasionally thrown in.

The most difficult of these to distinguish from each other are the Lesser Egrets and the Little Egrets. Both are about the same size, with similar elegant figures and almost identical white plumage. Out of the breeding season they can be recognised from one another by the Lesser Egret's yellow beak in contrast to the Little Egret's black beak; but in spring the former bird's bill turns from yellow to black, whilst the latter's does not turn from black to yellow. So one must look for other distinguishing features then. These exist in the form of two long, streamer-like crest-plumes which in summer grow on the Little Egret's head. Some years ago that adornment proved almost fatal to the population of Little Egrets in Egypt, because the two aigrettes became fashionable adjuncts to smart European ladies' costumes; and callous, profiteering plume-traders nearly exterminated the local species.

Though the Lesser Egret does not sport this particular decoration, it develops (as the Little Egret also does) certain other extravagant nuptial plumage in the form of a long, fine bib of breast feathers.

The bird shown on the opposite page is perched on a bough bending above the lake in Roshanara Gardens. Like countless numbers of other beautiful wild birds there, it appears indifferent to the torrents of noisy traffic jostling along the streets of Old Delhi a stone's throw away.

Paddy-bird

THE Paddy-bird, or Pond Heron, rarely strays far from water. Nor does it mind whether the liquid is fresh or salty, running or stagnant, clean or dirty. Wherever on the vast plains, the wide plateaus, or the spreading foothills of India there is a patch of water, there also a few Paddy-birds are almost sure to be. At swampside, lakeside, riverside and ditchside they congregate to hunt the small fish, frogs, crabs and other digestible creatures which inhabit such regions.

The annual consumption of the said fish, frogs and similar victims by the multitudes of Paddy-birds (not to mention other kinds of herons) who inhabit India (not to mention the Middle East, Pakistan, Ceylon, South-East Asia and other regions where they thrive) must reach staggering, astronomical figures. It is a notable illustration of the excesses of populations of innumerable species of animals which bounteous Nature provides, over and above the vast quantities required for the preservation of their own species, to serve the sole purpose of helping to preserve countless other species. Incidentally, Paddy-birds are very efficient executioners of their prey. As one of them wades through a pool, taking each step very slowly and cautiously like a retriever dog stalking game, its sharp, dagger-slim beak is held poised to strike. Suddenly its neck shoots out from its shoulders, and the deadly weapon plunges into the water. It seldom reappears without a prize.

For nesting the birds resort to bushes or low trees, building shallow, rather loosely knit platforms of sticks anything between ten and thirty feet above the ground. They do not gather in large colonies; but usually a few of their nests are built in the same vicinity. The one illustrated here was lodged in a tree in the backyard of a peasant's cottage in the hamlet called Madanpur, a few miles from Delhi. In the same tree lay another Paddy-birds' nest, and in two neighbouring trees were a couple more. Other residents in the village were House Crows, and the herons' blue-green eggs were in much graver danger from those piratical birds than from the human beings who strolled through the yard scores of times every day. Indeed, the eggs in two of the four nests went to feed the crows; but the others survived to hatch lively young Paddy-birds.

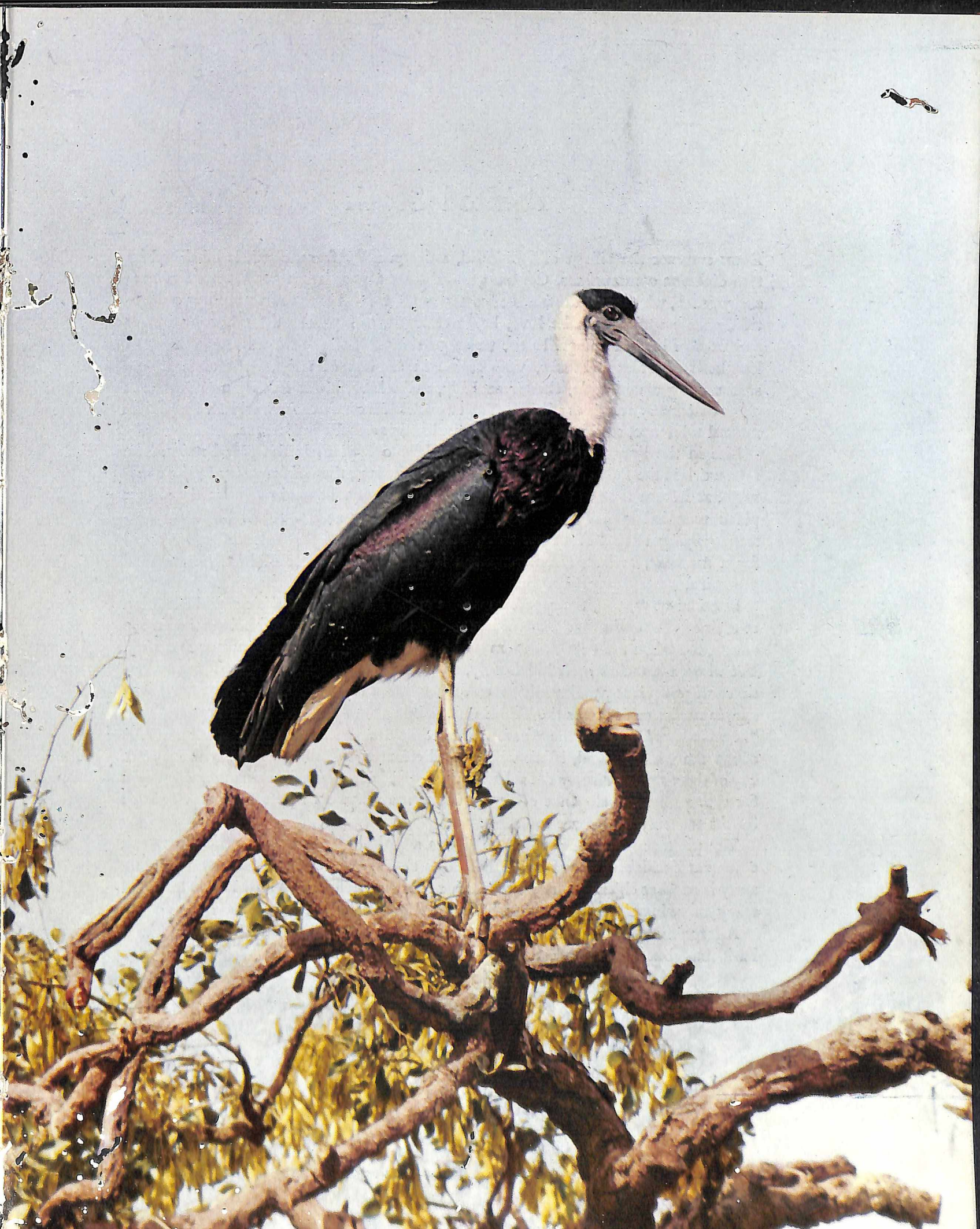


White-necked Stork

UNLIKE the Painted Stork, which breeds (as I shall describe) in populous tree-top colonies, White-necked Storks lay their eggs in solitude, building a nest in a retreat remote from other creatures of their kind. The nest illustrated here was sited sixty feet in the air in a tree on a long avenue bordering the road running from Gaziabad to Dadhri, about fifteen miles from Delhi. Thus it was distant not only from any community of gregarious birds, but also from any centre of human habitation. From their lofty home the storks peered down on wide stretches of farmland. As far as I could detect, their nearest nesting neighbours were a couple of Golden-backed Woodpeckers inhabiting a hole in a tree-trunk a short distance along the same avenue, two Tawny Eagles on their eyrie about a mile farther up the road, a pair of Great Grey Shrikes a hundred yards away in a stunted tree, and some White-breasted Kingfishers with a young family lodged in an earthy tunnel overlooking a nearby stream. I suspected some White-breasted Waterhens of having a clutch of eggs hidden somewhere beside a pond in the vicinity; but my visits to the storks were so few and fleeting that I had little time to observe their neighbours.

The four stork nestlings were already well-grown when Khiman discovered them, and their appetites required a lot of appeasing. Both parent birds shared the task of feeding them, each bringing rations several times a day. The fare consisted mostly of fish caught in one of the rivulets or pools scattered here and there in the surrounding landscape. Sometimes as I drove along the highway I caught sight of an adult stork standing statuesquely beside a stretch of water, its long beak poised for action, like a native fisherman spearing supplies for his larder.

Nor was the fare which the storks brought to their chicks, rations the mere size of sardines. Their average avoirdupois was about half a pound, and the captor would disgorge the whole fish at one spew. Indeed, so ample was the storage in the bird's crop that it would throw-up six, seven, or eight such fish at each visit, casting them on the nest-floor like a fishwife spilling a basketful of her wares on a table. At that the young storks would scramble to seize the food, with all the gusto of lusty piglets at a trough.



Painted Stork

EACH summer the village of Faridabad, a dozen miles from Delhi, is inhabited by two different communities. On the ground lives a population of hundreds of men and women, who reside in streets of cottages, grow food in the surrounding countryside, gossip sociably, make love, beget children, and pursue the other customary activities of human beings. In the tree-tops sixty feet above them lives a colony of hundreds of Painted Storks, who reside in clusters of nests, hunt food in the surrounding countryside, chatter sociably, make love, beget chicks and pursue the other customary activities of birds. The two societies conduct their affairs with perfect mutual tolerance, setting a pleasant example of peaceful co-existence.

Life in the lower regions occupied by *Homo Sapiens* is lively and noisy. The men work in the fields, the women toil in their homes, the children play in the roadways, and from time to time they all converse loudly. But existence on the higher plane occupied by *Ibis leucocephalus* seems even more active. Adult birds are constantly flying to and from the trees, the fledglings in their nests are scarcely still for a moment, and stork conversation is a ceaseless babble of loudly squawked gibberish.

In other ways, too, the members of the avian families hold their own in relation to their earthbound neighbours. It is true that the storks are smaller beings than those others, for when the tallest of them stands erect it measures less than four feet high. Yet when it launches itself in leisurely, strong, majestic flight, its spread from wing-tip to wing-tip is approximately seven feet; so it is an impressive size. And few of the simple rustics can surpass the birds in dignified appearance. In the matter of wearing "fine feathers" perhaps the women when they don their most gaily coloured saris outdo the white-bodied, black-winged and crimson-collared hen storks; but few if any of the villagers display the solemnity of bearing, the sagacity of countenance, and for that matter the elegance of figure which are universal in the tree-tops. Painted Storks are truly handsome creatures.

The photograph facing this page shows a typical group on a nest in that stork colony at Faridabad—a parent bird with its two chicks. On another nest a few feet away is another chick. There were three or four additional nests in the same tree, and many more in neighbouring trees. The place was alive with storks.

A large number of even more beautiful wild Peacocks and Peahens also lived at Faridabad; but that is another story which I shall tell later.



Black Ibis

THE vital statistics of the Black Ibis seem to my human eye to exhibit less beauty-prize winning quality than those of its relative, the White Ibis. Its shorter, thicker neck, its somewhat clumsier build, and its dumpier legs give it a less gracefully proportioned figure. And its bald, warty head, with a face covered by naked black skin, lends it a rather odd appearance, as if the bird were wearing a grotesque mask. But the central feature of that mask—its long, slender, down-curving bill—is dramatically picturesque; and this ibis also has a certain dignity of bearing.

Its nest has rarely been found and photographed. Pairs breed usually in solitude, but occasionally also in the company of one or two other couples near the top of a high tree in open country. The one illustrated here was skied alone some sixty feet above the ground in a lordly peepul tree standing in the middle of a village, with a wide prospect of farmlands all around. The encircling cultivated fields no doubt provided plentiful supplies of the grain, worms, crustacea and other foods on which Black Ibises thrive.

The tree rose from the centre of a small public square amidst the cluster of cottages, where local worthies were accustomed to gather for gossip. Always groups of village cronies sat chattering in the tree's shade, whilst women fetching pails of water from a nearby pump, and youths and maidens talking amiably together, came and went ceaselessly there. The ibises felt completely undisturbed by the proximity of this noisy population only a score of yards below their lodging; and the men and women were equally tolerant towards their flamboyant neighbour—though the flesh of the Black Ibis has a reputation for tastiness.

The babble of human conversation was periodically swelled by loud, staccato exclamations shrieked by two Spotted Owlets occupying a nest-hole lower in the tree. More soft-spoken were a pair of Little Brown Doves incubating eggs on a roof-beam in a cowshed five yards away. A cock and hen Indian Robin were constantly bringing food to three chicks in a nearby wall; and in trees in various backyards lived a small scattering of nesting Paddy-birds. No doubt other species reared other families in the vicinity.

At the summit of this community the Black Ibises squatted in their peepul tree, like gods on Olympus.



Neophron

IN these notes on Indian birds I shall in due course present the crown for Beauty to the male Golden Oriole. Now I award the wooden spoon for Ugliness to the Neophron, alias Egyptian Vulture, alias Pharaoh's Chicken, without distinction of sex. For gawkiness, scruffiness, unseemliness and other qualities which are the negation of pulchritude the said Pharaoh's Chicken, alias Egyptian Vulture, alias Neophron takes the prize. Not that close competitors are lacking; but in one way or another those other candidates fail to attain the same high standard of repulsive looks. Thus, the scrawny White-backed Vulture has rather more dignity of bearing, the top-heavy Green Barbet has a sprightlier air, and the grotesque Grey Hornbill has a more engagingly clownish appearance than has the Neophron.

Of course, all these remarks show arrogant, complacent anthropomorphic human prejudice. It is wrong to judge birds or beasts by human standards. Birds have not the same attitude to these matters—nor to any other matters—as have mortal men. In many avian eyes the Neophron no doubt cuts a handsome figure. And just because its favourite food is blood-stained, uncooked entrails of corpses, that is no reason to accuse it of bad taste. By wild Nature's code of conduct the Neophron is a model of proper behaviour. Living by killing, and sustaining life on death, is a widely respected and practised law in the animal world. And in fact the Neophron sets a commendable example of respect for other creatures' lives. It never kills. It does not slay delight in organised battues of living animals such as occur on Scottish moors every August 12th; nor use bait to destroy vivid, lovely silvery beings, as fishermen do. Neophrons appear to be squeamish about murder in any shape or form, only feeling attraction to bodies when they are already corpses (or near-corpses), and only savouring flesh when it is in any case on the point of decomposing. They then do such a thoroughly efficient job that bones are picked bare, and all danger of lingering infections is eliminated.

So let us reflect on these extenuating facts. And let us be fair—judging vultures by vulture standards, just as we ourselves wish to be judged by human, not divine standards. By that measure the Neophron sets a superlative example of ugliness, dirtiness, horridness and every other desirable vulturish virtue.



White-backed Vulture

AMONGST the multitudes of vultures who populate the subcontinent of India, the White-backed Vulture is the commonest species.

These vultures are not prepossessing creatures when seen at close quarters on the ground. Their bald heads, grotesque faces and scrawny necks, as well as their gruesome delight in defiling corpses, earn them a reputation for physical and moral ugliness. It is astonishing how quickly a mob of them will gather at the death-bed of a deceased bullock, goat, donkey or other beast in a field or street. They must be as far-sighted as any bird of prey, for within a few minutes of a hapless animal's demise two or three score vultures will have flown from the four quarters of heaven to its side.

So avid is their hunger that sometimes they arrive beside a prospective corpse before it has actually given up the ghost. I once saw that happen. A donkey lay at a roadside, sick unto death. It was stretched out motionless, and I thought it had already passed away—gone to the Elysian Fields where all good asses can bray in peace. This impression seemed to be confirmed when three White-backed Vultures landed beside it, obviously intent on playing their traditional part in its funeral rites. But when they applied their beaks with rough, greedy curiosity at a sensitive spot in the region of the donkey's tail, its head at the other end of the body lifted in protest. Pathetically the beast gazed at the birds, appealing dumbly to them to desist. But the vultures were too eager to proceed with the burial service, and the donkey was too feeble to insist on its postponement; so matters took their ordained course.

Soon about forty winged undertakers were in attendance; and I need not describe the wild scenes which ensued as their chaotic ceremonial progressed. The funeral became a banquet, the banquet became an orgy, and at the end of it the corpse was well and truly buried—inside the birds.

If vultures thus engaged on the ground appear unsightly, they give a very different impression in the sky. There they move with unsurpassed ease, power and grace. The huge bird will glide, wheel and hover effortless by the hour, its extended tail held taut, its outspread wings almost motionless, and its shrewd eyes peering earthwards for any sign of approaching death to mortal man or beast. There is no more awe-inspiring sight in Nature than a party of these giants so manœuvring together in the blue.

The bird shown on the opposite page is the youngster described earlier in this book in "A Summer of Photography". Its white back is concealed by the fold of its wings, and the ugliness which develops in older vultures is so far held in check by its fresh youth.



Tawny Eagle

ALMOST a dozen different species of eagles can be observed at one time or another by discerning bird-watchers in Delhi and its neighbourhood. This noble galaxy of the grandest birds of prey is evidence of how close India's long established, highly civilised premier city remains to the Wild. For many centuries the place has been a populous and cultured centre of human habitation; yet its residents include many untamed characters who sometimes make one wonder whether it is the capital of a Republic of men and women, or of the Kingdom of the birds and beasts. Monkeys scamper mischievously through its streets, vultures hold feasts at its roadsides, mongooses fight duels with snakes in its backyards, cormorants travel in flotillas along its river, storks stab fish in its pools, jackals howl at nights in its gardens—and several types of eagles soar in its sky.

From my garden situated in the centre of the city I observed five different species of eagles, three different species of buzzards, three different species of kites and four different species of falcons and hawks. The eagles were Bonelli's Eagle, Pallas' Fishing Eagle, the Steppe Eagle, the Tawny Eagle and the Short-toed Eagle. The last-named bird is not an entirely true eagle; it is a harrier eagle, with a small bill fashioned not for tearing flesh, but for picking up game like lizards and snakes.

The commonest of Delhi's eagles is the Tawny Eagle. An all-the-year-round resident, numerous pairs build nests in the vicinity. The one illustrated here was lodged fifty feet high in a tree little more than a stone's throw from the traffic-laden bridge across the Jumna River beside the historic ramparts of the Red Fort in Old Delhi. As can be seen, the adult bird has the majestic fierceness of its kind. Its stern eyes, viciously hooked beak (made for tearing and ripping up its victims), and predatory talons are features of a born killer. Yet nothing could be more gentle, more protective, more affectionate even than its posture in the first of its photographs in this book. The portrait is a study of the magnificently strong defending the helplessly weak, for the bird is crouching on its nest with wings outspread to shield its chick from death. The month was July, the time of day was early afternoon, and the temperature was 112°F in the shade. A blazing sun was shining in a cloudless sky, and its rays were hot enough to roast the downy eaglet alive; so the mother bird crouched there for hours on end with her wings opened as a parasol to save the nestling from that burning. The strength of the sunlight is indicated by the sharp black shadow of a branch thrown across the bird's brown-feathered back.



In the second picture, taken later when the sun had sunk behind surrounding foliage, the small eaglet sits revealed. The heat was still so intense that the chick's beak gapes wide open as it gasps for air. Its downy head and innocent eyes make it appear as weak, harmless and playful as a kitten. Beside it stands the adult model of uncompromising, imperious strength which it, too, will soon become.

Quite often a Tawny Eagle visited my garden, and sat for an hour or two high in a shady tree, watching me as I strolled round the lawn with field-glasses observing various winged creatures. Every now and then I stared back at it, and admired its handsome, arrogant, self-confident calm. Occasionally on particularly hot, dry days in mid-summer it would itself descend to the ground, stalk across the lawn, and halt beside a wide-spreading, shallow pool of water made by a mechanical hose sprinkling the parched grass. After looking cautiously around to make sure it would not be disturbed by any unfriendly intruder, the eagle then lowered its face, dipped its beak into the liquid, and raised its head again and tilted it backwards so that the refreshment trickled down its throat. This action it repeated over and over again, like a confirmed tippler settled at the bar in a public house periodically lifting his elbow. Sometimes two or three buzzards and kites would join it there, and likewise slake their thirsts under the mercilessly scorching sun. It was a party of as wild characters as have ever attended a social gathering in a diplomat's house in New Delhi. I had to pinch myself to make sure I really was awake in the heart of India's capital city.



White-eyed Buzzard

THE three formidable birds-of-prey shown in this picture are fledglings still on their nest. For several weeks they had been fed by both their parents. At intervals throughout each day an adult buzzard would arrive with a lizard, field-mouse or other substantial fare, and throw it into the nest to be fought over, torn up and guzzled by the hungry chicks. This was no doubt good training in the proper use of the workmanlike beaks and claws with which they were endowed.

Like all young birds, they had ravenous appetites. Nestlings of every species require an astonishing lot of nourishment, for the period between their emergence from eggs and their flight from a nest is much shorter than the equivalent period of growth in many other animals; so their physical development has to be more rapid, and their sustenance must be adequate to that end.

So, as they grow, their food supplies must become increasingly immense—and at the moment when the needs of the young buzzard trio shown here were truly challenging to the combined hunting skill of their parents, one of those adults died. What accident killed it, I never knew; one morning I found its corpse lying on the ground.

So thereafter only one breadwinner instead of two supplied the lusty family. I think it failed to bring enough food. Whether this was because it assumed that its mate was still providing a share of the provender; or because, although it instinctively realised that its partner's absence required it to double its efforts, it simply could not attain sufficient success in hunting, is a question to be answered by a greater authority on buzzards than I am.

Whatever the explanation, some days later one of the three fledglings lay dead on the nest. I suppose it died of under-nourishment; there was no sign on its body of any other cause of death. Presumably insufficient food was now being brought to satisfy all the youngsters' needs, and one of them fared less well than the others in the periodic struggles over lizards, mice and other quarry. No doubt it was the feeblest of the three, and as it grew steadily feebler it became ever less capable of claiming its due—until it lay down and died.

The other young buzzards survived; and I trust that as I write these words, two summers later, they are hunting small game for their own nestlings somewhere in Delhi's neighbourhood.

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Common Pariah Kite

AN attractive fact about bird society in Delhi is that the nesting season for its various species lasts throughout the twelve months. For a visitor with an ornithological bent from Britain, where breeding occurs only in the all-too-short spring and summer, this provides perpetual surprise and delight.

Thus, in my garden I could watch the domestic life of different species throughout the year from January until December. Naturally the largest numbers of nests of the greatest number of species were to be observed in the hot months between March and September; but several types had already hatched eggs before March, and a few were still occupied in rearing families after September. For example, on Christmas Eve one year half a dozen fledglings still sprawled in a White-throated Munias' nest in a creeper outside my study window.

Common Pariah Kites build their nests from November onwards. Pairs then soar together high in the blue, and periodically the two birds fly towards each other and meet briefly in what appears to be a sparring match—but what is in fact an episode in courtship. They mate on perches near their many-sticked nest, one or the other of the birds screaming excitedly throughout the performance. In January the first chicks hatch.

The partnership between the cock and hen is a complete one, all their parental duties being shared. Both help to build the nest, both incubate the eggs, both join in feeding their chicks, and at nights the hen sleeps with the youngsters whilst the cock roosts on a nearby branch.

It is pleasing to watch nestling kites learn gradually the skills required of them as adults. At first they cannot feed themselves, and depend on their mother to tear up meat brought by their father, and to drop it into their gaping beaks; but after a few weeks they cope with the food unaided. Again, to begin with they squat always on the nest; but later they learn to stand, later still they flap their wings with keen ineffectiveness, in due course they wave them exultantly as they make little leaps in the air, and finally they take a first bold flight of several yards to a nearby perch. Almost two months elapse between their hatching and that auspicious moment. They are still incapable of finding their own food; and for several more weeks it is brought to them by their parents in the immediate neighbourhood of the nest.



Short-toed Eagle

I HAVE described earlier the tempestuous difficulties which attended the building of a hide at a Short-toed Eagles' nest. Eventually the structure was completed, the photographer and her camera were installed, a crowd of inquisitive village women who threatened to loiter nearby was persuaded to disappear—and an expectant hush descended on the scene.

That morning a sharp rainstorm followed, by intermittent showers prevented the local peasantry from working in their fields; but naturally the inclement weather would not have discouraged the parent eagles from coming with food for the youngster squatting on the nest. However, the new, forbidding-looking tent-topped tower posted a few yards from their home, did deter them. After a while an adult bird appeared, flew hesitantly just above the nest, decided that discretion was the better part of valour, and veered off to a tree fifty yards away. Settling on a bough there, it gazed dubiously in the direction of the hide, and during the next hour shifted periodically from one tree to another in the neighbourhood, studying the situation cautiously from various angles. In its mind a conflict no doubt raged between its suspicion of the hide and its anxiety to appease its nestling's now loudly proclaimed hunger. At last it plucked up courage to fly to the nest, where it disgorged a hefty snake and stayed for a while to help the chick in grappling with this tough fare. One of the illustrations overleaf shows the eaglet struggling to swallow the snake after that visitation.

The next day happening to be a Sunday, I went to watch the photography from a prudent distance, expecting that the noble birds of prey would by now be so accustomed to the hide that they would come and go at the eyrie unconcerned. Perhaps that would have happened, were it not for another circumstance. The morning was warm and sunny, and for the first time that season many labourers were ploughing their land. It was a busy rustic scene. Eight different teams of oxen drew primitive ploughs through fields surrounding the eagles' nest; and the consequent disturbance prevented the adult birds from descending from on high. Yet all the time one of them soared in the sky overhead, peering down and wondering whether to drop earthwards to feed its youngster—for I could see the long tail of a lizard dangling from its beak. Throughout the morning the bird never disappeared from my sight, though periodically it flew away almost to the horizon.

Twice it was joined for lengthy periods by its mate, when both birds circled indecisively in the blue. The youngster could see them, and often called ravenously,



not understanding why they hesitated. So for hours the eagles—and the photographer—waited patiently whilst the work of agriculture proceeded. Every few minutes the quietude was broken by ploughmen calling instructions to their oxen, by the whacks of sticks on the beasts' posteriors when they ambled forward too slowly, and by the occasional mooing of the animals. At mid-day a further disturbance occurred in the form of women and children bringing lunch for the men. Work was interrupted whilst parties of villagers sat eating and gossiping at the edges of fields; and afterwards some labourers puffed contentedly at hubble-bubbles before resuming toil. There was constant movement and chatter; and all the time a Short-toed Eagle glided overhead—with the same long lizard's tail dangling from its beak.

Towards two o'clock the ploughing ceased, and the men drove their oxen home. Then tranquillity prevailed. Nevertheless, for a long time the eagle did not drop from the sky. But at last it essayed two or three descents, passing each time low above the nest—so low that a Black Drongo owning a clutch of eggs in the neighbourhood rose and “mobbed” it. A pair of Common Pariah Kites also made unfriendly passes at the eagle. I thought these impertinent interventions must be the reasons why the great bird did not land on the nest; but Chris told me later she believed its nervousness was caused by the silvery flashlamps standing on her hide's platform. Whatever the reason, the bird seemed extremely timid—disgracefully timid, I thought, for a full-grown eagle!

Its flight during all those hours had been beautiful to watch—easy, graceful, disciplined and powerful. Occasionally a breeze blew up, and the bird's manoeuvring then was particularly skilful. Sometimes it remained absolutely motionless in the same spot of air like a hovering kestrel; facing strong gusts of wind. Its wings and tail were all outspread, and its only shifts of position were occasional slight adjustments of its feathers to meet fresh eddies of air.

Eventually the bird glided to the tree, alighted on a branch close by the nest, and then leaped to the eaglet's side. It stayed there only a few minutes, delivering the lizard and helping the youngster to commence its meal. Then it made off again. Soon afterwards the second parent also briefly visited the nest, apparently merely to make sure that its offspring was still hale and hearty.



Peafowl

No more gorgeous creature exists on Earth than a Peacock, and it is a pity that the illustration here shows only its plainer mate. As is customary (though not invariable) in bird society, the male sex is the fair sex amongst Peafowl. Yet the Peahen, too, has stylish dignity of figure and grandeur of manner, as is indicated in this picture of a bird sitting on her eggs. Unfortunately, the cock never visited the nest, and so he did not have his portrait taken.

In parts of India Peafowl are sacred birds, since according to Hindu mythology a peacock was the vehicle of the god Kartikeya, who was a son of the Lord Shiva and his voluptuous consort, Parvati, and a brother of elephant-headed Ganesh. So in those localities where Kartikeya is held in especial reverence these birds are protected. No one molests them. Wide regions are therefore as safe for them as a wild-bird sanctuary; and by centuries of habit they stroll freely and fearlessly through the rustic landscapes. It is common to see a cock dancing its magnificent *pas seul* in a field before an audience of admiring hens, or a male bird as splendidly clad as a maharajah strutting along a road with a harem of its own particular brand of wives, or one of those hens guiding a brood of chicks through a farmyard where she had recently hatched them amidst newborn calves, litters of piglets, and other animals. The nest shown on the opposite page was situated in long grass on a broken wall beside a cowshed where men and buffaloes ambled, gossiped and bellowed in a hamlet called Madanpur, a few miles from Delhi. In it the unperturbed Peahen sat on a clutch of five eggs.

As I have remarked before, there is a charming intimacy of living between men and wild birds in rural India. I have described on page 40 a happy example of it in a village where a community of human beings and a colony of Painted Storks shared the local amenities. That was not in fact the full extent and variety of the local population. The place was a favourite resort also of gorgeous wild Peacocks and Peahens, who meandered through the surrounding fields, perched on the cottage walls, and fluttered to roost in the trees in large numbers. The camaraderie of all these different characters was as mutually peaceful as was presumably the case in Noah's Ark.



Red-wattled Lapwing

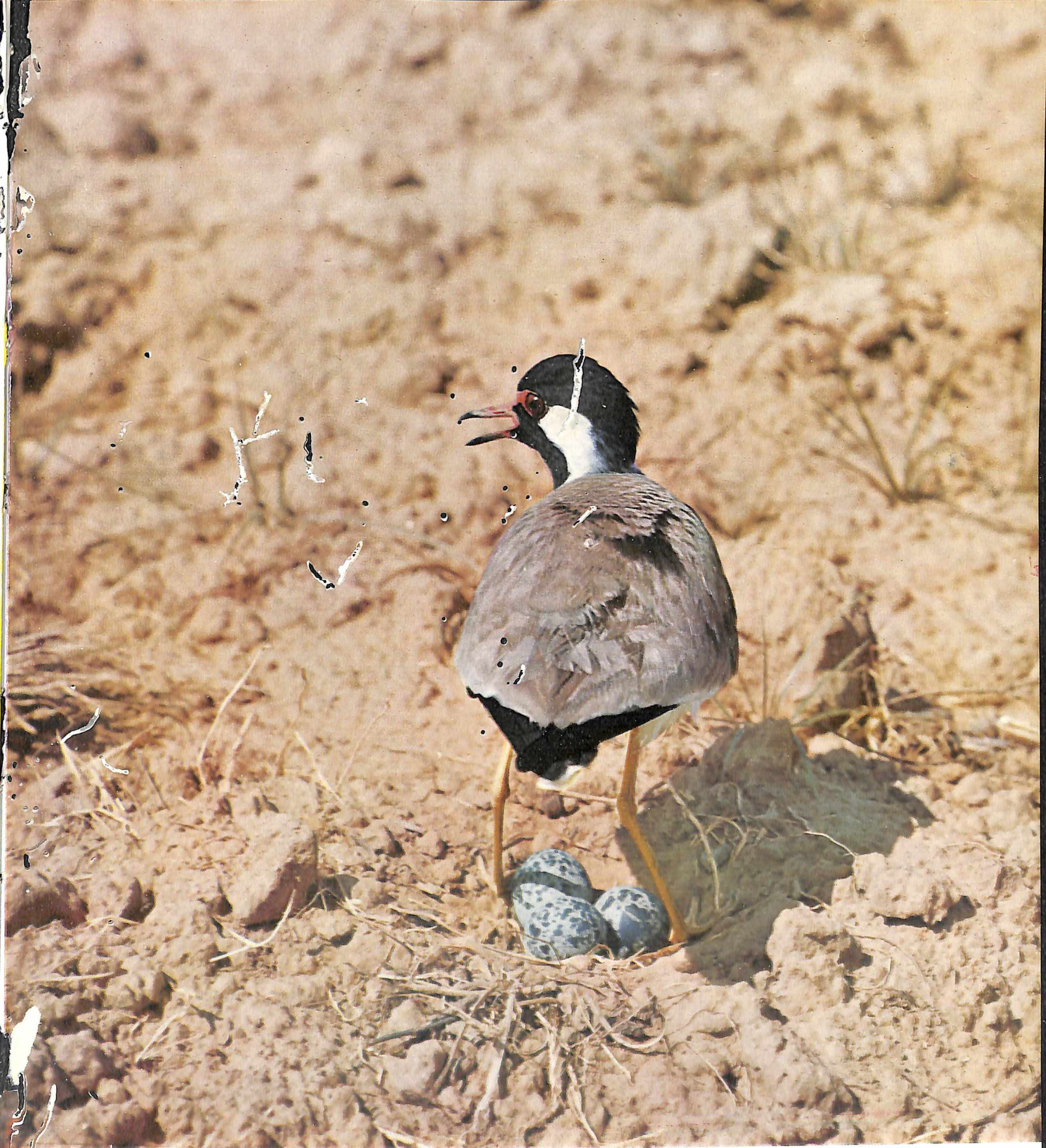
THIS handsome lapwing usually lays its eggs in a shallow scrape of earth in a field or other stretch of open ground. Pairs do not necessarily retreat to rustic quietude; on the contrary, several nest every year in gardens in Delhi. Other lapwing couples in the city prefer loftier elevations, resorting to flat roofs on buildings.

In April, 1960 a pair selected my house. Throughout their courtship they used my lawn as a rendezvous, dallying and mating there. After that they spent many hours every day on the house roof. Whenever I went upstairs I heard them making lapwingish conversation above the eaves. They were busy building a nest, and soon I found it—a circular heap of small stones with a shallow scoop in its centre. Its construction was a laborious undertaking, for the finished work contained nearly eight hundred little flints and pebbles.

The birds deserted this site on April 23rd, when the nest seemed complete and I believed the hen would shortly lay eggs. I suspect their abrupt departure was connected with the celebration of Queen Elizabeth II's Birthday. In Delhi we observed that happy national festival on April 23rd, Her Majesty's actual birthday, since the temperature on her official birthday in June was too scorching for a tolerable garden party.

Early that morning I watched a lapwing arrive on the roof as usual, heard it utter cries of alarm, and saw it promptly rise in the air and make off in panic. Then I noticed that in an excess of loyal zeal my servants had hoisted three Union Jacks on flagpoles on the roof near the lapwings' nest, and that all the flags were flapping bravely in a keen breeze. I had two of them pulled down forthwith, but could not avoid leaving one to express the British High Commission's joy on the anniversary of Her Majesty's birth. I fear the lapwings objected, for they never returned to my roof.

Several days later I discovered they had flown across the road, inspected other roofs there, and built a new nest above the office of a General in the Indian Army. Gaining permission from the military authorities, I climbed daily to his roof to observe subsequent developments. The lapwings' second nest was similar to the deserted heap of stones on my premises, consisting of six hundred and eighty-seven broken chips of cement painstakingly collected from a refuse dump. In due course I watched the birds incubating four speckled eggs. But alas, owing to some mishap these were never successfully hatched.



Blue Rock Pigeon

THE population of Blue Rock Pigeons in India, as in many other lands, is multitudinous. Amongst their overseas relations are the famous pigeons who congregate round the Nelson Column in Trafalgar Square in London.

In India the birds are abundant wherever either cliffs provided by nature or buildings provided by man afford them plentiful nesting sites. A pair lays its two eggs on a slight mat of grasses spread on a stoney ledge. These pigeons are, therefore, amongst the commonest residents of Delhi, for that historic, oft-rebuilt capital is well supplied not only with modern buildings but also with ancient ruins—and pigeons incline to prefer ruins. The broken 13th-century mosque and minarets at Qutb, the tumbled medieval walls at Tughlakhabad, the fragmentary palace at Ferozabad, and the great cracked gateways at Purana Quila abound with lofty niches well suited for the lodgement of eggs. Many less dilapidated old monuments provide equally aloof chinks of accommodation. The parapets on Humayun's Tomb, the ramparts of the Red Fort, and numerous crannies in the Great Mogul's palace in Old Delhi are ideal cradles for new-born chicks. Indeed, the men who over many centuries built the succession of capital cities clustered in the vicinity might have been striving for no other purpose than to provide permanent homes for teeming populations of Blue Rock Pigeons.

Nor did the latest of them, the architects who built for the glory of the British Raj in New Delhi, fail to add suitable contributions. Countless alcoves in the old Viceroy's (now the President's) House, the Parliament Building, and the Government Secretariats produce annual crops of nestling pigeons. I have even seen a pair of the birds constructing a nest in the arms of the statue of His Majesty the King Emperor, George V, overlooking the central thoroughfare once called Kingsway and now rechristened Rajpath.

I should perhaps add that Rock Pigeons show a similar indifference to all human Empires. For example, many members of the French branch of the family nest in crevices up the wall of the magnificent Roman theatre at Orange in ancient Provence; and I have watched those birds perching, flirting, and indeed mating on the hands, shoulders and head of the marble statue of the Emperor Augustus which dominates the stage there. Rock Pigeons do not give a damn for the Emperor Augustus, the King Emperor George V, or any other distinguished personage. I expect Lord Nelson and the galaxy of generals who surround him in Trafalgar Square would vehemently agree with me, if they were not so dumb.



Little Brown Dove and Indian Ring Dove

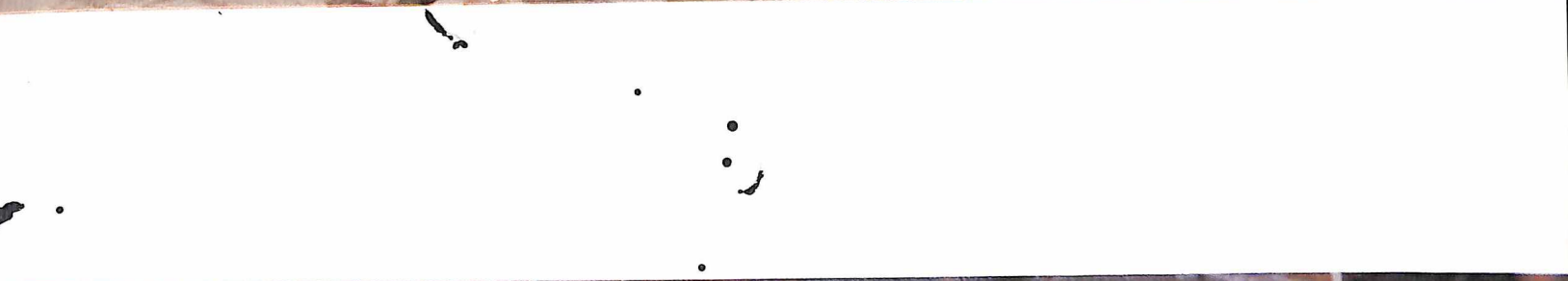
No more gentle-mannered bird exists in the length and breadth of India than the Little Brown Dove. Acquaintance with it makes one understand why a dove is often portrayed as the symbol of peace. The Indian Ring Dove (which in Europe would be called a Collared Dove) gives a less convincing impression of pacifism. Indeed, I have sometimes seen one fly in to such a bellicose rage, and rant and rave so violently, that it appeared an Angel of War rather than a Dove of Peace. Its behaviour then was entirely justified, because it occurred when some pirate like a House Crow or a Tree Pie was stealing its eggs.

The nests of both these doves are saucers of slim sticks set across forking branches in a shrub or tree. Both birds of a pair share the toil of building; but by the inherited habits of generations they observe a strict division of labour. One dove is solely concerned with gathering building materials, and brings to the nest every few minutes a fresh twig or rootlet; whilst the other is only concerned with plaiting these bits and pieces into place in the nest. So this second bird sits all the time on the unfinished structure, accepts in its beak every stick brought by its mate, and then pokes and weaves it into proper position—whilst the first bird flies away to fetch another offering.

It is instructive to watch the collector dove on the job. Not any and every bit of apparently suitable material satisfies it. On the contrary, it is very picky. I have often observed a dove so engaged on a bare flower-bed, where the earth had been recently dug, and where countless broken plant-roots therefore lay exposed. The dove would pick up these rootlets one by one, test the feel of each in its beak for weight, length and pliability, reject those which were faulty, and accept only those which were exactly right. To an uninstructed human eye all the samples appeared alike; but an expert dove's eye and beak judged better. The bird usually threw away about ten roots for every one it kept.

That is a vivid example of the care which birds take in choosing fabrics for their nests. I have frequently seen not only other species of doves, but also different types like orioles, crows and kites being equally particular about selecting materials. They *have* to be cautious, for if they chose inadequate stuffs, their chicks would suffer disaster. So Nature usually blesses them with unerring instincts in this vital matter.

(The upper picture on the opposite page shows a Little Brown Dove, and the lower shows an Indian Ring Dove.)



Green Parakeet

GREEN PARAKEETS are beautiful birds with superlative elegance of figure and radiance of plumage. In winter they spend their days in large flocks, chattering sociably in tree-tops, travelling in screaming air squadrons across the sky, and settling almost as devastatingly as locusts in fields or orchards to guzzle food.

In the autumn many hens select their nesting sites for the following year. These are commodious holes in trees. The female parakeets occupy them as sleeping quarters throughout the winter, each bird retiring at dusk to its chosen retreat and emerging again at dawn the next morning.

In Delhi their courtships begin in January. Shortly before sunrise a cock will fly to the entrance of the sleeping apartment of his chosen hen, perch outside it, and call aloud to her. She appears, and they hasten together to a nearby branch, where he promptly mounts and pleasures her. He then regurgitates food for her; and when she has finished the meal she returns to her nest-hole. From the beginning of their mating until their chicks are nearly full-grown, three months later, she rarely leaves the nest. Whereas previously she joined the parakeet flocks in all their sociable activities, she now stays at home, as closely hidden from view as an old-fashioned Indian wife in purdah. Once in a while she appears briefly from her retreat, to mate with her lord, receive food from him, and preen her feathers; but immediately afterwards she disappears again into the nest-hole.

After their chicks are hatched she continues to be absorbed in maternal duties. All day she guards the youngsters in the nest, and at nights she sleeps with them there. The cock bird's labours as the family's provider are then increased, for he must bring food for his offspring as well as his partner. Only when the chicks are growing lusty does the hen once more leave the vicinity on foraging expeditions of her own, and resume life amongst the parakeet parties out-of-doors.

Unfortunately it is impossible to observe the lives of nestling parakeets, for their first several weeks are passed deep in the dark interiors of tree-trunks. But eventually they acquire strength to climb the inside walls and peer hour after hour, fascinated, at the outside world. Nearly four months after their birth as eggs they pluck up courage to leap from the tree and join the chattering, colourful flocks of their adult kindred.



Crow Pheasant

THE Crow Pheasant is neither a crow nor a pheasant. I suppose it must have been christened by slapdash, ignorant people who observed its long tail, its habit of strolling sedately over the ground in search of food, and its shyness in running into hiding in undergrowth whenever it is disturbed (all pheasant-like characteristics), and who then noticed its crow-like head—and promptly jumped to the wrong conclusion. The truth is that the bird belongs to the family *Cuculidae*, or Cuckoos. An additional disconcerting fact is that it is a non-parasitic cuckoo, who builds its own nest in which to incubate its own eggs and rear its own chicks. Altogether, the situation is somewhat confusing.

Nor is the species' nest a slight, skimpy, apologetic affair. As is shown in the picture opposite, it is a formidable example of avian architecture—a large, globular, domed structure with room to accommodate anything between three and five quite hefty youngsters. And the adult birds are unexceptionably conscientious in performing their parental duties. They do not leave others to coddle and feed their offspring, as most cuckoos do. On the contrary, in the breeding season—which lasts for them throughout the pelting monsoon—they spend busy hours every day, day after day, hunting caterpillars, grasshoppers, beetles, wasps, locusts, lizards, frogs, small snakes and other of the varied, reluctant meats on which their nestlings thrive.

Perhaps the most charming feature of the Crow Pheasant is its voice. In deep, booming, rather sepulchral tones it utters periodically a three-or-four-times reiterated hoot, and at each hoot the bird bows its head as if it were performing some solemn, ceremonial obeisance. It is the sort of combined sound and gesture which might make ancient, primitive peoples suppose that the Crow Pheasant is a sacred messenger from the gods; and the bird's richly coloured plumage—so brilliantly shown in this picture—might well also indicate the same high destiny.



Pied Kingfisher

THIS bizarre kingfisher appears all the more handsome because of its considerable size, since it measures twelve inches from the point of its long beak to the tip of its short tail. Unlike its White-breasted relative (of whom I shall write next), it is a true kingfisher in habit as well as name, since it feeds entirely on fish.

The nest-hole portrayed on the opposite page was tunnelled by a pair of the birds into a sandbank beside a rivulet, and gaped about five feet above the water. The chicks squatting invisible within its dark interior could be heard periodically calling for food. Both parents occupied themselves diving for fish in the stream, and flying with their hauls into the tunnel. At the same time another pair of Pied Kingfishers with a nest and family a few yards away along the same sandbank were similarly engaged.

It was charming to watch that quartet on the job. In intervals between bouts of sport they perched sociably together on a telegraph wire high above the water, where they chattered volubly—forming a group reminiscent of human anglers swapping boasts about the sizes of their catches! Every now and then a bird would spy a bite below, drop from its look-out post, hover on rapidly vibrating wings a few feet above the water, and then close its wings and plunge headlong into the stream. A moment later it re-emerged from the splash with a shining fish gripped in its beak, and, speeding to its nest-hole, disappeared indoors to present the gift to its progeny. When it reappeared, it made its exit backwards (tail first and head last), owing to the confined space of the tunnel, and then ascended for further conversation with its companions on the telegraph wire.

The four kingfishers were apt to be particularly busy towards sunset, perhaps because the temperature then was cooler, or because the fish were more mobile and numerous then, or because unless their youngsters *had ample suppers they would be kept awake by hunger pangs when they should be sleeping. Their flight was swift, and in order to get good photographs in the fading light at that hour, Chris Loke had to use flashlamps.* The portrait opposite is one of the attractive results. It shows a bird poised in mid-air immediately after it has backed out of its nest following a visit to its chicks. If the picture had been taken before it entered the nest tunnel, a fish would still be gripped in its beak.



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White-breasted Kingfisher

THE name White-breasted Kingfisher is an accurate but over-modest description of a bird endowed with more brilliant flashes of beauty than just its snow-white front. Its dark red beak, chestnut-brown flanks, gorgeous blue wings, and coral-red legs are marvellous additional attributes. Nor does it favour only one monotonous shade of blue, for the colour is boldly varied.

A remarkable fact about the White-breasted Kingfisher is that it is more of a hunter than a fisher. Sometimes it plunges into water to catch a fish, like any other member of the tribe; but more often its kills for food are worms, grasshoppers, lizards and other land-lubbing types rather than the inmates of pools or rivers. I have watched one of these kingfishers sit by the hour on a low branch of a tree above a lawn surrounding a fishpond, keeping a sharp look-out for prey. Every few minutes it pounced into the grass, extracted a large worm from the ground, and bore this back to its perch for leisurely, gourmandish swallowing. Hardly ever did it plunge into the equally accessible water, although the pool was just as teeming with fish as the ground was riddled with worms. Perhaps the explanation was that the denizens of the pond were goldfish, and that White-breasted Kingfishers are not partial to such gaudy fare.

No doubt because of that habit, White-breasted Kingfishers are frequent visitors to gardens in Indian cities and towns; whereas other species of their tribe are rare callers, except where lakes or streams form important features in the landscape gardening.

Like other kingfishers, the White-breasted breed lays its eggs and rears its chicks in tunnels burrowed into sandbanks or mudbanks. The entrance to one such nursery is visible on the opposite page; and also in the Frontispiece, which portrays the same decorative creature. Invisible, but not inaudible, at the far end of the tunnel were half a dozen lusty nestlings, who often squawked for food. Several times every hour a parent would visit them to satisfy their craving, bringing worms, lizards, eels and fish without discrimination between items on the menu seized from the surrounding meadows or a neighbouring pond.



Green Bee-eater

GREEN BEE-EATERS have a fairy-like loveliness which springs not only from wondrous sweetness of form but also from airy grace of movement. Their long-tailed, sharp-winged, sylph-like figures perform the lightest, daintiest acrobatics of flight. That follows from the manner in which they hunt their food. They do not stroll on a lawn and lug slothful worms from the ground, or drop into water to catch hesitant fish, or climb trees in search of lurking grubs, or gather static berries on shrubs, or seek other more or less stationary mites of nourishment in the manner of most birds. They go after swift-moving flying insects, who flee to escape them. They chase a bee through the air, a dragonfly on the wing, or a moth in full flight. And as those lightsome creatures swerve or zigzag to avoid capture, the bee-eater twists and turns, rises and falls, hovers or darts in pursuit. Its manœuvres are like a dance, an exquisite *pas seul*, an episode of ballet performed in mid-air, which reaches its climax when, with a thrust of its head and a snap of its beak, the bird claims its prey. Then it speeds to a sandbank, where its brood of young bee-eaters awaits the prize.

The nest is at the far end of a long tunnel excavated in the sandbank by the birds themselves. The parent bee-eater shuffles along the corridor and delivers its catch to a nestling. Then it reappears out-of-doors, and returns to its happy hunting ground. Perching on a twig, it observes appraisingly every winged insect in sight. With the practised judgment of a connoisseur it considers the tasty quality of each passer-by, rejecting this one forthwith, dismissing that after a moment's contemplation, deciding that a third is just right, and promptly giving chase. So the lovely, swift, frolicsome, and fatal aerial ballet between the hunter and the hunted is repeated. It is repeated by every parent bee-eater about a dozen times every hour.

In the picture on the opposite page a bird is speeding away from its nest on one of those foraging expeditions. The shadowy entrance to the nest appears behind the tip of its exquisite long tail.

Bee-eaters are so much birds of the air that they are almost incapable of movement on the ground. When not in actual flight, they stay perched aloft on thin branches of trees, telephone wires or similar fine elevations. Their feet are made for gripping such slim supports, and are too small and feeble for walking or hopping on the ground. Like certain species of sea-birds which are similarly incapacitated on "terra firma", they only come to earth for nesting.



Indian Roller

THE Indian Roller is a revelation. When perched on a bough it attracts no particular attention, appearing a heavily built, dully coloured, rather unbecoming creature. Its eyes search the ground, and suddenly they spy a grasshopper poised on a blade of grass, a lizard enjoying a sunbath, or a frog peering from beneath a leaf. The bird opens its wings, flutters to the earth, grabs the victim, and flies back to its perch—and in those moments it unveils its unsuspected, ravishing beauty. The nondescript browns and greens of its closed wings and tail are transformed into the brilliant, varied blues of its outspread plumage. The picture of the bird in this book gives a vivid impression of those flashes of glory.

Its name of Indian Roller derives largely from its behaviour in the breeding season. Different species of birds exhibit different remarkable forms of sexual display when spring is in the air and courtship is in fashion. White-throated Munias skip and twiddle their tails, Peacocks dance sedately with brilliant cloaks spread aloft like rainbows, Crimson-breasted Barbets wiggle-waggle their posteriors seductively, Ring Doves strut with puffed-out chests, courtly bows and suggestive coos, Indian Robins walk backwards in extravagantly contorted postures, and other types carry-on in equally odd ways.

Indian Rollers express their feelings on such occasions by rolling about in the upper air in a most abandoned fashion. Indeed, no flirtation between lovers in bird society is more dramatically beautiful than that of these rollers. In each other's company a pair of the birds work themselves into a state of high excitement, soaring towards the sky, and fluttering and somersaulting there in a paroxysm of emotion as they utter hoarse cries of desire. The performance continues for several minutes with a sort of ecstatic intoxication that is astonishing. No acrobats in a circus could cast themselves around more recklessly. The birds seem literally head-over-heels in love, flashing their brilliant multi-blue wings as they flip hither and thither, climbing, hovering, capsizing, tumbling and rising again in a breath-taking exhibition of crazy trick flying. Periodically they plunge downwards like aeroplanes out of control, apparently intent on dashing themselves to bits on the ground, only to recover their equilibrium within a few inches of the grass, and to shoot up again like rockets towards the heavens. Eventually their crescendo of exuberance reaches its climax, and they alight together on the earth to consummate their union.

In comparison, the rock-'n-roll appears a mild sample of exhibitionism.



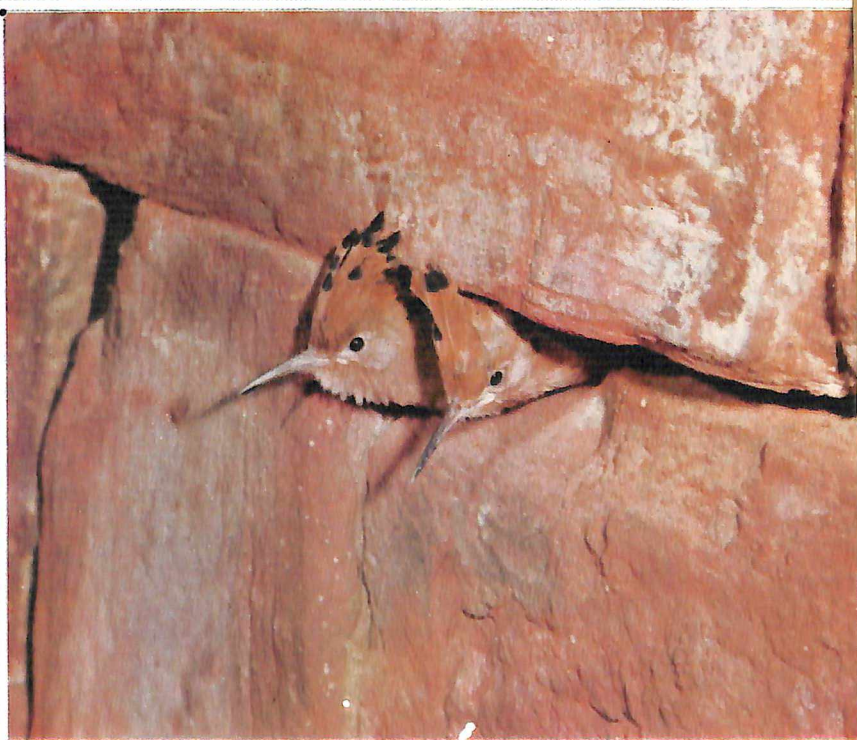
Indian Hoopoe

THE hoopoes' nest portrayed on the opposite page is lodged, as the reader can see, in a red wall. The wall happens to be the most famous edifice of that colour in the world, for it is the outer bastion of the Red Fort in Old Delhi—the one-time home of the Great Moguls who ruled India through several centuries. A stone's throw from this hoopoes' nest stand the main Gateway, the Halls of Audience, the Pearl Mosque and the gracious, gleaming white marble buildings of the Private Palace in the royal gardens. It is one of the most stately and fabulous sites of history.

Indian Hoopoes are not unworthy occupants of the remnants of that departed glory. Their appearance is distinguished and courtly. The bird's figure is dandyish; its plumage is richly coloured like a maharajah's robes; and the crest on its head is as splendid as any turban.

Each summer numerous pairs of hoopoes lay eggs on little mats of grass deposited in holes along the palatial stretch of wall facing the Jumna River. A young family consists of from two to five chicks, and their parents appear to have an almost non-stop task preventing them from dying of starvation. No nestlings of my acquaintance have more demanding appetites, their meal seeming to be unending from dawn until dusk each day. Both adult hoopoes spend hours prospecting and digging feverishly with their long, fine, curved beaks in the surrounding pleasance; and every few minutes one of them flies with a worm or other titbit to the nest entrance. The chicks cannot restrain their hunger until the elder arrives indoors, but crane their necks from the entry and receive the food from the old bird as it flutters in mid-air.

When the fledglings leave their birthplace in the Red Fort they still depend on their parents for food, since their own beaks are as yet too short and inexpert to delve into the ground and extract successfully feasts of lively, protesting worms. So for many days afterwards every family stays as a party together, the troupe of colourful, zebra-striped youngsters following a parent wherever it scurries in search of prey. Each young hoopoe receives its rations in turn, until gradually, by precept and practice, they themselves become master diggers for worms. Then the family breaks up, each member going its own way into the wide world.



Crimson-breasted Barbet

THE Crimson-breasted Barbet is one of the most decorative, industrious and engaging residents in Indian gardens. It is more familiarly known as the Coppersmith Barbet because of the single, monotonously reiterated call-note which it utters, and which is its only claim to being a songster. The rather metallic-sounding cry is reminiscent of the perpetually repeated taps of an Indian village coppersmith's hammer on his wares.

The bird starts its annual cycle of family life about September each year when many individual barbets select sites for their next year's nests. Flitting from tree to tree, they inspect soft-wooded trunks like those of jacarandas, into which they might bore long tunnels. As both sexes of the species appear alike, it is difficult to tell whether only one or both of a pair undertake the labour of excavating their nest-hole; but I suspect that most, if not all the work is done by the hen.

When a barbet has chosen a suitable site, it starts to bash, chip and gouge with its tough workman-like beak at the bark. Gripping the tree-trunk in a woodpeckerish stance, and jerking its body rapidly to and fro as it uses its bill alternately as a hammer to split the timber, a chisel to cut it, and a shovel to throw the broken chips away, the bird appears like a tiny but powerful battering ram. Gradually it forces the beginning of a hole in the wood. Thereafter it toils much of each day, day after day, coming on to the job soon after sunrise and continuing until the early afternoon, with only short intervals now and then for rest or refreshment. As the days pass, it drives a neat round gallery ever deeper into the tree, penetrating first two or three inches horizontally into the wood, and then making a right-angle turn and plunging several more inches perpendicularly down the trunk's interior. As the work progresses the barbet's figure disappears farther and farther into the hole, until it vanishes altogether from sight; and after that its presence is only periodically betrayed when its face reappears briefly at the tunnel entrance to hurl a beakful of wood chips into the air. According to the toughness of the timber, progress is slightly faster or slightly slower; but the task is always a protracted, relentless, Herculean labour. A Crimson-breasted Barbet which I watched carefully one autumn took three weeks to complete a tunnel about two inches in diameter (just wide enough to admit the bird) and penetrating altogether ten inches into the tree.

For the next few months, right through the winter, such holes are used as bedrooms by their hen owners. Each evening at twilight every proprietress of such a

lodging hops into it, sleeps there all night, and jumps out again at sunrise the next morning. Every year in my garden I used to watch eight or nine barbets retiring at dusk and re-emerging at dawn from their dormitories.

When spring returns, the hen recommences work, now enlarging the chamber at the foot of the tunnel-shaft to turn it from (so to speak) a bedroom into a nursery. About that time a cock barbet appears, and shows an interest in her and her employment. Then he starts to woo her. Like a human lover bringing boxes of chocolates or posies of flowers to his intended, he visits her frequently, every time carrying in his beak a gift of berries for her. She accepts them with relish, snatching them from him and gulping them down. Every now and then—perhaps on the average once in every half-dozen such visits—he expresses a wish to receive a suitable return for his largess. Wiggle-wagging his posterior and fluttering his wings in a most seductive manner, he conveys that he desires intimacy. If she is in the mood, she promptly responds by crouching on the branch where they are perched. He hops on her back, and their union takes place. On those occasions he does not present her with the berries he has brought until she has complied with his will.

Some days later she lays their eggs on a cushion of wood chips prepared at the bottom of their nest-shaft; and about a fortnight later still three or four chicks are hatched in the dark interior. They remain incarcerated deep in the tree-trunk for another five weeks or so, when they leap from their birthplace and fly away into the outer world. Throughout that period both parents spend hours every day speeding energetically to and from the nest, bringing feasts of berries and an occasional insect for the growing family.

Most pairs of Crimson-breasted Barbets of my acquaintance renewed courtship and mating on the very day that their first brood left home, and during the next several weeks raised a second brood in the same tunnel. This business of conceiving, bearing and rearing two successive families kept them fully occupied most of the summer.

Often barbets use the same hole as a bedroom through the winters and a nursery in the summers year after year, merely lengthening the shaft of the tunnel by several inches every twelve months so as to provide a fresh cradle for each generation of chicks.

The first illustration in these pages shows an adult bird arriving at its nest, and the second reveals a youngster peering eagerly from the nest entrance, almost ready to leap from home into the wider, freer world.

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Green Barbet

THIS barbet is nearly twice the size of its Crimson-breasted relative, measuring ten inches long in comparison with the latter's six inches. In figure and dress it is less attractive than the other, and in temperament it seems more ill-tempered and quarrelsome. Otherwise it shares many similar habits. For example, Green Barbets also nest in chambers at the far ends of long tunnels excavated by the birds themselves in tree-trunks.

Being grosser birds, their tunnels are wider and their nest-chambers more commodious than those made by the smaller barbets. Probably that is the explanation of their less agreeable tempers, for the following reason. A number of other species, such as mynahs and parakeets, also nest in cavities in trees; and since these have no implements of their own—like the workman-like beaks of barbets—with which to delve nest-holes, they rely on the labour of others. Lodgings gouged out by Green Barbets are about the right size for them; so when the urge to reproduce their species takes control of them, they often attempt to commandeer those barbet residences for their own use. Naturally, the barbet owners object. But the mynahs and parakeets are compelled by just as strong and undeniable a natural force to try to seize the property, as the identical force commanding the resistant barbets. So vicious contests develop between the rivals. I have watched many pitched battles between pairs of barbets and mynahs, sometimes lasting several days. Usually the barbets refused to be ejected, and in the end were victorious—but no wonder they developed a considerable amount of bad temper in the process!

Occasionally the barbets were vanquished; but that was probably in circumstances when they were not particularly keen on retaining possession of their premises, such as when they had already reared one brood and were perhaps only mildly inclined to produce a second. In any case, when they finally completed their annual effort at reproduction, lost interest in their nest-hole, and departed, the site became available for other occupants. In my garden many pairs of Common Mynahs, Brahminy Mynahs and Green Parakeets laid eggs and hatched chicks in ex-nests of Green Barbets.

Indeed, other creatures also used those properties when they were abandoned by their makers. Squirrels bore young, bees contrived honeycombs, and bats slept at nights in caverns originally carpentered by Green Barbets. As builders, these birds are therefore great benefactors to numerous birds and beasts.



Golden-backed Woodpecker

ALL woodpeckers are engaging birds because of their colourful figures and dramatic habits. None is more pleasing than the Golden-backed Woodpecker of India and Ceylon. A large member of the tribe, measuring eleven inches long, its handsome garb is well illustrated on the opposite page, which shows a hen bird at the entrance to her nest. The cock's dress differs only in that the whole crown of his head from front to back is as crimson as the hind-half of the hen's crown.

Other types of woodpeckers were rare visitors to my garden in Delhi, but this species came often to examine the merits of my trees as larders stocked with tasty insects and larvae. One of these Golden-backed beauties would fly over my wall and across the lawn with raucous screams and purposeful, undulating flight towards this or that tree-trunk. Alighting there, by a series of jerky hops it would climb up the trunk and along the branches, tapping here and there at the bark, and chipping off strips wherever succulent morsels of food lurked below. Every time that it discovered such buried treasure I could see, through field-glasses, its very long tongue flick out from its pick-axe beak and lick the grubs from their lair. Occasionally I saw a woodpecker enjoy a veritable feast when it came upon a procession of ants ascending a tree. The procession would then be scattered with much more devastating casualties than those inflicted by a *peesse* of police breaking up a demonstration by anti-nuclear bomb marchers.

In the breeding season Golden-backed Woodpeckers sometimes visited my garden in pairs, one bird closely following its mate as they sped across the lawn and went from tree to tree in search of provisions for their family of youngsters. I always hoped that a couple would find a suitable site for a nest in one of my arbours, so that I could observe their woodpeckerish family life at close quarters; but unfortunately that never happened. The nest pictured on the opposite page was situated about eight feet from the ground in a tree-trunk along one of those shady avenues bordering the sun-baked highroads of India, with which readers of Rudyard Kipling's "Kim" are familiar.

Golden Oriole

GOLDEN Orioles are summer visitors to Delhi. Arriving in the first few days of April, they spend several months busily engaged in courtship, nest-building, hatching eggs, feeding chicks, and guiding young families through adolescence; and then they depart again on autumn migrations before mid-October.

The morning of their annual arrival is memorable, for the cock Golden Oriole is perhaps the loveliest bird that visits northern India. As can be seen in the picture on the opposite page, he is a flash of brilliant beauty. Sometimes physical beauty in a creature—whether it be a human being or some other mortal animal—is so flawless that the quality is by itself completely satisfying. No additional attribute seems required. Probably we have all observed (or think we have observed) such rare bodily grace in a man or a woman twice or thrice in our lifetimes. The face and figure of a person appear so exquisite that nothing more could be desired; their superlative elegance attracts all eyes when the individual enters a room; it is inexpressibly pleasing and moving; and it lingers in one's memory for ever afterwards.

I believe that in human beings such physical magnificence must be associated with a measure of goodness of character. A sour disposition would lend a slight, marring droop to the corners of a mouth; a vicious temper would be reflected in a hard look in the eyes: sheer stupidity would banish any bright liveliness from the features—and so on. A human face cannot be a mask completely hiding character; on the contrary, to a discerning observer it betrays a revealing hint of character. Perfect physical beauty in men and women need not be partnered with lofty intellectual genius, or sublime spiritual saintliness, or astounding brilliance of personality, or any other pre-eminent virtue. But it can scarcely be combined with a deplorably diabolical nature. . . . However, I must not be diverted into that fascinating byway of speculation!

For human observers, at least, bodily beauty in birds and beasts is independent of their individual dispositions or foibles. Whether the same holds true amongst those birds and beasts themselves is another question. I do not know whether a nasty look in a cock Golden Oriole's eye, or an arrogant fold of its wings, or a supercilious tilt of its head betrays to a hen of the same species that his loveliness of form is not matched by loveliness of temperament. From much observation of the behaviour of birds I believe that different individuals of the same species do possess varied dispositions. But for us human observers all cock Golden Orioles look—though they may not behave—alike; and each one is a glimpse of glory, a joy to behold.



One reason why that loveliness is perfect is that it is simple. Simplicity is one of the most truly fine qualities. A cock Golden Oriole's colour scheme is uncomplex, being composed only of distinct masses of golden-yellow and pitch-black. The bird's form, too, is simple, its figure being like that of countless other common-or-garden species. It boasts no dramatic exuberance of any kind, such as an unduly elongated beak, a fantastically extravagant crest, a fabulously exaggerated tail, or elaborately gorgeous plumage. Some other types have more startling, more breath-taking artistry in their costumes. Who would deny, for example, the supremely ornate splendour of the Peacock? It has unsurpassed richness of decoration, absolute majesty. It puts on a marvellous display—and yet it has not the same fine loveliness as a Golden Oriole. When a Peacock stamps its lordly foot and shivers its brilliantly outspread tail in its exciting love dance, there is just a touch of the over-theatrical, of straining after effect, of affectation, which may be perfection of magnificence, but is not perfection of beauty.

The oriole is effortlessly handsome. A mere ten inches of ordinary bird-shape, it nevertheless excels all other birds in grace. That is because its unsurpassed radiance is combined with pure simplicity—or so it seems to me.

The hen Golden Oriole has fine distinction in her own right. She too is easy on the eye, as her portrait here reveals. Her upper plumage is yellowish-green, her wings are brown tinged with green, her tail is brown-black tipped with yellow, and her off-white breast is washed with pale yellow and streaked with dark brown. Yet she seems rather drab beside her mate—that paragon of earthly beauty.



Black Drongo

THE Black Drongo is amongst the commonest of Indian birds. Its trim, fork-tailed figure is attractive, its flight has masterful grace, and its voice is throatily cheerful. But perhaps its most remarkable qualities are pugnacity and courage. A devourer of bugs, moths, crickets and similar lively foodstuffs, it cannot always be bothered to hunt its own prey. Often I have observed a drongo sitting with apparent casual innocence on a bough as it watched a hoopoe or a mynah searching for food—and every time the other bird caught a worm, grasshopper or other small game, the drongo would fly down, rob it of the prize, and swallow the morsel itself.

More creditable is its fearless bellicosity when it owns a nest. Then it is apt to sally forth and do battle whenever another bird flies—however inoffensively—close to its home. It launches the offensive regardless of the size of the passer-by. I have watched a drongo viciously assault not only species like barbets, doves and mynahs, which were about twice its size, but also crows, falcons, kites and eagles which were three or four times as big. On occasions its audacity was all the more splendid because it chanted a war song as it advanced on the foe. Nor was its attack in any way a feint. Arriving alongside its adversary, it would deliver actual physical blows. Several times I saw a little drongo alight on the back of a mighty eagle, and ride there as it delivered jabs with its beak, almost like a jockey whipping a race-horse to a winning post.

Most birds show remarkable courage in defence of their eggs or chicks, vehemently attacking any creatures which try to molest them. But in that situation Black Drongos are more spontaneously heroic than any other species. Perhaps it is because they are recognised as particularly doughty guardians of nests that certain gentler characters like Red Turtle Doves and Golden Orioles often build their nests in close proximity to a drongos' nest. With such neighbours the martial drongos live in perfect peace.

They also have a pleasant, mutually tolerant relationship with cows. Frequently a herd of grazing cattle has a few Black Drongos in attendance. The birds stand on the animals' backs, riding them as they amble through the pastures; and whenever the obliging beasts disturb a grasshopper or other desirable bite of food in the grass, a bird flies down to capture it.



Red-whiskered Bulbul

THE three species of bulbuls which visited my Delhi garden—the Red-vented, the Red-whiskered and the White-cheeked—were all neat, lively, eight-inches-long birds with pleasing characters. Their melodious voices added bright snatches to the medley of bird song in the flower-beds and shrubberies. The handsomest of them was the Red-whiskered Bulbul, with a jaunty black cockade, crimson “moustachios”, brown mantle, white breast, broken black necklace, and bright red patch beneath the tail.

Pairs were apt to make their nests in carelessly concealed places, with the result that they were often robbed of eggs or chicks by thieving birds and beasts. One reason for these disasters might be the conspicuous manner in which bulbuls build the nests, thus giving away their situations. The hen does all the work, gathering building material, flying with it to the site, weaving it into place in the gradually growing structure there, and then coming away again in search of more material. And the cock attends her at every stage of the labour, perching near her when she is selecting each bit of grass, rootlet, or other fibre, flying as close as a shadow behind her as she speeds to the nesting site, standing guard beside her again whilst she toils there, and following her once more as she wings away for more foraging. Exactly the same division of active and passive labour between the hen and cock respectively is followed by pairs of Red-vented Bulbuls. This perpetual double appearance of the birds is apt (inadvertently, of course) to draw attention to them, especially as they continue on the job hour after hour and day after day for three or four days. Many watchful animals—including enemies—must be aware of their activity, and know their purpose, long before the nest's completion.

Whatever the reason, the casualty rate amongst bulbuls' eggs and nestlings in my garden was remarkably high. Only a small percentage of the youngsters born as eggs survived to fly away as grown birds. All the rest were pillaged by winged egg-suckers or chick-eaters like House Crows, Tree Pies and Koels, or by four-footed pirates such as lizards and mongooses. It was sad to see pretty eggs like those illustrated on the opposite page go to make a thief's breakfast.



Red-vented Bulbul

HANDSOME, lively, cheerful Red-vented Bulbuls are common birds in Delhi. Every year between March and July about a dozen of their nests were built in my garden. As I have already written, the casualty rate amongst their eggs and chicks was high, for the nests were built in shrubberies, trees and flower-beds without any marked attempt at concealment, and so were exposed to ravage by unfriendly creatures with a taste for their contents.

The picture on the opposite page illustrates remarkably the carelessness of Red-vented Bulbuls about hiding their nests. The story of this particular sample of such casualness is entertaining. We had erected a hide in the garden from which Chris was taking photographs of Green Parakeets occupying a hole in a jacaranda tree; and one morning when she was hard at work inside the hide a pair of Red-vented Bulbuls began building a nest on a branch of the tree overhanging the hide and actually brushing against the photographer's platform. In spite of Chris's occasional movements two feet away, of her periodic comings and goings up and down the ladder, and of the fact that the jacaranda branch had in any case scarcely any foliage to afford protection, the birds continued constructing their nest; and in due course the hen laid three eggs there. It almost seemed as if the bulbuls were envious of the parakeets, wished to have their own photographs taken, and made their home beside the platform so as to draw Chris's attention to themselves! Naturally, she responded to this hint, and we raised a second hide two yards away, from which she got a series of pictures. The shot on the opposite page shows one of the bulbuls arriving to incubate the eggs, with the canvas tent and wooden platform of the first hide forming a background.

Incidentally, despite the nest's exposed situation, the parent bulbuls succeeded in rearing their three fledglings without mishap. A fortnight later the young trio fluttered safely into the outer world. Out of eleven Red-vented Bulbuls' nests which I watched in the garden that summer, this was the only one whose inmates survived. So perhaps the old bulbuls built better than they knew, since the two hides with their human occupant seemed to provide sufficiently formidable deterrents to prevent enemies from raiding the nest's precious treasure.

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Yellow-eyed Babbler

YELLOW-EYED Babblers have remarkable powers of concentrated industry. I have never noticed a member of the species idling on a branch, tarrying in a shrubbery, or posed motionless in any other situation in the manner of one enjoying a few moments' leisure. All other types of birds that I can recall show an occasional capacity to relax as they perch inactive on a twig, squat in sunshine on a lawn, or snooze in some secluded retreat. No doubt when dusk falls these little, long-tailed babblers also become motionless, roosting on a favourite bough, closing their eyes, and sleeping for several hours. But in daylight I have never caught sight of one in a static state—except when it happened to be sitting on its eggs.

In every other circumstance the Yellow-eyed Babblers who came frequently to my garden were in perpetual motion. They fed in the shrubberies and flower-beds with apparently unappeasable appetites, flitting from stalk to stalk in search of insects climbing the plants, or of those creatures' eggs deposited amongst the leaves. They travelled fast, never lingering in one spot longer than was necessary to scrutinise carefully every likely nook, and then hastening to another foothold. Having searched one flower-bed, hedge or vegetable patch from end to end, they sped across the intervening space to the next clump of vegetation, and continued their hunt with ceaseless zeal.

They show the same industry when building a nest. No garden bird is a more accomplished builder. I am inclined to believe that these babblers take more painstaking care and more time over the construction of a nest than do any other small birds in Delhi; and the finished product is a work of conspicuous skill, strength and charm. Thick walled, deep cupped, tightly woven, and firmly tied to supporting flower-stalks, it is a tiny fortress of broad grass-blades and fine bark-strips transparently enveloped in an outer network of cobwebs and gossamer.

In it the hen lays between three and five eggs; and both birds of a pair help to incubate them. So deep is the cup that only the sitting babbler's upright tail at one end, and its forehead and peering eyes at the other are visible above the nest-edge. Then, for once, this pretty little feathered dynamo rests motionless.





Jungle Babbler

JUNGLE Babblers are plentiful, perpetual and extrovert inhabitants of Indian gardens. Gregarious and noisy by habit, parties of half a dozen or more of them are for ever hopping, feeding, squawking, fraternising, quarrelling, composing their quarrels, and skipping sociably onwards again across lawns and flower-beds.

The bond which links a group of them together is extraordinarily strong, as is revealed in the breeding season. Instead of dividing them into separate pairs, as other species who flock in winter almost invariably do, the members of such a party remain closely, companionably combined together throughout the spring and summer. The reason for this has only recently become understood. The group shares a communal nest.

Knowledge of the extent and detailed arrangements of this odd domestic partnership is still far from complete. Do four birds (two pairs) customarily occupy the same nest, or does the association more commonly extend to three pairs? And in what degrees do the different pairs, and the cocks and hens of each pair, share the labours of building their nest, providing a clutch of eggs, incubating the eggs, and feeding the chicks? So far as I know, accurate and truly representative answers to these questions have still to be discovered. I for one have seen as many as five different Jungle Babblers in quick succession bring food to the same brood of youngsters in the same nest.

Another interesting fact about the family life of these birds is that Pied Crested Cuckoos and Common Hawk-Cuckoos both often exploit them as foster-parents for the rearing of their young. A cuckoo slips furtively on to a babblers' nest whilst its collective owners are all away at some chatter-box social gathering, lays an egg, and hastens away. More than once I have observed a Pied Crested Cuckoo's egg deposited amongst a clutch of Jungle Babblers' eggs, and it was impossible to distinguish between the two different species' apparently identical size, shape and glossy, turquoise-blue shells. It was fascinating, later, to watch the new-born cuckoo eject its new-born babbler foster-brothers or foster-sisters, one by one, from the nest. And it was no less entertaining, later still, to watch the whole troupe of babbler foster-parents exerting themselves with tireless zeal to keep alive with copious refreshments this murderer of their own offspring.



Ashy Wren-Warbler

ASHY Wren-Warblers are amongst the most enchanting garden birds in Delhi. All-the-year-round residents, they lead solitary, very ordinary existences through the winter, flitting quietly and unobtrusively through flower-beds and vegetable patches; and then in February they form pairs which lead inseparable, eventful lives for the next several months. Small in size, elegant in figure, gracious in colouring, cheerful of voice, and with gay, airy liveliness of movement, they are in every way attractive creatures.

They build various kinds of nests-in various environments. In my garden they always sought to achieve that purpose by stitching leaves together in the manner of Tailor-birds (of whom I shall write later), though their architecture was sometimes more resourceful and daring than that of the other species. Perhaps for that reason it was not always so successful. Surprisingly, often I watched pairs choose combinations of leaves of the wrong shape, size or texture for composing a firm nest, with the result that before their work was completed unmanageable strains developed which caused bursts at the seams, or other failures in construction. The birds promptly abandoned that particular attempt, and began another creation nearby. It was almost as if Ashy Wren-Warblers were amateur builders compared with the professional Tailor-birds.

Other, more successful samples of their nests often came to grief later, from other causes. For example, egg-stealing birds or beasts would rob a nest of its contents before they hatched, or chick-stealing birds or beasts would pillage it after they had hatched. Such disasters seemed to be the accustomed, almost the expected, lot of these wren-warblers; for a pair never appeared unduly put out by them. Always they at once started to build a new nest, and to indulge in a fresh series of matings to provide it with a fresh clutch of eggs. One such pair of industrious and imperturbable though ill-starred Ashy Wren-Warblers built a succession of seven nests within four months in my kitchen garden, all of which ended, from one cause or another, fatally. Not for a moment did the birds show the slightest sign of discouragement, nor any inclination to abandon their brave attempts to reproduce their charming species. However, they never did succeed. When their seventh and last attempt had produced three ten-day-old nestlings almost ready to fly, some murderous animal descended and carried them off as fare for its own youngsters.



Magpie Robin

THE Magpie Robin is one of the best songsters in India, where fine singing birds are scarce. It would be a pleasant, accomplished performer in any company in any land. One would not suspect its talent if one paid heed to its utterances in winter, when its art seems to be confined to brief, harsh, wheezy exclamations. But with the return of spring the Magpie Robin's voice also returns. At first its warbled snatches are restrained and gentle, with a tentative, experimental sort of character; but later the bird gathers confidence and enthusiasm. Its voice is both sweet and powerful; and the singer has an impressive repertoire. At intervals it will emit a surprising variety of musical phrases, none of them long sustained, each like a broken fragment. A professional critic might comment disparagingly on these fractured brevities; but that would be ungenerous criticism. Beauty is a matter of quality, not quantity; and the Magpie Robin's song consists of numerous small particles of perfection.

The birds make their nests in natural holes in trees, walls or earth-banks. When their chicks hatch, both parents share the labour of feeding them. Then why is the portrait in this book a study of a hen issuing from her nest after a visit, instead of a picture of the more handsomely plumaged male?

The answer is simple. When a hide was erected near the nest, both birds at first took fright. Neither would come near the place for two or three hours, although previously they had each frequently brought food. The chicks in the nest grew steadily more hungry, and called loudly for refreshments. At length the hen could resist their pleas no longer, arrived with an insect, and—after a few moments' nervous hesitation—entered the nest-hole to feed them. As the hide showed no hostility and offered her no harm, she promptly resumed her regular visits every few minutes. But the cock was more fearful. Several times he flew to the tree with a caterpillar dangling from his bill, hopped uncertainly from branch to branch, approached ever nearer the nest until he was on the verge of entering it—and then failed in courage, turned tail and fled with the booty still gripped in his beak. He did not summon up resolution to hop into the nest until about twenty-four hours later.

It was an interesting exhibition of the greater strength of the maternal than of the paternal instinct in most—though not all—birds.



Indian Robin

THE hen Indian Robin here illustrated is perched on a metal ring surrounding the platform of a new, spick-and-span dovecote in my Delhi garden. Thereby hangs a tale of war and peace, obstinacy and courage, defeat and victory in local bird society.

The dovecote was of course built for doves; but my troupe of decorous Fantail Pigeons spurned the place, preferring an older, untidier, and more squalid dovecote in which they had bred their young for several years. So the platform which had been erected as a rendezvous where amorous cocks with puffed-out chests and courtly bows could woo the hens was deserted, the nest-boxes were empty, and the property was available for other, wilder denizens of the garden.

Several rival claimants coveted its quarters. Common Mynahs commandeered some of its boxes, driving away with intolerant screams other would-be tenants like their more timid relatives, Brahminy Mynahs. They also evicted a pair of Indian Robins who tried to build a nest there. As often as the robins brought loads of grass into a box, the mynahs invaded the premises and ejected the stuff. After two days of unequal struggle, the robins abandoned the project, carried their next loads into a crevice in a nearby wall, and in due course successfully raised a brood there.

I felt sorry, for I would have liked an Indian Robins' nest lodged in the dovecote, convenient for observation; so in the following year I half closed the entrance to one box, leaving it large enough to admit a robin but too small for a mynah to enter. I hoped a pair of Indian Robins would repeat their earlier attempt; and, sure enough, they did. And again Common Mynahs objected. Whenever a robin landed on the platform with building materials, mynahs fluttered viciously above it, trying to frighten it away. But the robins were undismayed. Ignoring their rude neighbours—who were incidentally three times their size—they hopped through the doorway to their home and continued preparing a nest. The mynahs tried to follow them, but could not squeeze through the entry.

So the mynahs were thwarted, the robins proved triumphant, and one morning about a month later their three fledglings hopped on to the dovecote platform, like new characters in a play making their debut on the stage. Their individual performances in the drama of outdoor life began that day.

Tailor-bird

THE Tailor-bird owes its name to its manner of building a nest. To achieve that purpose, it selects two or three adjacent large leaves on a stalk, tugs them into contact, and sews their edges together so as to form a pocket within which to deposit eggs. For this sewing it uses its sharp beak as a needle, and collects bits of cotton, cocoon-silk or other thin fibres to act as threads. In fact, it displays a similar craftsmanship to old-fashioned tailors who, before the days of sewing machines, made shirts and other garments by the industrious employment of needles and reels of cotton.

When the joined leaves thus form a bag, the birds import into it tufts of horsehair, cotton wool, thistledown and other soft materials as cushioning on which to couch their young. After the clutch of between three and six eggs is completed, their incubation starts; and if all goes well chicks hatch rather more than a week later. Then for another ten days the parents feed the youngsters, who grow steadily larger, heavier and livelier. The fact that throughout these periods the nest continues to bear its increasing burden is a tribute to the intuitive skill of Tailor-birds as tailors. Their stitches hold good; the leaf-edges do not tear; and eventually the young family flies safely into the wider world. But the strain on the structure is severe, and sometimes the verdant walls of a nest are in danger of bursting at the seams. The nest illustrated on the opposite page is in that parlous state; its inner upholstery is threatening to spill through a wide crack between its walls. But in fact that did not happen; the stitches binding the leaves stayed firm; and in due course the fledglings departed, hale and hearty, to engage in the adventure of living.

It is charming to watch the parent birds' partnership as they feed their chicks. In the early days after they hatch, the hen sits in the nest protecting them whilst the cock goes foraging. When he brings a choice insect to their home, he does not give it directly to one of the youngsters. Instead he perches at the entry to the nest and passes it from his bill to the hen's bill. She then rises and presents it to one of their offspring, whilst he flies away to fetch more provisions. Afterwards she settles down again to resume her guardianship over the family, and to await his next return.

The photograph on the opposite page was taken at a later stage in the life history of a family, when the chicks were old enough to be left alone, and the hen could therefore leave home and aid her mate in fetching food. In this picture she is just taking off on a foraging expedition.





Bay-backed Shrike

BIRDS defending their eggs or chicks against enemies, or just inquisitive intruders, show magnificent courage. When aroused by the emotions connected with the protection of their young, they behave like heroes. For example, in that situation many small species seem utterly undismayed by an adversary's much more powerful size. I have watched a Crimson-breasted Barbet "dive-bombing" a group of several Green Parakeets who showed undue curiosity about its nest entrance, and a hen Golden Oriole chasing House Crows from its clutch of eggs, and Black Drongos attacking mighty eagles which passed inconveniently near their nests, and other similar emulations of David challenging Goliath.

These elementally excited creatures reveal equal gallantry in assaulting four-footed animals who trespass near their young families. I have often seen Green Barbets and other species vehemently chasing mongooses from the neighbourhood. Nor do some

birds in a like situation show fear of that mischievous two-footed animal, Homo Sapiens. Not only large species such as Common Pariah Kites, but also certain lesser breeds will launch intrepid and wounding physical assaults on men approaching nests containing their eggs or chicks.

The Bay-backed Shrikes shown in these pictures did exactly that. They are small creatures, measuring only eight inches from beak-tip to tail-end; yet one of them did not hesitate to attack Chris Loke—who stands, I believe, five feet four and a half inches high in her stockinged feet—when she sought to clip some sprigs of foliage from the surrounding of their nest. The leaves obstructed her camera's view of the sitting bird; so she reached forward with a pair of scissors to snip away the offending vegetation. At once a shrike attacked her. Nor was the assault a mock affair. Before she was fully aware of what was happening, she felt a sharp stab on her hand, and an instant later saw a drop of blood ooze from a puncture there. The bird repeated the onslaught two or three times as it flew to and fro, in deep agitation, striking her fist with its beak.

Chris judiciously waited until both birds had withdrawn elsewhere to fetch food, and then asked her attendant bearer to get to work with her scissors and cut away the leafage. So she was able later to take these peaceful pictures of those charming little shrikes, who are also appropriately called butcher-birds.



Purple Sunbird

THERE is remarkable variety in the architectural styles of nests built by different species of birds in a Delhi garden. Thus, Tailor-birds sew edges of large leaves together to make a lodging in which to lay their eggs, Crimson-breasted Barbets excavate a deep tunnel in a tree-trunk, Little Brown Doves plait a platform of sticks supported on twigs, Black Drongos sling a grassy hammock beneath forking branches, Spotted Owlets occupy a sparsely furnished hole in a house wall, Red-wattled Lapwings construct a low pile of pebbles on a rooftop, Red-vented Bulbuls fashion a conventional grass-cup in a shrubbery, House Sparrows stuff heaps of hay in any nook or cranny—and all manner of other birds contrive all manner of other cradles for their young.

Everything considered, the most cunning, elaborate and attractive nests built in my garden were those of Purple Sunbirds. Composed of fine grasses, strands of hair, silky fibres and similar materials tightly woven together, the finished article hung like a small, hollow mango from the stem of a bougainvillea or other shrub. Bound to its supporting stalk by cables of grasses, cobwebs and similar strong links, it dangled loose there, swaying gently in every breeze. Its entrance was a round hole near its





summit, shielded from rain by an over-jutting eave of grassy thatch; and within it a neat chamber was cushioned with soft feathers and thistledown to support eggs and chicks.

The cock sunbird rarely takes part in the task of building. I have watched several hens painstakingly construct these nests, but never saw one of their mates lend the slightest assistance beyond perching briefly at long intervals on a neighbouring branch, singing a phrase of approval or encouragement, and promptly flying away again. I am told that other bird-watchers have occasionally seen a male of the species condescend to bring a few bits and pieces of building material to an unfinished nest—but I feel sceptical about the accuracy of that information.

In the meantime the female toils with tireless zeal, flying to the site with a scrap of suitable stuff, staying there for a short while as she swiftly and skilfully threads it into place, and then speeding away again to fetch another morsel. This performance she repeats monotonously over and over again, almost all day long. To begin with she comes to the nest with a fresh length of grass or other fabric almost every minute (about fifty visits per hour); and she maintains this pace much of the day,

except that as the structure gradually grows, the weaving of each new strand into position takes rather longer, and her bouts on the job at the building site therefore tend to become more prolonged. She works round the clock, commencing before six o'clock in the morning and continuing until after six in the evening, with only an occasional short break for rest or refreshment, and (I think) an interval of two hours or so in the awful heat around mid-day. The sunbirds which I watched usually took four or five days to complete their handiwork, though the period varied somewhat, and was occasionally more protracted.

I believe the hen also receives no aid from her mate in incubating their two or three eggs. She sits within their home, visible only by her fine, down-curving beak protruding through its entrance as she keeps a wary eye on the outside world. I have never observed a cock occupied in this tedious duty. But when the chicks hatch he recovers his sense of husbandly and fatherly responsibility, and shares in the task of bringing them food—as is shown in two of the brilliant pictures in this book.

Through the winter the dresses of the male and the female are rather similar, both displaying the greenish-brown and yellow pattern that the hen sports throughout the year, though the cock is distinguished by a blackish stripe stretching from his throat to his belly. Only as spring approaches does the male gradually shed this modest costume and assume the finery which gives the species its name. His plumage then becomes uniformly black, except for a small yellow tuft beneath each wing; but the feathers have a glossy texture which makes them gleam and glitter with a purplish sheen in sunlight. The cocks appear almost as if they were clad in close-fitting suits of polished sable armour; and their dark bills and legs also have a metallic lustre. Each little creature, measuring four inches long, is a tiny, brilliant flash of glory.





White-eye

AN interesting ornithological study is the different temperaments of different birds. These differences are sometimes strikingly revealed to a photographer. For example, various species react in diverse ways to the sudden appearance of a photographer's hide within a few feet of their nest. Some become so alarmed at the apparition that they stay away from the vicinity for hours and even days before returning in daylight to feed their chicks; whilst others appear utterly unafraid, and continue their domestic activities regardless of the rude intruder.

White-eyes belong to the latter class. Indeed, they showed less concern at the arrival of a hide than any other species in my garden—a fact all the more impressive because, owing to their tiny size, the photographer's platform and tent had to be stationed closer to their nests than in any other case. It is true, that whilst the ponderous equipment was being moved into position, the bird in the picture opposite this page discreetly left its nest; but as soon as the edifice was stationary it returned, uncurious and fearless, and settled again on its eggs.

Its indifference was so phlegmatic that this became an obstacle to photography. Chris wished to take pictures of the White-eye flying to and from its nest; but even when she clapped her hands, called aloud, or sparked the flashlamps within three feet of the bird, in attempts to disturb it, it continued sitting stolidly there. In the end a bearer had to be summoned to assist. Periodically he walked towards the nest. As he drew very close, the bird rose and departed; and the camera caught a shot of it as it went. A few minutes later it flew back again—and Chris took another snap.

Similarly, other pairs of White-eyes would remain indifferent to the arrival of a hide when they were already feeding chicks. Immediately after its appearance both birds would continue bringing food to them. The cock as well as the hen seemed unperturbed, showing a more stolid character than the males of some other species.

White-eyes are pretty creatures, with neat figures exquisitely adorned in brightly coloured plumage; but even more engaging than their appearance is their nature. They are industrious, efficient, devoted and tireless. It is extraordinary how much energy is stored in those tiny, four-inches long bodies. And whereas many other birds grow easily agitated, ruffled, or ill-tempered, I never saw a White-eye anything but serene, genial and charming.

Baya Weaver-bird

SEVERAL unsolved mysteries surround the way of life of Baya Weaver-birds. For example, groups of the species almost always build their colonies of nests in trees^o overhanging sizeable ponds of water. Their strongly woven, somewhat flagon-shaped residences dangle like a collection of upside-down straw bottles slung from branches above the pool. Why they favour this proximity to water is a riddle[?] which no one yet knows the answer. Dr. Salim Ali is directing intense investigations into it and related matters touching this species, and perhaps he will plumb their secrets.

In some species of birds the hen performs unaided the whole task of building a nest; in others the two^s sexes share that labour; and in yet others the cock is the solitary creative genius. Bayaⁱ weaver-birds belong to the last of these categories. Moreover, male Baya Weaver-birds are not content to make only one nest; instead each cock in the breeding season builds three or four nests in fairly quick succession. As an uncompleted nest reaches a stage of construction where its merits as a lodging for eggs can be examined, likely hens enter and inspect it. One of them is enticed to adopt it, and so to become a mate of the builder. The cock then continues his work on other structures, and each in turn tempts a female to occupy it. Thus by the time he has successfully completed three or four^t nests, he is the owner also of three or four “wives”! This circumstance produces another of the mysteries involved in Baya Weaver-bird society. Since every breeding male has three or four mates, does this mean that the total female population is so much in excess of the total number of males? Or do a large number of birds remain unattached “bachelors” every year? Dr. Salim Ali tells me that this mystery has been deepened recently by the discovery that when Baya Weaver-bird chicks leave their nests males appear to be more numerous than females amongst them, whereas in the adult population the opposite seems to be the case. The matter is “a riddle wrapped in a mystery inside an enigma”.

A hen's inspection of a nest occurs before the apartment's construction is complete, when the builder has finished the chamber for supporting eggs in the bulbous, wide-spreading centre of the edifice, but before he starts to fashion the long, narrow, bottle-neck entrance suspended below. That odd, unique feature he adds afterwards. The photograph on the opposite page shows three dangling, unfinished nests in a corner of a colony of these habitations, with a dully plumaged hen examining tentatively one of the premises, whilst the gaily clad cock looks on hopefully. A masculine neighbour also shows a perhaps not wholly detached interest.



Brahminy Mynah

AMONGST the species of birds who are daily visitors to probably every garden in Delhi is this sleek, rather beautiful mynah. Other perpetual presences are their relations, Common Mynahs. Both types stroll on the lawns and perch in the trees in considerable numbers; and they are virtually permanent features of an Indian landscape.

Of the two, the Brahminy Mynah is the more attractive, though not the more amusing, character. The Common breed is rather dully plumaged; and at any rate by human standards there is a touch of vulgarity about its noisy, self-assertive, quarrelsome nature. Brahminy Mynahs are gaily coloured, and they are quieter, more sedate, and generally better behaved.

Not that they, too, cannot pick a quarrel. They are amongst the species who build their nests in holes in trees, and who, being about the same size as Green Barbets, often covet those barbets' nest-tunnels. Thus vicious hostilities are apt to break out between two pairs of the rival claimants; and the mynahs are often as rude as they are aggressive.

The nest entrance shown in the photographs in this book was the scene of such a conflict. Three weeks before the pictures were taken the place was the property of a couple of Green Barbets who had just successfully reared a brood of nestlings there. They showed every sign of wishing to continue to occupy the quarters; but a pair of Brahminy Mynahs had other ideas. As soon as the last of the barbets' fledglings flew from home, they sought to commandeer the nest-hole; and a hard-fought rivalry at once developed between the two species. Whenever the barbets were absent from the vicinity both mynahs busied themselves carrying loads of grass and other mynahish building materials into the tunnel; and whenever the barbets returned those rightful owners flew into a rage, and ejected the stuff. Angry aerial skirmishings frequently took place between the quartet of contestants, the mynahs seeking to enter the nest to import more building material, whilst the barbets strove to prevent them. Viciously sustained pitched battles were fought several times each day, day after day, for a whole week. Gradually the mynahs' obstinate determination proved stronger than that of the barbets, probably because, since the barbets had already raised a family of youngsters and the mynahs had not, the elemental urge to reproduce their kind was more powerful in the mynahs than in their opponents. Whatever the cause, in the end the mynahs prevailed, the barbets with ill grace retreated, and little more than a month later a trio of new young Brahminy Mynahs triumphantly emerged from their stolen nursery.



The subsequent history of that nest-hole shows how beneficial to various other species of birds besides themselves is the laborious work of Green Barbets in gouging out such lodgings for their eggs; for within twelve months that particular excavated chamber was the birthplace not only of a family of Green Barbets and a family of Brahminy Mynahs, but also in turn of a second family of Brahminy Mynahs, a family of Green Parakeets, and a family of Common Mynahs. The photograph of a parakeet opposite page 68 in this book was actually taken at the same site.

To satisfy this succession of diverse occupants the place needed only a series of minor alterations. For example, whereas in the inner chamber the Green Barbets laid their eggs on a mattress of wood chips, the Brahminy Mynahs imported some grass and feathers for the cushioning of their clutch; and although the Green Parakeets were content with the withered remains of this upholstery, the Common Mynahs embellished it with more grasses, bits of rag, scraps of ribbon, and even a sheet of lavatory paper which they found lying around in the neighbourhood. The different tastes of different birds in furniture is one of the many interesting aspects of their extraordinarily varied natures.

The violent quarrel between Brahminy Mynahs and Green Barbets over a nesting site that I have described was only one example of many such rivalries between different species which occurred in my garden. Similar struggles were staged regularly by Common Mynahs versus Green Parakeets, Common Mynahs versus Indian Robins, Common Mynahs versus Spotted Owlets, and other pairs of opposing claimants for coveted quarters. Other battles were fought by other species for other reasons, such as vicious duels between a Black Drongo, Green Pigeon, Indian Ring Dove or Golden Oriole on one side and a House Crow, Tree Pie or Koel on the other when the former was defending its eggs or chicks against pillage by the latter. Sometimes four-footed animals were involved in the conflicts, such as thieving lizards or mongooses. Occasionally, too, hawks would descend from on high to commit robbery or murder. And of course there was a ceaseless massacre by meat-eating birds of worms, caterpillars, grasshoppers, beetles, frogs, butterflies and countless other kinds of prey for themselves and their nestlings. Every acre of lawn, flower-bed or vegetable patch was a perpetual battle-ground.

The law of the jungle is not confined to the jungle; it prevails all the time in the quietest, most respectable gardens.



Common Mynah

UNDOUBTEDLY the best-known and most plentiful bird in India is the Common Mynah. Several of them stroll around every lawn, every vegetable patch, every courtyard, every roadway, and every other open space in every city, every town, and every village throughout the vast subcontinent stretching south from the Himalayas. And as if their numbers were not sufficient advertisement for themselves, they usually publicise their presence by loud squawks, whistles and chatterings. They strut about with a self-confident air, very sociable with their own kind, incorrigibly quarrelsome with other breeds, and possessing an insatiable curiosity which often leads them to interfere in other creatures' business.

They have original notions about nesting sites. Holes in trees, chimney-pots on roofs, rolled-up blinds on verandas, nest-boxes in dovecotes, tins placed casually on outdoor shelves, lamp brackets in drawing-rooms, and all manner of other varied spots tempt them irresistibly as desirable residences. Into them they import a variegated mass of building materials, which they arrange in an untidy, shapeless, higgledy-piggledy heap. To such a nest's making go not only conventional stuffs like twigs, grasses, straws and feathers, but also unorthodox elements like bits of string, scraps of rag, fragments of silver paper off chocolates, strips of cellophane wrapping from cigars, cast-off snakeskins, and the Lord alone knows what else. No more apparently ramshackle and aesthetically unsightly nests are built anywhere on the planet Earth.

On most occasions they serve their purpose well. Exceptions to that rule occurred now and then in my garden, such as when a pair of mynahs built their nest in an empty petrol can hung on a mango tree as a "scarecrow" to frighten off greedy parakeets who loved to guzzle the fruits. Unfortunately the month was July, and the chicks hatched two days before the monsoon broke. When the first sustained rain-storm pelted down, the tin half filled with water, and the youngsters were all drowned.

Otherwise the incompetent-looking nests perform their function with conspicuous competence; and every summer from countless glossy, sky-blue eggs lodged in them emerge fresh legions of garrulous, quarrelsome and, in spite of everything, rather charming Common Mynahs.



Index

<i>English Name</i>	<i>Latin Name</i>	<i>Hindi Name</i>	<i>Page</i>
Babbler, Jungle	<i>Turdoides somervillei</i>	Satbhai	102
Babbler, Yellow-eyed	<i>Chrysomma sinensis</i>		100
Barbet, Crimson-breasted	<i>Megalaima haemacephala</i>	Chota Basantha	82
Barbet, Green	<i>Megalaima zeylonicus</i>	Basantha	86
Bee-eater, Green	<i>Merops orientalis</i>	Patringa	76
Bulbul, Red-vented	<i>Pycnonotus cafer</i>	Bulbul	98
Bulbul, Red-whiskered	<i>Otocompsa jocos</i>	Sipahi Bulbul	96
Buzzard, White-eyed	<i>Butastur teesa</i>	Tisa	52
Crow Pheasant	<i>Centropus sinensis</i>	Mahoka	70
Dove, Little Brown	<i>Streptopelia senegalensis</i>	Cholā fakhta	66
Dove, Ring	<i>Streptopelia decaocto</i>	Dhor fakhta	66
Drongo, Black	<i>Dicrurus macrocercus</i>	Kotwal	94
Eagle, Short-toed	<i>Circaëtus gallicus</i>	Sampmar	56
Eagle, Tawny	<i>Aquila heliaca</i>	Wokhab	48
Egret, Large	<i>Egretta alba</i>	Bara bogla	32
Egret, Lesser	<i>Egretta intermedia</i>		34
Heron, Pond	<i>Ardeola grayii</i>	Andha bogla	36
Hoopoe, Indian	<i>Upupa epops</i>	Hūdihūd	80
Ibis, Black	<i>Pseudibis papillosa</i>	Bāza	42
Kingfisher, Pied	<i>Ceryle rudis</i>	Koryala Kilkila	72
Kingfisher, White-breasted	<i>Halcyon smyrnensis</i>	Kilkila	74
Kite, Common Pariah	<i>Milvus migrans</i>	Cheel	54
Lapwing, Red-wattled	<i>Lobivanellus indicus</i>	Titiri	62
Mynah, Brahminy	<i>Sturnus pagodarum</i>	Brāhmani Myna	122
Mynah, Common	<i>Acridotheres tristis</i>	Desi Myna	126
Neophron	<i>Neophron percnopterus</i>	Safed Gidh	44
Oriole, Golden	<i>Oriolus oriolus</i>	Peelak	90
Paddy-bird	<i>Ardeola grayii</i>	Andha bogla	36
Parakeet, Green	<i>Psittacula krameri</i>	Tota	68
Peafowl	<i>Pavo cristatus</i>		60
Pigeon, Blue Rock	<i>Columba iiaria</i>	Kabutar	64
Purple Sunbird	<i>Nectarinia asiatica</i>		114
Robin, Indian	<i>Saxicoloides fulicata</i>	Kalchuri	108
Robin, Magpie	<i>Copsychus saularis</i>	Dhyal	106
Roller, Indian	<i>Coracias benghalensis</i>	Nilkhaut	78
Shrike, Bay-backed	<i>Lanius vittatus</i>	Chota Latora	112
Stork, Painted	<i>Ibis leucocephalus</i>	Janghil	40
Stork, White-necked	<i>Dissoura episcopus</i>	Manik-jor	38
Tailor-bird	<i>Orthotomus sutorius</i>	Darzi	110
Vulture, White-backed	<i>Pseudogyps benghalensis</i>	Gidh	46
Weaver-bird, Baya	<i>Ploceus philippinus</i>	Baya	120
White-eye	<i>Zosterops palpebrosa</i>		118
Woodpecker, Golden-backed	<i>Brachypternus benghalensis</i>	Katphora	88
Wren-Warbler, Ashy	<i>Prinia socialis</i>	Phutki	104



ZOOLOGICAL GARDEN, ALAMEDA