

HORNBILL

1981 (2)



BOMBAY NATURAL HISTORY SOCIETY

Land Crab *Cardisoma hirtipes*

Reverend Thomas Stebbing in his *A HISTORY OF RECENT CRUSTACEA* describes the tribe. Land crab thus: 'they generally take up their abode in the hills not less than one mile or more than three miles from the coast. Go away then without a stick in hand and they will approach with uplifted claws as if threatening an assault. But if they are themselves assailed with a stick or a switch, they retreat, yet still facing the foe, and ever and anon, clashing their claws together to strike terror into him'.

Daylight encounters with these crustacean cretins had raised strong feelings in the good Reverend, but what he would have said had he encountered them at night on some lonely island, sitting precariously by on a rocky ledge may well be beyond the call of the cloth. Yet how true was his observation of these crabs! I still shudder at the memory of a night spent with a photographer friend in the remote island of Narcondam in the Andaman group. We huddled together listening to the eerie night noises as a distant nightjar kept up an incessant chaunk...chaunk...chaunk. The continuous rustling sound we dismissed as normal jungle noise, turned out to be a horde of formidable land crabs that scuttled among rock crevices around us, and to add to our uneasiness we discovered by the torchlight that the rustling noise was made by clicking of their powerful claws. We kept on flashing our torchlights to prevent them from getting closer, but were not very successful as we discovered the next morning that one of our cameras had been dragged into a crevice and its leather cover and straps cut to pieces.

The photograph on the cover is of one such individual basking on a dead tree trunk at the edge of an oil palm plantation in Little Andaman.

S.A.H.

The Society was founded in 1883 for the purpose of exchanging notes and observations on Zoology and exhibiting interesting specimens of animal life. Its funds are devoted to the advancement of the study of zoology and botany in the Oriental Region. The Society also promotes measures for conservation of nature.

Membership of the Society is open to persons of either sex and of any nationality, proposed and recommended by one or more members of the Society; and also to persons in their official capacity, scientific societies, institutions, clubs, etc. in corporate capacity.

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Members receive during a year three issues of the *Journal of the Bombay Natural History Society* now in its 77th volume, and four issues of *Hornbill*, the Society's popular publication.

Journal Editors

J. C. Daniel, P. V. Bole and A. N. D. Nanavati.

Advertisements for publication in *Hornbill* are welcome. Rates : Inside full-page Rs 500/-; half page Rs 250/-; back cover Rs 1000/-.

Annual and other membership subscriptions

Entrance Fees	Rs 25.00
<i>Subscription</i>	
Ordinary individual membership	Rs 50.00
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Life membership	Rs 750.00
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The first annual subscription of members elected in October, November, or December will extend to the 31st December of the year following the election.

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EDITED BY

J. C. DANIEL
S. A. HUSSAIN
J. S. SERRAO

EDITORIAL

The moving Forests

Every evening those living near or who happen to be in or near forested areas will see lines of people moving out of the forests with headloads of wood. Most of the forest areas situated in the vicinity of towns and villages have disappeared as headloads for the fuel needs of the surrounding human population. As the population steadily increases, the demand for fuel keeps pace with it and forests recede. This is particularly noticeable on hill slopes where the forest retreats with the inevitability of a man going bald.

Firewood remains and will remain the major source of domestic fuel in India and the demand will

increase in proportion to the increase in human population which has shown no signs of being controlled. If conservation of nature and natural resources, that is of the forests and their wildlife is to be effective, Conservationists should put their best efforts to see that programmes and projects for growing energy forests of fast growing species of trees indigenous or exotic are implemented as speedily as is possible and with more attention to results than is usually the case in India. Our major fault is the gap between intentions and their execution. Unless we meet this major hazard with determination we will keep seeing "a moving grove".

'Headloads' enroute from forest to city

Photo: Zafar Futehally



FEEDBACK

'A New Ecological Menace'

I have just read the Presidential article at page 3 of 1980(3) issue of *Hornbill*. One method of control of *Parthenium*—in my view the *only* one *likely* to lead to control without vast perennial expenditure—is that of biological control, endeavouring to find through on-the-spot research biotic agent(s) capable of reducing, hopefully, very significantly, the weed's aggressive competitiveness. This I suggested in my then capacity of Director of the Commonwealth Institute of Biological Control. Absolutely no action was taken along this line—although there was much talk, conferences, etc. on ways and means of eradicating (an impossibility) *Parthenium* from areas such as Bangalore.

I did not realize that it was a menace in game reserves near Nagpur—I had pictured it more as a peri- (though widespread) urban weed—and have seen it spreading around Bangalore, Mysore, Bombay and Delhi. I have by constant vigilance managed to keep my 4-acre garden virtually free from it by 'outing' it wherever a small rosette appears.

By contrast when I visited Queensland from India I mentioned the menace in India of *Parthenium* and a weed expert in Brisbane pricked up his ears and mentioned that there was a very recent record of the weed in a wheat area in north-

ern Queensland. We discussed the possibilities of biocontrol through investigations in Trinidad, Central America, etc.—and within 3 months Queensland had financed an investigation by CIBC in Mexico (and preliminarily in Trinidad). India in the 5 or so previous years had *done nothing*.

The situation with regard to the eventual destruction of *Parthenium*—at least throughout some ecological areas, is not hopeless, but India, I repeat, has with this ecological menace galloping over new areas, done very little except advocating herbicides or hand-pulling. We had (after the inevitable conference!) a *Parthenium* Eradication Campaign both costly and much published, plants pulled by the Chief Minister, etc., etc. I wonder what *he*, looking round Bangalore, feels about his—advertizing alone quite expensive—campaign.

DR. F. J. SIMMONDS
Kothanur P.O., Bangalore 560 077
23rd January 1981.

Bees and solar eclipse

Please enlighten me about last year's eclipse of the sun. All bee keepers here had all their bee colonies swarm on the day following the eclipse. My own two, and a nearby neighbour's seven; 19 from another. In fact every apiary was left empty.

LT. COL. C. F. HAMILTON
Kalimpong, West Bengal

India's Wildlife

Our country now has a few wildlife reserves/parks, some of them internationally known. In the last few years I had the opportunity to visit a few of them in the east, south and the north. Some of them are managed well, and others so-so.

The main theme of these reserves is to allow the wild animals to move and live free in their natural habitat away from the danger of their enemy No. 1, that is Man. Man could then see them in their natural surroundings in freedom. So far so good, but now that the parks are there, animals are there, so are the visitors and the concern of the Forest and Tourism departments to make quick money through sprawling tourist complexes and guided tours, of course, at the inconvenience of the primary residents of the parks—the animals.

Take the example of Corbett National Park. I spent 7 days there in March 1979, and have been a regular visitor to the park since childhood. Besides the old dak bungalow there are now several buildings for tourists, tentage accommodation, staff and office quarters, most of them made of cement concrete. No consideration has been given to design of these structures so as to merge them with the surroundings. They stand clear for miles like an island in a vast ocean; at least they could be camouflaged with fast growing trees and creepers. There is no restriction on the number of visitors, as I could see on two occasions busload-full of school children camped at Dhikala with their usual hustle and bustle.

The number of roaring vehicles of the visitors, the large number of visitors and the big complex of the houses at Dhikala, the too often breaking of the normal decibel level of the jungle by vehicles and the large group of visitors residing has resulted in retreating of animals to deeper areas of the forest. Already complaints of the visitors are there that all they saw were plenty of cheetal deer near the camp—they come next to the elephant shed to steal left-over feed—and a few hare. When the group of school children were at Dhikala even these cheetal kept away. A few years back one could see plenty of wildlife next to the dak bungalow itself. The new dam which has come up a few miles from the place has also contributed its share by making the bigger animals like the bear retreat to the other side of the river towards the hills.

The main concern of the park should be the primary residents, the animals. In my opinion the number of the visitors should be strictly controlled so that the natural environmental decibel level is maintained as one is aware of the main sensory organs of the animals are the ear and the nose which drive them to alertness or fright. When the VIPs visit the park, it is all with their household staff, security staff, team of waiting officials, guards, security and wireless vans, etc., etc., although all they want is peace and nature. Once the main gate of the park is guarded all this can be avoided and serenity of the park maintained.

SQN LDR. P. C. S. RAUTELA SC, VSM.

PRESIDENT'S LETTER

Charles McCann : An Appreciation

Charles McCann who died in New Zealand in November 1980 [Obituary in JBNHS Vol. 77(3): 494-495] was indeed an enviable type of field naturalist. His knowledge of Indian animals and plants was truly encyclopedic, and to be out with him on a field trip whether in forest, field, desert or seashore was a rare experience in nature education accorded only to the lucky few, and then not easily forgotten. I first met McCann ('Charlie' to all who knew him) in 1923, not long after he had finished his schooling at St. Mary's and had been appointed as a junior assistant in the Bombay Natural History Society as a field collector for the Mammal Survey at the instance of Fr. Blatter who, along with his other Jesuit teachers were largely responsible for fostering, guiding and developing his natural bent for botany and zoology. We immediately sized up each other as kindred spirits, and from that time on until he migrated to New Zealand following Indian Independence we kept in close touch in the field of natural history. The long tutelage and probation under Fr. Blatter had developed Charlie into a first class systematic botanist whose work won international recognition. But McCann was a systematic botanist with a difference: the most refreshing thing about his botanical expertise was his proficiency in identifying the living plant in the wild, and not only after it had become

a pressed and discoloured 'sheet' in a musty herbarium! This added immensely to the fun and scientific value of his company on a jaunt in the countryside for a bird ecologist as I chose to count myself. His familiarity with Indian land animals—whether bat, bird, frog, snake, lizard or what you will—was equally intimate and there was hardly any living creature he could not immediately place at least in its correct Order and Family if not in the Genus or Species. A glance at the list of his wide ranging original notes and articles in the *Journal* leaves one marvelling at his versatility and excellence as an observer and a field naturalist. McCann was equally deft with his hands as a taxidermist and a rough-and-ready mechanic. Many of the beautifully mounted exhibits in the Natural History Section of the Prince of Wales Museum, Bombay, including the largest mammals like gaur, tiger and Kashmir Stag are his handiwork, and a monument to his skill as a self-taught taxidermist. As Assistant Curator of the Society, McCann was a perfect foil to his senior, S. H. Prater, who though perhaps equally good with his hands was of a more artistic and literary temperament and more effective as a Public Relations man. They made a remarkable pair and the Society earned considerable all round prestige in the high noon of their partnership between the years 1920 and 1948. A particularly wel-



McCann (above) on a field outing at Tulsi lake, Bombay

McCann preparing the hornbill exhibit for the Museum

Photos: Sálím Ali



come attribute of McCann to his field companions was the apparent relish with which he would volunteer to take on every sort of unpleasant job from which others like me would be scheming to escape; jobs such as cooking in the open on smoky woodfires, grovelling under cars on dusty roads to examine broken springs, mending and inflating punctured tyres, tinkering with greasy recalcitrant engines, and so on. He was in fact the rare model of a perfect field naturalist combining in himself all the essential qualities of one. His memory will abide with all who had the fun of sharing a field trip with him.

Sálím Ali

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CONSERVATION ACTION

The 55th meeting of the Species Survival Commission of the International Union for Conservation of Nature and Natural Resources was held at Delhi between 19th and 24th February 1981. Some of the points of interest to India and the recommendations to the Government of India by the Commission are given below.

FUND RAISING CAMPAIGNS

The 1982 campaign of the IUCN and the World Wildlife Fund will focus on tropical forests and their primate populations.

The 1983 campaign will feature Plants. It is hoped that countries will issue stamps depicting their endangered plants.

NEW SPECIALIST GROUPS

Two new groups have been formed, a Varanus Lizards group with Dr. W. Auffenberg of the Florida State Museum as Chairman and a Snake group with Mr. Romulus Whitaker of the Madras Snake Park as Chairman.

OPERATION TIGER

There has been no confirmed report of sightings of the Indonesian Tiger in Java and it is now believed to be extinct on that island.

PHEASANTS

The following recommendations were made :

1. That there should be a few self-financing displays of pheasants, situated in the Himalayas to act as breeding nuclei and also as a public education campaign, to make the local people aware of

- the value of their conservation.
2. That IUCN consider doing a survey in the Himalayas where good pheasant habitat is still to be found so that pheasant ranges might be identified and ultimately suitable areas set aside from development and logging.

WOLVES

Mr. S. P. Shahi, a member of the Wolf Specialist Group tabled a report entitled 'A Case for the Indian Grey Wolf', stressing the urgency for conservation measures to ensure its survival. Mr. Shahi estimates that perhaps no more than 500 are left in the wild.

WILD ASS

Mr. M. A. Rashid, Chief Conservator of Forests (Wildlife), Gujarat reported on the current status of the Asian wild ass, and stated that a census takes place every five years and at the last count the population was estimated at approximately 720. He said that poaching had not been a threat in recent years and that it is hoped a canal system project, which would split up the populations in order to maintain good genetic stocks, will be approved.

RHINOCEROS

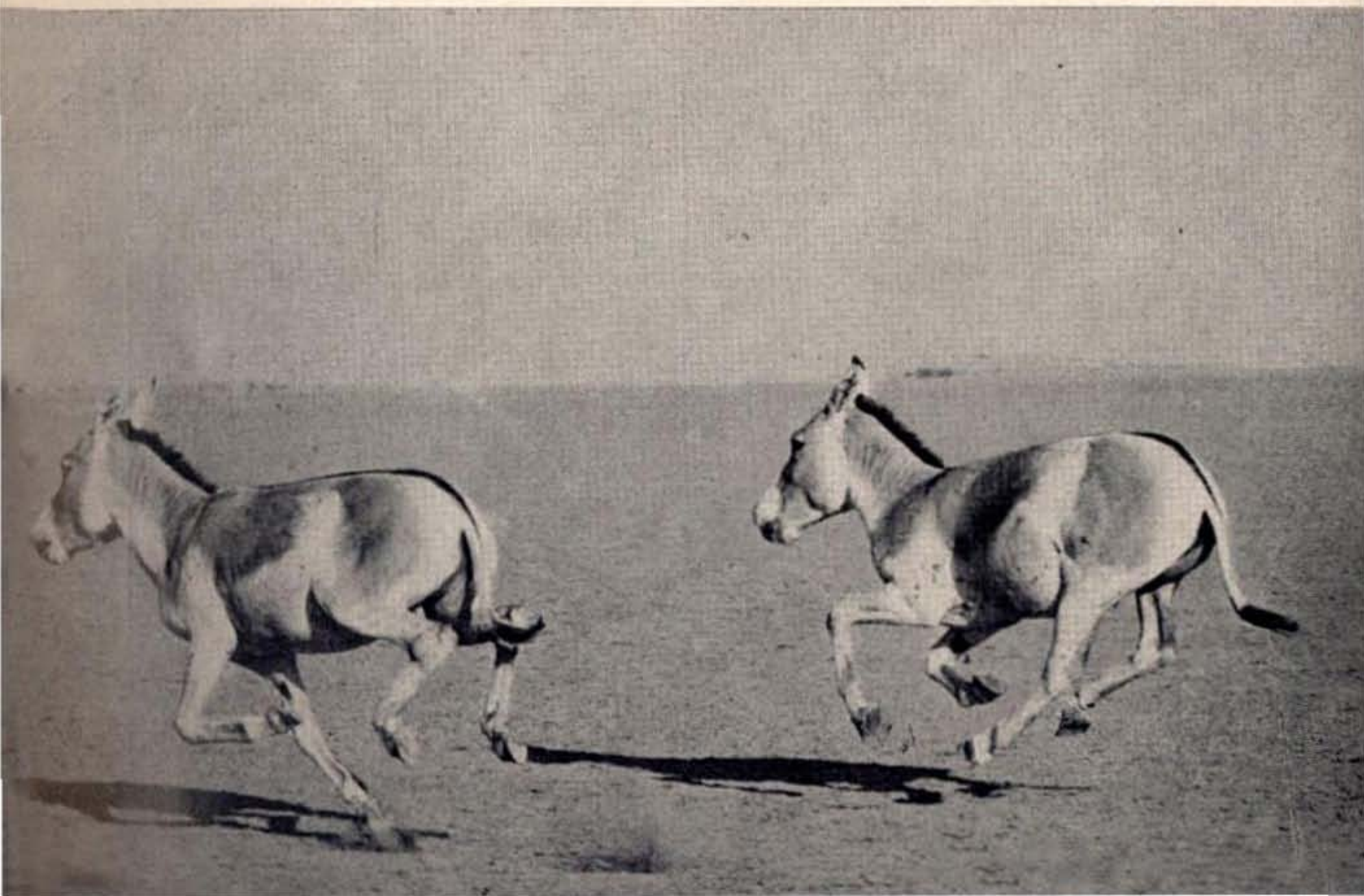
Mr. Lahan of the Assam Forest department, a group member, reported that the status of the Great Indian rhino has not changed in recent years and that the total population is estimated at approximately 1600. The possibility of translocating rhinos to the Dudhwa National Park, which has not



One among the last!

Photos: E. P. Gee

Wild Ass on the run in the Rann



been inhabited by rhinos for some 200 to 300 years, is currently being investigated. No translocations will take place until thorough investigations have been carried out as to the suitability of the area.

Dr. John McKinnon reported on the status of the Javan rhino, saying that research is currently being carried out and that there appears to be a gradual increase in numbers with estimates presently at 50 individuals.

The following recommendations reflect the discussions at the meeting.

1. Warm congratulations to the Government of India on the success of Project Tiger, which has led to the preservation of a great deal of habitat for other species also.
2. Suggestions that a number of other areas might be scheduled as Tiger Reserves, viz. Dangs Forest, Gujarat and Buxa Forest, and Nilpara Range, North Bengal.
3. Use of domestic elephants to drive wild elephants out of agricultural areas as has been done very successfully in West Bengal.
4. Congratulations to the Chief Minister of Gujarat on setting up a new national park for flamingoes.
5. Request Government of Nagaland to adopt the Wildlife Protection Act in order that forest habitat of Blyth's tragopan pheasant and many other rare animals may be saved.
6. Congratulations to the Government of India and Uttar Pradesh on the success of major conservation efforts for the highly endangered gharial (crocodile), and urging them to continue with this programme.
7. Urge the Government of Orissa to enforce legislation to prevent illegal collection of turtles, for sale in Calcutta markets.
8. Urge the Government of Kerala to set aside special forest reserves as sanctuaries for wild cardamom plants.
9. Urge the relevant authorities to create as a National Park an area containing a viable population of blackbuck, viz. Sunderapura, Baroda. Also urge full protection to the National Park at Guindy, Madras.
10. Congratulate the Chief Minister of Rajasthan for making the Ranthambore Wildlife Sanctuary a National Park.

Society's Stickers

Round (diameter 10 cm) stickers with the Hornbill on a green background are available with the Society for pasting on glass and on opaque backgrounds. Price Rs. 1.50 each, postage extra.

Tippling bats

In south Gujarat between Dharampur and Vansda where I studied the large fruit bat, the flying fox, they are quite destructive to cultivated fruits such as sapota (*Achras zapota*), guava (*Psidium guvaya*), papaw (*Carica papaya*), banana (*Musa paradisiaca*), date (*Phoenix sylvestris*), cashewnut (*Anacardium occidentale*), custard apple (*Annona squamosa*), grape (*Vitis vinifera*), mango (*Mangifera indica*) and tamarind (*Tamarindus indica*), and fruits of wild-growing trees like country almond (*Terminalia catapa*), mowha (*Bassia latifolia*), black plum (*Syzygium cumini*) and the banyan (*Ficus bengalensis*). When fruits are scarce they feed on leaves of pipal, banyan, eucalyptus and also on the secretion of the mango-hopper during summer. In addition to the normal food, these bats were

Drinking toddy

Photos: Authors

Bleary eyed and unable to fly



Landing on a toddy pot

observed to take toddy and getting quite drunk in the process.

D. R. CHHATWANI

B. S. VAIDYA



The Monitor or Ghorpad

After the first few showers of the monsoon, the *Katkari* adivasis (tribals) bring to village markets around Thane and some suburbs of Bombay an assortment of wild monsoon produce which they collect from the nearby hills and jungles.

Govandi, where I live, is a suburb of Bombay (25 km from Hornbill House). Its small village bazar too gets these seasonal wild products collected from the neighbouring hills of Trombay. Usually they are multicoloured *shevla* flower stalks *Amorphophallus commutatus*; bunches of *kakad* fruits *Garruga pinnata*; tender *kuli* leaves *Chlorophytum tuberosum*; *kantoli* fruits *Momordica dioica*; puff-ball mushrooms among vegetables; and baskets full of clambering *mutya khekre* (land crabs) *Gecarcinus jacquemontii*. A visit to the bazar during the monsoon months gives interesting possibilities for trying out new recipes.

Last year when the rains started I began my usual evening market surveys and one evening I found a *Katkari* boy having in his fish-net covered basket a large Monitor lizard. It lay on its side with the legs tied in pairs to a stick. Impulsively I felt that I must save it from ending in the cooking pot and found myself bargaining with the boy who got a crisp 20 rupee note for his ghorpad *Varanus bengalensis*.

At home an old chicken coop served as a temporary enclosure till I made secure arrangements in the out-door enclosure where a breeding colony of five starshelled tortoi-

ses lived. As monitors are experts in escaping and excellent climbers a rocky wall or a tree would make no difference and when alarmed they take to water if near by and swim with their limbs pressed against the body and propel their bodies with snake-like movements. Afterwards when it was released in the coop it hurtled against the opposite wire net and was back to the door through which it saw my face peering. In defiance it inflated its body, exhaled with a hiss and as I moved away it gave a heavy lash of its tail on the door. It reminded me of the legendary fire-breathing dragon. The intense eyes, a heavy set of claws, whip-like strong tail, beaded mail-like tough skin and a long, blue, forked tongue flicking out of the vice-like mouth with very sharp backward curving teeth made it a perfect 'dragon'.

The 6' x 4' x 5' cement walled enclosure had a clump of *keora* (*Pandanus*), a hollowed-out coral tree log, a sunken flat earthen vessel for water and an inverted wooden box with a hole in which the tortoises huddled together in the evenings. All reptiles feel at home with a lot of secure places to hide, especially in captivity. After the initial burst it paced nervously while exploring for a possible escape route and finally settled for the coral tree log to sleep for the night. Next day afternoon I was taken aback to see a heap of freshly dug up soil in a corner of the enclosure. The monitor which was curled up inside had nearly succeeded in digging its way



Varanus on a rock—a perfect replica of a dragon

Photo: Author

out. Monitors are known to demolish tough ant hills for termites and water monitors *Varanus salvator* dig out crocodile nests to rob eggs which top their menu card. As I tried to extract the reluctant monitor, it wedged itself in the hole and inflated its body with air so that it could not be pulled out till the escape tunnel caved in. I somehow managed to grapple with the hissing and clawing monitor whose neck I held with one hand to avoid my fingers being bitten, while with the other hand supported its body. In spite of this gentle handling it protested by squirting foul smelling faeces onto my trousers. A monitor named Yeshwanti is said to have been used by the Maratha General Tanaji Malusurey as a live grappling 'hook' to scale the Kondana fort during Shivaji's time.

A week later it started eating hardboiled eggs, cockroaches, frogs, pieces of meat, mice and rats. A live mouse was held and shaken violently to kill and then gulped down. A

large prey like a rat or a big frog was held in its mouth tightly till it collapsed due to suffocation and then the protruding parts like the forelimbs were torn out. This way it ate four times a week. With no onlookers, it loved to bathe in the morning sun and lolled in the water during hot noons. Reptiles have a slower metabolic rate than mammals and birds. Also, they cannot maintain the body temperature at a preferred level and therefore will warm or cool their bodies by basking in the sun or by moving to cooler shade or water.

It was time to return the monitor to the wild as monsoon was nearing its end and a lot of green cover was available. One morning I took the monitor while on a birdwatching trip at Borivli National Park and released it near Tulsi lake, and watched it with great satisfaction as it disappeared in the lush undergrowth.

ISAAC D. KEHIMKAR

Travels in the Andamans and Nicobars

CROCODILES

I do not know how far out to sea estuarine crocodiles (*Crocodylus porosus*) range from their native shores; I have read somewhere that 25 miles has been recorded for an adult. So when my friend Manjit and I were informed by the hospitable headman of the sleepy Car Nicobari village that no crocodiles survive on the island—the last, he said, had been killed near his village about six years earlier—we offered to show him the tracks we had seen emerging from the sea, near a small creek.

After a ten minute walk through coconut plantations we, together with a small group of interested Nicobarese were on the white, powdery, coral-sand beach, looking at tracks made by a young crocodile. The animal appeared to be of a size smaller than the juveniles I had frequently encountered inhabiting tidal pools in the Nicobars—on Katchal, Nancowry and Great Nicobar islands—and fractionally larger than the 70 cm, 750 g crocodile that disturbed my plastic groundsheet as I slept on the beach at Trinkat island.

The tracks led over the sand of the narrow beach and disappeared into swampy ground on the landward side. I could not help feeling that despite the tiny size of the pioneer—or stowaway, for it seemed possible that it had arrived on drifting vegetation—the swamp was too small to conceal its presence

from humans for long. Involuntary or not, the sea voyage it undertook must have been perilous indeed: the nearest crocodile habitats were Teressa island, roughly 65 miles away, Tillanchong and Camorta islands, 80 miles and Little Andaman, 100 miles.

SEA SNAKES

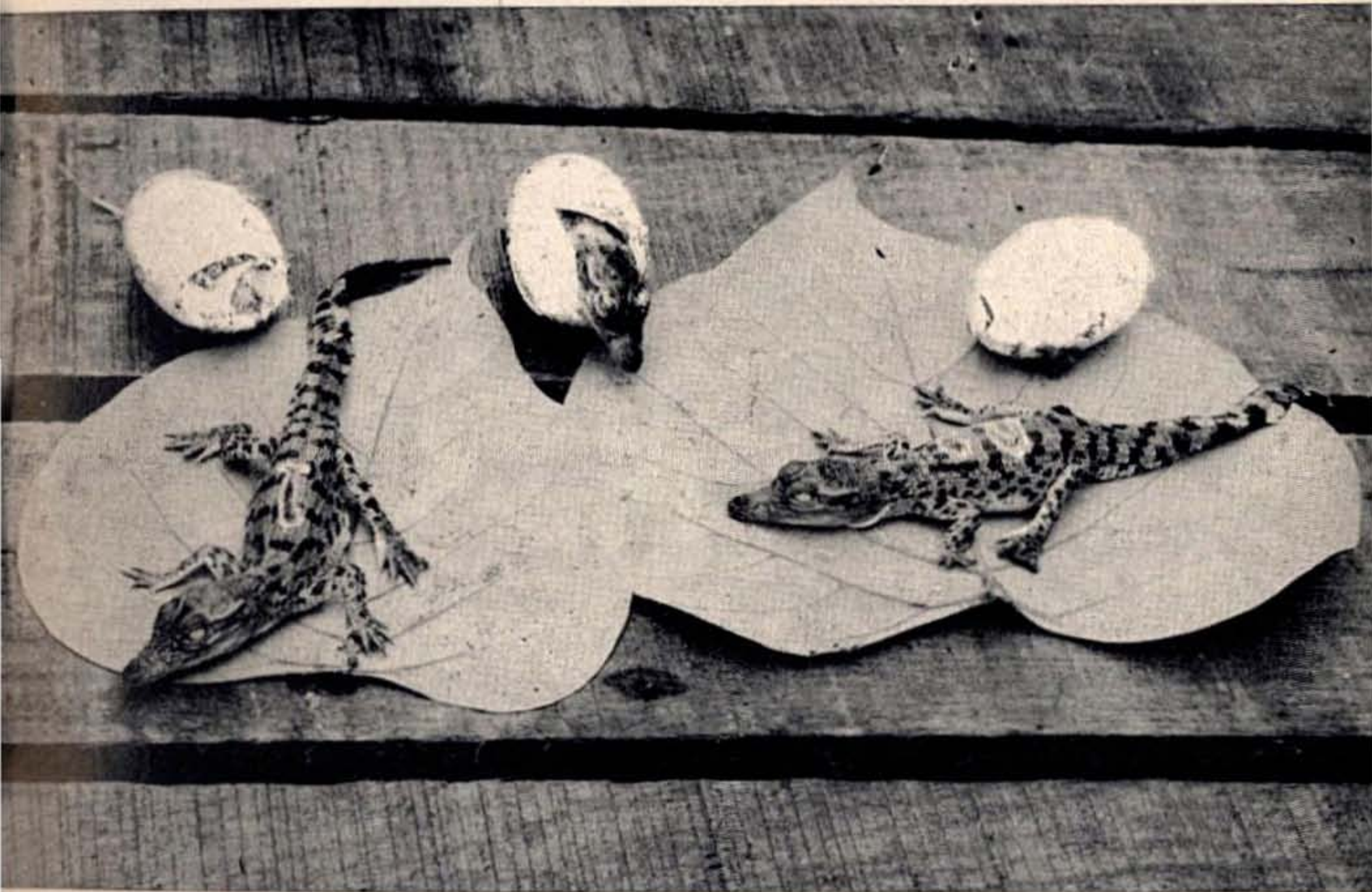
Dr. Manjit Singh is an unusual person. During his tenure as surgeon at the Government Hospital at Car Nicobar island he had established a degree of rapport with the Nicobarese matched by few mainland Indians. He speaks their language, participates in their light-hearted banter and has developed a strong liking for toddy that endeared him to the Nicobarese, who are no teetotallers. And judging by the speeches and tearful farewells at the party the hospital staff threw in his honour, he was as accomplished at his vocation as in his interpersonal dealings. A keen mountaineer and explorer, it was his restlessness that had urged him to resign his post and seek a new life abroad.

When I informed Manjit that I would be out looking for sea snakes along Car Nicobar shores, he joined me eagerly. I had seen numerous sea snake tracks while walking the island beaches looking for signs of nesting sea turtles, and I thought that there was a reasonable chance of observing them as they emerged from the sea.

A few minutes before dusk, Man-



A typical Nicobar beach
Photo: S. Bhaskar



Esturine Crocodile hatchlings
Photo: I. H. Khan

jit and I had settled down to wait among *Pandanus* bushes near some low-lying rocks that bordered the beach. Darkness fell. We played our torch on the rocks for barely a minute when there appeared a two-foot *Laticauda* crawling over the rocks. The adjacent fringing reef supports a variety of marine life including moray eels, one of which we had observed as it poked its head out from a crevice in the intertidal zone. I read later that eels are often preyed on by sea snakes.

Our *Laticauda* had disappeared, but there now appeared very close to it another individual apparently of the same species but smaller in size. I saw Manjit hastily scouring the rocks in his vicinity! With considerable effort, the beautiful blue-and-black banded sea snake crawled beyond the reach of the tide, giving me an opportunity to indulge in a little experiment.

A few months earlier, on Havelock island, I had been brushing my teeth with paste and sea water—to conserve drinking water—on a moonless night on a rocky outcrop that bordered the island shore. Midway through my ablutions my flashlight beam revealed the presence of a *Laticauda*—a large one, about four feet from me. To my dismay, chance or the attraction of the flashlight beam appeared to draw the snake directly towards me. I am no snake man, and I did not know whether or not *Laticauda* are aggressive, but there was little doubt as to what I wished most to do—remove myself speedily from the scene, which I would have done

had the slippery rocks permitted! I switched off the flashlight, hastily switched it on again and scrambled over the rocks to safety. Is *Laticauda* attracted to light?

With Manjit by my side, I played the flashlight on the second snake, about 10 feet away. Quite at ease, it crawled up the beach until it lay between my feet. I wished to see whether it could be persuaded to climb my trouser leg, using the torch beam as a lure, but a slight movement by Manjit disturbed it. It slithered away quickly to the waterline where we soon lost it.

ONGES

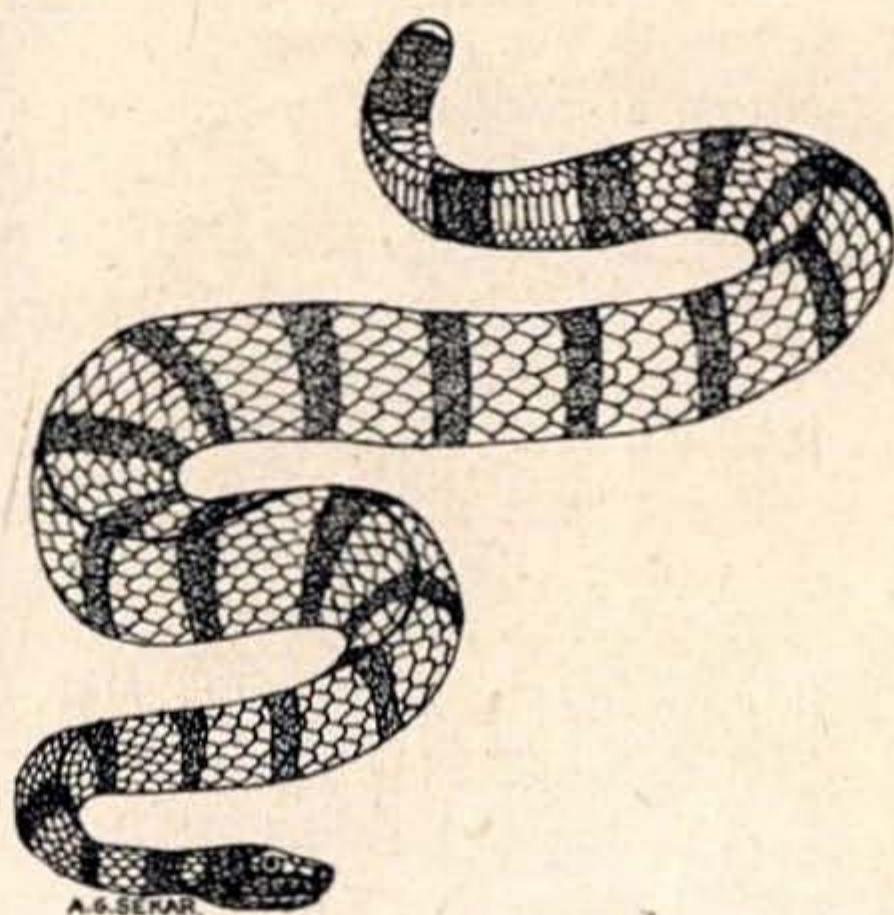
The island of Little Andaman is inhabited by a negrito tribe, the Onge. Today the Onge number only 110 and Little Andaman has itself been opened for settlement by refugees, Indians from the mainland and by Nicobarese. Most of the Onges have moved into colonies provided by the *Administration*, but it is still possible to see disused huts built by the Onges at some points along the coast. That hunting and fishing as a way of life with the Onge has not disappeared became evident to me when I found Onges on two occasions engaged in the traditional activity near the shore—one young man was painstakingly but dexterously hollowing out a tree trunk to be made into a boat, using a small adz, while another was fashioning a tree stem into a spear to be used for harpooning fish and turtles. The basic simplicity and innocence of the Onge has been commented on before, as also their devotion to each other.



An Onge tribal with his day's catch
Photo: L. Cipriani

Both men I met were accompanied by their wives, and a baby in one instance.

As I slept in a jungle clearing in my mosquito net, it was strangely soothing to listen to the songs they chanted in unison. Perhaps in order to discourage mosquitoes and sandflies, the Onges slept on a narrow platform made of sticks, under which the smoky embers of a fire were kept alight. At half-hour intervals throughout the night, one or other of the Onge would rise and stoke the embers or replace a faggot.



Laticauda Sea snake

RANCHIS

A considerable proportion of the work force that has made the recent colonization of the Andaman and Nicobars possible originates from east-central India. Known locally as 'Ranchis', they are a hardy and cheerful people. Many are conversant with life in the forest and are keen hunters. A 'Ranchi' named Louis with whom I once travelled was bitten by a venomous snake. It was past sunset and we had many miles to walk that night, with no medical aid immediately available.

Despite a headache and a growing swelling on his bitten leg, Louis stoically walked four hours through a mangrove swamp, chopping down a tree to use as a makeshift bridge across a creek on one occasion and reaching an outpost dispensary where he all but recovered the following day. It was the third occasion on which Louis had been bitten by a venomous snake—this time perhaps by a not-so-venomous Andaman pit viper (*Trimeresurus pureomaculatus*)—and he was visibly proud to be on his feet the next day and able to carry on his back a heavy load of supplies required at another forest settlement.

SNAKES

The Andamans and Nicobars have their share of lethally venomous terrestrial snakes—the king cobra (*Ophiophagus hannah*) is known from Middle Andaman and I have seen a krait (*Bungarus andamanense*) in the heart of the town in Port Blair. There are several species of pit vipers. I saw at least four species in varied habitats—among the leaves of a mangrove tree in a swamp on North Passage Island, a green vine snake on the bole of a large tree at Karmatang, Middle Andaman, a fast-moving snake among coconut frond debris on the ground at Trinkat island and a dog-faced water snake in two inches of sea water near the shore of the same island. There was also a small snake with an iridescent blue and green sheen that inexplicably lay coiled up, dead and stiff, on the coral-sand beach of a tiny island

called Chester—one of the Labyrinth islands. Its jaws were wide open in death but external injuries were absent.

On the island of Great Nicobar, I heard reports of settlers occasionally losing their domestic fowl to a very large kind of snake—apparently the Regal Python (*Python reticulatus*) which is among the largest snakes in the world, rivalling the anaconda in length.

HUNTING

As is the case at any place where far-flung colonies have been established, policing the activities of settlers often presents difficulties. The Andamans are no exception. Poaching is rife on the remote coast of Betapur in Middle Andaman. A man named Rosappa informed me, with a touch of pride, that very few sea turtles then nested along a section of beach near his camp because during his ten-year stay there he had removed every clutch of sea turtle eggs—probably near 100%—that he could locate.

I spent a week with two poachers who had been settled in the Andamans after having arrived as refugees from East Bengal (now Bangladesh). They worked with trained hunting dogs to catch wild pig and axis deer (*Axis axis*), the latter species has proliferated after having been introduced into the Andamans. They also set traps, a series of about a hundred of which I had an opportunity to visit one morning. I inadvertently sprang two cleverly concealed traps, fortunately without injury to myself. Some of

the hunting dogs that had scars on their legs had been less fortunate.

An axis deer (*Axis axis*) that had been trapped by a leg was trussed up and carried on a pole while the remaining traps were checked or reset. Twice the poachers lost their footing and dropped the animal. Its eyes wide with fright, it moaned piteously each time it hit the ground. A while later we came upon a trapped barking deer, but it was dead and the carcass beginning to rot—failure to check the traps regularly had resulted in this waste. Then there was a three foot monitor lizard (*Varanus salvator*) that had been snared by a leg. Before I was aware of their intentions, the hunters had freed their trap by hacking off the reptile's trapped leg. At my remonstrance at this display of callousness, I was told that the animal was capable of inflicting a nasty bite if handled in any other way. Monitor lizard meat is relished in some places in the Andamans.

The hunters also used throw-nets to catch freshwater prawns in the clear mountain streams that ran by their encampment into the sea. The prawns were baited with balls of dough. Eggs of sea turtles were assiduously dug up after they had been located by the use of a probe-stick. Turtle egg omelettes were prepared out of the yolk alone, the albumen being wastefully discarded. But most of the eggs and the meat and hide of the animals they trapped—as also the large cowries (*Cypraea mauretania*) that they collected from the reef at low tide—

were sold at Nimbutala and Beta-pur.

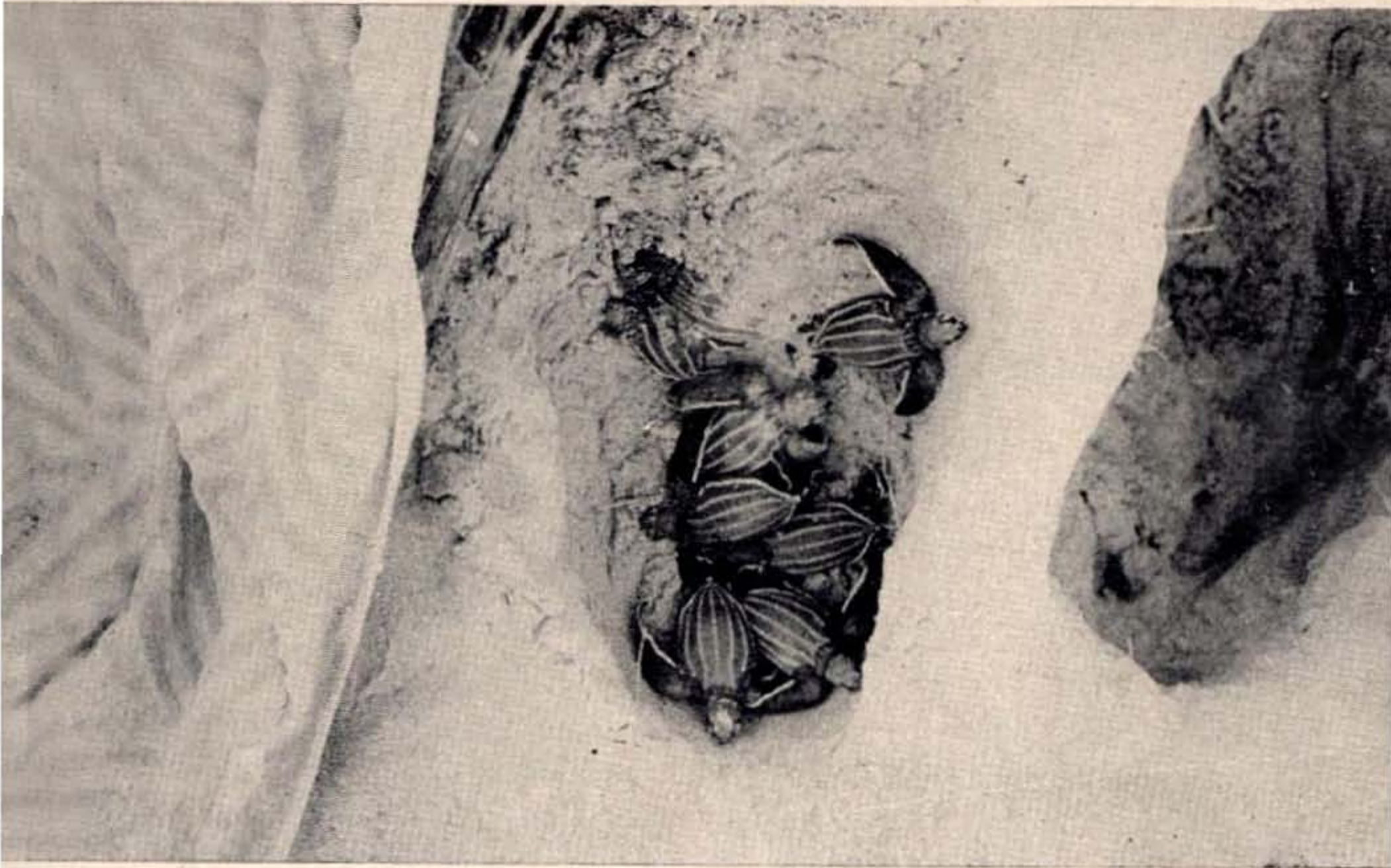
TURTLES

It is curious that during almost 200 years of occupation by Europeans and Indians the existence of turtles—other than sea turtles—in the Andamans and Nicobars should have gone unrecorded. By a coincidence, two species were found in a single year, 1979, by the Wildlife Wing of the Forest Department. Both up to then had been unreported from the Indian soil. One, which awaits identification—it is a soft-shell turtle, in all likelihood an exotic subspecies of the otherwise common *Lissemys punctata*—was reported to have been found in the sea in shallow water near a mangrove swamp at Port Blair. The other, probably *Cuora amboinensis*, the Amboyne turtle, is a box turtle that was found at Campbell Bay, Great Nicobar island. A living specimen of this species was also shown to me at Trinkat island as also two eggs that it had laid in January. They were white and elliptical. One measured 25 × 50 mm. The species is also said to occur on Camorta island and on Car Nicobar.

NICOBARESE

I found the diet of the Central Nicobarese to be worthy of comment. It was not unusual for a Nicobarese to offer, as a friendly token, a piece of dried fish to a visitor. That it was totally uncooked only appeared to heighten the esteem in which the flavour was held! On one occasion, I saw Nicobarese children and adults clustered about a honey-

Leatherback turtle hatchlings. Turtle nests on beaches are regularly pilfered.



Photos: S. Bhaskar



Nicobarese boys with a catch of crabs



A poacher's catch—Water monitor and Andaman wild pig, both on Schedule I (Completely protected species) of the Indian Wildlife (Protection) Act 1972

comb they had found in a forest on Nancowry island. The grubs it contained were being delicately extracted singly and eaten with relish. The meat of sea turtles—including that of the Hawksbill—is sometimes finely minced and eaten raw with coconut. I believe this practice, however, to be not entirely safe as Hawksbills have been known sometimes to accumulate lethal poisons in their system through the consumption of marine organisms containing these poisons. Tridacna clams (giant clams) are sometimes carefully nurtured or farmed in shallow water near Nancowry until they grow to a large size, when the meat is eaten.

SEA LIFE

The undersea life in the Andamans and Nicobars is as rich and

varied as any in a tropical coral reef area. The collection of molluscs such as cowries, helmet shells, trochus, turbo, chank and murex shells is becoming increasingly big business. Shell ornaments are popular, especially among people of Bengali origin.

Near the jetty at Katchal island where I utilized the stop over period of an inter-island ferry boat to take a quick plunge in the sea, I excitedly beheld the first colony of garden eels (troglodyte eels) that I had seen, on a sloping sandy bed in about 15 ft of water. As I approached them, they simultaneously retreated tail-first into their sandy burrows, swaying like stalks of vegetation in the gentle swell.

Close to the town of Wandoor in South Andaman, the intertidal fauna is particularly rich. Large

chitons cling to spray moistened rocks; sea cucumbers of at least five species are found in the shallows. A small pale white octopus crawled over rocks exposed by the tide.

South of the hamlet of Pulo Babi on Great Nicobar island, I twice observed avian predators—perhaps Nicobar Serpent Eagles—snatch up octopi from a reef exposed at low tide. In one instance the bird was forced to drop its prey after partaking of a bite or two, because of the weight of the mollusc. Despite having a chunk missing from its mantle, I found the octopus to be alive and active after its fall.

MAMMALS

I was fortunate enough to see civet cats (*Paradoxurus tytleri*) on two occasions: once at daybreak on uninhabited Tarmugli island at a distance of ten feet as it leisurely climbed to the top of a tall tree,

and another individual at dusk as it searched for titbits among crevices in the exposed reef of Rutland Island, much as I had observed wild pig do in Little Andaman. On both occasions the civets displayed a degree of apparent unconcern about the proximity of a human being that was startling to me.

It is to be hoped that the rapidly expanding population in the Andamans and Nicobars and the influx of refugees and settlers, with the resultant need for living space and resources like timber, will not result in the undermining of its irreplaceable forest wealth or cause the disappearance of the surviving negrito tribes and of their culture.

SATISH BHASKAR

(From *Hamadryad*: Newsletter of the Madras Snake Park Trust, Vol. 6, No. 1, January 1981, pp. 2-8).

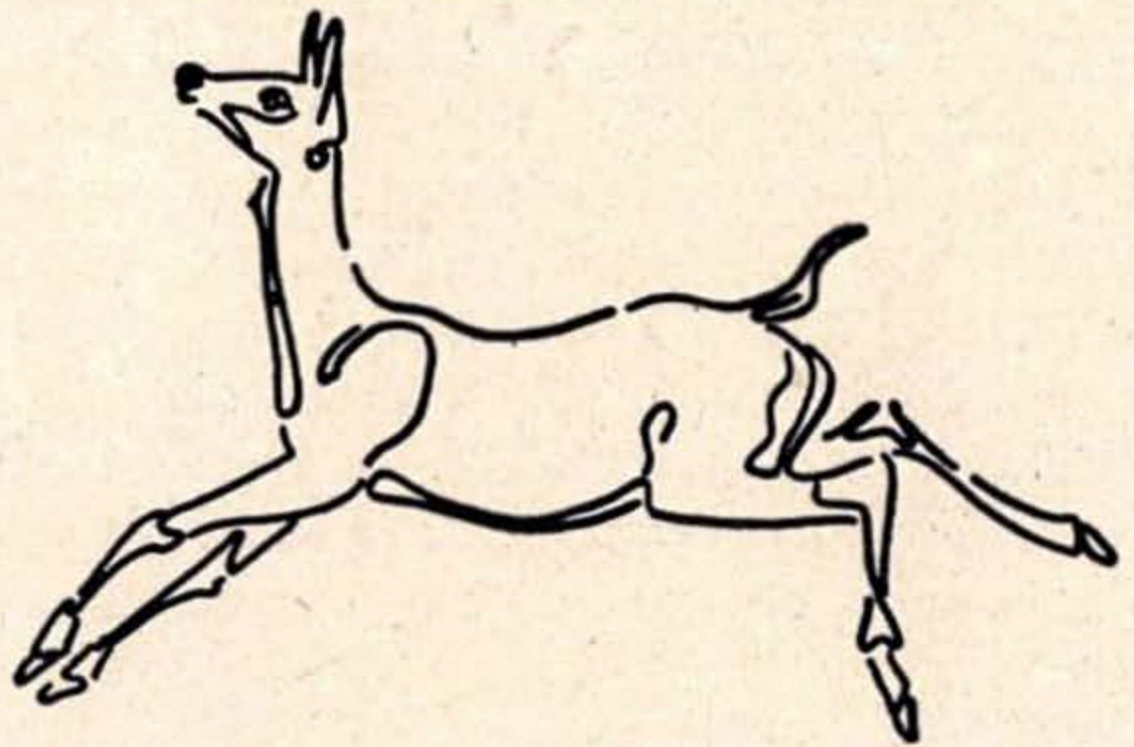
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Living with frogs

So many friends, visitors and business associates ask why we call our house at Thirumullaivayal, Madras, by the name THE FROGS that we decided the explanation was worth printing.

It's simply because there are frogs all over the place: hundreds of tiny, greenish brown tree-frogs that live in the folds of the curtains, in rows along the pelmets, behind books on the shelves, and in the cool damp-

Frogs at THE FROGS



ness of the bathrooms and toilets.

Take down a book in my study and a shower of moist little frogs, disturbed from their slumber, falls out on your head. A visit to the toilet is memorable: a row of little faces looks up at you from down there, where they are happily keeping their bottoms wet; and of course you have to flush them out before you can sit down—an unnerving experience for many foreign visitors who haven't been face to face with a frog since they were ten.

At dusk you see their tiny faces emerging cautiously from behind the books as they leave for the garden to spend the night hunting for insects or being hunted themselves by the snakes, mongooses, civets, jackals, owls and other predators that frequent the premises. Survivors return to their favourite authors next morning.

The paint gets a bit grubby from their muddy little toes, but we don't mind because we're fond of all kinds of animals and we are happy to have them around. Apart from that, they help by eating many flies, termites, mosquitoes and other pests.

When the rains begin they all go out to get married, and we are frogless until the ponds dry up again a few months later. Meanwhile, they sing to us in the evenings in joyful concert with their big green bull-frog cousins, with many other frogs of intermediate dimensions, and with sundry toads, all of whom enjoy the hospitality of our pond.

HARRY MILLER

Do you know these vanishing birds ?

In recent years the spotlight of bird conservationists has been steadfastly turned upon the endemic Great Indian Bustard as a gravely endangered species that is steadily and rapidly declining and may vanish before our eyes. Few people realize, however, that our other two bustards, confined almost entirely to India, namely the Bengal Florican (*Eupodotis bengalensis*) and the Lesser Florican or Leekh (*Sypheotides indica*), have also been unobtrusively but as surely disappearing from their former habitats and may vanish in the same way as the Mountain Quail of the Himalayas and Jerdon's Courser of the Deccan plains have done—while we were looking the other way, as it were. As has been mentioned elsewhere in the *Hornbill*, one of the Bombay Natural History Society's ongoing internationally sponsored projects is an in-depth study of the bionomics and status of the Great Indian Bustard in order to devise strategies for, hopefully, its permanent preservation. Along with this enquiry it is proposed also to take up a parallel investigation on the equally endangered floricans. Since these birds are much less familiar to birdwatchers and the general public, on whom we must depend for most of the preliminary basic data, the two species are illustrated below with brief clues to their identification etc. It is hoped that all members and readers of *Hornbill* will make a special effort to help in the collecting of all pos-

sible local information from village shikaris, professional bird trappers, cultivators or whoever, especially from within the known distributional ranges of the birds.

BENGAL FLORICAN

Larger than domestic hen, with full mop-like crest and longish bare legs—standing about 2 feet (55 cm) to top of head. Male: pied black-and-white. Female: sandy brown, mottled and streaked with blackish.

Habitat: wet tall grassland and *chauris* interspersed with scattered scrub and bushes.

Distribution: Bengal *duars* and Assam Valley, chiefly N. of Brahmaputra river. Rarely Nepal and Kumaon *tarai*.

Habits: usually keeps singly, flying long distances at grass-top height when flushed, and running on after alighting.

LESSER FLORICAN OR LEEKH

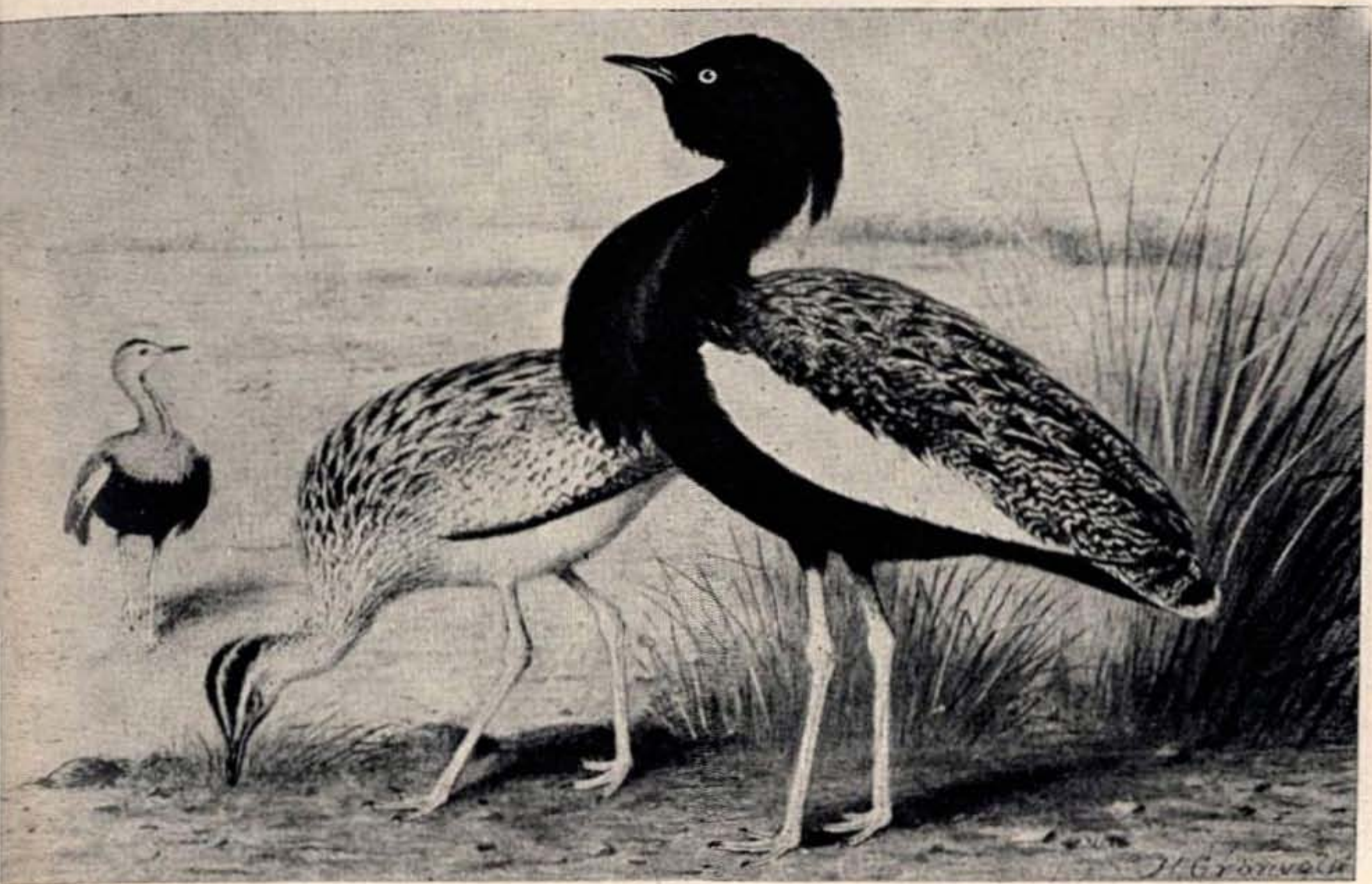
Smaller than above. Male (breeding): pied black-and-white, with a tuft of black upcurving plumes projecting behind either side of head. In non-breeding plumage similar to female: sandy buff, mottled and with blackish arrow-head marks on back.

Habitat: tall grassland with scattered bushes; standing crops of cotton, millets, etc.

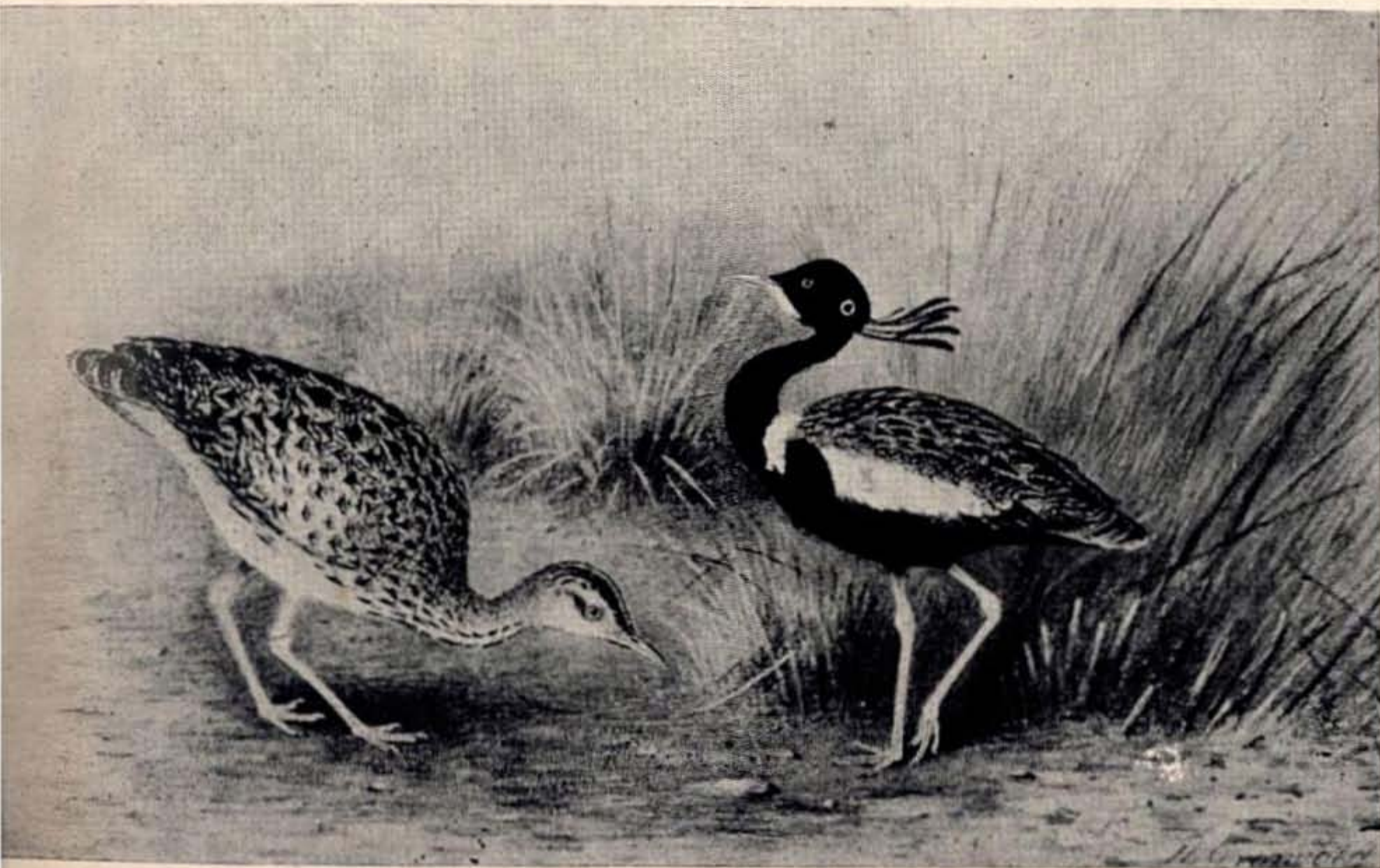
Distribution: Peninsular India, plains and plateaus. Wanders widely in rainy season and may be met anywhere.

Habits: similar to Bengal Florican's.

Sálim Ali



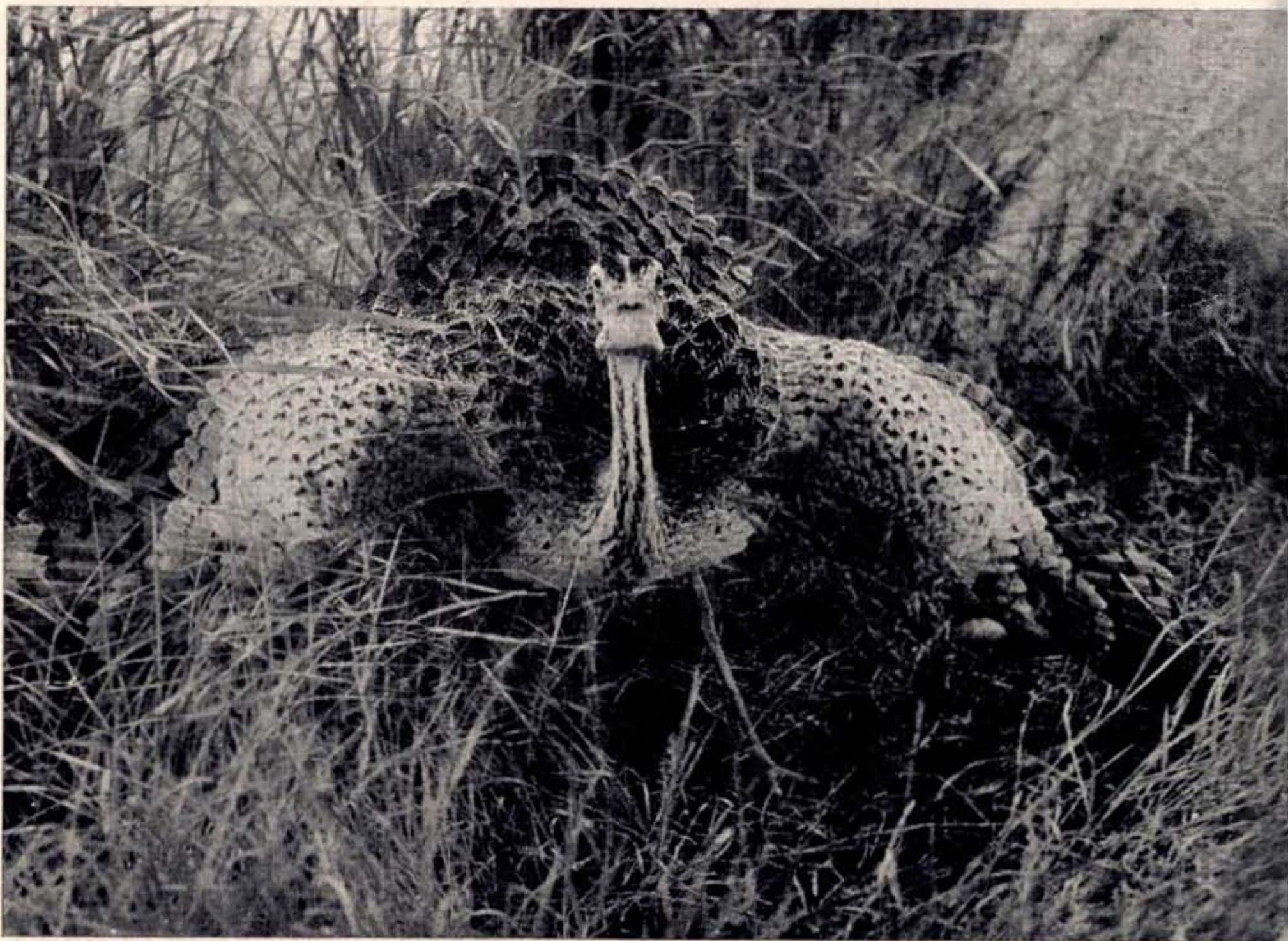
Bengal Florican
Female *Male*



Lesser Florican
Female *Male*



*Lesser Florican
at nest facing an intruder*



*warning off
Photos: Shivraj Kumar Khachar*



*Lesser Florican
gathering the eggs*



back to brooding
Photos: Shivraj Kumar Khachar

Butterflies of Bombay-6

We continue the series from p. 28 of *Hornbill* 1981(1) and present seven more butterflies of the family Nymphalidae in this section.

41. TAWNY RAJAH *Charaxes polyxena* (Cramer). Rare. We have not come across this insect ourselves, but it has been recorded for the area by earlier workers. Its larval food plants are recorded to be *Sacopetalum tomentosum* and *Tamarindus indicus*.

42. BLACK RAJAH *C. fabius* (Fabricius). Rare; on wing in July-August; larval food plant is *Tamarindus indicus*.

43. COMMON NAWAB *Eriboea atamas* (Drury). Rare. We ourselves have not met with this butterfly in Bombay but it is recorded by earlier workers. Larval food plants are various: *Acacia* sp. and *Delonix regia* (gulmohr).

44. GREAT EGGFLY *Hypolimnasia bolina* (Linnaeus) 44a ♂, 44b ♀. Common between August and October but can also be seen in March. The female can be mistaken for the Common Indian Crow but is distinguished by the scalloped border of the forewing. Common during the rains. While the male flies high, the female prefers to stay close to the ground. Larval food plants are species of *Hibiscus*, *Portulaca* and *Abutilon*.

45. DANAID EGGFLY *H. missippus* (Linnaeus) 45a ♂, 45b ♀. Very common on wing from June to October and again in March. Female mimics the Plain Tiger (*Danaus chrysippus*), but can be distin-

guished by a prominent black spot near the anterior margin on the upperside of the hindwings, and two prominent black spots on their underside. Larval food plants are *Elatostema cuneatum* and *Portulaca oleracea*.

46. BLUE OAKLEAF *Kallima philarchus* (Westwood). Common. On wing from July to October. As a rule flies inside the forest rarely coming out into the open. When at rest the folded wings resemble a dry leaf. They are attracted to ripe fruit and often settle on them for the sap. Larvae feed on *Carvia callosa*.

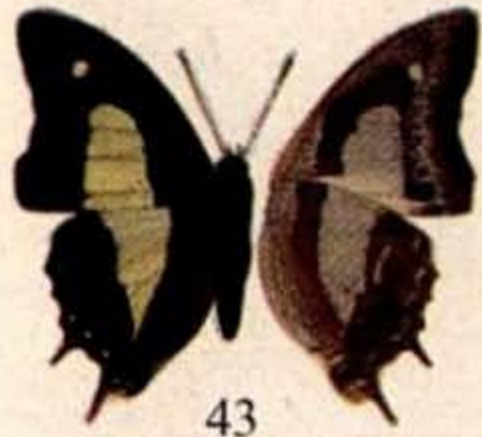
47. BARONET *Euthalia nais* (Forster). A sun loving butterfly, common from September to November. Flies close to the ground and settles frequently with spread-out wings. Larval food plants *Shorea robusta* and *Diospyros* sp. It is attracted to sap of over-ripe fruits.

NARESH CHATURVEDI
S. M. SATHEESAN

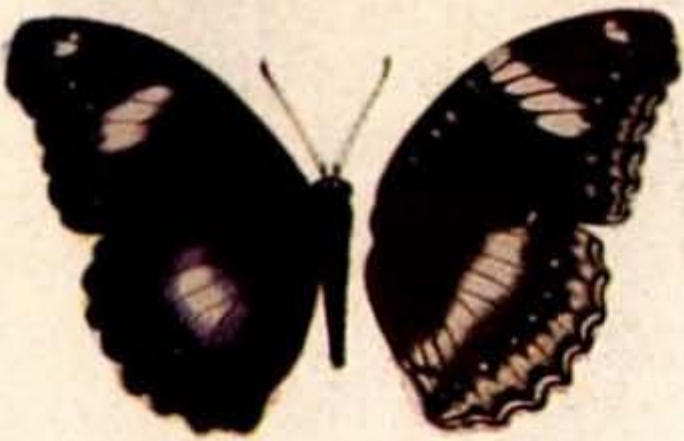
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42



43



44A



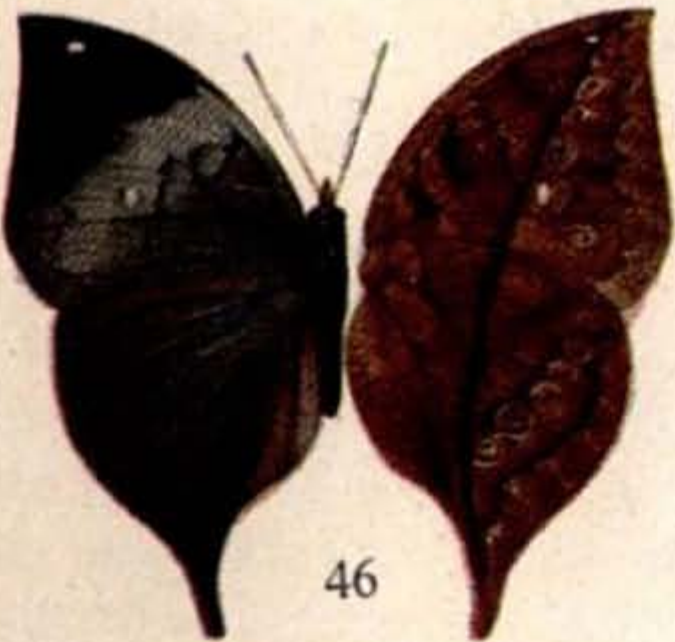
44B



45A



45B



46



47

Some big cat incidences in Madhya Pradesh

A severe drought in the Vindhya-chal-Bundelkhand region of Madhya Pradesh occurred in 1979-80. The drought disrupted not only human life but also the wildlife of the region. A large number of villagers entered forests in search of green fodder and water for their cattle, thus disturbing wildlife. Poaching of wild herbivores was rampant and the big cats were forced to subsist on cattle. Tigers and leopards were seen in the vicinity of towns and villages in Mandla, Jabalpur, Chhatarpur, and Panna districts. In the following notes only well-documented cases are reported. It is interesting to note that the reports related to incidents which commenced in May 1979 and gradually ended by August 1980.

Distirct Mandla

Village Katra is situated on Jabalpur-Mandla road, just 4 km from Mandla town (and district headquarters). At midnight on 31st May 1980 a leopard entered a hut in the village of Katra on the Jabalpur-Mandla road where lived a tribal family—a couple and two children. The family had come from a distant place to work on relief programmes. The family was sound asleep when suddenly a noise woke the tribal woman Puniyabai who saw a full-grown leopard in the hut. The leopard wasted no time and ran away with a goat which was tied in the hut. The woman who saw the beast so near to her was so ter-

rified that she died of heart failure. The leopard was not new to the area but had been lifting animals from the village for some time.

District Jabalpur

In July 1979, a tiger left the forested area and took to living in the vicinity of village Bahori Bandh near Sihora. The tiger had obviously left the forest due to shortage of water and was in the beginning seen a number of times by the villagers lying on the shady banks of the nullah. It did not harm anybody. Some villagers mistook it to be blind and started throwing stones at it. The tiger then made its first human kill. The second incidence occurred when a villager finding his buffalo heifer missing went in search to the forest late in the evening. Seeing a dead heifer lying in the forest he tried to go near it, not realising that the tiger was hiding near by. The tiger killed him.

The harassed villagers then poisoned it and thus came the tragic end of the regal creature.

In the first week of August 1980 some factory workers in the explosive depot were dumbfounded to see a full-grown panther within the walled-in compound of the Gun Carriage Factory of Jabalpur city. Although the forest of Kundam range is in the neighbourhood of the factory they did not expect a pan-

ther to scale the high boundary wall.

The matter was handled carefully by the factory officials and the panther was easily trapped in a cage baited with a goat, and successfully tranquilized by Mr. Panwar of the Kanha National Park, who was especially called for the purpose. The trapped animal was then released in the Kanha National Park.

District Chhatarpur

A similar case was reported from Laundi teshil of Chhatarpur district in July 1980 where a panther fell down a well. The poor beast was rescued after 36 hours by tehsil authorities by lowering a *jhoola* (rope woven cot) into the well. The panther successfully climbed out of the well and walked into the nearby jungle.

District Panna

On the night of 23rd August 1980 at about 9 p.m. a full-grown panther fell in a trap laid by poachers in the forested tract near a nullah on the Jabalpur-Riwa road near Kutera village. Somehow the news regarding the trapped beast spread quickly and the poachers made no attempt to kill it. Meanwhile after 24 hours of the incidence authorities at Bhopal, the State capital, got the news and a wildlife director along with his team rushed to the spot. After a journey of about 425 km the team reached the same day the nearby village of Pakaria, only 3 km away from the trapped animal. But the team could not reach the spot owing to very heavy rain. On 26th the team tran-



Tiger reflections
Photo: E. P. Gee

quilized the tired beast and carried it to Maihar veterinary hospital where it collapsed.

All these incidences reflect not only our success but also our failures in our efforts to save our splendid wildlife.

SHIV KUMAR TIWARI

Obituary for a forest giant

Nowadays there are few lofty, majestic trees in our depleted forests of the Konkan along the Western Ghats. A grand old *satwin* tree with huge buttresses was seen for the first time by me in 1969, towering over the Ransai-Karnala ravine in the Karnala Bird Sanctuary near Panwel, Kulaba district, Maharashtra. Its age was then roughly estimated to be about two centuries.

I had a number of opportunities since to visit and see this majestic tree during our floristic study visits to the reserved forests of the Karnala Bird Sanctuary. The canopy of this arboreal giant was so dense that the top of the crown could not be seen from the base. The trunk of the lofty *satwin* tree at breast height required a chain of 7 persons to encircle it, and the short branches were always packed with thick evergreen palmate foliage.

Interestingly this famous tree was known to local officials as *saitan* or devil. The official name is the result of wrong pronunciation of the British officials of the local name *satwin* in Marathi or *Saptaparna* in Sanskrit. Without caring to understand the etymology, our local officials still continue to call the tree as *saitan*. Botanically the tree is known as *Alstonia scholaris*, an



The 'giant' satwin tree (Photo: Author)

evergreen tree species found usually in the thick forests of high rainfall tracts. It is one of the major plants mentioned in Ayurvedic medicine.

Because of the indiscriminate forest cutting, even in the remote jungles of Ransai-Karnala area, very few trees and saplings are seen in the Karnala Bird Sanctuary.

During the torrential monsoon of 1979 it was reported that the tree collapsed and thus died a natural death. Its demise deserves to be mourned by all who had the good fortune to have seen it.

V. D. VARTAK

The name saitan for this tree could well be a mispronunciation of the Indian trade names of Alstonia scholaris, namely Chatiyān or Shaitān. Incidentally the satwin tree is said to flower around Sharad Pournima. The jungle folk maintain that the fragrance of its blossoms spreads far and wide and stimulates elephants sexually. Satwin trees were in flower in 1980 from about mid September to mid November in many parts of the Bombay City, but we failed to notice any fragrance.—EDS.

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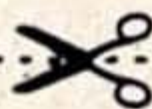
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