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

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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.

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 The Indian Short-billed Minivet.
 The Yellow-throated Minivet.
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 The Sikkim Yellow-vented Flowerpecker.
 The Indian Scarlet-backed Flowerpecker.
 The Nepal Fire-breasted Flowerpecker.
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Lepcha



A family from Sikkim
(Mixture of Lepcha and Bhutia)

JOURNAL
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VOL XXIII. JULY 1948. No. 1.

PEOPLES OF DARJEELING, SIKKIM, NEPAL,
BHUTAN & TIBET.

BY

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

The hills of Darjeeling, Sikkim, Nepal, Bhutan and Tibet are inhabited by many tribes of Mongolian race but proper anthropological studies of these people have not yet been made. There is a vast unexplored field for enquiry about these peoples of this area beginning from the mysterious "wild man" or "Snow man" down to the Lepchas, Bhutias, Tibetans and Nepalis.

The Nepalis and the Tibetans believe very firmly that amongst the higher peaks of the Himalayas and in the snowclad regions there lives a race of wild people known as "Snow man" or Banmanus or "Sagpa". Many interesting stories are current among the hill tribes about the snow man and occasional reports came from various observers that they have seen the snow man. Many reports have also been published in various papers and even in the official account of the Mount Everest Expedition 1928, Mr. Tilman commented on the abominable snowman.

Though reports from various observers and travellers often come but no definite proof of the existence of this mysterious man has yet been received. Some sort of authentic report came from Mr. N. A. Tombazi, an Italian photographer, who came to Darjeeling on a photographic expedition in April 1925, and he toured over the lower peaks of the Kanchanjung. He reported that in the neighbourhood of Kabur, a mountain of a height of 15,830 ft. he saw this snowman. His coolies first saw him across the valley and drew his attention to it. Mr. Tombazi examined

with powerful field glasses and saw the wild man walking upright, stooping occasionally to uproot or pull at the rododendron bushes on the mountain side. He afterwards moved off into some thick shrub and was lost in view. A few hours later at 11 A. M. in the morning Mr. Tambazi was able to reach this spot where the man had been seen and examined his foot prints which are six inches in length spreading up towards the toes. The outline of the figure showed up dark against the snow, and he was convinced that the snow man wore no clothes.

Some other interesting stories of "Dwarf man" other than 'snow man' have also been reported in the press. Major A. D. Molony reported from Kalimpong that he had seen two of these Dwarfmen. He says, "it looks as if the existence of the Dwarf race of the middle Himalayas is beginning to pass out of knowledge. Their foot prints are six inches in length and they are now a days far up in the snows although previously encountered in the lower forests. They are not at all abominable.

There were two, who looked like brothers carrying wood and water for the monastery at Pemionchi, Sikkim State, (9,000 ft.) in 1915. They were very hardy and dressed like Bhutanese but I could not find none like them in Bhutan soon after. They were not more than four feet in height but were perfectly proportioned. They made signs that they could neither speak or understand any language we might try and we were told afterwards that they "grunted" to each other but were good as deaf and dumb for communication with the rest of mankind.

It is probable that they had come in with a priest on a visit from the monasteries in the snows beyond; though the people of the place had all seen them, their permanent existence at Pemionchi or Sikkim was unknown at Gangtok.

They made off at first into the jungle on our noticing them but came back smiling directly we called to them and came up to us fearlessly. Sepera porters should know of their existence and would not confuse them with abominable snow men who seem to be unspeakable outlaws of Tibet."

It is also reported that a Maharaja of Nepal desired to see one in the middle of the last century and one was caught and produced in a cage.

Rumours of the existence of an anthropoid ape of a considerable size at high elevation in the Himalyas keep cropping up from time to time. Mr. J. R. P. Geul, Forest Officer of the Darjeeling Division is said to have discovered the existence of big ape which is sometime known as the Jangli Admi or Sagpa but Mr. E. O. Shebbeare, Dy. Conservator of Forest is of opinion that the evidence for the existence of the Sagpa does not seem very convincing. No competent observer appears ever to have seen an unmistakable anthropoid ape in the Himalayas.

All these reports appear to be some truth in them though definite scientific record has not yet been made. It is very desirable that the truth should be found out and it is also desirable that the newly formed Anthropological Survey of India should investigate this matter and organise an expedition in order to reveal the truth whether there is really any race of man called Snowman, or anthropoid ape or the whole thing is a myth.

Apart from the study of the above, they should take up the anthropological study of the present day peoples of the hills of Darjeeling, Sikkim, Bhutan, Tibet and Nepal as no proper studies of these peoples have yet been made. With the impact of modern civilisation due to easy communication these peoples are fast changing with their ancient customs, manners, dress, social organization, marriage, religion etc. They are getting mixed with other peoples of the plain, and loosing their distinct characters. It is very high time to record all ethnological data for scientific study.

Collection of Ethnographic specimens are also essential at present otherwise all will be lost for ever. The work is so vast that it can not be undertaken by a few individuals. It is the work of an organised body or Society backed by the Government. It has been reported that the Asiatic Society of Bengal is contemplating to take up the work. We welcome their enterprise if it is really so.

Among the hill peoples of Darjeeling the Nepalis are more numerous and most enterprising people at present. They dominate various hills specially the hills of Darjeeling though their original home is in Nepal. The upper class appears to be descended from Indo-Aryan Stock but the rest are of Mongolian origin. Hinduism is prevalent among them but some other tribes are followers of Buddhism. The principal tribe of Nepal is Koranti and they were conquered by the Gurkhas. Among the Nepalis there are many sub-divisions and tribes of different origin. The principal among them are Rai, Sherpa, Chettre, Samysi, Brahman, Bhujel, Yogi, Mangar, Newer Tamang, Damai, Gurang, Limbu, Kami, Sunuwar, Yakha, Sarki, Gharti etc.

The Sherpas originally came from North East of Nepal are of Tibetan origin. They are combatants and recruited for climbing expedition. The Tamangs and the Limbus are Mongolian or semi-Mongolian tribes of Tibetan stock modified by the admixture of Nepali races. The Tamangs claim to be among the earliest settlers of Nepal. They bear the title of Lama and follow Buddhism although follow Hindu customs at death and certain festivals.

The Tibetans and the Bhutias have got their own distinct physical characters and generally follow the Buddhism. It appears that there are few sub-divisions among these peoples.

The most interesting people of this area are the Lepchas of Sikkim and Darjeeling. The Lepchas are said to be the original inhabitants of Darjeeling but they are being ousted by the Nepalis. They called themselves as "rong" or squatter. Though Mongolian in origin they have got a distinct physical character specially they have got pointed chin and fine nose (see plate). They are very simple, docile, nonaggressive, hardy people and are very shy always shunning other people and try to live in seclusion. This is one of the reasons why they are being ousted by other peoples and there is a great possibility of being dying out altogether. They generally live on primitive method of agriculture called Jhuming but they are said to be possessing expert knowledge of medicinal plants and herbs of the Himalayas. They have got language of their own called "Rong ring". The Lepchas freely

intermarry with other races notably with the Limbus of Nepal and also with the Sikkims and Bhutias and thus loosing their distinct physical characters rapidly (see plate.) They follow Buddhism and practise magical rites. Their marriage ceremonial is very simple and in most cases living together as husband and wife. Tribal customs still persist in the death ceremonies which are rather elaborate.

A study of the racial composition of the peoples of this area is very interesting because of large number of races found here and is of importance to those who wish to construct racial history of these peoples.

OBSERVATIONS ON CAPT. BAILLIE'S HAZARIBAGH
BIRD RECORDINGS.

By

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

Aprópos of Capt. R. H. Baillie's *Hazaribagh Bird Recordings* (*Journ. Beng. Nat. Hist. Soc.*, XXII, No. 4, pp. 111-127) the additional notes of other observers supplementing and accompanying the article induce me to offer some comments and observations thereon, as having had the advantage of several visits to, and frequent opportunities of collecting from, the District and district headquarter, I notice several material gaps in the author's scanning of the birdfauna of Hazaribagh.

CORVIDAE. Of the two species of Crows mentioned, both are resident; *Corvus macrorhynchos* has rather capricious distribution in the district; wherever found it generally keeps aloof from *C. splendens*, though at times a few birds may get mixed up with quite a number of *splendens* around human habitations for scavenging or collecting food for young.

Dendrocitta r. vagabunda, so far as I have noticed, is nowhere abundant, though two or three birds are found now and then haunting trees alike in hill jungles and open parts of the district; rather shy. I found it nesting in the 3rd week of April, 1945, in a *Mohua* tree (*Bassia latifolia*).

PARIDAE. Two species, *Parus m. cinereus* and *Machlolophus, X. aplonotus* are found very rarely in wooded tracts near Hazaribagh-Ranchi border.

TIMALIIDÆ. Of the four rather typical species of Babblers, all very common and resident in the district, mentioned by Capt. Baillie, *Turdoides t. terricolor* and *Argya c. caudata* are entirely gregarious, the latter being shy of human company and partial to secondary jungle, where too *Chrysomma s. sinensis* has its haunt. *Dumetia hyperythra* is exclusive in its choice of habitat among prickly thicket and grass; noticeable on both sides of the road to Bagodar.

Egithina nigrolutea finds no mention in the list. I collected in March, 1947 with the aid of my birdcatcher three live specimens, 2 ♂ and 1 ♀. Unlike *Æ. t. tiphia*, which is very common, *nigrolutea* appears to be uncommon, and almost invariably I have found the species associating with *tiphia*. It is coincidence, however, that my independent observation tallies with Ball's record (*S. F.*, VII, p 215).

Of the two species of *Chloropsis*, *jerdoni* is very common, while *aurifrons* appears to be sparsely distributed in the district (unlike Ranchi where no doubt it is abundant); *inter se* the species keep aloof generally, though at times they are attracted together to common feeding ground—evincing partiality for nectar or flowering *Loranthus*, parasitic on *Sal* (*Shorea robusta*) trees. Both are resident. I noticed *jerdoni* building nest in a *Mohua* tree (*Bassia latifolia*) in village Singdha (Hazaribagh Road); the female was carrying fibres in its beak; the nest was found on July 28, 1944 almost complete, made up of fibres entirely, built in a fork of the tree hidden under leaves—only 5 ft. from the ground.

PYCNONOTIDÆ. Capt. Baillie evidently refers to *Molpastes c. bengalensis* as distributed in Hazaribagh, but the specimens obtained by me, no doubt very common and resident, are referable to race *pallidus*. *Otocompsa jocosa* does not appear to occur in Hazaribagh, but I have collected it from hill jungles, off village Rajadera on Ranchi-Purulia Road.

TURDIDÆ. Of the two species of *Saxicola*, both no doubt cold weather visitors, *S. torquata* is more common and abundant all over the district, where it lingers till the first week of April. So is the Black Redstart (*P. o. rufiventris*). Another cold weather visitor is *Cyanosylvia svecica*, omitted by Capt. Baillie, which I found fairly numerous in Suriya (Hazaribagh Road) in scrub and waste land in November, December and January. *Saxicoloides f. cambaiensis* is resident and very common, nesting as early as April (a nest with 3 young found on April 22, 1945 in a fissure on *khad* side).

Turdus ruficollis is a dubious entry in Baillie's list, having never been found or collected by me or any previous observer.

Geokichla c. citrina finds no place in the list. I shot a specimen ♀ on October 24, 1926 off village Maurangi, 7 miles from town on Ranchi Road. I also observed it in the Canary Hill feeding on the ground.

Monticola s. pandoo is uncommon; occurring singly in rocks on river beds. I noticed it even in Suriya (Hazaribagh Road).

MUSCICAPIDÆ. *Siphia parva*, a winter visitor in nonbreeding garb, is difficult to split into races, though Capt. Baillie appears to be sure of its identity (*albicilla*) by sight only. It lingers in the district till the first week of May.

Muscicapula superciliaris and *M. melanoleuca* are omitted from the list. I found the former rather abundant in early March in Suriya (Hazaribagh Road), Bagodar and beyond it on Grand Trunk Road to Gaya, affecting roadside trees. Evidently they gathered together at this time and were hanging about the locality on the eve of their departure to the hills for breeding, as a little later none could be noticed. *Melanoleuca* is uncommon and I once obtained a specimen. *M. rubeculoides* (also omitted from the list), though not at all common, is seen occasionally in the jungles near mile 11 from Bagodar. *M. tickelliae*, observed and collected by me in Ranchi, does not appear to occur in Hazaribagh. *Eumyias t. thalassima* is a winter visitor,

Tchitrea p. paradisi and *Hypothymis a. styani* are not uncommon in shady groves and orchards near human habitation. *Leucocircia aureola* is no doubt common in the district; but *L. albicollis* has not been noticed, though it does occur in Ranchi—affecting the better-wooded tracts. Remarkably enough I observed just before dusk a small party of 4 or 5 birds bathing in the company of *aureola* in a hill stream near the foot-hill jungle off village Rajadera (Ranchi-Purulia Road).

LANIIDÆ. *Lanius e. lahtora* (omitted from the list) whenever occurring in the district affects scrub jungles and less-frequented areas near villages and also thickets overlooking rivers and marshes. *L. vittatus* and *L. nigriceps* are very common and resident; the latter was observed to raise a brood of 3 young which came out of nest in *Sal* (*Shorea robusta*) jungle on July 10, 1944. Unlike *L. tephronotus*, which is entirely migratory—solitary birds being occasionally found in winter, *L. s. erythronotus* in small numbers occurs in suitable localities. *L. c. cristatus* is very common and except for its absence for a short period (mid-May to mid-September) is noticeable throughout the district.

Tephrodornis p. pondicerianus is common and resident.

CAMPEPHAGIDÆ. *Pericrocotus f. speciosus*, of which 4 ♂♂ and 2 ♀♀ were collected by me in October–November 1927, occurs in pairs or small flocks in forests or forests fringes on Hazaribagh–Ranchi and Ranchi–Manbhum borders. The maximum total length of the specimens ♂ and ♀ obtained off Ichadag is 215 mm. and 221 mm. respectively, and maximum wing measurement is 105 mm.; innermost secondaries in ♂♂ are with scarlet oval drops near extremity of outer webs and in ♀♀ they are with oval yellow spots on outer webs. These characters leave no doubt as to the identification of the species (vide *J.A.S.B.*, N. S., XXIII, pp. 343–4). *P. brevirostris*, mentioned by Baillie lacks these characters besides being smaller (total length 180 mm. and wing measuring 96 mm. only). I have never found *brevirostris* in the district. *P. c. iredalei* is quite common and resident.

Graucalus macei is resident; in early March pairs are in evidence in breeding condition—the male posturing before the female and uttering harsh calls.

ARTAMIDÆ. *Artamus fuscus*, omitted from the list, is not uncommon, being observed in suitable habitat—a few birds often flying overhead and steadily sailing through the air.

DICRURIDÆ. *Dicrurus m. macrocerus* is very common and resident—4 fledgelings being observed out of nest on July 11, 1944. *D. leucophaeus*, mentioned in Baillie's list, appears doubtful pending corroboration. *D. c. cœrulescens* is uncommon; a specimen, obtained alive by me on February 21, 1948, was noticed in the company of *D. m. macrocerus*. An important omission by Baillie is *Dissemurus p. grandis*, which I obtained near Canary Hill on 8. 11. 26.

SYLVIIDÆ. *Acrocephalus s. brunescens* and *A. domitorum*, omitted by Baillie, are regular winter visitors to Hazaribagh and even Suriya (Hazaribagh Road), the latter being sometimes noticed among hedges in gardens within town. *Orthotomus s. sutorius* is resident and well-distributed; haunting forest areas as well as open country, gardens and compounds. *Cisticola j. cursorians* is partial to grass lands or grass-clad raised bunds of rice cultivation in open but comparatively unfrequented places. *Franklinia buchani* (omitted from the list) affects low bush jungles on or near hill sides, creeping and moving in noisy parties about the stems of the cover in which it lives, sometimes running on the ground. *Hippolais rama* and *Sylvia. h. jerdoni* may be noticed as winter visitors. *Phylloscopus affinis* and *P. humii*, apparently overlooked by Baillie, are found regularly in winter. *Prinia i. inornata*, a resident species, is a familiar garden bird like *O. s. sutorius*, the two being sometimes found together.

ORIOOLIDÆ. *Oriolus o. kundoo* occurs throughout the district in wooded parts and near cultivation where there are large trees. In March and April their number in the district is swelled by breeding immigrants, which attract notice by their call, pugnacity and nesting behaviour. *O. c. indicus* is uncommon and sparsely distributed, while *O. x. xanthornus* is very common.

STURNIDÆ. *Sturnia m. malabarica* is curiously enough found associating with *Temenuchus pagodarum* in chattering flocks on tree tops in the compound of the house where I once put up in the town. But outside its limits it is rather rare. I have

not seen it in Bagodar or Suriya, where *T. pagodarum* is no doubt common. *Aethiopsar f. fuscus* is uncommon, and found in certain circumscribed haunts in well-timbered parts of the district. *Acridotheres t. tristis* is by far the most common, while *Sturnopastor contra* occurs in some areas in abundance.

PLOCEIDÆ. *Ploceus philippinus* is common and resident; its nest being found in date palms growing on bunds of cultivation or embankments of tank. *Uroloncha s. acuticauda* has not been found by me, but *U. malabarica*, though not very common, occurs in pairs or small flocks in open broken country, and even near cultivation. *U. p. punctulata* is common and resident (sometimes found in small parties near Canary Hill). *Amandava amandava* occurs in congenial haunts; obtained in November 1926 on Katkumsandi Road, mile 3 west of town.

FRINGILLIDÆ. *Carpodacus e. erythrinus*, unrecorded by Baillie, occurs as cold weather visitor, staying on till mid-April; a specimen ♂ obtained on April 8, 1947, my earliest record dating back to 16.10.26. from Sultana jungle, mile 8 west of town on the Chatra Road. *Gymnoris a. xanthocollis* is very common and resident; so is *Passer d. indicus*. *Melophus melanicterus* finds no mention in Baillie's list. I obtained alive with the aid of my birdcatcher 3 ♀♀ on April 4 and 1 ♂ on April 23, 1947. In Suriya (Hazaribagh Road) I found at this time the species not uncommon, two or three birds being often noticeable in cultivated fields feeding on the ground, and on one occasion I found a female carrying grass and fibres to a hedge for nesting.

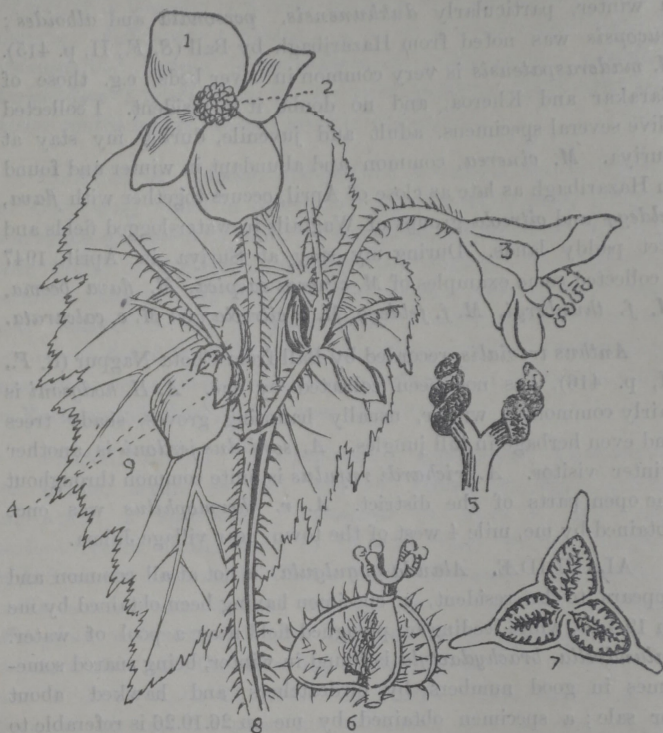
HIRUNDINIDÆ. *Delichon urbica* recorded by Capt. Baillie seems a doubtful entry; so far no House Martin or Sand Martin appears to have been found by any observer in Hazaribagh. *Hirundo rustica*, common in winter, is found in flocks. *H. smithii filifera* is a resident species; its nest being found on 15.4.47 in crevices of rocks on the bed of the river Barakar in Suriya. *H. Daurica erythropygia* is also resident. Baillie's recording of *H. daurica* is unscientific and confusing inasmuch as he refers the bird to two races, *nipalensis* and *striolata*, simultaneously.

MOTACILLIDÆ. Some races of *Motacilla alba* are noticeable in winter, particularly *dukhunensis*, *personata* and *alboides*; *leucopsis* was noted from Hazaribagh by Ball (*S. F.*, II, p. 415). *M. maderaspatensis* is very common in river beds, e.g. those of Barakar and Kheroa, and no doubt it is resident. I collected alive several specimens, adult and juvenile, during my stay at Suriya. *M. cinerea*, common and abundant in winter and found in Hazaribagh as late as close of April, occurs together with *flava*, *feldegg* and *citreola* groups of Wagtails in water-logged fields and wet paddy lands. During my stay at Suriya in April 1947 I collected some examples of *M. cinerea caspica*, *M. flava beema*, *M. f. thunbergi*, *M. f. feldegg*, *M. c. citreola* and *M. c. calcarata*.

Anthus trivialis, recorded by Ball from Chota Nagpur (*S. F.*, II, p. 416), has not been collected by me. *A. H. hodgsoni* is fairly common in winter, usually haunting groves, shady trees and even herbage in hill jungles. *A. sordidus jerdoni* is another winter visitor. *A. richardi rufulus* is quite common throughout the open parts of the district. *A. r. thermophilus* was once obtained by me, mile 4 west of the town, near village Jalma.

ALAUDIDÆ. *Alauda g. gulgula* is not at all common and appears to be resident, a specimen having been obtained by me on 19.4.47, while feeding on ploughed field near a pool of water. *Calandrella brachydactyla* is found in winter, being snared sometimes in good numbers by birdcatchers and hawked about for sale; a specimen obtained by me on 26.10.26 is referable to the race *dukhunensis*. *Mirafra assamica*, mentioned by Capt. Baillie, was found by Capt. Beavan as not uncommon in Manbhum (*S. F.*, II, p. 421). Either this or the race *affinis* has not been observed by me anywhere in Hazaribagh. *M. e. erythroptera*, overlooked by Baillie, is no doubt very common and resident. *Ammomanes p. phoenicura*, which is not mentioned in Capt. Baillie's list, occurs in suitable localities—haunting dry open elevated lands, ploughed fields and raised bunds of cultivation. It is a resident species and I found it nesting in April—a nest with 4 young having been photographed on 19.4.47. *Eremopterix g. grisea* is very common and abundant and often found together with *M. e. erythroptera* haunting dry rocky waste with thin scrub.

(To be continued).



Explanation of figures,

- 1. stamenbearing flower 2. stamens 3. pistil-bearing flowers
- 4. stipules. 5. twisted stigmas (stigmas much enlarged) 6. ovary showing stamens 7. horizontal section of the fruit which resembles a gothic church window 8. peduncles 9. leaf—mark how the two portions of the leaf differ in size.

HIMALAYAN BEGONIAS.

By

B. N. GHOSH.

A charming little family of pretty flowers is formed by the Begonias. True it is that the flowers of the wild ones can hardly bear comparison with the modern varieties we find cultivated in conservatories or in the beds on our gardens. They are the handsomest of all the many summer flowering plants, possess varied colours and distinct forms. One would doubt if the humble Begonias that we so often gather have become the gaudy flowers of the florists. Yet they have by cultivation and careful hybridisation. Those wild Begonias have intermarried with species found in various parts of the world.

The wild Begonias of our glens and dales are either herbs or undershrubs with tuberous or renzometous roots, their stems are cylindrical and jointed, generally swollen at the nodes; they possess watery acidulous juice. They grow in the ground but often on rocks or clefts of trees where a little earth has accumulated. The Napalese call these plants "Manger Kanchi" and sometime eat the stems. In the cool valleys of Chittagong the natives use the leaves as pot herbs, the taste is pleasantly acid and not unlike sorrel.

These plants have in most cases one half of the leaf smaller than the other, the base forming two rounded lobes. All the parts of the plants are particularly tender and brittle. The flowers grow in Axillary peduncles branching into a cyme, each of the ramification of the cyme has a pair of stipules at the base. The flowers stand upon slender stalks. There are two kinds of flowers one having stamens only and the other bearing pistil only.

The stamen-bearing flowers consists of two large obtuse sepals and 2-5 petals. Both the sepals and petals are similarly coloured, and one cannot distinguish the one from the other. In their centre there is a round ball of anthers, the filaments of which are united into a common stalk. The anthers are usually club shaped, fleshy yellow bodies, having a curved pollen cell on each side. They discharge pollen grains.

The postil-bearing flowers have a calyx and Corolla like the other flower. Beneath the Calyx of this flower is a fleshy thick part, usually having 3 unequal wings, divided into 2-4 cells containing minute ovules. The ovary is terminated by 2-5 stigmas each of which has two very much twisted hairy lobes.

The fruit when ripe is a berry or a thin brown case having 3 wings of which one is very much larger than the others. It contains a multitude of small seeds of an oblong form usually covered with a net work, the meshes of which are disposed with wonderful regularity. If a slice were cut off a little below the calyx it would have quite the appearance of a gothic church window.

Begonias thrive in moist shady places in the subtropical Zones of the world—India, Africa and South America. Our Sikkim Begonias also grow in similar climatic conditions. We find that the subtropical region in Sikkim penetrates far into the interior along the banks of the great rivers. Here the summers are warmer and the winters cooler, when compared with regions in similar latitudes. Owing to the humid climate and the absence of excessive cold at any season of the year, and from the dripping nature of the climate of the misty regions which extends above 4000' ft from the sea level, Begonias are generally met with on rocks, on stema of trees or growing on the ground. They are all most graceful objects and in the moister uncultivated valleys, where undisturbed they attain their full luxuriance in small groups. Below 4500 feet elevation several handsome ornamental species associated with ferns and other herbaceous vegetation are found. Most Begonias flower in summer and have the ordinary habit of shedding their stock or leaves towards the end of autumn and remaining bare till spring.

For ready identification Begonias may be divided into five groups.

The first group comprises two species that have their fruits more or less fleshy and round and without the papery wings that are so characteristic of this genus. To this group belongs *Begonia Roxburghii*. It has succulent glabrous stems 2 feet or more high, with large glabrous ovate leaves, minutely pubescent on the nerves,

bearing a few white flowers in short cymes near the axils. The fruit is a 4-celled, 4-angled, succulent body. The other plant is *B. inflata*. It bears narrow oblong lanceolate leaves on long erect stems in each branch. Fruit very leathery, 3 celled and trigonous.

The species falling under the next group have all tuberous root stock: their capsules are 3-celled with three papery wings of which one is much larger than the other two. Most abundant in this group is *B. picta*. They grow on rocks or in crevices of stone walls. The flowers are rather large and conspicuous and of a pale rose colour. The leaves are nearly equally cordate pilose above and often variegated and very ornamental.

Begonia satrapis is also a very beautiful small plant bearing bright rose-red flowers on peduncles rising much higher than the highest leaves.

Begonia Josephii is a denizen of the misty regions growing as it does above 5000 feet elevation and can be easily recognised by its peltate leaves. This plant is very variable in size and habit, carrying small rose red flowers.

The much incised and lobed *B. gemmiphra* has its flowers in pendulous cymes. The flowers are white striped with rose and are of medium size. This curious species clothes the moss grown trunks of trees and rocks at 8000' elevation. In some of the axils of the peduncles we find quadrangular cups, neatly and closely packed with small bulbils.

Begonia Ameana is a small plant with glabrous leaves bearing few flowered scapes. The styles are persistent *i. e.*, they remain even when the seed is ripe in the fruit.

One other small *Begonia* of this group is *B. Ovatifolia*. It has roundish (ovate) leaves about 2 inches in diameter grows on steep slopes in the Tista Valley. The peduncles are 4 to 8 flowered bearing white or rose coloured flowers; capsule small with persistent style.

The next group have 2 celled compressed Capsules, triquetrous, having one broad and 2 narrow papery wings. These have thick woody root stock with fibrous roots.

The most conspicuous in this group is *Begonia gigantea* which has thick woody rootstock bearing stems 2 to 3 feet tall very rarely branched. This is the largest of Indian *Begonias*. The leaves are very unequally deeply auricled on one side. The peduncles are short, dichotomous with many small white or pale pink flowers.

To this group also belongs the very thick rhizomed *Begonia Xanthina*, which has ovate leaves and which are unequally cordate. The flowers are of medium size and conspicuously yellow. Capsule has unequal wings, one very much elongated.

The caulescent *B. rubro-Venia* with its elliptic lanceolate acuminate leaves, can be easily recognised by its rose red veins specially on the under surface of the leaves and by the greyish white large irregular patches on the upper surface of the green leaves. The flowers are borne in axillary peduncles, usually branched near the top, bearing a few white flowers. Capsule often recurved, about half inch including the wings.

The next group have long creeping root stock which are neither woody nor tuberous. *Begonia laceneata* bears roundly ovate leaves on long petioles. The leaves are unequally cordate and acutely lanculate. The peduncles are axillary as long as the leaves, bearing 2 to 6 flowers of which generally more than half of them are stamen bearers. There are several varieties the most outstanding being *B. laceneata var-lutea* and bears fine yellow flowers.

The creeping root stock of *Begonia megaptera* is thick and woody and the stems erect. The leaves are unequal at the base. A large number of elongated peduncles rise from the upper axils bearing on each a few large pink flowers. The flowers completely cover the plant and produce a charming effect.

Begonia Sikkimensis has thick woody rootstock. When mature it carries a stem 15 inches high. The leaves are round lobed almost to the very base and the lobes themselves are also incised and lobed. They grow on rocks and shed their stems and leaves at the advent of winter. Very easily recognised on account of their lobed leaves.

Begonia Cathcartii. It has cordate leaves that are acute and glabrous. It is very easily distinguished by the numerous scattered hairs on its stems above 5500 feet elevation.

The next group is represented by *Begonia Rex* which has a fleshy creeping rhizome which are subterraneous. The leaf stalk is round, red in colour and setose. Leaves are about 10 to 12 inches broad, its surface is rugose or bullate with a metallic lustre, having a broad silvery band running all round the leaves about 1 inch away from the margin. Flowers are borne in erect branching cymes, large, of pale rose colour. This magnificent species is the progenitor of numerous ornamental foliated *Begonias*.

I will attempt in the next issue of this paper to describe the various species that one may come across in the Sikkim Himalayas with a little more detail so that they can be easily recognised by any flower lover.

THE HAWK MOTHS OF DARJEELING AND SIKKIM

By

COL. F. B. SCOTT, F.R.E.S.

(Continued from Vol. XXII Page 137)

Genus *RHYNCHOLABA* Rothschild & Jordon. One species.

117. *Rhyncholaba acteus* (Cram.). Common in hills and plains. *Larva* pale green on reddish-brown. A very large obliquely oval ocellus on segment 5, pupil deep blue in front, green dotted with white behind, the pupil edged narrowly with white and olive-brown and broadly with ochreous. A series of much smaller, obliquely oval ocelli on 6 to 11, yellow, edged narrowly with pale and dark blue. A very narrow white dorso-lateral stripe on 2 to 4 and 6 to 11 and broad pale blue oblique stripes. Horn very short, slightly down-curved, orange. *Length* 2·8" *Pupa* with a free tongue-sheath. *Food-plants*—Vines; arums; *Begonia*; *Caladium* etc.

Genus *RHAGASTIS* Rothschild & Jardon,

6. Fore wing upperside with a series of white submarginal spots, preceded by a straight white line from apex to R^2 and by a lunate line between R^2 and SM^2 ; underside of body and wings ochreous.
Expanse ♂ 3"; ♀ 3." 7 ... *R. olivacea*.
 Not so coloured ... 7.
7. Underside of wings densely speckled with brown, marginal band of fore wing not joined to brown basal area; no white submarginal scaling on fore wing upperside; abdomen without yellow lateral stripe.
Expanse ♂ 2." 7; ♀ 3" ... *R. velata*.
 Underside less densely speckled with brown; marginal band of fore wing joined to basal area between R^2 and R^3 ... 8
8. Costal half of cell of fore wing underside of the reddish colour of the disc; abdomen without yellowish lateral stripe; costal edge of fore wing very pale, creamy. *Expanse* ♂ 3." 4; ♀ 3." 6 ... *R. confusa*.
 Cell brown; abdomen underside buffish-white; the stripe connecting basal area with marginal band of fore wing heavier. *Expanse* 2." 8 to 3." 4 ... *R. a. aurifera*.

118. *Rhagastis velata* (Walk.). Common in the hills. *Larva* dark brown on dorsum, pale brown elsewhere, with a still paler brown dorso-lateral stripe from head to horn; a small round ocellus on segment 5, the round pupil black edged narrowly with white behind, brown elsewhere the whole edged narrowly with black. Horn short, brown, down-curved. *Length* 2' 8. *Food-plant*—Arums.

119. *Rhagastis acuta* (Walk.) Sikkim; Bhutan; Assam. Rare.

120. *Rhagastis a. aurifera* (Butl.). Fairly common in the hills. *Larva* green or brown, with a large oval ocellus on segment 5, pupil blue in front, green behind, the whole edged narrowly with white and then with green; the green portion of the pupil contains some white dots. A yellow patch between the ocelli. A white dorso-lateral stripe on segments 2 to 4, and dorso-lateral muscles of bluish spots on 6 to 10. Horn purplish, slightly down-curved, slightly flattened laterally and with a slightly bulbous tip. *Length* 3."4. *Food plants*—Vines; arums.

121. *Rhagastis confusa* Roths. and Jord. Sikkim; Khasi Hills. Rather rare. *Larva* very similar to that of *aurifera*, but paler in colour. No yellow patch between the ocelli. Dorso-lateral stipe waved but not formed of dots. Horn tapering evenly to a point, sides not flattened. *Length* 3."6. *Food-plant*—Vines.

122. *Rhagastis lunata sikkimensis* Roths. and Jord. Sikkim. Very rare.

123. *Rhagastis l. lunata* (Roths.). Khasi Hills. Rare.

124. *Rhagastis olivacea* (Moore). Common in hills. *Larva* very similar to that of *aurifera*, but ground colour a brighter green. Conspicuous whitish oblique stripes, and dorso-lateral stripe wanting. Horn purplish, down-curved, tapering evenly to a blunt tip, not flattened laterally. *Length* 3."6. *Food-plants*—Balsams; arums.

125. *Rhagastis gloriosa* (Butl.). Sikkim; Bhutan; Khasi Hills. Rare.

126. *Rhagastis a. albomarginatus* (Roths.). Sikkim; Khasi Hills. Very common on cultivated hydrangeas. *Larva* green or bluish-green, with broad pale blue oblique stripes. Ocellus on segment 5 obliquely oval, a narrow dark blue pupil edged broadly with pale blue, the whole ringed with black. The surface of the ocellus is *convex*, not flat as in other larvae. Horn blue, slightly down-curved with bulbous tip. *Length* 4." *Food-plant*—Hydrangea.

Genus CECHENENA Rothschild & Jordon. *Imago*; body green or brown, fore wing green, brown or pinkish, hind wing blackish. Thorax and abdomen with pale lateral stripes and fore wing with dark stripes from apex to inner margin. *Pupae* with the tongue-sheath much projecting in front of head.

Key to the imagines.

1. Fore wing with seven or eight almost straight lines in outer half, abdomen striped above ... 2
 - Fore wing without three lines, abdomen not striped above ... 3
 2. Mesonotum without a pale medial band, fore wing with seven lines (inclusive of the feebly marked submarginal one). *Expanse* 3"6 to 4" ... *C. m. minor.*
 - Mesonotum with a pale medial band. Fore wing green with eight lines, there being an additional line between lines 6 and 7. *Expanse* 3"8. to 4"8. ... *C. l. lincosa.*
 3. Fore wing with a broad sub-basal amber—or mummy-brown band or patch. *Expanse* ♂ 4".3.; ♀ 5". ... *C. h. helops.*
 - Fore wing without such band, clayish with a black spot near base. *Expanse* 3"2 to 4" ... *C. aegrota.*
127. *Cechenena aegrota* (Butl.) Silhet. Rare.
128. *Cechenena h. helops* (Walk.) Sikkin; Khasi Hills. Rare.
129. *Cechenena M. minor* (Butl.) Fairly common in hills. *Larva* brown on dorsum, pinkish elsewhere; a broad whitish dorso-lateral stripe from head to horn. An ocellus on segment 5,

pupil deep indigo-blue dotted with yellow in the posterior half, edged narrowly with yellow and then with black; a round whitish subdorsal spot on 6 to 11; pale pink oblique stripes on 5 to 10. Horn brown, down-curved, slightly flattened laterally, tapering to a blunt point. Length 3." 4. Food plants—Vines, arums; *Saurauja*.

130. *Cechenena l. linosa* (Walk.), Fairly common in the hills. Larva very similar to that of *minor*, but dorso-lateral stripe waved upwards on each segment. Ocellus obliquely oval, the pupil dark brown dotted with white in front half, yellow in posterior half, edged with bright blue in front, yellow behind, the whole narrowly ringed with dark brown. Spiracles surrounded by an ochreous patch, oblique stripes dark brown. Horn dark brown, sharply down-curved, flattened laterally and with a slightly bulbous tip. Length 4." Food plants—Vines; balsams; *Saurauja*; *Polygonum*.

As there are two forms each of *Sataspes infernalis*, *S. tagalica*, *Acosmeryx socrates* and *Nephele didyma*, there is a total number of 134 species, subspecies and forms so far recorded from the East Himalayan region.

SOME THRILLING EXPERIENCES WITH TIGER IN BURMA

By

W. S. THOM

(Continued from Vol. XXII Page 129)

All my hopes of ever seeing the tiger again sank to zero. However there was no getting out of it now so I decided to push on regardless of all consequences. To cut a long story short, let me say that after taking on the blood spoor for another 150 yards or so, and crossing the dry bed of a small nullah, a few feet in width, all traces of the wounded animal disappeared. Casting carefully around for these, my men scattered slightly to right and left of me, in a crescent, with no one anywhere ahead of me.

We were only about 600 yards, or so, from the village. The jungle showed signs of becoming denser than any we had as yet passed through. Two men—Maung Po, the Village Policeman already referred to, and a Gurkha Sepoy, had branched off together; two other men turned off at right angles to my left, whilst the remaining two men, a Kachin Sepoy, and a Village Constable, who had dropped to some 20 yards behind me, also turned off to the right and began walking up the dry bed of the stream we had just crossed. We were all busily engaged looking ahead, stooping every now and then and scanning the ground and had hardly parted company when my ears were greeted by a succession of short, grunting, coughing roars from my right, in the direction taken by Maung Po and his companion. The whole affair was over in 10 or 15 seconds. According to Maung Po, the tiger, which did not come along at any great pace, made a bee line for the Gurkha, who was standing some three paces from his right, having evidently spotted him from the beginning. He unfortunately was wearing a pair of white cotton shorts, a fact which, when starting on the trail and in the excitement of the moment, had escaped my notice. Maung Po was more sensibly dressed in nature's garb principally, having nothing on but a dark coloured cotton loin cloth tucked up in front and behind according to the custom of the country. He jumped to one side and at a distance of about six paces fired at the tiger's shoulder as it came on at the Gurkha, failing however to stop it. The Sepoy, according to his own statement and that of Maung Po fired at the tiger when it was three paces from him hitting it rather low down in the face below the right eye, the bullet eventually finding a billet in the muscles of the neck, where it mushroomed without doing much harm beyond temporarily stunning the animal which still came on at a trot but in a dazed manner. A third, or fourth, shot was fired in rapid succession, but somewhat wildly, by the other two men who had gone up the bed of the nullah some way behind. Neither of these shots had the desired effect of disabling or turning the brute. A harmless slug from the muzzle-loading Enfield of one of the Constables, the man who fired the fourth shot, was afterwards found embedded in the muscles of the animal's hind leg. The Gurkha, after firing, apparently lost his head. Instead of clubbing his rifle, or jumping to one side which

he could easily have done, or attempting to unsheath his *kukri*, the unfortunate man stood and thrust his Martini-Henri rifle towards the animal holding the weapon with both arms at full length before him. The tiger seized the rifle in its teeth, and splintering the wood work, and scoring the barrel, with its teeth, three of which were, afterwards, found broken, changed its grip from the rifle to the man's right thigh, the latter going over on to his back, screaming wildly. Maung Po having witnessed this, rushed back to me yelling for assistance. We met half way, for as soon as I heard the screams of the unfortunate man I rushed forward as quickly as the circumstances would permit, till I came within sight of the tiger at a distance of about half a dozen paces, put in three shots behind the shoulder. Fortunately there was not much chance of hitting the Gurkha by mistake, as when I appeared on the scene the tiger was standing broadside on to me in an open space affording a clear view and an excellent shot. It had its head down and with closed eyes was silently chewing away at the man's right thigh whilst the Gurkha, whose screams were most unnerving, was engaged with the fingers of both hands clawing away aimlessly at the tiger's face, which paid not the slightest attention to his movements but continued its horrible work. I wondered at the time that this action on the part of its victim did not infuriate the animal and make it relinquish its grip to a more vital spot higher up the man's body. Maung Po, whose companionship at this time was most acceptable, stood calmly by with an empty gun whilst I loaded and fired. My first shot did not seem to trouble the tiger for it paid not the slightest attention to it. It may have been a miss as I was feeling far from comfortable and the whole situation was not conducive to steady shooting. My second shot hit the animal hard in a vital spot for, leaping up several feet into the air, snarling like the devil, it turned a complete somersault and fell a few yards away clear of the prostrate man. Hurriedly ejecting the two empty cases and loading the right chamber only I, much to my relief, finished the brute, with a third shot. I was only using a 12 bore ball and shot gun burning $4\frac{1}{2}$ drachms of black powder, with a heavy conical bullet, a weapon hardly powerful enough for an encounter of this description. After reloading both barrels, I threw a few sticks at the body in order to make sure that the

animal was really dead and then, seeing that it remained motionless, approached the wounded Gurkha, who sat up and asked for a cigarette, remarking in a broken voice, that he was afraid his time had come. I cheered him up at once and told him that he would soon be alright. After removing his shorts I examined the wounds, which at first sight though deep and badly lacerated, showed that no vital organs had been perforated. They did not, at the time, appear likely to be fatal. Of course it is well known how quickly, and easily, the whole system is poisoned by bites or wounds, inflicted by any of the *Felidae* and how rapidly a wounded man, even though possessed of a powerful constitution, succumbs to his wounds. Snatching a long new white muslin turban, some two or three yards in length, from the head of a Kachin Sepoy who was standing close by, I bound up the Gurkha's wounds as quickly as possible, and had him carried into the Sinbo hospital within an hour of the occurrence. The wounds, of which there were about six in all, were situated in the front and upper part of the right thigh, between it and the groin, but nearer the groin, and there were, also, one or two deep punctures and scratches on the lower part of the unfortunate man's back. When the wounded man, before being lifted off the ground told me he could not lift his right leg off the ground, I guessed at once that it had either been broken or dislocated at the hip; it turned out to be the latter. The femoral artery had also been severed partially as the Asstt. Surgeon in charge of the hospital told me after the unfortunate man's death, which occurred the following morning about 3 A. M. he passing away in an unconscious condition. I asked the Gurkha at the time, after the accident occurred, why he had not attempted to draw, and use, his kukri either as a stabbing or a cutting weapon. His reply was "Sahib I knew nothing. I did not know what to do, I lost my head".

My first bullet fired from the *machan* had, after hitting the tiger on the top of the neck, and missing the spine by a very little, continued its course, shattering the whole of the left shoulder and rendering the leg absolutely useless as the shoulder was a mass of pulp. I forgot to mention that the tiger, according to those who had seen it charging, came out on three legs, with the left leg swinging clear of the ground. No man, however good a

sprinter he may be, can expect to escape from a charging tiger, even though the latter has the use of only three legs.

The circumstances under which another tiger was shot were somewhat peculiar and thrilling.

I was out after rhinoceros, bison, and elephant along the water-shed of the hills which divide Arakan from Thayetmyo in Burma. It was in the month of May. We were encamped among the Arakan Yoma Mountains at an elevation of about four thousand feet. A lovelier spot for a station could not be desired. Long undulating stretches of perfectly open grass country rolled away on either side of my camp for a distance of at least two miles and plenty of cool clear water was to be had within easy reach of the summit, from which point a magnificent view of the surrounding country was obtainable. What with the mighty Irrawaddy to the East on one side; lying as it were at my feet some forty-five miles away, with its tiny specks of sailing boats and smoking steamers, and a pagoda here and there glittering along its banks, and Arakan some ninety to a hundred miles to the West on the other side with its broken coast and shimmering sea clearly visible to the naked eye, and studded here and there with islands of all shapes and sizes, it was altogether a glorious scene and one alone well worth the trouble of coming to see. When I threw myself down on the ground and buried my face in the short, sweet smelling, crisp grass and ferns I could almost fancy myself back again amongst the bracken and the heather of "Mine ain Countree."

Next day I saw no less than ten Sambar feeding along the tops of the hills and in the open, and during the day my bag was a very fine bull Gaur, a good Serow, standing as high as a small donkey with 11 inch. horns, and a very good stag Sambar.

About 1-30 p.m. on the following day, whilst my hunters and I were marching along rather aimlessly down a stream, one of them Tha Yauk by name, who was leading with my double 8 bore Paradox, suddenly drew up and, stooping, pointed to the fresh tracks of a tiger. Their wet and fresh appearance on the gravel bed of the stream showed that the animal could not be very far ahead of us, and that there was a good chance of our

coming up with it provided the animal did not leave the stream and turn off into the jungle. I immediately changed the solid nickel-coated bullets with which the chambers of my double .303 Lee Enfield rifle had been loaded for others loaded with soft-nosed projectiles, and instructed Tha Yauk to remain handy with the double eight bore Paradox loaded with conical hollow-pointed soft lead bullets. When out shooting I always made a point of taking out a few eight bore cartridges loaded with large buckshot and six drachms of powder for an emergency of this sort. They had unfortunately been forgotten on this occasion. As a stopper in case of a charge from a wounded tiger at close quarters, there is nothing so effective as large buckshot when delivered from an eight bore Paradox as the pattern is generally fairly close. A twelve bore magnum Explora gun, by Westley Richards, which takes a heavy charge of smokeless powder and large conical bullets is also a very effective weapon.

I then took the lead down the bed of the stream which was full of rocks and boulders and pools of water here and there. I had only gone perhaps about 150 yards, when I suddenly became aware by sounds which emanated from the front, that some animal was splashing about in a pool ahead of me. Could it be a rhinoceros? I moved quickly forward a few more paces when the head and shoulders of a tiger followed immediately by the rest of its body suddenly appeared within full view round the bend in the rocks directly facing me. The animal, which turned out to be a tigress and was only some twenty paces off, stopped dead on perceiving us. We were all in full view in mid stream. After raising her head to its utmost, to obtain a better view of us, she took us all in with the steadfast gaze of her fierce yellow eyes for about the space of about three seconds and then came towards us snarling like the devil. "Well," said I to myself, "we are in for it now, this is a most unusual procedure for a tiger surprised in this fashion to take."

But whether after coming up to within five paces of us, she realized we were not the kind of animals she had been accustomed to meet in the jungles, or whether she had got a whiff of our scent, she suddenly pulled up and sprang sideways up into the air most gracefully to a height of 8 or 10 feet to give us a wide

berth, affording me a lovely broadside shot of which I at once availed myself with the '303. She made no sound on receiving the shot but galloped off down stream and disappeared among the bushes. Tha Yauk then said to me, "sir, you have hit her fair and square behind the shoulder, and I saw the place distinctly where the bullet hit." A statement of this description would probably stagger some people without any jungle experience and seem to be a bit too tall to swallow but it is quite true nevertheless and I am not going into further particulars here as to the why and the wherefore of things. We then decided to call a halt to have some breakfast and smoke. After a great many cautious manoeuvres, and detours, during which several trees were climbed Tha Yauk caught sight of her ladyship lying stretched out at full length on her right side. I picked up a stone and threw it at the body to make sure but she never moved. So much for the efficacy of the '303 with soft-nosed Tweedie bullets. That is the first and last time I ever used a '303 on a tiger. The tigress measured 8ft. 9ins. of which her tail was 2ft. 4 ins. We found on examining the pool of water from which she had emerged, when we surprised her, that it contained two newly killed red land crabs of 4 and 3 inches in length. One crab was lying out of the water on the bank whilst the other one was still in the pool and had only just been killed. The contents of the animal's stomach showed that she had not had a solid meal for sometime and, although she was full grown and in prime condition otherwise, she was distinctly tucked-in under the ribs. Tha Yauk, one of the most experienced hunters Burma has ever seen, informed me that from his own experience and observation of tigers and leopards in these hills, he firmly believed that all the cat tribe when hard pushed for food during the hot season, that is to say from April to the end of May, when they were unable to approach and stalk game as easily as at other times, owing to the dry state of the undergrowth, leaves, and twigs, were driven to eat fish, fowls, tortoises, snakes, crabs, and the like, in fact anything that was edible.

(To be Continued).

GAME BIRDS OF SIKKIM INCLUDING THE
DARJEELING DISTRICT AND OF THE
JALPAIGURI DISTRICT, BENGAL

By

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

(Continued from Vol. XXII Page 112)

Our next genus is *Perdix* to which the English Partridge belongs. It differs from *Francoelinus* in having 16 or 18 tail feathers instead of only 14 in that genus. There are no spurs on the legs. There are three Indian species and subspecies only one of which is said to occur within our area. They are like the English Partridge.

[(43.) The Tibetan Partridge.]

Perdix hodgsoniae hodgsoniae (Hodgson). The forehead has a black and white band the latter edged with black ; the next of the forehead and sides of the crown and a broad collar from base of hind neck are chestnut, the rest of the upper plumage blue grey barred and, tipped with black and some rufous ; the wing-coverts are boldly streaked with white edged with black and broadly barred with chestnut edged with buff ; the quills are brown barred with fulvous-white and chestnut ; the central tail-feathers are like the back, the others chestnut ; there is a black patch on the sides of the face ; in front of the eyes and cheeks and the chin and throat are creamy-white bordered with black ; the lower plumage is white, the centre of the breast with broad black bars, which in some birds, coalesce to form a more or less complete black patch on the belly ; the sides of the breast has chestnut patches and the flanks are barred with chestnut ; the rest of the lower plumage is fulvous-white.

"Bill horn-green ; iris brown ; legs greyish-brown" (F. M. Bailey).

"Orbital skin deep velvety crimson in the breeding season, dull reddish crimson at other times" (Stuart Baker).

The length is about 13 inches; the wing 6.12 inches and the tail 4 inches. Weight 1 lb.

"*The Young Bird* has no tinge of blue-grey above, the chestnut is wanting everywhere, and the lower parts are a dull earthy buff, the breast with paler striæ and indefinite narrow bars of dull black. The crown, cheeks and ear-coverts are dark brown with white apical spots." (*Stuart Baker*).

The sexes are alike but the hen is slightly smaller.

The distribution according to Stuart Baker is "Tibet, from the extreme West to the East where it meets *P. h. sifanica*, a smaller and less richly-coloured race. On the West it is replaced by another form in Ladak and in North-East Kashmir. It is not rare in the highest valleys of both Sikkim and Nepal but does not occur anywhere near Darjeeling. It is found in both the Abor and Mishmi Hills."

There is nothing *definite* about its occurrence in our area.. Stevens writes: that it "is recorded for the Tibetan Plateau, north of Sikkim, strictly not within our limits, but in all probability occurs at extreme elevations in Sikkim." We doubt whether it is found *anywhere* within our area. Certainly there are two skins in the British Museum said to have been collected in the Interior of Native Sikkim by Mandelli during May and another one labelled "Darjeeling" all in the Hume collection. As the latter certainly was *not* collected in "Darjeeling" it is also probable that the other two were really collected in Tibet especially as neither Bailey, Meinertzhagen nor ourselves have ever come across it in the North of Sikkim where the fauna is purely Tibetan.

This Partridge is common at Gyantse and Colonel Bailey has also found it at Datha and Kambu in the Chumbi Valley just above sea level. He has found them at altitudes between 13,000 and 15,000 ft. but Stuart Baker says they wander up to nearly 19,000 feet and may be found, though extremely rarely, as low as 9,000 feet in winter; probably 11,000 feet is as low as it may be usually be found in winter.

Ludlow writes :—"A few are to be found on the actual plain of Gyantse, but they generally keep to the side nullahs which open into it, especially if these nullahs are cultivated and there is cover in the shape of buckthorn and Tibetan furze," Hume found them in quite a different type of country which he describes as follows :—"The entire aspect of the hill where these birds were found was dreary and desolate to a degree—no grass, no bushes, only here and there, fed by the melting snow above, little patches and streaks of mossy herbage, on which, I suppose, the birds must have been feeding."

They are found, according to Bailey, in flocks of from ten to fifteen birds and Ludlow writes "they keep in coveys right through the winter and do not pair off till the end of March." They afford good sport when they fly. Bailey writes :—"Their flight is like that of an English partridge, but they are not so willing to rise ; they are not very wild. When scattered they call each other with a curious buzzing sound. I once heard this imitated by the creaking lid of a lunch basket which we had out shooting." He also says that two good days' shooting for two guns near Gyantse yielded 48 Partridges and 25 Hares on one day and on the other day 43 Partridges and 34 Hares. Ludlow writes that, now a days around Gyantse, 15 brace to a couple of guns would be a good day's bag. He, also, says they are "often difficult to flush and run strongly. They especially do this if there are hill-slopes at hand. Then one may throw stones at a covey, and even empty a couple of barrels into it without causing the birds to take wing." Some of Stuart Baker's correspondents informed him that "when in crops or cover, these birds do not run far, but rise fairly close, and give good shots, though the covey bunch very much the first time they get up when it is often difficult to avoid "browning" them. After re-alighting they often scatter a good deal and then afford fine single and double shots, as they rise one after another. When on bare ground, instead of waiting until the shooter is close up to them, they run a great deal, and will often scuttle along in front of one for quite a long distance, stopping every now and then when a dip or hollow in the ground hides them temporarily from view."

They breed in many parts of Tibet usually between 11,000 and 15,000 feet but Barnes took eggs at over 16,000 feet (he ate most of the clutch !!) and Stuart Baker says Macdonald took eggs for him at about 17,000 feet. Ludlow writes, "The nest is generally a mere depression in the ground, lined with dry grass, and placed under the shelter of a small bush. Nests may be found on low banks between the barley fields, or high up on the mountain-slopes." Stuart Baker remarks:—"As a rule the site selected is one protected by rocks or bushes, sometimes it is scratched in amongst the low thorny bushes which cover so great a part of the Gyantse and similar plains, and sometimes, it may be placed at the foot of a single bigger bush or clump of grass. But the eggs may also be taken on ground which is absolutely devoid of all vegetation, in between a couple of rocks or under some boulder. In all cases, however, the nest is placed on the leeward side of the hill and to the leeward of the bush, rock or other protecting cover." Bailey took nests near Gyantse in June, July and the beginning of August and saw a good many newly-hatched broods in the beginning of the latter month.

Ludlow says "the number of eggs in a clutch varies from 5—11." Stuart Baker says sometimes 12 or perhaps even more. He describes them as "very much like the Common Partridge's eggs. The colour varies from a pale reddish buff which is rare through warm buff, olive buff or reddish olive to a warm, clear olive. The shape is normally a rather long oval, the smaller end well pointed and occasionally becoming almost peg-top in character." He gives the average size of one hundred and fifty eggs as 37.6 by 27.2 mm.

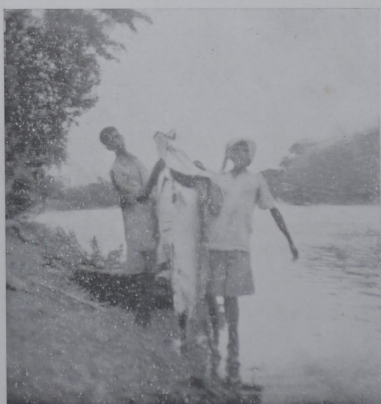
I can find no information about these birds ever having been kept in captivity.



A. Great Stone Plover (Tamed)



B. Fulvous-breasted woodpecker
(young)



C. Masheer 120 lbs.

DOYANG T. E.,
DOYANG P. O.,
ASSAM.

DEAR SIR,

GREAT STONE PLOVERS.

I was very interested in Mr. W. A. S. Lewis' article on Plovers in the Journal Vol. XXI—No. 2. It is an extraordinary fact that the Great Stone Plover, a bird essentially of the wide open spaces and shy of human beings, should be very easily tamed and, and even when given full liberty, loth to leave the society of man for its native haunts.

On May 26th 1937, a Miri from the *chaporis* of the Brahmaputra came to me at my tea estate with a present of two young Great Stone Plovers, fully fledged but unable to fly. They were perfectly tame, and had been reared at the house of the Miri. I put them with my wild ducks—two Spotbills and a whistling Teal—and they all became very great friends. They were all given full liberty in the compound, but never wandered very far away. At night time they were shut up as a protection against wild cats, of which there were quite a lot in the vicinity. They were definitely nocturnal, and in the evenings became extremely active, running about the compound in search of insects, beetles, worms and so on. Most of the day-time they slept—often choosing a cool quiet place on my bungalow verandah.

By July they could both fly well, and here comes the interesting part. They would fly away for hours on end, probably to their native haunts by the Brahmaputra, only three or four miles away. But they always returned.

In August, one of them disappeared, presumably killed by a wild cat. The other bird remained with me till November. Some nights it returned and was safely shut up with the ducks till morning. Other nights it was miles away over the Brahmaputra *chaporis*. But it always returned in the day-time to sleep

in some corner of the verandah. When it finally did leave me in November, I think it may have been because the floods having subsided and large attractive stretches of feeding grounds having reappeared, the bird could no longer resist the temptation of returning to its real home.

These two Great Stone Plovers were very clean and handsome birds, and made attractive and interesting pets. They always came when called, and took scraps of meat etc. from one's hand. (See plate A).

Yours very truly,

E. P. GEE.

DOYANG T. E.,

OATING P. O.,

ASSAM.

A YOUNG FULVOUS-BREASTED PIED WOODPECKER.

(*Dryobates Macei* (Vieillot))

DEAR SIR,

With reference to your article and Mr. Lewis' note on this bird, in July, 1929 I rescued a young one almost fully fledged but unable to fly. It had been found by a boy on the tea estate and fed on suttoo for six days, and kept as a 'toy' for the children. After rescuing it, and bringing it gradually from a suttoo diet on to insectivorous food, I took great care of it with the intention of setting it free as soon as it could fly and fend for itself.

It lived in a large cage on my verandah for two months, and seemed to be doing well, when it unfortunately died. I presume it was a male, as it had a crimson crown. It was an exceptionally elegant and nimble little bird, and a great pleasure to watch. Its call seemed to be 'tweet', and 'tit-tit-tert-i.'

I wonder if these birds have ever been successfully kept or reared in captivity. They are fairly common on the tea estates in Central Assam, where the shade trees seem to suit their way of life. (See plate B).

Yours very truly,

E. P. GEE.

MISCELLANEOUS NOTES.

RECORD OF MAHSEER.

J. de Wet Van Ingen caught one Mahseer of 120lb in Mysona in 1946. He stated "the fish should have weighed a further 4 or 5lb had I not, unfortunately, had it carried from the waters edge up the steep Bank to camp, using two gunny sacks with two men holding the ends of each sack—as they acted like blotting paper and arrived completely moist". (See plate C).

In 1870 Mr. Sanderson caught a record Mahseer in Cubbery river, the weight of which was 130lb. Mr. Van Ingen's fish probably the second record Mahseer. (ED.)

Sibia Nepalensis Nepalensis.

It is generally believed that *Sibia N. Nepalensis* is a bird of higher altitude and seldom comes below 9000 ft. Mr. Matthews mentioned in his book—*A list of birds of Darjeeling and neighbourhood* "occasional winter visitor to our area, seldom coming below 9000 ft." Dr. Law caught one at Darjeeling 7000 ft. on the 14th September. He also collected several birds before, during summer months. The editor also observed this bird in August this year. So the bird cannot be an occasional winter visitor in our area as it has been found here in breeding season. (ED.)

FROM

RAI BAHADUR DR. N. C. CHATTERJEE, D. SC., F. N. I.

FOREST ENTOMOLOGIST,

Dehra-Dun, the 27th September 1948.

TO

THE CURATOR,

NATURAL HISTORY MUSEUM,

Darjeeling.

Dear Sir,

I was very much interested to read a note on *Phromnia* by Mr. H. E. Tyndale on P. 121 Vol. XVI. No 4 April 1942 issue of the Journal of Bengal Natural History Society.

This species is known from Sat Tal, Kumaon, Ganni, Garhwal, Central Provinces, Dehra-Dun, Sikkim, Naga Hills, Cachar, Margherita (Assam), Mussoorie, Tavoy and Siam.

P. Marginiella feeds and breeds on *Elacodendron glaucum* and other Celastraceae.

A very interesting note on this species has been published by Dr. A. D. Imms in Manchester Memoirs Vol. VIII (1914) No. 4.

Yours faithfully,

N. C. CHATTERJEE,

FOREST ENTOMOLOGIST,

Forest Research Institute.

EDITORIAL

Mr. Chas. M. Inglis, Curator, Natural History Museum, Darjeeling and the editor of this Journal, has retired after serving more than quarter of a century. The Museum and the Society owe greatly to him for his devoted work with untiring zeal and energy in promoting Natural History especially of the study of Birds life in which he is an expert and authority, and has published many books and written articles in this Journal. After continuous work for a long time, he deserves his long due rest. We wish him long life, peace and happiness.

Mr. C. R. Roy, M.A., B.L., F.I. A.I., Ex-curator, Karachi museum has been appointed as the curator of the Natural History museum and he has taken overcharge of editing the Journal. The editor takes this opportunity to express his thanks to all members for his appointment and assures them that he would serve them to the best of his abilities. He requests the members to extend to him their helping hands and co-operation, for carrying out the work of the Society successfully.

The policy of the Journal will be the same as before but we wish to publish articles on all branches of Natural History and also publish popular articles as on the lines of the Journal of the American Museum of Natural History if our funds permit us to do.

The cost of publication of our journal is now more than four times than before and the difficulties in procuring paper and specially art paper for coloured plates are very great. Many European members, who were the backbone of this Society, left India and there has been a fall of subscriptions to a great extent. As Government and municipal grants which are also under 20% cut, are not sufficient to meet all the expenses, it will be very difficult to continue our useful work unless financial position is improved. Other Societies have increased the rates of the subscription and curtailed the number of issues owing to abnormal cost of publication but we do not contemplate to increase the rate of subscription at present. We only expect from the members that they should take active interest in the work of the Society and help it by way of contributing articles to the Journal, donating liberally wherever possible and enrolling new members amongst their friends and also collecting specimens in their area for the museum so that we may keep alive the interest of members in Natural History. We hope we would receive good response from all members,

We regret very much for the delay in publishing this journal due to various difficulties mention above.

Editor.