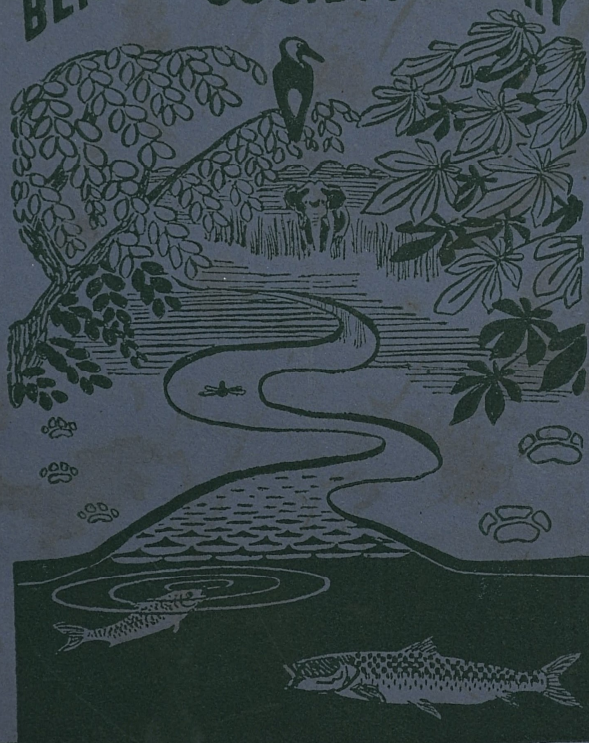


THE JOURNAL OF THE
BENGAL NATURAL HISTORY
SOCIETY



VOL. XIX

NO. 4.

Issued April 1945.

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

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BENGAL NATURAL HISTORY SOCIETY.

The Society under the name Darjeeling Natural History Society was started about the end of 1923, the objects being to maintain the Museum in a proper condition; to promote the study of Natural History and to get together, as complete as possible, collections of Natural History specimens from a limited area, including "the Civil Districts of Jalpaiguri and Darjeeling and the State of Sikkim", as well as what could be procured from the neighbouring countries of Tibet, Bhutan and Nepal.

The Government and Municipal grants not being sufficient for our purpose, it was proposed to enrol members so as to increase our funds, and a Quarterly Journal has been started. The Journal is no longer confined to articles on the Natural History of the above mentioned area, but includes those from anywhere. It is hoped that everybody will join the Society and co-operate to make the Museum and Journal a success.

The annual subscription is only Rs. 10.

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THE CURATOR,
*Natural History Museum,
Darjeeling.*

Copies of 'A list of birds of Darjeeling and neighbourhood' by W. H. Matthews and V. S. Edwards with a supplement for the Sikkim Himalayas are available on application to the society at a cost of Rs. 2/4 per copy post free. A few copies are available interleaved with blank sheets for notes, price Rs. 2/12 each post free.

Coloured Plates and Back Numbers of the Journal.

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The Atlas Moth	Vol. V.	No. 4	April 1931	
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The Grey-winged Blackbird	Vol. XIX No. 4 April 1945.

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- Vol. I, Nos. 3 and 4
- Vol. II, Nos. 1 and 4
- Vol. III
- Vol. IV, Nos. 2, 3 and 4
- Vol. V, No. 4

CORRIGENDA.

VOL. XIX. No. 3.

PAGE	LINE	
93	7 (from bottom)	read "nocturnal" instead of "noctural"
95	10 (from top)	read "had" instead of "have"
95	14 & 15 (do.)	capital "O" in "owl"
96	13 (do.)	read "Française" instead of "Franzaise"
98	8 (from bottom)	comma after "concern"
102	19 (do.)	read "dokha" instead of "doka"
103	5 (from top)	comma after "away"
110	12 (from bottom)	read "to" instead of "o"



TURDUS BOULEOULI (Latham)

The Grey-winged Blackbird

Male in front; Female behind

About $\frac{1}{3}$ Nat. size

JOURNAL
OF THE
BENGAL NATURAL HISTORY SOCIETY.

Vol. XIX.—No. 4

The Grey-winged Blackbird.

Turdus bouboul (Lath.)

By

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

(With a coloured plate.)

The genus *Turdus* belongs to the Subfamily *Turdinae* of the very large Family *Turdidae*. The genus is well represented in India comprising more than 20 species and subspecies: 10 of these have been recorded from North Bengal but two of them require further confirmation.

Field identification:—A typical Blackbird found in the hill forests and during the winter sometimes descending into the foothills and plains. Its song a loud, melodious series of whistles is constantly heard in the early mornings and evenings, during the breeding season. The male, black in colour with a broad ashy-grey patch on the wing; the hen is brown with a pale rufous patch.

Description:—The coloured plate shows both sexes and no separate description is necessary but the ashy-grey patch on the wing of the male is, often, more silvery than shown in the plate.

Stuart Baker describes young birds as follows:—"From the earlier stages the males seem darker than the females. The upper parts are streaked with fulvous and have darker edges to the feathers; below they are broadly edged with brown. Young males seem to have a transition stage between this and the adult plumage losing the bars of the lower plumage but retaining the narrow pale shaft-stripes (*F. B. 1 2nd Ed.* Vol. II p. 131.)

Distribution:—The distribution of this Blackbird is from Hazara and Kashmir eastwards to the extreme East and South of Assam and Manipur. With regard to its distribution in the Darjeeling District and Sikkim Stevens writes: "Recorded up to 8,000' from the base of the hills. During the cold season stragglers descend to the Terai, whilst *not extending over the plains* as several of the other Ouzels do, being much more sedentary in their habits, notwithstanding there is a change in its distribution according to season, as there is a marked increase in its numbers around Gopaldhara where it commonly breeds at elevations of from 4500-6500' and it is equally numerous in the Mai Valley, Nepal at elevations up to 9000' in March and April" (*J. B. N. H. S.*, Vol. XXX No. 2. p. 359.)

Ludlow says this species and the White-collared Blackbird overlap at 8000-9000 feet in Bhutan and remarks "Found throughout Bhutan. It is probably just as common as the preceding species (above mentioned *Ed.*), but is more addicted to dense forest, and is, in consequence, not so often seen." (*Birds of Bhutan and adjacent Territories of Sikkim and Tibet* p. 275.)

Habits:—This is one of our commonest hill birds and during the breeding season the males may be heard calling in the forests all round Darjeeling, especially in the mornings and evenings. The note of the Grey-winged Blackbird is a series of loud musical whistles but not, perhaps, as melodious as that of the Nilgiri Blackbird (*Turdus s. simillimus*) and, as Whistler truly says, "individuals vary a good deal in the merits of their performance." We have heard some birds utter far from musical notes. It is a lover of forests but keeps, principally, to their outskirts. At Gangtok we have seen them in the beautiful grounds of the Residency and found a nest there not far from the house. It is a rather sedentary bird in its habits and resembles our English Blackbird in many ways.

It feeds, largely, on the ground, and is often seen hunting about beneath the trees, assiduously turning over dead leaves, in its search for insects, grubs, earthworms, fallen

fruit and seeds ; but it also gets much of its food on trees feeding on wild fruits and berries. It is often seen in pairs but sometimes large numbers congregate together. Stevens saw "a large congregation of thirty to forty birds, both sexes in equal numbers, preparatory to nesting" at Gopaldhara, in the Darjeeling District, on the 8th March 1916.

As already mentioned, some birds descend right into the plains. We have specimens collected in the Duars in the months of the January, February and March the latest date being the 21st March. They are to be seen there during most winters.

With regard to the nesting of this Blackbird we cannot do better than quote what Gammie wrote to Hume "I took a nest of this species out of a large tree within reach of the ground at an elevation of about 4000 feet on the Government Cinchona plantations, Sikkim. (This is Mangpu *Editor*). This was on the 20th May, and the nest contained three fresh eggs. The nest was a very beautiful, finely woven cup composed entirely of fine roots, but with a little green moss and a few dead leaves intermingled externally. No mud at all had been used in the construction of the nest. The cavity measured 3.5 inches in diameter and over 2 inches in depth, and was nowhere above an inch in thickness." He again wrote :—

"This Ouzel breeds in the Darjeeling district from May to August, most commonly about the elevation of 5000 feet, near the edges of large forests. It sometimes builds in forks of trees at no great distance from the ground, but its favourite position is at the height of 20 or 30 feet right on the summit of a stump of a Ficus-tree, from which the Bhutias have cut the top, and pollarded for the sake of the leaves for their milch cows.....A rather isolated tree is generally chosen, the bird, I suspect, objecting to the drip off lofty trees. In building a neat compact shell is first made of twigs and moss, then a good coating of mud, and finally a thick

lining of fibry roots. Externally it measures about 6 inches across by 3·2 in height..."

The nest we saw in the Residency grounds at Gangtok was very low, one could see inside it ; it was built in a fork of a small tree. Some nests are built in banks, or among the exposed roots of a tree or on the ledge of a rock.

May and June are the principal breeding months but Stevens took a nest as early as the 8th March. With regard to the elevation at which this birds breeds. In Muree a few birds even breed as high as 10,000 feet but it is not known to do so in this part of the Himalayas and, apparently, it does not breed below 4000 feet.

The eggs number 3 or 4. They resemble the eggs of the English Blackbird "generally of the reddish type" according to Stuart Baker. They show a good deal of variation. The aforementioned naturalist has a "set so closely marked with deep brownish-red that they appear to be almost unicoloured mahogany ; another set has a pinkish stone ground, marbled all over with chestnut-brown primary and lavender-pink secondary blotches. In yet a third set the ground colour is a distinct green, heavily blotched with dark reddish-brown, dense and coalescing at the larger end and then decreasing numerically towards the small end."

The average size of 50 eggs is given as 29·0 × 20·9 mm. by Stuart Baker.

The Grey-winged Blackbird is often caged on account of its song. It will live in the plains ; its length of life in captivity being about 3 years in the Alipore Zoological Gardens, Calcutta.

The vernacular names of this bird are *Kastura* in Hindi; *Patariya masaicha* in Bengali ; *Phoyiong-pho* in Lepcha and *Chemam* in Bhutanese.

Lovedale District in March.

March is an ideal month for bird observations in this district, and this past month of March was to my mind particularly good, perhaps it was helped by better health on my part, so that I did not find it so fatiguing to stand about and watch them as on other occasions.

The White-eyes (*Zosterops palpebrosa*) which had been away from the place as far as I could judge for the last six weeks returned in small numbers from about the ninth of the month, but it was not until the end that they were here in any number and this was a distinct advantage when studying others of the small birds like Warblers. Before now I have found the White-eyes getting into the picture far too much, and so I was very glad not to have them to distract my attention.

The Warblers gave me some really very interesting times, and I like to think that I distinguished at least four different sorts, there may easily be more in these parts, there are always all through the winter a great number of these delightful little birds, and the differences are so small. I use the word "distinguished" with purpose, as I do not yet know which the two smaller varieties are, nor can I tell whether I am right in the identification of the two larger ones, but I certainly saw four different types.

Our commonest Willow-Warbler, is a handsome and noticeable little bird, I had always marked him down as the Greenish Willow-Warbler (*Acanthopneuste nitidus viridanus*), more because I thought I ought to see them here, than because they fitted the description, and now doubts began to loom larger than ever, especially after reading Whistler's Popular Handbook, of which I had just secured a copy of the Third Edition, until I felt certain that whatever else these were they certainly were *not* the Greenish Willow-Warbler !

Perhaps if I give as careful a description of the bird as I can someone will be interested enough to send me a helpful suggestion as to what better identification I can come to.

There is no sign of any wing-bars. The measurements I should imagine would be about the same. The top of the head, neck, and back are greenish-brown, wings and tail brown-olive, the tail being rather darker than the wings, and is square-ish but *slightly* forked, (indented). The lower plumage is lovely yellow, throat, abdomen, and vent being bright yellow, (I rather think the colouring brightens in the spring) sides of neck and flanks not so bright, washed with grey.

There is a very distinct yellow eye-brow, and a dark line through the eye, these are quickly seen and appear to be quite a distinguishing mark.

This Warbler is not in the least shy, or skulking, but is a chatty and lively little bird, always on the move, always talking, and quite ready to allow one to watch it so long as no sudden or violent movements are made, and with its bright eye-brow and dark line through the eye is particularly noticeable and handsome.

The other *small* Warbler is best described as "a slim little mouse-bird", this may not be of much use for those who only deal in scientific terms to express what the late T. A. Coward always described as a bird's "jizz", but it does describe the general manner of this particular Warbler. I should say it was rare, at least I did not often see it, and it would well be described as "shy".

I do not believe nearly as many birds are actually shy as that their manner of living is rather skulking and furtive, and this deceives the mere human, who really knows so little about a bird's mind.

But this small Warbler, very slim, very furtive, seldom seen, but sometimes heard in the undergrowth, certainly appears to dislike observation and is certainly what a mere human would call shy.

And now let me try and give some description of it. If I remember rightly the upper plumage could be called snuff-brown in colour washed with olive green. The lower plumage pale buff, not yellow, nor white. The legs were

distinctly pale, almost yellow, and the proportion of the tarsus struck me as long for a Warbler. There was no eye-brow, but a pale line through the eye. The general colouring is snuff-brown and pale buff, with no distinctive marking.

The same day as I saw the above variety I also caught sight of a larger Warbler, one of much stouter build. I had seen this bird fairly often from time to time each winter, but it was only this year that I have had the opportunity of really making notes on its appearance. On this occasion I could not see much of the bird, but later in the month I had several opportunities of studying it and came to the conclusion that it might very possibly be a Syke's Tree Warbler (*Hippolais rama*). One day one of these birds got into the large "cage" of our Malabar Squirrel, and attracted my attention by the terrific din it set up. The alarm note is most strident and piercing, and might easily belong to a much larger bird. And yet on occasions its notes were quite the smallest and highest sound possible. One day in fact I heard the very tiniest song, very thin, very high and minute, and this "song" I later located to this variety of Warbler. This was on the 12th of the month, and what may be of interest is that as the month drew to an end this song grew in strength, and became no longer the "fairy sound" it had been at first. I could imagine many people being stone-deaf to this very small sound, it is something like the squeak of the smallest of our British Bats. I remember the late T. A. Coward telling us how he envied people who could hear this sound to which he was stone-deaf, as well as to the "mew" of the Black bird. I notice that Whistler says of the Booted Tree Warbler, that it never sings in its winter quarters, and not until it reaches its breeding grounds does it begin to sing, but he makes no mention of anything of that in his remarks on Syke's Tree Warbler.

The fourth Warbler I have distinguished, should really be the first, as it was seen in February, not March. This one I never remember noticing before, and I only saw it on two separate occasions, the second time I had the opportunity

of making notes of the dark crown of the head, the wings edged with yellowish-green and the lower plumage pale yellow, also the larger size than the other Warblers that were then about, and so I dared to think that perhaps it was a Large Crowned Willow-Warbler (*Acanthopneuste occipitalis*).

It is also in March that I made two other discoveries that I should surely have made long before this. It is extraordinary how long one can be in a neighbourhood and yet not know all the most familiar birds in it. Often I have listened, during the years spent here, to a little song "down at the bottom of the garden", it was difficult to locate its exact position, and puzzled me much as to what the bird could possibly be, but it was only during the month of March that I "discovered" a new bird, and found the source of the song!

This was simply the Nilgiri Blue Flycatcher (*Stopa-rola albicaudata*) I believe it is quite common about here, and certainly I have heard it singing "most months of the year" (Whistler), though it is now sometime since I heard it sing (June); so that it seemed most blind of me to never catch sight of it in the nearly four years that I have been in the district. But even if it is a "common" bird the thrill of discovery is almost as great as the more rare varieties.

The other "discovery" was a Tickell's Blue Flycatcher (*Cyornis tickelliae*) so familiar to me when I stayed at Kotagiri, where they were my "daily strangers" in the Red Gums under which I used to sit most of the day. But I had not seen them since I came to this side, till March of this year, and then only on one occasion, I have watched for them again again, but never been fortunate. But they are quite likely to be in the more jungly part of the district; they are labelled "shy" and perhaps over here they live up to that labelling, which they certainly did not in the compound I knew at Kotagiri.

In March the Nilgiri Blackbird (*Turdus merula similimus*) sings so beautifully, and almost all day long; one had a nest just below my room and I found that the male

bird is quite a ventriloquist, he will start his song very piano and distant, and then gradually grow louder and clearer till suddenly one finds that what one thought was a bird singing in the distance "in rivalry" is simply the one close by.

I have often listened to Blackbirds as home in Scotland when they were singing "under their breath", and they never seemed to give the sense of distance these birds do, and I never heard them increase the volume of their song when singing in this way, but only to continue right through in an undertone, as if singing to themselves.

This, I think, were all my adventures in the realm of Ornithology, but I was more than satisfied with them.

(Miss) M. G. WOLFE MURRAY,

at Heathcote.

Lovedale P. O.

NILGIRIS

Breeding the Magpie-Robin in Captivity.

(*Copsychus saularis*)

I had the pleasure of breeding the Magpie-Robin in captivity. As to whether this could be achieved again with another pair under similar conditions to those under which I bred mine, is problematical. I however have no doubt that these birds can be bred under suitable conditions.

I will first of all detail the conditions under which mine bred. I acquired a cock bird and housed him in an aviary, which was part of my verandah wired-off, with a mixed collection of finches and a few small soft-bills. The aviary was 12' x 16' x 16' and rather crowded. He settled down quite well and was soon in full song. Towards the end of the year I bought a hen and let her into the same aviary. The cock made advances which were resented with the result that he set about her and she would have been killed had I not caught her up and placed her in a smaller

aviary adjoining the large one, in which were housed some Barbets. She settled down quite well, and became exceedingly tame and would come up to the wires and take tit-bits from my fingers. One night, a few months later I noticed her sleeping on a perch near the wire separating the two aviaries and the cock sleeping on the same perch, which extended into the other aviary, quite near to her, only the wire separating them. During the day they showed great interest in each other, I now put the hen into the same aviary as the cock and this time his advances were not resented, and everything was quite peaceful. The cock was gentleness itself. From this it was clear that it is absolutely essential to introduce the hen only when she is in breeding condition. This is most important. Shortly afterwards they began to show interest in a wooden box 8" x 8" x 8" with a 2½" entrance hole, which was nailed on the wall about 8' from the floor. Twigs and straw were carried into it. I did not pry into their home to see what was happening because conditions would not permit this to be done unobtrusively, and further I have made it a rule never to pry into or interfere with a nest because the only time I did so which incidentally was with the first pair of birds that went to nest in my aviary—the nest was abandoned. Two youngsters eventually emerged from the nest and these turned out to be a cock and hen. The young were fed on gentles, grass-hoppers, small cockroaches and any other insects the parents could find. I had an electric light in the enclosure which used to attract insects which were collected in due course by the Magpie-Robins and some of the other birds. I saw them on occasions picking at the "Satoo" paste. "The Satoo" paste was composed of powdered gram made into a paste with water. The youngsters reached maturity.

What in my opinion would be ideal conditions for breeding these birds is to let a pair have a large outdoor aviary, well planted, in a quiet corner of the garden. A few nest boxes or earthenware urns should be placed in secluded places such as in bushes or on the sides of the aviary high off the ground. Of course such accommodation could not

be provided by everyone. The next best thing is an aviary similar to the one used by me but with the "crowd" removed. It is of paramount importance that these birds should have a plentiful supply of "live" food, especially when breeding.

CLIFFORD E. UNDERWOOD.

Some thrilling Encounters with some of the
Big Game of Burma.

By

W. S. THOM.

PART IV.

(Continued from Vol. XIX Page 109)

Gaur or Bison.

To give the reader some idea what a lot of lead a large solitary bull bison will sometimes take before it is finished off I will relate another incident of how I had to put four 8 bore bullets into an animal before succeeding in killing it. It was a bull which I came across on the Yoma mountains, at an elevation of about 4,000 feet above sea level, on the watershed some thirty five or forty miles to the west of the Irrawaddy river above the town of Kama, which is situated on the banks of that river, in the Thayetmyo District of Burma and a little below the spot where the Maton river enters the Irrawaddy.

I was spending two months privilege leave on the watershed in the hope of bagging a bison, a tiger, a good tusker elephant, and, perhaps, one or two serow and goral.

I came to Burma in 1886 and spent all my privilege leave hunting big game from that year to May 1926 when I retired from Government service. I went home to Scotland, for the first and last time, on 18 months furlough in 1900. I trust I may be pardoned for blowing my own trumpet somewhat when I say that I am now

in my seventy sixth year but still play singles at lawn tennis and shoot snipe without glasses, and can beat most men several years younger than myself in a 100 yards race.

At about 7-30 A.M. one morning I left my camp, which was situated on the top of a plateau on the watershed, accompanied by my hunter Tha Yauk. We had gone about 400 yards or so over the lovely, open, undulating country found there for miles covered with short grass, ferns, and wild flowers, when my binoculars spotted a solitary bull bison moving slowly along the watershed through a small grove of stunted trees, bushes and low dwarf bamboo jungle. The animal, as it moved along, appeared to be browsing on the luxuriant grass and shrubs to be found on either side of it. It took us about half an hour to get to the spot where we had last seen it feeding and then I suddenly caught sight of a large black object which turned out to be the bison lying down on the grass chewing the cud with its head facing away from us. The wind was, fortunately, in our favour. I stalked the animal as slowly and carefully as possible, followed by Tha Yauk and when I had succeeded in getting to within about 40 yards of the bull, without being discovered, I sat down in the open, behind a bush, and let it have a raking shot into its left side, well behind through the small of the ribs; the animal on receiving the bullet rose to its feet at once and spun round towards us as if standing on a pivot. I then let it have the second barrel of the Paradox raking it again through the point of its shoulder in the hope that the bullet would travel through the length of its body and touch up the lungs if it did not shatter the animal's shoulder. My second shot seemed, at first, to have the desired effect, for it appeared to be slightly dazed and unsteady on its legs. I was, however, wrong in thinking that the bull had been disabled in the slightest degree, for on seeing me rise to my feet, it uttered a snort and came straight towards me travelling at a fast gallop. I did not like the appearance of things at all as can be imagined, and immediately made a bee line, accompanied by Tha Yauk who by now had joined me, to get

behind the trunk of a suitable sized tree in time, one that would withstand the impact of the bison's horns should it happen to strike the trunk with its head when we were standing behind it. The animal, as a matter of fact, reached the tree at the same time as we did hitting the trunk with a resounding blow with its horns and head. I then let the bull have a third shot in the chest from the Paradox as it was standing facing us about three paces off; even this shot failed to bring the beast down for it charged the tree again and struck it a violent blow with its head and horns. The impact of the animal's head against the trunk of the tree seemed to me to cause the tree, which by the way, was by no means a very thick one, to vibrate a good deal. The animal then stepped back a few yards and shook its head violently from side to side at us uttering, at the same time, a few low deep snorts. I succeeded, luckily for us, in finishing the bull off with a fourth shot through its right shoulder, as it still seemed to have a good deal of vitality left in it, especially as it was now making a move to get at us by moving round the trunk of the tree. This shot caused the animal to stagger and sway from side to side and then finally brought it to the ground with a crash. After the lapse of about five minutes I walked up to the bull, much against Tha Yauk's wishes, to see whether the beast's eyes were open or closed. If open the bull was dead, if they were closed, it was still alive. One must always remember that when approaching an animal that may be lying on the ground *hors de combat* that it is not dead if its eyes are closed.

(To be continued)

Note about fishing in the Darjeeling District.

1. Fish which provide regular sport in Darjeeling are Mahseer 3 to 50 lbs., and Cutli $\frac{1}{4}$ to 6 lbs. An occasional Goonch is caught.

2. In the larger rivers, just before and just at the end of the rains are the best times. This also applies to Cutli in the Balasan but Mahseer can be caught in that river, in July and August.

3. Join the Shooting and Fishing Club this costs Rs. 20/- a year.

4. 14 ft. Mahseer spinning rod will be excellent for Mahseer and a small trout rod for Cutli.

5. For Mahseer, "tiger" or similar traces, and spoons from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches. For muddy water, *atta* paste, on a large hook, has been used very successfully. Live bait tackle is good under most conditions (Ask Mr. Langdale Smith about this).

In Cutli use fairly fine gut traces and a fly spoon, or a live grasshopper (or other insect) impaled on a small hook. They are just as shy as trout if the water is clear; Mahseer are bold.

6. Places to fish. The best place of all is the big pool at Reang (get permission from Agent, D. H. Rly. to stay at the Railway bungalow). This place is particularly good for very large Mahseer in the autumn (September and October). The record fish was caught by Mr. Ritchie at the junction of the Reang with the Tista in August 1921. It weighed 54 lbs. The next best place is Singla bazaar. There is a police rest house which you can occupy with permission of the S. P. This place is good (1) in the spring when the water is warm but not muddy and (2) in the autumn when the water is clearing but is not quite clear. But all round pool is the one just below the bamboo bridge, except when the water is low, in which case the best water is from the junction pool of the Ramam to the bamboo bridge. The Ramam for 200 yards above the junction pool is good for Mahseer and it contains lots of Cutli, for miles up.

Next come, Sevoke, but Mahseer can be had at the end of the rains at any place where a large stream flows into the main river. It does not matter whether the river is muddy so long as the stream runs full and clear.

If the Balasan runs full and clear during the rains, try below the P. W. D. bridge at Panighatta. This pool holds big Mahseer in the rains.

For Cutli the best place is Namchi. There is a District Board rest house there which the D. C. can give permission to occupy. This place is very good, usually, in the spring after a *little* rain. Good catches have also been taken in November—December. Birch fishes this fairly often and will tell you when to try it. There are lots of Cutli too in the little Rungit. This and the Balasan and also the Ramam are very much spoiled by poachers.

Generally speaking there are heaps of daktungalows, but take a mosquito net and *take quinine*; malaria is bad in the valleys; this also applies to Namchi.

Warning. Tackle *must* be strong for Mahseer; line and traces to be tested for 20 lbs. dead weight and a Silex reel is best; porcelain, or agate rings save wear on the line.

Times of the day for fishing Mahseer. This is rather important as the fish won't be tempted unless on the feed, but it is difficult to frame a rule. In cold weather the only chance is, usually, the middle of the day. In warm weather when the river is low, early morning or evening.

In the autumn when the water is muddy they generally prefer between 7 and 11 A. M. and in the afternoon between 3 and 5 P. M.; 4 P. M. is usually a good time. Generally, they take best when the weather is very hot; a cold wind puts them off the feed.

O. M. MARTIN.

A List of the Rhopalocera of Tukdah, May-June 1944.

By

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

There can be only very few lists of the butterflies from localities in the Darjeeling district; apart from my own list of the butterflies of Peshoke published in this Journal in 1937, I cannot remember seeing one published during the last twenty years or so. This, I think, is a pity as, in general literature, Darjeeling and its immediate surroundings are included in the very much larger and richer district of Sikkim, and this again in the even larger and richer region of 'Kumaon to Assam or Burma' or 'N. E. India' from which Evans, in *The Identification of Indian Butterflies* records 962 of the 1438 species found in the Indian Empire, Ceylon and Burma. Contrary to general opinion, Darjeeling and the hills round it are not very rich in butterflies, and a totally false impression is given by the cases of butterflies offered for sale in Darjeeling itself, most of the contents of which come from the valley bottoms at Rhyang, Teesta and the like; I shall never forget the richness of the butterfly population, both in species and individuals, in a field of buckwheat at Singla Bazar in November 1927, in contrast to the scarcity at the higher levels of the Phalut trip.

Tukdah is situated some twelve miles to the east of Darjeeling at a height of about 5,000 feet. The country consists partly of fairly open hillside, on parts of which maize and vegetables are cultivated, and partly of Cryptomera and mixed forest. Weather was fairly good, there was not a day during the whole stay when it was absolutely impossible to get out collecting, but periods of sunshine were not very frequent and were invariably short. Collecting was not easy as the hills are steep and anything struck at and missed was usually lost for good.

As a matter of interest, I give below a comparative table of the species caught at Tukdah in May-June 1944 and those caught at Peshoke, a few miles further east but

only about 2,500 feet high, during the last ten days of December 1936.

	Tukdah (5,000 ft.) May-June 1944	Peshoke (2,500 ft.) December 1936	Species common to both
Papilionidae ...	7	4	1
Pieridae ...	14	16	7
Danaidae ...	4	3	2
Satyridae ...	11	10	2
Nymphalidae ...	26	20	11
Erycinidae ...	4	3	2
Lycaenidae ...	16	11	3
Hesperiidae ...	12	4	2
TOTAL ...	94	71	30

These totals, compared with my record of 68 species seen on one small patch of waste ground in Calcutta during four week-ends in March 1944, will shew that these hills are not exceptionally rich in butterflies. Species common to Tukdah and Peshoke are marked with an asterisk.

I have followed Evans' *Identification of Indian Butterflies* (2nd edit.) in regard to nomenclature, except that the names of the Papilionidae and Pieridae have been altered to those used by Talbot in the *Fauna of British India, Butterflies*, Vol. I (2nd edit.). I have also added Evans' notes regarding range and commonness in brackets after my own notes.

Papilionidæ

- A 2-1 *Polydorus (Tros) aidoneus* Dbl.—One worn specimen. (Garhwal—Shan States. R.)
- A 2-15 *Polydorus (Tros) philoxenus* Gray, *polyeuctes* Dbl.—Fairly common. (Sikkim—Burma. C.)
This is the only species of the group that I was able to capture and identify, it is always possible that some of the red-bodied Swallowtails I saw were *P. dasarada* Moore, *dasarada*.
- A 3-1 *Chilasa agestor* Gray, *agestor*—Two larvæ, (Sikkim—Dawnas. NR.)
- A 4-11 *Papilio arcturus* Westw., *arcturus*—Fairly common. (Nepal—Dawnas. NR.) I did not actually catch a specimen of *P. polyctor* Bsd., *ganesa* Dbl., but it is more than probable that this species was also present.
- A 4-19 *Papilio helenus* L., *helenus*—Common. (Mussoorie—Burma. C.)
- A 4-25 **Papilio polytes* L., *romulus* Cr.—A single ♀ f. *stichius* Hbn. (Ceylon, India, Burma. VC.)
- A 8-1 *Graphium (Meandrusa) gyas* Westw., *gyas*—Not rare. (Sikkim—Assam. R.)

Pieridæ

- B 1 *Leptosia nina* F., *nina*—One specimen. (Ceylon. S. India—Mussoorie—Burma. Andamans. C.)
- B 4-10 **Pieris canidia* Sparr., *indica* Evans—Very common. (Zhub. Chitral—Dawnas. VC.)
- B 4-11 *Pieris brassicae* L., *nepalensis* Dbl. Very common. (Baluchistan. Chitral—Assam and Plains adjoining Himalayas. VC.)
- B 6-7 *Delias belladonna* F., *lugens* Jord. One specimen, but was possibly overlooked as the next species. (Assam—N. W. Burma. Chin Hills. NR.) Talbot states that it sometimes occurs in Sikkim as a rare form with *ithiela* Btlr.

- B 6-10 *Delias berinda* Moore, *boyleae* Btlr.—Very common, also pupæ. (Sikkim (high elevations). R.)
- B 6-11 **Delias descombesi* Bsd., *leucacantha* Fruhs.—Fairly common. (Sikkim—Burma. NR.)
- B 9-2 *Cepora (Huphina) nerissa* F., *nerissa (phryne)* F.)—Common. (Sikkim—Assam. C.)
- B 9-3 **Cepora (Huphina) nadina* Luc., *nadina*—Fairly common. (Sikkim—Burma. NR.)
- B 10-2 **Appias lalage* Dbl., *lalage*—Fairly common, the dry season form *argyridina* Btlr. in May and the nominotypical wet season form in June. (Mussoorie—Tavoy. NR.)
- B 11-1 *Catopsilia crocale* Cr.—Fairly common. (Ceylon, India, Burma. C. Andamans. R.)
- B 15-2 **Eurema (Terias) laeta* Bsd., *sikkima* Moore—Uncommon. (Sikkim—Burma. VC.)
- B 15-5 **Eurema (Terias) hecabe* L., *contubernalis* Moore (*hecabe*)—Fairly common. (Bengal—Sikkim—Burma. Andamans. VC.)
- B 16-14 *Colias electo* L. (*croceus* Fourc.), *fieldi* Men.—Fairly common. (Sikkim—N. Burma. NR.)
- B 17-2 **Ixias pyrene* L., *familiaris* Btlr. (*pirenassa* Wall.)—Fairly common. (Sikkim—Assam. C.)

Danaidæ

- C 2-5 *Danais tytia* Gray, *tytia*—Common. (Sikkim—Burma. NR.)
- C 2-12 **Danais plexippus* L.—One specimen. (Ceylon, India, Baluchistan, Burma, Andamans, Car and Central Nicobars. VC.)
- C 3-1 **Euploea mulciber* Cr., *mulciber*—Common. also larvæ. (Simla—Burma. C.)
- C 3-7 *Euploea core* Cr., *core*—Not uncommon. (India to Himalayas. C.)

Satyridæ

- D 2-5 *Mycalesis francisca* Cr., *sanatana* Moore—Very common, only the dry season form. (Kulu—Burma. NR.)
- D 3-3 *Lethe sidonis* Hew., *vaivarta* Doh.—Very common. Also a few larvæ. (Kulu—Bhutan. NR.)
- D 3-15 *Lethe sura* Dbl.—Not common. (Sikkim—N. Burma. C.)
- D 3-22 *Lethe rohria* F., *rohria*—Not common. (Sikkim—Burma. C.)
- D 3-25 **Lethe confusa* Auriv., *confusa*—Common. (Murree—Sikkim. C.)
- D 3-43 *Lethe bhairava* Moore—Fairly common. (Sikkim—Assam—Dawnas. NR.)
- D 3-44 *Lethe verma* Koll., *sintica* Fruhs.—Very common, also small larvæ. (Sikkim—N. Burma. C.)
- D 5 *Orinoma damaris* Gray—Common. (Kangra—Karens. NR.)
- D 14-21 *Ypthima sakra* Moore, *sakra*—Very common. A few larvæ and pupæ. (Sikkim. C.)
- D 22-1 **Melanitis leda* L., *ismene* Cr.—Rare. (Ceylon, India, Burma, Andamans. VC. All Nicobars. VR.)
- D 25-8 *Elymnias malelas* Hew., *malelas*—One specimen. (Sikkim—Dawnas. NR.)

Nymphalidæ

- F 2-7 *Eribæa dolon* Westw., *centralis* Roths.—Uncommon. (Nepal, Sikkim, Bhutan. R.)
- F 12 **Hestina nama* Dbl.—Fairly common. (Mussoorie—Burma. NR.)
- F 24-4 *Limenitis daraca* Dbl. & Hew.—Common. A few pupæ and one larva. (Sikkim—Karens. NR.)

- F 24-5 *Limenitis dudu* Westw.—One example. (Sikkim—S. Shan States R.)
- F 25-2 *Pantoporia nefte* Cr., *inara* Dbl.—One specimen. (S. India, Sikkim—N. Burma. NR.)
- F 26-6 **Neptis hylas* L., *varmona* Moore—Very common the first half of May, but disappeared later. (Ceylon. S. India—Kumaon and Sikkim. VC.)
- F 26-9 *Neptis yerburyi* Btlr., *sikkima* Evans—Two only. (Sikkim—Assam. NR.)
- F 26-15 *Neptis ananta* Moore, *ochracea* Evans—Common. (Sikkim—Dawnas. R. (high)).
- F 26-18 *Neptis antilope* Leech, *melba* Evans—One specimen. (Sikkim. VR.)
- F 26-24 *Neptis radha* Moore, *radha*—One example. (Kumaon—Assam. R.)
- F 29 *Pseudergolis wedah* Koll.—Fairly common. (Kulu—Burma. NR.)
- F 35-2 **Precis orithya* L., *ocyale* Hbn.—Not common. (Sikkim—Burma. VC.)
- F 35-6 **Precis iphita* Cr., *iphita*—Common. (Sikkim—Burma. VC.)
- F 36-1 **Vanessa cardui* L.—Fairly common. (Ceylon, India, Burma. C.)
- F 36-3 **Vanessa indica* Herbst., *indica*—Common. (Kashmir—N. Burma. C.)
- F 36-4 **Vanessa canace* L., *canace*—One larva, not a single imago. (Sikkim—N. Burma. NR.)
- F 36-10 **Vanessa cashmirensis* Koll., *asis* Fruhs.—Very common, also larvæ. (Simla—Sikkim. C.)
- F 38-1 **Symbrenthia hippoclus* Cr., *khasiana* Moore—One only. (E. Ghats—Kulu—Burma. C.)
- F 38-3 *Symbrenthia hypselis* Godt., *cotanda* Moore—Common. (Kumaon—Burma. NR.)
- F 38-4 *Symbrenthia niphanda* Moore, *niphanda*—One specimen. (Sikkim—Assam. R.)

- F 39—1 *Argynnis hyperbius* L., *hyperbius*—Not common.
(Central Provinces. Mount Abu. Baluchistan.
Chitral—N. Burma. NR.)
- F 39—2 *Argynnis childreni* Gray, *childreni*—Not
uncommon. (Kumaon—N. Burma. NR.)
- F 39—8 *Argynnis lathonia* L., *issaca* Dbl.—One specimen.
(Safed Koh. Chitral—N. Burma. C.)
- F 47—1 **Cethosia biblis* Drury, *tisamena* Fruhs.—Fairly
common. (Sikkim—Burma. C.)
- F 49—2 **Ergolis merione* Cr., *assama* Evans—One speci-
men. (Sikkim—N. Burma. C.)
- F 51 *Pareba vesta* F., *vesta*—Larvae and pupae very
common in early May, imagines at the end of
May and early June, and small larvae at the
end of June. Imagines very varied. (Sikkim—
Assam. NR.)

Erycinidae.

- G 2 **Zemerus flegyas* Cr., *indicus* Fruhs.—Very
common. A few larvae. (Mussoorie—Burma.
VC.)
- G 3—5 *Dodona ovida* Moore, *ovidia*—Common. Also
larvae. (Nepal—Dawnas. NR.)
- G 3—6 *Dodona adonira* Hew., *adonira*—Common. A
few larvae. (Nepal. Sikkim. Assam. R.)
- G 4—1 **Abisara fylla* Dbl.—Very common. A few
larvae. (Mussoorie—Burma. C.)

Lycaenidae.

- H 21--2 *Lycaenopsis puspa* Horsf., *gisca* Fruhs.—One
specimen. (India, N. Burma. C.) The species
of this genus are not easy to catch and cannot be
identified without being caught, so it is quite
possible that there are further species to be
found at Tukdah and that my notes of compara-
tive scarcity are incorrect.
- H 21-12 *Lycaenopsis transpecta* Moore—One specimen.
(Sikkim—Burma. NR.)

- H. 21-20 **Lycaenopsis cardia* Fldr., *dilecta* Moore—Fairly common. (Simla—Karens. NR.)
- H 21-24 *Lycaenopsis argiolus* L., *sikkima* Moore—Fairly common. (Sikkim—Karens. C.)
- H 24-3 *Zizeeria maha* Koll., *maha*—Not common. (Baluchistan. Kurram. Central—N. India. Burma. VC.)
- H 24-5 *Zizeeria gaika* Trimen—Not common. (Ceylon, India, Burma, Andamans, All Nicobars. C.)
- H 28 **Cosmolyce (Lampides) boeticus* L.—Fairly common. (Ceylon, India, Burma. C. Andamans, Nicobars. R.)
- H 32-4 *Nacaduba vajuva* Fruhs., *vajuva*—One specimen. (Sikkim—Burma. NR.)
- H 32-16 *Nacaduba dubiosa* Semp., *sivoka* Evans—Fairly common. (Sikkim—Burma. C.)
- H 35-2 **Heliophorus epicles* Godt., *indicus* Fruhs.—One specimen. (Kumaon—Dawnas. Middle Andaman. C.)
- H 35-6 *Heliophorus brahma* Moore, *brahma*—Common. A few larvae. (Kumaon—Sikkim. NR.)
- H 35-8 *Heliophorus androcles* Hew., *moorei* Hew.—One specimen. (Sikkim, Chumbi, Bhutan. R.)
- H 49-36 *Amblypodia centaurus* F., *pirithous* Moore—Rare. (Kumaon—Assam. NR.)
- H 79-2 *Chliaria kina* Hew., *cachara* Moore—One example. (Sikkim—Dawnas. NR.)
- H 85-12 *Rapala schistacea* Moore—Uncommon. (Ceylon. India—Burma. Andamans. C.)
- H 85-19 *Rapala nissa* Koll., *nissa*—One specimen. (Kashmir—Sikkim. C.)

Hesperiidae.

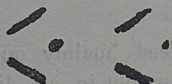
- I 1-7 *Hasora badra* Moore, *badra*—One specimen. (S. India. Sikkim—Burma. Andamans. S. Nicobars. NR.)

- I 4—4 **Choaspes benjaminii* Guer., *xanthropogon* Koll.—
One specimen. (Kulu—Karens. NR.)
- I 11—5 *Celaenorrhinus pyrrha* DeN.—Uncommon.
(Bhutan and Kumaon—N. Burma. NR.)
- I 11—13 *Celaenorrhinus plagifera* DeN.—Two larvae.
(Sikkim—Assam. NR.)
- I 11—16 **Celaenorrhinus leucocera* Koll., *leucocera*—Un-
common. (S. India—Bengal. Murree—Burma.
C.)
- I 20—1 *Coladenia dan* F., *fatih* Koll.—One specimen.
(Kulu—Karens. C.)
- I 43—4 *Aeromachus stigmata* Moore—Fairly common.
A few larvae. (Murree—Karens. NR.)
- I 43—8 *Aeromachus discreta* Plotz, *jhora* DeN.—Fairly
common. (Sikkim. R.)
- I 58—5 *Notocrypta feisthamelii* Bsd., *alysos* Moore—
Common. One larva. (Murree—Burma. C.)
- I 91—2 *Astycus pythias* Mab., *bambusae* Moore—Un-
common. (Central—N. India. Burma. C.)
- I 97—3 *Baoris pagana* DeN.—Uncommon. (Sikkim—
Dawnas. NR.)
- I 97—21 *Baoris eltola* Hew.—Uncommon. (Murree—
Assam. NR.)

Calcutta, S. ix. 44.

Notes from Tasmania.

In the week-end I went ski-ing up one of our highest mountains. Up there we make great friends with little rock-wallabies which come eagerly round looking for scraps. Goodness knows what they, usually, live on up there in the snow, but they will eat anything, cheese, bread, jam etc. that we give them. One night I was shining a torch on one of them, watching him eat a rind of cheese I had thrown out. He was not two yards away and seemed oblivious of the torchlight on him. Suddenly I felt something rubbing and rubbing against my ski-ing trousers and looking down I saw a bush possum sniffing my legs. He was attracted by the bright beam of the torch and, through curiosity, forgot all fear and had come right up to me to see what I was. He was a funny brown-grey little fellow with a bare pink nose, big brown eyes, with darker rings round them and a very bushy tail. We don't often see them, the ring-tailed possums are far more numerous. All over the snow you see tracks like



I think they are made by rock wallabies. They, evidently, put both their front paws down together making one small mark and then bring up the back legs which touch the ground all along the fore-part which is about 3 to 4 inches long; when they are in a real hurry you do not see the mark of their pretty useless front paws as if they dispense with them altogether.

Black jays marks are, also, seen all over the snow. These birds come down to the tree-line at night fall, or in stormy weather, and can be heard at sunset and sunrise calling to each other in rancous voices.

TASMANIA

ROSEMARY GARNER

Dated the 8th June, 1944.

DEAR MR. INGLIS,

I wonder if you would be kind enough to help me identify a bird which has been puzzling me and several of my friends who are interested in birds. The only book of reference I have here is Whistler's Popular Handbook, and I can find nothing in that which helps, though there is a reference (3rd edn., p. 486, 6th line from bottom, 6th word onwards) which may relate to the locality in which it is found.

The bird is of the size and shape of a small mynah (about 7"); sexes alike, adults black all over with a high green metallic gloss on the head and neck, a blue gloss on the back and wings; iris conspicuous bright crimson; bill and legs black. *Young*, glossy ashy brown above, whitish with dark brown or black vertical striations below; iris brown, bill and legs dark brown or black, gape orange-yellow.

They appear to feed mainly on fruit, and clamber among the twigs, reaching out in all directions rather like pigeons or parrots; they nest in holes of rotten branches, some way from the ground. The young make a chirruping twitter when being fed, the adult birds have a curious whistling call impossible to describe. Since our attention was drawn to them, we have observed several pairs. One pair was feeding young in the nest about the tenth of May; another pair had three almost fully adult young (in the plumage I have described) at the end of May; they were flying about in a family party, the young were feeding themselves, and also still being fed by the parents. Since then I have seen two pairs alone, without young. Their favourite tree is a *figus* of some kind.

I feel that probably the birds are well known, and you will be able to identify them at once. I have been hereabouts for a year or more, and never noticed them before the middle of this May, though that is not to say they were

not here. If however you are interested, I will try to procure you a specimen, though I have no means of preserving it; would packing in salt be sufficient?

Yours sincerely,

PETER MURRAY,

Paym. Lt.

[The birds, are Hodgson's Glossy Stare. (*Lamprocorax panayensis affinis.*) Editor.]

Dated 26th May, 1944.

THE EDITOR.

Bengal Natural History Journal.

Darjeeling.

DEAR SIR,

Since writing you about Wild Dog hunting at night I have collected some more evidence which I send along.

Mr. S. Sam, Forest Manager, The Bengal Timber Trading Co., Ltd. Panposh, informs me that in 1938 he was in camp in the Jeypore Zamindary, Orissa. After dinner one night some carters came and informed him that something was attacking a Sambar in a field nearby. Mr. Sam along with one of his assistants visited the spot, using spot lights, as it was a dark night, and came across a Sambar Stag that was being attacked by Wild Dog. The Dog scattered into the jungle but as soon as the lights were put out they ventured into the field again and again.

The Sambar Stag had been disembowelled.

Yours faithfully,

H. V. T. BLACKBURN.

Civil Lines,
Raipur, C. P.

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