LORIS

A JOURNAL OF CEYLON WILD LIFE Vol. VII No.—4

LORIS

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Wild Life Protection Society of Ceylon

FOUNDED 1894

The objects for which the Society was formed were—

"To prevent the elimination of game in Ceylon by destruction of animals for trading purposes, to further the interests of legitimate sport, and to conserve one of the food supplies of the inhabitants."

At the Annual General Meeting held on 30th November, 1945, the Rules were revised, and the objects of the Society now are—

(1) To prevent the progressive destruction of species of wild animals and wherever possible to preserve wild life intact in natural conditions in Ceylon.

(2) To continue the tradition of the Society in furthering the interests of legitimate sport.

(3) To promote an interest in the life histories of all forms of animal life and to co-operate with other Societies and Institutions which have similar aims and objects.

The Subscription to the Society is Rs. 10 annually, payable on the 1st October.

All members, whose subscriptions are not in arrears, receive a copy of each number of the Society's Magazine, "LORIS," which is issued bi-annually in June and December. Further copies may be had at Rs. 3-50 each, at which price copies are also available to the general public.

Persons wishing to join the Society, or desirous of obtaining further particulars, should apply to the Hony. Secretary, Mr. C. E. Norris, Pingarawa Estate, Namunukula.

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A JOURNAL OF CEYLON WILD LIFE

Published by the Wild Life Protection Society of Ceylon.

Literary contributions should be sent to the Editor, MR. R. L. SPITTEL, WYCHERLEY, BULLERS ROAD, COLOMBO.

Articles are invited not only from members of the Society but also from the general public interested in Wild Life.

All manuscripts should be typed with double spacing and on one side of the paper only.

Matters relating to *Membership* and *Subscriptions* should be addressed to MR. C. E. NORRIS, PINGARAWA ESTATE, NAMUNUKULA.

Gleanings from the Warden's Report—1955

Staff

ONLY one case occurred where shooting had to be resorted to in self-defence. This unavoidable occurrence took place near Maradanmaduwa in the Wilpattu National Park. A small patrol party led by a Game Guard encountered a she-bear and her nearly full-grown cub in thick *Nelu* vegetation and the she-bear's charge was stopped at a distance of a few feet by a shot. She fell to the shot but got up and disappeared in the thick undergrowth. The blood trail was followed in order to ascertain how severely she was wounded, and when she was next encountered, about a quarter of a mile away, she was found to be seriously injured but she charged again and was destroyed. The element of danger is always present in the course of patrolling in the National Reserves and is part and parcel of the everyday life of the staff. When a fire-arm is carried there is a natural tendency for vigilance to be relaxed and for the cohesion of the party to be lost. When the patrol has a strength of five or six men a gun is not necessary and is not usually carried, but the normal patrol consists of a guard and one or two watchers. In Wilpattu the greatest danger is from bears, in Yala from elephants and lone buffaloes. Cases of snake bite are very rare: happily, there has been no fatality yet.

In the Wild Life Department, unlike any other Government Department, officers of all grades, from the head down to the most junior watcher, are thrown together in the most intimate personal contact and relationship in the course of their field activities. On exploration or on patrols of some days duration, the food, the camping out conditions (either in a small, unfurnished circuit hut or, more usually, in the open), and the nature of work are the same for all irrespective of rank. And when travelling on foot in the jungle it is not the most senior officer but the most experienced and most skilled man in jungle-craft who leads the way, and it is he, for all practical purposes, who commands the party because upon him is the responsibility for immediate decision and action if danger is encountered. When a file of men, one close behind the other, is working its way through jungle, the third man and those behind him see little or nothing of those glimpses of fleeing animals or those incipient stages of the demonstrations or attacks of aggressive animals which the leader sees clearly. One way of going through jungle without much risk of danger, a method practised by collectors of bee's honey, is for some members of the party to tap the trunks of trees with a stick or axe and for all to keep up a loud conversation, or even indulge in song, as they move along, but this is exactly the opposite of the method in which officers of the Department of Wild Life are trained: they are enjoined to walk silently and vigilantly, to see without being seen, to avoid disturbing wild animals, and, not to take liberties with poten-

tially dangerous animals. The inherent dangers and risks in this method of approach are obvious, but these are the skills that must be acquired and the risks that must be run by a ranger, guard or watcher who strives to be highly efficient. In the exercise of this skill and the taking of these risks, some remarkable photographs have been taken by officers of this Department with ordinary cameras at very close ranges. For example, the photographer has remained hidden in the jungle surrounding a rock water-hole until a bear or elephant has approached the water, and then left his place of concealment and crept upwind, camera in hand, unseen and unheard, to within fifteen feet, photographed the animal while it was drinking, and withdrawn again to his hiding place without the animal being aware of his presence. An unique photograph of a sleeping leopard was taken by Ranger C. S. Wickremasinghe by stalking the animal. Ranger H. P. de Alwis took a close-up series of bears in copulation. Game Guards F. E. Fernando and H. D. George have photographed elephants, herds and single animals, at close quarters. These and other officers of the Department who own cameras and have gone in for wild life photography at their own expense have hitherto followed the prevailing fashion of photographing the larger animals only. The field of photography of the smaller animals—hare, porcupine, squirrels, monkeys, jackals, mouse-deer, mongoose, wild cats and others—remains practically untouched and is likely to produce equally interesting pictures taken without risk but with much greater effort.

The National Reserves

Excisions are due to be made from the Hakgala Strict Natural Reserve. Veddikachchi Intermediate Zone and Wilpattu East Intermediate Zone for agricultural and grazing purposes, and although the actual boundaries of the areas to be lost have not yet been finally defined and gazetted, work is proceeding in those areas with a view to their conversion to other uses. The Fauna and Flora Protection Advisory Committee had referred to it proposals to restore a tank in the Wilpattu South Intermediate Zone for a colonisation scheme and to construct a public highway through the Veddikachchi Intermediate Zone and, after consideration, decided unanimously to oppose both proposals. If the Kaudulla tank restoration scheme is proceeded with, the entire Veddikachchi Intermediate Zone will necessarily have to be unreserved as the greater part of it, particularly its extensive park-lands, will become paddy fields under the restored tank. The Irrigation Department carried out surveys for the construction of a large, new reservoir by damming the Kala Oya at Makalanmaduwa, in the southern extremity of the Wilpattu National Park.

The Wasgomuwa Strict Natural Reserve

One case of poaching in this Reserve was detected, but this solitary detection does not reflect the extent of the poaching which is believed to be going on within it. The Karaugahawela tank, near the southern boundary, was restored and the fields below it brought under cultivation. This new settlement imperils the security of the southern part of the Reserve. Survey parties entered the Reserve to commence work on the Minipe channel extension scheme, and as this work proceeds during 1956 the Survey Department's staff will increase to over 100 men encamped at various places within the Reserve : they have asked and been allowed to carry firearms for their protection. If it is decided to bring this region under cultivation, the future aspect of the Wasgomuwa Strict Natural Reserve will preserve only the Sudukanda range of hills, now nearly devoid of wild life because of its high elevation, precipitous slopes and rocky surfaces, as the final content of the Reserve. Barren lands, whether on mountain or plain, are as unproductive of wild life as they are of crops.

The National Parks

There is now a general realisation among

visitors to the National Parks that the rule which prohibits walking (except to certain approved spots) in the Parks is a sensible one. Apart from avoiding disturbance to the animals, because a man on foot is instantly recognised and causes alarm, it has certainly avoided accidents from sudden encounters with dangerous animals. The more visitors there are—the number is increasing every year—the more rigidly must the rule be enforced. And in this connection it might be as well to repeat once again that it does not matter what coloured clothing visitors wear so long as they stay inside their vehicles.

National Parks are not established with the sole object of protecting wild life, although that is a vital element in their functional purpose. Their educational and recreational aspects are also highly important, and these benefits must be made available to and be taken advantage of by all classes of the people and not by certain privileged or more fortunate sections only. Wild life enthusiasts must not lose sight of the overall picture. • The security of tenure of a National Park depends ultimately on the character and degree of its national popularity : the more people of all walks of life who visit it, the greater will be the number and the strength of the voices that will be raised in its defence if it is threatened. Therefore, as important as the care of the animals are the facilities and amenities which should be provided for visitors. In this scheme of things an essential need is cheap but adequate accommodation for school children, students, teachers and that very large section of the people who travel by public transport. Such accommodation has been provided in both Parks in the shape of aluminium huts for the use of which a nominal charge of 25 cents a day for each person is recovered. The huts at Palatupana, just outside the Ruhuna Park, can accommodate 40 persons and those in the Wilpattu Park, half that number ; but it is already evident that the accommodation at Palatupana is inadequate because, like the Park bungalows, the huts are also being booked weeks, and sometimes months, ahead. Facilities for visitors also include, essentially, roads along which passenger vans and motor buses could safely travel. The Ruhuna Park now has 10 miles and the Wilpattu Park 15 miles of such roads, and these traverse those areas in which wild animals are most frequently to be seen.

The primary need in serving the welfare of the animals is the provision of adequate supplies of water during the annual drought from May to September, and over the last five years this work has received the highest priority in this Department's programme of improvements. The pangs of thirst are greater than those of hunger. The gratifying position today is that unless there is a severe failure of the north-east monsoon, the water supplies in both Parks will outlast the drought, and the animals will not be in distress. A multiplicity of tanks and water-holes is of no avail if rain does not fall to fill them.

The Ruhuna National Park

There is a period of about three weeks in July every year when the visitor to Block No. 2 will notice practically nothing in the way of wild life, but if he is interested in the doings of his fellowmen, he will see and learn and, possibly, profit much. This is the season of the **Kataragama pilgrimage.** Pilgrims from the Northern and Eastern Provinces have travelled by the eastern and south-eastern coastal route for many years past and this route is still made use of by numerous devotees who make their pilgrimage on foot. Not many, however, walk all the way from Jaffna or Mullaitivu or Trincomalee. Today, pilgrims can travel as far as Panama by bus but from there to Kataragama they must walk a distance of 65 miles, the greater part of it through the Yala group of Wild Life Reserves. The first halting place after leaving Panama is Okanda, the Range headquarters of the Yala East Reserve ; here the pilgrims offer worship at the Hindu shrine on the rocky headland by the sea, a site of much

sanctity. The second stage of the journey, which carries them through the first Reserve, terminates on the banks of the Kumbukkan Oya. The third night is spent at Pahala Potana in Block No. 2 of the Ruhuna National Park, where there is a well with rather indifferent water, and on the fourth day they reach the clear stream of the Menik Ganga at Yala. The fifth stage ends at Katagamuwa tank in Katagamuwa Sanctuary. At a point along this stage the pilgrims loudly hail their first view of the Kataragama hills : they have not discovered that a day earlier, at Veheragodella in Block No. 2, they could obtain an earlier and better view of these sacred hills if they were to climb the mound 200 yards off the track. The pilgrimage ends at Kataragama on the sixth day.

In July, 1955, the number of pilgrims who travelled through the Reserves greatly exceeded that of the four preceding years and must have been well in excess of 5,000 ; perhaps it was the least prosperous of these last five years. Stories are related, and are believed by the gullible, of the boldness and pugnacity of the leopards in the Strict Natural Reserve (now Block No. 2) who are reputed to have acquired a taste for human flesh by taking toll of dying or exhausted pilgrims, but nobody has seen the dead body or the skeleton of a human being in this region. On the other hand, it is also said that the dangerous animals, elephants, buffaloes and bears, recognise the sacred mission of the Sami (by which name every pilgrim is addressed) and keep well clear on either side of the pilgrim track so that the pilgrims may pass unmolested and unafraid : this is easily understood because it is the natural reaction of wild animals to a continuous procession of thousands of human beings travelling on one route and shouting their religious cries almost without cessation. It successfully puts to flight the boldest bull elephant and the most savage lone buffalo in Yala.

The pilgrims travel in groups, the unit being the family or the village. Occasionally there are lone individuals. Men and women of all ages, some very old and decrepit or lame or blind and walking with the aid of sticks, and children of all sizes, including babies in arms, comprise the groups. They carry their food on their heads and in every one's hand is a tin pail containing water. Their tent is the sky. Their earnestness, devotion and faith are patent, but cheerfulness often breaks in to ease the rigours of the journey. Their food is strictly vegetarian and here nature comes to their aid for this is the season when the Woodapple trees, which abound along the entire route, are in full fruit. The children, in particular, are constantly dashing off the track to pick up the fallen fruits. They also consume the leaves of several wild plants, principally Ranawara (*Cassia auriculata*), Kara (*Canthium coromandelicum*), Angunukola (*Dregea volubilis*), Museta (*Rivea ornata*), Mulla (*Premna latifolia*), Kankun (*Ipomaea aquatica*), and Mukunuvenna (*Alternanthera sessilis*).

Deer, peafowl and other animals which stray out of the Park into Maranan Eliya, Pattiawala and Godekalapuwa, close outside the park boundary, behave in the same trustful way as they do inside the park and can be easily approached and shot. Over a dozen parties, armed with game licences, came shooting to Godekalapuwa in November, the first month of the open season. To prevent this slaughter, all game licences issued by the G.A., Hambantota, now bear *an endorsement prohibiting shooting within two miles of the National Park boundary*. Objections may be expected from those who have a pretended interest in wild life protection and who have no compunction about shooting game animals which stand and gaze at them. This development at Godekalapuwa illustrates the scientific and practical necessity for an Intermediate Zone round every Reserve in which there is absolute protection.

A subject of much discussion is the comparative *rarity of bears in the Ruhuna Park in contrast to the Wilpattu Park* where they are

fairly frequently seen by visitors. That Wilpattu has a larger population of bears than Ruhuna is undeniable : this is also true of North Ceylon as compared with South Ceylon. During the palu (*Manilkara hexandra*) season in the Ruhuna Park the tracks of bears are very evident everywhere, even outside the Park boundaries, so that these animals cannot be said to be scarce : but their comings and goings have been at night and an explanation must be sought for this singular nocturnalism. In Wilpattu they are seen at all hours of the day in the cool, wet season, while during the drought they come to water and can be photographed during daylight : not so in Ruhuna. But even in Wilpattu bears have an aversion to and fear of motor vehicles greater than that of any other animal. The bear is also the first among the wild animals to recede before the jungle felling and clearing operations which precede the settlement of man on new lands : it is characteristic of him that he avoids the proximity of settled human habitation and of human activity. In Block No. 2 of the Ruhuna Park, into which visitors and vehicles rarely enter, bears are often seen by the staff on patrol or on exploration. The Wilpattu Park has many more visitors than Block No. 2 of the Ruhuna Park but less than one-fifteenth of the number of visitors to Block No. 1 : besides, it is considerably larger in extent and the traffic is dispersed and not concentrated as in the Ruhuna Park. The factors which mainly contribute to the rare appearances by day of bears in Block No. 1 of the Ruhuna Park appear to be the considerable motor traffic and the continual presence and proximity of man within it, both of which are obnoxious to the bear's retiring nature. If this assumption is correct it will be interesting to watch developments in Wilpattu as the tourist traffic in that park increases from year to year.

The *broad, mile-long corridor to join the Uraniya and Buttawa plains,* which had been half done, was completed and the natural surface track through it was made motorable. Most visitors now travel on this route. Elephants are frequently met with in this corridor. When new grass sprouted in the new clearing with the November rains, hundreds of spotted deer were to be seen in it, a very fascinating, close-up spectacle, the vehicles passing slowly through massed herds of these attractive animals without stampeding them. In the process of natural regeneration of the flora after the felling and clearing, low bushes of Ranawara, (*Cassia auriculata*), a very showy and long-flowering species, have sprung up everywhere in the corridor. The water-hole, Siyambalagaswala, was deepened.

The *elephant population in the Park* reached its peak in the second and third weeks of December, 1955. Owing to the abnormal, dry weather the grass was beginning to wither and was in just that condition in which elephants most relish it. It was observed that in the early morning hours, up to about 8 a.m., elephants were still in forest cover : thereafter, up to sunset, they were out in considerable numbers in the open, grassy plains and on the roadsides, feeding on the grass. Those on the roadsides were a serious obstruction to traffic. Many cars were held up for long periods : some could not proceed beyond Wilapalawewa or Buttawa. The largest number of elephants seen by one party in one day in the 10-mile stretch between Palatupana and Yala was 56. Many visitors saw 30 and more elephants of an evening. Two herds of 17 and 13 were frequently seen. Later, a herd of 27 came into the park from across the river. The staff on patrol found elephants everywhere off the roads and duties to be done on foot had to be carried out with great caution. At the peak, the elephant population came very close to two animals per square mile, a positively dangerous concentration. That no accident occurred was due as much to good luck as to the skill of the staff in directing visitors. Outside the Park too, in the stretch between Kirinda and Palatupana, there were several elephants, small herds and solitary animals, attracted by the large

extent of new chenas recently opened up and brought under cultivation in this area. By December 31, this cultivation, except for chillies, had largely failed for lack of rain.

Wilpattu National Park

It is now possible for motor cars to travel to 8 Villus, namely, Borupan Wila, Timbiri Wila, Kumbuk Wila, Mahapatessa Wila, Demata Wila, Lunu Wila, Kokkare Villu and Nelun Wila. The cutting of additional side-drains and the gravelling of new sections were carried out and new culverts were built : work has commenced on a small bridge. The extension of the main, motorable road to Kali Villu, a total distance of 26 miles, is the aim, but beyond the 12th mile there is no gravel or stone, and transport charges become very heavy. In dry weather, many of the Jeep roads are motorable.

Normally *elephants* come to water nearly every day at the Maradanmaduwa tank in the Wilpattu Park from late June till September, and the animals can be viewed from the bungalow or, at closer range, from a tree-hut erected on the tank bund. This is well known to visitors to Wilpattu and bookings of the bungalow for July are generally made several months ahead. But in the 1955 dry season there was ample water, in all parts of the Park and elephants came to the tank only occasionally. Due to the protection which the Park now affords and the improvement of the water supplies the elephant population in Wilpattu has risen to about 40 to 50 animals. But their timidity is still evident and they are far more nocturnal than in Yala. The carcases of four dead elephants were found in the Park during a year. One was shot in alleged self-defence by a survey labourer working on the new Wilachchiya tank restoration scheme. One had died of natural causes. In the two remaining cases the cause of death cannot be stated with certainty.

The *surface topography* of Wilpattu exhibits two features peculiar to this region, (1) sandy patches of bare, white sand, and (2) eroded areas, or near-desert formations. E. J. Wayland has reported these in his papers in "*Spolia Zeylanica*," but his route touched only a small fraction of the whole area of Wilpattu. The sandy patches occur only in the Villu area and they vary in extent from ½ an acre to 4 or 5 acres. The soil is a loose, fine, white (or discoloured white) sand. The ground is never flat but always sloping, with undulations, in one direction and the difference in elevation between the lowest hollow and the highest level may vary from 10 to 50 feet. It is not altogether bare of vegetation : clumps of bushes or small trees grow here and there. The occurrence of these sandy patches is always circumscribed and abrupt. Are they Villus in the making? The eroded sections or near-desert formations never occur in the Villu area but on firm ground. They are of considerably larger extent and take the shape of a flattened bowl, lowest towards the north, north-west or west which is the exit through which the flood waters pass. The high ground round is often 25 feet higher than the deepest hollow and rises clear and vertically from the rim of the bowl. Within the bowl the surface is uneven and interspersed with little hillocks, not fully eroded, which stand out like islets and often carry a single tree or some sparse vegetation on their diminishing summits. There is little or no sand except that brought down by the streams. Little ridges become watersheds for little streams.

Protected Animals and Plants

No addition was made to the lists of absolutely protected and partially protected animals and plants. The unrestricted export of the herb Ekaweriya (*Rauvolfia serpentina*) was curtailed to quantities fixed by the Controller of Exports.

Crocodiles are now seldom seen outside the Reserves and there is no doubt that over the past 10 years considerable numbers of them have been killed for their skins. In several village tanks crocodiles are now totally absent. If the protection now given to these reptiles

in (i) the large reservoirs within the Gal Oya, Minneriya-Giritale, Anuradhapura, Wirawila-Tissa and Giant's Tank Sanctuaries, (ii) the many Villus in the Wilpattu Reserves, and (iii) the lagoons and rivers in the Yala Reserves, could be assured in the future, there need be no apprehension that they will become extinct. A useful and interesting branch of research would be a study of the ecological unbalance or changes which have taken place in those tanks and other waters in which crocodiles formerly lived in appreciable numbers but are now absent or very scarce. In the course of such a study special attention should be given to those tanks which are teeming with the recently introduced exotic fish, *Tilapia*.

The over-shooting of *partridges* in the Mannar District appears theoretically to have been checked by (1) reducing the number of birds which may be shot on a licence to 6, and (2) restriction in the issue of licences.

The Unprotected Areas

The overall picture of wild life in the unprotected areas is a dismal one, and with little hope for the future, especially to those whose recollections of the highways and byways of the Dry Zone jungles extend back for 20 years. The spectacle of wild life on the jungle roadsides is now a thing of the past and for this the blame must be laid unhesitatingly on the men who shoot from motor vehicles. The Jeep and the Land Rover in recent years have carried this type of shooting off the roads into cart-tracks and jungle-paths and beyond into open parklands and plains. The jungle villager's contention that shooting is no longer practicable except at night and with a torch is true, because the animals have become almost completely nocturnal. By day they lie up in remote and secluded spots where they are not easily approachable, and they move out to feed only after night has fallen.

Night-shooting by sitting up over water-holes, in tank-beds and by river-banks is widely practised during the dry season. The more severe the drought the more shooting there is. The 1955 drought was very mild and the slaughter by night-shooting was comparatively small. This type of poaching is the main source for the illicit trade in meat which flourishes in colonisation schemes and townships, bazaars and fairs in the dry zone. There is a ready sale, but there would not be if butcher's shops for the sale of beef or mutton existed. *The absence of a licensed beef-stall in a populated area is a powerful inducement to poachers* and their associates to commercialise the shooting of wild animals and the sale of their flesh. With bicycles, transport over distances of 10 to 15 miles is not a matter of much account. Once this trade is organised and established, it is not easily broken. But there is no unfailing supply of wild animals and the depletion and final extermination of the animal population by continual shooting must eventually put an end locally both to wild life and the trade in meat.

Apart from the considerable trade in meat, there are no other internal commercialised activities in the products of wild life except in crocodile skins. There used to be a substantial export of horns, skins, porcupine quills, feathers, and pangolin scales, but since May, 1950, export in commercial quantities or for commercial purposes has been banned and these products have ceased to be collected. Crocodile skins can be legally collected, as the reptile is not protected, but the method of export is illegal and is by smuggling from the ports in the Jaffna peninsula.

For the third year in succession, the 1955-56 north-east monsoon brought very few *migrant ducks* into Ceylon. 1955-56 was the worst of the three years, but this cannot be attributed to the partial failure of the north-east monsoon because the preceding year ducks were nearly as scarce although the rains were abnormally heavy. In reality, duck-shooting in Ceylon is a comparatively recent form of sport. It is well known, for instance, among those acquainted with the Yala Reserves over the past years that prior to 1938, when the

present Ruhuna Park was a Resident Sportsmen's Reserve and much shooting was done within and outside it, very few ducks were ever seen in the tanks and lagoons between Kirinda and Yala. Nobody went duck-shooting in those days in the Hambantota District, although in the last 10 years that has been the sole mission of several shooting parties. The incursion of migrant ducks in large numbers into the Hambantota District and the Yala Reserves began to be annual event, eagerly looked forward to by sportsmen, some time after 1938. Records of careful observations made are available from 1941-42 in which year the ducks were here in colossal numbers with a very high proportion of Pintails : they were so crowded in the Hambantota District that they spread out over the inland waters to beyond Tangalle as far as Mawella, at the 116th mile. In the Batticaloa, Jaffna and Mannar Districts they were equally abundant. Nothing on this scale has been experienced since but a migration reminiscent of it occurred again in 1948-49. The seasons 1944-45, 1946-47, 1950-51 and the last three years (including the present season) have been very bad ones. In the Jaffna and Mannar Districts too the abundance of the birds has become prominent after 1938. In Mannar District large numbers of duck rest by day in the shallow, calm sea between Mannar Island and the mainland as well as in Giant's Tank. There appears to be no strong evidence of any co-relation between good and bad seasons for duck and good and bad seasons for snipe.

Special Protection for the Elephant

With the very large number of firearms now in the possession of villagers, the gun and the torch are the chief means relied on for protection of crops and they are used not for driving animals away but for killing them. Stout fencing, perimeter fires, wakeful watching with occasional inspection of the field, noises at intervals and co-ordination with watchers in neighbouring fields are now seldom practised. The numerous statements which have been recorded of men who have shot elephants in their fields usually begin, " I was sleeping in my watch-hut when I was awakened by . . . Herd elephants, it is well known, are easily driven away without shooting at them. Lone elephants are more difficult to dislodge, especially if their entry has not been detected and they have been allowed to feed undisturbed for some time.

A limitation of the cultivator's right to shoot, as and when he likes and without prior resort to other protective measures at every trespassing elephant, are undoubtedly necessary if the survival of the Ceylon elephant is to be ensured. It is mathematically certain that if the casualty rate is allowed to exceed the birth rate, which is happening now and has been happening for the past 15 years, extinction must be the inevitable consequence.

An experimental change in the basis of payment of compensation with the object of preventing or mitigating the shooting of elephants in defence of crops was proposed by Mr. R. L. Arnolda, C.C.S., Government Agent, Hambantota. His proposal was that *provided the cultivation was properly fenced and watched, and elephants were not shot, compensation to the full extent of the damage should be paid in every case.* Mr. Arnolda emphasised that intensive *propaganda* through the Rural Development Societies, the Headmen and other sources against the shooting of crop-raiding elephants would also be an essential feature of the experiment and he further suggested that *rockets,* which cost little, could be supplied by Government to the Headmen to be sold at cost price to the cultivators. The Fauna and Flora Protection Advisory Committee gave unanimous support to this proposal and recommended that funds be provided for trying out the experiment in Hambantota District during 1956-57.

Fantastic stories have been current about a herd of 30 or more elephants being pocketed in an estate of 1,000 acres in the Kurunegala

District. A concentration of one elephant per square mile is as much as a forest could stand : 30 or more elephants confined within 1,000 acres would leave not a tree standing in a week. This Department has very fully investigated this particular case and is in possession of the full facts. It is correct that the *elephants are pocketed in an area along a 15-mile stretch of the Deduru Oya roughly between Bingiriya and Nikaweratiya :* but the number of elephants does not exceed 25 and the limits within which they are confined enclose about 45 square miles (28,800 acres). This area was always a habitat of elephants because the jungle contains a plentiful supply of the kind of food they like and there is perennial water in the river : and in spite of the gradual closing of the escape routes to northward by the extension of cultivation and the progressive confining of their movements, the elephants made no attempt to leave the area. The completion of the Nikaweratiya colonisation scheme during the war and one or two smaller schemes soon afterwards finally closed the net around them. The villagers in the area have suffered no depredations from the elephants and have made no complaint : all agree that the herd is easily driven away when it approaches their fields. But within the pocket more and more land is being opened up every year both by capitalists and by peasants, and a stage will come in the near future, unless something is done now, when the dwindling area of jungle will be unable to support the elephants and they will be forced to raid crops in increasing degree for their sustenance : their extermination by shooting will then follow. To avoid their destruction in this way, it has been decided that, in step with the progress of developments of new lands from year to year, a certain but *variable number of elephants should be captured annually from this pocket.* In pursuance of this policy the Zoo has already received six elephants during 1954 and 1955.

Offences under the Act

The commonest offence but the one least often detected is *shooting by night with the aid of artificial light.* Officers of this Department out at night meet, frequently enough, men in the jungle carrying guns and torches, and motor vehicles on the jungle roads with guns protruding : but the act penalised is the actual shooting and to establish the commission of an offence this act must be witnessed. There are several loopholes in the law, as well as concessions and exceptions which are no longer justifiable and omissions in respect of the powers of search and arrest : all these matters were gone into at a conference presided over by the Hon. the Minister of Justice and an amending Bill is under preparation.

Public co-operation in the detection and prevention of offences is generally lacking. Information is always welcome and will always be treated confidentially, but vague statements and generalisations are of little aid.

The identity of poachers in the different areas is known to the officers of this Department, but to keep track of their day to day activities is no easy task without the assistance of local informants. Meat must be disposed of within 12 to 18 hours of killing, while it is still fresh, and poachers have no lack of customers, so that the time handicap is against the detective officer who has to receive information and get to the scene before the meat is sold out. *Localities in which professional poaching and trading in meat are prevalent* are :— Madhu Road, Mankulam and Tunukkai (Jaffna District) ; Wanni Helembewa, Habarana and Kebittigollewa (Anuradhapura District) ; Manampitiya and Wilikanda (Polonnaruwa District) ; Kantalai (Trincomalee District) ; Kathiraveli, Valaichenai and Padiyatalawa (Batticaloa District) ; Eluvankulam and Anamaduwa (Puttalam District) ; Maho and Galgamuwa (Kurunegala District), Embilipitiya (Ratnapura District) ; Tanamalwila and Buttala (Badulla District) ; and Hambantota, Ambalantota and Tissamaharama (Hambantota District).

The Total Eclipse of the Sun

There was a total eclipse of the sun in Ceylon on June 20. The eclipse began at

7.07 a.m. and ended at 9.29 a.m., with totality for 4 minutes from 8.11 a.m. to 8.15 a.m. The Wilpattu National Park was in the path of totality but the Ruhuna Park was just outside it. The entire staff of this Department was employed in observing the behaviour and reactions of animals, birds and insects before, during and after totality, and detailed instructions were issued for the guidance of the officers. The Wild Life Protection Society was invited to send some of its experienced members to join and assist the staff of the National Parks in the work of observation and there was a ready response : the President, the Hon. E. B. Wikremanayake, and Mr. Aloy H. Perera went to Wilpattu, and Messrs. W. W. A. Phillips and Gorton Coombe to the Ruhuna Park. The results did not come up to expectations. For one thing it was a dull and drizzly morning. In the Ruhuna Park, although the sun was almost totally obscured leaving only a very thin, hairline, half-crescent visible during totality, the darkness was no greater than that of early dusk and it was possible, in the open, to read a newspaper throughout the four minutes of totality. Mr. Phillips reported, " As far as the Wild Life was concerned, the eclipse appeared to have passed unnoticed," and this was confirmed by all the Departmental observers in Ruhuna. In the Wilpattu Park, which was in the path of totality, the darkness was more intense though not complete, and observers in the Villu area found the further shores of the smaller lakes, 200 yards away, invisible during totality. Some more positive observations were made here. Bird calls were generally stilled in the darkest period : jungle fowl out in the open took to wing and flew into the forest. But no birds of the night, such as owls, nightjars and night herons, or bats, were seen or heard. Deer moved about and continued feeding in the open during the period of totality : herds under observation were noticed to have shifted their position and to have been joined by fresh members who were previously in cover. Pigs and wild buffaloes showed no reaction : the buffaloes did not, as is their practice at nightfall, leave the water for the jungle. Monkeys made no noise and remained where they were. Silence was the predominant feature during totality, although normally, at 8.15 a.m. in the morning, cries and calls of animals and birds, especially birds, had not yet abated. More pronounced and tangible than the darkness was the fall in temperature.

Tragedy at Konwelena

On November 10 at Konwelena, a hamlet near Magama, about four miles south of Tissamaharama, an adult male leopard attacked and killed a woman and injured five men. About seven in the morning W. K. Baba Singho was watering his plot of chillies when he heard a noise and saw a leopard about 15 feet away, on the other side of the barbed-wire fence snarling at him. The animal growled again and then came forward, growling continuously. Baba Singho hurled his bucket at the leopard and struck it on the head. The animal leapt to a side and went into scrub jungle across the road. Baba Singho called out to his neighbours and two of them came out of their huts and stood at their gates, trying to locate the animal. The leopard suddenly re-appeared, leapt on the two men and wounded them, and went back into cover. At this stage an old woman, Denipitiye Lamaya, came along the path in search of her son, and the leopard sprang out on her, seized her by the throat and killed her almost instantly : it again took refuge in the jungle. An armed hunt was now organised by three or four men with guns, assisted by others, and about an hour later the leopard was discovered crouching inside one of the allotments. It was fired at and wounded, and it thereupon attacked the party and mauled three men, one rather seriously. Five more shots were fired at the wounded animal before it was killed. The carcase bore no old wounds or injuries and the animal, which is said to have measured 7 feet 1 inch, was apparently

in good health. There was no "kill" in the vicinity and all the evidence is that the leopard acted without provocation. During the week following this tragedy, two more leopards were seen in the vicinity of the village and one of them attacked a dog.

Recapitulation

In 1955 the Department of Wild Life completed the first five years of its existence. During this period its energies were directed mainly towards the improvement of the National Parks. The first and foremost requirement was the augmentation of the water-supplies so that the animals would have a sufficiency of water during the drought. This has been nearly achieved. The amenities for visitors have also received considerable attention. Motorable roads now run for several miles in both Parks, the accommodation for visitors has been increased and the bungalows fully furnished and equipped. The security of the Parks against poachers and intruders has been greatly strengthened by the opening of many miles of new Jeep roads so that patrolling and supervision can be carried out quickly and efficiently. All these works of improvement have resulted in the Parks being visited by an annually increasing number of people drawn from all walks of life :15,474 visitors entered the Parks in 1955 as against 3,335 in 1950.

The Cries and Calls of Night-Birds in the Ceylon Jungles

By W. W. A. PHILLIPS

" *Ere Mor the Peacock flutters, ere the Monkey People cry*
Ere Chil the Kite swoops down a furlong sheer,
Through the jungle very softly flits a shadow and a sigh—
He is Fear, O Little Hunter, he is Fear !
Very softly down the glade runs a waiting, watching shade
And the whisper spreads and widens far and near
And the sweat is on thy brow for he passes even now—
He is Fear, O Little Hunter, he is Fear ! "

(KIPLING'S "SONG OF THE LITTLE HUNTER.")

THERE is always something distinctly intriguing and mysterious about Birds-of-the-night. A fleeting glimpse in the dusk, a sudden, often rather embarrassing, disclosure in the glare of the head-lights on a jungle-road, is all the acquaintance that many people have of them—and how is one to identify a nocturnal bird from a fleeting glimpse in the half-dark or the spot-light ?

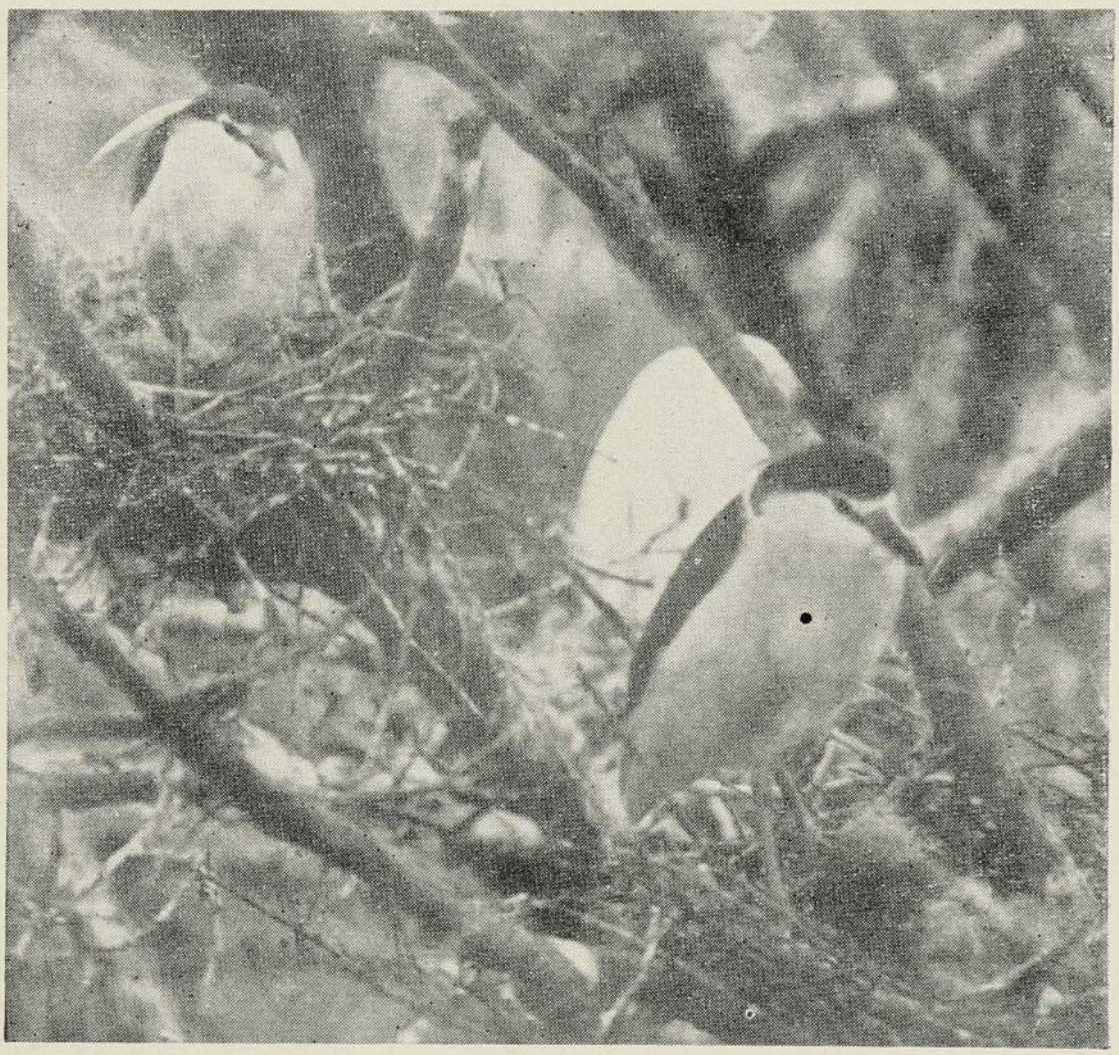
So, to most people, our night-birds remain more a strange assemblage of tales and pictures in books, than living realities of the jungles. And yet, did one but know their cries and calls, we would learn that, during the hours of half-light and actual darkness, they are all around us in the country areas, living out their appointed lives in their jungle-homes, heedless of our presence and caring nought for our ignorance.

Here then, is an attempt to describe some of the commoner cries and calls of our nocturnal friends, in order that, when we hear them in the stillness of the night-watches, we may know what night-birds are active around us and to what authors should be attributed the cries that we hear.

But first we must decide what birds we shall consider ; we must define our "Birds-of-the-night" or "Night-birds." Do we include all

birds that wake up and call or cry while the hours of darkness are upon us? Definitely not! We must restrict ourselves to certain families or species that, from choice or habit, are generally active during the night and usually sleepy during the day, resting and preening.

When the moon is full and bright, many birds are on the move or restless, crying out from love, joy or fright. The Red-wattled Lapwings often cry "Did-he-do-it," "pity-to-do-it," while they fly overhead to other feeding grounds; many herons, ducks, plovers, waders and waterbirds, from snipe to pelicans, delight to feed during the cool, subdued moon-lit hours when conditions are congenial, man is asleep and all small-life is active in the swamps. But these, though they may call and cry, are not true night-birds, for on dark nights, when the moon is in eclipse, they can see but little better than you or I and so they feed quite normally by day and sleep by night. But the real night-birds, although they may find life easier when the moon is shining, are always active in the dim half-light and hours of darkness and sleep and rest throughout the day. Which, then, are the true night-birds of Ceylon?



Night-Herons at their nests
"'Quark, quark', the squat Night-Heron croaks"

For purposes of this paper, we may define them as the night-heron, the owls, the night-jars and the frogmouth and perhaps we might

also include, as an act of grace but by no means as a right, some of the cuckoos—restless, immoral birds that so often compete with the true night-birds for a hearing during the hours of darkness or moonlight when they should by rights be sleeping soundly ; but perhaps uneasy consciences make them wakeful !

Not all our night-bird calls have been recorded—some calls have still to be linked with their authors and of some of our owls their cries are still unknown ; but we will now try to describe, to the best of our knowledge and with the help of others, the calls and cries that are known.

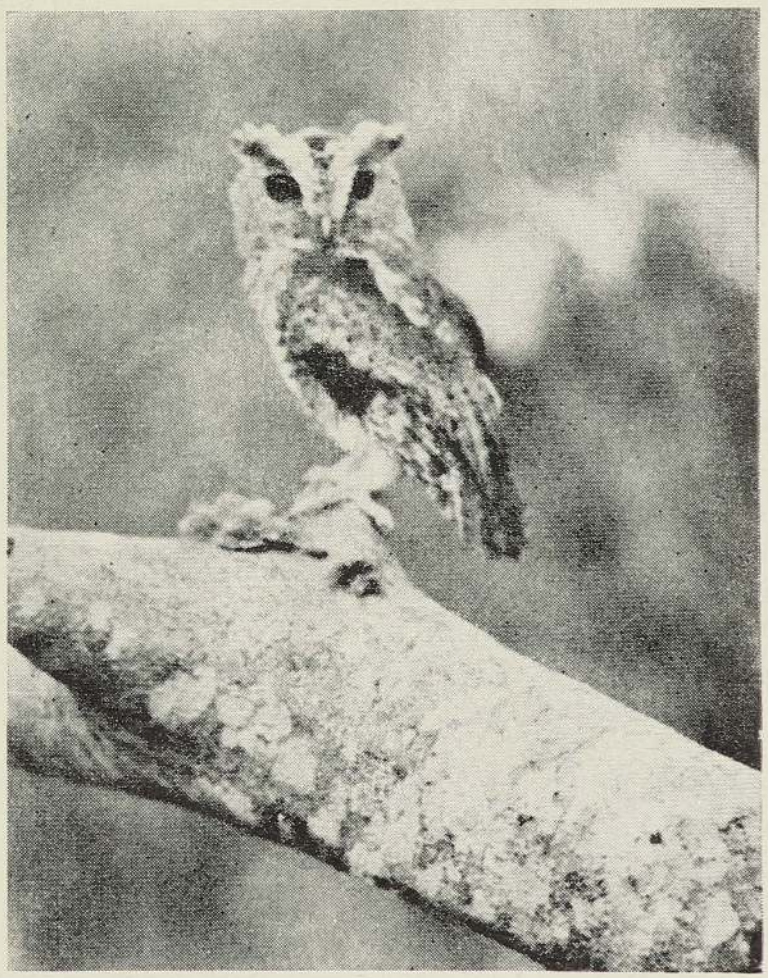
The Night Heron (*Nycticorax nycticorax nycticorax*).—A nocturnal heron, abundant around many of our tanks and lagoons, especially in the Dry Zone. The cry of this bird, uttered frequently as it flies overhead in the dusk on its way to its feeding grounds, is a rather low-pitched, hoarse croak—*Quark* or *Kwak*. At its breeding colonies, in the branches of trees standing in or overhanging water, the cries have been described as " an assortment of raucous noises " *Kaahk, Kaahk,*" " *Kwak*" " *Kwuk-uk,*" " *Koouk,*" etc.

The Eastern Barn Owl (*Tyto alba stertens*).—A scarce resident, this owl is confined to the Jaffna-Mannar seaboard, where it favours old buildings, forts and the like. I have no personal knowledge of its cries in Ceylon. Henry (p. 192), however, writes, " The breeding season is in February and March and, as it approaches, the Barn-owl becomes noisy ; it utters a harsh, high-pitched scream '*eeee*' or '*wheech*' which has a hoarse quality as if the bird were straining its throat. A more wheezy version of the same sound is the hunger-cry of the young " and Legge (p. 166), states " The note of the Screech-owl, as its name implies, is a loud cry or scream, which it sometimes utters on the wing," and Salim Ali (p. 275) describes it as " a harsh screech, uttered from time to time during its silent, ghost-like flight. It also produces a variety of discordant screams and weird snores and hissing."

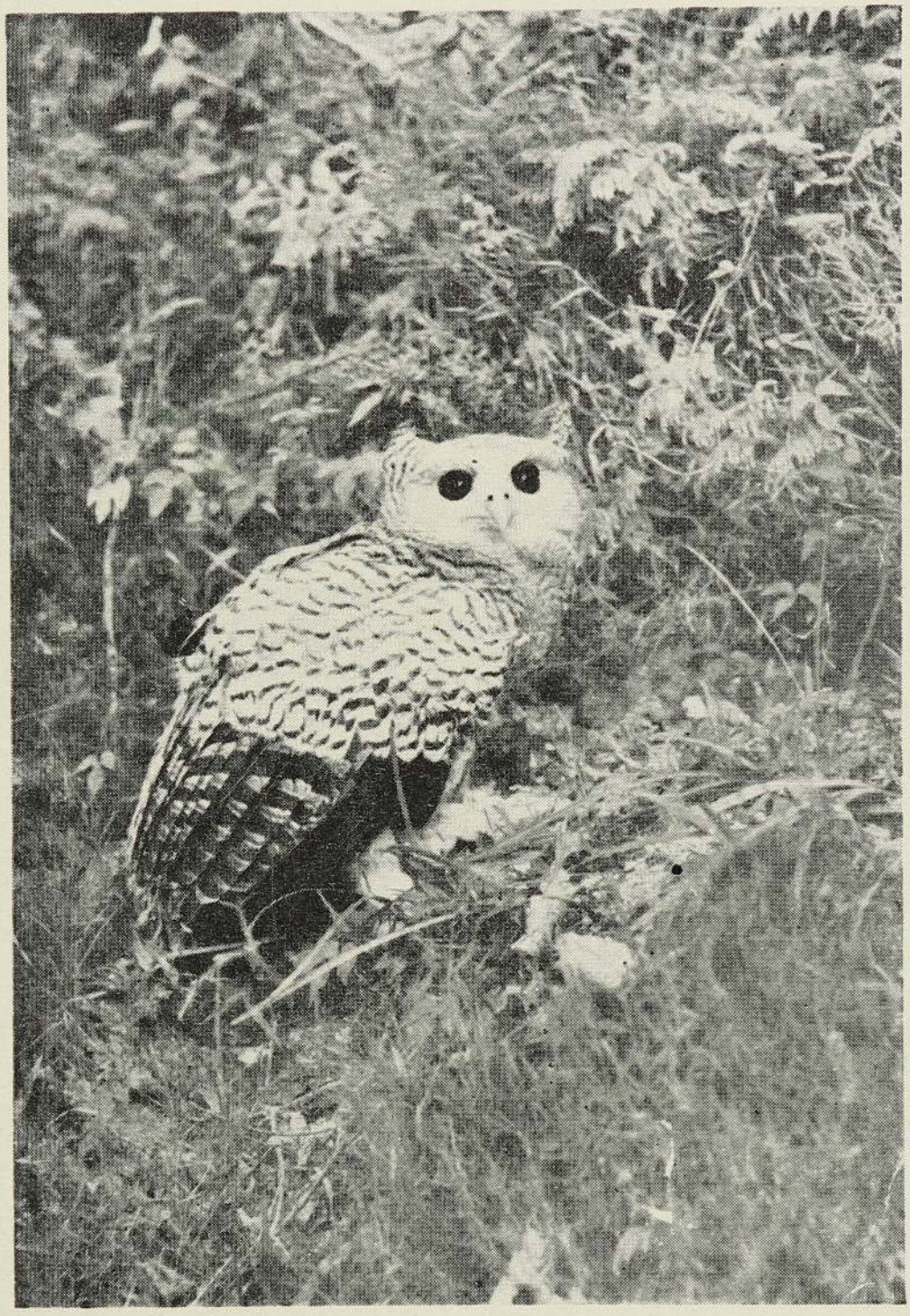
The Ceylon Bay-Owl (*Phodilus badius assimilis*).—A very rare, resident owl, occasionally met with in the forests of the Wet and Hill Zones to 4,000 ft. This rare owl has been accused of being the " Devil Bird "—but with little foundation, it would seem. No one, in fact, appears to have recognised or recorded its cries. Writing of the northern race, however, Stuart Baker (p. 381) states : " They have a single soft hoot but during the breeding season excel all other owls in the appalling nature of their cries. One bird . . . made nights hideous with cries like those of half-a-dozen cats fighting."

It is likely that the Ceylon Bay-owl makes cries somewhat similar to the northern bird.

The Collared Scops-Owl (*Otus bakkamoena bakkamoena*).—An attractive little " eared "



The Collared Scops-Owl
" 'Whok, whok,' the Collared Scops doth mock "



Ceylon Forest Eagle-Owl (in juvenile plumage)
" Screams, gurgles, groans and hell galore "

owl ; locally distributed but often plentiful in well-wooded areas in both the low-lands and the lower hills to about 4,000 feet.

Many of these charming little owls live in Colombo, in the Cinnamon Gardens ; sometimes they may be seen under the eaves of tall houses but, more often, in the large trees lining the avenues. After dusk, their calls are very frequently heard—a rather monotonous " *Whok* "—repeated, off and on, at intervals of 2 to 3 seconds, sometimes for quite long sessions ; it also has a more rarely heard

cry which has been described as " a bubbling, chattering call of a single note in ascending scale, occasionally interposed between normal calls " (Salim Ali, p. 283) : To Henry's ear, however, the usual call sounds like " a quaint, monosyllabic note resembling the word ' *what* ' with the *t* omitted ; " this," he states, " is repeated at intervals of two to three seconds for several minutes and is answered by its mate in similar tones. On their meeting, the call gives place to a loud ' *wa wa wa wa wa*,' descending in scale and often followed by a shrill, chittering squeal. A pair will call to each other several times during the night, especially during the courting season."

The Ceylon Little Scops-Owl (*Otus scops leggei*).—The smallest and most attractive of all our owls. Widely scattered, in small numbers, throughout the larger forest tracts both in the low-lands and in the hills to over 6,000 ft.

The cry of this delightful pigmy " eared " owl can very frequently be heard in the jungles

Ceylon Brown Fish-Owl (flash-light at nest)
" 'Oomp-ooo-oo', calls the big Brown Fish "

adjoining the Horawapotana, Tanamalwila, Maha Oya and other "jungle" resthouses. Sometimes it continues intermittently almost throughout the night and, as one lies awake listening to it, one wonders that the owl never seems to tire of its continued calling. In a paper published in 1933, in *Spolia Zeylanica* (Vol. XVII, pt. 3, p. 99). I described the call as a "steady, incessant and most monotonous cry, with an unvarying cadence and beat of just three seconds between calls, "*Wook, took—toorroo, Wook, took-toorroo, Wook, took-toorroo.*"

To G. M. Henry's ear, however, it sounded more like "*tuk, tok-torok . . . tuk, tok-torok.*" The first syllable being much fainter than the other two and not audible at any distance. By Legge, it has been rendered as, "*Whok-chok-korok.*" It is a very distinctive cry which, once heard, cannot be mistaken for the cry of any other Night-bird.

The Ceylon Forest Eagle-Owl (*Bubo nepalensis blighi*).—Widely scattered, in very small numbers, throughout the larger forest tracts, both in the lowlands and in the hills to over 6,000 ft. Many people believe that this giant owl is the true "Devil-bird"; others, however, declare that it is but one of several that have earned that title. Certainly, it has a very strong claim to be honoured with the designation "Devil-bird" for occasionally, but by no means very often, it undoubtedly makes a most disturbing, repulsive and frightening cacophony which is sometimes the direct cause of its own sudden death—for any one hearing it immediately leaps for his gun to liquidate the author of such terrible and ill-omened cries. Most probably, the gurgling shrieks, screams and blood-curdling, guttural chortles which have been likened by various observers to "a woman being tortured," "the neighing of a horse" and the "screaming cry of a woman—*mihay-wara-o-oh*" or "*uh-uh, uh-no-o-ho-o-oi*" are nothing more than the mating calls of this owl.

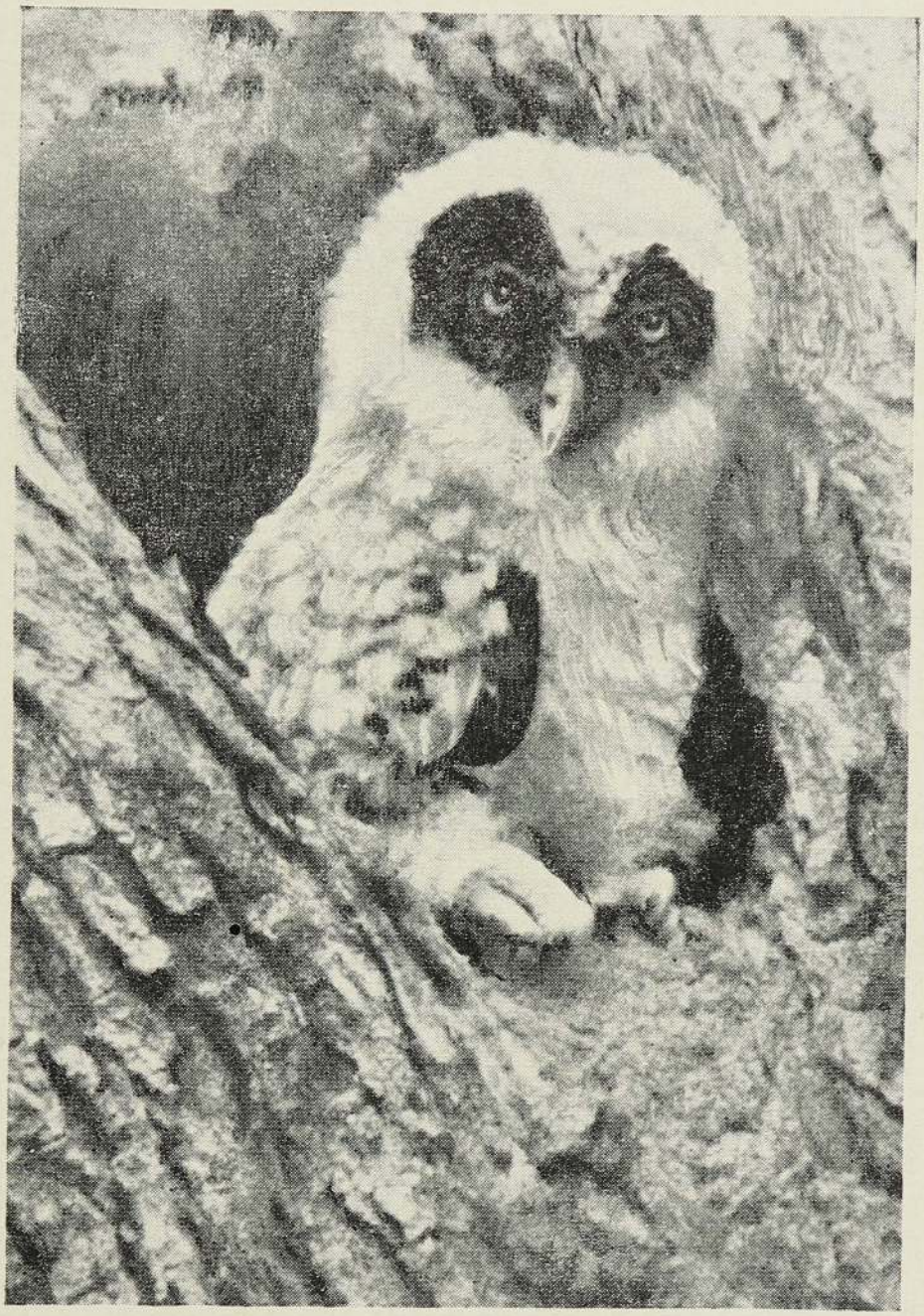
Fortunately they are uttered very infrequently, even in forests where the Eagle-Owls are resident, so they are rarely heard.

Normally, the call of this owl is a deep, deep mumble or human-sounding snore while the young have a weak, chittering cry which they utter in protest when they are disturbed.

The Ceylon Brown Fish-Owl (*Ketupa zeylonensis zeylonensis*).—Plentiful throughout the lowlands and occurs, occasionally, in the hills to over 6,000 ft.; one of the commonest owls in Ceylon. The call of this large "eared" owl is commonly heard, at or soon after dusk, especially in the vicinity of water. It is a deep, hollow-sounding, triple note "*Hoo-whoo-hoo,*" the second syllable lower than the first and third. By some, it has been likened to the words "*Gloom-oh-gloom*" or "*boom-o-boom*" or "*tu-whoo-hu.*" It is certainly an eerie, rather sepulchral cry which, on first acquaintance, seems as though two owls were carrying on a duet, the second answering immediately the first has called. Actually, however, the call is made by one bird although it frequently happens that a pair may call to one another in what Henry aptly describes as "doleful and utmost human-sounding moans; "*oomp-ooo-oo*" says one, to be answered by its mate with an assenting "*oo.*" This dismal concert goes on," he writes, "for some time before the birds decide that hunger, as well as music, has claims."

In addition, they are said to give vent to groans of displeasure and low chucklings when feeding their young.

The Jungle Owlet (*Glaucidium radiatum radiatum*).—Fairly plentiful in the forests of the Dry Zone, in the Eastern, Uva and Southern Provinces and occasionally visits the dry Uva Hills to 3,500 ft. In the jungles around Nilgala, Maha Oya, Tanamalwilla and other favoured areas, this small "earless" owl is fairly plentiful. During the night and often in the day-light hours, too, in dull weather, it may be heard calling loudly and frequently. Legge's description of the call is excellent: "The note commences with the syllable *Kaow*,



Ceylon Brown Wood-Owl (juvenile, at entrance to nest-hole)
"'Huhu-koo', the Brown Wood-Owl shouts."

slowly repeated and gradually accelerated until changed to '*Kaow-whap, Kaow, whap*' which increases in loudness until it is suddenly stopped." Towards the final note, the call becomes louder and more rapid, so that the sudden stop is quite unexpected.

Many a time, I have lain in bed in the Maha Oya or Tanamalwilla Resthouse, listening to this wild and peculiar cry. In the early part of the year, about March and April, this owl is particularly noisy and calls very frequently from near or far.

The Chestnut-backed Owlet (*Glaucidium cuculoides castanonotum*).—Widely distributed, in small numbers, throughout the dense forests of the Wet Zone and western aspects of the hills to 6,300 ft. This little owlet is even more diurnal, in its habits, than the

jungle owlet. On misty and overcast days, it is often active in the forests until late in the morning and it appears again early in the afternoon, under like conditions. A simple but curious, far-carrying note, is the call of this owlet, sounding like "*Kraw, Kraw, Kraw, Kraw, Kraw,*" but during the breeding season, a louder and more complicated version of the "*Kraw*" call is sometimes heard in the dusk. One evening, in the forests near Kitulgala, I was astounded at the volume of sound issuing from several of these little owlets.

The Brown Hawk-Owl (*Ninox scutulata hirsuta*).—Widely but locally distributed, in small numbers, throughout the lowlands and lower hills to about 4,000 feet. Like the Collard Scops-Owl, this owl is resident in the Cinnamon Gardens area of Colombo and its call may often be heard, during the more silent hours when the noise of the traffic has died away. Wait, quite rightly, describes the cry as much more musical than those of other owls—a clear, low "*Coo-ook,*" frequently repeated. Soon after sunset and again towards midnight, especially on moon-light nights, and often in the mornings until sometime after sunrise, the call may be heard. Legge writes, "It hoots in the evening just after sundown and is much more loquacious on moonlight nights than when it is dark. About 10 o'clock, after feeding, it recommences its not unmelodious hoot, resembling '*Whoo-wak, Whoo-wak,*' Henry gives his version as "a mellow '*Koo-ook,*' '*Koo-ook,*' the '*ook*' being lower in the scale than the first syllable." On still nights the call is repeated time and again and carries a considerable distance.

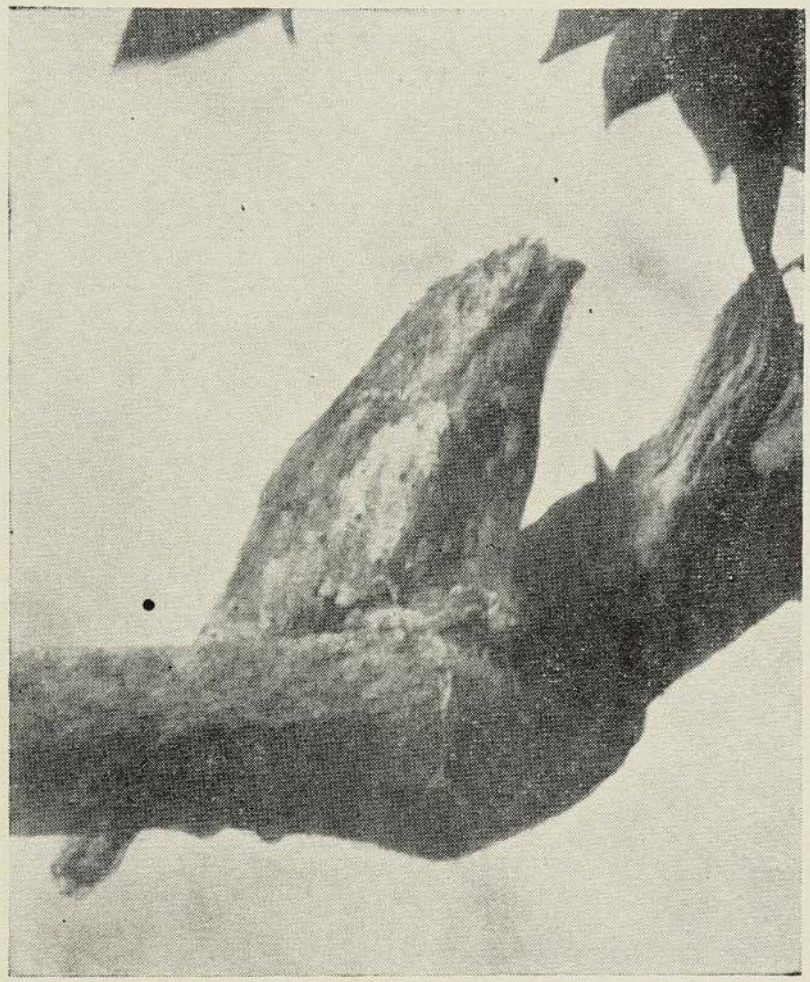
The Ceylon Brown Wood-Owl (*Strix leptogrammica ochrogenys*).—Well distributed and moderately plentiful throughout the forest tracts of the lowlands and hills to over 6,000 ft. The normal call of this wood-owl, which is so often heard in the highland jungles, is a frequently repeated hoot "*to-whooo*" or, as Henry puts it, a sonorous "*hubu-hooo.*" Wait, however, thinks that the hoot has four syllables "*oot-oot-tu-whoo,*" the first two syllables being heard only when close at hand. To my unmusical ear, the call sounds more like Henry's rendering "*hubu-hooo.*" Often a pair will call to one another, in the dusk, before starting hunting.

During the breeding season, these owls use also a long sibilant hoot which sounds rather fearsome, in the silence of the night; so much so, that I have known Tamil labourers refuse to do night-work in a tea-factory through fear of this "Devil-bird." Also, Henry mentions one that drove away a troop of macaque monkeys from its nestling, by flapping its wings violently against the foliage and giving vent, at the same time, to a curious whistle or scream. Later, the same bird, when approached, menaced him with beak-snapping (a common habit amongst owls), growls, hoarse hoots of "*huh, huh, huh*" and a short bark "*wow, wow, wow.*"

The Short-eared Owl (*Asio flammeus flammeus*).—An occasional winter visitor; a migrant from the north chiefly to the western shores of Ceylon, but has also been recorded from the Horton Plains (7,000 ft.) in the hills of the Central Province. This large owl is a bird of the open, of the marshes, patanas and swamps; it often hunts by day, usually perches on the ground and behaves more like a Harrier than a normal owl. Although it makes use of several different calls when on its northern breeding-grounds, while it is in Ceylon it appears to be quite silent; I have never heard one utter a sound.

The Ceylon Frogmouth (*Batrachostomus moniliger.*)—Widely distributed, in very small numbers, throughout the forest tracts to 6,000 ft. in the hills, but is so secretive and nocturnal in its habits that it is seldom seen. The cry of this curious and elusive night-bird still remains somewhat uncertain. Wait writes that A. L. Butler, who found the frogmouth fairly plentiful around Medagama in Uva, describes the cry as a rapid "*coorroo, coorroo, coorroo.*" I think that this is most probably correct but,

to me, the call sounds more like a series of 10 to 15 low, but rather rapid, "*Whoo, Whoo, Whoo, Whoo*" notes. Recently, I have heard this cry frequently at night—sometimes in the dusk, often in the still midnight hours and occasionally as dawn has begun to creep up the sky—near Tonacombe Bungalow (4,000 ft.) in the Uva hills, but unfortunately, I have never been able to locate the author. However, I am convinced that I am right in attributing the cries to the frogmouth as, by a process of elimination, that seems to be the only bird whose cries it could be!



Ceylon Frogmouth (male incubating on nest)
"'Who, who, who, who, who,' are we"?

The Southern Common Indian Nightjar (*Caprimulgus asiaticus eidos*).—Common and widely distributed, in suitable scrub-country, throughout the Dry Zone but not so plentiful in the Wet Zone; in the hills, it ascends to approximately 3,000 ft. The call of this nightjar, like the calls of other nightjars, is well known and can commonly be heard, in the dusk, in any suitable open country. Henry describes it admirably—he writes: "about dusk, it flies to some bare patch of ground, such as the middle of a road, or a bare branch, and commences to utter its extraordinary song '*tuk, tuk, tuk, tuk, tuk, tukrrk,*' which sounds like the scudding of a stone flung along the ice of a frozen pond, or like the tapping of a glass marble dropped from a height of a yard or so onto a cement

Southern Common Indian Nightjar (incubating eggs)
" Tuk-tuk-tuk--rrrk, that's the 'Ice-bird'."

floor ; hence its popular names of ' Ice Bird ' and ' Marble-dropper.' In the breeding season it will keep up this song, monotonously repeated, for long periods, especially at dusk and again before dawn. It has also another note ' *bub-bub-bub-bubbubbub,*' etc., suggestive of the sounds produced by blowing bubbles through a tube into water." A very excellent description of the calls made by this nightjar.

The Ceylon Jungle or Long-tailed Nightjar (*Caprimulgus macrourus aequabilis*).—Moderately plentiful throughout the well-wooded areas of the Dry and Wet Zones and ascends the hills, in small numbers, to nearly 3,600 ft. Here again the cry of this jungle-nightjar is well known in the forest areas and I will again quote Henry's description of it."

" It generally sits on a low stump or bare bough while uttering its curious call ' *grog, groggrog* ' which sounds as if the bird emitted it with an effort. The ' song ' consists of a loud, coughing bark *quoffrr . . . . quoffrr* which it will repeat at intervals throughout the night, especially in moonlight." Around the Maha-oya and Tanamalwilla resthouses, these calls and those of the common Indian nightjar can be heard repeatedly as one sits on the verandah in the evening.

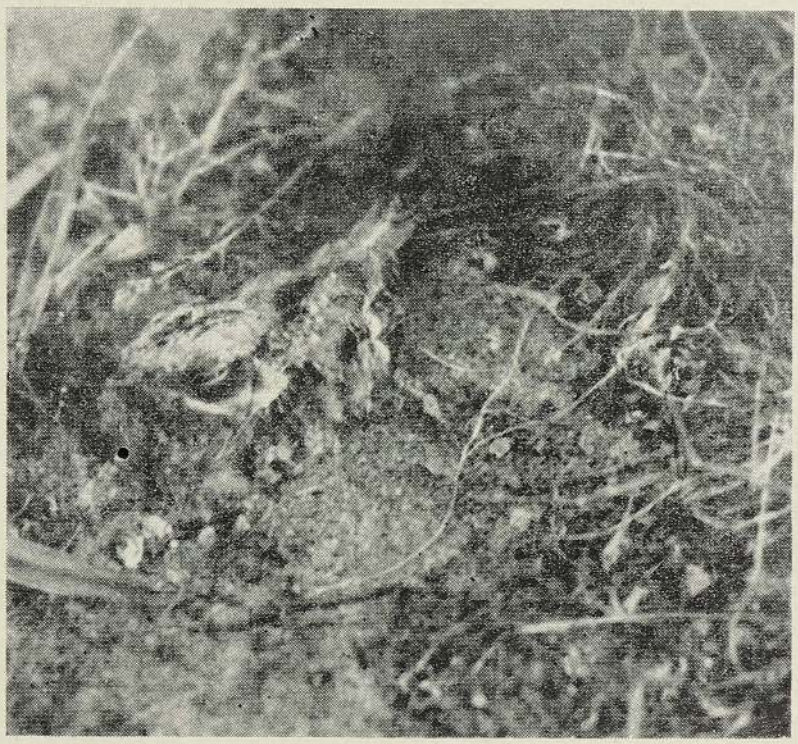
The Ceylon Highland Nightjar (*Caprimulgus indicus kelaarti*).—Locally distributed throughout the hills to over 6,000 feet but more common in the eastern or Uva aspects where the drier climate and open patanas appear to be more to its liking. Though not so well known as the cries of the other two species of nightjar, the call of the highland nightjar is often a feature of quiet evenings in the Uva hills. To quote Henry again " about dusk, it flies up to a branch, commanding boulder or stump and commences its weird song, which reminds one of the exhaust note of a small gas-engine ' *chuk'm, chuk'm, chuk'm, chuk'm* ' repeated for many minutes at a time during the courting season. At close quarters, this song has a curious resonant quality, the *chuk* being superimposed, as it were, upon a throbbing drone represented by the *M* ; it carries for a great distance. The courting male has also another note which sounds like ' *hoo hoo hoo hooter hooter.*' This is uttered in flight with the wings held high and steady and the tail widely expanded and centred to one side or the other, exposing the white tips of the four outer feathers."

This concludes the cries of the true " Night-birds," but, as some of the cuckoos call so

persistently during the night, especially when the moon is bright, it will not be out of place to record the more commonly heard calls.

The Indian Cuckoo (*Cuculus micropterus micropterus*).—Resident, in moderate numbers, in the well forested areas of the Dry Zone, to the north-east, east and south of the central hill cluster. Fairly plentiful in the Maha Oya and other districts of the Eastern Province. This is the famous "Captain Philpots" bird but to Henry the cry sounds more like "*Whee-whee-h 'yar-ho*" while I would interpret it, on some occasions, as "*Doctor Chissell,*" "*Doctor Chissell.*" Especially during March and April, the cry is so loud and persistent as often to become annoying. At Padaweya tank, to the north of Trincomalee, one haunted our camp during the last week in March, calling loudly and most persistently, not only for hours every morning and evening but intermittently throughout the whole of the moonlight nights. At Maha Oya, also, I have been kept awake by this elusive cuckoo calling from the top of a tall tree by the resthouse, throughout much of the night.

The Ceylon Hawk Cuckoo (*Cuculus varius ciceliae*).—Moderately plentiful, locally, in the hills above 2,000 ft., especially in the well-wooded areas of Dimbula, Dickoya, Dolosbage, Hewaheta and parts of Uva. This cuckoo's irritating and persistent calls have earned for him the popular name of "Brain-fever bird." To many people they cause great annoyance, so the bird is shot whenever opportunity occurs. The offending cry is an oft repeated "*too-trroo-yer,*" having a distinct roll in the second syllable and a rising inflection as each cry is repeated, until one feels that the cuckoo must surely burst itself; it also has a longer call, consisting of single notes mounting leisurely up the scale, sometimes coming down it again for a short way and terminating with several repetitions of the "*too-trroo-yer*" note. Sometimes the female answers with a strident, trilling



Ceylon Long-tailed Nightjar (resting on ground)
"Grog-grog-groggrog, quaffr, quaffr."

scream "*trrrrr-trrrrr-trrrrr.*" Although these calls are much more frequently heard in the late evening and early morning, they may be repeated at any odd hour throughout the night, especially by moonlight, and as they are very loud and penetrating, in the stillness of the night watches, the sleeper wakes and heaps imprecations on the cuckoos.

The Koel (*Eudynamis scolopacea scolopacea*).—Abundant in and around Colombo and in many areas of the lowlands ; it is increasing its range into the lower hills, following the black crow, in whose nests it delights to lay its eggs. This unpleasant bird, as so many Colombo residents know only too well, has a loud, high-pitched, aggravating cry "*Ku-il, Ku-il*" which to many a sick or ailing person sounds like "You're ill, You're ill," increasing in tempo and noise, as it is delivered. During the hot weather, the mating season for the koels, the cry is particularly irritating especially when, owing to the heat, sleep is light and fleeting.

Some of the other cuckoos may also call, occasionally, during the hours of darkness, but the Indian cuckoo, Ceylon hawk cuckoo and the koel are the worst and most frequent offenders.

These then are the night-birds of Ceylon ; I have endeavoured to describe their calls and cries, in the hope that their presence may be recognised in the areas where they exist—but there are many other cries that disturb or thrill the wakeful camper in the wilder places of the Island ; these vary from the strident stridulation of the crickets and the croaking of the frogs to the "sawing" of the leopard, the belling of the sambhur and the trumpeting of the elephant. Only experience will permit one to classify and determine these sounds. Go to the jungle and learn—there is no more rewarding holiday to be had.

Acknowledgments

While writing this article, I have made frequent reference to the following books on Ceylon and Indian birds ; Legge's "Birds of Ceylon," Wait's "Birds of Ceylon" ; Stuart-Baker's "Fauna of British Indian—Birds" ; Salim Ali's "Birds of Travancore and Cochin" and Henry's "Birds of Ceylon." The last, written by an author who has an excellent ear for bird calls and songs, has proved a particularly valuable source of confirmation of my own observations.

Ribbled Rhymes of the Rollicking Ruk*

Noisome Noises of the Naughty Night-birds

THE shades of night were falling fast
As through a jungle village passed
A man—a youth who noted all
The hoots and toots that birds do call.
Quark, quark, *the squat Night-Heron croaks*
I've got my eye on you two blokes.
Wheech, wheech, *screeched the White Barn-owl*
As falling dusk drew down its cowl.
Huhu Koo, *the Brown Wood-owl shouts*
And hoots again, to quell our doubts.
Oomp-ooo-oo, *calls the big Brown Fish*
And leaves, ghostly, without a swish.
Tuk-tok-toorroo, tuk-tuk-toorroo.
The lonely Little Scops doth croo !
Whok, whok, *the Collared Scops doth mock*
Just when you've torn your dinner frock.
Koaw Koaw Koaw Koaw Kw-whap Kw-whap
Wakes the Jungle Owlet from her nap.
Kraw, Kraw, *cries the Chestnut-backed*
Hooting softly, with so much tact.
And faintly, a deep Koo-ook, Koo-ook
Buts the Brown Hawk-owl in the book.
Who, who, who, who, who, who, *are we ?*
We are the Frogmouths, can't you see ?
Tuk-tuk-tuk-rrk, *that's the "Ice bird"*
Or "Marble-dropper," a nice-bird.
Grog-grog-groggrog—Quaffr-quaffr
Says the good old Jungle Gaffer.
Oh, chuk-m-chuk'm-chuk'm, *do*

* '*Ruk*' Hindustani—Jungle.

The Highland Nightjar calls to you.
Screams, gurgles, groans and hell galore
Devil Birds curdled my blue gore!
" You're ill," " you're ill," *the Koel blares*
" *I know I'm ill,*" *the young man swears.*
Doctor Chissell, Doctor Chissell
The Indian Cuckoo starts to whistle
" *Brain-fever,*" *without a doubt*
The Hawk Cuckoo's got another bout.
And so, with that one final clout
We say " *good bye*"—*we're played right out!*

The Snipe's Love Flight

Now, flying over fells in evening light,
The curlew's pipe
Sounds thrilling, call on call : also, the snipe
Above his nested mate, exultantly,
Wheels in love's sunset-flight—
Wheels in wide looping circles through the blue
Clear sky a-wing,
Soaring and dipping and recovering,
With tail-plumes drumming, as he earthward dives,
Only to soar anew,

As if the rapture of his heart, unspent,
Fired him to fare
Circling for ever through the glittering air
For her delight, who watches from the nest
Safe-hidden in deep bent :

And, only when the last reluctant light
Fades from the sky,
Does he close his swift wings, and, silently,
Run through the grass to where his eager mate
Awaits him in the night.

WILFRID GIBSON

Bird Tallies—A Big Day

By Lieut.-Colonel D. B. C. ROBERTSON

SOMETIME ago I read an article by an eminent British ornithologist, Mr. James Fisher, on the subject of bird tallies—the habit many bird-watchers have of keeping records of the different species they see, for example, during a walk or drive, or in a day or month or year. He said that some high-brows are rather contemptuous of the practice and querulously ask " What *good* does it do? " but that nevertheless he himself enjoyed keeping such lists and that in America, where they are less inhibited, the practice was becoming increasingly popular.

Well, I do it myself. Whenever my wife and I are driving anywhere we take a notebook and jot down all the different species we see on the road. I also keep daily and monthly lists of all the species I see, lists for each place I go to and for each country, and now I am starting a world list. I like to know how many different species of birds I have seen in their natural state. I think Mr. James Fisher said in his article that he had seen more than 800 of the 8,000 odd species known in the world. I can't aspire to that, yet, but I am getting on.

Recently, when my wife and I were staying with some friends in Uva, we decided to try and see how many different species we could see in one day. If you ask me what good it did I simply don't know. The object of the exercise was not to do good, at least not to anyone but ourselves. But we had a lot of fun, and a great deal of pleasure from a day in the country and from all the wonderful variety of birds we saw and watched—for in many cases we didn't just score them but observed them, often for a considerable time, with great satisfaction. And if it did no good it can be said with certainty that it did no *harm* to anyone or anything—unless it be to our hostess's toe! And very likely such an expedition may do good in the ornithological sense that it may possibly add something to the general store of

our knowledge of birds. For example, on a similar expedition a week or two earlier we saw a Blue-eared Kingfisher, described in W. W. A. Phillips's Checklist as "a very scarce resident," and which had, I believe, only been recorded once in the last fifty years. And Mr. Phillips himself, whose knowledge of birds is, I suppose, as great or greater than anyone else's in Ceylon, told me that when he goes, for example, to the Hambantota area he almost always sees something new or of more than passing interest. But whether it does any good or not such a day is tremendous fun, and this is the story of our Big Day.

These are the broad facts. The date was the 9th March, before, I suppose, any of the winter visitors had left. The party consisted of four, Colonel and Mrs. Rick Wall, my wife and myself, travelling in one car. We started at 6 a.m. and got back just after 7 p.m. We covered 135 miles. The route was from Veryan bungalow on Poonagalla Estate, at 4,600 feet on the eastern escarpment of the Uva hills, down through Poonagalla Estate to Koslanda; thence *via* the Diyaluma Falls to Wellawaya, the Hambantota road to Wirawila and on to Tissamaharama, returning by the same route to the starting point.

We made a few rules for ourselves. A species, or sub-species, to be recorded had to be actually seen, not merely heard, however certain the identification was from the sound. Except in the case of familiar birds it had to be seen by at least two of the party, although for our own enjoyment we tried as far as possible to let everyone see every bird. It could be recorded without specific identification if the family was certain, for example, a parakeet, and the species obviously differed from any other recorded.

We saw in the day 93 different species, which was just under a quarter of all those on the Ceylon list (which includes, of course, all rare vagrants and occasional visitors), and 43 of the 71 families in the list were represented. This is pretty good for one day, and is an indication of the abaundance of Ceylon's bird life. Even so we did not see quite a few that we might well have done, and had, in fact, seen on the same route before. But this will always be the case, and is balanced by those one is lucky to see on any one day and might well not see in the same area another day. We were a little disappointed that we didn't make a century, not that, aesthetically, ninety three is very different to a hundred but, as at cricket, a hundred is something more of an achievement. This, of course, is where the highbrow will groan again! I think we might have made the century easily if any of us had been more knowledgeable about waders and had been able to identify them readily, but unfortunately none of us had much experience of them and I'm pretty sure we missed quite a few species at Wirawila, particularly the smaller ones like sandpipers and plovers. There was a great variety there, but we only recorded those we were quite certain about.

Some families were well represented. We saw all four Barbets, all three Bee-eaters and four of the seven Kingfishers—but did *not* see the rare Blue-eared Kingfisher mentioned earlier which we had seen at Wirawila Tank a fortnight before. On the other hand, it was a disappointingly bad day for Woodpeckers, which always delight the eye. We only saw one species and that one of the less common ones, the Rufous Woodpecker. We didn't even see the Scaly-bellied Green (someone really ought to change that name), although a pair live in and around the garden at Veryan and are seen or heard almost daily. We only got three Warblers, though we undoubtedly heard others and might certainly have got the Ashy Wren-warbler and Jungle Wren-warbler, both of which are plentiful in the tea on Poonagalla Estate. And we failed to score either a Loten's Sun-bird or Ceylon (Hill) White-eye, both of which live in the garden. This shows how honest we were! Neither did we see a Common Iora. Against this, however, we were lucky to see two Spoonbills, a Thick-billed Flower-

pecker and a lot of Southern Grackles, all of which were new to all four of us, and a galaxy of Coppersmiths.

So much for the statistics. The story in detail follows :—

We were called at 5 a.m., had breakfast—a full one—at 5.30 and aimed to let in the clutch at 6.15. On a previous occasion, when the total bag was 82, we had started too early, at twenty to six, in the dark, and had dropped 1,500 feet before it was light enough to identify anything except a tiny baby hare which scampered down the road in the headlights and became so bewildered that we had to stop and shepherd it off into the tea. This was a mistake—the early start I mean. Nothing was moving when we left the bungalow, and in the next mile or so all we could see were a few dim forms flying across the road like bullets. We scored these as "oily boids," but felt hardly justified in including them in our tally for the day as we were unable to find them in the Check list. Nevertheless, from what one hears of the size of some of the worms caught from time to time the species is not unknown in Ceylon !

By postponing the start till 6.15 we hoped to have a quarter of an hour or so of daylight to see what was about in the garden. The idea of bacon and eggs at 5.30 a.m., by artificial light, normally revolts me but on this occasion I personally ate a hearty breakfast and enjoyed it. I think this must have been due to the appetising way in which it was prepared and served. Incidentally I imagine that those servants must have been jolly glad to see the last of us as visitors, for this was by no means the only occasion while we were there when they were required to produce breakfast at, or before, the crack of dawn. Once even they brought early tea at 4.30 and breakfast at 5.00, even before the lights came on. But on each occasion it was served complete, with the normal ceremony, just as if it were at the usual hour of 8.30.

After breakfast we had a quick look round the garden and totted up fifteen species in as many minutes. I went specially to the bottom corner of the vegetable garden where a Pitta had been residing for the whole winter, as I hardly expected to see one during the day. There he was, almost dead on 6 o'clock, in fact, I almost stepped on him and he went hopping off in front of me down the path between the peas, carrying himself as erect as a guardsman. The next score was a particularly good one. A cock Pale Harrier appeared and literally sat down on the top of a thick cypress hedge, very close to where there was a Blackbird's nest with two nestlings. He was quickly shooed off that but then slowly skimmed the top of another similar hedge on which was a Spotted Dove's nest with one youngster almost ready to be fledged (there had originally been two eggs). It was a fine sight to watch him at such close range. But he was not popular with the rest of our party. I really don't know why. After all, Harriers have to live and young birds are their natural prey—probably equivalent to our bacon and eggs and one might as well be sorry for the chickens and the pigs. And I have no doubt that there is some purpose in it, and who are we to interfere with nature's arrangement? But I'm bound to admit that somehow one doesn't like to see it happening. I'm pretty sure however he got those young Blackbirds in the end, for when I checked up the next day the nest was empty, and they had only been hatched a week before, on the 3rd March, and could hardly therefore have been fledged. Incidentally the nest was built not in a fork, as is usual, but laid on a flat sprig on the top of the hedge, about twelve feet from the ground, and only slightly concealed from above by an overhanging sprig. I think the Harrier knew about it as he had been there on several occasions before and nearly always skimmed the top of the two hedges. Once he came when the dove was sitting and she sat tight until almost the last minute and then slipped off down into the hedge as he skimmed over.

The wheels began to roll on the tick of 6.15. Driving down the hill through the tea we put up grey wagtails, Indian pipits, a brown shrike or two and some spotted doves. Passing some labourers' lines we saw the inevitable house sparrows and some Nilgiri house swallows. We looked out for, but failed to see, white-backed and spotted munias in the paddy fields at the bottom of the estate. As we cleared the tea and came into thin rubber with a fair amount of undergrowth, at about 3,000 feet, a flash of red went away down the road and swerved off down the hillside. We thought it was a red-backed woodpecker and stopped to see. As we peered down into the trees below us we suddenly spied two rufous woodpeckers busily preening themselves in a tree and watched them for several minutes. Their chestnut plumage was shown up clearly in the early morning sunlight.

We had no fixed plan, apart from the general idea of going to the tanks in the Hambantota area. We proposed to stop here and there on the way as the spirit moved or when we saw or heard anything promising. Between Koslanda and the Diyaluma Falls is a stretch of disused rubber, which is thin enough to let in a lot sunlight and has plenty of undergrowth. It seems to be a very popular place for birds when the sun is on it. It ranges from about 2,500 to 1,500 feet. We stopped at one or two places. Eastern swallows were busy, resting every now and then on the telegraph wires at the roadside, and Edible-nest Swifts were hawking above them. We saw several White-bellied Drongoes, presumably the Pale race (*insularis*), a Yellow-fronted Barbet, one or two Blue-tailed Bee-eaters, some Little Minivets, a Black-capped Bulbul, a Grey-headed Flycatcher and a Franklin's Wren-warbler. The latter was shouting his head off from a twig just below the road and giving an excellent view of his distinctive grey breast band. We stopped again just above the Falls, which is often a very good place if one waits a bit, but it produced very little that morning. I have seen there, amongst others, Velvet-fronted Blue Nuthatches, Pied Cuckoo-Shrikes, a Yellow-naped Woodpecker and a Golden-fronted Chloropsis.

We were then going to push straight on to the stretch of jungle a little way above Wellawaya, but as we came round a corner, at about the 124-13 culvert, we came upon a huge pipal tree overhanging the road opposite a caddy and heard a tremendous squawking noise of many birds up in the tree. We pulled up quickly and got out and were rewarded with an amazing sight. In the pipal tree, which was in fruit, and on the nearby trees on the hillside above it, were dozens of Grackles, their golden yellow wattles and orange beaks contrasting with their coal black plumage. At a rough estimate there were at least a hundred, but the thick foliage of the pipal tree prevented anything like an accurate count. They were making a terrific noise, something like Common Mynahs, to which they are closely related. As far as we could see they were all the Southern (Common) Grackle, with wattles on the sides of the head as well as at the back. We couldn't spot one Ceylon Grackle amongst them, although it is said that flocks are sometimes mixed. One particular bird was different to all the rest. His lower breast and belly were pure white, as in a Magpie Robin, instead of being all black like the rest. We all saw him quite clearly for some minutes. In all other respects he was like the others, with the same wattles. It has since been suggested that it was a semi-albino or freak, and that such variations may occur in any species, although uncommon. In the same pipal tree, or close by, we saw a fine Black-headed Oriole, one or two Small Ceylon Barbets, distinguishable from the Coppersmith by the absence of the crimson bib and by the blue face, and a lot of Small White-eyes ; also a few parakeets, which were not visible till they flew screaming out of the top of the tree and then could not be specifically identified. In a tree higher up the hillside, above the Grackles, were several

green pigeon which we thought were the Orange-breasted Green, but were not quite certain as they were rather far away and somewhat hidden by the leaves.

The stretch of jungle above Wellawaya was very unproductive that morning. A solitary Forest Wagtail was seen on the roadside and a brief stop produced only a Purple-rumped Sun-bird. We were then down in the Low-country and heading for the tanks. About 09.00 we stopped for our second breakfast, on the roadside, of hard-boiled eggs, which by that time went down very well. The Wellawaya-Hambantota road in the early morning is quite a good place for birds. It runs parallel to and not far from the Kirindi Oya for much of its way, is little frequented and has plenty of scrub jungle on both sides, with patches of thicker stuff. We were a bit late, however, in getting down there and there was not so much about as we had hoped. Before reaching the tanks the only additions to our list were Spotted Munias, a cock Plaintive Cuckoo, some Green Barbets (rather evil-looking birds I always think), a pair of Purple Sunbirds, a fine Bronze-winged Emerald Dove, which streaked away as we put it up off the roadside, and a White-breasted Water-hen. Whenever we stopped we heard flowerpeckers clicking in the trees just above our heads but simply could not see them. They were almost certainly the common Tickell's species but, sticking to our rule, we were not able to record them. We also undoubtedly heard hornbills in the distance, but didn't see them. Previously I had seen several of the huge Malabar Pied Hornbills about there.

About sixteen miles from Hambantota we came to the first tank—I don't know its name—on the left (east) of the road. Here the water laps the big spreading trees beside the road and, near the shore, is thickly covered with lotus leaves on which a considerable number of the beautiful Pheasant-tailed Jacanas were fantastically walking about. These, with their black, gold and white plumage, enormous feet and peculiar shape, look as if they have come out of a Chinese tapestry and are just not true. Fishing from a log under the trees within a yard or two of the roadside was a beautiful little Common Kingfisher, and flitting in the trees above him were a pair of Paradise Flycatchers, the ribbon-like tail of the cock floating gracefully behind him. These flycatchers must, I think, have been the Ceylon race (*ceylonensis*) as the cock was chestnut, not white as is the adult male of the migrant Indian race (*paradisi*), and being with a hen was unlikely to have been a juvenile of the Indian race, of which the immature males are also chestnut. These three beautiful birds being seen all together—the Jacanas on the lotus leaves, the Paradise Flycatchers flitting in the trees and the little Kingfisher perched on his log as in a Kashmir painting—were feast enough for any eyes, and would in themselves have made the day worthwhile. And as if this were not sufficient, to add colour and variety were several Green Bee-eaters, hawking from convenient vantage points, and wading beneath them on their long pale yellow legs two or three Red-wattled Lapwings (Did-he-do-its), their red wattles standing out vividly against the black and white head markings. Also wading in the shallow water close by were several Sandpipers (Snippets), flashing white as they were flushed, and a much bigger and longer-legged sandpiper with greenish legs—either a Greenshank or Marsh Sandpiper, probably the former—and half-a-dozen Pond Herons (Paddy birds) standing motionless and inconspicuous until they suddenly took wing and were miraculously changed from dirty brown to pure white as if by magic. Some distance away a number of Lesser Egrets were wading about in the shallow water, distinguishable from the Little Egret of similar size by the black feet and out of the breeding season by the yellow bill, and a solitary Purple Heron. Further out, perched on stakes and swimming about, were several Indian Darters, a peculiar bird most aptly named the Snake-bird, for when swimming entirely submerged except for

his long neck he looks exactly like a water snake. Incidentally the flexibility of this neck is quite phenomenal—at times it appears to almost tie itself in knots. Much further away, on the other side of the tank, were a lot of larger stork-like birds, too distant to identify.

This otherwise perfect scene was unfortunately somewhat marred by a slight accident to our hostess. In her haste to get a look at the kingfisher she stumbled over a half-submerged log and drove a sharp projection into her big toe. Though fortunately not serious it was extremely painful, and although she made light of it handicapped her considerably for the rest of the day.

Eventually we reluctantly dragged ourselves away and pressed on a mile or so to the main Wirawila Tank. The road runs through the middle of it on a low embankment, with wide expanses of water on both sides. There are no lotus plants on this tank and so no Jacanas. As a result of the long drought the water was very low and there were large stretches of close-cropped grass on which buffaloes were grazing. In the shallow water on one side of the road were many Egrets, all four species being represented. A Brahminy Kite was circling overhead and two Pied Kingfishers were fishing, not from vantage points as most other kingfishers do, but rising to a considerable height, hovering and then diving vertically into the water at high speed, spectacularly disappearing momentarily and then reappearing, by no means always with a catch. These birds are speckled black and white and entirely lack the blue one associates normally with kingfishers. They are fascinating to watch.

On the other side of the road, far out across the grass which would normally be covered with water, was a great concourse of birds of all sizes. I walked out slowly and was able to get quite close to the great mass of birds feeding near the water's edge. I identified Grey Herons, Painted Storks, Open-bills, White Ibis, Black-winged Stilts and two Spoonbills, but I was bewildered by the myriad small waders, of which I was only able to pick out the tiny Stint—probably the Little Stint—and one or two Common Sandpipers. There were also a number of Cormorants, though nothing like as many as we had seen on this tank a fortnight earlier, and more Darters. A nondescript eagle, which we took to be a Grey-headed Fishing Eagle, was sailing overhead and periodically coming to rest on the grass amongst the buffaloes. And all the time beating to and fro over the water were numerous small terns, I think the Whiskered Tern. There were no Pelicans. At our previous visit there we had seen a fairly large flock of Grey, or Spotted, Pelicans (the only one on the Ceylon list) fishing, in an obvious shoal, amongst large numbers of Cormorants.

It was at this tank that we had seen the rare Blue-eared Kingfisher and we looked for it again but there was no sign. All four of us had been able to study it with our field glasses for quite an appreciable time at a range of fifteen to twenty yards, with Henry's coloured plate in front of us, and we had been able to note definitely the complete absence of chestnut on the ear coverts which distinguishes it from the Common Kingfisher, and also the richer blue. For the record the date was the 20th February, 1956.

We could quite happily have spent several hours on this tank but wanted also to visit Tissa. Before leaving we were entertained by the local Game Guard to a lurid account of a recent murder case in the vicinity. He claimed to have discovered the corpse in the tank. It had, of course, created tremendous excitement in this out-of-the-way place, which had now hit the headlines, and the Game Guard could talk of nothing else. Incidentally, talking of Game Guards, we heard several shots while we were there, and it was quite obvious from the immediate reaction of the birds that they knew what it meant.

We turned off to the left shortly after leaving Wirawila and a little further on saw two lovely Chestnut-headed Bee-eaters perched on

the telegraph wires. The richness of its colours to my mind makes this Bee-eater quite the most beautiful of the three species of the family on the Ceylon list. We found the tank at Tissamaharama surprisingly empty as we drove along the bund towards the Resthouse and we saw only a small flock of Whistling Teal on the water. Passing the Resthouse we took a narrow road to the left called, I think, the Spill Road, which brings one in a short distance to the dam at the corner of the tank. A word of warning to anyone going there. Just short of the dam, where you must turn round, is a huge pothole on the left of the road, invisible to the driver. You can easily break a spring there. We nearly did. But to compensate us, at this spot we saw one of the most fascinating sights of the whole day. In a low tree just beside the pothole were a considerable number—we counted twenty plus—of Crimson-breasted Barbets (Coppersmiths). The tree was thick with mistletoe-like berries and had a rather similar leaf. It was not loranthus but a complete tree in itself, I don't know its name. We watched these delightful Coppersmiths just above our heads, many even at eye-level, at a range of a yard or two. One could practically touch them. They went on stuffing themselves, quite unperturbed. None of us had ever seen one at such close quarters before and here were a couple of dozen. They were quite lovely, with their green backs, scarlet, yellow and black heads, clear yellow chin, scarlet bib, striped waistcoat and scarlet legs. There were obviously young amongst them as although there was no apparent difference in size or plumage, some were having berries stuffed into them. They had quite a technique in competing with the fairly large berries. First they softened them up by squeezing them with their beaks several times. Then they hammered them on a twig and finally crunched them sufficiently to be swallowed.

Also in the same tree was a Thick-billed Flowerpecker, nowhere very numerous, which gave us an excellent and prolonged view at close quarters, and a Brown Flycatcher, and swimming on the tank nearby was a flock of tiny Dabchicks. When we could at last drag ourselves away from the Coppersmiths we returned to the Resthouse and went down in front to have a look at the nearby island, which was literally packed with birds. There were numerous Cormorants and Darters, hanging themselves out to dry, and a lot of Herons wading about, besides many others we could not see properly. As we stood on the shore watching a huge Stork-billed Kingfisher was getting his lunch from a large branch overhanging the water and to the other side of us a Common Kingfisher, minute by comparison, was doing ditto. They could not have had to exert themselves very much as there were hundreds of fish to be seen in the clear shallow water, although most of them looked rather large for the little chap, but doubtless his sharp eye could pick out the little 'uns that we couldn't see. And this at last reminded us of our own lunch. We had been so absorbed that we had forgotten all about it and found that it was now 3 o'clock. We set off to look for a suitable, and profitable, spot for our picnic. As we drove back along the edge of the tank there were cattle grazing in the fields on our left, and standing beside each one of them, as if on duty, was an egret, most of them the Lesser or Little. It really looked quite absurd. We turned off down a side road along the opposite side of the tank to the Resthouse, hoping to find a place near the lillies where we might see some Purple Coots, which we were told were there, but had not gone far when we came to a very dead buff, lying in the shallows close to the road, which was fit to burst and which put all thoughts of lunch, temporarily at least, out of our minds! As we held our noses Rick Wall stepped on the gas looking for a place to turn and escape. We didn't see any Purple Coots but it was not entirely abortive as we came upon a White-necked Stork to add to the list. It was four o'clock before we found a suitable place, just off the Hambantota road.

As we turned off the main road Rick and I both saw two very grey looking shrikes on a bush beside the road. They seemed to both of us to be definitely grey and decidedly bigger than the Brown Shrike. They were undoubtedly shrikes. The only thing in the book which really seemed to fit is the Indian Great Grey Shrike. It is extremely improbable, however, that it was that as there is one sight record only of this bird in Ceylon. They must therefore have been either Philippine Shrikes or, judging by their size, the Large Cuckoo Shrike.

By the time we'd finished lunch it had begun to cloud over and we were undecided whether to push on hard into the foothills or to see the daylight out in the Low-country. In the end we compromised, but there seemed to be very few birds about then. Stopping to look at an old dagoba close to the road we saw a fine Green Imperial Pigeon and several Pompadour Green Pigeons. A little later a barking deer bounded across the road in front of the car. We stopped and I got out to try and see it again. I did not, but what I did see, much to my surprise, hopping along in the roadside thicket, was a Pitta. So I need not, after all, have bothered in the vegetable garden in the early morning!

By the time we reached the foothills dusk was beginning to fall, rather earlier, owing to the clouds, than it should have done, and everything seemed to have gone to roost. We vaguely hoped we might see an owl on the way home or at least put up a nightjar off the road, as we occasionally did going home at night, but neither obliged. We got home shortly after seven, and so, with a much appreciated whiskey-and-soda—or two—and hot baths, ended a memorable day for all of us, with a record number of species seen by any of us in one day. It was, of course, a stunt but what a wonderful one! And not, I think, unprofitable.

Here is the full list. In arrangement and nomenclature I have followed W. W. A. Phillips's 1952 Revised Check list :

Family	*Species or Sub-Species*
Grebes	Little Grebe
Pelicans	Grey Pelican
Cormorants	Indian Shag
	Pigmy Cormorant
Darters	Indian Darter
Herons, Egrets and Bitterns	Eastern Common Heron
	Eastern Purple Heron
	Pond Heron
	Cattle Egret
	Large Egret
	Lesser Egret
	Little Egret
Storks	Painted Stork
	White-necked Stork
	Open-bill
Ibises and Spoonbills	White Ibis
	Spoonbill
Ducks	Whistling Teal
Hawks and Eagles	Brahminy Kite
	An eagle, ? Ceylon Grey-headed Pale Harrier—Fishing
Rails	White-breasted Waterhen
Jacanas	Pheasant-tailed Jacana
Plovers	Ceylon Red-wattled Lapwing
Curlews, Sandpipers, Snipe, etc.	Greenshank, or Marsh Sandpiper
	Wood Sandpiper
	Common Sandpiper
	Little Stint
Avocets and Stilts	Ceylon Black-winged Stilt
Gulls and Terns	Whiskered Tern
Pigeons and Doves	Pompadour Green Pigeon
	A pigeon, ? Orange-breasted Green
	Green Imperial Pigeon
	Bronze-winged Emerald Dove
	Ceylon Spotted Dove
Parakeets and Lorikeets	A Parakeet (species unidentified)
	Ceylon Lorikeet
Cuckoos and Malkohas	Plaintive Cuckoo
	Koel
	Common Coucal

Family	*Species or Sub-Species*
Swifts	Indian Edible-nest Swift
Tree-Swifts	Indian Crested Tree-swift
Kingfishers	Pied Kingfisher Common Ceylon Kingfisher Stork-billed Kingfisher White-breasted Kingfisher
Bee-eaters	Chestnut-headed Bee-eater Blue-tailed Bee-eater Green Bee-eater
Barbets	Green Barbet Yellow-fronted Barbet Crimson-breasted Barbet (Coppersmith) Small Ceylon Barbet
Woodpeckers	Rufous Woodpecker
Pittas	Indian Pitta
Swallows	Eastern Swallow Nilgiri House Swallow Ceylon Swallow
Wagtails and Pipits	Indian Pipit Forest Wagtail Grey-headed Wagtail Eastern Grey Wagtail
Cuckoo-shrikes and Minivets	Common Ceylon Wood-shrike Ceylon Little Minivet
Shrikes	Brown Shrike A grey shrike, ? Large Cuckoo-Shrike or Indian Grey Shrike
Bulbuls	Black-capped Bulbul Red-vented Bulbul
Robins, Chats and Thrushes	Ceylon Black-backed Robin Southern Magpie Robin Ceylon Blackbird
Babblers	Common Ceylon Scimitar Babbler Ceylon White-throated Babbler Common Ceylon Babbler
Warblers	Ceylon Tailor-bird Franklin's Wren-warbler Blyth's Reed Warbler
Flycatchers	Brown Flycatcher Ceylon Grey-headed Flycatcher Ceylon Paradise Flycatcher White-browed Fantail Flycatcher
Tits	Ceylon Grey Tit
Flower-peckers	Ceylon Thick-billed Flowerpecker
Sun-birds	Purple Sun-bird Purple-rumped Sun-bird
White-eyes	Ceylon Small White-eyes
Weaver-birds, Munias and Sparrows	Spotted Munia Ceylon House Sparrow
Starlings and Mynahs	Common Ceylon Mynah Common (Southern) Grackle
Drongoes	Pale White-bellied Drongo
Orioles	Ceylon Black-headed Oriole
Magpies and Crows	Jungle (Black) Crow

THE DEAD BIRD

This is something new in my life.
I have seen birds in trees—or up in skies

In flight—pigeons, quail
Friendly with hyacinth in ponds, friendly with grass . . .

But you : soft, milk-winged,
Snapped body, blood on beak

(Drops of blood like flowers, half an ounce of blood,
A baby in a blood-red shawl
Asleep)—my heart goes out to you.
My heart is your mother on the ground next to you.

JIBANANANDA DAS.

(Translated from the Bengali by Shyamasree Devi and P. Lal).

Ducks Unlimited

By PHILIP K. CROWE

FEW non-hunters seem to realize that the survival of game in many parts of the world depends primarily on sportsmen; yet it is certainly logical to surmise that those who derive their greatest pleasure and relaxation from shooting should be those who make the greatest effort to ascertain that their sport continues. Certainly many who do not shoot have contributed greatly to the preservation of wild life but, in most countries where protection exists today, the generosity and interest of the hunters have exerted the major pressure to save the game.

Take **Ducks in America.** Fifty years ago countless millions of wild fowl filled the skies as they winged across the United States to and from their breeding grounds in Canada. "There will always be ducks," said the hunters and the ornithologists. Then suddenly, in the twenties, the migrations fell off alarmingly. The Wild Life Service estimated that not more than 30 million ducks were left, out of an estimated normal of 200 million. The great banners of waterfowl that used to wave across the skies had shrunk to tattered ribbons. Something had to be done and done quickly.

The sportsmen met the challenge. A small group, headed by Joseph P. Knapp, formed the "More Game Birds in America Foundation" and hired 2,000 biologists and observers to conduct an international duck census. The result of this survey revealed that the trouble lay not in over shooting but in the breeding grounds. Draining of the Canadian marshes, to plant wheat to meet the needs of a hungry world during two world wars, was having its baleful affect on the wild fowl population.

The survey estimated that 70 per cent. of the prospective North American duck population died on these far northern breeding grounds, and that nearly 90 per cent. of all the ducks that flew over the United States were bred in these same marshes. Only 23 million acres of land in America was considered good breeding territory for ducks while Canada had 640 million acres. In the vast wet lands of Alberta, Manitoba and Saskatchewan lay the Continent's "duck factory." The answer obviously was in Canada but, in 1937, there was no way in which U.S. government funds could be spent in another country to improve waterfowl breeding grounds; the job had to be done privately.

At the foundation meeting set up in Washington, the matter of a title for the organization was brought up and "Ducks Ltd." was suggested. "Limited, hell," said one outspoken member "what we want is ducks unlimited." And ten days after incorporation, "Ducks Unlimited," financed by American and Canadian sportsmen, started its first big project—the restoration of 50,000 acres in Big Grass Marsh in Manitoba. There was no time in those pioneer days for permanent dams; the earth was pushed with bulldozers, holes were blasted in the prairie to hold water. Without water the ducks died. Everyone helped. The Canadian provincial governments turned over 60 million acres of poor wheat land; thousands of farmers promised co-operation. One dour old Scotch wheat farmer said "Dead ducklings ruin my hay" and then his face softened and he added "I sort of like the living things on my land."

While these first dams were being built, reports from the field showed that other causes besides drought were cutting down the flocks. Crows and magpies devoured 15 per cent. of the eggs; fires destroyed another 12 per cent.; so did Indians, skunks, coyotes, wolves, squirrels and jackfish. In fact, these great northern pike were estimated to consume eight million ducklings a year! "Ducks Unlimited" attacked the enemies on all fronts. Wire nets kept out the fish; a bounty was placed on crows and magpies; and the Indians were persuaded to give up eating duck eggs by giving them funds to buy other food they liked better. Even beaver were imported to build their water-

holding dams and give the Indians a better living from trapping. Today the record is impressive. "Ducks Unlimited" has established 3,000 miles of shoreline nesting areas; built 614 dams; banded 70,000 ducks and geese; planted thousands of aquatic plants; and maintains 600,000 acres of water on the prairie provinces of Canada.

All this has cost money—more than £5,000,000 to date—and it has all come from duck hunters. Have the results justified this expenditure? By 1947, ten years after "Ducks Unlimited" started functioning, the duck population had risen to 160 million and in every year, but one since, an increase has been noted. This year's census will probably show that the total is again approaching the norm of 200 million ducks which the scientists think is about the right number for the continent to carry.

The interesting fact about this recovery in America's duck population is that it has taken place *in spite of a greatly increased number of hunters*. Moreover, more than two million duck licenses are issued yearly in the United States, a four-fold increase since 1934, and if these license-holders and the generations after them are to find sport in the skies more money must be raised to open up new breeding grounds in the north country. It is a challenge that Ducks Unlimited, financed by the sportsmen of America, is willing to face.

In Ceylon we also face a crisis in the Island's wild life. According to Major W. W. A. Phillips, one of the Island's leading authorities, the last half century has seen great changes in the status and distribution of the Island's unique wild life; some notable forms are already extinct, or verging on extinction, and others have been sadly depleted in numbers and restricted in range. He predicts that the next half century will undoubtedly see the extinction of many valuable species.

Not all of these species can be saved but a concerted effort by the sportsmen of Ceylon could go a long way towards aiding the government to preserve many of those birds and animals which provide the hunter with his happiest hours. An organization dedicated to protecting the Island's wild life already exists—The Ceylon Wild Life Protection Society—but it lacks funds and the whole-hearted support of the sportsmen. Some people seem to think, in fact, that the Society is opposed to legitimate sport. This is not the case. No one knows better than the members of the Society that the animals shot under license, in the government reserves, constitute but a minute fraction of the numbers killed illegally. So far, however, the Society has made no real effort to attract and organize the Island's sportsmen.

Even for many of Ceylon's rigidly protected fauna the end seems near. The most dramatic and tragic example of approaching extinction is provided by the Ceylon Elephant. At the beginning of this century, it was estimated that at least 2,000 of these great beasts roamed the Island's jungles. Then, the herds migrated into the hills during the dry season and elephant paths could be seen along the ridges of the mountains. There was even a small resident herd in the Horton Plains area. Today, experts say there are less than half this number left and they declare that, since the rate of depletion by killing and capturing is about twice the normal rate of increase, the writing is on the wall for Ceylon's noblest animal unless draconian steps are taken immediately to save it.

Two forms of our wild life are already virtually extinct. The Ceylon Hog-Deer, which used to be plentiful in the Galle area, has vanished. Pressure of population to open new lands to cultivation has driven this interesting little deer from the coastal area and, since it was apparently unable to survive in the inland hill country, it has been killed out. Another inoffensive mammal, the Dugong, has become so rare in the shallow seas of the Mannar area that for all practical purposes it is also extinct. Major Phillips thinks that, even

with strict protection, it is now doubtful if this unique species, from which the ancients drew their tales of mermaids, can recover. Several years ago I saw one swimming in a tank of turtles and offered to purchase it in order to set it free. The fishermen who had netted it told me, however, that there would be no use in this gesture as it would immediately be caught by someone else. Sluggish and trustful, the dugong, seems doomed.

The Wild Buffalo, protected from shooting by his resemblance to his tame brothers and a perpetual closed season, is still found in good numbers in the national parks but illegal capture, for domestic use, has all but exterminated it in other areas. On a five-day trip down the Mahaweli Ganga, which flows through one of the Island's few remaining isolated jungle areas, I saw only a few tracks of wild buffalo.

Spotted Deer and Sambhur reproduce rapidly; they are still plentiful, therefore, in the national parks and shooting reserves but outside of these protected areas they are becoming increasingly rare. I have made many motor trips around the Island and have kept careful notes of all wild life seen. Even on the long stretches where the roads run through heavy jungle as on the link between Puttalam and Anuradhapura, and Anuradhapura and Trincomalee. I saw pitifully few deer and all of these during the day. Night shooting from cars has driven the surviving game deep into the forests. Lights on the road at night may mean death to them.

The deer are protected by law, however, and ostensibly derive some benefit from the closed season. No laws cover the Sloth Bear, Leopard, Crocodile or Wild Pig. Outside the reserves, they can be shot the year round and this indiscriminate slaughter goes on twelve months a year. In the Wanni I saw a she-bear with two cubs which a local "sportsman" had shot from a blind over a water-hole. He said he had no use for the skins, could not afford to mount the heads, and had only shot the trio for fun. On another occasion I saw the skin of a leopard cub that would not cover a baby. The hunter who had shot it tried to sell it to me for a "trophy." Pig's flesh cannot be touched by Moslems but Moorish poachers frequently shoot pig to sell the flesh.

The sale of the flesh and skins of all wild life is prohibited by law but they can be bought in almost any village near a jungle area. The crocodile, which performs a useful purpose in cleaning up dead animals in the tanks, is now extinct outside the protected areas. Its belly skin sells for a price that makes the fine for selling it a minor hazard.

The primates have also suffered. The Grey Langur, or wanderoo, and the red monkey have been greatly reduced in numbers. There is some point in shooting the red monkey as it is very destructive to crops, but the big langurs gain most of their sustenance from the jungle and are shot for their flesh.

The birds have also suffered. The Peafowl, Asia's largest and most beautiful game bird, is continuously poached for its feathers, flesh and oil. The belief that the oil, emanating from a peafowl's legs, is a specific for a number of diseases results in a constant illegal market for the unfortunate bird. Legitimate hunters kill only a few peafowl for it is an extremely wary and keen eyed fowl ; it takes a long, lucky shot to bag one during the day. At night, however, the big birds roost in trees and it is then that the poachers slaughter them as they huddle, silhouetted against the sky, in the moonlight.

The Painted Partridge, formerly plentiful in the Uva hills, is now virtually extinct except for small numbers in the country around Nilgala. Major Phillips believes that the extinction of this beautiful little partridge is not so much due to over-shooting, trapping and egg-stealing as to the burning of the grass and patna lands. The Grey Partridge has also decreased alarmingly, and is now confined to the Mannar area and a few islands off the coast there. I had some good partridge shooting on Iranitivu but since then have heard that a party of market-

hunters invaded the Island and shot virtually every bird they could find. As the partridge cannot leave the Island, the distance to the mainland being too great for them to fly, it would not be difficult to exterminate them.

The Comb-duck and the Glossy Ibis have gone completely from Ceylon. Occasionally, a straggler from India is identified but both of these rare and interesting birds have ceased to breed in the Island's tanks. In 1880 the famous ornithologist, Legge, reported that comb-ducks were fairly common in the north and east and about the same period Layard noted that the glossy ibis was seen in abundance in the north of the Island. Despite laws protecting them, Egrets, Herons and Storks are being persecuted to a point where they too, may face extinction. Unfortunately all these beautiful birds are edible, as well as providing fine feathers for the children.

Even Eagles and other large raptores, whose flesh has no food value whatsoever, are shot by irresponsible hunters. The Rufous-bellied Hawk-Eagle is virtually extinct and the numbers of Legge's Hawk-Eagle and the proud White-bellied Sea-Eagle are decreasing yearly. The Malabar Pied Hornbill, which looks like a bird from the pre-ice age and takes off slower than a heavy bomber, is now rare outside the reserves, and the Ceylon broad-billed Roller can only be found in a few remote localities.

Blame for Ceylon's vanishing wild life is, of course, due to a number of factors, of which the most important is probably the steady increase in the Island's population. In 1900 only $3\frac{1}{2}$ million people lived in Ceylon. Today there are nearly 9 million and by 1980 it is predicted there will be 18 million. Ceylon's rate of increase, 2.8 per cent., is the third highest in the world and is exceeded only by Venezuela and Panama. Pressure for food, from this increasing number of mouths, naturally results in opening up of more land to cultivation with an inevitable effect on the habitats and feeding-grounds of the wild life.

The Wild Life Department is doing a heroic job with an inadequate and underpaid staff. The Ranger of one large reserve that I know is not even provided with a jeep ; he is expected to patrol an area of several hundred square miles on foot or bicycle. The poachers, of course, have cars. It is estimated that great numbers of the guns now in use on the Island are illegally possessed and must be assumed to belong to these same poachers. It has even been suggested that the Government return those illegal firearms which were confiscated during the previous regime. The reason given was that the people need these guns " for protection in remote areas."

No one would quarrel with the right of the villager to protect himself and his chena from attack by wild animals, and with this in view licenses for 111,357 guns were issued in 1955, certainly an adequate arsenal to cope with a few hundred elephants and bears. During the same period only 2,081 game licenses were purchased and the official kill of axis deer was 80, sambhur 5, and peafowl 10—a minute fraction of the number of protected animals and birds destroyed either illegally or ostensibly in defense of crops.

The net of all this is that unless there is strong public support for stricter protection, much of the Island's wild life will continue to diminish and some will become extinct. Now is the time for all sportsmen to help stem this tragic tide by banding together under the aegis of the Wild Life Protection Society and embarking on a plan of positive action.

The ducks were saved in America and the wild life can be saved in Ceylon.

Swallows and Swifts

By C. E. NORRIS, F.Z.S.

I HAVE been asked to draw an identification chart to help identify the different species of Swallows and Swifts that are to be found in Ceylon.

On the accompanying illustration, the arrows have been put in to show the main characteristic markings which should assist the watcher in determining the species.

1.—The Ceylon Alpine Swift or the **Ceylon White-bellied Swift,** *Apus melba bakeri.*

This large swift is locally distributed but covers a very wide range in its daily flights. It breeds and roosts on precipices situated in the central hills. When I lived at Pelmadulla a flight of these swifts passed over the bungalow every evening heading towards Adam's Peak. I have also seen them pass over Balangoda heading in the same direction. A colony was resident on the precipitous face of the Ragalla rock but I do not know if they are still there. In fine weather they fly high but can be distinguished by their long scimitar-shaped wings and the white patch on their bellies. During misty, rainy weather they descend to tree-top level. They may occasionally be seen dipping over lowland tanks taking their drinks. It is very probable they spend the whole day on the wing from the time they leave their roosts to their return in the evenings as, owing to their very weak legs they are unable to rise from the ground and have to launch themselves into the air from a height.

2. The Indian Spinetail Swift or the **Brown-throated Spinetail Swift,** *Cheatura giganteus indicus.*

It again is locally distributed. They can be confused with the former species but their wings are slightly broader and not so scimitar-like in shape. The white on the rump and sides is not always easily discernible when the birds are flying but the lack of the white belly of the Alpine Swifts helps. These swifts may be seen anywhere in the Island as their powers of flight are very great. I have watched them drinking from the dam at Kuttapitiya, Pelmadulla ; they swooped down to the water at great speed, took their sip and soared up again with an audible swish. So far the nest has not been recorded in Ceylon; but in South India it has been located in large hollow trees, the eggs being laid at the bottom of the cavity without any nest being made. Theories have been put forward as to the reason for the strange spiny shafts on the tail feathers, one being that the tail assists the bird in ascending the cavity in which its eggs have been laid.

3.—The Common Ceylon Swift or the **Ceylon White-rumped Swift,** *Apus affinis singhalensis.*

The white rump distinguishes this swift from all others found in Ceylon. It generally will be found in colonies which wheel round in a noisy bunch when on the wing. They nest in caves and under overhanging rocks in colonies ; they will also enter dwelling houses to breed. The Ratnapura Resthouse is famous for its colony of swifts which nest on the verandah. I had a pair which stole a Ceylon Swallow's nest on the verandah of the Kuttapitiya bungalow. I have frequently found them nesting amongst the rocky outcrops in the jungles of the low-country. The nest is rather an untidy affair of feathers and grass glued together with saliva.

4.—The Ceylon Swallow, *Hirundo daurica hyperythra.*

It is peculiar to Ceylon, and is fairly plentifully distributed throughout the Island up to around 4,500 ft. It is a much heavier and slower flying swallow than the migrant Eastern Swallow. The reddish underparts and band on the rump readily distinguish it. It nests under bridges and culverts, under overhanging rocks and also will enter bungalows. The nest is a very neat " bottle " in shape made entirely from mud

pellets and lined with feathers. The entrance is through the neck of the "bottle." Very often the Common Ceylon Swift will take over these nests.

5.—The Nilgiri House Swallow, *Hirundo tahitica domicola.*

Is common in the hills above 2,000 feet but may be met with at lower elevations. I knew

one pair that was resident at Opanaike (700 ft.) and nested in an estate bungalow but such cases are not frequent. This swallow is considerably smaller than the Ceylon Swallow and lacks the chestnut markings except on the forehead and throat. It is a most confiding bird readily using bungalows in which to build its nest which is a neat cup of mud lined with feathers. The same nest is used for a considerable length of time.

6.—The Eastern Swallow, *Hirundo rustica gutturalis.*

This swallow is a North-East Monsoon migrant. It may be distinguished by its long-forked tail and white underparts. When this swallow is in full plumage the back assumes a lovely metallic gloss. They are very active spending a great deal of their time on the wing catching flies. At night they roost in colonies; at times these colonies contain many thousand birds. There is one such colony which uses the telephone wires on the Badulla road and has been using this stretch as a roost for a number of years.

It is possible the Indian Cliff Swallow, *Hirundo fluvicola*, may be seen in Ceylon. It resembles the Eastern Swallow somewhat but has buff-white underparts heavily streaked on the chin ; the top of the head is dull chestnut. Syke's Striated Swallow, *Hirundo daurica erythropygia*, has been recorded from Ceylon but must be considered as a rare vagrant. It resembles the Ceylon Swallow in size, shape and flight but can be recognised by a chestnut collar on the hind neck, nearly white underparts streaked with brown. The rump is chestnut as in the Ceylon Swallow.

7.—The Indian Edible-nest Swift, *Collocalia brevirostris unicolor.*

Is a common Swiftlet to be found throughout Ceylon at all elevations. It is a uniform mouse brown colour and is a little smaller than the Common Ceylon Swift. It may be confused with the Palm Swift which is a much more slender bird, having narrower wings and a longer, forked tail. The Palm Swift will only be found below approximately 3,000 ft.

The nests of the Edible-nest Swift were once exported to China for the famous bird's nest soup which was considered such a delicacy. These nests are situated in dark caves, deep culverts, and railway tunnels. They are shallow cups, sometimes on their own but quite often made in clusters, constructed from the bird's saliva and moss and cemented to the wall of the cave or chosen site. The saliva dries into a hard white shiny substance which becomes discoloured with time. The birds use the nests for roosting in the off-breeding season. In the evenings colonies of these swiftlets can be seen making their way back to their caves generally following the same route every day.

The Indian Crested Tree-Swift, *Hemiprocne longipennis coronata* (not illustrated).

Is a common swift that is quite distinctive and should not be confused with any of the others. It will be found in open wooded country up to about 3,000 ft. The long tail, which is generally carried in a long narrow point is deeply forked but is only noticeable when the bird opens it in flight; this is one of the main distinguishing features together with the long narrow wings. The crest is only noticeable when the bird is seen perching generally on a bare branch. The call is distinctive, being a loud whistle. The general colouring is a palish grey blue being lighter on the underparts. The nest is a tiny cup glued on to the top side of a slender branch and composed of lichen and tiny pieces of bark. When the bird is sitting on the nest it appears to be perching and a close look is necessary to see the nest.

The Ceylon Large Cuckoo-Shrike

By W. RAYMOND JACKS

G. M. HENRY, in his excellent guide to the birds of Ceylon, mentions that the Ceylon Large Cuckoo-Shrike is rather scarce and that its nest is seldom found, so possibly the following episode may be of interest :—

This small bungalow is situated at an elevation of about 1,000 feet in Madipola, Matale North, on the borders of the dry zone. A pair of these birds came here towards the end of February this year and at the beginning of March began building a nest on the fork of a horizontal branch of an old rubber tree 49 feet from the ground in full view of and about 120 feet from the bungalow verandah. When they first came their curious cry of " Kureech," generally accompanied as it is by the alternate raising of their unopened wings, seemed to annoy other birds in the vicinity, but this gradually wore off. Both birds shared building operations, but the female did most of the work. The nest was completed about the 24th March and four days later the female commenced sitting. Except when the male relieved her from time to time, usually in the early morning and late evening, she hardly ever left the nest. On the 31st March, I sent my servant, Piyadasa, up the tree in order to obtain particulars of the nest and eggs. His description of the former exactly agreed with that given by Henry. There were two eggs in the nest, one of which he carefully lowered to me. It measured 30 × 21.5 mm. and was of a pale bluish green with a dense ring of light brown blotches at the large end and with others scattered fairly evenly over the rest of the surface. It was carefully replaced in the nest, and the bird, which had flown to a neighbouring tree while this was taking place, immediately resumed sitting as Piyadasa reached the ground.

About 300 yards from the tree in which the nest was built is a paddy threshing floor, and, as is their wont round here at harvest time, the owners had been shouting at night to keep " devils " away. On the night of the 1st April, a villager with an unusually loud and penetrating voice went on duty and incidentally kept me awake the greater part of the night, so, when I turned my binoculars on the nest at 6.00 the next morning, I was not surprised to find the nest deserted and the birds nowhere to be seen. I kept the nest under observation for the next two hours as I was interested to see if they would return. At a little after 8.00 I heard the familiar cry some distance away and shortly afterwards both birds and a dove landed almost simultaneously near the nest. The birds were very excited and the male immediately drove the dove away. While he was so engaged, I noticed the female pecking at or round the nest and on his return he pecked once or twice and then a moment later I saw him fly away with the nest, held by the rim in his powerful beak and slightly tilted towards him. Unfortunately, owing to intervening rocks I was unable to follow his flight, but I noted the direction in which he was heading. The female looked down at the spot on which the nest had rested for about a minute and then flew over my head to a tree on the opposite side of the garden to be joined almost immediately by the male, but without the nest ; they then flew out of sight.

Piyadasa climbed the rubber tree and reported hardly a vestige of the nest remained and there was nothing to indicate the fate of the eggs. A close inspection of the surrounding area below the tree revealed nothing. An extensive search over a wide area by myself, my servants and a band of small children to whom a reward for the nest or an egg fragment had been offered produced no results. I scanned many surrounding trees with my binoculars with similar results. The birds were seen flying around every day, but they gave no clue as to the whereabouts of the nest. They were never

observed going back to the tree where the nest had been.

On the 9th April the same birds commenced building another nest on the horizontal branch of a rubber tree where it forked. This tree is 38 yards from the tree in which they built their first nest. The new nest was about forty feet from the ground and at the extremity of the branch. On the same day a half shell of one of the two eggs in the first nest was found at the base of the tree in which the new nest was being built, but there was no sign of the nest it had come from. On completion of the new nest two eggs were laid and the female began sitting from the 18th. On the 12th May two young birds were hatched. On several occasions after the 9th April a third bird had been seen flying about with the male cuckoo-shrike, on one occasion two, but it was not possible to ascertain if they were young birds.

The parent birds were observed feeding the young birds in the nest, and up to the 20th May all was proceeding normally. On the 25th May I returned after a few days absence to find the parent birds flying about as usual, but the young birds *and the nest gone*. There is no reason to think the young birds were not successfully reared as they were well looked after, and the nest was not easy of access, also the parents did not appear to be troubled or excited.

The question arises, do these birds remove their nests after the young have been reared? The second nest like the first is not to be found.

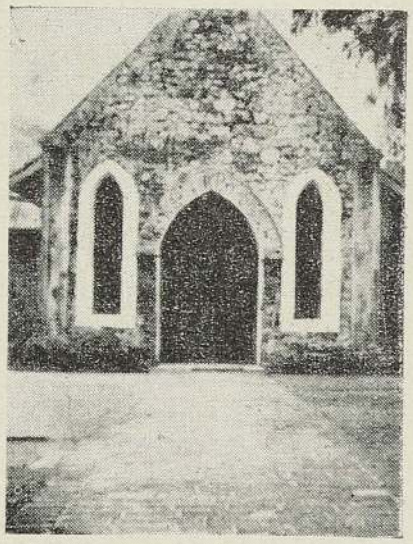
Major Rogers—Architect of Uva

By CLIVE JAYATILAKA & ROY ABEYSEKERA

IN a sequestered section of Badulla—removed from the congestion and the dusty streets of this town—there is a little church, St. Mark's, Badulla, which will be celebrating the centenary of its consecration in 1957.

Within the church, almost facing each other, are two memorial plaques. One is in Sinhalese and the other, which is in English, reads as follows :—

A.D. 1845
THIS CHURCH WAS ERECTED
TO THE HONOR OF GOD
IN MEMORY OF
THOMAS WILLIAM ROGERS
MAJOR CEYLON RIFLE REGIMENT
ASSISTANT GOVERNMENT AGENT
AND DISTRICT JUDGE OF BADULLA
BY ALL CLASSES OF HIS
FRIENDS AND ADMIRERS
HE WAS KILLED BY LIGHTNING
AT HAPOOTALLE—JUNE 7TH, 1845
AGED 41
IN THE MIDST OF LIFE WE ARE IN DEATH



St. Mark's Church, Badulla, a tribute to the memory of Major Rogers.

Yet another memorial tablet placed in the Church of St. Paul, Kandy, by those who knew

him well, reads :—" In testimony of their respect and regard for his integrity as a man, his ability as a public servant, his gallantry as a soldier and his amiable, social qualities as a friend."

This tablet is annotated with a biblical verse—" Lo, these are the parts of His way, but the thunder of His ways who can understand ? " Adorning this memorial is a piece of wooden sculpture, depicting a tree being struck down by forked lightning.

These are some of the lasting tributes to a man who had unstintingly devoted the best years of his life in the service of his Government in Ceylon, before an untimely death claimed him.

In the year 1824 a young lieutenant, barely twenty, made his first acquaintance with the Island as he stepped ashore at Trincomalee. He was Thomas William Rogers. Tall, quiet and unassuming in demeanour, he had a personality, well-bred as he was, that could not be ignored. He was soon transferred to Colombo as Adjutant.

In 1825, however, he went back to England and returned three years later as Captain. In that same year he became the Commandant of the Military post at Alupotha—eight miles east of Passara—in the Uva district.

Administrator and Road Builder

Six years later, in 1834, Rogers now turning thirty, after a successful period of service at Alupotha, was transferred to Badulla, the capital of the Province, and called upon to shoulder the threefold responsibility of Assistant Government Agent, District Judge and Commandant of the Military forces.

In ten years, Rogers, now a Major, had earned for himself the trust and esteem of the Government he worked for, and in the next eleven years he was destined by his untiring efforts to win the confidence and the respect of the people whom he so unselfishly served to the end.

Though still predominantly quiet and unassuming in nature, he was not prone to hesitate in making important decisions or adopting stern measures, when occasion demanded.

Hardly had he assumed duties at Badulla than he was called upon to quell a small rebellion in his district, led by a man named Chandrajothi, who had set himself up as king. Rogers promptly proceeded to the scene of the uprising, arrested Chandrajothi, who was subsequently tried and executed.

Nevertheless he was a man who had the interests of the common people at heart. Beginning at Alupotha where he was only Commandant of the Military post, he lost no time in bringing to bear the added resources of his threefold office in the amelioration of the conditions of the people in his charge.

The villagers who now became his chief concern were being constantly harassed by herds of wild elephants, which at this time roamed the hill country. The elephant was both a menace to travellers, whose life was often endangered, and to the farmers whose tireless efforts against nature were proved futile in the course of a single night.

Rogers, therefore, was convinced that the elephant was an obstacle to progress, and took upon himself the hazardous task of eliminating it.

At the start he was an indifferent shot and is said to have completely missed the first five tuskers he had shot at. But motivated by the sincerity of his purpose, he spared no pains to develop his marksmanship to that degree that he could confidently bring down an elephant with a single shot, ever so often as he ran into them, while engaged in his major task of opening up the area.

Himself an engineer, Rogers was obsessed with the idea of building roads to serve his people. Some of these roads, which were traced and constructed by him, even today exist as a part of the network of roads leading out of the hill country. These are the roads :—

From Badulla—to Hambantota *via* Wellawaya ;
—to Ratnapura ;
—to Nuwara Eliya ; and the road to Batticaloa.

Another road which he constructed was the lower Badulla road, which provided a shorter route to Kandy. This road has since fallen into disuse and it is of interest to note that the last Government's second six-year plan envisages the re-opening of this route.

Roger's ability to build roads efficiently was, no doubt, due to his association with that great road-builder, Major Skinner, whom he had the good fortune to meet during his early days in Colombo. Skinner, an older man, took a great liking to Rogers through their affinity of interests and could not have paid him a greater compliment than saying, " We were very fond and justly proud of him, a nobler fellow, a finer soldier, or a truer friend could hardly be imagined."

Apart from his road-building, he was also responsible for the construction of many bridges, resthouses and public buildings, and the maintenance of several civil and military buildings.

As an administrator, one of his greatest achievements was to accomplish successfully the second and third commutation of the grain tax, after the miserable failure of the first commutation by one of his predecessors. Difficult though this task was, Rogers by his sympathetic understanding of the people was able to reconcile them to the British Government once more.

Amidst all his arduous duties, Rogers found the time to devote himself to yet another pursuit. He was the first to open coffee plantations at Badulla and Haputale.

With all this he was not one to neglect his social calls which had to be made over great distances either on horse-back or on foot. Now and again of an evening he would go to Kandy to visit his brother officers. On such occasions he took the lower road constructed by him which crossed the Uma Oya.

Twice, when this river was in spate Rogers escaped drowning, but on each occasion he lost his horse in mid-stream, and was compelled to swim for it ; he reached the further bank with great difficulty, whereupon he continued the rest of his journey on foot.

Yet another incident relates how Rogers was once delayed by monkeys while he was on his way to respond to an invitation to a dinner at Wilson's bungalow. That evening as his work had taken him to the vicinity of the bungalow, he decided to proceed direct to the dinner. Having plenty of time he stopped at a stream nearby for a bath. Leaving his clothes on the bank he immersed himself in the refreshing waters and was soon relieved of the heat of the day. But his enjoyment was short-lived, for, on glancing towards the bank, he noticed to his utter dismay two monkeys running off with his clothes.

Realising the hopelessness of his plight, for the monkeys seemed to have disappeared for good, he began to call out, hoping that someone in the bungalow might hear him. After some time his host turned up and provided him with fresh clothes.

Elephant Hunter

Today, one hundred and eleven years after his death, this great pioneer of Uva is hardly known. Paradoxically the few who still remember him, know him not so much as one of the foremost administrators that this country has had, but as a fearless elephant hunter, whose record bag perhaps has no parallel the world over. For this man was individually responsible for the destruction of 1,400 to 1,600 elephants, during his seventeen years in Uva.

Although this feat seems fantastic, its credibility is in no way diminished, for Rogers himself is said to have kept a record of the shooting of 1,300 elephants, and thereafter given up the count. Further, his innumerable encounters with elephants bear ample testimony to the authenticity of this staggering achievement.

Rogers' reputation as a hunter was not confined to Ceylon only. When His Royal Highness Prince Waldemar of Prussia visited Ceylon in 1844, to Rogers fell the task of accompanying the Prince on an elephant hunt.

An incident on this hunting trip speaks highly of Rogers' calmness and accuracy in times of imminent danger.

Prince Waldemar was standing on an elevated spot when a herd of elephants came crashing through the thicket. Rogers at the time was tracking an elephant near by. His attention being attracted by the noise of the herd, he rushed to the side of the Prince and was just in time to halt the leader, which was approaching the Prince, with a bullet through its ear. Hardly had this elephant crashed to the ground, when Rogers noticed the elephant he had been tracking earlier making its way towards the clearing stealthily from behind. Rogers calmly turned and felled the beast with a shot through its temple. The rest of the herd then retreated.

When Governor Stewart Mackenzie was on an official tour of Badulla District, he had expressed a desire to Rogers that he wished to shoot an elephant. They went out to a place called Nilgalatalawa and halted at a spot which is now named Rogers' Park.

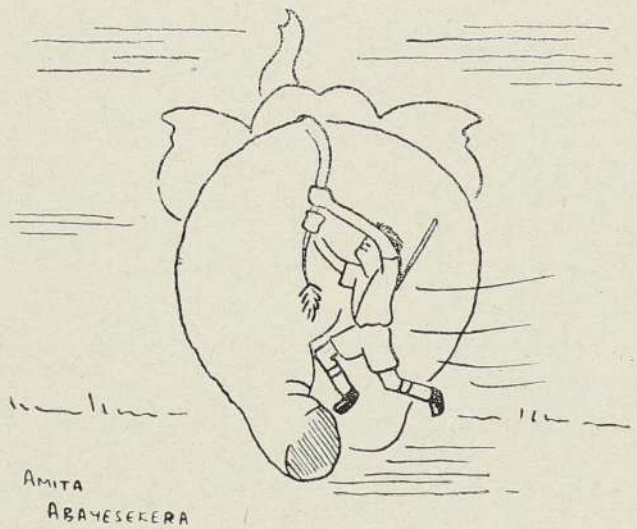
When an elephant was sighted, the Governor is said to have lost his nerve, and rather than shoot at the animal he took refuge behind a Bo-tree. Here he began to play a game of hide-and-seek as the elephant came nearer. Rogers watched the Governor's antics with amusement for sometime, and then shot the animal himself much to the relief of the Governor.

The shooting of elephants was mere routine to Rogers. Quite often, on circuit, he is said to have shot more than one elephant a day, so much so, that even a sudden intrusion by an elephant did not perturb him at all.

On one occasion when Rogers was surprised by an elephant he did not think it immediately necessary to desist from enjoying the cheroot he was puffing at. Instead he waited till the beast drew nigh, unhurriedly placed the cheroot on the ground, shot the elephant dead, and resumed his smoke as though nothing unusual had happened.

On another occasion an elephant is said to have got the better of Rogers because he did not have a gun. The incident is not without an element of humour. Rogers taken by surprise had just enough time to climb a tree, but not before the elephant with its outstretched trunk had plucked off his Wellington boots, even as he was still gaining the safety of the higher branches.

The elephant not to be outdone remained at the foot of the tree and held Rogers a prisoner



for almost twenty-four hours before it wandered away into the jungle again.

To Rogers must also be given the credit of having destroyed two elephants with a single shot. This rare achievement was made possible when he shot at a mother elephant which collapsed on its baby killing it instantaneously.

Yet another incident clearly illustrates Rogers complete lack of fear in dealing with elephants.

On information received that a rogue was terrorising the villagers of Matale, Rogers lost no time in proceeding to the area. He had not to wait long before the terror-stricken beast dashed through the streets, pursued by a shouting mob. Rogers realising the danger of shooting at the oncoming beast allowed it to pass him instead, and with the deftness of an acrobat swung on to its tail to which he firmly clung much to the amazement of the pursuing villagers. The elephant careered through the nearby jungle till it reached a clearing, whereupon it decided to stop and take a look around. Rogers quickly disengaged himself, unslung

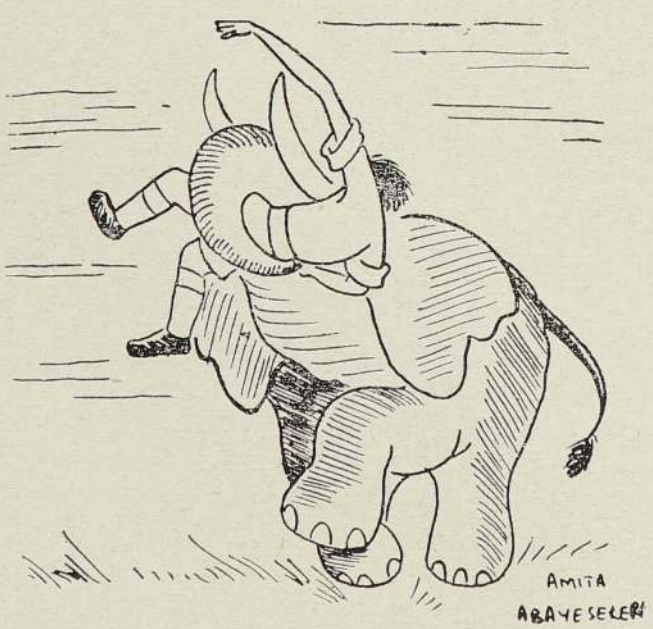
the gun from his shoulder, and as the animal turned he shot at it at point-blank range.

In his long campaign against the wild elephant, it is significant that Rogers always brought down the beast with one shot. But one day towards the end of the year 1841 his luck seemed to have failed him.

On this day, December 29th, Rogers was tracing a new track through the jungles off Hambantota. During the course of this work in the forenoon he had accounted for several elephants, and was on the look-out for more as he was aware of a herd in the vicinity.

When he came upon this herd he fired at the foremost animal, which appeared to turn away after it had been hit. Rogers, somewhat surprised, closed in for the kill. He fired a second shot confident of bringing the beast down. The elephant, however, stung by the shot turned around almost immediately and before Rogers realised his plight the infuriated beast had him in its trunk and whirled him about over its head, but somehow refrained from dashing its victim on the ground. Instead, dazed and bleeding it carried Rogers to the crest of a little mound at the bottom of which ran a stream.

Here it put Rogers down and attempted to crush him with its head all the time giving vent to its anger with hideous growls. Maimed, severely bruised, Rogers, however, was not bereft of his wits. Each time the elephant's head drew nigh, he made use of the sloping ground to propel himself away from certain death, until the bank of the stream was reached.



Embedded in the soft sands, Rogers now proved a difficult quarry for the maddened creature to pick up. Time and again its efforts to lift him up by his clothes failed, as his frayed garments tore at each attempt till he was almost stripped.

Impassioned by the apparent elusiveness of its victim, the impatient animal with a sweep of its trunk shoved Rogers in between its legs, and began to play a diabolical game with him by kicking his body from its fore-legs to its hind-legs and back.

In such an eventuality Rogers had a preconceived idea as to how he should act. He had decided to feign death, and this he now did with admirable courage, rendering his body limp and lifeless and not uttering a sound.

Taken in by this ruse, the elephant seemed suddenly to lose interest in its victim. Picking up his torn garments, it stepped over his body with caution, and flourishing the fragments in its trunk, it moved away trumpeting wildly.

A silent spectator of the whole incident was a villager, who had wisely refrained from using his gun as long as Rogers was at the mercy of the elephant. However, seeing the animal move away, he had no difficulty in bringing it down with his old single-barrel gun.

This villager with the help of the others rendered immediate first aid in their primitive way, and bore him in a crudely constructed stretcher to Badulla hospital, which they reached the following morning. Here it was found that Rogers' left shoulder was dislocated and his left arm broken in two places in addition to several other minor injuries, which necessitated his confinement to bed for three months.

The simple villagers hardly thought that

Rogers would survive this ordeal. But when he was back at work, none the worse for his adventures, the talk naturally spread that he bore a charmed life, and that nothing on earth could kill him ; they went even further, saying—that only lightning would destroy him.

Despite his injuries Rogers fulfilled his day-to-day tasks ; nor did his frightening experience deter him in the least from continuing his ceaseless campaign against elephants. More and more of them fell to his gun. He did not heed the advice given him from time to time to desist from the dangerous sport.

" It's all Over Now . . . "

ON the 7th of June, 1845, the Government Agent of Kandy, Mr. C. R. Buller, accompanied by his wife, arrived at Haputale on a tour of inspection of the area. Rogers who was expecting his superior officer went up from Badulla to meet him.

Having breakfasted at the Haputale Resthouse, which is the present post office, Rogers lost no time in taking his chief out on inspection. They had not been out long before an impending thunder storm drove the party back to the resthouse, which they had barely reached when the storm struck with all its fury.

Typical of the local thunderstorms, the shower, though intense while it lasted, soon abated. Meanwhile Rogers was enjoying a drink inside with Mr. and Mrs. Buller. Observing that the shower had now almost ceased, Rogers politely interrupting his conversation with Mrs. Buller, came out to the verandah with the drink in his hand. A casual glance skywards satisfied him that the inspection could continue. Turning around he called out to Mrs. Buller, who was following him out, " It's all over now."

In the next instant there was a blinding flash, followed immediately by a resounding thunder clap which rent the air. Mrs. Buller stood rooted in the verandah. The main mast of the pandal outside was ripped in two. The stable hands and horses in the out-houses were struck senseless.

Rogers fell face downwards at Mrs. Buller's feet, struck dead by lightning.

A distorted piece of metal on his boot showed that the lightning had been attracted by his military spur.

Many were the praises and commendations that Rogers had received when he was alive, not only from his colleagues but also from his superiors.

Governor Sir Robert Wilmot-Horton under whom Rogers had served, once speculating on the possibility of being given another lease of life on this earth, had said that he would have certainly preferred to choose the life of Rogers to any other person he had known.

Lieutenant J. W. Grylls who served under Rogers and knew him intimately described him as possessing " a peculiar gentleness which one does not usually associate with a person bred to the profession of arms."

Even after his death, Major Skinner to whom Rogers was much indebted, had this to say, " This splendid fellow at the time of his death was performing most efficiently, and to the entire satisfaction of the Government and the public, the offices of Government Agent of the District of Uva, District Judge, Commandant of the District, and was also my assistant in charge of the roads of that Province—duties which, after his death, required four men to perform with far less efficiency, promptitude and punctuality than when they were administered by him alone."

Another intimate friend of Rogers, Major Kelson, who was residing at N'Eliya took charge of his body, which, except for a discoloured heel, was not disfigured, and had his remains interred at the cemetery there. The present location of this cemetery which is today referred to as the old cemetery is behind the pavilion of the N'Eliya Golf Club.

In this unkempt graveyard, amidst the disintegrating tombs of personalities of the old

colonial days, lies the dust of this endeared ruler of Uva, who had given the best years of his life in the service of its people.

His tomb itself, a rectangular slab of stone about three feet high has been unmoored from its foundation, and leans heavily on a slender tree. The tombstone which adorns it bears a deep lateral crack which has been cemented over. Above this is engraved his epitaph which reads :—

> In Memory of Thomas William Rogers of Her Majesty's Ceylon Rifle Regiment. Many years Commandant and Assistant Government Agent at Badulla. Stricken to death by lightning at Haputale pass on the 7th of June, 1845. Aged 41 years.

The presentiment that the simple villagers had as to how Rogers would meet with his death having been fulfilled, it was not long before legends grew up among them—legends which sympathetically attempted to explain the tragic circumstances of his death.

Mahima, an old resident of Haputale, who works as a peon at the Post Office, related a story told him by his grandfather. Rogers it appears had some time prior to his death shot at and killed an elephant sacred to the Kovil of the Kataragama god. This angered the god so much that he had Rogers struck to death by lightning. All that remains today of this Kovil which lies on the crest of the hill overlooking the present Post Office, is the dilapidated foundation, at which there was evidence to show that ritual was still being performed.

Another legend, corroborated by Lt.-Colonel A. Watson in a letter to the " Times of Ceylon " (1895) attributes his death to the displeasure of the gods incurred by a supposedly rash act. When Major Rogers was tracing a bridal path from Badulla to Haputale he had come across a Bo-tree, which he had ordered to be cut down. His subordinates had begged of him to desist from such a sacrilegious act. But Rogers had his way, and his faithful people are said to have built an " ambalama " at the spot by way of atonement.

It is also said that Rogers had been once denounced by a Buddhist monk whom he had encountered in the course of shooting elephants. This monk had predicted his impending death by lightning if he continued to slaughter these beasts.

The simple superstition of the villager went even further. The crack on the tombstone, referred to earlier, they explained was caused by lightning sent down by the irate gods against a man who had dared to defy them when he was alive. The belief is current that the grave is still struck by lightning once in seven years.

About the crack on the tombstone, however, there are conflicting reports. A newspaper source affirmed that there was evidence to show that the tombstone was broken at the wharf in Colombo, when it was being unloaded. But a correspondent to the same newspaper, Lt.-Colonel H. C. Byrde of the Ceylon Rifle Regiment, a personal friend of Rogers, whose residence was not far from the cemetery, denied this allegation, and added further that the tombstone was not struck by lightning.

But those for whom Rogers had worked and laboured, and those who knew him well, saw to it that legend alone should not perpetuate his memory. At a public meeting held shortly

The grave of Major Rogers at the old cemetery, N'Eliya, with the deep lateral crack across it.

after his death it was suggested that a column like the Dawson tower be erected at the Haputale gap to commemorate this great man and road builder. But Rambukpotha Dissawa, the chieftan of the District, in a stirring speech reminded the people that they had always commemorated one of their own by building a place of worship. He, therefore, appealed to them that the best memorial to Rogers would be a place of Christian worship. This appeal was warmly and unanimously received by those present, and public contributions towards this endeavour were made liberally by the people of Uva, among whom the majority were Buddhists.

Thus, ten years after his death (1855) the memory of this devoted servant of Uva, Thomas William Rogers, was wrested from the limbo of legend and perpetually enshrined in a lasting edifice—the Church of St. Mark, Badulla.

My First Experience of a Rogue Elephant

By MARJORIE TUTEIN-NOLTHENIUS

IT was in 1937. We left Haputale at 8.30 with H. V. Doudeney for Tanamalvilla. He had been requested to try and shoot a rogue elephant which was damaging the small village of Huratgamma. He asked Con to come with him, so I insisted on accompanying them. Out at 6 a.m. to the village, but the elephant had not been there that night. After lunch we went to Bogaswewa—very pretty country and a lot of game tracks. Doudeney stalked a small herd but had no luck. Con shot a cobra. Sitting outside the resthouse I saw my first racket-tailed drongo. Later there was a partial eclipse of the moon. Next day we were called at 4.30 at day light, and were off to Hudo Oya to try and locate a buffalo said to come every night and damage a chena and generally make a nuisance of himself. He had not been there for the last two nights. So we returned to the R.H. for breakfast, shooting a jackal and a jungle cock on the way. We decided to pack up and try for snipe at Wellawaya as Doudeney had to return to Ohiya Estate that evening. On reaching the Huratgamma P.W.D. lines we were stopped by Sudu Banda and two coolies with news that the elephant had visited the village last night. We left the car at the lines and I was carried across the river. Just behind the village we picked up fresh tracks—great excitement; there appeared to be two or three elephants about. The tracking led by H.V. was the most interesting thing I had ever done. He kindly pointed out all the signs which, of course, I would never have known to look for: mud on a branch high above the ground off the elephant's back, the bark scraped off a branch lying across the track by the toe nail. Most of the going was through small glades and we walked for miles. Then the tracks led into thicker jungle after about 1½ miles. A branch cracks—*the* sign. Seconds later we see the elephant crossing on our right like a shadow. We then see two more on our left, by crouching on the ground and peering through the tree trunks. They wind us and start moving off. We run to cut them off and just as we get on to a small game track, see an elephant standing just on the edge of the jungle in a small glade about 15 yards away. We all kneel down. Con, who drew first shot, H.V., self, tracker and two coolies, one with the spare rifle. We could see the elephant's trunk trying to locate our position, as the wind was tricky. Suddenly he wheels round and in the fraction of a second, charges on top of us, ears spread out, trunk up and screaming with rage, crashing through the overhanging

branches like a tank. Hearing a noise behind me I see the coolies running, I do so too and hurl myself into a bush. I hear a shot but the crashing noise continues ; so I have visions of C. and H.V. having been flung on one side and the next moment of myself being picked out of my bush and torn to pieces—another shot and silence and I hear Con shout "Look out." I disentangle myself and creep down the path with shaking legs and, I am sure, a face green with terror and see the elephant on the ground but struggling to get up. Con walks up behind his head and finishes him off. C. and H.V. had stood shoulder to shoulder and fired simultaneously into its face and had just time to jump out of the way as it fell where they had been standing—luckily not on top of Con's tirai. All took a few seconds—closest possible shave : most exciting moment I have ever known or want to know, as it was " touch and go," and a question of either him or us : a most furious and angry charge but a grand sight. How an animal like an elephant can wheel round and get up speed as this one did is remarkable. What would have happened had we not stood our ground, I dread to think, and our nerves were badly shaken.

He was an old bull but in poor condition—he died gamely. The cooly with the spare rifle turned up about half an hour later ! We took some snaps—cut off the tail and both front feet and suddenly started to laugh and laugh until the tears ran down our cheeks, reaction I expect. Back at West Haputale at 5 after the most exciting and successful trip we have ever done or are likely to have. We are very lucky we can tell the tale, and to see such a charge must be extremely rare.

Wilpattu—Easter, 1956

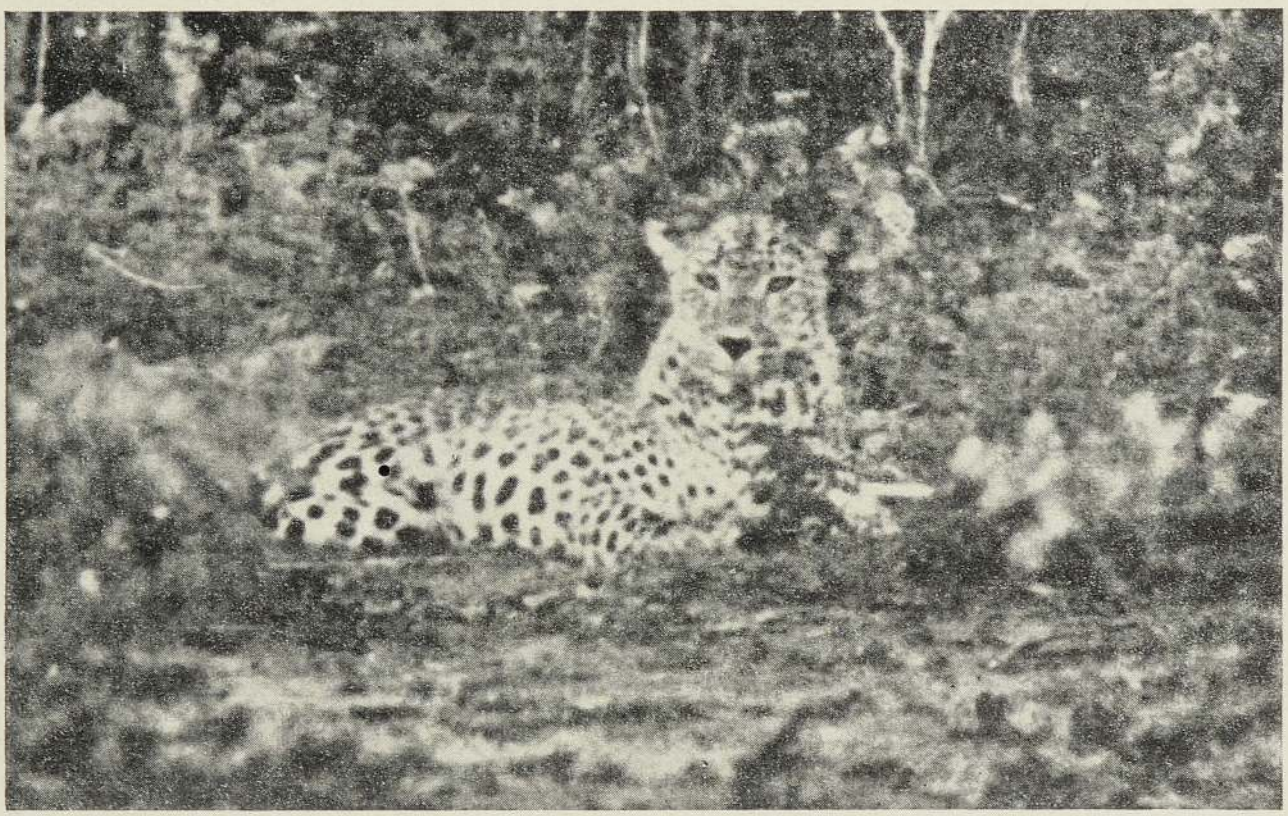
By R. P. GADDUM

MY better half picked me up at the Office at 10 a.m. on Maundy Thursday, March 29th, and, as usual, I had nothing whatsoever to do with organising our holiday in the jungle—a most admirable arrangement which I commend to all married men. With traffic rather heavy we did not get across Victoria Bridge (which is a good starting point from which to time a journey) until 10.15 but from here we pushed on non-stop (except to fill up with petrol, bananas and buns at Puttalam and buy a couple of boxes of matches at a road side kadday) to Marandanmaduwa bungalow which we reached in the excellent time of four hours and twenty minutes. The run was quite uneventful and the only animals seen were a mongoose on the main road and two herds of spotted deer, one of them grazing round the bungalow, in the National Park. Two jungle fowls and a hare have also to be recorded—rather unusual as they are not normally out and about in the heat of the afternoon.

After lunch and a short rest we set out with Malhamy on a preliminary tour of inspection of those Vilus whichare a ccessible by car, visiting Thimbiri Vilu, Mahapatissa, Demata Vilu, Kumbuk Vilu, Kokkare Vilu, round which we drove, and finally Nelum Vilu where we found another party already in occupation. As the Park becomes more and more popular, as it has done to an unbelievable extent during the last five years, overcrowding is going to become an increasing problem for there is only one road which leads to those portions of the Reserve which can be reached by car and as most of us are naturally selfish, and resent being disturbed by others, when watching for animals, difficulties are bound to arise unless the road system can be greatly extended and/or blocks allocated to parties for watching as they are for shooting.

Game, as usual, was plentiful, particularly spotted deer but we also saw a sambhur hind and her newly born fawn, buffalo, a muntjac or Ceylon barking deer, jackal, hare, some crocodiles, plenty of both whistling and gargeny teal, several jungle fowl, a peacock, a considerable number of aquatic birds and waders, particularly ibis and storks and, to end a perfect evening, a magnificent leopard. My wife saw what she thought was a jackal and as Malhamy, our guide, was not satisfied with this diagnosis, he made me reverse the car when closer inspection revealed that the "Jackal" was the head and shoulders of a leopard who was lying down. After a time he wandered into some bushes but on driving the car along the track in his direction he stopped and sat down again, then went back to where he was first seen and lay down once more. We watched him changing his position from time to time until it started to get dark, and with the greatest reluctance, we eventually left him there after he had entertained us for the best part of twenty minutes and, for all I know, he may be sitting there still. He was, I think, the most self-possessed leopard I have ever seen and it was a pity it was too dull and dark to take a cine shot, for he was a particularly fine male with a magnificent coat.

It was wonderfully cool during the night with the thermometer below 70 early this morning and, for the last hour or so, I have been indulging in the delightful pastime of doing nothing except sit in a long chair and, when feeling energetic, lazily lifting up a pair of binoculars to scan the tank in front of the bungalow, on which bird life abounds as there are plenty of teal, terns, divers, egrets, waders and several jacanas collecting, as and where they can, the wherewithal to maintain life. The water lilies, both pink and white, are all in bloom and it makes a wonderful picture against the green



R. P. Gaddum

"The most self-possessed leopard I have ever seen"

jungle and blue sky flecked with small white clouds which look like cotton wool.

After sleeping most of the morning and again after lunch we set out at a little after 2 p.m. and had a relatively uneventful prowl round the Park during the afternoon and evening though we did see a bear on the road near Kumbuk Vilu, a most unco-operative animal who scuttled into the jungle almost as soon as the car appeared—time, roughly, 3 p.m.

Much of our evening was spent watching birds on the edge of Nelum Villu where whistling teal, cotton teal, divers, jacanas and other water birds were active the whole time.

The Kumbuk tree under which we sat was literally alive with birds, particularly paradise fly-catchers of which there must have been between twenty and thirty in every stage of plumage from the red ones with short tails, to long-tailed reds and whites. One of them, in fact, had one red and one white tail feather which is most unusual. I have only seen one before. There were also quite a number of Ceylon azure fly-catchers and plenty of bee-eaters. Animals, however, were few and far between though we saw a few deer, pig, buffalo, sambhur and a jackal, whilst peafowl, as usual, were very scarce.

How great an element of luck obtains in seeing animals is illustrated by the fact that we saw the bear as a result of having to return from Borapan Vilu where we found another car in occupation. Another party in the Park, which consisted largely of children, saw a herd of eight elephants drinking at a pool called Mayila Wila at a little after three in the afternoon, while the occupants of a car which was about twenty minutes behind us when we were returning saw a leopard and an elephant, also a jungle hen scratching for insects on the middle of the road for her two tiny chicks.

After a quiet and cool night—the only jungle noises I heard were some monkeys and an elephant trumpeting in the distance—we got up at 5 a.m. (Saturday, March 31st) and, as soon as it was light enough to see, we did the same drive as we had done the previous evening but drew a more or less complete blank. Both at Wilpattu and Yala the mornings are invariably disappointing as compared to the afternoons and evenings but even so one always goes out with high hopes only to return muttering "I knew we wouldn't see anything." Still, there it is, and whether one sees game or not it is always a thrill to drive through the jungle just when the dawn is breaking and, after all, you haven't even a chance if you go on sleeping in the bungalow!

As I have already said, luck (assisted possibly by a little knowledge and the drive which makes one go out and stay out most of the day) is what matters most, and when one thinks that the Park or Villu, which one is watching, or through which the car is passing, represents only a microscopic part of a stage with an area of some 250 square miles it supports this view.

Easter Sunday morning and though I have a lot to write about, I propose to start today's instalment with an "I told you so!" story on the subject of luck being the most important factor for, at a little after 9 a.m. yesterday morning, some visitors to the Park, on finding there was no accommodation available, decided they would go round the Villu area before returning though it was, admittedly, the worst time of the day for seeing any animals other than possibly a deer or two. When they returned shortly after 1 p.m. we learned they had been rewarded by seeing two leopards! In some ways it is just like buying a sweep ticket!

After lunch we decided we would like to have a look at the Northern boundary and obtained the departmental jeep which visitors can hire for a tour of exploration. The route we followed was North to Malimadua and thence West parallel to the Moderagama Aru, *via* Sudupadu Kallu and Kattan Kandal Kulam where, incidentally, there is a most attractive unfurnished hut similar to that which has been built at Kumbuk Villu, and then south west *via* Uduppu Villu to Kali Villu where we spent

the night and returned to Marandanmaduwa Bungalow getting back here at about 7.30 a.m.

Though we saw no elephant, bear or leopard there were signs of the former everywhere in the shape of broken trees, droppings and tracks, and it is, I think, quite evident, that except in the really dry weather they are almost entirely nocturnal in the Wilpattu area. This is doubtless a legacy from the bad old days when they were captured in season and out of season by the Pannikkans of Marichchikaddai whose skill in this direction is legendary.

Tracks of bear and leopard were frequent and between Kokkare Villu and Kumbuk Villu a leopard and her cub had walked down the road we were following just prior to our arrival. Did I say luck was important ?

Of game seen, sambhur, particularly along the track near the Moderagamaru, were numerous as we saw no less than twenty-two, of which nineteen were stags, in about five miles. They were all lying in the shade of some bush or tree and even when startled by the jeep they seemed incredibly tame.

Spotted deer too were everywhere and we saw something like twenty groups of individuals or small herds during our journey to Kali Villu. They are said to be, and I can well believe it, the most beautiful of the deer family.

Buffaloes were also in evidence but not many of them, whilst only one pig was seen—early this morning on Kali Villu.

Jungle fowl were extremely common and I counted 24 between Kali Villu and Marandanmaduwa this morning—twenty-two of them being cocks and cockerels. There also were a lot of pigeons about including bronzewings (though I believe they really belong to the dove family), green pigeons and imperial pigeons but the strangest sight was two great stone plover chicks at Kurutti Pandi Villu for as soon as they knew they had been seen they lay flat on the sand with their necks stretched out in front of them pretending to be part of the scenery. Their anxious parents watched them from about 200 yards away and returned to their children hurriedly as soon as the " Jeep " had moved on.

A wonderful run and I must pay a tribute to the driver whose handling of his vehicle on tracks which were, to put it mildly, extremely rough and rugged, was masterly. It was touching to see him give the " Jeep " a once-over whenever we stopped for he was obviously proud of his charge which he keeps in showroom condition and spotlessly clean.

Shortly after we returned Mr. de Alwis had to set out in his jeep to investigate a report that a dead bear had been seen close to Marandanmaduwa bungalow and back he came in about an hour with the corpse of a cub, said to be about a year old. It had certainly not been dead more than an hour or two, for it was still covered with ticks and a post-mortem examination revealed the poor little beast had died of general debility. It appeared probable that it was the cub of a bear which was shot in December attacking one of the watchers. It ran into the jungle and since then it had obviously not been able to fend for itself properly for it was very emaciated and had signs of acute tummy trouble which in turn must have led to its final collapse. A sad story.

At about 3.30 we set out in the jeep once again for Borapan Villu *via* the ruins of Galbendi Niraviya and what an evening it was. Our first experience was passing through a large herd of spotted deer quite near the bungalow. They were so tame they hardly deigned to move —in fact, a large stag who was lying down just stayed put though he could not have been more than 15 yards away from our noisy vehicle.

After following the same track we had gone along on the previous day for about four miles we turned west into some lighter park country and in the first large glade saw three peacocks, all in full plumage with magnificent tails. Further on, were five jungle fowl, three cocks and a couple of hens out in the open and I was watching them intently when a large bear suddenly intruded himself into this sylvan picture. He took just one look at the jeep,

didn't like it, and started to canter down the track from where he had come. This suited us admirably as we were able to follow him until he vanished into some thick scrub. It must all have been a terrifying procession from the point of view of the jungle fowl who promptly vanished.

The next unusual incident occurred when we were crossing an eroded piece of land which, apart from a small scrubby thicket about ten yards, in diameter was completely bare of pasture or water, for when the jeep was about twenty yards away the thicket literally vomited eight sambhur, all of whom were lying up in the shade from the heat of the day. There were five stags and three hinds and it must have been a particularly cosy after luncheon party !

A little further on, and this time in heavy jungle with high trees, we saw a Ceylon Hawk-Eagle or Serpent-Eagle devouring something in the middle of the jeep track and though he made a determined attempt to fly away with his prey, its weight proved too much and he had to abandon his meal, a full grown jungle cock, equal in weight, I should imagine, to its killer. The eagle had already eaten the jungle cock's head and part of its left side for the stomach could be seen through bared ribs and, as we left the body where we found it, I have little doubt it was finished off at leisure. I tried to reconstruct the 'crime' and came to the conclusion that the eagle must have seen the jungle cock from a high tree on which it was perching and thereafter converted itself into a guided missile with disastrous results to the fowl.

Next came the greatest thrill of the evening for after we had gone two miles or thereabouts we were lucky enough to see a pair of leopards, one standing, and the other sitting, at the edge of a patch of scrubby jungle. The smaller one was light in colour and was, I imagine, a female but even if this guess is incorrect the other was far too massive to be anything but a very large male with a particularly dark coat. He only let us watch him for a minute or so before he disappeared (the female had already effaced herself) but even so he formed an unforgettable picture.

In addition to the high spots (this is not intended as a pun) of this journey through the jungle we saw plenty of commoner game, particularly deer as on Borapan Villu alone there were four sizeable herds and at Nelum Villu we again saw a large number of paradise flycatchers having their evening bath.

A word about the *Galbendi Niraviya ruins* which I have already mentioned. They are well and truly off the beaten track and though no information was forthcoming as to the era to which they belong, one wonders what stories they could tell to our own particular generation.

Bits and pieces of chiselled rock are scattered over quite a large area but the principal " Ruin " consists of a large stone plinth about, I should estimate, 16′-0″ × 24′-0″ in area and standing some 30″ above the level of the ground. The sides to this rectangle are built of what I can best describe as " fitted " stone, an eccentric form of ashlar in which each stone is cut so that it will bond in perfect register with its adjacent fellows, the general effect being that of a jig-saw puzzle with the vertical joints all ninety degrees to the base but the horizontal courses anything but parallel to each other and hewed so that they will " fit " their lower course. The top course was levelled off. Round the four sides of the plinth and projecting about nine inches from the base are a number of rectangular dressed coping stones about six inches in thickness and about 6′ × 3′. How they were ever got there and were put in place without a block and tackle, for they must each have weighed well over a ton, is a problem which I leave to others, so I will confine my comments to recording the impressiveness of these ruins in their absolute simplicity and massiveness, bearing in mind their remoteness from civilisation as we know it today. I have since learnt these ruins are similar to those found in the western monasteries at Anuradhapura. They are said to be characteristic of the

Tapovana or forest dwelling Sect of Ascetic Monks and belong to the 7th/8th Century. The architecture is quite plain with no dagoba, images or carvings).

This morning, Easter Monday, April 2nd, we did a farewell round of the Villu areas in our car—a Ford 10—and, although we did not see anything of particular interest if one disregards deer, pig and the other commoner forms of fauna (we counted, incidentally, 20 jungle fowl during a run which only lasted an hour and half at completely the wrong time of the morning) it was very lovely seeing the Villus, green, with lush pasture and full of water which we all hope will last until this year's North-east rains once again replenish these reservoirs of life in this dry and arid area.

During holiday periods I am afraid the Wilpattu National Park will provide, in an increasing measure, an administrative headache until the difficulty of only a relatively small area being accessible by car is solved. Congestion is bound to occur when the approach to the nearby Villus has to be made through the bottleneck of a single road and, of course, until the animals become more "educated" (and I feel it is too much to hope that the "Swabhasa," or "Sinhalese only" policy of Government will provide a solution) too many cars, containing too many people travelling over the same roads will produce a "Devil take the hindmost" outlook which, in the long run, will prove prejudicial to the efforts of our Wild Life Department whose results, during the six years I have known Wilpattu, are beyond praise and most certainly beyond what it was expected they would be able to achieve in so short a time. In fact, that the problem mentioned has been created is due to their success in making this area so popular.

A wonderful run back which only took four hours and twenty minutes brought our perfect trip to an end and having had a lovely bath, the first real soak I have had since we left, I shall try and finish this short account of our Odyssey.

After doing nothing except relax and enjoy myself I want to first say "Thank you" to my wife who organised everything on a unilateral basis.

Next, I would like to place on record my thanks and appreciation to Mr. C. W. Nicholas, the Warden, for his kindness in telling us where to go, and Mr. de Alwis, the Ranger, for his co-operation and assistance. His enthusiasm is terrific and it is quite obvious he loves his job and is never happier than when showing visitors the beauties of Wilpattu.

Malhamy, as in the past, continues to amaze me for his sight is incredible—I have yet to meet any game watcher who can spot game better than he can, whilst his knowledge of the Park and the habits of the local fauna is encyclopaedic. He is also tremendously keen and, if he had his way, I am sure, he would like any party in his charge to be out and about from sunrise to sunset.

Wilpattu continues to improve, thanks to the keenness and unremitting attention it receives from all concerned with its administration, and this Island owes a great debt to the Wild Life Department and the Officer who guides its destinies, Mr. C. W. Nicholas and his staff.

FOOTNOTE

These notes are only intended to give an outline of a fleeting trip which my wife and I paid to Wilpattu, accompanied by the Creightons, on the 7th, 8th and 9th of June, 1956.

We were all in the Park by 2.45 p.m. Then, after a cup of tea and a short rest, we set off by Jeep to Kali Villu approximately 16 miles away.

We saw a large number of deer, pig and buffalo *en route* but the only outstanding experience was seeing a large leopard stalking some deer in a small Villu, about two miles from Kali Villu, through which we passed when returning.

The leopard was sneaking along the edge of the jungle and though quite visible to us the deer, who were feeding in the open, were quite oblivious of their danger until, hearing the jeep, they looked up and saw not only us but their enemy as well—I felt rather sorry for the leopard though I have little doubt that he had a more successful stalk later in the evening.

Next morning, Friday, the 8th, saw us out of the bungalow before 5.30 a.m. on a tour round the Villus but once again we did not see anything out of the ordinary, so returned to Marandanmaduwa in time for breakfast at about 7.30 and spent the rest of our morning lazing in the bungalow and watching birds and animals drinking at the Marandanmaduwa tank. "Among those present" were deer, sambhur, buffalo and pig.

In the afternoon, we decided to go to Nelun Villu at 1.30 immediately after lunch, for three elephants had been seen there the previous afternoon at 3 p.m. We had, however, a disappointing vigil, for while we were there the only animals which came down to drink consisted of five or six herds of deer, several sounders of pig, one of them being 22 strong, about half a dozen sambhur and, of course, the inevitable buffalo. A number of peafowl too made their appearance and they appear to be increasing quite appreciably in this area, for, five years ago, both peafowl as well as jungle fowl were comparatively rare.

At about 5 o'clock, as we were all tired of waiting, we decided to visit the adjacent Villus and return to Nelun Villu in half an hour (by which time) it was hoped, some elephants would put in an appearance) and it was lucky we did so, for near Walas Wala we were able to watch a bear drinking at a jungle pool for the best part of five minutes before he became aware of our presence and, after giving us a thorough inspection and deciding we were undesirable intruders he scuttled into the jungle. He was quite close, not more than 20 yards away, and we had a magnificent view.

On returning to Nelun Villu, we found three watchers who were very excited, for a large leopard had emerged from the jungle on the opposite side of the water just prior to our arrival and, after slaking his thirst it had walked along the edge of the tank and then lain down in some long grass which completely hid it from view. Nevertheless, as we were assured the leopard was still there we did our best to make him get up as we drove our car near its suspected position in the hope that we would see it.

However, as nothing appeared we came to the conclusion that it must have sneaked into the nearby jungle unobserved by the three watchers.

Jim Corbett, in one of his books, refers to the fact that a leopard has the capacity of being able to conceal itself effectively behind a tuft of grass, and my experience with these animals makes me confirm this statement. It is quite uncanny the manner in which one can mark them, down, when, for instance, they disappear in a depression in the ground, behind a log, or in a small thicket, and, when you get to the actual spot where you last saw them, they seem to have vanished into thin air.

On getting back to Marandanmaduwa bungalow we again heard, as we had done at intervals during the previous night, some elephants trumpeting on the opposite side of the tank and their screams and rumbling noises continued until we went to bed.

Luck was with us

By PATSY NORRIS

ON a recent jungle trip we had the biggest slice of luck any amateur cine-photographer could wish for, and were able to film a scene that thrilled us all beyond measure.

We had come back to camp after a fairly long and quite successful walk up the river bed. The river itself, being completely dry except for the odd, stagnant pool. We decided we would drive out around the plain just to see what was happening, and debated about taking our cameras. However, as the light was failing we decided to leave them behind, especially as my film was in colour. How wrong we were! And how quickly we had to scuttle back to camp to fetch our cameras! Not five minutes after leaving camp as we came round a corner, there, sitting under a small malitun tree, on the edge of the plain was a bear playing with her tiny cub.

Our excitement was intense as we quickly reversed the Land Rover to collect our cameras, all the time keeping our fingers so tightly crossed that luck would be with us and that the bears would still be there on our return.

It hardly took us five minutes in all, but Oh! what a five minutes! Cursing our stupidity for leaving the cameras behind and, for myself, praying that our beloved jungle would not let us down over such a wonderful opportunity. I think we were all holding our breath tightly,

I know I was, coming round that last corner before the plain and Oh! the glorious sight that met us, she was still there gamboling with the little chap for all she was worth. She rolled him about, and when he stood up on his tiny, hind-legs and caught hold of her snout, she threw her head over to the opposite side with him hanging on, rather as though he were on a trapeeze. She then decided it was time he ceased his rather violent exercise, so sat back in spite of the failing light; she had performed before the camera in true film-star fashion. After she had gone, we continued out on to the plain and on our return trip we were astounded and delighted to see her still almost in exactly the same place. She was grubbing for berries under another small malitun tree while baby gamboled around. It was now far too dark for photography, so we just sat and watched. After a short time she gave a

"Luck was with us"

on her haunches and picked him up on to her lap holding him, and nursing him exactly like a human, with those great cruel claws being—oh, so gentle. Playtime was then over, and she let him scramble off her lap, got up herself and stood, while baby clutched her baggy trousers and hauled himself up on to her back, then she ambled off with baby riding like a minute jockey.

We were about 25 yards away from all this and my camera never stopped whirring grunt, which evidently called baby to heel, he again caught hold of her baggy breeches and hauled himself on to her back, whereupon she proceeded to stand on her hind-legs and climb up into the small tree, baby and all. The tree seemed to sway about in rather a drunken manner, and presently out popped her head through the top branches as she surveyed the landscape, all the time guzzling berries hard. Then her head would disappear while she was obviously hunting for more berries, and in

a short while pop out through the top branches again. We sat and watched, entranced, until she had her fill, then down she slithered with baby on her back and ambled off into the gathering darkness.

The whole episode was so utterly fascinating, and our luck in being able to witness, and film most of it, so tremendous that we all felt even if we saw nothing else for the rest of our stay, our trip had been made for us. However, on this trip, luck altogether favoured us, and one amusing incident happened on our first morning just after we had pitched camp. We went for a short stroll up the river-bed before lunch and on our return, opposite camp, an elephant was standing in the shade, digging in the sand for water. I set my camera up and took some shots of him digging, then sat and watched him. He started to amble across to our side, and the next thing we knew, he had come up the short steep bank straight into camp! We had to "shoo" him off rather smartly, and he shuffled off, tail and trunk on high, with a very grieved expression on his face, poor old gentleman, having had his peace and quiet disturbed.

I wanted some more feet of film of crocodile and this time we were amply rewarded. There was a long narrow stagnant pool a little way down below camp, so one morning early we decided we would try it in the hopes of some "shots" of croc. Our luck was holding as, lying out on a spit of sand, we counted fourteen large ones, basking in the sun. We did a very stealthy stalk along the bank and managed to position ourselves very close, and slightly above them. We then sat and waited for them to come out of their comatose condition and give us some movement, which from time to time they did, either coming out of the water or re-entering it to cool off. So once again the camera whirred away happily and some good shots were secured. Quite a few other animals visited that stagnant pool while we were there, one large boar who seemed to find a breakfast of dead, very smelly, fish floating on the water, most succulent. Having eaten one he kept returning to the water, collecting a fish, and returning to eat it in the shade. His peace was disturbed by, of all things, a large albino pig which came down grunting, to the water for a drink, an incongruous sight, very reminiscent of the farmyard. A large herd of spotted deer came next, followed swiftly by a beautiful sambhur stag with a fine head. Our last visitor of whom we managed to get a fleeting shot, was a black-necked stork. He planed in over our heads and settled on the sandspit, but his sharp eye almost immediately detected us and he was up and away with the sun glinting and gleaming on his glossy blue-black neck. The time now had come for us, unfortunately, to leave, and we had to retrace our steps to camp and take our homeward journey.

Yala—May 24th to 27th, 1956

By R. P. GADDUM

OUR party consisted of seven; first and most important, Raman, our cook, a veteran of many jungle trips, next, my wife (Doreen) in the role of organiser, then Philip Keun (Philip) and Dora Walsh (Dora) both of Colombo. Penultimately come Tiny and Winn Creighton and last and least the writer of these notes.

As the Creightons live near Kalutara it was decided to make a large Ficus tree which forms a natural arch over the Colombo-Galle main road our rendezvous at 6 a.m. on the 24th and, for once, we all arrived at the appointed spot within a minute of each other—a remarkable and quite unique achievement.

It poured the whole way as far as Tangalle

where we turned east and, though I had several exciting skids it had the advantage of keeping the roads free from pedestrian traffic which otherwise would have been exceptionally heavy for it was the Sinhalese Wesak (May Full Moon) holiday and, as 1956 was the 2,500th anniversary of Buddha's birth, the occasion was being celebrated in the biggest possible way.

With only three short stops at Matara, and Hambantota and Tissa, we made such good time that we reached Palatupana before noon and were in the Yala bungalow, an hour afterwards—a good performance as this point is very nearly 200 miles from Colombo.

After a little unpacking we had a lovely sleep, having improvised suitable accommodation for six, excluding Raman, by making Dora's bed on top of a large chest and relegating a mattress on the floor to the writer. We more or less passed out for a couple of hours, so did not start our evening round of inspection until about 4 p.m. when a short sharp shower of rain was just showing signs of stopping.

On our way out *via* Gonalabbe, Buttuwa, Uraniya, Welmalkema and thence to Vilupaluwewa, where we turned our cars, we saw but little except for a few deer, pig, peafowl and buffalo but returning later in the evening was a very different story.

Our first real excitement was trying to see something which had obviously attracted the attention of the inmates of the leading car and it was not until we reached the position from which they were pointing that we saw what it was—a large elephant's head and shoulders peering through a frame of trees and branches not more than ten or fifteen yards from the track! In the circumstances, both cars moved on smartly until they were placed so that they could make a quick get away should it be needed but this subsequently proved to be quite an unnecessary precaution for "Jumbo" was most placid and obliging and went on feeding as though nothing had happened. We must have watched him for about twenty minutes before we decided to move on and we left him still grazing and at peace with the world. A most accommodating animal who gave us a wonderful view of a typical if somewhat elderly wild elephant in his natural surroundings.

Continuing along the Uraniya-Buttuwa Road another elephant was seen, this time, virtually on the path, feeding and squirting water over his back from a muddy pool of rain water until Doreen who was driving the leading car, which contained our watcher, Packeer Deen, Dora and Philip got a little too close. This intrusion on his privacy was immediately resented by the elephant, who made a sudden rush towards the car, ears cocked and head up. It looked most terrifying and hostile.

To be quite frank, I think we all thought the leading car had "Had It" when the watcher suddenly screamed a blast of invective at the advancing elephant using language which, perhaps, it is as well we did not know. Anyhow, it stopped and given this breathing space Doreen turned her car and retreated to a safe distance from where we continued to watch our friend, who resumed feeding as though nothing had happened, until he reached a point which was far enough away from the track to make passing him a safe proposition.

On our way back we saw several large herds of deer and plenty of commoner game, particularly pigs who were grubbing about everywhere after the rain.

All in all it was an exciting evening and we had several whiskys for I think we were all a bit shaken.

Friday, May 25th.—Up betimes, as I think Pepys used to say, though we rather overslept and we set off after a cup of coffee on a morning tour along the road to Katugamuwa seeing a flock of twelve or fourteen peafowl just by the bungalow and a lot more along our route as well as plenty of deer, pig and buffalo. We only went as far as Varahana, from where we returned and then did a run to Buttuwa *via* Gonalabbe and Patnamgala where we visited

the deserted fishing village. On the whole our morning run was disappointing from the point of view of seeing game but then, the mornings are never so good as the evenings. One of the great attractions, however, of spending more or less the whole day on the road is that one always lives in hope, for one never knows what is round the next corner or what fate has in store when dealing with the unpredictable.

We spent much of our day under a tree outside the bungalow watching a stretch of river where we saw a sounder of 14 pig come down and drink as well as deer, buffaloes and other animals. The odd crocodile too was always to be seen, for of this venue it can be said with truth that "Every prospect pleases."

In the afternoon, as the threatening rain did not materialise, we decided to go the whole way to Katugama and found the road remarkably good but we were very disappointed when we got there to find a party with a "Jeep" and a "Land Rover" already in possession. Still, we spent a very pleasant hour there and were rewarded by seeing well over 200 Painted Storks as well as a number of other tank birds including several Lesser Adjutant Storks, some of the Open-billed and Parson species, a pelican and any number of egrets, crocodiles too were conspicuous by their presence and the tank was literally infested with them; I counted 71 heads in quite a small corner and there must have been well over 100 visible at the same time with their noses and eyes protruding above the water and, occasionally the tops of their serrated tails as well.

Returning later in the afternoon we saw two large herds of deer, a couple of sambhur on the river at the Rugamtota ford and quite a number of buffalo, pig and peafowl.

A rapid run to Buttuwa and back in the dusk produced a visual bag of more deer and pig and to round off a delightful evening we found an elephant on the edge of the road only 300 yards from the Yala bungalow. He let us watch him undisturbed until it was too dark to see him properly.

Saturday, May 26.—We got up very early and left the bungalow by 5.30 on a morning run *via* Gonalabbe, Buttuwa and Uraniya and saw a great deal of game, particularly deer and peafowl and got back at 7.30.

Later in the morning Tiny, my better half, and the writer set out for Tissa to get some petrol; the only thing of any moment we saw was a small bushy tree on the edge of one of the Lewas near Kirinda which literally cascaded about twenty or thirty grey langur monkeys as the car approached. They ran along an intervening strip of grass until they found the sanctuary of the adjoining scrub where they proceeded to sit down in the shade and watch us as we passed.

The other half section of our party spent their morning on the edge of the Palatupana Tank where they saw a large variety of birds and, once again, a great many crocodiles, many of them being out of the water where their dark olive green and dirty yellow marking showed to advantage in the sunlight.

In the afternoon we set out to Jamburagala which we found just as beautiful as ever but there was very little game about except on Uraniya where we saw fifteen sambhur and some buffalo. On our way back we came across an elephant on the edge of the road near the Syambalagaswala turn and, with the passengers of the same "Jeep" and "Land Rover" we had seen at Katugama, we watched him for twenty minutes or longer, taking a number of photographs. He was a most docile animal and was, I think, the same beast which we had seen first on the evening of the 24th. I noticed he had recently been in musth for the evidence of the typical discharge which characterises this condition could be seen below his eyes. Nevertheless, he could not have been more placid or better tempered for he showed no annoyance though he obviously wanted to cross the road and was prevented from doing so by the cars.

We saw many more deer, buffalo, peafowl and pig on our way back

Sunday, May 27th.—We overslept in the morning and paid the penalty by seeing very little game for it all vanishes into the jungle as soon as the dawn breaks and unless one is out by 5.30 one cannot expect to see very much. Still, we were lucky in seeing four "Did-he-do-it" (red-wattled lapwing) chicks on the Buttuwa plain. They could not have been hatched for more than a couple of days and yet their instinct made them drop to the ground and feign death to an extent which would have made them quite impossible to see, had the watcher not spied them running as the car approached. Their agitated parents, too, tended to give the show away as they kept on trying to attract our attention from the chicks to an extent which made it quite obvious that they had some precious possession in the vicinity.

While I was waiting for a cup of coffee prior to our departure this morning no less than fifteen or sixteen peafowl flew down from the trees on which they were roosting to the edge of the river opposite the Yala bungalow where there is a large area of exposed sand. They were incredibly tame and most of them were still there when we set off. The behaviour of these extremely shy birds is one of the most eloquent tributes I can pay to the excellent work of the Warden, the Ranger and their staff, for I can remember the days when this was shooting country and when peafowl were not only incredibly hard to stalk but were extremely scarce.

After breakfast Philip and Dora left for Colombo. I went with them as far as Palatupana to call on Mr. G. N. Q. de Silva, the Ranger-in-charge, and Mrs. de Silva and returned to Yala at about 11.30. While I was away the others organised a trip to Talagasmankada. On their way back they visited Padikema and were rewarded for their trouble by seeing an elephant browsing in the jungle immediately below the steep rock from which there is a beautiful view of the two Patnagala outcrops and the coast line.

Lunch was followed by the usual siesta until half-past three and then what a wonderful time we had! Talk about "A crowded hour of glorious life" or perhaps I should say half hour?

It all started off quite tamely, as so many exciting things do and we only noticed a few deer and pig on Gonalabbe and the Buttuwa plain but reaching Uraniya we saw two groups of sambhur totalling sixteen (including three stags) lying out in the open.

They seemed very somnolent and lazy for we were able to get to within about fifty yards, or less, in the car before they showed the slightest sign of being disturbed and they continued to laze and graze while "Tiny" photographed them to his heart's content and I finished off the remaining few feet of a ciné film which was still in the camera.

From Uraniya we moved on to Welmalkema seeing an elephant about ten yards off the path on the way but he did not wait long and melted into the jungle before we were able to take any pictures. After visiting the rock pool we decided to return by the same route. That is *via* Syambalagaswala and Uraniya in the hope that we might see another elephant—in due course we did!

There were some deer out on the Uraniya plain, the sambhur having disappeared, but as they were too far away to "shoot" we decided to go on to Buttuwa and it was in the "corridor" which connects these two areas that things really started to happen.

We had gone roughly half way when Doreen suddenly hissed "Leopard" and, somewhat naturally, I looked at the edge of the jungle hoping to see it when my attention was distracted by a noise which sounded like a rush of steam forcing its way through a safety valve just beside the car and there was the leopard, his face contorted in a snarl a few feet away. Doreen maintains she could have touched him had she opened the door, which, somewhat

naturally she did *not* do but whether she could or not Tiny, who is 6'-4", could most certainly have done so. It was very nearly a case of an unrehearsed version of Michela Denys' recent book " Leopard in my Lap."

After a few moments the leopard, who was probably much more frightened than we were, relaxed from his crouching position and walked away for about twenty yards from where he sat behind a bush and peered at us over its top. This performance was repeated at intervals of about a minute until he eventually decided it was time for him to leave and as he vanished another leopard, this time a female, in most beautiful condition, walked out into the open from behind a small ant hill and carefully studied the car and its occupants.

After satisfying herself that they were harmless she proceeded to go through the normal repertoire of a contented domestic cat, first she sat down, then she stretched, washed her face with her paws most carefully, yawned and finally lay prone on her side but, in order to show she was still there she kept on waving her tail high in the air like an animated question mark. In between each act she appeared to look at her audience seeking their approval !

Apparently ten minutes exhausted her routine and though she did not actually bow, she walked gracefully into the jungle where she doubtless rejoined her mate and told him about the silly clots of humans she had seen.

Resuming our journey, chattering like a lot of magpies, we were brought to earth again by our tracker saying " Elephant " in rather apprehensive tones and there, sure enough, about 100 yards away was the same elephant which had charged Doreen's car three days previously.

He was standing in a strategic position round which the road along which we had to pass formed an arc with a radius of from 100 to 120 yards from where he was situated and we therefore decided to have a go and see whether we could get to the Buttuwa plain before he had time to demonstrate.

He let us get roughly half way round the arc before he decided to charge and chase which he did with great resolution, trunk curled up, ears pricked and tail erect, looking the embodiment of malevolence but we were too quick for him and reached the safety of the open before he was able to get nearer than 20 yards from the car. We left him a very frustrated and disappointed animal who had obviously decided to go into training in the hope that his next encounter with humans would have a happier ending from his point of view.

Our next thrill (after watching yet another family of lapwing chicks being exhorted by their parents to " Lie down " when strangers were about) was to round a corner and almost run over three sambhur who were lying down ruminating by the edge of the path. They were as close as the first leopard and far too close to photograph with a telephoto lens. They were, however, most obliging for they stayed put a minute or so before they decided it was time to move.

Finally, and I feel I must almost head this paragraph " Believe it or Not " about two hundred yards further on we saw yet *another* leopard, a large male, sitting out in the open by the edge of the jungle. He unfortunately behaved normally and as soon he realised there was a car in the offing five strides took him into the scrub, so we only had him in sight for, possibly, half a minute.

By the time we got back our tongues were wagging to an extent which must almost have given them cramp and perhaps this was understandable for I have never experienced an evening like this or such a wonderful half hour. It was all quite incredible and I just would not have the face to record our experiences if I had not got four witnesses ; the three other members of our party and the watcher, Packeer Deen, who admitted that he, though he lives and works in the jungle, had never seen leopards behave like the first two we encountered. He said we must be " Lucky " and we all fully agree with this verdict.

Monday, 28th.—It was much hotter during the night and jungle sounds in the shape of sambhur calling and visitation by a buffalo who made a lot of noise kept some of us awake more than usual, so when Raman, the cook, called us at 4 a.m. half an hour early, some of the party claimed to be awake.

Anyhow, we were away well before 5.30 and had another lovely tour during which we saw heaps of deer, heaps of pig, heaps of pea-fowl and odds and ends, such as, jackals, hare, buffalo, a number of jungle fowl and a quail with two tiny chicks but I regret to say that, for once, no elephants or leopards can be recorded.

Breakfast at 7 a.m. was followed by the sad and loathsome job of packing. We were away by 8 a.m. and made such good time that we reached Colombo at 3.30 p.m.

It was, I think, the most wonderful trip I have ever had from the point of view of seeing game as so much of it was really close, sometimes far too close.

Packeer Deen, the watcher, who accompanied our party, was an extremely nice Malay, who thawed appreciably after the first forty-eight hours. He has very fair sight so far as spotting game is concerned but is, perhaps, rather prone to imagine that others have similar powers of jungle vision. He can easily correct his fault of not pointing out what is obvious to him if he makes up his mind to draw attention to everything which catches his eye.

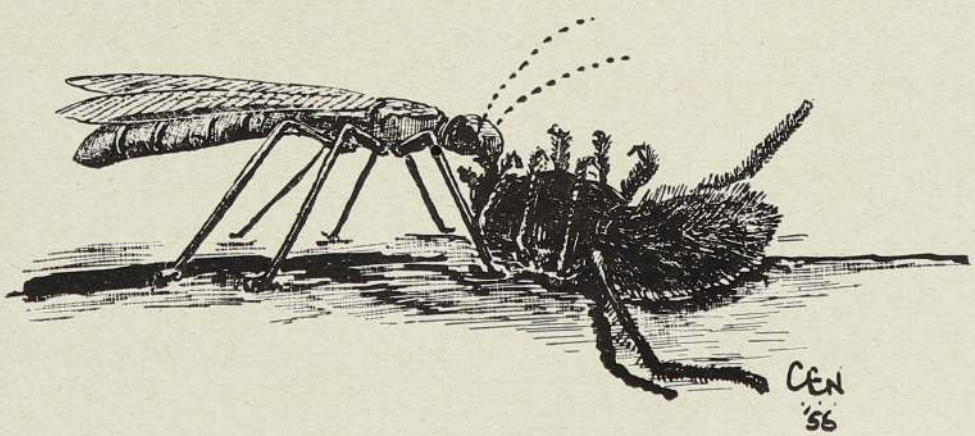
For many years Yala has been my first love so far as National Park bungalows are concerned by virtue of its surroundings and situation. My latest visit serves to confirm my judgment and my choice.

The Hunting Wasps

By C. E. NORRIS, F.Z.S.

MY attention was attracted to some movement in the grass at the side of the path on which I was standing. Upon taking a closer look I was interested to see a hunting wasp dragging the inert form of a trap-door spider. This wasp belonged, I think, to the genus *Salius* and was probably *S. ceylonicus*.

These wasps, upon finding a trap-door spider, sting it in the nerve ganglion at the back of the head, which action does not kill the spider but completely paralyses it so that it continues to live long enough for the wasp's needs. The spider is then taken to the wasp's already prepared nest, which is situated in a small hole



Hunting Wasp

dug in the ground. The wasp lays its eggs (I am not sure whether more than one egg is laid at a time) on the body of the spider so that the larva, upon hatching, commences to feed on the preserved spider. Another genus of wasp—*Pompilus*—also provides spiders for its broods whilst others, who nest in trees provide cockroaches and, the genus *Larridae* take crickets. The Mason or Solitary wasp, of the genus *Eumenes,* provides succulent caterpillars which it cements up in the very skilfully made mud nest.

The *Salius,* whilst dragging the spider, progressed backwards through the grass and over some quite formidable obstacles. Although the wasp was engrossed in its task, I was struck by the somewhat aimless and unnecessary labour it seemed to perform. Every now and again it left the spider and rushed around obviously looking for its nesting hole which it did not seem to be able to locate. Twice when left, the spider was very quickly set upon by some black ants ; the wasp, upon its return, dealt with the ants in a peremptory manner giving them a severe nip and throwing them aside. Whenever the wasp took hold of the spider it invariably coiled its antenae as though to keep these delicate organs out of harm's way. Once the *Salius* dragged its prey up the vertical face of the roadside bank, which must have needed considerable strength as, I am sure, the spider was much heavier than the wasp. This action was apparently quite aimless, as it immediately took it down into the drain again. The spider was then dragged under some dead branches where, possibly, the wasp's nest might have been situated.

The presence of a trap-door spider intrigued me as I have not come across them at Namunukula. Their presence may be disclosed by their abandoned homes with the trap-door hanging loosely on its hinges. Although I have kept a close watch on moss covered banks, so far I have been unlucky in finding any of these spiders.

Recently I saw a species of *Pompilus* chasing a cockroach but it was not lucky in securing it, as the cockroach managed to make good its escape before the wasp was able to drive home its deadly sting.

The much-feared Hornet, of the genus *Vespa,* is a great hunter and, I am sure, helps the agriculturist more than is realised by taking caterpillars. I have often seen them carefully searching albizzia foliage for the caterpillar of the *Eurema* butterfly, which can cause so much damage to young albizzias. The hornet is also a scavenger as it will be found feeding on the dead bodies of animals. Their huge papier-mache nests are to be avoided as the owners will ferociously defend them. The hornet is not popular with bee-keepers owing to its habit of preying upon these useful, hardworking insects. I have seen bees being taken from the landing board of a hive. In January this year I came across some six huge nests, situated in trees growing beside the Menik Ganga in the Ruhuna National Park, all these nests were occupied by what appeared to be thriving colonies of hornets. In June I again visited this area and was surprised to see all these nests abandoned and falling into disrepair.

Does this mean the hornet, like the bambara (*Apis dorsata*), carries out a local, seasonal migration ? The National Park was very dry and it would have appeared unsuitable for caterpillars owing to the lack of young foliage ; so I am inclined to think the hornets had left for areas in which they could obtain a living. I am hoping to visit this same place during the coming North-East Monsoon to find out if these nests will be re-occupied and repaired.

The observation of wasps can be most interesting, and I have heard of an entomologist who used them to supply him with a rare species of cricket, which he procured by robbing their nests !

North to India: A Sporting Odyssey

By PHILIP K. CROWE

LEGEND has it that Adam and Eve came to Ceylon for their honeymoon and crossed from India by way of the chain of coral islets which link the Island to the continent of Asia. Whether or not our first ancestors discovered Eden in the tick-infested jungles of Lanka is open to speculation but there is ample testimony as to the great age and popularity of this approach. Rama, Prince of India, is said to have ordered Hanuman, the monkey God, to build these stepping stones so that he could pursue and recapture his beautiful wife, Siva, who had been abducted and carried to Ceylon by the giant, Ravenna. I reversed the route as the starting point for a sporting holiday in South India, but, lacking both Eve and a God to pave the way, I settled for the company of Commander Selwyn Graham, my Naval Attache, and the locomotion of my Mercedes Benz piloted by my chauffeur Ernest Kotelawala.

My objectives were to shoot a Bison, the Indian cousin of the Sladang that I bagged twenty-one years ago in the Empire of Annam in what was then French Indo-China ; to have a day with the Ooty, one of the last packs of foxhounds hunting in India ; to fish for trout in the Nilgiri Hills ; to observe the rich bird life of the Deccan ; to secure a pair of Raiza Asils, and generally to enjoy the people, climate and scenery of the great states of Madras and Mysore. I could not have achieved some of these aims if it were not for the generosity of His Highness the Maharaja of Mysore, the Master of the Ooty Hunt and others. I am also grateful to my friend, B. N. Chakravarty, High Commissioner for India in Ceylon, for arranging my various permits ; Madras state is dry, and, in addition to spirited liquors, we carried enough rifles and ammunition to start a small revolution.

The Nilgiris

At Avanshi, a dusty little town, we first saw the hills. Looming purple through the heat haze, they dominated the horizon in the overpowering way that mountains dominate the flat lands. And these hills are no ordinary hills ; they are part of the Western Ghats, the famous range known as the Nilgiri Hills, which culminate in the two great peaks of Sispara (8,096 feet) and Nilgiri (8,118 feet) and encompass 957 square miles of highlands. Bounded on the north by the state of Mysore and on the south and west by the plain of Malabar from which we came, they are the setting of four hill stations to which fortunate people flee from the heat of the plains. In addition to Ootacamund, which lies at an elevation of 7,500 feet above sea-level, there are the stations of Coonoor, Wellington and Kotagiri. Named after "mund", a word of the aboriginal hill tribe of Todas meaning land, Ootacamund was settled by Mr. Sullivan, a collector of Coimbatore, who purchased land from the Todas in 1820 and built Stonehouse, the first European house in the Nilgiris.

The Ooty Club, which was founded in 1864, is a fitting monument to the sporting life of the Nilgiris. On its walls hang the trophies and photographs of many a triumph with hound and rifle. The framed photographs of masters of the Ooty Hunt, the masks of jackals, and the heads and skins of the greater fauna make fascinating looking for any sportsman. There is a tiger killed far above the jungles where tiger should normally roam, hill leopard, Nilgiri wild goat and some immense sambhur heads. In the bar, hung boards on which are engraved the names of the winners of the races and the masters of the O.H.

My main purpose in going to Ooty was to have a day's hunting with the Ooty hounds and the first person we had the pleasure of meeting the evening we arrived was Gerald Simpson, the master, and his wife. Simpson is a brother of General Sir Francis Simpson of World War II. We had corresponded and he had generously offered to arrange to have me mounted as well as show me his hounds and the country. A lithe, kindly gentleman in his early fifties, Simpson rides at 125 pounds and has been hunting for most of his life in India.

He is one of the managers of the Bombay Burma Corporation, the famous company that was responsible for bringing Burma into the Empire. King Thebaw and the company's officers did not see eye to eye over the teak forests. He also told me that Colonel Williams, author of Elephant Bill, used to work for Bombay Burma, whose foreign holdings now consist of tea and coffee plantations in the Nilgiris and teak forests in Borneo.

Ooty is a favourite retiring place for elderly British sportsmen and among those I had the pleasure of meeting and talking with was Dr. Willoughby-Grant, a seventy-four year old physician who has bagged everything there is to bag in the Nilgiris and is still at it. He has shot many of the rare Nilgiri ibex, or wild goat, and told me that due to their cunning there is little possibility of them being exterminated. He had recently seen a herd of more than sixty. The law allows a sportsman to shoot only one male per year and it must be a ram with a white saddle on its back. This coloration appears only in the old rams and can be seen from great distances. The record head is about 16 inches. The good Doctor said a tiger had killed a buffalo the previous day in a nearby valley and that I was welcome to shoot it. However, with both hunting and trout fishing on the Ooty schedule I passed up the pussy cat.

We also talked with Lt.-Col. E. C. Pythian-Adams, another noted sportsman in his middle seventies. We found the Colonel at his cottage from whose garden he can see more than a hundred miles over the country he knows so well. And what a museum his cottage is. No less than five tiger skins adorn the walls of the living room while all the furniture is covered with leopard skins. Ruddy-faced and jovial the Colonel said he goes out seldom nowadays and spends a lot of his time writing. He is the author of a history of the Madras Regiment with which he served many years and of numerous hunting tales for the Journal of the Bombay Natural History Society. He is also honorary superintendent of the Nilgiri Game Association.

Speaking of the present shooting prospects in the Nilgiris, the Colonel said that he made a census of the ibex last year and estimated that there are at least 450 still in the hills; his watchers actually counted more than 300. The sambhur have suffered greatly from poaching by estate coolies who run them with pie dogs and then do them in with spears. In the high ranges above Sispara Pass, however, good heads can still be found but it takes a deal of stalking and walking to get at them. Jungle sheep or barking deer are still holding their own and wild pig, even though mercilessly hunted still survive in fair quantities. A few tiger climb to the high country and a nine-footer was killed near Ooty while we were there. Hill leopard are indigenous and often snatch the local dogs.

The best shooting is down at the 3,000 foot level where good bison heads can still be found. The Colonel's shikari recently saw a bull with a 36-inch horn spread at the foot of Sigur Ghat, the hill on which the Colonel lives. Spotted deer are plentiful and heads of 38 inches can be had. There are also tiger, leopard and increasingly large herds of elephant. Only rogues can be shot and the Colonel killed a big tusker with half a dozen lives to his credit several years ago.

Small game shooting on the plateau, that is at the 7,000-foot and above level, is not spectacular but still provides respectable rewards for the ardent sportsman who is willing to work for his bags. Beats produce grey jungle fowl, spur fowl, and black neck hare, while there are still numbers of the delicious-eating Nilgiri wood pigeon. Snipe and woodcock can be shot in season as can the painted bush quail. Down below at the 3,000-foot level there are red leg partridges, sandgrouse and green pigeon. Peafowl are plentiful but protected as they are sacred to the Hindus. The

Colonel knew my friend Dillon Ripley, the Yale ornithologist, who, he said, had made a study of Nilgiri birds.

The Colonel told us that the Nilgiris have a good sanctuary, the Mudumalai Wild Life Sanctuary, which encloses 123 square miles and adjoins the Anaikkatti area where good open shooting is available. The Nilgiri Game Association is the licensing authority and maintains six watchers. Luckily there is now only one road into the Anaikkatti area, and, by posting game wardens at a gate on it, poaching is materially reduced. Men are not the only enemies of the game. Packs of red dog still roam the low jungles and even though there is a bounty of 20 rupees on each head, they still wreak havoc among the spotted deer and sambhur. The Colonel has two mounted heads of red dogs which look bigger than our American timber wolves.

Todas.—I wanted to visit a Toda village and Simpson took us to one of their strange hamlets of rounded thatch-covered huts with two-foot high doors. A white-haired chief, looking like a prophet from the Old Testament, was seated in the sun communing with his buffalo. The Todas revere their buffaloes, believing that the great grey beasts belong to their god, On, and that they, the Todas, are simply put on earth to tend the god's cattle. The old man was not averse to having his picture taken but did not smile; he simply gathered around him his long white robe, worked with curious designs, and looked sadly away. The Todas are a dying race. In 1900 there were said to be 2,000 of them and now there are said to be less than 500. Inbreeding, disease and the weariness that affects all ancient peoples are given by the anthropologists as the causes for their gradual extinction.

In the low entrance to one of the huts sat a young woman whose shoulders and arms were tatooed with blue designs and whose long black hair was curled at the ends like that of Greek tragic actress. This girl was also sad and shy and soon withdrew to the dark shadows of her hut. The Todas practice polyandry and one woman can marry any number of brothers. There were a few children in the village—all with the resigned far away look of the parents.

The temples are called Pohs and the Todas believe that in the beginning On created buffaloes and, holding to the tail of the last one he made, was a man. When a Toda dies, wild buffaloes are captured in the jungles and sacrificed by having their throats cut, but when a chief dies a buffalo is driven between two lines of Todas and forced to leap off the precipice of Mukatu Peak. On this buffalo with the chief ride to heaven. Only the priests are allowed to make butter, and, as the Todas are strict vegetarians, it gives the holy ones quite a temporal hold on their flocks.

No one knows where the Todas came from. Neither their language nor their religion nor their appearance bears any resemblance to the local tribes of Malabar. Some anthropologists think they might be the lost tribes of Israel and certainly there is a biblical cast to the long sad faces. Others think they are an ancient aboriginal race of India. Their own legends say that they have always lived in the high down country of the Nilgiris, and the legends of the vassal tribe, which lives in the foothills of the Nilgiris, and furnishes musicians for the cremation ceremonies of the Todas, say the same thing.

Ooty Hunt.—Seven miles from Ooty lies Wellington, the pleasant little hill station (5,500 feet) where the Indian Government has built its staff college. The Commandant, Major-General P. S. Gyani, kindly invited us for tea. A tall good-looking Sikh, the general and his handsome wife are both keen members of the Ooty Hunt. If it were not for the twenty-odd horses that the General maintains for his officers, the Hunt would probably have to fold up. I gratefully accepted the General's offer of a mount for the following day's hunt.

Hounds met at seven-thirty at West Briar, seven miles out on the Mysore Road from Ooty. A grey mist swirled over the downs and I was strongly reminded of other misty hunting mornings ; of meets on the moors of Nantucket Island off Massachusetts, when Becky Trimpi, the master, cast hounds into the bracken and they went away like smoke across the moors ; of meets on the downs in Devon when the stag hounds ran like ghosts through the fog and it needed the best hunter in England to stay with them.

We were first to the meet and greeted Bahu Lal, the huntsman, when he arrived with nine couple and a very level workmanlike pack they were. I was particularly struck with Drummer, a big powerful dog hound, imported from The Hampshire in England, and also liked Countess, a nice little lemon and white bitch. Then came Rasundram, the terrier man, armed with a spade and clad appropriately in a faded pink coat. At his heels trotted the hunt terriers, Whiskey and Brindle. The horses, all except a few of which were from the Staff College, were ridden by red-turbaned syces, or grooms. Australian whalers and country-breds predominated but Miss Scott, the lone lady member out, had a nice thoroughbred mare. I was pleased when I saw my horse, a big weight-carrying grey named Jutland who later justified his name. Then came the master in pink and General Gyani in ratcatcher and topee. The field included a dozen officers from the Staff College and the syces with second horses.

We left the road and jogged over the springy turf of the moors, with hounds clustered around Bahu Lal and the field spread out behind. The going on the hills is perfect but in between these rounded giants run boggy streams and there is no surer way to come a cropper with the Ooty than to take one's own line between the hills. One must proceed by the crossings, carefully constructed stone-inlaid trails, and if one can't find these legitimate passages the wise thing to do is to search further.

It takes a well-bred and careful horse to negotiate the Nilgiri Hills and before we crossed many hog backs and their intervening bogs, I knew I was lucky to be astride Jutland. He galloped hard on the turf but slowed to a prudent trot on the stony ridges and proceeded dead slow across the muddy waters of the streams. I think he knew he was carrying 185 unfit pounds at an altitiude of nearly 8,000 feet.

Hounds found in a nullah on the far side of One Tree Hill and Bahu Lal doubled his horn as they went away with a grand burst of music toward Victory Hill. I gathered Jutland and let him run for a mile or two before I realized that I was not as young as I should be and pulled him protesting to a walk. From then on I saw the hunt from the hilltops and enjoyed it almost as much as I used to in the old days when hunting meant gallop and more gallop. On the side of a blue lake, which might have been sent to India direct from the English Fells, hounds killed and broke up their jackal in fine style. As hounds ran the distance covered—Mount Marjy, Kabbliod Stream, Armistice Ridge—was about five miles and the elapsed time fifty minutes. The master kindly gave me the mask which was duly forwarded to Van Ingen and Van Ingen in Mysore for mounting.

Riding home behind the tired pack we passed a herd of long-horned buffalo and I was told that they were the wild stock beloved of the Todas. Single bulls are dangerous and have been known to charge anyone, including the hunt members who invade their chill uplands.

At a delicious lunch given us by the master and Mrs. Simpson I learned something of the history of The Ooty. Faded records of 1835 reveal that officers of the British regiments stationed in Madras and Malabar used to hunt sambhur with a pack of " capital hounds round about Ooty," but it was not till 1845 that the pack was organized as a pukka hunt. The first recorded master was Lieutenant T. Peyton who reigned from 1845 to 1856. The country

hunted runs to about 60 square miles with an average elevation of 7,600 feet above sea-level. The covers, consisting of natural jungle or plantations of eucalyptus, are called "sholas" and harbour a great number of jackals. Blank days, in fact, are unheard of but hounds have, like all hounds, occasionally run riot on other game. In 1944 the pack killed a leopard, a feat which was duly reported in The Field, and there are recorded instances where jungle sheep, hyena, tiger cats, civet cats, and pie dogs have furnished sport. A young sambhur stag is kept in kennels, however, and the present pack is very steady to deer.

Trout Fishing.—Hunting was not the only reason that we went to Ooty ; trout fishing was also a strong incentive, and as he does not fish, the master gave us an introduction to Sir Vere Mockett, retired judge of the Supreme Court of Madras, and a keen fisherman. Sir Vere most kindly invited us for a day's fishing with him on the Avalanche, one of the most beautiful rivers in India, which derives its name from the great landslide which scared the hillside about the time the first shanties were being built in Ooty. Skene Dhu, writing thirty years ago, remarked on the beauty of the Avalanche Valley saying : "let us hope that it will ever remain impossible to get a motor into that peaceful valley, but perhaps when its streams are full of two pound trout even the present hurrying generation will consider it worth while to make the expedition even though they cannot do it at twenty miles an hour."

The road to the Valley has not noticeably improved, and even though we did drive there, we made slow going of it before we bucked down into the Emerald Valley and thence over another low range into that of the Avalanche. The River, running gin-clear between low grass covered banks, is a trout fisherman's dream. There are no over-hanging branches to lose flies on and no muddy banks to dirty the stream.

Tying on a Cocky-bondu onto a 3 × leader, I followed Kani-muttu, my old Tamil gillie down from the ford to where the stream bend and a lovely pool reflected the rocky peak of Telcundu and the white clouds above it. Then casting just below the far bank where Kani-muttu indicated I drew in my fly slowly and hooked a nice ten-inch rainbow which put on a series of aerial acrobatics that eventually gained it its freedom. Later in a long clear run I hooked another good fish and by dint of careful playing brought it to the bank where Kani-Muttu skilfully netted it.

As we progressed down stream we encountered a great herd of buffalo whose horns intrigued me. There were old scarred bulls with great sweeping horns whose points could impale a leopard ; meek looking cows whose horns drooped till they formed a sort of snood around their heads, and buffaloes of indeterminate sex with one horn pointing skywards and one pointing to the grave. Then, rounding a curve in the river, I saw two shrouded figures lying side by side on the hillsside. Their long white cloaks were drawn over their heads and they looked like corpses ready for burying. A small brown dog stood silent and immobile guard above them. Kani-muttu said they were Toda herders "guarding their buffaloes."

I caught another half dozen trout and rested by the side of the stream while Kani-muttu told me of his life as a shikari. He was forty-four but looked much older and said he had been guiding sahibs for the past twenty-eight years. He pointed up to Telacundu and said that nine years ago he guided a sahib to within fifteen feet of a ten-foot tiger which lived on the peak. The tiger was asleep, having gorged on a fat buffalo, and the sahib was jubilant. Then the nightmare of all big game hunters happened : the gun jammed. Retreating slowly out of ear shot both the sahib and Kani-muttu tried to extract the jammed cartridge with knives but to no avail ; the gun was useless and the tiger, protected by the god of the peak, slept on undisturbed. A month later the sahib shot the tiger from nearly four hundred yards distance.

At noon we retraced our steps up river and

joined Sir Vere and Selwyn for the excellent lunch which the former had provided. Beefsteaks, salad, potatoes, sandwiches, sweets and beer soon vanished leaving scarcely a bite for poor Thumper, Sir Vere's Springer Spaniel. The total bag was eighteen trout and Selwyn who had never had a trout rod in his hands before, accounted for six. In addition Sir Vere had the shikaris collect a pail of big brown beetles which he said the mahseer of the Pykara River were unable to resist. Mahseer of the Nilgiri rivers are not big—the average run less than five pounds—but very sporting and Sir Vere said they invariably broke the light traces that he was forced to use due to the clarity of the water. Like their giant cousins of the Mysore rivers, the hill mahseer are shy and can't be tempted on coarse tackle.

Introduction of trout into the streams of the Nilgiris was a hazardous business. Back in the 1860s a Scotsman named McIver imported about a dozen trout from Scotland which by some miracle survived the journey and later spawned. According to Skene Dhu's good book, *The Angler in India,* these came-over-with-the-Mayflower trout could not go the course, and, even though their fry were put in some of the local rivers, they did not survive. Subsequent attempts to get trout started were just as ill-fated. One lot of ova was frozen to death in the refrigerator of the steamer they came on ; another arrived in the middle of the hot weather and roasted to death ; while a third was sent up from the low-country in a motor car, got curvature of the spine from the vibration, and died in infancy.

Finally in 1906 the disheartened fishermen of the Nilgiris decided that the government might help and an approach to Sir Arthur Lawley, Governor of Madras, resulted in the Crown taking over and the retention of H. C. Wilson of Ceylon as the pisciculturist. Mr. Wilson soon had trout culture in the Nilgiris on a firm footing. He built a hatchery on the Avalanche River and then proceeded to import trout from both Ceylon and New Zealand. By 1911 fishing was well established and 299 fish over twelve inches were caught.

Trout fishing in the Nilgiris today comes under the auspices of the Nilgiri Game Association and licenses can be purchased at the Ooty Club. Poaching and poisoning of trout, which is causing so much trouble for the Ceylon Fishing Club, is not so blatant in the Nilgiris. The Todas eat nothing but vegetables and the estate labourers do not use poison or dynamite. Favourite fishing waters include the Avalanche, Krurmund, Billithadahalla, Bhavani Pusha, Emerald Valley, Mehaod, Parsons Valley and two lakes in one of which, the Mukurti, trout up to five pounds have been taken by spinning. Killing flies including the Zulu, Cocky-bandu, Peter Ross, Invictor, March Group, Greenwells Glory and Wickhams Fancy. Unlike the Ceylon streams where only wet-fly fishing produces anything, both dry and wet flies are effective in the Nilgiris. Nor are the Nilgiri trout fussy as to the components of their flies. Sir Vere has a big brown fly tied from Thumper's hair, which he made to resemble the beetles that prove so enticing to the big local trout as well as the mahseer.

Trout fishing is available in other places along the Western Ghats. I believe some of the rainbows which were introduced into these ghat rivers came from Ceylon and were originally imported from the Shasta River of California. Early accounts of fishing in the Ceylon rivers claim that ova from the Nuwara Eliya hatchery were sent to these streams as well as to those of Kashmir and the Kulu valley of North India.

Despite its sporting possibilities Ooty has an air of departed glory. Only about a dozen Englishmen still live permanently in the resort and the number of planters in the surrounding district is decreasing. The grass is uncut in the courtyards of some of the palaces of the maharajas and even His Excellency, the Governor of Madras, only comes up to the Raj Bhavan for a short time during the summer. The days when Ooty was the gayest hill station

in South India seem a thing of the past.

Even understanding of the lares and penates of the old days seems to be lacking. A fresh young thing from England dined recently in the Ooty Club dining room, where the pictures of the Masters adorn the walls, and remarked that she had never seen so many "jockeys." Compounding the sin she asked who the "one-legged jockey was." She was referring to a lady hunting side saddle.

But there is still spunk in the old guard of Ooty. When Khrushchev and Bulganin went there last year the servant of one of the members of the hunt asked her mistress if she could have time off to go and see the "Russian Rajas." Her mistress, who was our friend Miss Scott, explained that the men in whose honour all the tamasha was to be held were not rajas but killers of rajas and told how the Maharaja of all the Russians, the Maharani, and even the Yuveraj had been murdered by these same men. The servant spat and went to see her relatives which was just as well as the Russian emissaries did not turn up at the public celebration prepared in their honour.

Mysore.

Later we drove to Mysore and proceeded to Government House where we were to stay as guests of His Highness, the Maharaja. Both His Highness and Mr. Darashah, the Private Secretary, were in Bangalore on state business but we were received most cordially by Mr. Watsa, the manager of the Government Guest Houses, and escorted to the Staff Quarters, a comfortable bungalow next to the palace of the Maharaja's mother. After my usual afternoon nap, Mr. Watsa took us for a tour of the City, which has been well named the garden city of India : broad clean streets, stately public buildings, numerous parks and flower beds.

It was the time of a local festival and all the children and many adults were flying gorgeously festooned kites. There were few automobiles but many tongas, pony-drawn two-wheeled carts. I saw no slums comparable to those of most Indian cities and there was a conspicuous absence of beggars.

As twilight fell we drove up Chamundi Hill, which takes its name from the Goddess Kali, the special diety of Mysore, and watched the lights of the city twinkle far below us. Also on the hill is a vast stone statue of Nandi, the sacred bull, whose expression for all its great size is docile and contented.

But there is in Mysore City a place that attracted us more than palaces or temples. I refer to the workshop of the Van Ingen Brothers, artists in taxidermy. In my humble opinion there are three outstanding exponents of the art of setting up the skins and heads of big game ; Jonas Brothers of New York, Rowland Ward of London and Van Ingen of Mysore. All three firms have done work for me at one time or another but it had never before been my privilege to visit a workshop. There are three Van Ingens in the firm which was begun by their father, Eugene Van Ingen, and two of them, Jourbert and Botha Van Ingen, were on hand when we called, and took us on a tour of inspection. We saw tigers mounted *in toto*, ten-foot ones that looked alive enough to spring ; a magnificent bison, recently shot by the Shah of Persia, also being mounted whole ; and hundreds of antlered heads of sambhur, spotted deer, Himalayan bear and leopard.

There is a unique collection of the skulls of tigers which illustrate the amazing ability of the great cats to survive gun wounds. In some cases the entire lower jaws had been shot away, but the wound healed and the tiger, unable to chew his natural game, turned man-eater. There are skulls with three and four bullet holes in them proving that the tiger survived even though some of the bullets were lodged in the casing of the brain itself. In another was imbedded the tine of a sambhur's antler.

All the Van Ingens are keen fishermen and De Witt in 1948 caught the record Mahseer, a 120-pound monster, of which he made a plaster mould. Mounted on a board are the

jaws of hundreds of these fine sporting fish which the brothers have caught.

Botha Van Ingen and his attractive wife, Barbara, who is the daughter of the late Robert Flaherty, producer of Elephant Boy, invited us for dinner. Also present was M. A. Muthanna, Chief Conservator of the Mysore Forests, and in that capacity also responsible for game protection. He told me that 18 per cent. of Mysore's 32,000 square miles are forest areas. Interested in all forms of conservation, Muthanna has been to America and many European countries surveying various methods of protecting natural resources.

Darashah called on us and arranged an appointment with the Maharaja. Promptly at ten the following morning we presented ourselves at the palace and were conducted by the Secretary, now impressively arrayed in his court costume, to the audience room where Major-General, His Highness, Sir Sri Jaya Chamarajendra Wadiyar Bahadur, received us most cordially. I thanked him for his generosity in inviting us to visit Mysore and shoot in his forests. His Highness then inquired about my guns and said his own favourite for dangerous game is a Purdey .500 which he uses for rogue elephant, for stalking tiger on foot and for bison.

A big man but unusually quick on his feet, His Highness was dressed simply in a white sherwani whose only adornment was a small jewelled strap attached to the second button. He was proclaimed Maharaja on the death of his father in August, 1940, and is of the Wadiyar dynasty, which, according to tradition, began in 1399 but in later years power rested with military adventurers such as Haider Ali and his son, Tippoo Sultan, and it was not until the final overthrow and death of the latter at the battle of Seringapatam in 1799 that the royal house was restored to authority by the British.

Later I attended the celebration of his 37th birthday. Not the time of parading elephants and fireworks that it used to be, but still a sincere tribute to a man who rests securely in the affections of his people.

Nowadays, His Highness has little time for sport and said he regretted his inability to go with us to the jungles. As titular head of a state of more than nine million persons he seldom finds opportunities to indulge his hobbies which include animal photography and music as well as shooting.

At the end of the interview, which lasted nearly an hour, the Secretary took us on a tour of the palace, and, even though I am not usually attracted by this type of tourism, I found the vast Indo-Saracenic pile extremely interesting. In the private entrance hall are selections from His Highness' trophies including no less than six huge bison mounted *in toto,* among which is the record fifty incher. There are half a dozen out-sized tigers, also fully mounted, and a pair of great sloth bear. All of these trophies were prepared by Van Ingen and certainly constitute an impressive testimony to the firm's fine work. We viewed the Durbur Hall where more than 1,500 guests assemble during Dasara, the yearly ten-day religious ceremony. Simulating the battle between good and evil the celebrations are a time of festival for all Mysore.

We inspected the royal stables in one of whose special stalls lives the State Horse. A pure white stallion named Jayaghava, the State Horse has never been ridden. His function, like that of the State Elephant and State Cow, is simply to parade at Dasara time. His flowing tail was tinted with the colours of the rainbow.

We saw the 72 royal coaches and were especially intrigued with those conveyances which are meant to be pulled by animals other than horses. There is a zebra carriage whose motive power is stabled in the local zoo, the camel carriage, the elephant carriage, and the bullock carriage.

But by far the most impressive of the State celebrities is the State elephant. Ten feet tall with a faded white forehead and shining brass-bound ivories, this engaging pachyderm who is

called Ranga is 56 years old and evidently thrives on his job.

Bird Sanctuary.—Joubert Van Ingen took us to the Palhalli Bird Sanctuary on the Cauvery River and provided a coracle for the trip to the islands where the birds roost. A coracle consists of a round bamboo frame of about five feet in diameter and perhaps eighteen inches deep over which is stretched the skin of two cow hides. The total weight is only about sixty pounds and a more fragile looking craft it would be hard to imagine, but under the skippership of Joubert's expert boatman it held three of us with comfort. We paddled along the bank until we were opposite the bird islands and then swung out into the brown flood of the river and half drifted with the current and half paddled until we reached them. A sleek head bobbed up near us and immediately vanished. It was a big dog otter, evidently feeding on the Carnatic carp, which in turn feast on the droppings of the birds. The low-lying islands were alive with herons, ibis, open-billed storks, darters, egrets, and some I did not recognize. As we approached they rose in a white cloud and I got some grand opportunities to photograph them in colour. Unfortunately crows had followed our approach, and, as the nesting birds left their eggs, two of these black marauders darted in and did their evil work.

Crows are not the only thing the birds of the Cauvery Islands have to fear. Crocodiles rise from the flood waters and snap the young in the nests, and once Joubert surprised a ten-foot python gorging on eggs. The islands are watched by a government warden but poaching exists. Particularly suspect are members of the Pardies tribe who specialize in netting all types of wild life. They usually hunt birds of the plain, however, and have trained cows behind whom they approach the partridges, quail, jungle fowl and peafowl. Then with a dexterity that is born in them they noose the game bird and sell it for money. Their own food consists of rats, jackal, and other vermin that has no value on the market. Expert in the calls of all wild animals, the Pardie tribesmen can call up a cock partridge as quickly as we can a friend.

Joubert uses his coracle for both fishing and duck shooting, and has a special seat made so that he can cast and fire above the head of his paddler. The Cauvery used to be a great river for mahseer and is still a fine one for carp, the mahseer's sporting cousin. Dynamiting and netting, however, have wrought havoc among the sporting fish, and big mahseer are now rare. Crocodiles, hunted for their belly skins, are also rare.

Bison Hunt

In India today there are two grand trophies—the Tiger and the Bison—and of these the Bison is the rarest. Not only is he the finest specimen of genus *Bos* in the world and far and away the most massive member of it, but, shunning the haunts of man, confines his range to the dense jungles of the forest clad hills. Tiger can be found in most parts of India but the Indian Bison must have the solitude of the virgin jungles and nowadays is seldom seen outside the forest belt of the Western Ghats and the foothills of the Himalayas. Not that the range of the bison is restricted to India they are also found in Burma, Malaya, and Indo-China.

The name bison is, of course, a completely inaccurate description, for the great bovine is no relation to the American bison and does not even belong to the bisonite group, the only eastern representative of which is the yak of Tibet. His scientific name is *Bos Gaurus* and it is by the name of Gaur or Sladang that he is known in Indo-China and Malaya. In Mysore the Tamil name for bison is *Kat yeramay* while the Kanarese call it *Karti,* as do the Kurumba and Nayaka hill people. The same animal, however, inhabits all these Asian countries and the bull that I shot in 1935 in the Annamite Hills was almost an exact duplicate,

except for the colour of his coat, of the bull I shot in Mysore, some thousands of miles further west.

Standing the height of a man at the shoulders, the bison has an extraordinarily powerful neck and shoulders—perhaps more developed than those of any other animal except the elephant, while along the back runs a high ridge which serves to enhance the animal's bulk. The horns are black around the base and shade into grey at the tips ; those of old bulls being chipped and frayed by many battles. Yet the bison carries all this weight and armour on slender-looking legs which are marvellously adopted to the rough and forbidding terrain he inhabits. The young bulls are dark brown in colour while the old bulls are blackish and tend to lose their hair. All four legs are dirty white from the hooves to just above the knees. The front of the face is white and the insides of the ears of young animals are yellow. The muzzle is pale white, and strangest of all are the eyes which are a cold china blue.

A good deal has been written about the ferocity of the bison and there is no question but that when wounded, the old bulls—and for that matter cows with calves—are about as dangerous animals as one can meet in the jungle. Even though weighing nearly a ton they can deliver a formidable charge at surprising speed. I have never had a bison deliberately charge me and the rushes of these great animals that I have encountered may well have been intended as a means of escape. Bison, however, are quite capable of wreaking a terrible vengeance on their tormentors and in Indo-China I attended the funeral of two young American army officers, who, against the explicit advice of the French forest officers, went hunting them with army rifles. An old sladang bull charged, tossed both men, and then pounded them to a bloody pulp. He even smashed the stocks of the silly little army rifles.

It takes a powerful rifle delivering a heavy bullet to stop the big bovines and I had brought with me my Westley Richards .425double which, loaded with 410 grain copper-capped slow expansion shells, hits with a shock force of 5,010 pound feet. As a second arm I included my Holland and Holland .375 Magnum magazine rifle, which loaded with 300 grain soft nosed bullets, delivers a shock force of 4,160 pound feet.

The bison are confined to the hill country and one of the areas where they still survive in fair numbers is the Belligiri Ramgan Hills, some sixty miles southeast of Mysore, where, through the kindness of His Highness, a shoot was arranged for us. Laying on such an expedition is not done with a wave of the hand. P. N. Monnappa, Wild Life Officer of Mysore, was put in charge and a whole series of orders given. In addition to the Mercedes, transport in the form of a new jeep station wagon was provided, and crammed with a cook, cook's helper, butler, cutlery, bedding, and all the hundreds of items that make living comfortable in the jungle.

Leaving Government House after lunch we soon turned off the main Bangalore pike on to the mud roads of the back country. It started to rain and by the time we raised the dim line of the Belligiri Hills it was nearly twilight. The Maharaja's hunting camp is located 3,650 feet above sea-level and from the porch has a glorious view of the plain of Mysore. We turned in early with the knowledge that long before we woke in the morning trackers would be out scouting a good head. These trackers are of the Sholaga tribe and live in the jungles where they are employed as game watchers and for other forest work. Independent, lazy, and good natured, they often resist the government's efforts to educate them, preferring the solitude of their ancestral wilderness.

Soon after breakfast a Sholaga came in with the news that an old bull had been sighted in a section of the forest known as the Kethedverea Gudi, or small shrine to the goddess Kethedverea, and, climbing in the jeep, we rode to where two pad elephants were awaiting

us. Huge dependable females, named Setha and Radhapyara, they were said to be over sixty years of age and had been used for shikar since the days of the present Maharaja's father. Both elephants were under the charge of the Jamadar of Elephants, Hyder Sherif who is the uncle of Sabu, the hero of Elephant Boy. Like an upper berth in a sleeping coach an elephant needs a ladder to be mounted and a brace of youngsters were on hand with just such an aid. Monnappa, my chauffeur, Ernest, and I shared Setha's hunting howdah, a comfortable padded platform with a large seat forward for the hunter and two smaller seats behind. Selwyn, Mr. Thippesweamy, the forest subdivision officer, and the Jamadar then mounted Radhapyara and we took off into the jungle after the two Sholaga trackers whose heads of long black hair bobbed like corks in the green sea in front of us.

The wonderful, silent ease with which hunting elephants negotiate jungle has always been a wonder to me. The track led straight up a rocky ravine where the angle of advance was never less than forty-five degrees and where the loose boulders of the hillsides were ob-

The Author and his Bison

scured by a dense growth of bamboo. We had proceeded for about an hour when one of the trackers came running back and signalled to Monnappa that the bull was just ahead. I had already loaded my rifle and now swung the barrel around ready for action. The bull had winded us, however, and even though I saw his head, and a great head it was, the angle was not right, and, before the elephant could be manoeuvred into a better position, he made off down the mountain.

We now settled down to tracking and relaxed to the extent of taking pictures and enjoying the ever-changing scenery of the high jungles. Once we heard a peculiar sharp whining sound that was new to me and Monnappa said it was made by wild dogs, probably tracking a sambhur. Hunting in packs these lean red hounds of the forest are the same that Kipling mentions in the Jungle Books and are just as relentless as he depicted them. Tiger have been killed by them.

Climbing down the other side of the big hog-backed hill where we found the bull, we came upon a lovely glade, shadowed by teak and rosewood trees, in which we surprised a herd of some thirty bison. There were cows, calves and several young bulls but none with worth while horns. The wind was blowing from the herd to us and the mahouts were able to bring the elephants close enough for some fine pictures. The horns of the cows, while not appreciably smaller than those of the young bulls, were curved so that the tips tended to complete a circle.

We had now been tracking the lone bull for four hours, and, evidently tiring of climbing, he turned toward a broad meadow whose edge we were just about to emerge on, when we heard the scream of elephant and found ourselves facing a herd of fourteen. There were several young tuskers, one with only one ivory, and many females and calves. They must have assumed that our elephants were simply carrying some odd objects on their backs to protect them from the sun for they paid not the slightest attention to us. Monnappa purposely coughed, and swinging their trunks in the air, the bulls took another reading of the air and decided to move off. The herd split with half of it decamping into the very meadow where our old bull was probably resting. Wisely preferring not to take chances, Monnappa waited until the herd had cleared the meadow and then told the mahouts to enter it. The grass was five feet high and effectually hid any animal lying down in it, but scarcely had we started to wade across the green expanse, when three bison bulls jumped up and started uneasily away. Urging the elephants nearer we saw that none of them carried really good trophies and were about to leave the meadow when our old friend the lone bull was sighted standing in the long grass with his head and shoulders partly hidden by bushes. There was no mistaking the rake of the great horns, and, judging where his heart should be, I fired through the grass just below his shoulder. He went down as if hit by an express train and even though I followed up the shot by several more he was down to stay.

Only then I noticed a strange thing about him ; the colour of his coat was not black like my sladang in Indo-China nor like the bulls I had seen previously that day ; it was reddish. Monnappa was also excited by this discovery and said he had only seen four bulls of this colour out of the hundreds in the Belligiri preserves. He added that bulls of this tinge were only found on the high ridges of the hills and were referred to by the hill tribes as Yethu Karti, or wild cattle, as distinguished from the black bison which they call Yemmu Karti, or buffalo bison.

When the vast chest had ceased to heave and the blue eyes had closed we descended from the elephants and made a close examination. Monnappa said the bull was about twenty-six years old and in the prime of condition. His horns, though scarred, were beautifully moulded and massive. The width or spread was 36 inches ; the span between the tips, 22 inches ; the girth

at the base, 21 inches ; and the tip to tip across the forehead measurement, 72 inches. His height was five feet and nine inches. The record head for the area is a 45½-incher shot by His Highness in 1949 but the average head is only about 30 inches and the best trophies shot by both the Shah of Iran and the King of Nepal when they visited Mysore had the same spread as mine. I was both pleased and proud of my bison.

That night I woke with a start, and, going to the window looked down over the misty jungle. Then I heard again, clear and close, the noise that had woken me ; it was the moan of a tiger. Later elephants screamed and I finally dropped off to sleep to dream of hunting a pack of tigers from the back of a giant bison. For some reason the tigers gave tongue like hounds and there seemed nothing strange in the fact the quarry was a small Maryland red fox. In the morning Monnappa told me that he had also heard the tiger and that it may have been a tigress that lives in the area and last year killed two Sholagas who surprised her in her den with her cubs. The tigress did not eat the men, however, and is not a man-eater.

During the hunt I marvelled at the ability of our mounts to force a way through what appeared to be almost impossibly dense vegetation. The elephants would reach up with their trunks, seize the impeding tree, bend it downwards, and break it clean off. Smaller branches would be dealt with by the mahout who would chop them off with his curved knife, the reverse side of which he used freely to thump his charge on the head when he did not feel she was responding adequately to his directions. Our mahouts appeared to guide their beasts by voice, kicks with their bare toes, which hung in rope stirrups just behind the elephant's ears, and the aforesaid aid of their knives and the iron ankus, or elephant goad.

On several occasions we passed beside deep pits which Monnappa said were elephant traps, built during the old days before 1873 when G. P. Sanderson introduced the khedda system of capture. Monnappa, who has been in the Forest Service for the past twenty-three years, had been on many of the famous kheddas and vividly described for me the last one held in this district in 1947. More than 3,000 men were employed during the last eight days of the drive when the wild herds were impounded in an area of less than six square miles and held there temporarily by a wall of fires and humans before being finally driven into the kheddu or stockade. He told of another time when he was forced to shoot a charging bull with buck shot at very close quarters. Nowadays elephants captured in the khedda operations are trained for use by the Forest Department or sold to lumber companies. The last big Mysore khedda was held in 1953 when 77 elephants were captured.

A great deal has been said about the size of elephants but I have personally never seen an Indian or Ceylonese elephant that measured ten feet in height and Monnappa told me the males of the Mysore jungles average 9 feet 6 inches and the females a foot smaller. Both of our hunting females, though huge ladies, were well under nine feet. Male elephants can be used for shikar but one always takes a chance that they will be charged by a wild bull under the mistaken illusion that a city slicker has come to court his country harem. As a matter of fact even the tame cows are left out to be bred by wild-bulls. The scientific name of the Indian elephant is *Elephas maximus* even though the Indian variety is considerably smaller than his African cousin. The Tamil, Kanarese, and Kurumba name is *Ane,* the same name used by the Tamils of Ceylon. In India almost all the males have tusks while in Ceylon only about ten per cent. of them grow ivory. The females of both countries are tuskless. Sanderson says that a cow elephant carries a male calf twenty-two months and a female

eighteen months but other writers believe the gestation period simply falls between these two extremes.

The jungle people fear the elephant more than any other animal. Spending much of their time wandering in the forest, hunting and looking for roots and edible bulbs, they are frequently surprised and sometimes killed by wild elephants. In Indo-China I was told of an old cow, whose calf had died, who terrorized a Moi village for six months, killing no less than fourteen persons. Most dangerous rogues of all are the tame elephants who escape to the wilds in a fit of madness and, having no fear of man, become the craftiest of killers. Vividly describing the charge of a rogue, Fletcher says : " The grand head is held high ; the trunk is curled between the gleaming tusks ; the mighty bulk comes on with surprising swiftness ; the whole performance impresses one with a sense of relentless, irresistible power. Can the puny mortal standing in the way of the on-coming elephant by any possibility stay the tremendous attack."

We also passed a smaller, deeper and more recently made pit which Monnappa said was designed for tiger. A goat is tied so that the tiger has to leap a low fence in order to reach it and by so doing lands with all his weight on the camouflaged lid to the pit. The pits used to be 22 feet deep, but since a tiger succeeded in springing out of one, the depth has been increased to 24 feet. Once trapped, the tiger is made to leap into a wooden cage by a process of building up the ground under him by throwing hay in the pit and then keeping out all light except that which filters through the cage. The tiger then springs to the light and ends up in the Mysore zoo.

While the local name for tiger is Huli, the Karumbas and Sholagas often refer to it as *nari,* meaning jackal. I understand that this is not meant as a term of contempt but is said on account of superstitious fear. The little Moi tribesmen with whom I hunted in Indo-China were terrified of the tiger and called it *Con Cop,* or Lord of the Night. They venerated it even in death and once refused to carry a tiger which I had shot even though that particular beast was a cattle killer which had been decimating their herds.

His Highness had generously given instructions that Selwyn was also to have a crack at a bison and the second day in camp we mounted our respective elephants with this purpose in view. It had rained hard during the night and the bison were not moving about in the jungles. Even the Sholagas had not been able to pick up tracks, and the best we could do was to cruise through the forests in the hope of locating a herd or a lone bull.

Monnappa made every effort to see that the hunt was a success. Relays of trackers combed the forests and we made an early start. By nine we were on the track of a small herd which the Sholagas said contained two good bulls. We trailed them, but they climbed high up on the mountain where we could not follow.

Monnappa then decided that our best chance was to go back to the valley where I had shot my bull, but long before we reached this valley it was noon. It had started raining again and the quiet, which always comes to the jungles with rain, lay heavy and sombre over the hills. We crossed a brook, running muddy and swollen, and were half way up the opposite hill when a lone bull suddenly broke from a clump of bamboo and started lumbering away. Selwyn, whose elephant was ahead of mine, raised the double rifle and fired. The bull staggered, fell forward, regained his feet and lurched up the hillside. Selwyn fired again and we thought he went down for keeps, yet such is the stamina of these great bovines that he rose again and turned to us perhaps with the thought of charging his persecutors. But his right shoulder was broken and he had been hit by the second shot well forward in the chest. The shock of the two heavy bullets was too much and the bison slowly crumbled to the ground.

Selwyn, who had never shot anything bigger

than a rabbit before coming to the East, handled my heavy rifle like a veteran and shot his bull from a moving elephant at a distance of about 75 yards. The spread measured 32 inches and the horns were massive and badly chipped at the tips from fighting. The base measurement was 20 inches and the tip to tip line 17½, while the overall count across the forehead was 69 inches. The bull stood five feet seven inches at the shoulder and his age was estimated at 22 years. Nelson at Trafalgar was no less pleased than Selwyn.

Needless to say both heads and sets of hooves were dispatched to our friends, the Van Ingens, for mounting, while the hides were ordered forwarded to the government tannery for processing. Nor was the meat wasted. Two villages of harijans of the caste which is allowed to eat cattle were summoned from the valley and carted away every last pound of the flesh of both bulls, a feast of at least two tons.

Bandipur Wild Life Sanctuary—Happily returning to camp, we paid the shikar staff, ate a huge curry lunch, had our afternoon nap, and took off for Bandipur, the famous game refuge where we exchanged our rifles for cameras and shot the game on film. The Bandipur Wild Life Sanctuary lies some fifty miles southwest from the Belligiri camp and consists of a twenty-two mile area where absolute sanctuary is provided and a peripheral area of some 310 square miles where the game is protected but the trees are harvested and the cattle are grazed. The Forest Service bungalow where we stayed faces the blue line of the Nilgiris, and, even though the view is nothing like as dramatic as that of our previous camp, it has charm. The altitude, about 3,500 feet is the same at both camps. There is a wide lawn leading up to the edge of the jungle on which the *axis* deer come to graze and lick the salt that is thoughtfully provided by Achappa, the game ranger.

Unlike the Belligiris, where the only possible way to cover the mountainous terrain is by elephant, the Bandipur reserve consists of an almost flat plateau country through which wind some ninety miles of jeepable roads. The open park lands, dotted with dingula trees, allows excellent vision for relatively long distances. The animals, moreover, are as sophisticated as those of the zoo and allowed our jeep to come close enough for good pictures. We saw four big herds of axis deer with some really magnificent stags, and a herd of some thirty bison, grazing as peacefully as cattle. The sanctuary is said to contain some 5,000 deer, 15,000 bison, 150 sambhur, a dozen tigers, half a dozen panthers and 500 elephants.

Christmas in the Jungle

By R. C. WALL

GOING through a collection of old snaps recently, I came across the one reproduced here, showing three of us sitting round our camp fire one Christmas night in camp in the Central Provinces of India.

In those days I was with the Small Arms School at Saugor, which was right out in the "blue" surrounded by hundreds of miles of jungle. We had recently moved there and my wife and I and our friend Arthur, assisted, as a keen spectator, by my mother-in-law, decided to take every advantage of the wonderful opportunity to try our hands at some big-game shooting.

There was a very good "block" about twenty-seven miles from Saugor. Twenty miles along the main road and the rest more or less straight across country. We took this block between

us for November and December and managed to get out there for most week-ends as well as for our Christmas leave which was about two weeks.

Living in Saugor was a really grand old shikari and we took him on to help us. He knew all there was to be known about big-game shooting, having been at the game for about forty years, according to his "chits." It was on his recommendation that we took that particular block. He knew it well and all the inhabitants of the one village in it, which we found most useful later when we wanted men as beaters or for odd jobs. They all knew and liked the old man and, as a result, we all got on famously.

We had three small grass huts erected to form our permanent camp, so that we should not have to bother with tents each time we went out. These huts were perfectly adequate for what we wanted and did us well all the time, but when Ma-in-law came out we took a tent for her.

We had great fun and quite a successful time in that block, and Christmas Day turned out just as we had hoped it would. We had thoroughly reconnoitred the block by then and knew where to find the various sorts of animals and how to run the beats. We kept four of the best beats for Christmas Day and left that part of the jungle undisturbed for some time before. The beaters had learned what we wanted them to do and on the day each beat went quietly through the jungle and drove the animals slowly ahead and past our "machans."

We had decided that we would shoot only tiger, bear or panther that day, although there was not much likelihood of any of these appearing in those particular beats. None of them did, so we shot nothing, but had a wonderful view of all the other animals that we could hope to see.

There were many sambhur, the hinds in a group well ahead with youngsters and young stags with small "heads," all a bit worried by the beat but not in the least bit frightened. All were going quietly along, sniffing the air and turning their great trumpet-like ears backwards and forwards. They were always followed, some way back, by the big stags moving alone, also rather worried but not frightened. The chital moved in much the same manner. It was a wonderful sight to see all those big deer like that in their natural surroundings, all moving quietly along unfrightened.

It was a great effort on the part of the beaters that they had picked up so quickly what we wanted them to do. To start with their idea was to make as much noise as possible all the time, with the result that if anything did come along in the beat, which was seldom, it was scared to death and moving at a gallop. We gradually got them to move along in line, slowly, chatting quietly among themselves and occasionally tapping a tree with their axes.

Apart from several herds of sambhur and chital, we saw a few four-horned antelope and barking deer. Usually the first arrivals—a long way ahead of the rest—were the peafowl. They always made more noise coming through the jungle on the dried Sal leaves, than anything else. Here again, the hens and the youngsters used to come along together in a group ahead and the full-grown cocks—the chaps with the huge tails, folded down, of course, when moving along—were always by themselves well behind.

Jungle fowl kept to the ground as long as they were not frightened and made an extraordinary sight, looking for all the world as if the bungalow poultry had got loose in the jungle. Spur fowl usually flew. On one occasion one came and perched on one of the supports of our machan, within two feet of my wife's head. He stayed there for quite a time and sorely tried our ability to sit still and not have a grab for his feet!

Small cats, mongooses, brown monkeys and the big grey langoors all came along under our machans. I will never forget the look that one old langoor gave me. That particular machan had a small patch of open ground in

front of it and the langoor was crossing the open patch at a fairly fast lope and going below us with absolutely no idea that we were there. Just as he got below us I could not resist a loud hiss. The poor old chap nearly turned himself inside out with surprise and then gave me a really dirty look before rushing on.

We had two beats and then a wonderful picnic lunch in a beautiful grassy glade and then two more beats, ending up at about 5 p.m.

A little further on we passed a salt-lick to which most of the animals in the block came at one time or another, as one could see by the variety of footprints around. This was on the edge of the thick jungle and from there to our camp the country was much more open and the track led along a fairly shallow, muddy, slow-running stream with tall trees on either bank.

There was a large collection of the small

Christmas Night in the Jungle

in nice time to pay the beaters and get back to our camp before it got dark.

On the way back we passed a dried-up water channel and in the middle was a perfect tiger's pug-mark. He must have stepped in the mud while it was wet, probably at the end of the rains some months before, and when the mud dried, the mark had remained. It was, of course, huge, having been made in soft mud, but was quite perfect.

brown monkeys in the trees on our side. When they saw us coming along they took fright and started jumping across the stream to the trees on the far side. It was all right for the full-grown ones, they managed to get across, but the jump was too much for the smaller ones. Several came the most imperial "belly-flops" in the water and then swam like mad, but others would not face the jump and contented themselves with climbing up to the tip-top branches

of the trees they were on and chattering at us from there.

And so back to camp to tea, cleaning rifles and guns, having a bath and change and then the first " peg."

We had asked all the beaters along for a party. They were sat in rows and given tea and some rather tough looking cakes, which seemed to be popular in spite of their appearance, and cigarettes. There were about sixty beaters and they seemed to think it was fun. We had taken a battery wireless into camp with us and were able to listen to King George VI's Christmas broadcast while sitting round our camp fire. The beaters could not, of course, understand the King's speech but we translated the gist of it into Hindustani for their benefit and then turned on suitable music for them from All-India Radio, which also appeared to be popular. When it got quite dark they all pushed off to their village with much salaaming and profuse thanks for the party.

It had grown quite chilly and we very much appreciated the fire of huge logs round which we sat waiting for our Christmas dinner. The dining table was in the open, close to the same huge fire and, in due course, dinner was served. In spite of our being in camp in the middle of the jungle, it was the same as any ordinary pre-war Christmas dinner, except that we had a pea-chick, shot by ourselves some days before, instead of turkey. All the " trimmings " were there, Christmas crackers, dessert, good drink (lots of it !) and all. Dinner ended with the usual Christmas toasts and we then returned to our chairs round the fire.

It was then that this photograph was taken. I hasten to say that our somnolent and slightly bloated appearance is due, not entirely to too much good food and drink, but mainly to the fact that we had to sit absolutely still for about three minutes while my wife took the time exposure—the only light for which was the camp fire and one lantern.

So ended Christmas Day. We still had several days left of our leave and made the most of them but that Christmas Day was, for us, the perfect Happy Christmas.

The Knuckles Wilderness

By HERBERT KEUNEMAN
In the Sunday Observer

SOMETIME this year, an expedition, manned by Ceylonese, will set out to conquer a range of hills which covers territory virtually unknown and unexplored. Lying off Kandy, this virgin region is dominated by a curiously familiar-shaped range of hills and hence the name. The expedition will be organised by the Ceylon Geographical Society and the Ceylon Natural History Society—and sponsored by the *Ceylon Observer*.

Some of the earliest plantations in Ceylon lie north-east of Kandy and south-east of Matale, north of the Teldeniya road and east of the road to Madulkelle. Those roads run along the trace of bridle paths the pioneer coffee-planters made as they struck deeper and deeper into the mountain country, faring steadfastly forth into the wilderness to wrest new land from the forest. They cared for nothing, these men nor the wives that followed them, but the call of land to be opened and money to be won : neither distance nor inaccessibility daunted them, neither loneliness nor the lack of even the most fundamental urban facilities, neither rivers in spate nor wild animals : all they asked was virgin hillside and the climate the coffee needed.

When coffee disappeared and tea took its place the process of expansion was pushed forward. Further and further the forest was

rolled back, and mountains and valleys that had been untrodden by men were stripped bare to receive mantles of a new vegetation.

But in one eminently fit area the tide of the planters' progress was halted. Men pushed up to its borders and turned away again. Yet there was nothing in the land that made it unsuitable for their purpose ; it was well watered, well drained and virgin. But it was formidable : it was as though the land itself had turned upon them so stern a face that hardy as they were they had quailed and sought a kindlier prospect. That land is the Knuckles Wilderness, than which there is no fiercer country in Ceylon.

Perhaps the Knuckles Wilderness was not always so. At one period one of the great highways of the country, that from Dambulla to Mahiyangana ran through it. But the road is quite disused now, no trace of it (I think) remains.

No one dwells there now but a few chena cultivators encamped on their land, strangers and sojourners ; the villages of the area can be told on the fingers, and names that appear consequentially upon the map are found to refer to a mere site rather than to a centre of human habitation.

One such name is one called Kalupahana. The place for sheer wildness, is one I well remember though it must be twenty-five years since I saw it. Once we had left the gansabawa road at Malkirigoda Gap not far from Illukkumbura (to where, incidentally you can now take a bus) we saw no sight and heard no sound of human being for six miles. Instead, we saw two wild things I had never seen before—the pangolin or scaly ant-eater, and the flying squirrel.

At the end of six miles we came upon a newly-burnt chena. Some of the charred stumps were still smoking. In the chena was a hut. The wattle walls were still uncovered with mud. A woman lay there on a *messa* of jungle sticks, feeding her baby. The men-folk, she said, had gone hunting. If they came back empty handed they must make do for another meal with rice *amu bodhi* and *sambol*. They had no provisions with them but rice, chillies and a handful of onions; coconuts they picked from a clump of nine trees that grew untended close by. For anything else they must go sixteen miles to Rattota.

It is impossible to describe the desolation of that chena. It lay in an amphitheatre ringed with rock. Precipices 500 to 1,000 feet high upheld grassy tablelands above the steamy jungle below. Behind the tablelands the mountains swept peaks a mile high into the cool damp regions of the upper air ; the chena was pure inferno. The silence was shrill with the stridulation of cicadas but it was a vast, oppressive silence nevertheless.

Yet man had been here. The coconuts near the chena were planted when Kalupahana was the name of a frontier coffee estate. The foundations of the bungalow still exist ; two porcupines had a burrow under them. Four orange trees stood near by. There was even one small patch of overgrown coffee trees that had escaped the blight that wiped out the plantations in Ceylon.

I hoped Ranmenika's men-folk would return to her safely and soon. Some years before two men like them had set out on a similar errand. They were hunting monkeys. (Yes, indeed ! the chena dwellers eat monkeys—as you would eat them if your body craved flesh and this was the easiest to come by). One of them was a seasoned and experienced chena man, the other a young neophyte from a village near Matale. The elder man shot and killed a monkey. It fell on the lip of a crag of rock sixty feet high that dropped sheer from the ledge on which they had been standing to another shelf of jungle below. In attempting to retrieve it, the elder man slipped and fell. When his companion reached him it was clear his back was broken. The younger man must go for help. Could he find the way ?

He was sure he could. You followed the ledge on which you had been standing when

the monkey was shot, crossed the ridge followed the game-track that led away on the other side as far as the big *ehetu* tree, scrambled down into the gully and followed the stream that ran in it all the way back to the chena. He was confident he would not fail. He reloaded the gun and put it in the crippled man's hand reassured him and hurried away. But he never found the *ehetu* tree.

Six days later, tea-pluckers on my step-father's estate ran shrieking to the near-by lines that a wild beast had attacked them. They had seen it, they said creeping on all fours over the ridge below which they had been working, and when it saw them it had hurled itself towards them rolling down the hillside and uttering screams that sounded like half-human laughter. They had flung stones at it as they ran away, and now it lay hiding in the tea.

The kangani took up his gun. The men coolies picked up pruning knives, alavangoes, mammoties. It was a well-armed rabble that made its way to No. 40 field.

Even so, it was some time before the bravest of them could find it in him to act upon the suspicion that the gibbering creature that drew itself upright at their approach, clinging to the trunk of a grevillea tree, and laughed and cried and almost spoke words was a man. But it was a man who, six days before, had set out without arms or compass or jungle knowledge to walk an uncharted mile through the Knuckles Wilderness.

My step-father's estate was on the milder, softer side of this region. Even so, it was wild country. The estate was nowhere more than a mile wide—but for its 1,600 acres it must needs extend over four miles down the narrow valley. The valley began at 5,200 feet—the hills on either side of the gap at the head climbed a thousand feet higher ; at the lower end of the estate the elevation had fallen to under 2,000 feet but the high hills closed it all round. That was why the estate was called Brae.

The valley dipped right down to the Bintenne forests that extended to Trincomalee. Over 60 miles away, whence the Foul Point lighthouse used to wink a friendly eye on clear nights at the bungalow lamp. On the day of the Japanese raid on Trincomalee, my step-father and mother were awakened by shuddering vibrations of the ground and believed at first that they had experienced an earthquake.

Certainly one did experience in that wild region some of the elemental forces of nature. In one February there were 28 inches of rain in a single day and over a hundred for the month ; the year's rainfall regularly approached —and sometimes topped—250. The monsoons funnelling up and down the valley, used to compress themselves into howling tornadoes. They stripped the hillsides, except in valleys too steep and deep for tea, of all vegetation wherever they struck ; so that of the 1,600 acres less than half could be maintained as a plantation. As the wind baffled back and forth across the valley it burnt the clothing of vegetation on the shoulders of the hills into patches of coarse tussocky grass. On one memorable night the entire zinc roof of the bungalow servants' quarters lifted up and flew down into the Telgam Oya, a hundred feet below ; on another scores of glass panes in the factory windows burst under pressure of the wind alone.

That is the sort of violent region this is. And this mind you, on the western side, where the hills behind rob the south-west monsoon of some of its fury. The eastern side is open to the full blast of the north-easterly cyclones. Fewer and fewer are the folk who find the tenacity to pursue a life there. I confess that I hardly know the eastern side at all.

The one journey I have made away from the roads that skirt it was to the **nitre caves** many years ago. I was a schoolboy then and the nitre caves were a deep disappointment to me. Without—as I have since found—the least scientific justification nitre had connected itself in my mind with stalactites and stalagmites.

For the fairy caverns I had long expected, reality exchanged a great wide cave infested by incredible colonies of bats. The nitre is

the bat dung! The floor of the cave is spongy with it—but that is because the top layers are still new. Beneath there must be layer upon layer compressed as solid as stone from the myriad generations of bats that have used the cave for refuge.

The most outrageous challenge I ever offered to the Knuckles region was twenty-two years ago when with three friends I conceived the idea of riding bicycles across the easier portions of the country.

Our route as planned lay from Madulkelle through the Brae and Malkirigoda Gaps 5,200 feet and 2,700 feet respectively, through Rambukoluwa to Pallegama, thence to Hembarawa and along the bank of the Mahaveli Ganga to Yakkure and Polonnaruwa. We completed three laps. From Madulkelle *via* Cabaragalla to Brae Bungalow was easy—it only involved eight miles of pushing. But from Brae to Rambukoluwa six miles, took us seven unremitting hours. From Rambukoluwa to Pallegama seven miles took us eleven hours and-a-half. Not even seeing, at Pallegama, for the first time a family of otters at play seemed worth the effort. None of us remember ever at any other time having been so dead beat. When they told us the road to Hembarawa was as bad as that we had followed and with not a human habitation on the way, we turned away to Nalanda and Dambulla instead. We were disappointed but not ashamed; after all we were not the first that country had licked.

What we should have had for our transport, we discovered afterwards, was pack-bulls—*tavalam harak*. All the traders who visit the region still use them (where the ubiquitous buses don't now run).

No doubt Rambukoluwa is "civilised" now; the buses run to within six miles of it. Doubtless the girls even wear jackets when they pound paddy. I am glad to have seen such places when they were still "unspoilt." But there must be many deep pockets still in the Knuckles Wilderness where any measure of civilization has still far to come.

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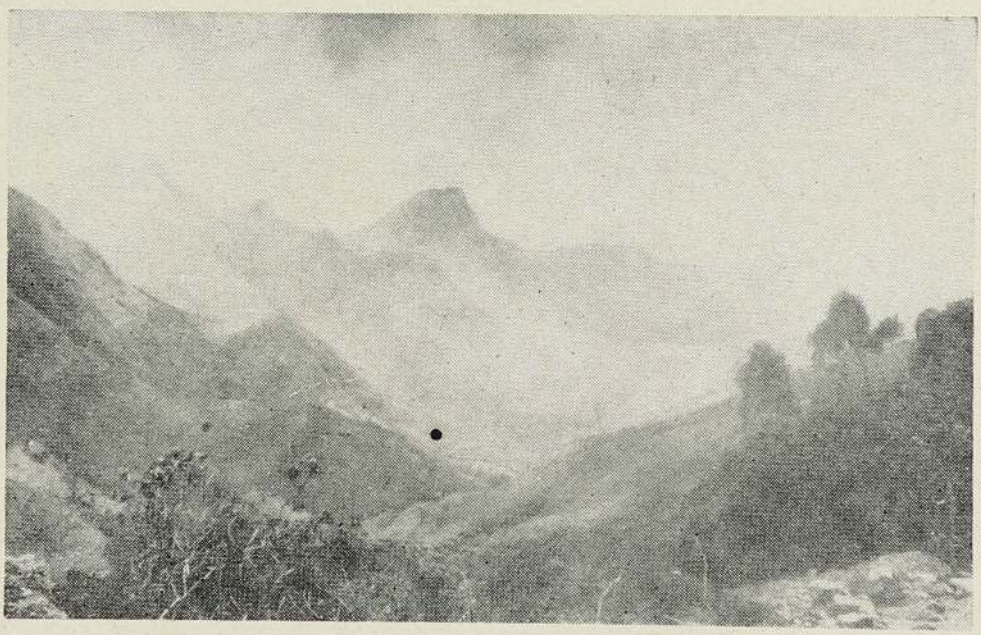


Dorothy Lewes

Corbett's Gap—looking over to Minneriya far beyond

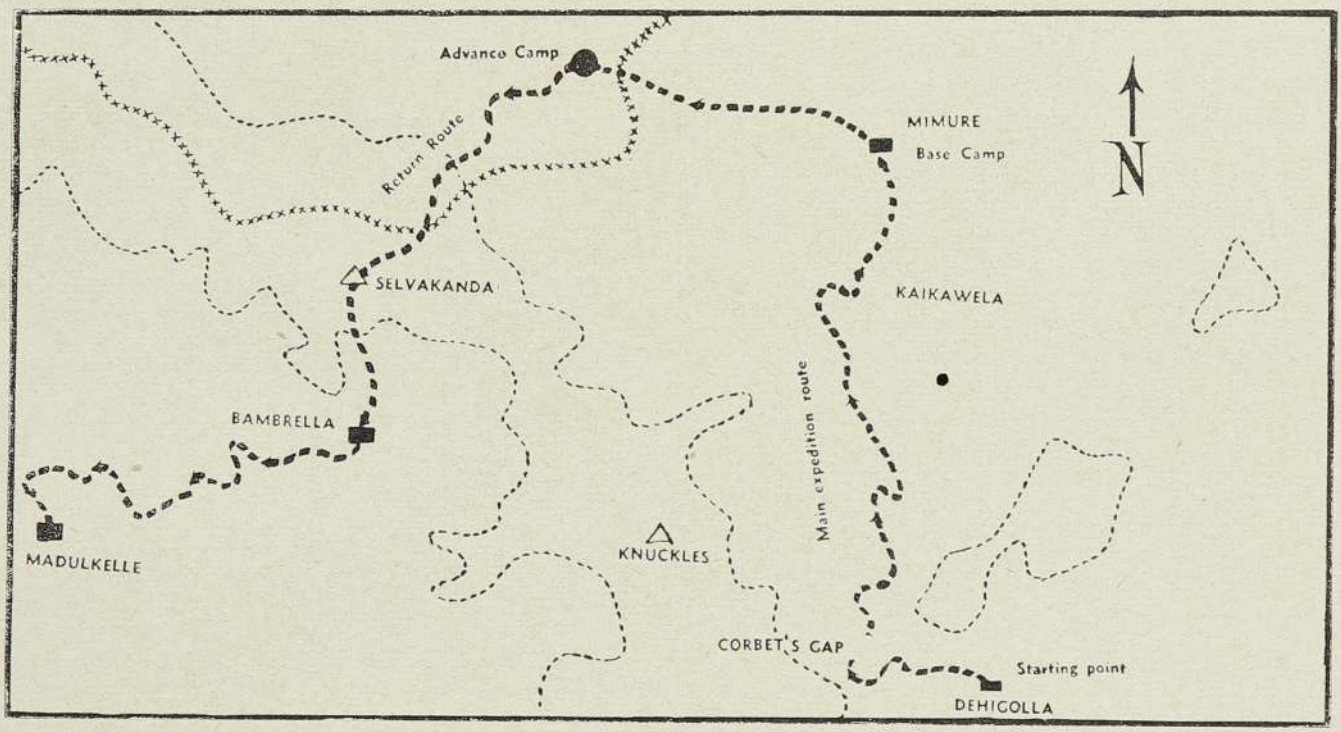
The Knuckles Expedition—August, 1956

By R. S. V. POULIER

THE Knuckles is a long range of hills on the north-east of the Kandy plateau stretching for nearly 20 miles, easily visible from Kandy. Its highest points are Gombaniya (6,248 ft.) and Knuckles (6,112 ft.) ; there are several other peaks of over 5,000 ft., Yakungegala, Relagala, Aliyawetunaela, Dunbanagala . . . This range is so effective a barrier that it has been crossed by motorable roads only at two points—Laggala on the north-west and Corbet's Gap to the south-east. In between is virtually unknown, unexplored and heavily forested country with high peaks, very steep escarpments and (what appear to be) broad sloping flats. The present reconnaissance expedition will examine the southern portion of the range.

The question is often raised as to how the idea of this expedition to the Knuckles first grew. For myself it began in the 1920's ; walking on the hills around Kandy with that remarkable and observant tramper (if I may call him this) Mr. Frederick Lewis, he would more than once point to the Knuckles' peaks and refer to the area on the "other" side as a botanist's paradise. Another personal factor was that those hills prominently occupy the distant skyline opposite my house in Kandy, and most wanderers will understand the peculiar urge to climb hills which are looked at for some time.

Another factor was Mr. Gerald Cooray's remarks in his Presidential address to the Ceylon Natural History Society on "the Geological foundations of Ceylon's scenery." He was also Honorary Secretary of the Geographical Society and envisaged the possibility of such an expedition. Both Societies accepted the idea with enthusiasm and nominated three members each to form a Joint Planning Committee. Its first meeting was held on 5th April, 1956, and appropriately enough, Mr. Gerald Cooray was invited to lead the expedition ; eight further meetings became necessary to attend to finance and equipment, to select personnel and to plan in detail the whole operation.



By courtesy of the Editor, Ceylon Observer.

The Knuckles Terrain, showing route taken by the Expedition

Up to now visits to less known places have been mostly the result of an individual urge ; for the first time a pioneer spirit of high adventure has been encouraged, co-ordinated and directed into useful field work. It will bring together the scientific and research talent in the University, in Government departments and among scientifically minded laymen ; we hope that this will be the beginning of the formation of many such serious-minded field groups of scientific workers in various fields.

A team of 12 were selected, including Botanists, Zoologists, Forresters, Geologists, a Geographer and a member of the Wild Life Department ; they were to spend about 10 days in the area, splitting up into small groups with common interests and working daily along chosen traverses, making a preliminary study of nearly 40 square miles of one of the most fascinating but little known regions of Ceylon.

The Planning Committee and some members of the team first examined the " one mile to an inch " map of the area endeavouring to get what information they could from all possible sources ; then followed a close study of aerial photographs of the area. The ultimate plan was that :

(*a*) An advance party consisting of two separate sections should start work on 1st August, two weeks ahead of the main party ; they were to clear the main paths wide enough for carriers to pass easily and to erect the advance camp at Kalupahana. They were also to bring back a clear idea of the terrain and details of likely problems which could not be foreseen ;

(*b*) An aerial reconnaissance should follow which could take with them information collected by the advance party;

(*c*) The stores and equipment should leave Colombo on 14th August and the main party leave on the 15th August, spending the night at Dehigolla Estate Bungalow, a mile from Corbet's Gap.

Thereafter the programme of the main party would be as follows :

Early on the 16th they leave for Base Camp at the village of Mimure, a walk of nearly eight miles from Corbet's Gap and a descent of about 3,000 ft. They spend three days at Mimure, making traverses to the north, south and west. On the 20th they climb to advance camp at the foot of the magnificent, isolated peak of Kalupahana, involving a climb of over 3,000 ft. in 4 miles. The next three days will again be spent in making traverses, one of which, we hope, will be to the crest of the Knuckles range. They return on the 24th across a comparatively low point in the main range, called Selvakande, down to Bambarella Estate, a division of the Knuckles Group and return to Colombo on the 25th August.

Each group will make a preliminary examination of its specimens on the spot with such light scientific equipment as can be transported. A fuller and closer examination of specimens will be carried out on return to Colombo. Results will then be reported to a joint meeting of the Natural History and Geographical Societies which are sponsoring the expedition.

You might ask what we hope to achieve. I have already referred to the wider (if somewhat idealistic) purposes of the expedition in bringing together scientific research and field workers and stimulating a spirit of high adventure. The Knuckles area is blank on the geological map of the Rangala region and blank in regard to other scientific maps too. We hope to fill in some of these blanks. The sociological study of an isolated village like Mimure (the site of the base camp) is bound to throw up interesting material.

The Nitre Cave area will receive further study ; this is a region which geographers would like to have as a Study Park and which could possibly be included in the Proposed National Trust.

Part of the Knuckles area was once planted in coffee and was not replaced with tea ; the subsequent forest growths in this once coffee

land will be of great interest.

Botanists will not only collect and identify the types of vegetation but will also attempt to relate them to the environment, soils and microclimate of a particular locality.

We believe that there will be unique opportunities for the study of wild life (and bird life in particular) undisturbed by the encroachment of man, the great destroyer.

Knowledge might emerge on the regeneration (or otherwise) of wild life which had probably been almost shot out by coffee planters over 75 years ago.

We may be able to reconcile the low-country devil bird with its (apparently) so different up-country relative; a later and more leisured expedition may one day record on magnetic tape the strange concatenation of sounds of this unique bird which are so difficult to reproduce faithfully from memory.

We may add to our knowledge of that rare and interesting bird, the broad-billed roller and help to decide whether it is an occasionally breeding visitor or a nearly extinct resident.

I should now refer to the personnel of the expedition :—

Main Party

P. G. Cooray, Geologist, Dept. of Mineralogy.
R. A. de Rosayro, Senior Asst. Conservator of Forests, Deputy Leader.
Dr. B. A. Abeywickrema, Senior Lecturer in Botany at the University; in charge of stores and equipment.
S. Sivalingam, Research Asst., Fisheries Dept., Zoologist.
Christopher Wickremasinghe, Divisional Game Ranger, Wild Life Department.
R. Malalasekera of Aquinas, Zoologist.
Sydney Perera, Staff of Kingswood College, Geographer.
Victor Merrit, Forester; David Erb, Geologist; of the Canadian Aerial Survey, to help interpret aerial photographs.
Wikramanayake of the *Ceylon Observer*, correspondent and photographer.

Advance Party.

J. M. Henderson; Mr. Allan Caldera; who led one section of the advance party and joined the main party.
Lieut. Schokman, who led the other section of the advance party.
Ten Officers and men of the Ceylon Army who assisted both sections of the advance party in cutting a path and constructing the advance camp.

The Planning Committee has been greatly encouraged by the very willing and mostly spontaneous assistance given by individuals, organisations, firms, the Ceylon Army, the Royal Ceylon Air Force, the Red Cross, the Prime Minister, the Government Agent, Kandy, and by no means least, the *Ceylon Observer* which generously solved our biggest problem—finance.

In conclusion I would like to add that we hope later to be able to afford the finance to publish a full report of the work and activities of this pioneer expedition, for which our hopes are very high.

'HILLS EMBOSOMING A FAIRYLAND'

KENNETH SOMANADER writes in the *Ceylon Observer*:—

WILLIAM SKEEN based his poem on "impressions and recollections impressioned by short visits made to the Knuckles District in May, 1867, and February, 1868." Skeen made daily jottings on the spot, intended only for communication to a few intimate friends but the notes were later made public in the columns of the *Ceylon Observer*.

The first coffee estate in the Knuckles District was opened in 1842, and the number of coffee estates had risen to 19 by the middle of the last century. About 4,350 acres were then

under cultivation. The estates were situated on the western face of the great Knuckles range (highest point 6,112 feet). Their general elevation was about 3,500 feet, the lowest point being 2,700 feet and the highest 4,300 feet.

Today, the eastern and central side of the Knuckles is all wild country, while the western side has been considerably developed for tea.

Something that the proposed expedition might look out for is the *Ringing Stone*, a singular phenomenon, a specimen of which the Knuckles District is said to possess. It is a large boulder 7 feet by 6 feet by 6 feet, and stood near the summit of the ridge beside the boundary of old Goomera Estate and old Tunisgalla Estate. The boulder which stood on a narrow base had the peculiar property of emitting, when struck by a hammer, a clear ringing note which the faintest touch was sufficient to produce.

The boulder was surrounded by numerous fragments of apparently similar material, but none of them had the same property. The local inhabitants of the area had all sorts of traditions and stories in respect of this boulder, which was the subject of much correspondence in the *Observer* in August, 1868.

Here are a few extracts from Skeen's poem on the Knuckles :

Due East, majestical uprise
And spread their summits to the skies
In group that mark'd resemblance points
To a clench'd hand's protruding joints,
The " Knuckles "—hills with contour grand
Embosoming a fairyland."

Not many an island scene can vie,
Or more entrance the raptured eye,
Than that, outspread as on a map,
Beheld from Batagalla gap,
A glorious expanse to view
When pass'd th' high rock that rent runs through.

From this high standpoint, all around
Rise mountains huge,—drop depths profound,—
Spring water-courses, streamlets brawl,—
Rush oyas here,—there cascades fall.
While far away, like ribands red

Roads o'er the hills and valley spread,
And built on many a charming spot,
The Planters' homes the landscape dot.

" Sermons in stones and running brooks."
Here each may find who listening, looks.

Range of the quaint but graphic name.
District not least nor last in fame,
'Mongst those in Lanka's isle best known
For fertile soil and produce grown,—
A gem amongst the many set
In Ceylon's sparkling carcanet.

Love

By GUY DE MAUPASSANT

I HAVE just read among the general news in one of the papers a drama of passion. He killed her and then he killed himself, so he must have loved her. What matters He or She? Their love alone matters to me, and it does not interest me because it moves me or astonishes me, or because it softens me or makes me think, but because it recalls to my mind a remembrance of my youth, a strange recollection of a hunting adventure where Love appeared to me, as the Cross appeared to the early Christians, in the midst of the heavens.

I was born with all the instincts and the

senses of primitive man, tempered by the arguments and the restraints of a civilized being. I am passionately fond of shooting, yet the sight of the wounded animal, of the blood on its feathers and on my hands, affects my heart so as almost to make it stop.

That year the cold weather set in suddenly toward the end of autumn, and I was invited by one of my cousins, Karl de Rauville, to go with him and shoot ducks on the marshes, at daybreak.

My cousin was a jolly fellow of forty, with red hair, very stout and bearded, a country gentleman, an amiable semi-brute, of a happy disposition and endowed with that Gallic wit which makes even mediocrity agreeable. He lived in a house, half farm-house, half chateau, situated in a broad valley through which a river ran. The hills right and left were covered with woods, old manorial woods where magnificent trees still remained, and where the rarest feathered game in that part of France was to be found. Eagles were shot there occasionally, and birds of passage, such as rarely venture into our over-populated part of the country, invariably lighted amid these giant oaks, as if they knew or recognised some little corner of a primeval forest which had remained there to serve them as a shelter during their short nocturnal halt.

In the valley there were large meadows watered by trenches and separated by hedges ; then, further on, the river, which up to that point had been kept between banks, expanded into a vast marsh. That marsh was the best shooting ground I ever saw. It was my cousin's chief care, and he kept it as a preserve. Through the rushes that covered it, and made it rustling and rough, narrow passages had been cut, through which the flat-bottomed boats, impelled and steered by poles, passed along silently over dead water, brushing up against the reeds and making the swift fish take refuge in the weeds, and the wild fowl, with their pointed, black heads, dive suddenly.

I am passionately fond of the water : of the sea, though it is too vast, too full of movement, impossible to hold ; of the rivers which are so beautiful, but which pass on, and flee away ; and above all of the marshes, where the whole unknown existence of aquatic animals palpitates. The marsh is an entire world in itself on the world of earth—a different world, which has its own life, its settled inhabitants and its passing travellers, its voices, its noises, and above all its mystery. Nothing is more impressive, nothing more disquieting, more terrifying occasionally, than a fen. Why should a vague terror hang over these low plains covered with water ? Is it the low rustling of the rushes, the strange will-o'-the-wisp lights, the silence which prevails on calm nights, the still mists which hang over the surface like a shroud ; or is it the almost inaudible splashing, so slight and so gentle, yet sometimes more terrifying than the cannons of men or the thunders of the skies, which make these marshes resemble countries one has dreamed of, terrible countries holding an unknown and dangerous secret ?

No, something else belongs to it—another mystery, perhaps the mystery of the creation itself ! For was it not in stagnant and muddy water, amid the heavy humidity of moist land under the heat of the sun, that the first germ of life pulsated and expanded to the day ?

I arrived at my cousin's in the evening. It was freezing hard enough to split the stones.

During dinner, in the large room whose sideboards, walls, and ceiling were covered with stuffed birds, with wings extended or perched on branches to which they were nailed—hawks, herons, owls, nightjars, buzzards, tiercels, vultures, falcons—my cousin, who, dressed in a sealskin jacket, himself resembled some strange animal from a cold country, told me what preparations he had made for that same night.

We were to start at half-past three in the morning, so as to arrive at the place which he had chosen for our watching-place at about half-past four. On that spot a hut had been built of lumps of ice, so as to shelter us somewhat from the trying wind which precedes daybreak,

a wind so cold as to tear the flesh like a saw, cut it like the blade of a knife, prick it like a poisoned sting, twist it like a pair of pincers, and burn it like fire.

My cousin rubbed his hands : " I have never known such a frost," he said, " it is already twelve degrees below zero at six o'clock in the evening."

I threw myself on to my bed immediately after we had finished our meal, and went to sleep by the light of a bright fire burning in the grate.

At three o'clock he woke me. In my turn, I put on a sheepskin, and found my cousin Karl covered with a bear-skin. After having each swallowed two cups of scalding coffee, followed by glasses of liqueur brandy, we started accompanied by a gamekeeper and our dogs, Plongeon and Pierrot.

From the first moment that I got outside, I felt chilled to the very marrow. It was one of those nights on which the earth seems dead with cold. The frozen air becomes resisting and palpable, such pain does it cause ; no breath of wind moves it, it is fixed and motionless, it bites you, pierces through you, dries you, kills the trees, the plants, the insects, the small birds themselves, who fall from the branches on to the hard ground, and become stiff themselves under the grip of the cold.

The moon, which was in her last quarter and was inclining all to one side, seemed fainting in the midst of space, so weak that she was unable to wane, forced to stay up yonder, seized and paralyzed by the severity of the weather. She shed a cold, mournful light over the world, that dying and wan light which she gives us every month, at the end of her period.

Karl and I walked side by side, our backs bent, our hands in our pockets and our guns under our arms. Our boots, which were wrapped in wool so that we might be able to walk without slipping on the frozen river, made no sound, and I looked at the white vapour which our dogs' breath made.

We were soon on the edge of the marsh, and entered one of the lanes of dry rushes which ran through the low forest.

Our elbows, which touched the long, ribbon-like leaves, left a slight noise behind us, and I was seized, as I had never been before, by the powerful and singular emotion which marshes cause in me. This one was dead, dead from cold, since we were walking on it, in the middle of its population of dried rushes.

Suddenly, at the turn of one of the lanes, I perceived the ice-hut which had been constructed to shelter us. I went in, and as we had nearly an hour to wait before the wandering birds would awake, I rolled myself up in my rug in order to try and get warm. Then, lying on my back, I began to look at the misshapen moon, which had four horns through the vaguely transparent walls of this polar house. But the frost of the frozen marshes, the cold of these walls, the cold from the firmament penetrated me so terribly that I began to cough. My cousin Karl became uneasy.

" No matter if we do not kill much today," he said : " I do not want you to catch cold ; we will light a fire." And he told the gamekeeper to cut some rushes.

We made a pile in the middle of our hut which had a hole in the middle of the roof to let out the smoke, and when the red flames rose up to the cleor, crystal blocks they began to melt, gently, imperceptibly, as if they were sweating. Karl, who had remained outside, called out to me : " Come and look here ! " I went out of the hut and remained struck with astonishment. Our hut, in the shape of a cone, looked like an enormous diamond with a heart of fire, which had been suddenly planted there in the midst of the frozen water of the marsh. And inside, we saw two fantastic forms, those of our dogs, who were warming themselves at the fire.

But a peculiar cry, a lost, a wandering cry, passed over our heads, and the light from our hearth showed us the wild birds. Nothing moves one so much as the first clamour of a life which one does not see, which passes through the sombre air so quickly and so far

off, just before the first streak of a winter's day appears on the horizon. It seems to me, at this glacial hour of dawn, as if that passing cry which is carried away by the wings of a bird is the sigh of a soul from the world !

" Put out the fire," said Karl, " it is getting daylight."

The sky was, in fact, beginning to grow pale, and the flights of ducks made long, rapid streaks which were soon obliterated on the sky.

A stream of light burst out into the night ; Karl had fired, and the two dogs ran forward.

And then, nearly every minute, now he, now I, aimed rapidly as soon as the shadow of a flying flock appeared above the rushes. And Pierrot and Plongeon, out of breath but happy, retrieved the bleeding birds, whose eyes still, occasionally, looked at us.

The sun had risen, and it was a bright day with a blue sky, and we were thinking of taking our departure, when two birds with extended necks and outstretched wings glided rapidly over our heads. I fired, and one of them fell almost at my feet. It was a teal, with a silver breast, and then, in the blue space above me, I heard a voice, the voice of a bird. It was a short, repeated, heart-rending lament ; and the bird, the little animal that had been spared began to turn round in the blue sky, over our heads, looking at its dead companion which I was holding in my hand.

Karl was on his knees, his gun to his shoulder watching it eagerly, until it should be within shot. " You have killed the duck," he said, " and the drake will not fly away."

He certainly did not fly away ; he circled over our heads continually, and continued his cries. Never have any groans of suffering pained me so much as that desolate appeal, as that lamentable reproach of this poor bird which was lost in space.

Occasionally he took flight under the menace of the gun which followed his movements, and seemed ready to continue his flight alone, but as he could not make up his mind to this, he returned to find his mate.

" Leave her on the ground," Karl said to me, " he will come within shot by and by." And he did indeed come near us, careless of danger, infatuated by his animal love, by his affection for his mate, which I had just killed.

Karl fired, and it was as if somebody had cut the string which held the bird suspended. I saw something black descend, and I heard the noise of a fall among the rushes. And Pierrot brought it to me.

I put them—they were already cold—into the same game-bag, and I returned to Paris the same evening.

LES CANARDS

THE first tank we visited was so completely flooded that the water came right up into the surrounding jungle. We left it, and made another silent tramp of half an hour before we came out again upon the edge of another little lake with a long bund holding back the water above some deserted paddy fields.

Almost at once my wiry guide made a set like a pointer nosing a covey of partridges. I always feel blind and humble in the presence of the telescopic jungle eyes of the villager.

" Was it a deer ? " I asked him.

He made a sign with his hand near the ground to show the size of the game, and set off immediately along the side of the tank. He was a real huntsman. The quarry was before him, and he was going to stalk it without any sympathy for my weakness of eye and

tongue. I doubled up and followed him.

He must have had the most astonishing power of vision, for we seemed to creep on for a quarter of a mile through the tangled bushes that lined the side of the tank. At last I could hear a strange rustling sound like a thousand paper flags stirring in the wind. It was a weird and meaningless sound such as I had never heard before.

The rustling grew louder every moment.

At last my guide stopped behind a small bush, fifty yards from the edge of the water, and his hand went up beckoning me to come to his side.

I wriggled up, leaving a track like a large tortoise in the wet sand.

When I came up to him and cautiously peeped over the bushes I saw a fine sight.

Before me was a wide mud flat running out like a spit into the tank, and on it was a great flock of wild duck, preening, pecking, gobbling in the mud, quacking and quarrelling, or standing on one leg in round contentment, with bill on breast or neatly tucked under one wing. The picture was like one of Thornburn's magical close-ups, in perfect setting, and come to life before my eyes. I could count a hundred and fifty birds from where I lay and there must have been at least twice as many.

It was at this point that I felt the muzzle of a rifle placed suggestively against my ribs. I looked up hastily expecting to see a deer somewhere beyond the mud flat, for the idea of shooting at the ducks had not even entered my head. But when I looked down at the guide it was quire clear that his mind was running upon curried duck, and that he had ideas of skewering half a dozen with a rifle bullet. I took the gun from him and, pressing his head firmly down in the sand with the other hand, turned to look at the ducks again.

After watching them for some time I decided to see how long they would take to see me, and I rose very slowly on to my knees and showed my head and shoulders above the bushes.

There was an instant silence over the whole mud flat. Heads shot out from under wings, and alert little black eyes looked around suspiciously. They knew the murderous habits of man too well. One or two birds close to me jumped into the air, and at once the whole cloud was on the wing, and the sky was filled with ducks separating into their various flocks, circling and making away. In about two minutes there was not a single duck to be seen on the tank, or on the whole wide horizon.

I got up from the ground, and so did my guide. He was rather cold and distant. It was not the sand on his nose that was troubling him, but he said : " I showing ducks. Master not shooting. What to do ? "

What to do indeed. I had forgotten all about the camera, and we trudged back to the seashore in the growing heat of the sun, with nothing whatever to show for a ten-mile tramp.

W. T. KEBLE in *Ceylon Beaten Track*

A PERFECT HEAD

By E. C. FERNANDO

Sambhur Head—Shot by Z. Dean Ismail

HERE is a photo of a Sambhur head, *Rusa unicolor unicolor*, shot at Pilmagala in the Yala North Intermediate Zone, on about April 9th, 1956, by Mr. Z. Dean Ismail of 21, Queen Street, Fort, Colombo.

The specimen is, I think, unique, and if not the record for Ceylon, its equal.

Although Indian specimens carrying heads up to 50½ in. have been recorded, a specimen carrying a head of 33 in. in Ceylon is unique. The measurements of Mr. Dean's specimen are as follows :—

Right	Left		Right	Left
33¾″	31¾″	*Brow tine*:	17½″	15″ damaged

Tip to tip : 34″

Girth above brow tine: Right 9″ Left 9″

I also enclose a list of Indian records from Rowland Ward's Record of Big game. You may also look up Phillips' "Mammals of Ceylon" where he records Ceylon's biggest sambhur horns as picked up in the sanctuary.

Comparing these records, I think Mr. Dean has been very lucky indeed. I am sure you would like to record this in *Loris*.

Mr. W. W. A. Phillips comments as follows on seeing the photo : "What a perfect head ! It is the best sambhur's head that I have ever seen and equal to, if not better than, the existing Ceylon record."

Records of Indian Sambhur (*R. unicolor*)

Length on Outside Curve	*Circumference above Brow Tine*	*Tip to Tip*	*Widest Inside*	*Points*	*Locality*	*Owner*
50 1/8	7 1/2	24	38 1/2	3+3	Bhopal	General Nawabzada Obaidula Khan
48	7	Single shed specimen		3	Khandesh	R. H. Madan
47	6	36 3/4	41	3+3	Central Provinces	The late J. Hall
46 1/2	6 1/4	36 3/4	41 1/4	3+3	Khandesh	Sir Duncan J. A. Campbell
46 1/2	6 1/2	18	29	3+3	United Provinces	A. V. Willcox
46 1/2	6 3/8	24 1/8	30 7/8	3+3	Central Provinces	British Museum (Home Collection)
46	9	..	..	..	Bombay and C.Ps. Border	The late C. J. Lucas
46	6 3/4	20 1/2	31	3+3	Betul District C.Ps.	C. E. Cox
45 1/2	7	17 1/4	28 1/2	3+3	?	Major E. R. Loder
45	7 3/8	22 1/2	33 3/4	3+3	Mayoghur C.Ps.	The late Sir John Morris
45	7 3/4	8	..	3+3	?	D. R. Wright
44 1/4	6	26	32 1/2	3+3	?	Lieut.-Col. F. Jollie
44 1/4	5 1/4	33 3/4	35 1/4	3+3	?	Capt. L. W. Reynolds
44 1/8	7 7/8	44 3/8	45 7/8	3+3	Rangeer	Col. W. J. Morris
44	6 1/2	29 1/4	35 3/8	3+3	Central Provinces	Major R. A. F. Thorp
44	6 7/8	19 1/4	31 3/4	3+3	Rewa	H. E. M. Davies
43 3/4	8	..	..	5+4	Betul Dis. C.Ps.	C. E. Cox
43 1/2	5 1/4	17	28	3+3	Rewa	Sir Percy E. Bates, Bart
43 1/2	6	32	43 1/4	3+3	Central Provinces	J. R. Beckett
43 1/2	6	26 1/2	34 3/4	3+3	Central Provinces	The late Lieut.-Col. C. A. Martimore
43 3/8	6 1/4	20 3/8	29 1/8	3+3	Central Provinces	The late Sir Robert Hervey, Bart
43	6	24 1/2	30	3+3	Khandesh	A. Cumine
43	6 3/4	26 3/4	34	3+3	?	Capt. C. P. Graham
43	7 5/8	14 1/2	25 1/2	3+3	Kotah Rajputana	Earl of Dudley
42 3/4	5 3/8	26	32 1/4	3+3	Central Provinces	A. H. Pollen
42 1/2	5 3/4	22	29 1/2	3+3	Central Provinces	Major M. O. Jephson
42 1/4	5 1/2	15 1/4	28 1/2	3+3	Central Provinces	Lieut.-Col. R. Campbell, Heathcote
42	6 1/4	23 3/4	35 1/2	3+3	?	Capt. A. H. Bailey
41 3/4	5 3/4	19 1/2	23	3+3	Central Provinces	Col. W. F. Blaker
41 3/4	7	28 1/4	34 3/4	3+3	Central Provinces	Lord Rothschild
41 1/2	6 1/2	25 3/4	29 3/4	3+3	Bauda, United Provinces	Miss Blane
41 1/4	7 3/4	32 1/2	30 1/4	4+3	?	Col. A. B. Souter
41	6 1/2	17 3/4	26	3+3	Bhopal	H.H. the Heir Apparent of Bikaner
40	5 7/8	26 1/4	25 1/4	3+3	Bhopal	The late Prince Sri Bijey Singhji of Bikaner
40	5 3/4	38	30 1/4	3+3	United Ps.	Major J. G. Selby
40	5 3/4	27 1/2	30 3/4	3+3	?	H.H. the Maharawal of Dungarpur
39 3/4	7	41 1/4	30	5+3	Central Provinces	Major Hon. G. Willoughby
39 1/2	5 3/4	31 1/2	25 1/4	3+3	Central Provinces	H. H. the Maharajah of Bikaner
39 1/4	5 1/2	42	43 1/2	3+3	Bhopal	H.H. the Maharajah of Bikaner
			Spread	56 1/4		
36 3/4	6 7/8	35 1/2	32	8+6	Central Procinces	Hon. J. Best (see illustration, p. 20)
			Spread	49 1/4		

Owner's Measurements

Length on Outside Curve	*Circumference above Brow Tine*	*Tip to Tip*	*Widest Inside*	*Points*	*Locality*	*Owner*
$47\frac{3}{4}$	..	..	$28\frac{1}{2}$	..	Central Provinces	A. P. Percival
$46\frac{7}{8}$	..	49	..	3+3	Central Provinces	R. Wordsworth
46	..	44 Spread		..	Dhar	H.H. the Mharajah of Dhar
45*	..	..	..	..	Central Provinces	Bombay National History Society
$43\frac{1}{2}$	..	35	$37\frac{1}{2}$	3+3	Satpura Hills	Major F. J. Winter
43	6	31	$29\frac{3}{4}$	4+3	Surguja	H.H. the Maharajah of Surguja

* This is the measurement of only a portion of a Sambhur antler, and was recorded in the Journal of the Bombay National Historical Society, iii., p. 228. The animal was shot by Mr. R. Gilbert in the C.Ps., but got away minus this piece of his antler.

Ceylon Specimens

$32\frac{1}{2}$	$6\frac{1}{4}$	24	$26\frac{1}{4}$	3+3		A. R. Hay
$31\frac{1}{2}$	5	20	17	4+3		Lieut. -Col. G. E. Hale
29	$4\frac{1}{2}$	25	$22\frac{1}{4}$	3+3		Earl Cairns
28	$4\frac{3}{4}$	$17\frac{3}{4}$	$22\frac{1}{2}$	3+3		D. G. Brebner
$27\frac{3}{4}$	$4\frac{5}{8}$	$17\frac{3}{4}$	$19\frac{3}{4}$	3+3		H. C. Bibby

Snips

Our Elephants

Elephants should be fully Protected

TWO schemes have been put forward. The first is for the protection of a herd in an adequate stretch of their natural habitat. This can only be done if the area is ideal in every respect for the requirements of elephants. By this, I mean that an adequate water supply must be available throughout the year and sufficient food of a varied nature should be easily available for the animals. I am given to understand the Deduru Oya herd are in such an environment, but any further opening up of this area must be stopped. Is Government prepared to set aside this forest for the elephants ?

The other scheme of allowing elephants the freedom of the jungle, and paying full compensation for any damage caused by them to cultivation, as long as the animals have not been shot at, has a lot to commend it. I foresee elephants being preserved only in areas which are adjacent to the existing reserves, as their preservation in areas undergoing cultivation will become increasingly difficult unless they are given some sort of sanctuary into which they can retreat.

Elephants, by nature, are wanderers, which complicates the matter of their preservation, but I do not think they move further than a radius of some 50 miles from their main habitat whilst foraging for thier food. These herds, I am certain, have a set area in which they move

and they use roughly the same route each year. Not enough is known of their movements, which is a pity, as such information would be of great advantage in helping to formulate plans for providing corridors along which the animals could move.

When assessing the damage attributed to elephants, great care must be taken, otherwise, the scheme may be abused. Village cattle and buffaloes are responsible for a considerable amount of damage for which wild animals are blamed.

At present many elephants are shot at, wounded and even killed before they have done any damage. The cultivator appears to work on the assumption that all elephants, wherever they are, should be shot at, paying little heed to the fact that the animal which he has probably wounded may account for the lives of his relatives.

The elephant holds a special place in the culture of the country. It is also given the honour of carrying the most venerated relics of Lord Buddha, which should be reason enough for the people to accord it due respect.

C. E. NORRIS.

Namunukula.

Origin and Extinction of the Elephant

THE elephant has always aroused in man respect and affection that no other animal has done. Few of the larger mammals with the exception, perhaps, of the horse, the camel and the dog, have won higher regard from him for native intelligence, sagacity, dexterity and faithfulness. The living elephant today is represented by only two species living in South-East Asia and Africa, but these two are survivors of a once numerous and widely distributed family, spread over most of the world, tracing its ancestry as far back as Eocene or late Cretaceous, measured in terms of years to over fifty million. In India of the recent past (Pliocene-Pleistocene geological age) there flourished over thirty species of elephants comprising a large number of genera roaming over the northern jungles. In the next succeeding age these were wiped off leaving behind only one living species and a profusion of fossil remains entombed in the Middle and Upper Siwalik beds in the Himalayan foothills, well-preserved specimens of which have enriched many of the museums of the world. Perhaps, this sudden and drastic extinction of the elephant population is to be ascribed to the rigours of the Middle and late-Pleistocene Ice Age of sub-Recent age, to which these large highly organised creatures could not adapt themselves.

Neither Ceylon, India nor South-East Asia was the original home of the elephants. The centre of origin of this race has been located in Central Africa, from where in the early Tertiaries they radiated out in all directions and spread over and peopled every country in the world, except Australia, with a wonderful proliferation of genera and species. According to Pilgrim, our hippopotamuses, pigs and proboscideans entered India during the Miocene age from Central Africa through Arabia and Iran and thence migrated to China, Burma and Ceylon. Thus the elephant, like the horse, has been a world traveller. It is, however, sad to reflect that the end of this travel is in sight within a foreseeable future; for the surviving elephant species is slowly and irrevocably passing towards extinction, as so many of their compeers and predecessors have done. In the present world, the ponderous six-ton beast, needing hundreds of pounds of food per day, has no secure place in the economy of nature against more active and more streamlined competitors, in this age of increasing animal population and diminishing vegetative forest food supply.

D. N. WADIA
in Journal R.A.S. (Ceylon).

Saving the Elephant

IN Parliament, last week, the Member for Kalutara, Mr. Cholmondeley Goonewardene, made a plea for more effective measures to be adopted to reduce the slaughter of elephants. He suggested that payment of full compensation to peasants for damage done to their crops by elephants would help to discourage them from rushing to the use of firearms to keep away these animals. The Warden of Wild Life, in his administration report for 1955, estimated that the total population of wild elephants had been reduced by one-sixth in five years ! Most of the animals are killed by peasants in defence of their crops, which occur at the rate of one every week and which account for 70 per cent. of the mortality among wild elephants.

The temptation to the peasant to use the gun is great. It is not a pleasant thing for him to see the fruits of months of labour lost in as many minutes when hungry elephants invade his plantation. Mr. R. L. Arnolda, when he was Government Agent of Batticaloa, suggested a more generous system of compensation for damaged crops as a means of reducing the use of firearms against elephants. At present, compensation is paid only to the extent of short-fall in food supply. Mr. Arnolda's suggestion was that, provided a cultivation was properly fenced and watched and elephants were not shot, *compensation should be paid to the full extent of the damage*. He also urged that rockets be provided at cost price to peasants and that propaganda be conducted through the agency of headmen and Rural Development Societies to dissuade peasants from shooting elephants unless it was absolutely necessary. Another proposal that was made some time ago by Dr. Spittel and now seems to be looked on with favour by the Government, is the establishment of jungle corridors to enable elephants to go from one reserve to another without trespassing on human habitations. There seems to be some perplexity about where these corridors should be established, as the elephant tracks are not fully known, but with investigation it should be possible to discover them. Meanwhile, the need is still great for a National Trust to ensure that our National Reserves are preserved inviolate.

Elephant Nestled Baby as She Died

IN the remote wilderness of the Wanni jungles, at Nikewewa, a cow elephant was seen breathing her last, for nearly five hours, during which time she was fondling the young offspring that was sucking her breasts.

As the elephant stroked its offspring with her trunk, tear drops rolled down her eyes, the villagers said. None of them were able to say who had shot her. All they knew was that they had heard the report of a gun, and gone to see what it was when they saw the dying elephant.

They wanted to catch the young one but the sight that met their eyes moved them too much.

According to the inquiring officer the elephant was about 35 years old. And had been shot at the close range of about 25 yards, for all the pellets of an S.G. cartridge were embedded in the chest of the elephant. There was a previous gun shot wound on the right leg where the pellets were still wedged in.

The scene of the tragedy shows that the elephant had come in a herd, and could have been passing through in search of water. The broken up earth and crushed shrubbery shows evidence of the elephant struggling to get away after getting the shot.

The person who shot this animal has done so for some strange reason ; for it would have been a harmless one going along with her herd. Besides there is no chena close by that it could have destroyed.

Observer.

Dead Jumbo

WHILE I was surveying along the Walawe Ganga through thick jungle close to Kaltota, I came across the carcase of a dead elephant right in the middle of the stream.

This was yet another victim of buckshot of the merciless chena-cultivator.

A little later I came across a herd of seven elephants in the middle of the river. This herd was at a spot just below the carcase of the dead elephant. Obviously, the herd had been hanging around their dead mate when we came upon them.

Well, this gives a good explanation why the elephant population is dwindling so rapidly.

Daily News. P. KAPUGEEKIYANA.

Faithful Elephant

A LARGE crowd of interested spectators watched a faithful elephant keep guard over his keeper at Kochchikade last evening.

The mahout who was returning home was fully drunk and fell off the back of the elephant onto the road where he lay senseless.

The animal, seeing its master's plight kept watch, allowing nobody to come near the mahout. Motorists had to give way to the elephant.

Observer.

Elephant Saved from Drowning

AN elephant, which was being bathed in the Kaluganga near the Naragala ferry and which was carried away by the force of the water, was saved from drowning by Mr. K. T. Wickramasinghe, the ferry renter.

It is stated that Mr. Wickramasinghe went in a canoe to rescue the animal but the panic-striken animal swam further into the deep water.

At this stage Mr. Wickramasinghe plunged into the water and guided the animal safely to a shallow spot and after it had rested for some time brought it to the land.

Daily News.

Elephant Charges Bus

SEVENTEEN people were hurt when a wild elephant charged a bus on its way to Mannar from Medawachchiya. Eleven of them were entered to the Cheddikulam and Vavuniya hospitals.

The elephant came out of the jungle when the bus was passing through Rambaikulam, seven miles from Medawachchiya and attacked the bus.

The bus has been badly damaged.

Observer.

Ed.—This elephant was afterwards shot.

Elephant in Well

WHEN I visited Munneswaram—a place of pilgrimage about two miles off Chilaw on the Kurunegala Road—the peasants there had this fascinating story to relate.

One of the elephants, of a herd of about fifteen to twenty, had fallen into a deep well, walled of brick, the diameter of which was about six feet or more at the mouth. It being a well which gradually tapered towards the bottom the poor animal was stuck and unable to stir. Pandemonium had reigned there for two successive days when the rest of the herd had tried rescue methods employing stumps of trees or whatever else they could get at. Yet all their attempts were unavailing. Finally to the amazement of the villagers (who were watching the scene from tree-tops in the distance) one of the elephants securely entwined its trunk round a strong tree, quite close to the well, for a support and sent down one of its hind-legs into the well. The jammed animal gripped the leg with its trunk, and trumpetting with pain was pulled out at last.

Matugama. C. T. M. FERNANDO.

Monkey Scared the Elephant

MR. A. M. Samaranayake, Co-operative Inspector of Madawachchiya, was on his way to Kebitigollewa when he was stopped by a wild elephant between the 11th and 12th mile-posts.

The elephant was about 54 yards ahead and was preparing to charge, when suddenly a

monkey dropped on the elephant's back from the branch of an overhanging tree.

The elephant was surprised, and ran into the jungle. The Inspector happily went his way.

Observer.

Where Animals Die

(i)

SIR Emerson Tennent writes: "At the corral . . . at Kornegalle, in 1847, Dehigame, one of the Kandyan chiefs, assured me it was the universal belief of his countrymen that the elephants, when about to die, resorted to a valley in Saffragam, among the mountains to the east of Adam's Peak, which was reached by a narrow pass with walls of rock on either side, and that there, by the side of a lake of clear water, they took their last repose." Tennent adds in a footnote: "The selection by animals of a place to die is not confined to the elephant. Darwin says that in South America 'the guanacos (llamas) appear to have favourite spots for lying down to die; on the banks of the Santa Cruz river, in certain circumscribed spaces which were generally bushy and all near the water, the ground was actually white with their bones; on one such spot I counted between ten and twenty heads.' And at St. Jago, in the Cape de Verde Islands, Darwin saw a retired corner similarly covered with the bones of the goat, as if it were 'the burial ground of all the goats in the island'."

(ii)

SIR William Gowens, a former Governor of Uganda, writing in the *London Times* of the July 29, 1929, had this interesting comment to make:—

"In general the old elephant, or the wounded elephant goes to the water every day and as he is less inclined to go further afield and search for his food he remains near the water. One day, as his age and enfeeblement have increased, he is unable to pull himself out of the deep muddy bottom, which most of these equatorial swamps and rivers possess and he dies quietly in the water.

"In the water his skull and his tusks are subjected to less weathering than they would be if they lay on the surface of the ground, although even in these circumstances ivory can remain in a fairly good state of preservation for a very long time.

"It is quite possible that the stories of elephant cemeteries that one has read of are due to the drying up of some swamp to which elephants have resorted, and in which they have died for many years."

While the naturalists generally agree elephant graveyards do not exist, it is interesting to note the experiences of Dr. Robert Murphy of the American Museum of Natural History, and Surgeon Commander G. Murray Levick, who was one of the members of Captain Scott's last expedition to the Antarctic.

The dead bodies of penguins are almost never found, but in South Georgia Dr. Murray came across a small snow water lake, on the shore of which several feeble penguins were to be seen. Looking through the clear water of the lake he saw "with their flippers outstretched hundreds, perhaps thousands, of dead penguins" lying there—a penguin graveyard, probably soon to be augmented with the bodies of those penguins on the shore who had so obviously come there to die.

Commander Levick discovered, near the Drygalski ice barriers, a seal cemetery. Situated within a few hundred yards of the sea on a patch of ground were the frozen and mummified bodies of a great number of seals, who must have crawled from the ocean to end their lives in that isolated spot. Judging from the ages of the dead bodies it seemed as if the group had been added to for many hundreds of years. I wonder how many other animals have a common graveyard?

E. R. BUULTJENS in the *Daily News.*

Bears in Drought—September

He Kicked the Bear in the Tummy

From his quarters the porter saw a black object lumbering along the platform of the Thambalagam railway station at 2 o'clock in the morning.

He raised an alarm. Four men (including two passengers in the waiting room) got up sleepily to investigate.

The object didn't need much investigating—it was a bear, quite a big one, too. Three not-so-sleepy men took to their heels, while the fourth, a railway pointsman, tried to scare it away.

The bear lunged at him so he kicked it in the abdomen. It gave a cry of pain and ran off into the surrounding jungle.

Three other bears were noticed running away,

K. H. Liyanage

This bear was drinking water in a channel near the Naval Establishment at Monkey Bridge, when it was killed by three naval policemen.

too. It is likely that they had come in search of water.

Times.

(i)

Due to the drought in Trincomalee district, in May, bears roamed in the area in search of water. One fell into a well at Irakkakaudy and was shot by villagers. Another was killed at Tambalagam ; while a third was clubbed to death by Royal Naval Police personnel at Monkey Bridge.

Massacre

All the wild animals in the Kaltota area come to the Walawe Ganga and Weli Oya to quench their thirst. In so doing, most of them come by their death too. Right along the river, at various spots the merciless inhuman professional hunters wait in ambush, hawk-eyed for the arrival of animals for water. As the animals finish their drinking, then only the guns are discharged.

The thirst of these animals is so great that they over-indulge in abundance of water. The result is that they can hardly move and they become easy targets. Besides, they become so immobile that they can't run away when only injured. These wicked hunters are no sportsmen and what they want is their kill at any cost.

If there is any genuine desire to check this type of massacre, Kaltota is the type of place that should be frequented by the officers concerned.

Kaltota. P. KAPUGEEKIYANA.

From a Bear . . .

May I make an appeal to the Buddhist public of Ceylon, through your journal ?

We, bears, are living through a severe drought. The jungle water-holes have been reduced to mud-flats.

A few days ago a friend of mine strayed into a human habitation in quest of water. Did he quench his thirst ? No, Sir, instead he was given the unique honour of having his photograph in the Press.

A Sinhalese newspaper showed him strung up like a pig-in-a-poke, and the front page headlines proclaimed in bold jubilation : " The Death of a Bear " while three smiling hunters were posing beside their spoils.

He came for water, harmless and alone. With what compassion did his human brethren receive him ? Are you preparing for Buddha Jayanthi ? And this mangled corpse on your doorstep is crying out to heaven !

Kurunegala. " WALAHA."

Fish Dynamiters—Lax Law

Public Afraid to Report : Police do not help : Big men make big Profits

(i)

Six to ten thousand pounds of fish are dynamited daily and the authorities despite all their efforts cannot stop it—because legislation is hopelessly inadequate and public co-operation is lacking.

Rewards up to Rs. 50 are offered to anyone who would give information leading to the detection of this type of illicit activity which destroys the spawn and the millions of fish-to-be that go with it.

But members of the public are not coming forward in sufficient numbers. They are reluctant to co-operate for fear of reprisals.

A spokesman of the department said that they were also looking forward to closer Police co-operation. He said that ever since the Fisheries Department put its own preventive force into operation, the Police seemed to have washed their hands of the job.

But, he pointed out that the Preventive Force was only ten strong, and had just two jeeps and a launch. Besides, it operates only in unpoliced areas.

Without active Police co-operation, the authorities say, no effective steps can be taken

to check the widespread dynamiting of fish. They point out that Police officers are also entitled to, and have received in the past, rewards whenever they help to bring the culprits to book.

And then there is the law. A man who is caught dynamiting fish can be fined Rs. 500 or sent to prison for a year if it is a first offence. The sentence can be doubled if the offence is committed a second time.

The authorities say Rs. 500 is a mere bagatelle for any one of the big men who are behind the fish dynamiting business. One stick of dynamite in a good shoal and up comes enough fish to fill about 40 boxes. On each box, which contains an average of 80 lbs. of fish, the men make a profit of at least Rs. 100.

Make it Rs. 5,000 or five years imprisonment for the first offence, they say, and double it the second time, and at least a proper start can be made to stop dynamiting.

Another point stressed repeatedly by the authorities is the need to control the purchase of dynamite. They said: "You can buy all the dynamite you want in the Pettah today." Officials cited several instances of dynamite being used for purposes other than the killing of fish—for example, the blowing up of fishermen's boats.

The Minister of Industries and Fisheries, Mr. P. H. William de Silva, told me yesterday that he was only too well aware of the extent to which dynamiting has been going on particularly along the Eastern coast. He said he was looking into the question of making the law much more strict.

Observer.

(ii)

Considering that unsettled state of affairs at the moment (June riots at Gal-Oya) as well as the fact that looting and injury to persons is greatly aided by use of explosives, especially on the East coast, would it not be a sound idea to declare the dynamiting situation as an "emergency" and deal with it swiftly and summarily without all the tedium and ramifications of the Law which take years to materialise—years which mean thousands of pounds of fishes destroyed each day!

By the time the Law is passed (if it is passed) the damage (which is and has been frightful) will have been done and there will hardly be any use having laws to protect fish which just aren't there!

Now is the time to act and act fast. The Army, Navy and Police, not to mention Air Force, should combine to do a vast "Operation dynamite" and wipe out from the face of our land the terrible national disgrace that is the fish-dynamiter.

With them should be volunteer civilians who are conversant with the facts, and I can enumerate several ardent anglers and spear-fishermen who are only too willing to join forces with the law to wipe out the dynamiting of fish.

Let us take advantage now of the public indignation towards them and *Act* not plan to revise rules and regulations. The law is quite adequate to assist all people in catching the bandits red-handed.

Even though the fines are small and there are loopholes in the law not even the most ardent dynamiter will keep on doing it when he is constantly harassed by the law and the public.

RODNEY JONKLAAS.

(iii)

Preventive Sergeant Heridge and two guards attached to Kuchchavali Fisheries Office went out on their usual patrol towards Walapadukuda, three miles off Kuchchavali. There they detected two men on a rock in the sea dynamiting fish. While the officers lay in ambush the two dynamiters were busy diving in and collecting their haul. Suddenly the officers rushed towards the men attempting to arrest them, but the men eluded them and disappeared into the thick jungle nearby.

On searching the spot where the two men

were, the fisheries guards found 19 bundles of dynamite. Each bundle contained about five prepared sticks of dynamite tied together.

(iv)

The Angler's Club Memorandum to the Minister

A great deal has been said about the dangers to the Island's fishing resources in consequence of the widespread activities of gangs of fish dynamiters. It is time some concerted action is taken to arrest the unlawful exploits of a few ruthless " Mudalalis."

Two main links of this vicious chain on which the attack should be concentrated are :—

(*a*) Availability of the dynamite.

(*b*) The profitable use of the dynamited fish.

Explosives Act No. 21 of 1956 provide regulations to cover stocking and sale of dynamite. This same regulation could be amended to embrace laws to make dynamite an article that could be purchased only on a Government permit.

If purchase and possession is on a "on permit only" basis it would be a little more difficult to purchase this article for illegal uses.

A recent five-day visit to a dynamiter's paradise on the east coast gave us a chance to study the depressing facts at first-hand. The information we gathered has made us revise our earlier contention that enhanced jail sentences or heavier fines would be the answer.

Always it is a mere menial working for an influential Mudalali that gets convicted and sent up to serve a jail sentence. During the victims comparatively comfortable enforced sojourn at the hands of the State, he rests content that his dependants are amply provided for by the said Mudalali.

If the fine is heavy, the victim would elect to go to jail instead with the same results.

The set-up of this " Syndicate " is such that it allows for contingencies like fines and jail sentences, hence the authorities should aim a few telling blows at the Top Brass of this racket, who provide the dynamite and control the finances sitting back comfortably in palatial homes built with their ill-gotten gains.

The C.A.C. suggests that the authorities, with the least possible delay commence picking the pockets of these top individuals by enacting laws that would allow the authorities to confiscate :—

(1) The dynamited fish.

(2) Any lorry, boat or other vehicle transporting such fish to larger towns for disposal.

(3) Any boat or other vehicle carrying dynamite or like explosives without a permit.

An amendment of section 14 of Fisheries Ordinance No. 24 of 1940 reads : No person shall possess, sell, expose for sale or transport any fish, knowing or having reasonable cause to believe that such fish has been taken in contravention of the provisions of section 14.

At first sight this does sound a formidable enactment ; but a closer perusal makes it evident that this enactment defeats its own purposes by leaving the onus of proving the state of mind of the accused with the prosecution.

A conviction in a case filed under this enactment, could be only obtained if the prosecution is allowed the services of a mind reader or hypnotist and more important if the court is prepared to accept this evidence.

This law could be only made effective by deletion of " Knowing or having reasonable cause to believe that such fish has been" from its context. This amendment could be qualified to allow for administrative action to be taken to ensure that those persons who purchase such fish for their own personal consumption do not come under the purview of this act.

The law should also provide for the immediate sale of fish seized on suspicion by the authorities and the proceeds to be deposited in court. The disposal of such monies to depend on the results of the action.

(v)

You cannot purchase one single ·410 cartridge unless you are a licensed firearm holder. But you can buy as much dynamite as you

want. And this dynamite sold over the counter is much more dangerous than a single gun cartridge.

In Ceylon dynamite is used much more for illegal purposes than for legal purposes. Everybody knows that the dynamiting in our rivers, tanks, coastal lagoons and even the open sea is a curse. I have seen millions of small fish rotting at the edges of east coast lagoons. I have heard as many as 48 explosions between the hours of 6 a.m. and 4 p.m. on the east coast.

A fortnight ago I counted 14 explosions between noon and 1 p.m. at Inallakandy Lagoon north of Trincomalee. And my fishing then with rod and line was a farce.

So it is a relief to read in your paper that the Minister of Fisheries is soon to have a law passed whereby you cannot purchase dynamite over a counter like lozenges. Let us hope this law will soon be a *fait accompli* and that this dynamiting as an easy means of fishing will cease for all time.

•

Daily News. DOUGLAS RAFFEL.

The Mantis—*He Preyeth Best*

(i)

The first language in which the Infant Walrus (my daughter aged four) learnt to express herself was Sinhalese. She also esprid herself, a little prematurely, on her command of English, and knows only a few words of Tamil. These facts afford the background to an odd piece of dialogue which we overheard while completing our toilet in the bathroom at the Walrus residence a few days ago.

There was a sound of terrific commotion and running about, and after some excited jabbering in Sinhalese with the ayah, the IW was heard to say in English to her mother :

Amma ! Amma ! come kickly ! In my room ! See !

Amma (imperturbably) What is it ?

IW : Come to see ! Soon, Amma ! What-is-that-in-English-I-don'-know.

Amma : Well, what is it in Sinhalese ?

IW : I dunno !

Roused at last to investigate this mystery, Mrs. W later reported that the cause of the excitement was a praying mantis.

WALRUS in *Daily News.*

(ii)

" Permit me to correct you," writes an anonymous correspondent on a postcard which reached us today. " What the Infant Walrus did not know was a preying mantis ; not praying mantis. Can you blame her ? "

No. Nor do we blame ourselves or Mrs. Walrus. We had always supposed that the praying mantis was so-called not because of its (supposedly) predatory habits but because it appears to adopt an attitude of prayer.

Our dictionary (the shorter OED) bears this out, defining this amiable little beastie as an " orthopterous insect " of the kind that " holds its forelegs in position suggesting hands folded in prayer."

WALRUS in *Daily News.*

(iii)

Spurred on to further research by a letter on the subject from the erudite Mr. S. V. O. Somanader of Kalkudah, we are now in a position to present for your consideration a few more facts about the praying mantis. We incorporate below some of those brought to our notice by Mr. Somanadar, together with some which we have gleaned from various sources ourselves.

There is no doubt that those who first dubbed this creature the praying mantis really meant " praying " and not " preying." Entomologists clinch the matter by calling him (or rather her, since they always use the feminine form) *Mantis religiosa,* one variety known, we gather, in English as the soothsayer, being named by the less respectful appellation of *Mantis superstitiosa.*

In France she is called *mante religieuse* or by the Provencal name of *prega-Diou* (which is equivalent to "prie-Dieu", in Germany *Gottensanbeterin*, which has the same meaning.

In the Batticaloa district the common term is *kumbudu-thaddaa* ("because, as the first part of the name implies, it prays and, as the second suggests, it taps the air or ground after raising its forelegs in prayerful attitude"); elsewhere among Tamil-speaking people it is *kovil poochie*, the temple-bug.

There are, we find innumerable and long-standing legends attaching to this insect. Lost travellers were wont to suppose that it would obligingly gesticulate with its forelegs in the direction they should take to find their way home; and the Arabs like to imagine that it points the way to Mecca. St. Francis Xavier, on noticing the insect's apparently devotional demeanour, exhorted it to sing the praise of God—and a very beautiful canticle is said to have resulted, though Mr. Somanader advises us that "unfortunately, there seems to be no foundation" for this charming legend.

We are obliged to admit that there is not much more foundation for the supposed piety of the mantis than for its musical accomplishments. As Sir James Emerson Tennent remarks, it "little justifies by its propensities the appearance of gentleness and the attitude of sanctity which have obtained for it the title of praying mantis. Its habits are carnivorous and degenerate into cannibalism."

There seems to be some reason for supposing that, as in the case of other living species which it should not be necessary for us to enumerate, the female of the species is more deadly, though no less ostensibly holy, than the male. Fabre records how one of these murderous ladies which he kept under observation got through seven husbands in a fortnight—a record of which the most rapacious Hollywood star might well be proud—not merely sucking them dry of all their juice but devouring the remains into the bargain.

After which, no doubt, she resumed her gentle expression and "attitude of sanctity" in readiness for the next victim.

WALRUS in *Daily News*.

The Buddha on Flesh

(i)

Bhikkhu Kassapa, in a communication, has shown that far from forbidding his followers to eat meat and fish, the Buddha himself did eat fish, venison, pork and snipe. All this great Teacher advocated was moderation and the avoidance of wanton cruelty. And, as Bhikkhu Kassapa said, not even vegetables are ahimsa food—the growing of vegetables, even rice, involves the killing of pests. There is too much cant about today, and we hope genuine religious leaders like Bhikkhu Kassapa who practise what they preach and make genuine sacrifices for what they believe, will rally public opinion in defence of religion against stunts which, besides being ridiculous, also cause great hardship and infringe the basic liberties of the citizen.

(ii)

We quote this extract from Major R. Raven-Hart's book "*Where the Buddha Trod.*"

"At Pava the village goldsmith prepared a meal which included 'dried boar's flesh': only the Buddha ate of it, warning his host not to serve it to his companions, and to bury what remained over.

"Boar's flesh may read oddly: are not Buddhist monks vegetarians? They are, nearly all of them; but the actual rule laid down is that they must not eat the flesh of any being that has lived 'if they have seen or heard or suspected' that it was killed for their especial use, since it is not the eating of flesh or fish that matters but the taking of life. Rather than take advantage of the concession most Buddhist monks (but by no means all) avoid eating anything that has lived; otherwise with the modern central butcheries and tinned meats, the rule would almost disappear.

" But to go to the Texts again, from another passage it is quite clear that there is no general prohibition of meat-eating since in it monks are specifically forbidden to eat the flesh 'of elephants, horses, dogs, snakes, lions, leopards, bears and hyenas.'

" And, far more importantly, in the Texts not once but half a dozen times it is stressed that evil habits, wicked deeds, impure thoughts defile a man, ' and not the eating of flesh.'

ALICE in *The Morning Times.*

Banned

When Britons wore but skins for dress
And still be-daubed their limbs with woad,
And Europe was a Wilderness
Unmarked by any track or road,

Our Culture then was at its height.
In War and Arts Agrarian
Our Isle excelled, when Europe's might
Was naught, her sons barbarian.

•

Ah, vaunted Culture in thy name
What crimes committed are today.
Our Ancient Kings would blush with shame
Could they but pass again this way.

Ban Sport ! Ban Radio ! Ban Song !
Ban all our good companions,
Ban this, Ban that, until ere long.
All will be banned but Banians !

Ban ALL things western 'cause they're " West."
Aloof and isolated grow.
On Duttu Gemunu's Laurels rest
And on our own small Dunghill crow.

•

Alas, full circle turns the wheel,
And at the pace we're going on
Soon Tourists will be here, I feel,
To see the Wild Men of Ceylon.

" GALLINAGO."

Observer.

Knox's or the White Man's Tree

(i)

We are interested to learn, says 'Walrus' in the *Daily News,* that a body called the Eastern Province Progressive Youth Front has raised doubts about the " White Man's Tree" under which Robert Knox is traditionally supposed to have been captured in 1660. An inscription on stone placed under the tree some 233 years after the event records that—

THIS IS THE WHITE MAN'S TREE
UNDER WHICH ROBERT KNOX
CAPTAIN OF THE SHIP ANN WAS CAPTURED
A.D. 1660.

(ii)

Is Knox's Tree, which the Government protects, really Knox's Tree? The authorities who are responsible for preserving it, don't think so.

The tree is looked after by the Department of Wild Life and this is what *Mr. C. W. Nicholas,* the head of the Department, writes in his administration report, issued the other day :—

Knox's tree at Mutur, the tree under which Captain Robert Knox, the father of Robert Knox, the author of the well-known book on Ceylon, is reputed to have been captured, is a protected tree. (For some reason which is not obvious this tree is called " John Knox's Tree " in the Trincomalee sheet of the one inch to the mile maps).

It is a very old tamarind tree, and in January, 1955, a main branch broke off and the tree itself was threatened with collapse unless measures were taken to build up a supporting structure around it. Rs. 800 was released from the votes of the Department of Wild Life and the Executive Engineer was requested to proceed with the work.

Considerable doubt has, however, since been cast on the authenticity of the tree. Mr. J. H. O. Paulusz, the Government Archivist, has very kindly furnished me with extracts

relating to the scene of Captain Knox's capture from unpublished documents, these documents being (1) Robert Knox's own interleaved copy of his book in which he made copious manuscript additions, and (2) Robert Knox's statement to the Dutch in Colombo soon after his escape from Kandy.

Knox's published work says that his father, the Captain, came from the ship in a boat into a small river and sat down under a tamarind tree. The unpublished documents confirm the journey by boat up the small river but add that the scene of the capture was two miles up the river from the seashore.

Since Knox is usually very accurate in his details, the further particulars now made available must be considered as ruling out the Protected Tree as the tree under which Captain Knox was taken prisoner, because the site of the protected tree does not fit the narrative.

(iii)

Dr. W. Balendra, commenting on Knox's Tree, writes : " I wish to inform you that those responsible for perpetuating the memory of one of the greatest Englishmen who lived in Ceylon, were not definite that the particular tree under discussion was the tree under which Capt. Knox was captured. They only surmised that the tree was probably one of historic importance.

" This information was given to me by the late Mr. J. P. Lewis, author of the book " Sixty-four Years in Ceylon." Mr. Lewis was one of those responsible for inaugurating the movement to perpetuate the memory of Robert Knox.

" A particular tree is not important. It is the site which matters most in the history of Knox's landing in Ceylon."

The Robert Knox referred to here, however, was not the author of the *Historical Relation of Ceylon* but his father (whose name was also Robert and not John as the EPPYF seem to think). Knox's narrative in his book is a bit confused on this point, but a note in his manuscript autobiography in the Bodleian Library makes it clear that father and son were not captured at the same time. Under " Certain Passages I would Keep in Memory " he noted :

Anno 1660 April 4th I came one Shore at Cattior one Zelone and whare I was Detained Captive—Ditto the 10th My father came one Shore thare and was detained.

The tamarind tree is mentioned in Knox's book in connexion with the capture of the elder Knox, and it seems unlikely that the son was taken in exactly the same place.

But that is not the end of the matter. Other earnest seekers of truth are doubtful whether the White Man's Tree fits in with the geographical clues provided in the *Historical Relation* at all, and whether either of the Knoxes could have been captured at this precise spot.

Crocodiles

It is not only elephants that are in danger of extinction. It appears that crocodiles are also being slaughtered at such a rate that they too may disappear. In fact, they are so close to extinction that an appeal has been launched by Dr. Heinz Wermuth, of the Berlin Museum, and Dr. Paul Deraniyagala, Director of the National Museums of Ceylon, on the urgency of the protection of crocodiles all over the world.

The appeal was originally made to the Secretariat of the International Union for the Protection of Nature, in Brussels, and it has now been circulated to about 160 Herpetologists (those who deal in the zoology of reptiles) all over the world.

Why, it may be asked, is it worth while saving crocodiles from destruction? Crocodiles are not handsome creatures, but the appeal points out that they provide a unique link with the age of the Dinosaurs and Pterodactyls, and their anatomical structures are of extreme importance in tracing the evolution of corres-

ponding ones in the higher vertebrates. Moreover, the distribution of crocodiles throws much light upon former land connexions.

The destruction of crocodiles has been hastened by desire to possess their valuable skins as well as by the vanity of " sportsmen " who desire to boast that they have bagged crocodiles " although shooting a crocodile with a high-powered rifle is no more dangerous than shooting a domestic fowl."

In Ceylon, the crocodile has practically no place to live in other than the tanks and when they go dry " the crocodiles fall an easy prey to the hide hunters whose harpoon and axe secure nearly every specimen in a tank."

ALICE in *Morning Times.*

Crocodile vs. Dog

A young crocodile, which invaded the residential area of Nalluruwa, Panadura, at night, was nearly attacking the inmate of a house, when dogs kept it at bay.

The croc., about 5 feet long, had slipped out of the crocodile-infested Talpitiya Lake the day before, and had attacked several dogs.

The residents, assisted by the Panadura Police, noosed the reptile and despatched it to the Dehiwela Zoo.

Observer.

Cobra Swallows Cobra

Many people witnessed the unusual sight of a cobra swallowing another at Nagolla.

Two cobras rushed out of a hole in an ant-hill, faced each other and with darting tongues struck at each other. This went on for about five minutes when the bigger of the two darted, coiled itself round the other, held it in a grip, grabbed its tail with its mouth and started swallowing it.

The victim made futile attempts to strike and free itself but inch by inch it was disappearing down the throat of the bigger snake.

The bloated victor crept back into the hole from where it had come.

Nemesis Came in Shape of Mongoose

A one-and-a-half day fight between two cobras in a jungle clearing, had a dramatic climax.

The fight, which was witnessed by a number of curious villagers, raged day and night over the body of a dead frog.

Writhing, hissing and wriggling, the cobras fought, aiming blow after blow and dodging like two professional boxers contending for a coveted title.

As the fight continued into the next day, and one reptile had almost swallowed the other, nemesis overtook them.

The arch enemy of all cobras arrived on the scene and tore the victor and the vanquished to pieces.

Times.

Pere David's Deer go Home to China

Four specimens of the remarkable Père David's deer have been sent by the Zoological Society of London to the Zoological Society of China at Peking, in exchange for a variety of Chinese animals.

There is evidence to show that this deer inhabited certain parts of China, probably in considerable numbers, about 3,500 years ago, but the first time it was ever seen by western eyes was when Père David, the French Lazarist missionary, who discovered the Giant Panda, allowed his curiosity to get the better of his discretion and, climbing on to a heap of sand, looked over the wall of the Imperial Hunting Park near Peking.

He was puzzled by what he saw—and no wonder—for this animal, which is known to the Chinese as Ssu-pu-hsiang or the Four Unlikes, has many features which distinguish it sharply from any other kind of deer. The hoofs, presumbly to help it over swampy

ground, are wide and big, somewhat resembling those of the reindeer ; the tail is much longer than that of the other deer and " tasselled " at the end like a donkey's ; the ears are small, and the antlers differ from those of other deer in having no forward-pointing tines but carrying a short distance above the burr a long backward-pointing tine which the animal uses for digging and for throwing mud on its back when it wants a mud bath. In spite of these great physical differences, the Père David has been successfully crossed with a Red deer, producing a fertile female calf which associated with the Père David but mated with the Red deer.

Père David managed to bribe some of the imperial gamekeepers to smuggle him the skin and bones of a pair of these animals over the wall, and these he was able to send to the Natural History Museum in Paris. Shortly afterwards the French Charge d'Affaires at Peking obtained two living specimens, the male of which unfortunately died. In the meantime the Zoological Society of London had applied for permission to obtain living specimens, and after one or two abortive attempts to bring them to this country the first pair arrived in Regent's Park in 1869.

Attempts to get them to breed there failed, and it was not until 1947 that the first calf, the young of a pair presented by the Duke of Bedford, was born at Whipsnade Park. In the meantime the Duke had set about forming the nucleus of a herd, which now numbers over 250. With the help of the Zoological Society of London, the Bedfords have made it possible for zoological societies in many parts of the world to be supplied with one or more pairs and thus ensure, should tragedy overtake the Woburn herd, that the Père David's deer shall not perish.

While all this was going on things were going badly for the animal in its native land. Most of the Imperial herd escaped when part of the Imperial Park wall was destroyed by flood in 1894, and large numbers of them were slaughtered and eaten by peasants. Then most of the survivors were scattered and probably killed when troops marching to relieve foreign legations in Peking during the Boxer rebellion broke into the Imperial Park—though some were probably shipped to Europe. A pair is known to have existed in a zoo at Peking in 1917, but by 1921 these had disappeared and so the Père David's deer became extinct in China.

Now, through the efforts of succeeding Dukes of Bedford, the wheel has turned full circle, and it is possible that this fine animal may once more become a part of China's natural fauna.

London Times.

Boom in Tigers

In a score of pokey little one-room offices in Delhi and other large Indian cities the shikar hunting companies who arrange for foreign visitors to shoot tiger, are counting up profits after one of the most successful seasons they have ever had. Tiger-shooting has reached such a scale that the Government has now rationed tigers to three for each hunting party.

Big game shooting brings hunters to India in their thousands for a fortnight's or three weeks' sport in the foothills of the Himalayas during the season—October to the end of May. Most are businessmen from America ; others come from Europe, from South Africa, Australia, Hong Kong and South America.

Tiger is the main quarry, but elephant or black bear will do at a pinch with a leopard, black buck and gazelle thrown in.

Many of those running shikar agencies, are former landlords who have gone into the business with the compensation received when their land was taken over by the Indian Government under agrarian reform measures. Not many years ago the same landlords, with typical Indian hospitality, would have arranged a tiger shoot for a foreign guest for nothing.

Those days have gone for good. There are even a few of the former Indian rulers in the business to augment the tax-free pensions—sometimes amounting to £50,000—which the Government allows them. But the Maharajahs operate in the upper reaches, and an introduction is necessary before an "invitation" to shoot is forthcoming.

The shikar agency's fee is £750. For this sum it takes the hunter to the Himalayan foothills on a 15-day trip, feeds him and looks after him, provides him with servants, electric light from a portable generator in camp, a hand laundry service which washes and irons his clothes in a few hours and an elephant from whose broad back he shoots the tiger.

The shikar agency guarantees to put the hunter in, "a position to shoot at least one tiger" and agrees to refund a quarter of the fee paid if a tiger fails to materialise.

Much of the shooting is done at a range of less than 50 yards and few huntsmen return home without the tiger skin they covet. And the average cost of this trophy is at the finish, about £1,000.

JONATHAN SWAYNE.

By courtesy of the *Morning Times* and the *London Observer*.

Preserving the Tiger

With reference to the fate of the tiger in India, I would like to point out that it still continues to hold its own in our forests in spite of the grim forebodings about its impending doom. The late Jim Corbett's apprehension expressed to Lord Wavell in 1946 about the tiger being "wiped out in 10 years" appears to have been occasioned more by his concern for the noble beast than by any facts in his possession. That his fears were ill-founded will be borne out by the number of tigers that our forests continue to produce annually in the major tiger-bearing states.

The average number of tigers shot each year in the region comprising Assam, Bengal, Bihar, Madhya Pradesh, Madras, Mysore, and Uttar Pradesh is as follows :—During the five years before 1939, 333 ; during the six years of the Second World War, 245 ; during the nine years after the Second World War, 274.

It may be pointed out that fewer tigers have been shot during the post-war period owing largely to factors that have no bearing on their intensity of distribution. These are : the partition of Bengal ; the prohibitive costs of permits, "kills," drives, arms and ammunitions ; discontinuation of the large Christmas shooting camps of the British days ; and above all, the progressive disappearance of the idle rich who indulged in organized slaughter.

Luckily, the tiger breeds freely in the wild state ; its rate of multiplication can be safely placed at 10 to 15 per cent. a year. In the sanctuaries constituted under the aegis of the Indian Board of Wild Life, conditions are conducive not only for the multiplication of the tiger and other game *in situ* but also for stepping up their population outside the precincts of such sanctuaries, not considered sacrosanct by their denizens. As a matter of fact, a sanctuary acts as a veritable nursery in the middle of the forest.

The Indian lion which once occupied about 250,000 square miles came to grief and became practically extinct about 100 years ago. The tiger need fear no such fate. Unlike the lion, whose bravado and bluster led to its extinction, the tiger is wary enough to fend for itself. In its uncanny caution and cunning lies its chief security, in its capacity to dodge the sportsman its real safety, and in the recognition accorded to it as a precious national heritage its best insurance against extinction.

M. D. CHATURVEDI.

11, Roberts Lane, New Delhi.

Abominable Snowman

The "abominable snowman," legendary creature of the Himalayan peaks, is probably really the *Himalayan red bear*, Dr. William L. Straus, Jr., anthropologist of the Johns Hopkins University, Baltimore, reports in "Science News Letter."

The "abominable snowman" is known only through travellers tales and gigantic man-like footprints left in the snow at heights of from 10,000 to 21,000 feet above sea-level.

"It must be emphasised," Dr. Straus states, "that there is no record of any 'snowman' ever having been captured—either alive or dead—or even photographed."

The animal footprint most commonly mistaken for that of man, he suggests, is that of the bear.

There are three varieties of bear in the Himalayan region : black, brown and red.

The red bear is known to walk on its hind-legs like a man and, when erect, is said to be as tall or taller than a tall man.

A factor in the start of the "abominable snowman" legends is due to a mistranslation of Tibetan words by foreigners.

The Himalayan red bear is known locally as mi-te. Himalayan expeditionists have mistranslated the word mi-te as abominable, filthy, dirty. The word actually means "man-bear."

Another name for the animal is kangmi, which has been derived from the "snowman."

"Abominable snowman" has been derived from the combination of the two mistranslated words, "miteh-kangmi."

The size of the great footprints has been exaggerated and distorted by the melting of the snow around the edges and by the action of wind.

According to the Reverend Swami Pranavananda, who has made a study of the giant footprints, the red bear is not the only mammal that frequently makes excursions far onto the snow fields and glaciers, apparently in search of food.

The wild yak, Tibetan wild horse, lynx, snow leopard, wolf, ibex, bharal, ghural, Tibetan antelope, musk-deer, and other animals do likewise, for vegetation can occur up to an altitude of 20,000 feet or more.—(NAFEN).

A Queer Bird—*The Kiwi*

The kiwi, reproduced on the stamps and coins of New Zealand, certainly has an extraordinary appearance, but can this national emblem really be threatened with extinction? It is not easy to say exactly how many kiwis now survive because the bird's nocturnal ways make it a difficult subject of study in its natural habitat. But there is no doubt that stoats, ferrets, rats, feral cats, bush fires and the advance of cultivation all contribute to threaten its existence. British scientists only discovered the kiwi in 1813, and their description of its fantastic appearance made sceptics doubt its existence. Could there be a bird without a tail—a distant relative of the ostrich, the emu, and the cassowary—with wings hidden beneath silky feathers that look like hair, flightless and burrowing like a ground-hog, with nostrils at the tip of its long curved beak and laying an egg equal to a quarter of its own weight?

International Bulletin.

Protection of Migrant Birds

This winter's severe cold caused a high death-rate among migratory birds who, having made their long journey towards the more temporate regions of Europe, found themselves unexpectedly surrounded by ice. A great number of the resident flamingos of the Camarague succumbed to the severe weather. In some areas, wild-fowl, half dead with cold and hunger were attacked by hunters and poachers. They were massacred wholesale, sometimes being hit with sticks and stones. In other parts, where inhabitants and hunters had more compassion, veritable rescue parties were organized to feed the birds and to save them from certain de-

struction. In Holland, in particular, nearly 110,000 florins were collected from all sections of the public to help the birds and in some cases even helicopters distributed food and watched over them. Thanks to the La Commission de la Chasse des Oiseaux-Migrateurs hunting was quickly prohibited in many European countries, but sometimes this praiseworthy step was taken too late to be really effective.

The House that Jack Built

I will only quote one example : the Macquarie Islands where rabbits, introduced with the intention of improving food resources, soon began to destroy the crops. Then man turned his mind as how best to repair this blunder. To combat the rabbit, he released the cat, the rabbit's natural enemy. The cat did indeed eat the rabbit, and for the time being, this method had some success. But, once all the rabbits had been disposed of, the cats attacked the seabirds whose eggs the natives greatly prized. Once again man intervened—to counteract the cat, he released the dog. But it had never struck him that the dog would rather attack the seal, which supplemented the local man's food resources. And so a very difficult situation arose. On the Macquarie Islands attempts are being made to destroy the dog that man introduced to destroy the cat, that man introduced to destroy the rabbit that man introduced for his own benefit.

Many other examples could be quoted.

ROGER HEIM.

Introduced Pests

The Kermadec Islands, outliers of New Zealand territory, are situated in the Pacific well to the north of the mainland. Various unsuccessful attempts at colonization have taken place there, especially on the island of Raoul, and although they are now uninhabited, the islands have been left their legacy of domestic animals including feral cats, goats, pigs and rats. "Forest and Bird," the quarterly magazine published by the Forest and Bird Protection Society of New Zealand, draws attention to the lamentable state of the endemic wild life there, like all island flora and fauna known through experience for their instability. Of course, the wild cats, which always grow to giantly proportions when they revert to their ancestors' way of life, destroy the birds ; the Kermadec petrel, a surface-breeding species, is now in danger of extinction. Goats threaten the vegetation and so the trouble spreads. The Royal Society of New Zealand has now intervened and is going to launch a camapign to exterminate these pests ; meanwhile the Civil Aviation staff is destroying the goats.

My Friends

My fruit trees (12 apple, 5 pear and 4 Victoria plum, in addition to red, white, and black currant and gooseberry bushes) have not been sprayed or otherwise treated for years, and I gather abundant crops of clean fruit year after year.

My friends the birds keep pests in check, in return for which service they are very welcome to the small quantity of fruit they themselves eat.

C. W. SMITH.

Upminster, Essex.

Snake Expert Killed by Own Cobra

Snake expert, Ernest Bender, 61, died recently in West Germany after being bitten by one of his own cobras—but it was fate that killed him.

Bender, who ran a reptile zoo here, had survived many snake bites, and he was unperturbed when the cobra bit his finger on Saturday.

He bound his arm, cut out the wound with a scalpel and injected himself with a serum. But the serum did not work because it had probably been stored too long and the snake poison began to take effect.

His wife frantically telephoned doctors and

clinics in the area for help. None had the right serum.

Then she remembered a research scientist whose speciality was snakes at Duesseldorf, about 60 miles away. She telephoned, and minutes later a car containing the serum was racing towards Koenigswinfer.

It arrived in time and could have saved Bender but fate decreed otherwise. The ampule containing the serum had broken during the journey.

Herr Bender, the snake lover, died four hours after the bite.

South African Mongoose Stories

(Being extracts prepared by Mr. S. V. O. Somanader of Kalkudah, E.P., from the April, 1956, Quarterly News-Letter of the Natal Society for the Preservation of Wild Life).

How a Mongoose was Killed by an Iguana

ON returning one evening from one of the adjacent farms at Mala Mala in Eastern Transvaal, Mr. Davidson saw an extraordinary sight.

An Umbulu (tree-iguana) had an Uchakide (Zulu name for the water-mongoose) by the back of the neck. Do what it could, the mongoose was held in a vice by the iguana. Mr. Davidson told one of his boys to release the captive, which he did. He then heard his head-boy Zaba talk to the other boys and say, "You would not believe me when I told you that a mongoose was killed by an iguana! Here is the evidence which you have seen with your own eyes."

I asked Zaba how the iguana had managed it, and he said that the mongoose followed up the scent, and, in doing so, poked its head into the hole where the iguana was lying, and was caught by the latter.

The tree-iguana, it is stated, has a call like that of a bird. There are any number of them at Mala Mala, and, like the tree-frog, if it called, the country was sure to get rain.

How a Mongoose Killed a Snake

Mr. Davidson states that Mr. Fynney had told him that, when he was once waiting for a leopard, he saw a water-mongoose with its hair standing on end, and not far off was a huge, black mamba. The mongoose, making a peculiar noise, passed close to him. It did not move; but he suddenly saw the little chap run and lie on an overhanging branch. The mongoose had anticipated that the snake would go under it—which it did. The mongoose then jumped on to the snake, and caught it behind the head. The snake threw its coils round its aggressor, but the latter kept on throwing them off with its legs and claws.

When the mongoose was satisfied that it had killed the snake, it started peeling its victim from its head, had a meal of it, preened himself, and then went off.

On another occasion, Mr. Davidson, while walking along a native footpath, stopped under a shady tree to snuff. His attention was attracted by a water-mongoose scraping and flattening itself out on an ant-heap. Having done this to its satisfaction, it got up, and suddenly saw a black snake (mamba) going straight for the ant-heap. The mongoose got there before the mamba, and, as the latter put its head into the ant-hole, the mongoose caught it and made a meal of it.

Why a Mongoose is Immune to Snake-bite

Mr. Davidson says that the late Mr. Alex Slogan—a great friend of his, and a keen observer—had told him that he felt, though with no real evidence to back up the assumption, that, when a mamba (snake) struck at a mongoose, the latter bristled up, and this caused the snake to strike short, and thus be blinded by the bristles.

He gives an instance. It seems that his head-boy Zaba had once related to him a fight between a number of the small variety of mongooses (called "Sibitsoya" in Zulu) and a mamba. The latter struck one of the mongooses, which rolled over, but the others went

into the attack, and succeeded in killing the snake. The stricken one soon got up and joined in the affray. It was here that Logan, listening to Zaba, had made to Mr. Davidson the suggestion that the snake had not got home with its bite, as the hairs of the animal were standing upright.

How like the Veddas

Honey-taking in Tibet is a very risky adventure as the bees hide the honeycomb under the projecting rocks of deep ravines. Long bamboo ladders are dropped down, which men climb sometimes two or three hundred feet, swinging free in the air. Below them flows the Kosi and if the rope which holds the ladder breaks it means certain death. They use smoke-balls to keep the angry bees away as the men collect the honeycomb, which is hoisted up in containers by a second rope. For success of this operation perfect and well-rehearsed combination is essential, as the sound of shouts or whistles is lost in the roar of the river below. On this occasion eleven men worked for a week in the ravine, and the price at which they sold the honey bore no relation to the risks they ran. I much regretted that I had no cine-camera with which to take a picture of this dramatic scene.

HEINRICH HALLER.

Salt for Leeches

Some of the valleys of Tibet are infested to such a degree by leeches that one simply cannot protect oneself against them. The best way of keeping them out is by wearing socks and trousers steeped in salt.

H. HALLER.

Boy Fires at Bird, Kills his Mother and Himself

A 14-year-old boy, in a residential area in Durban, fired a rifle at a bird on an electric power cable—and both he and his mother died.

He missed the bird, severing two cables which fell to the ground setting fire to the grass. His mother threw water over the blazing grass and was electrocuted and, in attempting to rescue his mother, the boy fell over one of the cables and was also electrocuted.

Correspondence

General Meeting of the Wild Life Protection Society

Sir,

A question which has been occurring to my mind rather frequently of late, and which I think other members of the Society too may have been asking themselves latterly in view of the alarming possibility of the extinction of certain species of our wild life—particularly the elephant—is whether this Society should not hold more frequent general meetings ?

It is really the Committee members who would know best about the practical aspects of holding more general meetings, but one cannot help feeling that the status of our wild life seems so uncertain now a days, despite all the good work that has been done, that our general meetings held annually are tending to become more and more occasions on which we foregather to contemplate situations where the time for action or remedy is past or very nearly past.

We are aware that our Committee Members devote an amazing amount of their spare time to the Society's affairs, but they are nevertheless not full-time game wardens, and I am sure, that the advice and activity of members can

be further mobilized to assist the committee, if we meet more often.

For instance, each year when we meet we hear that the elephant population has decreased further, or that Government has decided to deprive us of some valuable section of a sanctuary or intermediate zone, or that there was heavy poaching at water-holes during the past drought.

We know that our Committee of highly experienced wild life lovers are doing all that is humanly possible to voice our feelings on such matters. But would not the holding of a general meeting and the publication of its opinions on the particular wild life problem of the moment, go a step further towards achieving the desired result ?

I would like you, Sir, to put this letter up for the consideration of all members through the *Loris*.

A. F. TAMPOE.

Colombo.

Slaughter

Sir,

During the prevailing unprecedented drought which gripped the entire N.C.P. and Eastern Provinces, the well-known abodes of our fast diminishing wild life population, much propaganda was initated by the Department of Wild Life, the I.G.P. and the Government to tell the jungle dwellers that wild life is a national heritage and an invaluable national asset which should be preserved. And they were further advised not to indulge in the wanton destruction of wild animals which congregated at perennial rivers and water-holes to quench their thirst. This work is very laudable.

However, a strange thing was taking place during this period of propaganda. The educated class of "sportsmen" were granted permits by the Department of Wild Life authorising these gentlemen to sit throughout the moon-lit nights under a "camouflaged blind" near perennial water-holes to shoot leopard and bear which braved danger to quench their parched throats.

I hope the Department of Wild Life will *on principle* discourage these so-called "sportsmen" or moreover refuse requests of this nature to these "sportsmen".

May I suggest that all perennial water-holes, better known as "kemas" be protected during the drought season. Declare the months of July, August and September as quarter time for *all animals*, and thus save them from the guns of cowards.

C. R. W. ABHAYARATNE,
Daily News.

Hatton.

Migrants at Mandaitivu

Sir,

I observed the following newcomers of this season on the tidal mud flats here, through field glasses, on the date placed against each :—

Sandpipers—

Little Stint	1.8.56
Spotted	3.8.56
Common	3.8.56
Terek	4.8.56

Waders—

Red Shanks	13.8.56
Green Shanks	15.8.56

A host of others swarm the tidal mud flats of these shores, and there is no better place than a good mud flat at low tide to observe sea birds through field glasses.

Sand-pipers are the hardest shore birds of all to identify, and to make this harder, a host of obscure waders freely join sandpipers while on their way to and from their arctic breeding grounds. Also the Golden Plover has the habit of mingling with sandpipers on open coastal mud-flats—but they may easily be sampled off by the trained eye—as all plovers

are more stocky, with stouter bills, rounder heads and thicker necks. Various species of cranes and herons can be seen.

To the novice all long-necked and long-legged waders are cranes ! The heron is a long-necked and long-legged wader but does not belong to the crane family—and cranes must never be mistaken for herons.

In flight, herons can easily be distinguished for cranes fly with their necks stretched full length forward. Herons only have the habit of doubling their necks in flight, and are distinctive species of waders altogether.

The Pond Bittern and Egrets all belong to the Heron family. The crane belongs to the Stork family.

Herons wade in the shallows and often stand motionless while waiting to spear a frog or fish with a sudden thrust of their sharp bills—and the heron's neck is as long as its legs.

Cranes stand motionless more often in knee-deep water and submerge their heads when in search of food.

Young Night Herons are brown in colour and resemble bitterns, but adult birds are black above and whitish below.

There are many species of herons, and the most commonly seen and known is the Indian Pond Heron or "Paddy Bird." Not uncommon is the Green Heron or Bittern and there are four species of Bitterns in Ceylon : The Crested, the Green, the Yellow and the Black.

When not in breeding season, Egrets found in Ceylon are snowy white, and for this reason they are called "White-Wings."

When the sun is rising over the Jaffna lagoon, with the little waves dancing to welcome the new day, egrets may be seen flying low over the water on their way to feeding grounds north of the isle of Mandaitivu off the coast of Jaffna. In a snowy white line they fly. one behind the other, a flash of beauty, with the sun shining on this white array. The return flight is at sunset to trees growing along a desolate part of the seashore, on which they roost.

It may be to only a few to witness "The dance of the egrets." I have seen it often :— When the baby fish come in with the tide, a ring is formed by the egrets to enclose a shoal, by forming a circle, and with graceful stepping, flapping and leaping motions (which once seen will never be forgotten) the shoal is caught and gobbled.

T. K. Toussaint.

Mandaitivu,
27.8.56.

Angler Hooks Cobra

Sir,

I feel that the following incident is worth recording :—

On the 15th May, Mr. M. G. Strange, a visitor in the Inginiyagala Resthouse went fishing in the Gal Oya river close to the Power House. He was out for "Valaya" ("the fresh water shark") and as in the past he used a spinner shaped like a fish as a bait. To his surprise, in reeling in after his third cast, he found on the end of his rod a five-foot cobra, hooked a few inches below its head. The cobra was obviously swimming under the water as it was not seen on the surface, and after attacking the spinner got hooked in the neck. It was brought to the resthouse alive still attached to the hook and before the spinner could be removed the cobra had to be killed. This is not a so-called "fisherman's story," as many have seen this hooded cobra and identified it.

It will be interesting to know whether a similar "catch" has been made elsewhere.

R. W. Szechowyez.

Gal Oya.

Loris and Schools

Our journal is now being sent regularly to twenty-four principal schools of the Island, as a propaganda measure. Each copy is accompanied by the following slip : "For the school library with the compliments of the Wild Life Protection Society of Ceylon."

Here is a letter of appreciation from one of the schools :—

Sir,

Please accept our sincere thanks for the June, 1956, issue of the *Loris* so kindly sent.

This periodical has proved enjoyable reading. Its interesting and informative articles makes it a journal that commands much attention.

Our best wishes go out for its continued success.

Librarian, Royal College, Colombo.

Tamil Shooting Vocabulary

Sir,

I was interested to see Mr. Philip Crowe's "Shooting Vocabulary" in the last (June, 1956) edition of the *Loris*.

Though much credit is due to him for this good bit of work, the Tamil equivalents to the English names listed by him, however, are not all quite correct, including the way in which the Tamil names have been spelt. We cannot blame Mr. Crowe as he is a non-Ceylonese, but he will pardon me for attempting to improve on his efforts by sending you this amended list.

Maybe, Mr. Crowe got some of the names (with their spelling) from books on Ceylon Big Game, like Harry Storey's "Hunting and Shooting in Ceylon" (Appendix IV, pp. 362-365), but even Storey's more comprehensive list of vernacular terms for birds, beasts, camp equipment, etc., very helpful as it is, needs amending in many places.

Perhaps another reader of the *Loris*, who is conversant with the *Sinhalese* names of "shooting" words in Mr. Crowe's list, will be able to provide us with an amended list of terms in that language.

It is a pity that Mr. Crowe could not add to his useful list many other words like rogue elephant, loris, flying-fox, fishing-cat, giant-squirrel, krait, rat-snake, pelican, cormorant, hornbill, mite, red ant, centipede, caterpillar, tank, channel, shooting platform, etc., but perhaps he had to consider limitations of space in your magazine.

S. V. O. Somanader.

Kalkudah, E.P.

TAMIL SHOOTING VOCABULARY

English Name	*Name as given by Mr. Philip Crowe*	*Name Amended (where necessary)*
Elephant	Ahney	Yaanai or Aanai
Bear	Karradee	Karadee
Pig	Pandee	Punry (grammatical) or Pundy (colloquial) (*u* pronounced as in "tub")
Leopard	Pilee	Pulee (*u* as in "bull")
Sambhur (not spelt sambur)	Marrey	Marrai
Axis (or Spotted Deer)	Pullee-Mahn	Pullie-Mahn (*u* as in bull)
Mouse Deer (perhaps Barking-Deer is meant, and not Chevrotain) *See below*	Sarroogoo-Mahn	Sarugoo-Mahn (*u* as in bull)
Wild Buffalo	Kohtoo-Mahdoo	Kaddoo-Erumai (*e* as in met and *u* as in bull)
Crocodile	Mothalley	Muthalai (*u* as in bull)
Hare	Moosal	Muyal (grammatical)or Musal (colloquial) (*u* as in bull)
Jackal	Narree	Naree
Pangolin	Ooloonkoo	Anungkoo (*u* as in bull)
Mongoose	Kelree-pulley	Keery-Pullai (*u* as in bull)

English Name	*Name as given by Mr. Philip Crowe*	*Name Amended (where necessary)*
Porcupine	Moollahn-Pandee	Mul-Punry (grammatical) or Mul-Pundy (colloquial), (first *u* as in bull ; second *u* as in tub)
Red Monkey (Toque Monkey) ..	Korangoo	Siru-Kurangoo (*u* as inbull)
Grey Monkey .. .. .. (Black Wanderoo or Langur ?)	Mandee	Karung-Kurangoo (*u* as in bull) cr Mundee-Kurangoo (first *u* as in tub ; second *u* as in bull)
Monitor-Lizard	Udumbu	Udumboo (*u* as in bull)
Civet-Cat..	Pullugoo-Pooney	Punukoo-Poonai (*u* as in bull) of Puluga-Naavy
Peafowl	Myil	Myil Kahtoo-Cheval (*e* as in her) or Kahtoo-Chaaval (both used for peacock)
Jungle-Fowl	Kahtoo-Sahavl	Kahtoo-Kolee (both sexes)
Snipe	Kottan-Kooroovee	Pundee-Pathukai (first *u* as in tub, second *u* as in bull)
Green Pigeon	Pachey-Peerah	Pachchai-Purah (*u* as in bull)
Teal	Tahrah	Chilly-Tahrah
Duck	Tahrah	Tahrah (general name)
Python	Male-pamhi	Malai-Pahmboo or, Venkanaanthy (Pahmboo)
Cobra	Nallah-Pahmboo	Naaga-Pahmboo or, Nallah-pahmboo
Russell's Viper	Vineyan-pahmboo	Kannaady-Pudayen (*u* as in bull) or, Kannaddy-Vyrien
Scorpion	Komban-thel	Nadduva-Kaaly
Tarantula	Pulimuka-silanthi	Pulimuka-chilanthy
Black Ant	Kadeeyan	Kadyen
Tick	Sellu	Unny (*u* as in bull)
Leech (not Leach)	Adde	Addai

OTHER USEFUL WORDS

Yes	Ahmah	Aam or Ome (as in Home)
No	Illey	Illai
Water (drinking)	Tannee	Tanneer
Water-hole (animal)	Tannee-Kevolee	Tanneer-Kuly (*u* as in bull) or, Tanneer-Mudoo (*u* as in tub)
Large River	Heng-Gey	Ahroo
Small River	Ahroo	Sit-Ahroo
Camp	Pahleyam	Koodaarem
Gun	Tohkoo	Thuvakoo
Rice (boiled)	Sohroo	Choroo

The Chevrotain or Mouse-deer is called Ukkulaan-Punry (first and second *u* as in bull, and the third *u* as in tub) or Ukkulaan-Pundy (Colloquial), in Tamil.

S.V.O.S.

Kalkudah, E.P.

THE MALDIVES BECKON TO A NATURALIST

A NATURALIST'S consuming passion, it is said, is unexplored territory. And to the veteran naturalist, Mr. W. W. A. Phillips, the Maldive atolls are unexplored territory. Practically nothing is scientifically known of the fauna of the atolls. So Mr. Phillips is going there to study fauna.

For 45 years Mr. Phillips has studied wild life in Ceylon's jungles. When he came here in 1911, he started planting with his uncle, the late Mr. R. W. Kerr. His love for the wilds and its creatures took him into the jungles, and he is an authority on Ceylon's wild life. He has written two books—" Mammals of Ceylon " and " Birds of Ceylon," and is besides a member of the British Ornithological Union, the Zoological Society, and a Fellow of the Linnean Society and of the Ornithological Union of America.

His wife shares with him his passion for animals. " She is a wonderful organiser, and always accompanies me on my camping expeditions." Mr. Phillips said. In the bungalow they had at Bandarawela, animals were always welcome visitors. There was a pair of owls that used to visit them daily, and Mrs. Phillips had a tame pangolin (scaly ant-eater) that used to curl itself around her ankle while she went about her housework. They even tried taming a month-old crocodile, but found it a cross little creature.

Mr. Phillips told me he was concerned about the decline of Ceylon's natural vegetation. " The capital value of the land is being destroyed for the sake of one or two years' crops," he said.

Mr. and Mrs. Phillips will leave for the Maldives this month, and return next February. In March, they will leave for Europe. " We will return to Ceylon when we can," he said.

The British Museum will receive all the specimens Mr. Phillips hopes to collect in the Maldive Islands.

Morning Times.

REVIEW

Birds of Ceylon—*Book 3*—by **W. W. A. Phillips,** F.L.S., M.B.O.U., F.Z.S.—*Associated Newspapers of Ceylon, Ltd.* Rs. 8 and Rs. 4.25.

THIS is the third book of this handy little series, the two preceding ones being, *Birds of the Garden* and *Birds of our Swamps and Tanks.* Two more are promised to complete the series of five ; and we do hope that the author's departure from the Island will be no impediment to their completion.

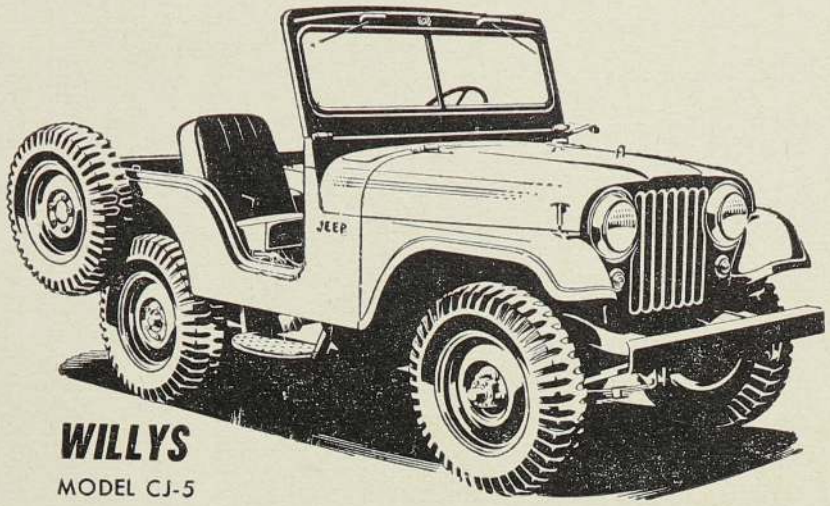
The present volume deals with the **Birds of Our Highlands,** the smallest of our climatic zones—nevertheless of special interest in that it is the home of our relic fauna, allied to but distinct from the typical fauna of the Island and of India. This relic fauna includes such beautiful birds as the *Ceylon Magpie, Kelaart's Yellow-eared Bulbul* and the *Lady Torrington Woodpigeon*—all found only in the higher altitudes.

The descriptive matter has the authoritative clarity so characteristic of the author. A short introductory preface is followed by a revised check list of the highland birds ; and that by brief descriptions of twenty selected birds representative of the district, illustrated with coloured plates by Cicely Lushington. These are of a better quality and a richer tone than those in the previous volumes.

What marks this book for special distinction is the final chapter on Bird Migration in relation to Ceylon. The author says, " Our knowledge of it is on a par with what existed in Britain fifty years ago." We have so far had to rely on the casual observations of bird-watchers. On these meagre data, Mr. Phillips, with the insight of the true ornithologist, has drawn a map, supported by such evidence as has been available to him, of the " assumed main migratory routes to Ceylon." It should form a helpful hypothesis for future workers in this field.

Let us hope that the time is not far distant when, as Mr. Phillips suggests, observatories will be set up on our small islands and headlands on the migrant routes, where the banding and ringing of birds will be undertaken.

R. L. S.



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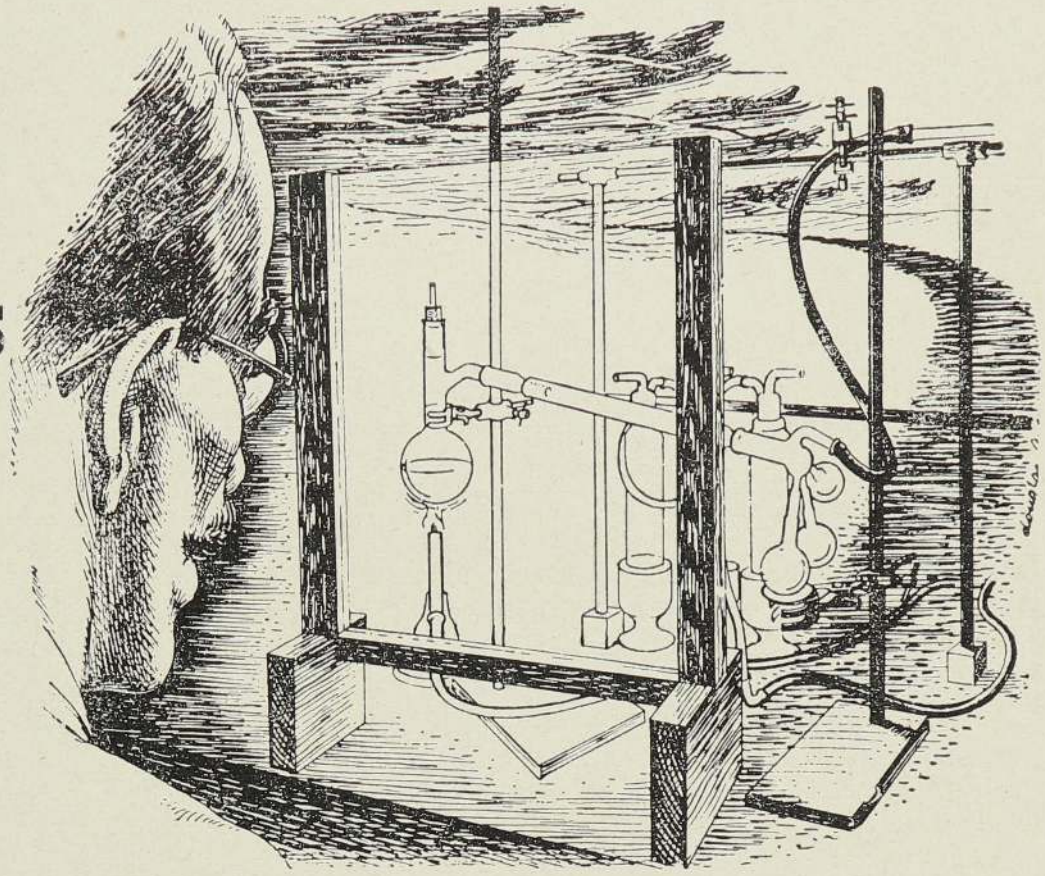

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