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BENGAL NATURAL HISTORY SOCIETY

EDITED BY

C. M. INGLIS, F.Z.S., B.E.M.B.O.U.

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and three illustrations in the text.*

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The Burmese Red-headed Trogon	
The Indian Black-crested Baza	

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The Painted Snipe	Vol. XV No. 1 June 1940
The Black-headed or Brahminy Myna	} ...	Vol. XVI No. 1. July 1941
The Indian Grey-headed Myna		
The Gold-crested Myna	Vol. XVI No. 4 April 1942
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The Duars Paradise Flycatcher	Vol. XVIII No. 2 October 1943
The Bengal Green Pigeon	Vol. XVIII No. 3 January 1944.
The Northern Golden-backed Woodpecker	Vol. XVIII No. 4 April 1944
The Himalayan Whistling Thrush	Vol. XIX No. 1 July 1944
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The Northern Bay Owl	Vol. XIX No. 3 January 1945
The Grey-winged Blackbird	Vol. XIX No. 4 April 1945
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The Indian Thick-billed Flowerpecker	Vol. XX No. 2 October 1945
The Indian Short-billed Minivet	Vol. XX No. 3 January 1946
The Yellow-throated Minivet	Vol. XX No. 4 April 1946
The Burmese Small Minivet	Vol. XXI No. 1 July 1946.

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CORRIGENDA.

Vol. XX, No. 4.

PAGE LINE

- 110 15 (from bottom) read "They were"
instead of "The were"
- 116 17 (from bottom) read "20, 10"
instead of "10, 40"
- 121 10 (from bottom) read small "c" in "Common"
- 128 10 (from top) read "her"
instead of "it".

THE EDITOR.

The following back numbers are out of print:
Vol. I, Nos. 2 and 4
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JOURNAL
OF THE
BENGAL NATURAL HISTORY SOCIETY.

Vol. XXI—No. 1.

The Minivets and Cuckoo-Shrikes of Bengal

BY

C. M. INGLIS, F.Z.S., B.E.M.B.O.U.

(With coloured plate)

(Continued from Vol. XX page 111.)

5. The Burmese Small Minivet.

Pericrocotus peregrinus vividus Stuart Baker.

This handsome little Minivet is divided into several races which are found practically all over India. A pale form (*P. peregrinus pallidus*) is found in Sind & N. W. India: the typical race (*P. peregrinus peregrinus*) which occurs over the greater part of India is grey above, darker than the last; in the male the throat is darkish-grey and the flame colour of the breast doesn't extend on to the abdomen; in the Duars, through Assam to Cochin China, Yunnan and the Andamans, is a third race (*P. peregrinus vividus*) in which the upper plumage is rather browner than in the typical race; the throat is a blacker grey and the flame colour on the breast is very rich and extends lower down (in the coloured plate the throat is rather too black); the race found from N. Kanara to Travancore (*P. peregrinus malabaricus*) is a very richly coloured one with the throat glossy black; there is another race (*P. peregrinus ceylonensis*) from Ceylon in which the grey of the upper plumage is not as dark nor the flame colour as rich as in the last subspecies.

was conveniently built out on an overhanging branch so that by running the launch alongside the bank and climbing on to the roof of the upper deck it was possible to look into the nest at close quarters. It contained two newly hatched chicks in white down on the 29th January (1939), but a few days later one of them had disappeared. While we were looking at the nest the birds kept swooping backwards and forwards just clear of the tree-tops, uttering an angry "kak, kak, kak" as they passed. This gave me an opportunity to take the accompanying photographs, (Plates I & II), which at least help to identify this bird when seen flying overhead. They hardly do justice, however, to the picture the bird makes against a blue sky, the pure white of its body and of the leading edges of its wings gleaming in the sun in contrast with the dark grey of the rest of the wing area, the whole forming a pleasing pattern in the form of a broad "V." As seen in plate I, the tail is somewhat wedge-shaped, and the terminal third of it is pure white. In immature birds the white parts are a good deal flecked with brown, making the pattern less distinct, but sufficiently clear to make identification fairly sure.

I also mentioned the Large Grey-headed Fishing Eagle (*Ichthyophagaë i. ichthyactus*), the only other member of the fishing eagle tribe one is likely to see in the plains of Bengal. I wanted a photograph of this bird for comparison with Pallas' Fishing Eagle, and was lucky enough to have a chance of getting it last year.

Around Calcutta the village people seem to call various big birds of prey "machhal" rather indiscriminately. It usually turns out that they are referring to Pallas' Fishing Eagle, but if possible I try to investigate a reported "machhal's" nest personally to make sure it is nothing more exciting. One "machhal" turned out to be a Changeable Hawk-Eagle which I was glad to have an opportunity of photographing. So on 30. 4. 44, when I heard of a "machhal" in a village near Baraset, I went to have a look, and found that this time it was the Grey-headed Fishing Eagle, a bird I have not often seen near Calcutta.



White-bellied Sea-Eagle flying over the Nest.



White-bellied Sea-Eagle in flight.



Large Grey-headed Fishing Eagle at the Nest.

Copyright W. A. S. Lewis.

The nest was in the fork of a tall straight mango tree, standing on its own, and towering over the roof of one of the houses of the village. There was a large young bird in it, and the parent sat on a nearby branch eyeing us while we discussed ways and means of building a suitable hide. We were surrounded by the usual crowd of sightseers, but the bird was not showing much concern, as it evidently thought that the possibility of my getting on any closer terms with it were remote. Its confidence was almost justified. The only other trees close by were palms whose tops were well below the level of the nest. There was only one chance, and that was a rather unsubstantial branch of the same tree, forking out slightly from the trunk and culminating in a cluster of small branches slightly higher than the nest. It looked as if my weight at the top of it might split it off, in which event I would have landed in the parlour of the gentleman below through a hole in his corrugated iron roof. All that could be done to avoid this contingency was to lash a bamboo across from the doubtful branch to a point just below the nest itself, and thereafter a rough cradle for me to sit in was constructed of odd bits of bamboo in the top of the branch. My shikari put the finishing touches to it during the following week, draping it round as usual with bits of old sacking.

On the morning of 7. 5. 44 I climbed into position. The young bird was almost fully feathered, the general colouring being brown, with pale edges to all the feathers, something like a pintail duck. The head was rather pale brown, with a longitudinally flecked effect. The eye seemed to be very dark brown, the feet china white, claws blackish, bill greyish, darkening to blue-black towards the tip. After only half an hour or so, I heard the guttural "oowok" of the parent bird as it approached through the trees somewhere near, and without further warning it swooped in quite quietly and perched on the nest with a fish in its talons. It stood still while I recovered from the momentary paralysis which one is apt to experience when the long-awaited sight suddenly confronts one. I debated for a few seconds whether to take a photo or not, as the first click of a shutter

sometimes sends a bird off for good, leaving one to curse one's impatience. The pose was so good, however, that I could not resist the temptation. The bird took no notice, and I even managed to change plates and get another photo before it began to move at all. It seemed more interested in the people watching from the ground than in the hide. After a minute, however, it sailed off again, leaving the fish which it had not attempted to offer to the young bird or tear up. The fish is just discernible in the photograph (plate III) lying in the shadow between the bird's feet. It appeared to be of the species I have heard called "boal", dark on top and yellowish below, the two colours meeting in a dentated pattern along the flanks.

The young bird had shown no great enthusiasm at its parent's arrival, and now continued to sit without taking any notice of the fish or attempting to entertain me. I waited hopefully till 12. 30 p. m. but by then had come to the conclusion that feeding activity probably takes place in the morning and evening with the young at such an advanced stage, and I might wait for hours without anything happening. As I felt sure I must have got at least one satisfactory photograph, I then departed.

The old bird was more handsome than I had expected. The grey of the head and neck was clear and delicate, the white parts snowy, and the eye a fierce yellow. The back and wings are dark brown. The tail is white, with the tip dark brown, whereas in Pallas' Fishing Eagle it is dark with a white band across it. The photograph gives an idea of the rounded shape of the wings. Seen from below, the bird's body is white with the brown of the breast rounded off against it. This Eagle does not show itself flying boldly overhead and in the open, but skulks about among trees. I saw nothing of it in the vicinity of the nest until it actually arrived through the cover of the jungle. As the young bird was already almost ready to fly, and I had not the time to spare, I did not pay any more visits to the nest or make any further study of the birds habits.

A List of Birds of Darjeeling and Neighbourhood

ADDENDA

Page No.

- 1 (24) Recorded up to 7,100 ft.
(46) Since recorded-June 1945.
7 (558) Recorded up to 7,000 ft.
(570) Recorded June 1945, probably breeding.

18 after (1470) add
(1472) *Clamator jacobinus jacobinus*

The Indian Pied Crested Cuckoo

Recorded Darjeeling, 7,000 ft, 4-9-45.

Supplement A

27 after (575) add

(618) *Cochoa viridis*

The Green Thrush

Recorded between Singhik and Toong, 4-5-31

Very rare resident.

Add D to following numbers :

24, 95, 309, 495, 558, 719, 888, 1248, 1353, 1472,
1794.

CORRIGENDA

3 (280) For *amigua* read *ambigua*

12 (906) Delete 'rare' and substitute 'not uncommon
locally'.

Supplement C

32 Delete (618)

33 Delete (1472)

Addenda "Darjeeling Bird Notes 1945"

Page 2 after (439) insert

(495) *Saxicola torquata indica*

The Indian Bush-Chat.

Upper part of Happy Valley T. E.

6400 ft, ♂ ♀, 15. 11. 45.

V. S. E.

Darjeeling Bird Notes—1945.

BY

V. S. EDWARDS.

Two important discoveries were made during the year :—

The first was at Namring by W. H. Matthews.

(34) *Dendrocitta frontalis*

The Black-browed Tree-pie

The discovery of a party of these was actually made in December 1944 and subsequent observation during 1945 confirmed the fact that one or more parties of these are resident there.

This species has only been recorded twice previously in the Darjeeling Neighbourhood : Lopchu, 4000 ft. 1902 and Sureil, 5200 ft. November 1921 although F. B. I (2nd) gives its distribution as 'Himalayas from Eastern Nepal to the extreme East and South of Assam'.

Whatever its distribution may have been in the past (F. B. I information probably dating back to the time before the Darjeeling Neighbourhood had been so largely opened up) it would seem that now the small area, in which the three recorded appearances have been made, is the western fringe of its range.

It is possible that in this small area the species is not quite so rare as the records would suggest, as it might easily be overlooked and not distinguished from (32) *The Eastern Himalayan Tree-pie* which is common ; the former is a less noisy bird than the latter and is easily identified by the absence of the large white spot on the wing which is a prominent feature of the latter.

The second was

(1472) *Clamator jacobinus jacobinus*

The Indian Pied Crested Cuckoo

On 4th September an immature bird of this species was observed in the garden of 1 Auckland Villa, where it stayed for two hours. This seems to be the first definitely recorded appearance of this species in the Sikkim Himalayas. Stuart Baker in F. B. I mentioned that stragglers wander as high as 8,000 ft in the Himalayas and that there was a record of a specimen having been taken in Tibet at 14,000 ft by an Everest Expedition.

H. Stevens in his Notes of Birds of the Sikkim Himalayas in the Journal of the Bombay Natural History Society in 1922/23 wrote as follows :—

‘Recorded for the Lower Himalayas, Unknown to G. E. Shaw and myself. It would be an interesting fact, if the route were known of the specimen obtained at Tingri, 14,000 ft, by the Mount Everest Expedition.’

From the behaviour of the bird and its method of progress, it is very easy to realise how heavy the odds are against any of the occasional stragglers that may appear in Sikkim, being observed, particularly as these visits take place during the rains. When stationary, the bird did not resent observation but when moving kept as far as possible under cover and only came out into the open when forced to do so, as when driven out of a tree by a crow.

Three cases occurred of birds being recorded at unusually high elevations.

(24) *Cissa chinensis chinensis*

The Indian Green Magpie

Recorded on Observatory Hill at 7,100 ft. on 17/9/45.

F. B. I gives its breeding range as up to 4000 ft. and local records as resident up to 5,500 ft.

(391) *Ixos flavala flavala*.

The Himalayan Brown-eared Bulbul

Recorded at Ghoom Rock, 7,500 ft. on 28/6/45 by Capt. R. H. Baillie.

Previous local records only mention it as resident up to 4,000 ft, though F. B. I states it is found up to 7,000 ft.

(558) *Copsychus saularis saularis*

The Indian Magpie-Robin

Recorded on 7/10/45 at 7,000 ft. in Darjeeling.

F. B. I gives it as breeding up to about 6,000 ft; Whistler's as occasionally ascending up to 6,000 ft. and Salim Ali as being resident up to about 4,000 ft. Previous local records only give it as resident up to 5,500 ft.

The following are noted as having been recorded for the first time in Darjeeling:—

(92) *Suthora unicolor*

The Brown Suthora

Calcutta Road, 7,000 ft. 9/6/45

(95) *Suthora poliotis humii*

The Black-fronted Suthora

By Capt. R. H. Baillie on 8/6/45 on Auckland Road near Ghoom.

(106) *Psittiparus gularis gularis*

The Sikkim Grey-headed Parrot-Bill

Calcutta Road, 7000 ft. 22-5-45

(286) *Alcippe nepalensis nepalensis*

The Nepal White-eyed Quaker-Babbler

Birch Hill Road East, 6,700 ft. 18-4-45

(304) *Fulvetta vinipecta chumbiensis*

The Nepal White-browed Fulvetta

Calcutta Road, 7,000 ft, 10-4-45

(309) *Lioparus chrysotis chrysotis*

The Himalayan Golden-breasted Fulvetta

Calcutta Road, 7,100 ft, 1-11-45

- (321) *Actinodura egertoni egertoni*
The Nepal Bar-Wing
Calcutta Road, 7,000 ft, 15-5-45 and 13-10-45
- (489) *Heteroxenicus nipalensis nipalensis*
The Nepal Short-tailed-Chat
Calcutta Road, 7,100 ft, 27-5-45 ♂.
- (712) *Lanius nigriceps nigriceps*
The Indian Black-headed Shrike
On many occasions during April and May on
Calcutta Road round 7,000 ft.
- (719) *Lanius cristatus cristatus*
The Brown Shrike
On Observatory Hill, 20-9-45 on downward
migration.
- (888) *Seicercus affinis*
The Allied Flycatcher-Warbler
On many occasions
- (1049) *Pyrhoplectes epauletta*
The Golden-headed Black Finch
Below Rivers Hill, 7-4-45 during upward migration.
- (1353) *Chrysophlegma flavinucha flavinucha*
The Large Yellow-naped Woodpecker
Observatory Hill, 7,100 ft, 17-2-45.
- (1383) *Blythipicus pyrrhotes pyrrhotes*
The Red-eared Bay Woodpecker
Observatory Hill, 7,200 ft, 29-3-45
- (1794) *Circus æruginosus æruginosus*
The Marsh Harrier
Calcutta Road, 25-9-45, ♀ on downward migration.
- (1867) *Dendrotreron hodgsonii*
The Speckled Wood-Pigeon
Observatory Hill, ♀ 14-4-45
Calcutta Road, ♂, 17-4-45
- (1870) *Streptopelia orientalis orientalis*
The Rufous Turtle-Dove
Calcutta Road, 19-4-45.

Thanks are due to Captain R. H. Baillie, who was in this Neighbourhood for three weeks during June, for the following information in addition to his two records mentioned earlier on :—

(46) *Nucifraga caryocatactes hemispila*

The Himalayan Nateracker

Observed on Senchal, about 8,100 ft. on 7-6-45.

This seems to suggest that the bird might be breeding nearby.

Previously only recorded as occasional winter visitor.

(487) *Heteroxenicus hyperythrus*

The Rusty-bellied Short-Wing

A pair seen at about 6,600 ft. near the Lepchajaggat/Marybong Rd. on 22-6-45.

Only once previously recorded in the Neighbourhood :
Mongpu, 3,800 ft. May 1920.

(570) *Turdus merula albocinctus*

The White-collared Blackbird

Recorded on Senchal on 9th and 27th June and were certainly breeding.

Previously only recorded as winter visitor to Darjeeling and Neighbourhood.

Thanks are also due to W. H. Matthews for the following information regarding :—

(1460) *Hierococcoeyx fugax nicolor*

The Nepal or Hodgson's Hawk-Cuckoo

Resident at Namring. Previous local records were, Darjeeling, 7,000 ft. August 1904 ; Mongpu, 4500 ft. May 1920 and Kurseong, 4,500 ft. January 1944. F. B I and other books give its call as a thin, shrill repetition of that of the Larger Hawk-Cuckoos. Mr. Matthews gives it as follows :—

'Gee-whiz-gee-whiz-gee-whiz very piercing and insistent, interrupted with harsh staccato stuttering up the scale and half way down again, getting quicker and quicker, ending in a

slurring trill. This last note can only be compared with the shrill alarm note of the Golden-backed Woodpecker. The gee-whiz note is also made in a mild way by the Grey Drongo.

The following note on the species mentioned below, may be of assistance to anybody coming across the same peculiarity.

(782) *Chibia hottentotta hottentotta*
The Indian Hair-crested Drongo

In 1943, Lady Morton writing from Kalimpong said that near Gantok she had seen a Drongo which was bright blue underneath but could not find any mention of such a bird in any of the books of reference. At the time it was quite impossible to solve the problem, but at the beginning of April 1945 I was staying at Namring 3500 ft. with W. H. Matthews and one morning at about 3,000 ft. elevation, he drew my attention to a Hair-crested Drongo: seen through glasses, the bird was bright blue underneath and this was confirmed by W. H. M. on his turning the glasses onto it.

It would seem that in bright sunshine at certain angles this species may appear bright blue underneath instead of black with a metallic blue gloss mentioned in F. B. I.

The Snakes of Northern Bengal and Sikkim.

BY

G. E. SHAW, E. O. SHEBBEARE, AND P. E. BARKER.

PART XII

(Continued from Vol. XVII Page 121.)

THE COBRAS (Genus *Naja*, until recently called *Naia*).

The two in our area (the Common Cobra and King-cobra or Hamadryad) are also the only Asiatic representatives, extending from the east coast of the Caspian to south China and the Philippines. The real head-quarters of the genus would seem to be Africa, from the Mediterranean to

Cape, where there are eight full species some of which include sub-species or local varieties. Our two, however, are perhaps the most outstanding members of the group, the King-cobra being the largest (incidentally the biggest poisonous snake in the world) and the common Cobra having the best developed hood. In most African species the hood is not more developed than in the King-cobra and some have no hood at all.

68. **NAJA HANNAH** (Cantor) The King-cobra, Snake-eating-cobra or Hamadryad. Poisonous, F. B. I. No. 486.

Synonyms :—*Naia hannah*, *N. bungarus*, *N. vittata*, *N. elaps*, *Ophiophagus bungarus*, *O. elaps*, *Hamadryas hannah*, *H. ophiophagus*, *H. elaps*, *Trimeresurus ophiophagus*, *T. bungarus*, *Naja elaps*.

Costals :—17, 15, 15, type A except near the hood where they are type F (see Plate II). *Ventrals* :—215-270. *Anal* :—entire. *Sub-caudals* :—80-120 the first few usually single, the rest divided (see Plate I, G). *Head shields* :—the third supralabial touches the orbit and the posterior nasal (see Plate III, F) a feature peculiar to cobras and coral-snakes (Nos. 68, 69 & 70). There is a pair of shields (post-parietals) in contact with one another immediately behind the parietals (see Plate III, E), this feature is peculiar to this species alone. The poison fangs, even in large individuals, are not more than about three tenths of an inch long, nothing like so big, proportionately, as those of the vipers.

Shape :—Much that of the common Cobra (No. 69) but the hood, when expanded, is proportionately less enlarged and the body is generally more cylindrical, that is to say less flattened and with the dorsal ridge less prominent. The aggressive attitude also differs slightly from that of the common cobra. Both snakes raise the body for about a third of its length and expand the hood but, in the King-cobra, it is raised bolt upright with the head bent sharply forward. Dittmars describes this perfectly : "Occasionally

"it will rear four feet high and stand as motionless as a great candlestick, staring fixedly. There is none of the nervous swaying or marked arching of the neck of the common cobra. The attitude is one of intense scrutiny."

Colour :—The colour of the adult has been said to vary from yellowish brown to nearly black. All we have seen could be described as dark brown with more or less well-marked lighter cross-bands—up to 50 on the body and ten on the tail can generally be distinguished. These cross-bands are, sometimes, quite distinct and a freshly-moulted King-cobra can be a handsome snake, rich brown with the cross-bars the colour of ripe corn. The underside is paler and the chin and throat generally yellow.

The young, up to about two and a half feet in length, are a great contrast to the adult being shining black with rich yellow cross-bars. The first of these is an unbroken line across the prefrontals on the snout, the second, across the frontal shield behind the eyes, is broken into a series of spots of which the central one (on the frontal shield) is the largest. The third, across the parietals to the neck, is also a broken line. These three cross-bars are all curved backwards, arcs of circles with the tip of the snout roughly as centre but the fourth, on the neck, is sharply pointed *forwards* along the dorsal ridge and the succeeding cross-bars repeat this pattern with gradually decreasing emphasis. The belly is a slightly paler yellow with the ends of some of the ventrals dull greyish black. Altogether it is a very beautiful little snake while in this stage and one likely to puzzle a beginner unless he relies strictly on shields and scales and is not misled by colour.

Size : Not many years ago the maximum length of the King-cobra was thought to be about twelve feet and for some years after that one killed at Buxa fort (in our area) held the world's record with a length of 15 ft. 5 ins. Recently this has been surpassed even by Northern Bengal specimens and we believe the Indian record is now somewhere about 16 feet. A monster from near Port Dickson, in Malaya, was sent to the London Zoo a few years ago by

Mr. Leonard who had kept it for some time as a pet. After death, as the result of an old wound received from another snake given it for food, it was found to measure 18 ft. 2 ins. In spite of these startling figures it is safe to regard any King-cobra approaching 15 feet as a very large specimen indeed; twelve feet is much more usual. We have unfortunately no information about the relative size of the sexes in this species.

Habitat:—Though a fairly common snake in our area it seems to be rather local in its distribution being much commoner along the outer face of the Himalayas, from near the foot of the hills to about 4,000 ft., than elsewhere. We have taken them at Dow-Hill (6,000 ft.) and heard of them up to at least 7,000 ft. Unlike the common Cobra it is essentially a snake of the forest. Outside our area we have found them common on the sea-face in the Sundarbans and it may be said to occur in all moist forest country from at least as far west as the United Provinces and South India, through Burma and Malasia to the Philippines and southern China as far north as the latitude of Shanghai.

Habits: Their food is almost entirely other snakes and Ditmars observed that they can detect and avoid poisonous ones. There is one record, from Buxa, of a monitor lizard (probably *Varanus bengalensis*) measuring 3 ft. 9 ins. swallowed by a King-cobra of 9 ft. 11½ ins. They can swallow fairly large snakes in comparison to their own size; we have a record of a 9 ft. 2 ins. python swallowed by a 12 foot King-cobra. They normally have a meal about once a week and consume a great number of snakes during the cold weather. In the London Zoo one ate 82 snakes in one winter and a fourteen-footer in the National Zoological Park, Washington, swallowed 45 feet of snakes between July and March. They have been known to eat small mammals but this is exceptional.

About 25 eggs (21 to 33 recorded) are laid in a rough nest of leaves and rubbish, usually during April and May. The female stays in the vicinity for some time though not

coiled over them continuously ; whether she remains until they hatch out is not known. The male is said by some to remain nearby also. The hatchlings are about twenty inches long.

There is no doubt that the King-cobra will pursue a human being on occasion though the statement one sometimes hears, that they always attack on sight, is untrue. We have heard some first-hand accounts of such pursuits and read of several more. These suggest that it is at least unusual for this snake to attack *unprovoked* unless there are young about but it would be rash to lay even this down as an invariable rule with our comparatively limited experience. Those who know this snake best are agreed that it is quite fearless. "insolent" and sometimes aggressive and that its intelligence is superior to that of most, if not all, other snakes. It is easily tamed and then becomes reasonably safe to handle by those whom it considers friendly. This taming is the normal practice among some hilltribes in Burma who venerate the species and I have known at least two Europeans who kept King-cobras as pets.

Like all fairly slender ground snakes, a 14-footer does not exceed $2\frac{1}{2}$ inches in diameter, it has a fair turn of speed though the tales of its overtaking a galloping pony are probably exaggerations.

Effects of the bite : The King-cobra strikes hard and usually holds on (in one recorded case for eight minutes) so that it can generally succeed in injecting a full dose on any bare or thinly-clothed part. Wall writes :—"Rogers estimated with some doubt that about ten lethal doses (for man ?) could be discharged at one bite. Being a much larger snake than the cobra, the mortality from its bite is almost certainly much higher than in that species." Death, in man, appears to follow a full lethal dose in about twenty minutes. The venom, though closely allied to that of the Cobra, is not identical and antivenene prepared from the latter snake is not completely effective in cases of King-cobra bite. It acts almost exactly like cobra venom, by

paralysing the respiratory centre of the brain & phrenic nerves so that death by asphyxiation follows, but its effects on the blood are even slighter than with cobra venom so that bleeding or bloody discharges are still less likely to be met with.

(To be continued.)

A record Mahseer of 120 pounds.

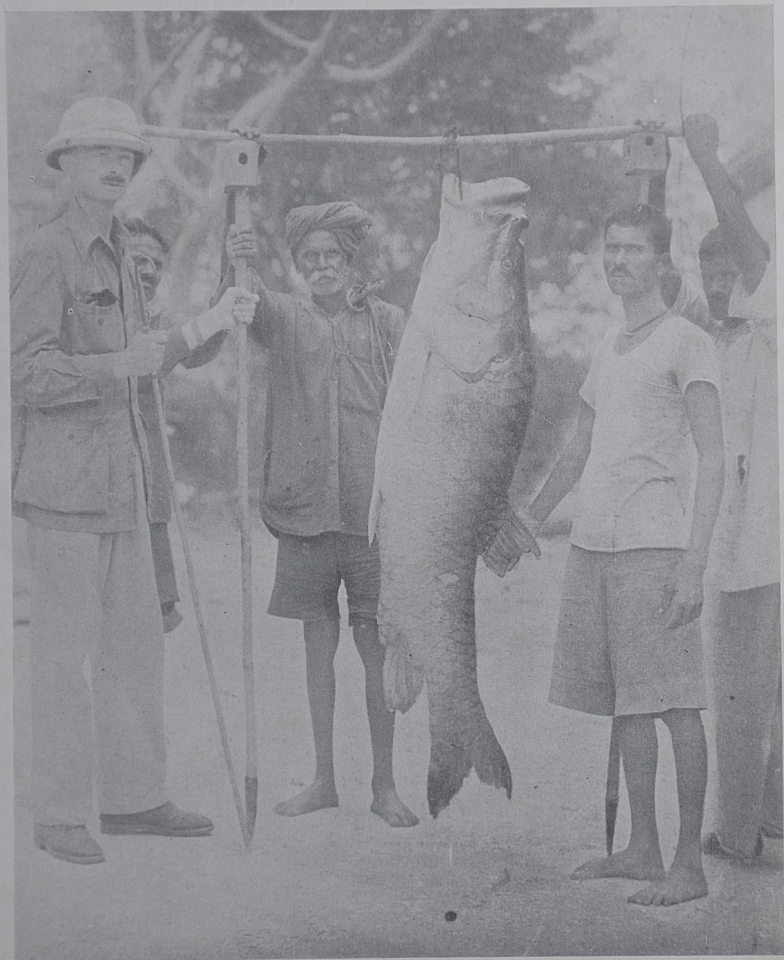
I enclose a photograph of a 120 lbs. Mahseer. Its length was $66\frac{1}{2}$ " and girth $41\frac{1}{2}$ ". I caught it in the upper reaches of the Cubbany river in Mysore on the 22nd March, 1946. The photograph was taken the following day.

The previous record of 119 lbs. with a length of 64" and girth 42" was caught by Colonel Rivett Carnac. Since then several fish of 100 lbs. have been caught but, up till now, Rivett Carnac's fish remained the record.

We had had lot of rain in Mysore and I was rather speculative as to what the river would be like. However I motored to my camp 40 miles away, along a road lined with large banian and other avenue trees. It passes through many miles of open cultivation before reaching the Game preserves and forest. The banian trees were all in fruit, and devoid of leaves, and numbers of Green Pigeon were seen feeding on the fruit. I pulled up 6 times and shot 5 birds with my 22, a very useful addition to the commissariat, for which my cook showed much joy.

When I arrived in camp I was informed that it had rained every afternoon of the past week. The river, which passed close to the camp, was, I was glad to find, not very discoloured all the same: evidence that there had been little rain in the hills beyond, otherwise it would have been like pea soup.

The Cubbany flows through miles of forest; huge trees and great sweeping bamboos grow to the very edge of its high banks. The water varies considerably; long runs, rapids of every type and stretches of still, deep pools.



The Author with his 120 lb. Mahseer.

Copyright J. de Wet van Ingen.

There are rocks too of every description and size. The larger islands are all overgrown with big trees, survivors of many floods.

I would spin in all the fast water, using a Hardy Murdoch rod, a $4\frac{1}{2}$ " Silex reel and a 4" spoon, with Punjab wire trace and fish the long still pools with *atta*.

On the morning of the eventful day I had only succeeded in landing a 5 lbs. Mahseer which was duly released. In the evening large clouds gathered and we heard the rumbling of distant thunder. I decided to fish a short while with *atta* and then to proceed fishing with a spoon, trying all the runs and rapids. By way of a change of luck I used a 12 ft., nondescript, light G. H. Farlow rod; one which had been given to me by a friend who had purchased it at an auction many years before. My boatman was very averse to this. I used a 4" Silex reel and a light line to match the rod.

I fished a pool which had a number of submerged rocks where I had, previously, lost fish, and tackle, as a fast flowing line need only touch the sharp edge of a rock to be severed. In order to circumvent the fish (if I should hook one of course) I had decided to race after it in my coracle immediately it was hooked, keeping as near to it as possible. I was fishing from the bank, and, presently, my line got taut and I struck. The line began tearing out and, as decided, I stepped into the coracle and sat on the ratan seat, telling the boatman to hurry. The inevitable happened; the boatman lost his head and got in behind me facing the shore. I took hold of the paddle, whisked the coracle round and raced after the fish. There we were sitting nearly back to back with my body and shoulders half turned and I holding on to the already doubled rod. My rain coat and fishing bag were also in the coracle so I had precious little leg room. Pivoting myself round on my posterior and, in some way, getting my legs over I managed to move my lower half round in the right direction. A coracle is a flimsy little craft and if one overbalances it capsizes easily.

Very soon we were near where the line entered the water and there was no more movement on the part of the fish; then, suddenly, the line got slack and I thought "alas! its gone"; soon, however, on reeling in, the line took another direction; this happened twice and, summing up the situation, I realized that these were the friendly rocks which fish take every advantage of as so many had previously done. To cut a long story short we, eventually, persuaded the fish to leave its rocky home and come out into the open.

I then ordered the boatman to paddle to the bank from where I intended playing the fish and shelving it as I had no gaff. While we paddled, the fish, a short distance behind, followed in our direction but not for long. It made a dash across our starboard, the line cutting the surface of the water. Here, again, I was in difficulties—half turned and the rod fully strained. I went through some more pivoting, moving my legs over the side of the coracle and not over the coat and bag as I, previously, did. The boatman kept on paddling, only stopping when I gave vent to my feelings.

The fish then made for a heap of dead trees, under a steep bank but I, fortunately, was able to dissuade it from doing so. My thoughts were not in terms of 100 pounders, though that was always at the back of my mind. I guessed it was only a 50 pounder but a fighter all the same! What a surprise it was to see the huge fish beached and the immense size of its head. It was an old hen fish and I had a great feeling of remorse at killing such a huge and fine fish, with which I could do nothing at all but give away. It was paddled across the river.

Taking the Murdoch rod, mounted with the 4" spoon, I proceeded down stream; but, evidently due to the thundery weather, I never moved a fish. Returning some two hours later I had the Mahseer carried by means of two dry gunny bags, up the very steep bank to my camp. On reaching this my feelings can well be imagined as I measured the fish and watched the scales turn to 120 pounds! Looking

at the sacks I found they were saturated with moisture absorbed from the fish. Had I weighed it, at the water's edge, as soon as it was landed, it should have weighed a further 4 or 5 lbs.

Returning to Mysore the next morning the fish was photographed and the weight certified at 12 noon, the scales turning to 117 lbs. so it had lost 3 lbs. from the time it was weighed in camp, although carefully covered with wet sacking en route.

J. de Wet van Ingen
Mysore

18th May 1946

[We congratulate Mr. van Ingen on his great success, a well befitting one after his many years fishing in Mysore rivers. The previous record Mahseer of 119 lbs. was caught in the Cauvery, also in Mysore.

Editor]

The general lay-out of this paper is similar to that of the previous one, except that species that were not found with in 1944 are marked with an asterisk, and those caught at Pashote in December 1930 have a P added in brackets. Evans' notes on distribution and rarity are only given for those species that were not caught in 1944. A comparison between the two periods, May-June 1944 and 18 Sept.-15 Nov. 1945, is given after .

Generally speaking I was disappointed by the results obtained. The immediate post-monsoon period has often been stated to be one of the best collecting seasons, and I was expecting a far greater abundance both of species and individuals. Actually I took fewer species on this visit than I did in May-June of the previous year, and, except for a few species, nothing was really common.

The following comparative table may be of interest. The figures for N. M. India and for India, Burma and Ceylon

The Rhopalocera of Tukdah, Sept.-Nov. 1945.

By

D. G. SEVASTOPULO, F.R.E.S.

In a previous paper in this Journal (1945, xix, 146), I recorded the Rhopalocera collected at Tukdah in May and June 1944. The present paper deals with a collection made between the 15th September and 15th November 1945.

My intention had been to arrive at Tukdah immediately after the end of the monsoon, but the rains of 1945 were abnormal and monsoon conditions continued well into October. I have no rainfall figures for Tukdah, but the rainfall in Darjeeling was below average whilst that in Kalimpong was much in excess. Tukdah residents told me that August had been far sunnier than normal. Shortly after fine weather had set in in the middle of October, a cyclone in the Bay of Bengal produced another three days of very heavy rain.

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Generally speaking I was disappointed by the results obtained. The immediate post-monsoon period has often been stated to be one of the best collecting seasons, and I was expecting a far greater abundance both of species and individuals. Actually I took fewer species on this visit than I did in May-June of the previous year, and, except for a few species, nothing was really common.

The following comparative table may be of interest, the figures for N. E. India and for India, Burma and Ceylon

are taken from Evans' *Identification of Indian Butterflies*
(2nd edit.)

	Tukdah, May-June 1944	Tukdah, Sept-Nov. 1945.	Total Tukdah	Peshoke, December 1936	Common to Tukdah and Peshoke	Total—N. E. India	Total—India, Burma and Ceylon
Papilionidæ ...	7	7	11	4	1	69	90
Pieridæ ...	14	11	16	16	9	57	98
Danaidæ ...	4	4	6	3	3	21	38
Satyridæ ...	11	12	14	10	4	120	184
Amathusiidæ	17	26
Nymphalidæ ...	26	21	29	20	11	179	232
Erycinidæ ...	4	7	7	3	2	19	25
Lycænidæ ...	16	14	21	11	4	253	438
Hesperiidæ ...	12	11	17	4	3	189	307
TOTAL ...	94	87	121	71	37	962	1,438

Papilionidæ

- A 2-15 *Polydorus (Troa) philoxenus* Gray, *polyeuctes*
Dbl.—Uncommon.
- A 4-5 **Papilio rhetenor* Westw., *rhetenor*—One imago
and four larvæ. (Kumaon—Burma. NR.)
- A 4-9 **Papilio polyctor* Bsd., *ganesa* Dbl.—Larvæ
uncommon. (Sikkim—N. Burma. C.)
- A 4-10 **Papilio paris* L., *paris*—One larva. (Orissa.
Kumaon—Burma. C.)
- A 4-11 *Papilio arcturus* Westw., *arcturus*—Not common,
Two larvæ. This was the only member of
the group that I saw, for certain, flying.
- A 4-19 *Papilio helenus* L. *helenus*—Fairly common.
Larvæ common on Citrus and wild Rutaceæ.

- A 6—1 **Graphium (Zetides) cloanthus* Westw.—A single wing lying on a path. (Kashmir—Burma. NR.)

The most striking difference between this visit and that of May-June 1944, was the discovery of the larvæ of no fewer than five *Papilio* species on Citrus and wild Rutaceæ. Of these five species, two do not appear to have been bred before at all, whilst the other three have only been bred in the Southern Indian subspecies. As I suggested in my previous paper, *P. polyctor* occurs at Tukdah, also *P. paris*.

Pieridæ

- B 4—10 *Pieris canidia* Sparr., *indica* Evans—Not common. (P).
- B 6—11 *Delias descombesi* Bsd., *leucacantha* Fruhs.—Two examples only. (P).
- B 9—2 *Cepora (Huphina) nerissa* F., *nerissa (phryne* F.)
Not common.
- B 9—3 *Cepora (Huphina) nadina* Luc., *nadina*—One only. (P).
- B 10—2 *Appias lalage* Dbl., *lalage*—Fairly common from the end of October onwards. (P).
- B 15—2 *Eurema (Terias) laeta* Bsd., *sikkima* Moore—Fairly common. (P)
- B 15—4 **Eurema (Terias) blanda* Bsd., *silhetana* Wall.
Fairly common. (P). (Ceylon, India, Burma, Andamans. C.)
- B 15—5 *Eurema (Terias) hecabe* L., *contubernalis* Moore (*hecabe*)—Fairly common. (P).
- B 16—14 *Colias electo* L. (*croceus* Fourc.), *fieldi* Men.—Not common.
- B 17—2 *Ixias pyrene* L., *familiaris* Btlr. (*pirenassa* Wall.)—Fairly common. (P).
- B 19 **Hebomoia glaucippe* L., *glaucippe*—Two seen but not caught. (P). (Nepal—Burma. C.)

Pierids were, generally speaking, far more common in May-June 1944 than during this visit. *P. brassice* and *D. berinda*, both of which were very common in 1944, and *C. crocale*, which was fairly common, did not appear at all. It is probable that *E. blanda*, which was found to be fairly common on this occasion, was overlooked in 1944.

Danaidæ

- C 2—1 **Danaus aglea* Cr., *melanoides* Moore—Fairly common. (Kashmir—Burma. C.)
- C 2—4 **Danaus melaneus* Cr., *plataniston* Fruhs.—Common. (P). (Sikkim—Burma. C.)
- C 2—5 *Danaus tytia* Gray, *tytia*—Fairly common.
- C 3—1 *Euploea mulciber* Cr., *mulciber*—Fairly common (P)

Two species, *D. aglea* and *D. melaneus*, were found to be quite common on this visit, but did not appear in 1944, although it is possible that *D. melaneus* was overlooked. *E. core* was not seen, although fairly common in 1944, and no larvæ of *E. mulciber* were found.

Satyridæ

- D 2—5 *Mycalesis francisca* Cr., *sanatana* Moore—Uncommon, all the wet, ocellated form.
- D 3—3 *Lethe sidonis* Hew., *sidonis*—First seen on the 1st October, after which it soon became very common. The specimens taken in May-June 1944 were wrongly described as ssp. *vairarta* Doh.
- D 3—15 *Lethe sura* Dbl.—Not common. A true shade lover.
- D 3—22 *Lethe rohria* F., *rohria*—Fairly common.
- D 3—43 *Lethe bhairava* Moore—Common in two restricted localities, absent elsewhere.
- D 3—44 *Lethe verma* Koll., *sintica* Fruhs.—Common. Another shade lover.

- D 5 *Orinoma damaris* Gray.—Common. A forest species.
- D 14—4 **Ypthima nareda* Koll., *newara* Moore—Fairly common. (Sikkim—Assam. NR.)
- D 14—15 **Ypthima baldus* F., *baldus*—Fairly common. (P.) (Chamba—Burma. VC.)
- D 14—21 *Ypthima sakra* Moore, *sakra*—By far the commonest species, swarming everywhere, both in the sun and in the shade.
- D 22—1 *Melanitis leda* L., *ismene* Cr.—Some half-a-dozen disturbed from one small patch of undergrowth on one occasion only. (P.)
- D 22—2 **Melanitis phedima* Cr., *bela* Moore—A single example only. (P.) (Sikkim—N. Burma. C.)

M. francisca was very much less common on this visit than in May-June 1944, possibly it is the usual thing for the wet season, ocellated brood to be rarer than the dry season, unocellated one. *L. confusa* did not appear at all in 1945, but was common in 1944. Both *Y. nareda* and *Y. baldus* were fairly common on this visit but were not met with in the previous year, I do not think that this was a case of their having been overlooked, or confused with the very abundant *Y. sakra*, as I found them quite easy to distinguish from this latter species on the wing. The single occurrence of a small number of *M. leda* in one small patch of undergrowth is interesting, I searched for the species on several other occasions, both in this spot and others, and did not see a single one. Was the party I saw part of a small migration, that was resting during the day? The species is, of course, a night flyer.

Nymphalidæ

- F 12 *Hestina nama* Dbl.—Fairly common. (P)
- F 18—23 **Euthalia sahadeva* Moore, *sahadeva*—Rare and very worn, (Sikkim—Bhutan. NR.)

- F 24—4 *Limenitis daraxa* Dbl. & Hew.—Very common.
- F 25—3 **Pantoporia cama* Moore—Uncommon. (Mussoorie
—Burma. NR.)
- F 26—6 *Neptis hylas* L., *varmona* Moore—Very rare upto
the middle of October, thereafter rather less
so, but never common. (P.)
- F 26—9 *Neptis yerburyi* Btlr., *sikkima* Evans—One only.
- F 26—15 *Neptis ananta* Moore, *ochracea* Evans—Not un-
common.
- F 26—24 *Neptis radha* Moore, *radha*—Uncommon.
- F 29 *Pseudergolis wedah* Koll.—Uncommon.
- F 35—2 *Precis orithya* L., *ocyale* Hbn.—One example. (P.)
- F 35—5 **Precis atlites* L.,—Two only, both the dry season
form. (Ceylon, India, Burma, Andamans.
Central Nicobars. NR.)
- F 35—6 *Precis iphita* Cr., *iphita*—Fairly common. (P.)
- F 36—1 *Vanessa cardui* L.—Fairly common. (P.)
- F 36—3 *Vanessa indica* Herbst., *indica*—Fairly com-
mon (P.)
- F 36—10 *Vanessa cashmirensis* Koll., *aesis* Fruhs.—Fairly
common, I saw no larvæ. (P.)
- F 38—1 *Symbrenthia hippocelus* Cr., *khasiana* Moore—
Fairly common (P.)
- F 38—3 *Symbrenthia hypselis* Godt., *cotanda* Moore—Not
common. A single larva.
- F 39—1 *Argynnis hyperbius* L., *hyperbius*—Quite
common.
- F 39—2 *Argynnis childreni* Gray, *childreni*—Fairly
common.

F 47—1 *Cethosia biblis* Drury, *tisamena* Fruhs.—Fairly common. (P.)

F 51 *Pareba vesta* F., *vesta*—Young larvæ fairly common. No imagines seen.

Except for one species, *S. hippoclus*, which was rather more common during this visit than in 1944, all species were far scarcer individually in 1945 than they had been in the previous year. This was particularly marked in *N. hylas*, in 1944, this had been one of the commonest butterflies, swarming everywhere, in 1945 it was one of the scarcest. *P. vesta* was only found in the form of small larvæ in 1945, in May/June 1944 it was found first as full grown larvæ; then as pupæ, after that as imagines, and then again as small larvæ, it was also far more common in 1944 than in 1945.

Erycinidæ

G 2 *Zemeros flegyas* Cr. *indicus* Fruhs.—Very common. A few larvæ and pupæ. (P.)

G 3—2 **Dodona dipoea* Hew., *dipoea*—Common, (Sikkim—Assam. R.)

G 3—3 **Dodona eugenes* Bates, *venox* Fruhs.—Two only. (Skkim—Assam. Dawns. NR.)

G 3—5 *Dodona ovida* Moore, *oida*—Did not appear until the end of October, after which it soon became fairly common. One batch of larvæ found.

G 3—6 *Dodona adonira* Hew., *adonira*—Very common until the middle of October, after which its numbers decreased slightly.

G 4—1 *Abisara fylla* Dbl.—Common. One or two larvæ. (P.)

G 4—2 **Abisara neophron* Hew., *neophronides* Fruhs.—One only. (Sikkim—Nepal. NR.)

The only family commoner, both in species and individuals, in 1945 than in 1944. *D. dipoea*, which was not met with at all in May/June 1944, was a common species in 1945, *D. adenira* was far more common on this visit than in May/June 1944, *D. ovida*, on the other hand, was rarer. I took a slightly crippled dwarf *A. fylla* with an expanse of rather less than half the normal.

Lycaenidæ

- H 21-12 *Lycaenopsis transpecta* Moore—Fairly common.
 H 21-20 *Lycaenopsis cardia* Fldr., *dilecta* Moore—Fairly common. (P.)
 H 24-3 *Zizeeria maha* Koll., *maha*—Uncommon.
 H 24-5 *Zizeeria gaika* Trimen—Uncommon.
 H 28 *Cosmolyce (Lampides) boeticus* L.—Fairly common. Larvæ on Lupins. (P.)
 H 29-1 **Jamides bochus* Cr., *bochus*—One female. (P.)
 (Ceylon, India, Burma, Andamans. C.)
 H 35-2 *Heliophorus epicles* Godt., *indicus* Fruhs.—One only. (P.)
 H 35-6 *Heliophorus brahma* Moore, *brahma*—Common.
 F 35-8 *Heliophorus androcles* Hew., *moorei* Hew.—Fairly common.
 F 49-51 **Arhopala (Amblypodia) rama* Koll., *rama*—One only. (Kashmir—Sikkim. C.)
 F 49-52 **Arhopala (Amblypodia) comica* DeN.—Two only. (Manipur—S. Shan States. VR.)
 F 49-79 **Arhopala (Amblypodia) areste* Hew., *areste*—Two only. (Sikkim—Assam. R.)
 H 81 **Zeltus etola* F.—One only. (S. India, Sikkim—Burma. NR.)
 H 85-12 *Rapala schistacea* Moore—One only.

The various species of *Lycaenopsis* are difficult to distinguish without catching them and it is, therefore, impossible to say whether all the species that occurred in

May/June 1944 were present on this visit or not. However, *L. transpecta* was caught fairly freely in 1945, whilst only one was taken in 1944, on the other hand *L. argiolus* was fairly common in 1944 and not seen at all in 1945. *N. dubiosa* was fairly common in 1944, but was not taken in 1945, whilst *H. androcles*, of which only one example was taken in 1944, was quite common in 1945.

Hesperiidæ

- I 1-16 **Hasora alexis* F., *alexis*—Two, both taken resting on the underside of leaves in the afternoon. (P.) (Ceylon, India, Baluchistan, Burma, S. Nicobars. NR.)
- I 4-4 *Choaspes benjamini* Guer., *xanthropogon* Koll.—One only, flying late in the afternoon. (P.)
- I 11-5 *Celaenorhynchus pyrrha* DeN.—One only.
- I 14-9 **Tagiades menaka* Moore—One only. (Kashmir to Karens, C.)
- I 20-1 *Coladenia dan* F., *fatih* Koll.—One only.
- I 43-4 *Aeromachus stigmata* Moore—Common.
- I 58-5 *Notocrypta feisthamelii* Bsd., *alysos* Moore—Fairly common. Larvæ common.
- I 90-10 **Padraona pseudomaesa* Moore, *pallida* Evans—One only. (Sikkim to Karens. C.)
- I 97-21 *Baoris eltola* Hew.—Fairly common.
- I 97-23 **Baoris assamensis* WM & DeN.—One only. (Central Provinces. Ganjam. Mussoorie to Burma.)
- I 97-34 **Baoris bevani* Moore, *bevani*—Common, including one at light. (S. India. Central Provinces. Murree to Burma. C.)

A. discreta was not met with on this visit, but was fairly common in May/June, 1944. *B. bevani* was common in 1945 but was not seen in 1944, although it may have been overlooked.

Calcutta, 24-2-46.

On

“A List of Birds of Darjeeling and Neighbourhood”

This List has been published to meet a felt want, and is intended to be used as “the basis for an illustrated book on the subject” which is to appear later.

Deserving of encouragement, Messrs W. H. Matthews & V. S. Edwards are to be commended for undertaking the task.

The areas considered embrace “Darjeeling”, “Darjeeling Neighbourhood” and, in a supplement—of which Mr. W. H. Matthews is sole author—are treated:—“(A) Birds of the Sikkim Himalayas outside Darjeeling and Neighbourhood.

(B) Birds recorded for the Sikkim Himalayas in the F. B. I. of which there are no local records but which are likely to occur.

(C) Birds recorded for the Sikkim Himalayas in the F. B. I. or labelled ‘Darjeeling’ or ‘Sikkim’ in the British Museum which do not occur at the present time and should be omitted from any future list unless information is forthcoming.”

Unfortunately, while the boundaries for “Darjeeling” have been judiciously chosen and accurately delimited, as to “Darjeeling Neighbourhood”, the prescribed boundaries of the Civil District of Darjeeling have been rejected for those of the authors’ caprice. This is confusion worse confounded.

Admissible as it may seem to exclude the Kalimpong Sub-division—assuming that the object in view was to concentrate on a compact area—, it is surely unadvisable for that of a large part of the Civil District severed by a more or less rough alignment running “due west of Latpanchor, Kurseong and Mirik”. For who would take upon himself to keep track of limits so indefinite when preferably the “contour line” would be more appropriate to accuracy? Moreover, many visitors to Darjeeling take advantage of the well-equipped bungalows situated in diverse and beautiful

surroundings as far afield as e. g. those along the Singalila Ridge, which are within the Civil District. If this particular area had comprised the whole, within the actual limits, of the District of Darjeeling—The Independent State of Sikkim could then have been treated separately in the "Supplement".

Political geography need not clash with biological distributions. Numerous counties, in England at least, have received and still receive attention by essay, paper, or book on their avifauna; but the recognized boundary is taken cognizance of, even though it should be represented by only a hedge or ditch, when more often than not the birds on one side of the boundary are no different from those on the other side; this boundary, however, is indispensable when deciding for or against the inclusion of a rare visitant; thus the author can justifiably claim that the area under consideration is enclosed within the boundaries of the county. All species with an extra-limital distribution, which are referred to, usually are—and if not, should be—enclosed within brackets.

The writer takes occasion to stress this point, seeing that on several occasions he has had requests from both botanists and ornithologists who wanted enlightenment on localities and position of places in the direction of and distance from Darjeeling, and whether the localities and places mentioned by them lay within Sikkim or the district of Darjeeling.

In the "List" stands a number corresponding to that in the F. B. I. Birds, 2nd ed. The scientific name follows, with an appropriate name below; concise comments include: resident or migrant, altitudinal data—actually in these areas under consideration of more importance than place, and in any case complementary to it—, abundance or rarity—relative terms at best—and, when considered necessary to substantiate a claim to inclusion, locality or place is specified; essential dates are also given.

on. As there is no description to assist the new comer for whom the list is intended, regretfully the novice will be at a loss in identifying the birds he comes across. Nor is the name of the observer or collector always cited; that is for records for which others are responsible; such a course is both informative and advisable when the bird's inclusion rests on six records or fewer. And then it is essential to make a distinction between the "bird obtained" and the "bird seen".

Sight records are invariably difficult to pass judgement on, so much depends upon light, distance, experience of the observer and methods employed. Identification of certain species by observation cannot always be admitted as indisputable, and similarly becomes an impossibility when intergrades, intermediates, and numerous subspecies are taken into account. Only a critical examination of the bird in the flesh or its prepared skin is then adequate. Even the expert is by no means immune from errors and, with the specimen before him, is apt to slip now and then in his identifications. The contents of List "C" would serve little purpose if it failed in its obvious warning.

Further, the elimination of a wrongly identified record is just as much a service to this branch of ornithology as the insertion of a rare visitant's appearance on good authority; therefore, it is imperative that all sight records should be authentic, and any inclination to swell one's list by doubtful records suppressed as undesirable. If treated as such, without giving them undue or equal prominence, only then can the latter be safely published. A remark which surely applies to No. (494) **Saxicola caprata bicolor** "Seen occasionally in the *winter months* at about 4,000 ft.". No. (1296) **Arachnothera longirostra longirostra** "Recorded from Darjeeling 6,700 ft. in *February*." (Italics mine). No. (533) **Phoenicurus erythrogaster grandis** 9/4/30, Sandakphu.

It is also well to remember that published errors of identification or disputable facts are apt to be copied by other workers, which has evidently taken place as regards

No. (514) *Oenanthe deserti oreophila* ; for there is no evidence available to prove that this Chat "in winter wanders lower down to some 3,000 or 4,000 ft. in Sikkim, Bhutan, and the hills of Northern Assam." (F. B. I. 2nd.). Nor is there a single specimen in the B. M. (Nat. Hist.) and other important collections from this extensive tract of which the writer is aware.

Nevertheless, happily and fortunately there is no such difficulty about a crowd of the familiar birds: requisite as it is at times to secure a specimen, the field of observation is wide enough for all. May their number never be less. What a wealth of species awaits the novice!

Owing to the exclusion from List 2 (The Supplement) of names which appear in List 1, some interesting and significant records for the area beyond that of the "Darjeeling Neighbourhood" and for Sikkim, which have been published are perforce omitted.

The summary of approximate elevations shows a range of 7,950 ft. from Kalijhora at 550 ft. to Tiger Hill at 8,500 ft.

A useful sketch-map drawn by Mr. W. H. Matthews, has the place-names mentioned in the text for easy reference.

In addition to the misprints already corrected on the two Errata slips, others still remain:

Page 2	(118)	read	FORMOSA
" "	(134)	"	MONILIGER MONILIGER
" "	(117a)	"	SIKKIMENSIS
" 3	(302)	"	CASTANEICEPS CASTANEICEPS
" "	(310)	"	HETEROPHASIA
" 5	(458)	"	TROGLODYTES
" 7	(538)	"	SVECICA
" 8	(614)	"	MYIOPHONEUS CAERULEUS
" 9	(648)	"	ASTIGMA
" "	(663)	"	THALASSINA THALASSINA
" "	(669)	"	MONILIGER MONILIGER
" 10	(685)	"	MACGRIGORIAE

Page 11	(786)	read	TECTIROSTRIS
„ 12	(894)	„	CASTANEICEPS CASTANEICEPS
„ 13	(970)	„	SAROGLOSSA
„ 15	(1262)	„	SEHERIAE
„ 17	(1404)	„	GUTTICRISTATUS
			GUTTICRISTATUS
„ „	(1460)	„	HIEROCOCCYX
„ 20	(1734)	„	CAERULESCENS
			CAERULESCENS
„ 21	(1789)	„	CAERULEUS
„ 23	(2084)	„	HIRUNDO
„ 27	(553)	„	CAERULOCEPHALA
„ „	(565a)	„	BUDDAE
„ 28	(1052)	„	PROPYRRHULA
„ 29	(1208)	„	OTOCORIS
„ 30	(1063)	„	RHODOPEPLUS
„ 31	(1540)	„	MENINTING
„ 32	(235)	„	SATURATIOR
„ 33	(1752)	„	FASCIATUS FASCIATUS
„ 34	(2014)	„	EURYZONOIDES

The authors admit that "changes in the scientific names have been so many since the 2nd edition of the Fauna of British India—Birds—Stuart Baker, was published that it is possible some may have escaped their notice." In the following notes some, at least, of these changes are referred to. Regrettable as many of them are, genuine changes have to be put up with, which is all to the good, if only it hastens the day of finality in nomenclature.

Lastly it is gratifying to add that Messrs. W. H. Matthews & V. S. Edwards are carrying on the good work : it is to be hoped they will infect other bird-lovers with their enthusiasm.

As nothing has so far been published concerning the bulk of the bird collection obtained by the Suydam Cutting Expedition on behalf of the Field Museum of Natural History, Chicago, U. S. A. to Cooch Behar, the District of Darjeeling, and Sikkim, (9th Oct. 1930—25th June 1931) the opportunity is taken to select such items of interest as

is possible, by myself who was entrusted with this commission, from a list of 1369 specimens, thanks to the kind services of the Curator of Zoology Emeritus, Mr. Wilfred H. Osgood, of that museum, which is now styled the Chicago Natural History Museum. All these records of specimens obtained appear as (*Chicago N. H. Mus.*).

To conform with the authors' treatment of their respective areas: Round brackets, where necessitated, are used for records outside the "Darjeeling Neighbourhood" area but within the District of Darjeeling, and square brackets for extra-limital records and the added remarks.

ADDENDA in the LIST for "DARJEELING and NEIGHBOURHOOD".

No. (475) The breeding bird of moderate altitudes is *Tesia olivea* (McClell.) which so far has not been recorded from higher ground than 6,000 ft. being an extreme limit; whereas *T. cyaniventer* has a still higher zonal distribution. See Kinnear (*The Ibis*, April 1937, pp. 258-261) for an exhaustive account of these two shortwings. [In Bhutan at all events, according to Ludlow, *Tesia cyaniventer* Hodgs. occurs only in temperate forest during the breeding season between 6,000 & 8,000 ft. In Upper Assam during the cold season, while *cyaniventer* did occur sparingly at the base of the Himalayan foot-hills, *olivea* was dispersed over the level ground of the plains, actually crossing the Bramaputra, and was to be found singly but plentifully in the dense undergrowth of heavy forest as far out as the right bank of the Dibru.

8♂♂, 4♀♀, obtained at Sevok, Mongpu, Sangsir, and between Rorathang & Rongli (*Chicago N. H. Mus.*) are *Tesia olivea*.

No (599a) *Oreocincla dixonii* (Seebohm) is now recognized as distinct from *O. mollissima mollissima* (Blyth). See Delacour & Kinnear (*The Ibis*, Oct. 1930, pp. 579-81) and Kinnear (*The Ibis*, April 1937, p. 276), and also Ticehurst (*The Ibis*, July 1938, p. 395). Obtained at Gopaldhara on 6 Jan, 1912, at 6,000 ft.

No. (739) Mayr (*The Ibis*, Oct. 1940, pp. 712-22), in an article "**Pericrocotus and its double**" has cleared up a welter of controversies. This name thus should stand as **Pericrocotus brevirostris** (Vigors). The other bird of the Sikkim Himalaya is **Pericrocotus ethologus laetus** Mayr. Type loc. Jeyluk, Sikkim, 9,200 ft. 5 April 1931 (*Chicago N. H. Mus.*), where it was breeding, but suffered destruction of its eggs by violent hail storms during the first fortnight of that month in 1931.

No. (1570) **Aceros nepalensis** Reported at wide intervals, but one of a pair was shot at Rungmook by Mr. E. Calvert in 1922. [Gammie records a pair breeding at Poomong. We have a ♂ from the vicinity of Kurseong sent to us by Mrs. Colthurst in 1929 *Editor*].

No. (2234) **Gorsachius melanolophus** One observed between Reang and Mongpu as it leisurely flapped overhead and across the road, to settle about 25-30 ft. up on a horizontal branch in full view as I passed by on the lorry, 27 April 1931. Recorded (*Bull. B. O. C.* lii, p. 18). Well known to me from specimens collected in Upper Assam.

ADDENDA in the SUPPLEMENT

"A"

No (526a) **Phoenicurus frontalis sinæ** Hartert ♀, Lachung, 9,100 ft. 8 Dec. 1925. "Baker appears to have overlooked this good form, described by Hartert in 1918", Meinertzhagen (*The Ibis*, Oct. 1927, p. 585).

No (528a) **Phoenicurus aureus aureus** (Pallas). Two adult males secured out of a small party on the Natu La at 14,100 ft. on 21 Dec. 1925. "Previously known from Sikkim and its inclusion in the Indian List only by a single specimen in the British Museum." (*Meinertzhagen*).

No (574) **Turdus naumanni eunomus** Temminck. ♂, Gnatong, 12,300 ft. 23 March 1931. The first record for Sikkim. No record for the District of Darjeeling. [My previous specimens, ♂, ♀ ♀, were obtained at Nguluko, north of Likiang, Yunnan, China, at 9,000 ft. in Feb. 1929 (*Kelley-Roosevelts' Exp. Chicago N. H. Mus.*)] Ticehurst

comments (*The Ibis*, Jan. 1939, p. 173) "it (N. India) can supply only about half a dozen records in a hundred years".

No (626a) **Prunella rubeculoides rubeculoides** (Moore). Meinertzhagen obtained it at Gyagong (15,750 ft.) on 20 Nov. 1925 and at Thangu (12,800 ft.) on 17 Nov. 1925. "At Yamthang they were seen between 14,200 and 15,600 feet." During the Suydam Cutting Exp. two were obtained at Gnatong (12,500 ft.) in March and five at Gyagong in June 1931. (*Chicago N. H. Mus.*) My experience of its confiding habits agrees with that of Ludlow (*The Ibis*, Jan. 1928, p. 63). The sight record for Sandakphu at 11,800 ft. on 15 Feb. 1912 (*Journ. Bombay N. H. Soc.* Vol. xxx, No. 2, pp. 365-6) is undoubtedly correct. [The subspecies *P. r. fusca* Mayr, 1927, known to me from Szechwan, China, where five were collected in April & June 1929, is a good deal darker than typical **rubeculoides** (*Kelley-Roosevelts' Exp. Chicago N. H. Mus.*)

No. (630) Delete **Prunella fulvescens fulvescens** and substitute No (630a) **Prunella fulvescens tibetana** (Bianchi). Kinnear mentions one skin in the B. M. (Nat. Hist.) obtained by Mandelli's collectors from the interior of Sikkim (*The Ibis*, April 1937, p. 279).

No (839) **Phragmaticola aedon** (Pallas). Represented in the B. M. (Nat. Hist.) by three September & October specimens, collected in 1876.

No. (871a) **Phylloscopus inornatus mandellii** (Brooks). This Warbler need no longer be ignored. See Ticehurst (A Systematic Review of the Genus **Phylloscopus**, issued 26th Nov. 1938).

No (1090a) **Hypacanthis ambiguus taylori** Kinnear. ♀, obtained at Yamthang (12,000 ft) 20 June 1931. (*Chicago N. H. Mus.*) Described in 1939 by Kinnear from specimens obtained by Mr. F. Ludlow in the Tsangpo Valley, S. E. Tibet. The Yamthang specimen is the first record for Sikkim and establishes its claim to inclusion in the Indian List.

No (2148) **Totanus totnus terrignotae** Meinertzhagen. ♂, ♀, obtained at Thangu, 12,800 ft. in May 1931 (*Chicago N. H. Mus.*). The first record for Sikkim.

Transfer from the "SUPPLEMENT" to "DARJEELING
and NEIGHBOURHOOD" List.

"C"

No. (850) *Franklinia cinereocapilla*. Obtained at Gopaldhara on 20 Dec. 1911, and recorded (*Journ. Bombay N. H. Soc.* Vol. xxix, No. 4, p. 1018).

No. (1680) *Otus sunia sunia*. Obtained at Turzum on 29 Oct. 1918, by Mr. Oscar Lindgren, and recorded (*Journ. Bombay N. H. Soc.* Vol. xxx, No. 4, p. (872) under *O. scops pennatus*, which is a synonym.

Transfer from List "B" to List "A" in the SUPPLEMENT

No. (655) *Muscicapula unicolor unicolor*. ♀, ♂, obtained at Sevok and Sangsir, Oct. 22, 1930- Jan. 21, 1931. (*Chicago N. H. Mus.*) Apparently plentiful from 1872-79 in Mandelli's time, but surprisingly enough no other record since. [The only occasion on which it was obtained by myself was twenty-six years earlier, that of a ♂ from the higher reaches of a gorge of the Deju stream in the Daffa Hills, Upper Assam on 4 Dec. 1904.] Sangsir lies in the Kalimpong sub-division.

No. (663) *Muscicapula magnirostris*. Represented in the B. M. (Nat. Hist.) by 10 ♂ ♂ & 5 ♀ ♀, collected in every month from April to October without altitudinal and locality data. Another flycatcher which has unaccountably never been located since the above specimens were obtained by Mandelli's collectors.

No. (1209) *Melanocorypha maxima*. Meinertzhagen records two males obtained at Yamthang (11,650 ft.) on 7 Dec. 1925, on some flat ground near the Lachung River in Sikkim.

No. (1966) *Arborophila mandellii*. No published record of any authentic occurrence in "N. Sikkim" is known to me. Waddell obtained one at Tendong (5,000 ft.) and another "near" Gangtok (c. 4,000 ft.) "My two birds were got well within Sikkim" (*Waddell*). Obtained to the east of Lingtam at 6,000 ft., ♂, on 1 March 1931 (*Chicago N. H. Mus.*) With this exception all the known specimens of this

rare partridge are in the B. M. Nat. Hist. . The western limits of its distribution evidently just include the south-eastern area of Sikkim, abutting on the Kalimpong subdivision. Referred to at greater length by Inglis (*Journ. Darjl. N. H. Soc.* Vol. ix, No. 1, p. 2 . Recorded *Bull. B. O. C.* Vol. lii, p. 18.

Transfer from List "C" to List "A".

No. (267) *Malacocincla sepiaria abbotti*. ♂, ♀, obtained at Sevok (Sivhok, in the Terai, District of Darjeeling, on Sheet 293—Bengal & Eastern Bengal & Assam) in Nov. 1930 (*Chicago N. H. Mus.*). Shaw obtained it at a similar low altitude of 500 ft.

No. (618) *Cochoa viridis*. Obtained between Singhik & Toong at 5,000 ft. ♂ gonads enlarged, 4, May 1931, one of a party (*Chicago N. H. Mus.*). Apparently no other record since July 1870 for the Sikkim Himalaya.

ADDENDUM to "List A"

No (1830) *Treron pompadora phayrei*. ♂, obtained at Sevok in November, 1930 (*Chicago N. H. Mus.*).

"DARJEELING and NEIGHBOURHOOD" List

(Reference numbers are those of the authors)

(7) In spite of conflicting views in the classification of the Jungle Crow, there is little doubt—of the several subspecies recognized—that the resident bird in the Sikkim Himalaya is *intermedius*. Meinertzhagen in a masterly "Review of the genus *Corvus*" (Nov. Zool. Oct. 1926, Vol. xxxiii, p. 83) considers this subspecies to be a race of *coronoides* Vigors & Horsfield 1826, Type Loc. Parramatta, New South Wales. On the other hand, Whistler & Kinnear (J. Bombay N. H. Soc. 1932, Vol. xxxv, pp. 510-13) consider *macrorhynchos* Wagler 1827, Type Loc. Java, the appropriate specific name. Both of these names antedate *levallantii* Lesson circa 1831. With Whistler's inference that all Jungle Crows from Bengal to Java belong to the

one race, Mayr (*The Ibis*, Oct, 1940, Vol, iv, No. 4, pp. 694-5) is in disagreement. There is also the probability that the bird which ascends to breed at moderate elevations will prove to be another and distinct subspecies, possibly **Corvus coronoides leuallantii** Lesson. However, it is solely a matter of choice for the present whether the resident bird is called **Corvus coronoides intermedius** or **Corvus macrorhynchos intermedius**. To judge from recent papers, perhaps the latter has preference over the former. Tiechurst, who disagrees with Hartert in his acceptance of **leuallantii** for the specific name, follows Kinnear & Whistler (*The Ibis*, Jan, 1933, Vol iii, No. 1, p. 144 & p. 152). 2 ♂♂ & 4 ♀♀, were collected at Lingtam & Gnatong in Sikkim of **Corvus macrorhynchos intermedius** Adams from February to March 1931 (*Chicago N. H. Mus.*).

(To be continued.)

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