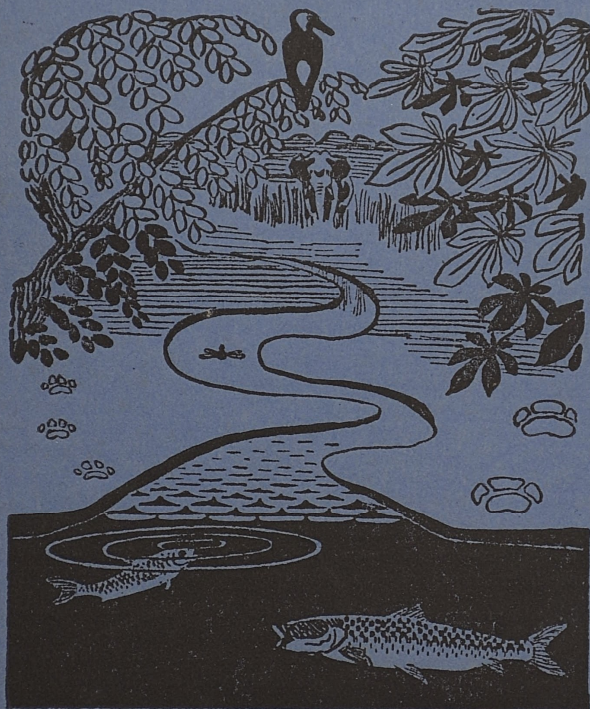


VOL. XXIII.

OCT., 1948.

NO. 2

# JOURNAL OF THE BENGAL NATURAL HISTORY SOCIETY.



*Edited by* C. R. ROY, M.A., B.L.

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## CONTENTS OF VOL. XXIII No. 2.

—:—

1. The Indian Bush-Chats by C. R. Roy, M.A., B.L. (Coloured plate by C. M. Inglis, F.Z.S., B.E.M.B.O.U.)	... ..	37
2. Observations on Capt. Baillie's Hazaribag Bird recordings by S. C. Law, M.A. Ph.D., F.N.I.F.Z.S. (Continued from Vol. XXIII. Page 11.)	... ..	44
3. <i>Luculia</i> by B. N. GHOSH (with plate.)	... ..	50
4. Some thrilling experiences with tiger in Burma by W. S. Thom (Continued from Vol. XXIII (Page 28.)	... ..	54
5. Further Notes on our bird bath at Baghho- wine in North Bihar by C. M. Inglis, F.Z.S., B.E.M.B.O.U.	... ..	59
6. The 'Great One-horned Rhinoceros in Khazi- ranga Sanctuary, Assam by E. P. Gee (with plates)	... ..	63
7. Miscellaneous Notes		
(i) <i>Personelia</i>	... ..	66
(ii) Acknowledgements	... ..	66
(iii) Addition to the Museum	... ..	66
(iv) Editorial	... ..	67

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*SAXICOLA TORQUATA PRZEWALSKII* (Pleske)

The Turkestan Stonechat (Male)

*SAXICOLA INSIGNIS* (Hodgson)

Hodgson's, or the Large, Bush Chat (Female).

About  $\frac{1}{2}$  Nat. Size.

**JOURNAL**  
OF THE  
**BENGAL NATURAL HISTORY SOCIETY.**

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VOL XXIII.            OCT. 1948.            No. 2.

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THE INDIAN BUSH-CHATS

By

C. R. ROY, M.A., B.L.

(Coloured Plate by C.M. Inglis, F.Z.S., B.F.M.B.O.U.)

The Indian Bush-Chats belong to the Genus *Saxicola* of the Sub-family Saxicolinae of the Turdidae Family. The Genus *Saxicola* has got four species viz. (I) *Saxicola caprata*, (II) *Saxicola torquata* (III) *Saxicola macrorhyncha* and (IV) *Saxicola insignis*. The species *caprata* is again sub-divided into three sub-species viz. (a) *Saxicola caprata burmanica* or the Burmese Stone-Chat, (b) *Saxicola caprata atrata* the South Indian Stone-Chat, and (c) *Saxicola caprata bicolor* or the North Indian Stone-Chat.

The species *torquata* is divided into four sub-species viz.- (a) *Saxicola torquata indica* or the Indian Bush-Chat; (b) *Saxicola torquata przewalskii* or the Turkestan Bush-Chat, (c) *Saxicola torquata stejnegeri* or the Japanese Bush-Chat and (d) *Saxicola torquata leucura* or the white-tailed Bush-chat.

The species *S. macrorhyncha* (Stoliczka's Bush-Chat) and the species *Saxicola insignis* (Hodgson's Bush-Chat) have no sub-species.

There are some confusion about the name of Bush-Chat and Stone-Chat and one is often used in place of the other. The term Stone-Chat has probably derived from its note 'hwet chat' resembling the sound produced by concussion of two stones. The

term *Pratincola* has been used for Stone-Chat but it has now been discarded. The Stone-Chat has now been associated only with the species *Saxicola caprata* and other species of this genus can be termed as Bush-Chat. The difference between Stone-Chat and the Bush-Chat lies primarily in the colouration of the plumage. The Stone-Chat can be recognised by the colouration of the plumage which is entirely black and white but the plumage of the Bush-Chat is not entirely black and white but its colour of the chin and throat varies from white, black, pale rufous to brown in different sub-species. The colour of the underpart of the female Stone-Chat resembles to that of the male Bush-Chat.

The Chat shown on the top of the coloured plate though termed as the Turkestan Stone-Chat (*Saxicola t.przewalskii*) can be termed as Turkestan Bush-Chat, and the other one below is a Hodgson's Bush-Chat (*Saxicola insignis*).

We shall here describe some of the main characteristics of the Indian Bush Chat in general and later deal with the different species and sub-species, as they are nearly similar in many respects.

The Indian Bush-Chats are small birds about five inches in length and can be recognised by the colouration of the plumage. In the Male the colour of the upper plumage from the forehead, crown, nape, rump, back, upto the tail black including the wings with a conspicuous white patch on the wings and at the base of the tail. The sides of the head, chin, and throat are black with a large patch of white bordering on each side of the neck. The breast is orange rufous merging into paler rufous underparts. The under wing coverts and axillaries are black with narrow white tip. The bill is strong and the rictal bristle are well developed. The wing is pointed and is decidedly longer than the tail which is slightly rounded. The tarsus is fairly long and slender. The bill is rather less than half the length of the head, broad at the base and well notched. The iris is dark brown and the leg and bill black.

They have an autumn moult and there are further seasonal changes in colouration. The sexes are invariably dissimilar. In the

female the upper plumage of the wing and the tail is brown instead of black as in the male and the white patches on them are smaller and less marked and there is a rufous patch at the base of the tail. There is white ring around the eye. The chin and the throat are pale rufous and remainder of the lower plumage is pale.

The Bush-Chats are migratory birds and can be seen in open country in both hills and plains perching on the tops of bushes or high stones, always flicking its tail and every now and then launching forth after some insect, on the ground below and then returning to its seat to devour it.

The Bush-Chat is widely distributed in Europe, Africa, Asia and is divided into a number of races of which we are chiefly concerned with the Himalayan breeding form known as *S. t. indica*. This breeds from Western Siberia, Russian Turkistan to the South Ural and throughout the Himalayas and also ranges that extended down the North-western frontier to Beluchistan. In the Himalayas the majorities breed between 5000 to 7000 feet, but some breeds in more higher altitude and also at the foot of the hills, and in the plains of the Northern India.

As we mentioned before that the species *torquata* is subdivided into three sub-species among them the *S. t. indica* or the Indian Bush-Chat fairly represents the species in general so the description of the same would be useful in distinguishing the other sub-species and other species.

### (1) *Saxicoia torquata indica*.

#### THE INDIAN BUSH-CHAT.

Ref. F. B. I. 2nd Edition 495, *Pranticola indica* Blyth, J. A. S. B. xvi p. 129.

*Pranticola Maura* Blanf & Oates ii p. 61.

**Description.** Length about 130 m.m. ; wing 67 to 71 m.m., tail about 50 m.m. ; tarsus 21 to 22 m.m. ; culmen 11 to 12 m.m. ;

**Male** :—Upper plumage brownish black, the feathers in autumn edged with fulvous ; sides of the head, chin and throat black also edged with fulvous in the autumn, a large patch of white on the

sides of the neck and another on the wings ; breast orange rufous merging into the pale rufous of the rest of the lower plumage.

**Female** :—Brown, the feathers slightly edged with fulvous in the autumn, a small white patch on the wings and the lower plumage is paler fulvous with more rufescent on the breast.

Bill, legs and iris dark brown.

Among the Bush-Chats this is the most common over a greater part of India but curiously enough, it appear to be rare in the Darjeeling district which is all the more curious seeing it in the breeding race of the Darjeeling hills. Mr. Inglis collected about 40 specimens of the Bush-Chat in the Duars and one collected at Binaguri on the 13th March 1945 appears to belong to this race and 31 specimens belong to the Tarkestan Bush-Chat.

**Habits.** As already mentioned this appears to be a rare race in the Duars though of course easily passed over amongst the many Bush-Chats one sees and so many be less rare than I imagine. It is a bird of open country either cultivation or grass land and may be seen perched on the top of reeds or bushes or on some big stones on the look out for its insects prey and pounces on the ground either consuming it there or also returning to its perch to do so. It constantly flirts it tail especially when settling, it is generally seen singly and its note is a short low trill and its alarm is "*Kweet-Chat, Kweet-Chat*". The song is quite pleasant though it is audible but for a short distance. The breeding seasons last from March to July but most eggs will be found in April and May. Two broods are reared in a season. It breeds from the extreme East to the West of the Himalayas, in winter through Northern India to the hill of Northern Mysore and Travancore, Andamans and rarely in North West Burma.

The Indian Bush-Chat breeds during late May, June and early July in the hills and about a month earlier, in the lower ranges and plains. Marshall has recorded it as breeding at Shaharanpur but a rare occurrence. It does however breed occasionally at the foot of the Himalayas in the plains of the North-west India but typically it is hill breeder between the elevation of 2000 and 8000 feet. It breeds in great numbers in Kashmir, the Simla Hills

and Garwal Hills between 5000 and 7000 feet. In Sikkim upto 9000 feet whilst in the Khagan and Kurram valleys Whitehead and Harington found it breeding at even higher elevation. Mr. H. W. Waite reported during a trek along the Hindustan Tibet Road in April-June 1941 that are common as far as Chini about 9265 feet and also observed between Pangri and Jangji. A nest with four eggs was found at about 10,000 feet above Chini on May 15. The nest is a cup of grass leaves and roots sometime mixed with other materials and generally lined with hair or fur. It is placed in holes in wall under rocks and boulders occasionally on the river banks still less under bushes and tuft of grass. The eggs number four to six and have the ground colour a pale rather dull blue with frickles of light reddish brown and sometimes numerous over the larger half of the egg some, times coalescing in a well-defined ring or cup and some times almost absent. Fifty eggs average  $16.9 \times 13.5$  m.m.

## 2. *Saxicola torquata przewalskii*.

### THE TURKESTAN BUSH-CHAT.

Ref. *Pratincola maura* var. *przewalskii* Pleske, Wis. Res. Przewalski's Reis Vol i. p.46 (1889)

The Turkestan Bush-Chat is almost similar to the Indian Bush-Chat but differs from the last one being the largest and darkest race almost black, the feather edged with rufous fulvous. Lower plumage deep orange reaching well on them to the flanks and abdomen. Female rather darker than the female of the Indian Bush-Chat and larger. The bill, legs and iris dark brown. This race is slightly larger than the Indian Bush-Chat and is the darkest coloured of that race.

It is a very common winter visitor, remaining at any rate to the end of March. Its habits differ in no way from the Indian Bush-Chat. It is the breeding bird of Tibet and according to Stuart Baker its nest was once taken at Monywa, Chin Hills, on the 6th June and contained five eggs. In the District of Jalpaiguri Mr. E. G. L. Webb collected for the Natural History Museum Darjeeling ten specimen from Binaguri from Nov. to January. The wings are over 71 mm.; culmen about 15m.m.

### 3. *Saxicola torquata stejnegeri*.

#### THE JAPANESE BUSH-CHAT.

Ref. F. B. I. 2nd Vol II 497 ; *Pranticola rubicola stejnegeri* (Parrot).

This Japanese Bush-Chat breeds in great number about Mt. Fujiyama. It can be found from Siberia to Japan and in winter it migrates to Southern China, Malaya, Burma, Assam and East Bengal. Japanese Bush-Chat is similar to the Indian Bush-Chat in colouration but a little darker than Indian Bush-Chat but not so darker than the Turkestan Bush-Chat.

This is also a winter visitor but rarer than the last bird as out of 40 specimens collected in the Duars only five belong to this race and these were all compared by Whistler with specimens in the British Museum. Specimens were collected near the Dunhua not far from Gairkata at Haldibari and Jalpaiguri from January to March. Habits are those of Indian Bush-Chat.

### 4. *Saxicola torquata leucura*.

#### THE WHITE-TAILED BUSH-CHAT.

Ref. F. B. I. 2nd. Vol. 498. *Pranticola leucura* Blyth, J.A. SB. 474 (1847) (Sind) Blanf. & Oates ii p.63.

It is like the Indian Bush-Chat but much paler. The orange rufous of the lower plumage of the male is confined to a patch on the breast, the rest of the lower plumage is white. The tail has the pair of feathers, next the central ones white, on the inner webs the white decreases slightly to the outmost ones.

The upper plumage of the female is brown with paler edgings to the feathers, a very small concealed patch of white on the wings, the tail has no white and the lower plumage is earthy white and dull brownish fulvous on the breast.

Bill and legs black ; iris dark brown.

It can be easily recognised by its paler colouration and the amount of white on the tail and the lower plumage of the male.

The white Bush-Chat breeds in the sub-Himalayan plains and the foot hills from Assam to Garwal upto an elevation of 2000 feet. Mr. Inglis obtained four specimens in the grassy Char of the Torsa river. O'donel found it common there in former years. It frequents reed beds and grass. It is a bird of swampy ground grass-lands either on the Chars of rivers or in the vicinity of swamps. It is like the other Bush-Chats in all its movement and like them is insectivorous. It is only a winter visitor,

### 5. *Saxicola insignis*.

#### HODGSON'S BUSH-CHAT.

Ref. F. B. I. 2nd Edition No. 500. *Pranticola insignis* Hodgs.  
List Mam, Birds B. M App p. 153 (1847) (Nepal), Banf & Oates  
ii p. 64.

**Description** :—Length  $6\frac{1}{2}$  inches. **Male** :—In the winter the upper plumage black with all the feathers edged with fulvous broadest on the back ; chin, throat, and sides of neck white with some rufous mark ; lower plumage orange-rufous, the abdomen paler or sometimes white ; a large white patch on the wings. **Female** :—Upper plumage brown margined with dull fulvous ; sides of head fulvous, tinged with rufous ; lower plumage rusty-fulvous, pale on the chin and throat and below the breast ; a white patch on the wing.

Bill and legs black ; iris dark brown.

It can be easily recognised by its large size.

**Distribution and habits** :—It can be found in the winter on the plains of the Northern India from Kanpur to the Bhutan Duars. Mr. Inglis obtained 3 males and 1 female in January 1931 at Jalpaiguri. Mandali's collectors secured it in the Bhutan Duars in April. Its breeding grounds are not known. In Behar Mr. Inglis came across it in sugar-cane fields and ekra grass, those obtained in Jalpaiguri are in grass-land. From the little I observed this Bush-Chat seems to have much the same habits as other members of the genus. Not much observations have been made about this bird.

(To be Continued.)

OBSERVATIONS ON CAPT. BAILLIE'S HAZARIBAGH  
BIRD RECORDINGS

By

S. C. LAW, M. A., Ph. D., F. N. I., F. Z. S.

*(Continued from Vol. XXIII, Page 11)*

ZOSTEROPIDÆ. *Zosterops p. palpebrosa*, mentioned by Capt Baillie as common in Hazaribagh, has been noticed by me as sparingly distributed in the district. In its favourite haunts which are invariably orchards and tree groves, even in the flowering season, it is nowhere abundant; 3 to 5 individuals at the utmost comprising a party can be seen in such hunting ground.

NECTARINIIDÆ. *Leptocoma a. asiatica* is the only species representing the family which is very common and resident. The males in full breeding plumage are more in evidence than females during the major part of the year. A number of juvenile birds with some black on the breast are very often seen towards the end of September.

DICÆIDÆ. *Dicaeum e. erythrorhynchum* does not appear to be so common and abundant as *Piprisoma a. agile*, both being noticeable in *Sal* (*Shorea robusta*) and waste-land jungles. The nesting of *P. a. agile* starts later than that of the former species, and I collected alive in Suriya (Hazaribagh Road) several young in the period between March 20 and April 15, 1947.

PICIDÆ. Capt. Baillie's mention of *Picus vittatus* occurring in Hazaribagh requires confirmation, as there is no authentic record of its distribution in Hazaribagh. *Leiopicus mahvattensis*, omitted by Baillie, is rather common and resident, affecting outskirts of forests, waste-land jungles and sometimes roadside trees and village groves; occurring singly, and occasionally in pairs. Two specimens, caught alive with the aid of my birdcatcher on two different occasions (April 8, 1947 and February 2, 1948), are thriving in captivity. *Yungipicus nanus brunneiceps* is not uncommon, though nowhere abundant, my catcher having in two instances secured it during the 1st week of April, 1947.

*Micropternus brachyurus*, noticed by me in Ichadag Hill forest in Ranchi district, does not appear to occur in Hazaribagh. *Brachypternus benghalensis* is rather common but very shy, affecting not only hill jungles but also cultivated tracts where a cluster of trees provides it with a happy hunting ground. *Chrysocolaptes festivus*, not recorded by Baillie, is sparingly distributed in the district, affecting dense forest and sometimes large trees in comparatively open country.

*Jynx torquilla* is no doubt a winter migrant, noticed by me among stunted *Sal* bushes on several occasions during January and April. Baillie has mentioned the race as Japanese Wryneck simply by sight observation.

CAPITONIDÆ. Of the two species noted by Capt. Baillie I have no record of *Thereiceryx zeylanicus caniceps* having ever been observed or collected by me in the broken tracts of Suriya (Hazaribagh Road), but I collected one specimen on 23. 10. 26 in the outskirts of Hazaribagh town near village Mourangi. *Xantholæma hæmacephala lutea* is no doubt common throughout the district and resident. A pair in courtship posture observed on April 21, 1945 evidently signalises the approach of their nesting time.

CUCULIDÆ. The sight record of Capt. Baillie regarding the occurrence in Hazaribagh of *Cuculus canorus telephonus* needs confirmation. Ball (*S. F.*, II, p. 393) was not quite certain of the identity of the species collected from Chota Nagpur. I have no record of the bird myself, though I have some recollection about *C. m. micropterus* being heard in two or three instances in light jungles of Hazaribagh. *Hierococcyx varius* no doubt occurs in the district, having been collected by me near the jungle of Rolla Hill, 4½ miles from Hazaribagh on the road to Bagodar. It appears to haunt patches of large trees under whose shelter it regulates its activities, sometimes descending on the ground to capture quarries. *Cacomantis merulinus passerinus* and *Surniculus lugubris*, only heard and not sighted by Baillie, require in the absence of authentic record corroborative evidence. The occurrence of the former bird is likely, and I can recall an

instance of a juvenile Cuckoo dark in colour with some rufous barrings on the wing feathers, observed on September 16, 1947 in the compound of the house where I had been staying at Suriya (Hazaribagh Road). I did not feel inclined to shoot it. It was moving among hedges and low flowering shrubs after the manner of *Orthotomus sutorius*—coming out for a while in the open, descending on the ground and roads to pick up and catch insects and then seeking cover in bushes. It was alone foraging for food and I did not see any fosterer near it. Its movements suggested to me that the fosterer must have been a Tailor Bird, if not a Common Babbler. *Clamator j. jacobinus* is not uncommon in the district, where its status appears to be uncertain. During the rains they may be seen definitely in some numbers. Even in early winter (October, 1926) below the foot of the Canary Hill I had noticed and collected a few birds from scrub jungles. *Eudynamis s. scolopaceus* is common and resident, being partial to groves and gardens, its loud and impetuous calls very early in the morning, before sunshine, rend the atmosphere piercing from all directions and are apt to interrupt our sleep. *Taccocua leschenaulti affinis*, unrecorded by Baillie, is not uncommon in Hazaribagh; shy and great skulker among bushes, grass and thickets; in winter months, however, when in the act of enjoying sunshine in cool mornings on a higher branch of a tree the bird exposes itself to human gaze. In this position I collected two specimens on October 30 and November 10, 1926. *Centropus s. sinensis* is quite common, resident and well distributed throughout; a very familiar bird of the countryside, specially in Suriya, where it is found more numerous than *Dendrocitta rufa vagabunda*, the two species together not infrequently occurring in identical habitat. A young bird, fledged and out of nest, with almost black on the upper parts and chestnut on the wings was observed towards the end of April, 1945 sitting quietly high up on a *Mohua* (*Bassia latifolia*) tree, in a lower branch of which a pair of *Chloropsis jerdoni* was building.

PSITTACIDÆ. In Capt. Baillie's list *Psittacula eupatria nipalensis* is noted as fairly common, *P. krameri manillensis* as common, while *P. c. cyanocephala* as not uncommon. It is difficult, however, to hazard any such categorical statement based

on casual observation regarding the relative abundance or otherwise of the birds in any given habitat. In my experience I find all the three species very well distributed throughout Hazaribagh, alike in hill jungles and open broken-up tracts, interspersed with patches of large trees, and cultivation. By nature gregarious and sociable they usually collect in flocks in their hunting ground as also their roosting site. Not uncommonly in such haunts some individuals of the different species get mixed up. For instance in a gathering of *Psittacula krameri manillensis* there is often found a sprinkling of *P. eupatria nipalensis*. Similarly in a congregation predominantly of the latter species there is noticed *P. c. cyanocephala* ranged with it, while an association of *P. krameri manillensis* and *P. c. cyanocephala* may sometimes be looked for. All the three species are resident. While nesting they become partial to massive patches of *Sal* or other trees, growing more often than not in less-frequented and wilder situations. I have seen during January and February small parties of birdcatchers moving through remote villages on the look-out for Parrots' nests in order to collect nestlings for internal trade.

**CORACIIDÆ.** *Coracias b. benghalensis* is a resident species, very common and well distributed. On September 16, 1947 in Suriya I noticed two fledglings in a village field calling and clamouring for food before the parents. This strikes me as an unusual breeding record, as the known nidificatory period of the species is from end of March to end of May.

**MEROPIDAE.** *Merops o. orientalis* is very common and distributed throughout. It is interesting to find the species gathering before dusk in a flock along with some juvenile birds after the nesting season is over (actually observed by me on July 11, 1944) evidently bound for a roosting place. *M. superciliosus, javanicus*, scarcely seen, is erratic in its movement; four or five birds sometimes suddenly being found to glide past over ploughed field and clearings amid light scrub to an unknown destination. *Alcedo merops athertonii* is equally rare, its status and distribution in the district being uncertain.

ALCEDINIDÆ. *Ceryle rudis leucomelanura* is common and resident, haunting rivers, e. g. *Khero* and *Barakar* in Suriya where they appear to be locally abundant. *Alcedo atthis bengalensis* is equally common, but nowhere abundant, single specimen being invariably found near water; partial to shallow streams passing through hill jungles. *Ramphalcyon capensis gurali* is uncommon, solitary birds being seen on isolated occasions calling and flying past overhead. *Halcyon smyrnensis fusca* is fairly common, being found more on land than over water.

BUCEROTIDÆ. *Tockus birostris* is common and distributed throughout the district; strictly arboreal and going about in small parties, single birds sometimes straying into open rolling upland. I have seen the species haunting surroundings of village Oraya and feeding on *Bauhinia* flowers.

UPUPIDÆ. Capt. Baillie mentions both the subspecies *epops* and *orientalis* as being not uncommon in Hazaribagh in cold weather. I have records of birds collected on February 19, 1948 and April 25, 1945 which are referable to the typical form. On 20th July, 1944, I observed solitary birds feeding on open waste land alongside Dhanwar Road in Suriya, whose identity was hard to establish by sight.

MICROPIDÆ. *Micropus a affinis* is no doubt common and abundant. *Cypsiurus batassiensis*, noticeable in localities where there occur its favourite trees, e. g., *Borassus flabelliformis*, is evidently referable to the subspecies *palmarum*. *Indicapus sylvaticus*, which is found locally abundant on the southern border of Chota Nagpur, appears to be scarce in Hazaribagh. *Hemiprocne coronata* is not uncommon, being observed in small parties in certain wellwooded tracts.

CAPRIMULGIDÆ, *Caprimulgus macrourus albonotatus* and *C. i. indicus*, not mentioned in Baillie's list, occur in Hazaribagh. Baillie has, however, mentioned another bird as the Himalayan Jungle Nightjar which he had observed on 16th October, 1944. If he is referring to a different race of *C. indicus* it

really requires corroborative evidence as to the authenticity of his statement. *C. m. monticolus* is very common, while *C. asiaticus* is not uncommon, occurring in suitable localities ; both of them haunt invariably at dusk village roads in comparatively quiet, and less-frequented tracts, when with the aid of motor car head lights they are easily bagged.

TYTONIDÆ. *Tyto alba stertens*, whose presence is occasionally revealed by its nocturnal screeches, does not appear to be common.

ASIONIDÆ. *Ketupa zeylonensis* and *Bubo bubo Bengalensis*, which are common in some parts of Ranchi, appear to be scarce in Hazaribagh. *Otus bakkomæna* is also uncommon. *Athene brama indica* is not doubt common ; so is *Glaucidium v. radiatum*, invariably found on roadside trees and amongst groves on rather open fields. *Ninox scutulata lugubris* occurring sparingly is secretive in its habit and haunts ill-lighted and dense-foliaged trees in the forest.

PANDIONIDÆ. The occurrence of *Pandion haliaetus*, as observed by Capt. Baillie on 8th May, 1945, needs corroboration. Its status appears to be that of a casual winter visitor to large pieces of inland water.

(To be continued.)

## LUCULIA.

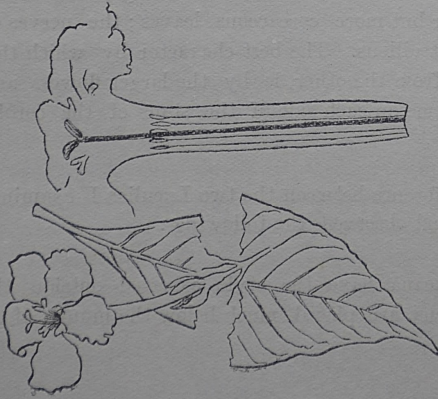
By .

B. N. GHOSH.

Luculia belongs to a very extensive natural order which botanists call Rubiaceae consisting of more than 4000 species, distributed in the tropical and semitropical regions of the globe comprehending from the meanest weeds to the most gorgeous and noble flowering trees and shrubs. It yields coffee, the infusion of whose roasted seeds, produces a pleasing drink, so universally popular throughout the world. It also produces several drugs invaluable to man for their medical properties, the most important are Quinine and Ipecacuanha.

From the earliest period of our familiarity with a garden we must have been acquainted with the sweet aroma of Gardenia flower and how often we must have admired the beauty of the Ixora. But the most beautiful and noble species of the whole tribe is perhaps Luculia, whose gay flowers are much sought after by the inhabitants in the subtropical forests of the Himalaya mountains. It is the pride of the gardeners, admired by crowd of sightseers and is the undisputed queen of flowers of our garden during autumn, bearing light or deep rosy flowers in terminal many flowered corymbs, shedding its sweet odour which fills the air for a considerable distance. The flowers are long lasting and is very attractive. The Nepalese call this "dowarey" and the Lepcha "sumbrangrip" and they passionately love this flower and use them profusely for decorating their homes and temples.

Luculia is a shrubby plant. The leaves are simple and are seated opposite to each other on the stem by a stalk and at the base of the stalk there is a minute leaf narrowed at the top. For convenience sake botanists call this small leaf bract. If you examine the arrangement of the flower you will notice that the flower stem has divided itself at the top into a number of short branches which do not rise from the same point but some from higher and some from lower positions, but all the flowers attain pretty much the same level. This arrangement in a flower is known as corymb.



A

LUCULIA PINCEANA.

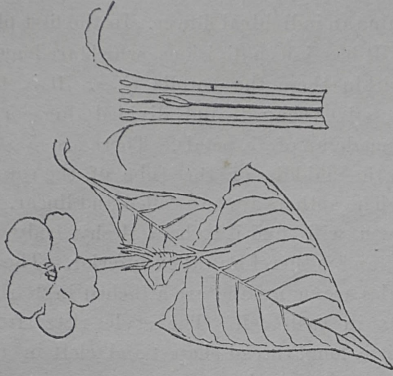
Mark the exserted style and the raised callus on the limb of the flower and the position of the stamens.



B

LUCULIA PINCEANA.

Mark the size of the flower and the raised callus on the limb of the flower and the position of the stamens and style.



C

LUCULIA GRATISSIMA.

Mark the position of the style and stamens and the hairy ovary—the absence of callus on the limb of the flower.

Let us now examine an individual flower. In the first place we find the green calyx. It has 5 deep divisions, which are long, linear and unequal; from within these the corolla rises. It is tubular below, the top is flat salver-shaped and divided into 5 lobes, which show that it is made up of 5 petals. There are 5 stamens which are inserted on the middle of the tube of the corolla by very short filaments. The anthers are two celled and linear. If you examine the ovary you will find it to be a fleshy body placed below the floral parts, and is therefore called inferior. The ovary has two cells, the ova are many and are attached in 2 revolute longitudinal placentas in each cell. The style rises from the centre of the flower, it is long, thread shaped and cleft in two at the top: this forked part is the stigma.

The capsule is woody, septicidally bivalved many seeded. The seeds are minute, the seed coat or testa is rough and winged, the embryo is minute and is buried in fleshy albumen.

Two species of *Luculia* are mentioned in Hooker's Flora of British India. The best known and generally cultivated species is *L. gratissima*. For house decoration, this early winter flowering shrub has no rival and deserves to become more popular. It bears rose coloured, terminal, many flowered cymes in late autumn. The leaves are elliptic, acuminate, glabrous above, villous on the veins beneath.

*L. pinceana* resembles *L. gratissima* in general habit, has narrower, smaller but more coriaceous leaves; the nerves of the lower part are not villous. The best character by which this can be distinguished from the other, is by the larger flowers and by the raised callus, one on each side of the sinus of the corolla limb.

To study the difference between the two *Luculias* I examined a number of plants and observed the following:

**A.** *Luculia pinceana* have the style exerted outside the corolla and the stamens are placed much below the mouth of the corolla.

**B.** *Luculia pinceana* have the style included in the flower tube and attains a height a little above the middle of the tube. The stamens are placed on the throat of the corolla. The flower is much larger and of more substance. The corymbs too are bigger in size.

**C.** *Luculia gratissima*. The style is included in the tube and the stamens are placed just below the throat of the flower. The ovary is villous, so also the raised veins of the underside of the leaves. The flower is the smallest in the varieties examined.

Luculias are amenable to pot culture but they succeed best in beds or borders. Here in Darjeeling, which has almost the same climate as that of London, we grow them on slopes in the open in ordinary garden soil. They receive large quantities of moisture throughout the summer and the rains from May to October. We do not prune them, we have noticed that heavy pruning is not beneficial as they refuse to flower profusely. Propagation is best effected from seeds which germinate freely. They may be multiplied by cuttings which however do not strike roots readily unless conditions are favourable.

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SOME THRILLING EXPERIENCES WITH  
TIGER IN BURMA.

By

W. S. THOM.

*Continued from Vol. XXIII page 28.*

A third tiger was shot in Arakan also under rather peculiar circumstances. I was out after rhinoceros and bison one very hot day in April. Marching well ahead of my men, and baggage elephants, along the banks of the Ru stream accompanied by a couple of Kami hunters in the Arakan Hill Tracts of Burma, I caught sight of something red glistening in the sun in mid-stream. It turned out to be the head and neck of a tiger, sitting on a rock submerged in a pool of water. The range being about 80 to 100 yards the shot was not an easy one as there was a nasty reflection, or shimmer, from the water owing to the sun. As it was quite impossible to get any nearer without attracting the tigers attention I sat down on the ground and risked a shot from where I was. The tiger, on the report of the rifle, a single-barrelled .500 bore, burning 80 grains of cordite, by Westley Richards, disappeared into the water and sank out of view. Then to my astonishment a tigress with two cubs galloped out of a patch of jungle some 30 yards above the spot where the tiger had been fired at ; followed immediately by about 20 elephants, the rear being brought up by a stag Sambar and two does. They were all travelling as fast as they could move in the same direction having evidently been disturbed by my shot. This was certainly one of the strangest processions I have ever witnessed for all 26 animals were in sight at the same time before they disappeared round a bend in the stream, into the jungle. I had no time to draw a bead on to the tigress but doubled up to the pool into which the tiger had vanished and retrieved the dead animal from the bottom with much reluctance as bubbles were still reaching the surface of the water. I knew, however, that the animal if not killed outright by my shot must have been drowned. I found that my bullet had passed clean

through the neck severing the vertebrae. This tiger was a very heavy massive animal measuring 9ft. 4 ins. taken straight across between uprights and had a magnificent coat as well as a very fine ruff round its face. I noticed that its stomach was considerably distended whilst a foul odour emanated from its mouth. It did not take me long to discover that it, with the tigress and cubs, had been feeding on a baby elephant, that they had killed up a neighbouring nullah and of which it had evidently had a big feed previous to its immersion. What astonished me was how two full grown tigers and two cubs had not succeeded in demolishing the elephant entirely for it was not a large animal. With regard to the subject of man eaters and as to how they begin to get a liking for human flesh, I would say that my experience has taught me that it may be due to several causes. Tigers do not necessarily become man eaters because they are unable to pull down game through old age, or failing vision, or bad hearing, although there is no doubt that cases of this sort do occur from time to time, poor vision being as much responsible as anything else. Tigers are more likely to go in for killing human beings when they have been crippled or disabled in some manner, say, through a bullet wound or through a scrap with another tiger, boar or bison. The principal reason, in my opinion why tigers become man eaters is because the tiger kills a human being in mistake for a four-footed animal. He then finds what an easy matter it is to kill the two-footed animal as compared with the four-footed beast and sticks to the killing of human beings. For instance I know of several cases in Burma where Burman hunters have been carried off by tigers when they have been crawling over the ground to stalk a sambar, pig, or barking deer. They, in turn, have been stalked and killed by a tiger which, in the first instance, mistook them for four-footed animals. Had these tigers, however, when stalking these hunters, got a whiff of human scent, in all likelihood they would have made off at once and not continued the stalk. A tiger, unless he is a man eater, is more afraid of a human being than he is of anything else in the world. I know, also of several cases in Burma where villagers sitting alone in the jungle with a decoy cock, with the object of attracting and snaring jungle fowl, have been carried off by prowling tigers that have mistaken the solitary watchmen,

with their decoy cocks, for four-footed animals. The difference in the tenderness, or flavor, of the meat of the human being, as compared with that of a four-footed animal, has nothing whatsoever to do with it.

I was fortunate in being able to kill a man-eating tiger in the Thayetmyo district of Lower Burma many years ago. The animal had accounted for several villagers. This tiger used to frequent a certain cart track in the jungle, some miles from any village, and then walk up to, and grab hold of, any one that came along. At other times this animal would be heard of along another cart track some miles away in a different part of the District. When I thought it was the turn of the first cart road to get another visit I began to walk up and down it for several miles alone, backwards and forwards, between the hours of four and six thirty p.m. I was armed with a double 500 bore Cordite rifle. I had been perambulating along the road for three successive days when on the fourth day the animal trotted out of the jungle on the road in front of me some 70 or 80 yards away. I stepped behind a tree and waited for it to come up feeling far from happy. On catching sight of me in the distance it gave a couple of low grunts and began to trot towards me slowly down the track. I waited until the brute got within five paces and was then, fortunately, able to brain it with one shot through the right ear making the animal turn a complete somersault. It was found to be a heavy male nine feet long in splendid condition with a beautiful coat. Tigers are also sometimes given to killing human beings owing to the scarcity of game and absence of village cattle. The vision and hearing of a tiger, in my opinion, is infinitely superior to its sense of smell which, it seems to me, is practically negligible and not to be compared with that possessed by a rhinoceros, elephant, bison, tapir or sambar. I do not think that the sense of smell of the leopard is any greater than that of the tiger. It is certainly a far more wary animal and is quieter in its movements and more cunning in its approach towards a kill. Under certain conditions both tigers and leopards will visit a kill even though they may get a whiff of their enemy man, provided they don't see him. In these hard times—hard I mean for the Felidae—they are meeting the genus *Homo* and his scent, so often that they are getting

more accustomed to it and sometimes, accordingly, disregard it. This applies more to the unsophisticated tiger or leopard, by which I mean those animals that have never been fired at before. They usually fear nothing and often just come on up to the kill regardless of the scent of a human being. The cunning tiger, that is to say the animal that has been fired at, and hit, or missed many times, often does not come near a kill after it has had its first meal off it, and certainly rarely, if ever, comes up to a kill that has been handled or moved to a more favourable position for the erection of a *machan*. It really makes no difference to a tiger that has never been shot at, in Burma, how much the kill has been handled or even removed to a new position. The animal turns up just the same, but I understand the reverse is more often the case in India. Is this because there are fewer unsophisticated tigers in India than in Burma and that the tigers in India are more harassed than the tigers are in Burma ?

Some tigers have been shot with a lamp placed over a kill to light it, and the tiger, up Ninety per cent of tigers and leopards will never go near a kill with a lamp over it. An electric contrivance turned on after a tiger or leopard has arrived at a kill usually dazzles the animal long enough to enable the sportsman to get in a shot. Tigers and leopards are often dazzled, and remain motionless, on a road at night and can be approached to within a few yards by a car with its headlights full on, they are then generally shot with ease but this form of sport is hardly legitimate. I personally have never shot either a tiger or a leopard from a car or from a *machan* with an electric contrivance. I do not consider it more unsporting however to use an electric contrivance, or torch, from a *machan* when shooting at a tiger than if one was shooting at a tiger from a *machan* by moonlight. In the first case, with a torch, or other electric contrivance, one has a better chance of killing the animal outright, whilst in the second case the animal is more likely to get away wounded when fired at by moonlight.

If a tiger is going to wind a man on a *machan* who is smoking a cigarette, it will do so just as easily as if the man did not smoke at all. In other words if the animal is capable of getting one scent it will get the other also. A sportsman may have the luck

to be winded by a tiger and he may not. If the tiger is returning, shall we say to its kill along a hundred feet high ridge, which happens not to be very far from the *machan*, whilst the sportsman's scent happens to be blowing along this ridge from the *machan* in the direction of the approaching tiger, the latter will, in all likelihood, get the scent and be suspicious and not turn up at the kill at all. It is all luck. There is no understanding the ways of some tigers. I have had many disappointments sitting up for tigers that have never turned up whilst on other occasions I have also had the most glorious luck. My want of luck on those occasions where tigers ought to have turned up and didn't, was not due to any carelessness on my part or through my not taking proper precautions. But I must confess that on the successful, as well as on the unsuccessful occasions, I invariably smoked cigarettes when on the *machan* but never allowed the butts to reach the ground. Life would not be worth living, I'm afraid, if one were to take all one's pleasures too seriously and make tiger shooting, for instance, from a *machan* at night, an exact science or a matter of life and death.

As trackers, and shikaries, I think the Burman can hold his own with any tracker in the world. Some of the Burmese hunters employed by me in the Momeik State of the Ruby Mines and Thayetmyo Districts of Upper Burma, namely Tha Yauk of Thayetmyo and Yan Gin and Maung Po of Momeik State seldom failed me in following a trail to a successful finish. The palm might be given to Tha Yauk of Kadaing Village Mindon of the Thayetmyo district, to whose peerless skill and fearlessness I owe many a grand day's sport, the memory of which will be with me when my time comes to enter the great Unknown. All my hunters have joined the vast majority and passed to the Bourne of Silence from whence none return. If so be that the power is given them may their spirits be permitted to repass that Bourne and to wander afield after the lordly denizens of the jungles they know so well when they roamed this earthly world with me.

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FURTHER NOTES ON OUR BIRD BATH AT  
BAGHOWINE IN NORTH BIHAR.

By

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

During the winter of 1946-47 we had five new visitors to our bird bath, making twenty-four different visitors in all. These were the following species given in their order of arrival.

1. The Eastern Indian Redstart (*Phoenicurus ochrurus rufiventris*).

A hen came on to the plinth of the bird bath on the morning of the 14th February. She went up and down the plinth continually shivering her tail and once had a drink. Unfortunately a Crow made a landing and frightened her away.

2. The Brahminy Myna (*Temenuchus pagodarum* (Blauf. & Oates.)

Every year two or three pairs of these handsome little Mynas visited our lawn and though we had seen them near our bird bath they never, actually, settled on the plinth. However this winter one alighted there, on the morning of the 22nd March, while we were at breakfast but we could not see whether it drank or not.

3. The Himalayan Black Drongo (*Dicrurus macrocercus albirictus* (Hodgson)).

Although this very common bird was always to be seen in our garden, it ignored our bath until this winter when, on the 21st February, one settled on the plinth and returned again next day to have a drink. On the 16th March a pair came but only remained a few minutes.

4. The Common Crow-Pheasant (*Centropus s. sinensis* (Blauf. & Oates.)

We often saw Crow-Pheasants at the base of the bath pedestal but they never ventured on to the plinth until one on the 15th

March, perhaps attracted by seeing a Water-Hen feeding on millet in a dish, flew up, walked up and down once or twice, with an occasional flirt of its tail, peered into the water but neither drank or bathed. It returned again at 2-45 p.m. in a bolder state of mind, took a sip of water, spread out its tail and plunged in. It had one splash and then came out on to the plinth where it scratched its head, spread its tail and pruned itself. After doing this it had another plunge and it seemed rather a waste of time pruning itself before doing so. On another occasion it only spread its tail and splashed it in the water.

5. The Indian Roller (*Coracias b. benghalensis* (Linnaeus)).

This is another common bird always to be seen in the garden but none ever settled on the plinth of our bath till the 26th February while we were having lunch. It had a drink taking quite a number of sips. It came again on the following day and must have been very thirsty as it took 18 sips. On another occasion one went into the water, I rather think it overbalanced while having a drink, and fell in. Unfortunately a Water-hen came on to the plinth at that moment and frightened it away so I don't know whether it would have bathed or not.

Now I will give a few notes on some of the birds already mentioned in my previous article.

6. The Chinese White breasted Water-Hen (*Amurornis phoenicurus chinensis* (Boddaert)).

In my last article I wrote that I was afraid these birds had left for good because during December 1945 and January 1946 they were not seen anywhere. You can imagine our joy when, on the 18th December of the latter year when we were having breakfast, one of these birds went across our lawn to the shrubbery it seemed to be very nervous. After that the pair were seen on many occasions, sometimes near the bird bath but, oftener, near the shrubbery or running at break-neck speed across the lawn varied by an occasional short flight. They are no longer the very tame birds they used to be but it was good to know that

they were still alive and in the garden. Since I sold the place the bird bath has been demolished, the trees in the garden felled and houses built so I expect the Water-Hens have disappeared with every thing else. It wasn't, however, till the 15th February that one had sufficient courage to come on to the plinth but it did not bathe. One came again a couple of mornings later and had a bath but did not stay long. About sunset on the 21st of the month one had a good bath and ate some of the millet ; it returned again next day at lunch time. On the evening of the 24th, after a feed of millet, one flew 30 feet up into the pipal tree to roost. One bird was extremely shy.

7. The Indian Spotted Dove (*Streptopelia chinensis suratensis* (Gmelin)).

On the 28th December a pair of those Doves were feeding on the plinth while a Bulbul was having a bath. Following its good example one of the Doves went into the water and did some splashing while its mate circled round and round on the plinth, apparently, afraid to go in. However, when the other had finished its ablutions and flown into the pipal tree to prune itself, it also had a dip. Although Spotted Doves were one of the most constant visitors to the bird bath during the previous winter not once did they enter the water.

8. The Bengal Tree-pie (*Dendrocitta V. Vagabunda* (Latham)).

These birds bathed several times this winter, sometimes it was just a dip without a splash, at other times there was a real splash as well as a dip ; but their splashing is a poor affair when compared with that of the Buleuls, Seven Sisters and Mynas, they are far from being regular bathers.

9. The Northern Green Barbet (*Thereiceryx zeylanicus caniceps* (Franklin)).

On the morning of the 11th February, while having breakfast, one of these Barbets had a bath ; it had one splash and then

went off but returned again to have another one. On another occasion one had a dip. These are the only occasions on which I have ever seen them have a dip in our bird bath.

10. The Bengal Jungle Babbler (*Turdoides t. terricolor* (Hodgson)).

On the 18th December 1946 a party of eight were seen on the plinth at the same time and had hurried dips without splashing. They were very frequent visitors and splash quite a lot. Sometimes they were seen on the pipal tree waiting for the Bulbuls to finish their ablutions and then would come down, one after the other, to bathe. One while trying to bathe in a small reservoir in the vegetable garden, got out of its depth and was drowned; a Brahminy Kite discovered the dead bird on trying to pick it up got into difficulties and was also drowned. The jungle Babblers do much hopping about, and tail wagging, when they come for a bath and it is amusing watching them taking prodigious leaps over each others, backs as they often do in getting from one part of the plinth to the other. Although a number cover the whole of its surface at a time, they only bathe, and splash, one at a time.

11. The Indian Ring Dove (*Streptopelia d. decaocto* (Frivalsky)).

Although these doves were such regular visitors to our bath during the winter of 1945-46, not a single one came to it during that of 1946-47 although the birds were always to be seen in the garden.

12. The Bengal Red-vented Bulbul (*Molpastes cafer bengalensis* (Blyth)).

These came in numbers, in relays from different points in the garden and, sometimes, half a dozen, or more, were to be seen on the plinth at the same time. How they enjoyed their splashing returning many times during the day.

13. The Indian House-Sparrow (*Passer domesticus indicus* (Jardine and Selby)).

A solitary cock House-Sparrow had a bath on the morning of the 15th February ; it was the first one to do so. It kept flying from one side of the plinth to the other, for several minutes, before making up its mind to go in ; it was joined by another one.

14. The Indian Hoopoe (*Upupa epops orientalis* (Stuart Baker)).

While hunting for food they go pitter-patter at a run more than a walk and search the roads and lawn, methodically, sometimes probing the same hole.

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THE GREAT ONE-HORNED RHINOCEROS  
IN KAZIRANGA SANCTUARY, ASSAM.

By E. P. GEE.

The very interesting and well illustrated note on the Jaldapara Game Sanctuary in the Duars, published in the issue of January 1948, prompts me to write something on the Kaziranga Sanctuary of Assam.

For many years an Honorary Forest Officer of Kaziranga Sanctuary, I have had ample opportunity of making the acquaintance of the rhino there. And the fact that the Assam Forest Department last year abolished the appointment of all Hon. F.O.s in the province has not diminished my interest, and I still go there whenever possible.

Kaziranga Sanctuary is, roughly, midway between Gauhati and Dibrugarh, and lies between the Assam Trunk Road on the south and the Brahmaputra river on the north. The village of Kaziranga is at milestone 137 on the Assam Trunk Road, and in it is situated a P.W.D. inspection bungalow and the Deputy Range Officer's office and staff quarters. The actual sanctuary is only about one mile distant at this point. Thus it is very accessible to visitors by motor or bus service.

In size Kaziranga is very much greater than Jaldapara. It varies in width up to 7 miles, and is about 27 miles in length,

comprising roughly 123 square miles altogether. It is mainly flat, but variable in character of terrain, consisting of tree jungle, elephant-grass (ekra) jungle, swamps, beels and streams. Most of it is elephant-grass, and large patches of this are burned off each year in February and March to improve the grazing and facilitate the seeing of animals. The best time, therefore, to go into the sanctuary is the second half of March or first half of April, but anytime between December and April is good, in the rains large areas get flooded, but only the deer seem to suffer, as these often get caught and slaughtered by the local inhabitants.

The sanctuary was created about the year 1906 when rhino had become almost exterminated, only a dozen or so remaining then. Now there are supposed to be between 400 and 600 rhino, and 100 to 200 wild buffalo. There used to be some mithun there, but these have not been seen for some time.

Since 1938 the Forest Department has opened up Kaziranga to visitors on payment of a small fee, and two inspection elephants are available at a reasonable charge. Permission is obtained from the D. F. O., Jorhat, and on an average visit one would expect to see about 10 rhino, 12 buffalo, 30 deer and numerous other animals, as well as birds of all sorts.

Apart from Kaziranga, a few rhino exist in the Manas Game Sanctuary of Assam; and there are reputed to be about half a dozen in the Sona Rupa Sanctuary in the Balipara Frontier Tract. As these two latter sanctuaries are near the foothills of the Himalayas, there may still survive a few isolated Javan Rhino (*R. Sondaicus*) or Sumatran Two-horned Rhino (*R. Sumatrensis*), but this is doubtful. Only *R. Unicornis* exists in Kaziranga.

The inspection elephants at Kaziranga, fine and well trained animals though they be, are scared of the rhino should the latter face round and snort. And should a rhino charge, as they often do, the elephant is allowed to bolt for a short distance before being brought back to observe its pursuer again. As a general rule rhino allow visitors on elephant-back to approach to a distance of about forty yards without charging. The nearest I have been to a rhino is ten yards, as some of them are quite placid.



This large bull charged us. Our elephant fled, but was brought back to enable us to photograph our erstwhile pursuer.



This cow with a half grown calf seems to have decided not to charge. She is starting to move away.

Tiger seem to avoid rhino, and the deer and buffalo appreciate this fact and often graze in the company of rhino, apparently for protection.

If a rhino gets into a quicksand, he often cannot get out and has to have assistance. Similarly if he falls into a shallow pit he is helpless, and this is how poachers used to trap him in order to get his horn.

Nowadays, as rhino have multiplied to such an extent, the Forest Department have been catching a few for sale to zoological gardens. In 1938 they caught a five year old one for the Washington Zoo, which unfortunately never reached its destination chiefly owing to difficulties created by the war. In 1947 they wanted a pair for the London Zoo. The first animal caught was immediately dispatched to Calcutta by rail, but died from injuries on route. I had suggested keeping captured animals for several weeks in a small stockade to quieten them down and tame them before sending them away. Fortunately this suggestion was afterwards followed, and the next male caught was partly tamed in a stockade and then sent to London. The Superintendent of the London Zoo, Dr. Vevers, has recently written of this rhino : "Mohan is doing extremely well and has grown quite a lot".

Again early this year a male and a female were caught, stockaded and tamed for some time, and then dispatched to the Chicago Zoological Gardens, where they should have arrived by now.

Considering its attractions and accessibility, very few visitors ever trouble to go to Kaziranga. But the Assam Forest Department now at least seem fully alive to the possibilities of the sanctuary, and I understand that they intended in the near future to improve and popularise the place.

And as publicity means security for the rhino, their safety and welfare now seem assured for all time.

**Miscellaneous Notes.****PERSONELIA.**

One of our Committee members, Dr. S. C. Law, who undertook an exploratory expedition to Bhutan Ghat for study of Birdfauna, collected alive some uncommon species from the reserved forests, all facilities having been afforded him by courtesy of the Conservator of Forests, Northern Circle, and D. F. O., Buxa.

It is interesting that Mr. M. Sain, another Committee member of the Society, who accompanied him, while "shooting" wild scenes, came across a few *Mergus merganser*. It is also remarkable that Dr. Law observed solitary examples of *Mergellus albellus* rapidly flying past him low over the Rydak river.

Their itinerary lasted from 11th to 23rd November, 1948.

**Acknowledgments.**

The Editor acknowledges with many thanks receipt of Photographs of Lepcha and a family from Sikkim from Mr. M. Sain, which were reproduced in the Journal of the Natural History Society Vol. XXIII, No. 1 but through oversight they were not acknowledged for which he regrets very much. He is also grateful to Mr. Sain for his suggestion for improving the Cover page of the Journal.

**Additions to the Natural History Museum.**

The Curator has received with gratitude presentation of the following bird specimens from Dr. S. C. Law :—

- |   |          |
|---|----------|
| 1. <i>Muscicapula h. hyperythra</i> (Blyth) | 11-9-48  |
| 2. <i>Sitta himalayensis</i> (Jard. & Selb) | 11-9-48  |
| 3. <i>Niltava s., sundara</i> Juv. (Hodgs)  | 11-9-48  |
| 4. <i>Machlophus s. spilonatus</i>          | 29-10-48 |
| 5. <i>Siphia s. strphiata</i>               | 29-10-49 |
| 6. <i>Siva s. strigula</i>                  | 30-10-48 |
| 7. <i>Sibia n. nepalnensis</i> (Hodgs)      | 14-9-48  |

**EDITORIAL.**

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As we were passing through great difficulties in publishing our journal for various reasons mentioned in the editorial of the last issue we could not issue this journal in time for which we regret very much. It is gratifying to note that we have overcome some of our difficulties though the financial difficulties continue to be the same and we hope we shall be able to expedite the publication of the journal upto date. Members will be pleased to know that the coloured plates will be issued as usual. This issue contains a coloured plate of Turkestan Stone Chat and Hodgson's Bush-Chat drawn by Mr. Inglis, Ex-Curator of our museum for which our thanks are due to him.

There are dearth of articles from members for publishing in our journal. Editor appeals to the members to take notes on observation of Natural subjects in their area and write articles and notes with photographs whenever possible for the publication in our journal. This will help us in keeping alive the interest of Natural History amongst the members.

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**CORRIGENDA**

VOL. XXIII No. 1

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Page 1 Line 3 Read "peoples" instead of people  
Page 35 line 1 Read "Mysore" ,, ,, Mysona.

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