Accn - 449
Date - 12/12/06

598.05 HUM
ZOOLOGICAL Kolkata
Acc no. 449
dt. 18/1/06
BOOK NO. 1375

STRAY FEATHERS.

Vol. XI.] DECEMBER 1888. [Nos. 1 to 4.

The Birds of Manipur, Assam, Sylhet and Cachar.

INTRODUCTION.*

MANIPUR is such an extremely out-of-the-way little State (five-sixths of my readers have probably never even heard of it), that some explanation seems necessary, first, for my having spent so many months in its exploration, when there remains so much ornithological work to be done in other more civilized portions of the Empire; and, secondly, for inflicting on my subscribers the very lengthy account of this small state's Avifauna that I am about to present them with.

In the first place, Sindh and Manipur are the extreme points, east and west, of our Asian Empire. Karachi and Manipur are almost exactly on the same parallel of latitude, *viz.*, 25° North. As I was the first, practically, to explore systematically the ornithology of the one so I wished to perform the same work for the other, and I was the more anxious to do this, because I had a kind of fancy that the two being in exactly the same latitude, but distant as the crow flies, (and a very long flight it would be for any crow) some 1,660 miles, a comparison of the two Avifaunas might throw some new light upon the subject of the distribution of our birds.

Besides being in the same latitude, there was another curious point of resemblance. Each includes, nearly in its centre, a huge fresh-water lake—the Muncher in Sindh, the

* NOTE.—I completed this paper in September, 1881, since when I have not looked at it. I now publish it, just as then written, because I am assured that it will be useful to brother ornithologists. I dare say it is out of date in many respects. Probably my nomenclature is more or less obsolete now. I much regret any such shortcomings, but have no time to rectify them now and have given up ornithology. I never intended to publish this without careful revision, but I shall never have time to revise it, and therefore, as I am pressed by many to let them have it as it stands, I publish it, errors and all. I have only to add that as the proof sheets pass through the press, Mr. J. R. Cripps, who has resided long in Assam, has engaged to add in some notes of his own in regard to the species dealt with.

Logtag in Manipur, and these are, strange to say, the only two such lakes in the length and breadth of the British Asian Empire outside the Himalayas. In the Himalayas we have, of course, the Woollar Lake in Cashmere, and the Tsomourari and Pangong (both salt, and at an elevation of 14,000 to 15,000 feet), and out of the Himalayas we have south of Cuttack on the east coast of India, the Chilka Lake ; but this is really a mere backwater, the entrance to which from the sea has nearly silted up, and it is always brackish, and at times very salt. There are a good many largish broads in some parts of the country, of which the Najjafgarh jheel, south of Delhi, is the most notable example, and an almost equal number, in other parts of the country, of artificial pieces of water, of which the Deba and Kunkrowli Lakes of Oodeypore are the finest specimens; but the Manchur and the Logtag are the only large natural fresh-water lakes that I know of in the Empire south of the Himalayas. Then again the western portions of both consist of ranges of hills from 5,000 to 7,000 feet in altitude.

But, of course, though on the same parallel of latitude, and each boasting a huge fresh-water lake and a similarly placed range of equally high hills, the conditions of Sindh and Manipur differ in other respects widely. Sindh abuts upon the sea everywhere along its somewhat narrow southern boundary ; Manipur is entirely land-locked, though the north-east angle of the Bay of Bengal runs up to within little more than 200 miles of its south-western point. Sindh is for the most part a low alluvial plain, the delta of the Indus, but little raised above sea level, though its extreme western portions rise into hills, some of which do not fall short of 6,000 or 7,000 feet. Of Manipur the more important portion is the bed or beds of a vast ancient lake, or possibly a series of these, having an average elevation of, say, some 2,000 feet above sea level, surrounded on all sides, and not on the west only, by hills rising to an elevation of 5,000 to 7,000 feet, and towards the extreme north, to which my explorations did not extend, I am told, from 10,000 to 12,000 feet. Moreover—and this is, to my notion, the fundamental difference—Sindh is a country of minimum rainfall ; it is almost rainless ; sometimes, in the hills, there does not fall a drop of rain for nearly two years ; the agriculture of the province is almost as dependant on the rise of the Indus as that of Egypt is on the swelling of the Nile, and the hills, which of course benefit in no appreciable degree from the floods of the great river far away below, are, as a rule, about as barren, bare and sun-burnt a congeries of rugged rocks as one could meet with. Manipur is a country of heavy rainfall, varying probably in different parts of hills

and plain, from 60 to 120 inches per annum, and it rejoices in a luxuriant vegetation which, especially in some of the lower hill valleys, is thoroughly tropical in its character, and unsurpassed in density and richness, even in Tenasserim or the Nicobars.

Now I propose to say, firstly, a very few words about the Manipur state itself and its inhabitants; secondly, to give a brief sketch, reproduced from my diary of my trip to it, so that people may realize how one gets to it, and something of what kind of place it is; and, thirdly, as this may be my last opportunity of putting on record for the benefit of brother ornithologists the results of my personal experiences in these matters, I wish to submit a few remarks on the nature of the records that collectors on expeditions like mine to Manipur will, I believe, find it desirable to maintain.

All this will constitute the introduction to my paper, which will itself consist of a complete list of all the species certainly ascertained to occur there. With these I shall combine (though printing their names in italics) all other species that I know to occur in any part of Assam, Sylhet and Cachar, and I shall give the distribution, so far as is yet known, of all these species in all these provinces, as also (for a considerable proportion of them belong rather to the Burmese than the Indian subregion) in the three Provinces of British Burmah. Lastly, I desire to analyse, though in a superficial fashion, the list of Manipur itself and compare it roughly with that of Sindh.

I.—The State of Manipur and its inhabitants.

Manipur is a small "protected" state lying on the extreme east of India, abutting on to that easternmost* district, Cachar, and jutting out into Upper Burmah. It comprises a tract of country roughly 110 miles long from north to south and 90 miles broad from east to west—a tract comprising somewhat over 8,000 square miles of country, of which the exterior portions are entirely mountainous, consisting of several series of narrow forest-clad ranges running generally north to south, divided by narrow gorges, each boasting its river torent or brawling stream; the ranges of varying heights, but nowhere, where I saw them, rising above 7,000 feet in height, though on the northern boundary, to which I did not penetrate, rising to some 10,000 feet, and one or two peaks, I believe, higher still. Set in the midst of this framework of hills lies an

* It will be remembered that this was written before our rulers had invaded Independent Burmah, and had annexed it, and done their best to kill all those of its people who bravely struggled to preserve their liberty and the independence of their country.

elongated level space, decreasing gently in altitude from north to south, (but with an average elevation of about 2,000 feet above sea level,) watered by numerous streams and boasting of many smaller broads and ponds, and one really large lake—the Logtag. This central space is called the valley of Manipur, but it is not a valley in the usual sense of the word; it is really a plain, some 60 miles long and varying from 10 to 30 miles in breadth—a sedimentary plain, through which, every here and there, crop up the tops of small hills, the bases of and valleys, between which have all been covered in by the lacustrine deposit which constitutes the plain. In fact it is the old bed of a huge lake, which has somewhere southwards cut a way of escape and disappeared, leaving a large hollow (the Logtag lake) and many smaller ones, still filled with water, as mementos of its now long-forgotten sojourn here. It must not be supposed that this level is one unbroken plain from north to south, or in any degree regular in shape. On the contrary, not only does it vary very much in width, not only is it every here and there invaded by the tops of what I may call submerged hills that rise for two or three hundred feet above its surface, but especially in its northern portions it is repeatedly broken into by transverse spurs from its lateral bounding ranges, which run far into and partially divide it into a series of plains.

My explorations were very limited, and this description may require modifications when the country is better known, but I believe that it sufficiently accurately portrays the leading features of the country.

I do not propose to enter into the history of Manipur, of which next to nothing is known, nor to trace the steps by which it came "under British protection," though there is less to blush for in this case than in that of most of our other possessions in the East. Even of the anthropology I shall say as little as possible, because my views are radically opposed to those of others presumably far greater authorities who have treated of the question. But certain facts I may mention. The hills surrounding the Manipur level are inhabited by some 20 different clans of *savages*, each occupying its own ridge or group of ridges and spurs—clans derived from the great races that inhabit the hills abutting on those hills, which are under the jurisdiction of the people living in the level, *viz.*, the Lushaies and Kukis, the Nagas, the Shans and other Burmese tribes. These people are absolute savages, good-tempered, stalwart animals when pleased, reckless of their own and other people's lives, cruel and blood-thirsty to a degree, when angered and normally, when not controlled by some superior intelligence, ceaselessly raiding on each other and murdering men, women and children

indifferently. The hills in which the Manipur level is set, and which are under the control of the inhabitants of this, are both on the north, east and south, only portions of a vast hilly tract inhabited by the great races—the Nagas on the north, the Lushaies and Kukis on the south, &c. As already remarked, those portions of this great congeries of hills, which are included in the Manipur state, and are under the control of the dwellers in the level, are inhabited by some twenty or more clans, most of whom cannot understand even their nearest neighbours—people whose greatest delicacy is roast dog (they buy the dogs from the people of the plains), and who have no intelligible (if any) religion.

In the level dwell the ruling race, the true Manipuris, a comparatively civilized race, well clothed, good agriculturists, Hindoos by religion, abstaining from flesh food, partaking largely of milk (which the hill savages, a sure sign that they *are* savages, will not touch), and by sheer force of intellectual superiority keeping fairly in order some ten times their number of the hill savages.

Now there are people who want to persuade us that this ruling race is a mere hybrid derived from the fusion of the savage clans—gold in fact, produced by mixing lead, iron, tin and copper. I unhesitatingly reject this orthodox view, and accept the people's own account, which is that in remote times a large Hindoo army which had been sent to invade Burmah, and had there come to grief, on its retreat, ashamed to return to India, *re infecta*, settled in this fertile level, in many respects resembling portions of the Gangetic plains, and having no women with them, seized for themselves wives from amongst the best looking women of all the surrounding clans, which they rapidly subjected, and so started the present Manipur race, which, after the first generation or two, ceased to intermarry with the subject clans, though they still often kept their handsomest women as concubines. That there is Naga and Kuki blood in their veins, that their language may be affined in many respects to that of the Lushaies (though it contains a vast number of words clearly derived from the Sanscrit) I do not for a moment deny; but I assert that they can truly boast of a large admixture of Aryan blood also, and that to this they owe their comparatively high civilization, and their marked intellectual superiority.

[*The subsequent sections of the Introduction will be published when the maps necessary to illustrate them can be prepared; with these will also appear my comparison of the Sindh and Manipur Avifaunas.*—A. O. H.]

5.—Pseudogyps bengalensis,* *Gm.*

This species is common enough between the Jhiri river, the western boundary of Manipur, to Noongzai-ban on the first or westernmost range of the Western hills. Eastwards it is very rare throughout the rest of the Western hills. In the Manipur plateau or basin itself it is fairly common. In the Eastern hills I only once or twice saw it, and practically I suspect that the basin is hereabouts its easternmost limit.

This species seems rare or unknown in the low-lying parts of Sylhet, but becomes pretty common from near Karrimganj, where the country rises, and is very common thence along the river to Cachar, and thence to the Eastern borders of the latter district. In the valley of Assam this species occurs right up to Sadiya, though beyond Dibrugarh it is markedly rarer.

[Very common in the Dibrugarh district. They breed on trees in this district, but from the difficulty of getting at their nests, on account of the density of the undergrowth in the forests and the high trees they generally choose to build in, I never was able to secure any of their eggs. On several occasions I have seen these birds, after having fed on a kill poisoned by strychnine, themselves succumb to the effects of the drug.—J. R. C.]†

It has been sent from several localities in Arakan, and occurs (though as a rule, except near crowded centres of population, somewhat sparsely) almost throughout Pegu and Tenasserim.

* Species whose names are, like **Pseudogyps bengalensis**, printed in large black type in this list have been ascertained to occur in Manipur, while species whose names are printed in italics, like *Otogyps calvus* (see next page), have *not* been as yet ascertained to occur in Manipur, but do occur in Assam, or Sylhet and Cachar, or in both.

† My friend Mr. Cripps has kindly looked through the proofs and has added his own notes—as he collected for me during some five years in different parts of Assam. His notes cannot fail to be useful.

Both, 2—*Otogyps calvus*, Scop. and 4—*Gyps indicus*, Scop. were observed by me alike in Sylhet and Cachar, but I never saw either of them in any part of Manipur, though I was constantly expecting and looking out for them. Both also occur in the valley of Assam.

[*Otogyps calvus*, Scop., is a permanent resident in the Dibrugarh district, and by no means rare. Wherever a crowd of the common Vulture were collected over a carcase, one or two of this species was sure to be also. *G. indicus* I never saw or at least identified.—J. R. C.]

Observations in regard to the occurrence of *Gyps indicus* must always be accepted with hesitation if no specimen has been procured. At one stage of its plumage the young *bengalensis, at a distance*, closely resembles the eastern race of *indicus* (the true *indicus* of Scop. as I suppose it to be), such as one gets in Lower Bengal and Assam. On one occasion in Manipur I made sure that I had met with *indicus*, and that, too, after examining it at less than a quarter of a mile's distance with good binoculars. It was for some reason very wild. I spent nearly a day following it about, and to my disgust on at last shooting it discovered it to be only a young bird of *bengalensis*. Beavan, it will be remembered (P. Z. S., 1866, p. 3) recorded it from near Moulmein, but all further investigations have gone to show that this species does not occur in Tenasserim (from the list of whose birds it should for the present at any rate be excluded), and it is most probable that he was deceived in the same way as myself, the more so that he does not appear to have shot or preserved any specimens. At the same time *indicus* does undoubtedly occur in Upper Pegu and Arakan and in the Assam valley, where however it seems rare, so that its non-occurrence, as well as that of *O. calvus* in Manipur, is noteworthy.

8.—Falco peregrinus, *Gm.*

Only once seen at the Logtak lake in the Manipur basin, where I shot a male as it struck at a Teal I had wounded. The boatmen did not recognize the bird, and it must be therefore, I fancy, a rare visitant. It occurs in both Sylhet and Cachar and in the valley of Assam, whence I have a specimen from nearly as far east as Dibrugarh.

[Pretty common in the Dibrugarh district about the more open parts of the country, such as tea gardens, where they frequent the larger dead trees. On one occasion, when going down the "Brahmaputra" river in a "dug-out," with a couple of friends, we rescued a male *Q. crecca* that had been wounded by one of this species, about 100 yards in front of us.—J. R. C.]

From Arakan, Northern Pegu and Northern Central Tenasserim, we have also received it, but it seems comparatively rare everywhere east of the Brahmaputra.

11.—Falco jugger, *J. E. Gr.*

I shot an unmistakable female of this near Manipur town, and on another occasion saw a male near the same place. I never observed it on any other occasion, and had I not examined one specimen myself, should have hesitated to record it, for it has not yet been observed in Burmah or any part of Assam, and it seems altogether outside of its normal range in Manipur. It is just possible that the pair were chance stragglers. Hawking is unknown in Manipur, and the Laggar Falcon is moreover scarcely ever trained, now-a-days, anywhere, so these cannot have been escaped or released captive birds.

13.—Falco subbuteo, *Lin.*

Only seen in the low narrow and western strip of Manipur, lying between Noongzai-ban and the Jhiri early in February. Elsewhere in Manipur, though it may occur as a straggler, I never shot or saw it. I have received it from N.-E. Cachar, but have no record of its occurrence elsewhere in Assam, or anywhere in British Burmah.

[A female shot in the Dibrugarh district in October 1885 measured :—Length, 12·75 ; expanse, 30·75 ; tail, 5·90 ; wing, 10·50 ; tarsus, 1·35 ; bill from gape, 0·80 ; weight, 8 5ozs.

Legs and feet greenish yellow ; cere, eyelids, and orbital skin yellowish green ; irides brown ; bill, above plumbeous, deepening to black at the tip ; below base yellowish green, rest plumbeous ; mouth inside bluish. This was the only specimen I shot. She was feeding on winged termites at dusk, and had also eaten a mouse and dragon flies.—J. R. C.]

14.—Falco severus, *Horsf.*

This species also I only observed in the Jhiri valley. In the tract referred to it seemed rather common. I shot at a pair sitting side by side at the very top of a huge dead tree. The female fell ; the male flew off apparently uninjured, the length and narrowness of his wings being very striking and quite swiftlike, as for some minutes he circled round and round high in air.

The following are details of this female, to judge by the plumage, an old adult :—

Length, 14·1 ; expanse, 28·75 ; tail, 4·65 ; wing, 9·4 ; tarsus, 1·38 ; bill from gape, 1·0 ; weight, 12ozs.

Bill blackish, bluish at base; cere, gape, eyelids and bare orbital space, rather pale yellow; legs and feet dull, rather clayey yellow; claws, black.

I have this species from N.-E. Cachar, but from no other locality in either Sylhet or Cachar. From Jonkotollee (Dibrugarh) however I have received it, and it probably occurs in suitable localities, wherever there are broken or hilly forest tracts, throughout Assam.

[Pretty common in the Dibrugarh district, frequenting tea gardens, and the edges of the forests bordering the tracts of paddy lands. Several were noticed knocking about the garden in August, and a specimen was shot as late as the 18th of May, so that they retire to the hills to breed from June to the middle of August—J. R. C.]

It must doubtless occur in British Burmah, but I seem to have no specimen thence nor any authentic record of its having been actually procured there. And similarly, though it has certainly, I understand, been sent from Malacca, we have never yet succeeded in meeting with a single specimen anywhere in the Malay peninsula.

16.—Falco chiquera, *Daud.*

Close to Noongzai-ban itself, a male of this unmistakable species passed within 20 yards of me at about the level of my feet. I was lighting a cheroot at the moment, but caught up my gun instantly and fired. However either I missed or the bird had got too far for No. 10 shot, and I saw no more of it, nor did I ever again see a specimen in Manipur, though I met with it both in Cachar and Sylhet. It has not yet been observed anywhere in the valley of Assam, nor does it extend I believe to any part of British Burmah.

17.—Cerchneis tinnunculus, *Lin.* (*Man*—Koonoo-Karang.)

In the hills this species was comparatively rare; in the basin of Manipur very common. I have often seen half a dozen in a morning.

It occurs throughout the valley and hills of Assam to our extreme eastern outpost, in Sylhet and Cachar, Arakan, Pegu, and the northern and central plains portions of Tenasserim.

[Very common during the cold weather throughout the Dibrugarh district.—J. R. C.]

18*bis*.—Cerchneis pekinensis, *Swinh.*

I never myself shot or saw this species, but I examined an adult shot in the Northern Manipur hills, and as I have

received it from Dibrugarh and from N.-E. Cachar, and Godwin-Austen obtained it in the Naga hills, it is probably a regular visitant to Manipur, though not at the season during which I visited that state.

[During March one year a party of six birds, which were hawking about the tea, and every now and again settling on a dead tree, attracted my attention. I bagged two males, which must be the specimens alluded to above by Mr. Hume. I never again saw this species in the Dibrugarh district.—J. R. C.]

I am not aware that it has as yet been observed in any portion of B. Burmah.

19*bis*.—Cerchneis amurensis, *Radde*.

Although I failed to secure any specimens of this species I twice saw it—once in the Manipur basin and once in the Eastern hills, on both occasions during May. Once a flight of some 30 or 40 passed over me, not above 30 yards high, when I was walking in the Residency grounds towards evening with Colonel Johnstone and his family. The peculiar plumage of the males was unmistakable. On another occasion a single old male passed over me near Machi in the Eastern hills, and I knocked it down apparently dead. It fell into dense jungle a coupled of hundred feet below, and though I had the whole place searched for hours by a whole army of Nagas, several of whom were with me when I fired and saw it fall, we never got it. A kind of pole cat, as well as I could make out, had carried it off; they found a lot of its feathers both where it fell and along the track of some kind of cat, which they traced for nearly a mile through the dense jungle. The Nagas there know the bird, and said that it was common at times, and that then they did not see it again for months, but it was impossible to make out from them clearly at what seasons it came. I have received this also from N. E. Cachar and from near Dibrugarh.

[A regular cold weather visitant to the Dibrugarh district, but never remaining for any length of time. Their flight is very like that of *Glareola orientalis*, though not so heavy as that of the latter species. On one occasion I saw one of this species alight on the stump of a tree only five feet off the ground. They skim along the tops of the tea bushes in search of their prey, whereas *C. pekinensis* flies high up nearly out of range of an ordinary gun.]

I have seen a specimen from Northern Pegu which I have now no doubt belonged to this species, though at the time I was uncertain whether to assign it to *amurensis* or *vesper-*

tinus, but I have no other record of its occurrence anywhere in British Burma.

It is a remarkable fact that I never met with any *Hierax* or, as Mr. Sharpe prefers, *Microhierax*, in Manipur.

20.—*H. eutolmus*, Hodgs., occurs in the Garo hills. It has also been found in Arakan, Northern Pegu, and the northern and central portions of Tenasserim. Further south it is replaced by *H. fringillarius*, and might well occur in Manipur

20*bis*.—*H. melanoleucus*, Bly., is recorded by Godwin-Austen from Lukhipur in Cachar, only a few miles from the western boundary of Manipur, and from the Dafla hills, and I have received numerous specimens from Khowang and Joonkotollee in the Dibrugarh district, and this too must probably occur in Manipur, though I certainly never saw any *Hierax* there.

Their flight, with which I am familiar, is very characteristic, a good deal resembling that of *Artamus*, but still recognisably distinct at a considerable distance, and had they not been very scarce, I must have at any rate have *seen*, even if I had not succeeded in shooting one.

[Pretty common in the Dibrugarh district. A flock of eight individuals took up their quarters in the Khowang garden in a small clump of middling-sized trees that stood in the centre of a large sheet of tea. During the day they used to be roosting about, but in the evenings and early mornings were busily engaged stooping at bats, gadflies, and butterflies, and even small birds. The call is peculiarly falcon-like, and although the flight resembles that of *Artamus* the sharp outline of their flight feathers readily distinguishes them at a distance. They are permanent residents, as in September I saw one of this party with a butterfly in its beak enter a hole in a branch of one of these trees, where no doubt it had young. The nest hole was on the underside of a dead branch that grew out diagonally from the main stem, and about 30 feet off the ground, which was strewed with their dung and the remains of insects and small birds. As the branch looked very rotten I could not persuade even a Naga to go up. All these eight birds were shot and another pair took possession of these trees, and were there undisturbed as long as I was in the garden. My successor informed that they disappeared suddenly some weeks after he took charge.—J. R. C.]

This species is not known to extend to any part of British Burmah.

Once in the Western hills, I saw, but too far off to permit of my including it, what I felt sure was an old female Goshawk.

21.—*Astur palumbarius*, Lin.—This may seem improbable,

but I have a very fine specimen of this species from Shillong in the Khasi hills.

22*bis*.—Astur rufitinctus, *McClell.*

Unknown in the basin of Manipur, it is by no means uncommon in the Eastern hills, and I once saw it in the Western hills. It occurs, I know, in the Northern hills.

Godwin-Austen obtained it near Asalu in the Naga hills, and I have received it from Tippook near Dibrugarh, and from N. E. Cachar. It has been received or recorded from various localities in the Tenasserim hills from Karenee to Bankasoon, throughout which, however, it is very rare. It has occurred in the north Pegu hills, and Blyth gives it from Arakan.

23*bis*.—Astur poliopsis, *Hume.*

I never met with this in any part of the Manipur hills, though it may doubtless stray into some of the low valleys. In the basin of Manipur it occurs, but even there is rather scarce, less so in the south about Moirang and Soognoo, more so north of the capital.

As in the case of the allied *A. badius*, the color of the irides, even in apparently old males, varies from intense yellow to bright ruby red. Usually the legs and feet are yellow, duller and faintly greenish on the tarsi; claws black; bill blackish, pale dingy blue on each side of upper mandible just above the gape and on all but the tip of the lower mandible. All the Manipur specimens are true *poliopsis*, precisely identical with Peguan and Tenasserim examples.

In Assam its limits are at present uncertain. I have 23—*A. badius*, Gm., from Sylhet, Dibrugarh (where Cripps says it is pretty common and a permanent resident) and Shillong, and Godwin-Austen records it from the Eastern Naga hills, while I have both this and *poliopsis* from Cachar.

Poliopsis is common throughout Tenasserim and Pegu, and though Blyth records *badius* from Arakan, this was before this present species had been discriminated, and I suspect that the Arakan bird also is really *poliopsis*.

24.—Accipiter nisus, *Lin.*

I only once shot this and that in the Western hills, but I on several occasions saw what I believed to be this species. At the same time Manipur is somewhat outside the range of this species, and the birds I saw may have been some other *Accipiter*.

This species has never been recorded from Cachar or Sylhet.

Nor did Godwin-Austen apparently get it in the Garo, Khasi or Naga hills. I have received it, however, from near Dibrugarh, and have also a specimen (which should, however, probably be referred to the larger Oriental form *melaschistus*) from Shillong in the Khasi hills.

[This species too is rather common in the Dibrugarh district, but although I have shot it in May, June and September, I am uncertain as to its breeding in the district.—J. R. C.]

Nisus is a rare straggler to the Tenasserim hills and Northern Pegu, and has occurred off the Arakan coast near Akyab.

I once saw a very small *Accipiter*, which I took to be 25—*A. virgatus*, Reinh., but I failed to secure it, and have therefore no certainty about it. It has, however, been sent from Dibrugarh, and is a rare visitant to Northern Tenasserim, Northern Pegu and Arakan.

27*bis*.—Aquila nipalensis, *Hodgs.*

A few frequent the northern half of the basin, about the capital, during the cold season. I shot none in the wetter southern portion and none in the hills. I only shot two, for they were wild and difficult to circumvent, but I saw from first to last probably a score. Besides those I killed I have noted seeing five others in the neighbourhood of the capital—a pair circling over Buri Bazar and another perched on a tree half way between that place and Bishnoopur, and I did not note half the specimens I saw. I fancied I once or twice saw it at the Logtak lake, but none of the Eagles I shot there, some twenty in number, proved to belong to this species, and it is one that affects dry rather than damp localities, so I was probably mistaken.

This species has not yet been recorded from any part of Assam, Sylhet and Cachar, but I have a single specimen from Shillong in the Khasi hills.

It occurs, for the most part sparingly, in many portions of Pegu, and has been sent from Arakan. Davison obtained the remains of one near Moulmein and saw it once or twice in the Tenasserim hills, but it is very rare in that province.

There is a sad confusion in the entries in regard to this species in some past volumes, because at one time, following the B. M. C., we applied the name *mogilnik* (which really applies to the white shoulder patch Imperial Eagle) to this present species.

28.—Aquila clanga, *Pall.*

Seen only at the Logtak lake, but there they are very common and easily shot, being constantly seen perched on the

large bamboo stakes by which the fishermen keep their floating weed islands in position. I dare say I have seen twenty in a morning, every one of which I could have shot from the boat with heavy shot, as they never rose till one was within 40 yards of them, and often did not move though the boat passed within 20 yards.

These birds feed largely on fish and frogs, but are none the less ready to pounce on wounded fowl or snipe, but I never saw them endeavour to strike an unwounded bird, big or little.

I cannot find that any one has as yet procured this species in any part of Assam, though it must necessarily occur there.

[*Aquila, sp.*—On several occasions I saw specimens of an Eagle which might have been *A. clanga*, but never having secured a specimen may be wrong in my supposition.—J. R. C.]

It is not, I gather, common there, but occurs in both Upper and Lower Pegu, and has been sent from Arakan. It may occur in Northern and Central Tenasserim, but I have hitherto failed to obtain any conclusive evidence of this.

30.—Aquila hastata, *Less.*

Three shot at the Logtak lake, and others (at least what I believed to be this species) seen. But this is far less common than *clanga*, which is clearly *the* Eagle of the lake.

This species has not yet been recorded from any part of Burmah (except Arakan, whence Blyth notes it) or Assam, except a single specimen obtained by Godwin-Austen in the Western Khasi hills, but this too will doubtless prove to be generally distributed in Assam if not in Upper Burmah.

In the drier upper portion of the valley I hunted a small brown Eagle for nearly a whole day but failed to obtain it. I believe it to have been 31—*Hieraëtus pennatus*, Gm., and though this has not as yet been procured in any part of Assam, it occurs sparingly both in the dry upper portions of Pegu and in the dry plains portions of Tenasserim bordering on Pegu.

32.—Neopus malayensis, *Reinw.*

By no means uncommon in the Manipur hills generally, but still very sparingly diffused, so that I often and often marched for a week without seeing one, and never saw more than a pair on any one day.

The long fan-like tail and the peculiar fashion it has of quartering a hill side give this bird a very Harrier-like

character when seen. It has often been compared to a Kite, but it has never seemed to me a bit Kite-like in its flight, outline and habits, or indeed like any other bird except a Harrier. One day especially I watched one of these and three or four Pied Harriers working backwards and forwards over a brushwood-covered slope, at an elevation of about 3,500 feet, sometimes above and sometimes below me, and despite the difference in color and the much greater size of the Eagle, the correspondence in shape and modes of movement was most striking.

This species has never as yet been observed in any part of Assam, and only once in British Burmah by Davison near the summit of Mooleyit.

34.—Limnaëtus caligatus, *Raffl.*

Although I never procured a specimen I twice saw this species in the Western hills and once in the Eastern near enough to identify it with certainty. I have it from N.-E. Cachar, and Godwin-Austen obtained it in the Khasi hills.

[Pretty common in the Dibrugarh district, but from its forest-loving habits not often seen. These birds have a habit of shaking their tails from side to side when alighting on a branch.—J. R. C.]

It is generally, but rather sparingly, distributed throughout the whole of British Burmah.

37.—Lophotriorchis kieneri, *Gerv.* ?

Unknown in the basin, but met with both in the Western and Eastern Manipur hills. The flight is far more powerful than that of any of the *Limnaëti*, and the way in which a male struck a Wood Partridge that flushed within ten yards of me, reminded me more of the stroke of a Shaheen than of that of a Hawk Eagle. I do not know whether it is that the tail is shorter or the wings longer, but as this species passes with rapid beats of its pinions overhead, it looks for all the world like a gigantic Falcon.

Mr. Gurney, I believe, scarcely considers this species generically separable from the *Limnaëti*, but assuredly its outline, when alive, flight and stroke, are very different from that of any of the five species of that genus that I have personally observed.

I have received this species from the North Cachar hills, and Godwin-Austen obtained it from the Naga hills bounding Manipur on the north.

As yet I have no record of its actual occurrence in any part of *Burmah*, though it must surely occur in Tenasserim, as we

have obtained it in the same range of hills lower down in the Malay Peninsula.

It is noteworthy that, with *Spilornis cheela* along the southern flanks of the Himalayas right up to Sadiya and *S. rutherfordi* in the valley of Assam,* in the Khasi hills and N.-E. Cachar, with *cheela* again at Thyetmyo and Tonghoo in Upper British Burmah and *rutherfordi* throughout the rest of that province, I failed to see or hear (and the wild querulous cry is recognisable at a distance of half a mile) any species of *Spilornis* anywhere in Manipur. It seems incredible, for the southern half, at any rate, of the basin seems exceptionally suited to their tastes, but yet had any been there I must surely, constantly and especially on the look-out for this genus as I was, have either seen or heard it, and I am pretty confident that no species of this genus occurs there, at any rate during February and the three succeeding months.

40.—Pandion haliaëtus, *Lin.*

I first shot this at the Logtak lake, where there were several pairs, but after this I saw it about several of the larger rivers in the Western hills and about two of the larger streams of the Eastern hills near their debouch into the basin. I also shot one in the Imphal Turail, just below its junction with the Chakpee, the southernmost point of Manipur to which I was allowed to penetrate.

In Assam I have only received this species from N.-E. Cachar, but I know that it occurs elsewhere in that province.

[Found in the Dibrugarh district along the Brahmaputra and other large rivers, even where their banks are densely wooded.—J. R. C.]

In British Burmah it is generally distributed in suitable localities, but it appears to be scarce, except perhaps in Arakan.

Again it is remarkable that I met with no species of *Polioaëtus*. In Assam the large 41—*P. ichthyaëtus*, Horsf., occurs in the Himalayas, the Garo and Khasi hills and even the N.-E. Cachar hills.† From the latter, too, I have received a specimen of the diminutive 41*ter*.—*P. humilis*, S. Mull. and Schl., and its more robust northern form 41*bis*.—*P. plumbeus*, Hodgs., which latter Godwin-Austen obtained from the Naga

* [39*ter*.—*Spilornis rutherfordi*, Swinh.—Very common, frequenting cultivation and thin jungle. The dimensions of a female were: Length, 24·75; expanse, 58·0; tail, 11·40; wing, 17·50; tarsus, 4·0; bill from gape, 1·74. They are permanent residents.—J. R. C.]

† And also in the valley itself. Cripps says—

[*Polioaëtus ichthyaëtus*, Horsf.—In Dibrugarh, this specis principally affects the well-wooded banks of rivers, and, though not rare, is not near so common as *H. leucoryphus*. It is a permanent resident.—J. R. C.]

hills just north of Manipur.* Again *P. ichthyaëtus* is found in many parts of British Burmah from the extreme north to the extreme south, and *P. humilis* has occurred on both the Tenasserim and Arakan coasts. Nevertheless, though constantly on the watch for, and fully expecting to meet with, some species of this genus, I certainly never saw or heard (and this genus too has a perfectly unmistakeable cry) any *Polioaëtus* during the four months I was in Manipur.

42.—Haliaëtus leucoryphus, *Pall.*

Common in the southern portion of the Manipur basin; rare elsewhere. At the Logtak lake there were several pairs, and they were very common along the lower course of the Imphal Turail.

This species occurs throughout Sylhet and Cachar and in the valley of Assam, but as in Manipur it does not seem to enter the hills to any great distance.

[Common and a permanent resident in Dibrugarh and throughout Assam along the banks of large rivers. When steaming up the Brahmaputra river, nests of this species can be seen everywhere high up in the "Bombax" trees that grow so plentifully on the churs.—J. R. C.]

It is found in the plains portion of Eastern Pegu and the western plains portion of Tenasserim, but does not get quite so far south as Moulmein I believe, and has not yet been recorded from Arakan.

47.—Buteo plumipes, *Hodgs.*

A single specimen of this in the light plumage figured in the Fauna Japonica was obtained in the Eastern hills in April.

I have received it from the Khasi hills, but from nowhere else as yet in Assam, Cachar or Sylhet, and from only a few localities in British Burmah, where it is a rare straggler, *viz.*, Thayetmyo and Tonghoo in Upper Pegu and Thatone in Northern Tenasserim.

It is noteworthy that I met with no species of *Butastur* in Manipur, and that no species seems ever to have been recorded from any part of Assam, Sylhet or Cachar, though both *teesa* and *liventer* occur in the northern portions of Burmah and *indicus* in the south of that province.

---

* And which Cripps apparently found in Dibrugarh. He says:—
[*Polioaetus plumbeus*, Hodgs.—That there was a second species of *Polioaëtus* in Dibrugarh I have no doubt, as on the wing, its smaller size, excess of white below, and being found only in densely-wooded river banks, at once distinguishes it. They are however so very shy that I never bagged a specimen, although on several occasions individuals were fired at.—J. R. C.]

51.—Circus macrurus, *S. G. Gm.*

Just inside Manipur territory, in the Jhiri valley, I obtained one specimen of the Pale-chested Harrier, but this was the only specimen I saw, and I do not think it extends to the basin of Manipur.

I have a specimen from N.-E. Cachar, but I cannot find that it has been *recorded* from any other locality in Assam, Sylhet or Cachar, though I should expect it to occur in all.

This species occurs in Arakan, and is not uncommon in Southern Pegu, but I do not know of its occurrence elsewhere in British Burmah, and we never saw it in any part of Tenasserim.

52.—*Circus cineraceus*, Mont.

I never met with this species in Manipur, nor is it recorded I think from anywhere in Sylhet or Cachar, but it occurs in the Assam valley.

[Fairly common in the Dibrugarh district during the cold season, when it is to be found in the treeless tracts of grass jungle.—J. R. C.]

53.—Circus melanoleucus, *Penn.*

Common in the basin of Manipur, especially in the southern half, during February, March and the first half of April. Quite at the end of May I saw two specimens between Manipur and Bishnoopur, so that I conclude that some few at any rate breed here as they do in Upper Assam.

On the outer hills immediately overlooking the basin they range up to nearly 4,000 feet, but only as stragglers, and I never saw them really *inside* the hills, except in the Kopum Thall, a small basin in the Western hills, a miniature of the Manipur basin, where also it was common.

Of course rice fields and stubbles are its favorite haunts, but one often sees it working about the margins of jheels or over these if they are much overgrown with weed.

Though common they were excessively shy and wary, and although I often tried to shoot them I only got four from first to last.

This species is common throughout Assam right up to Sadiya, Sylhet and Cachar. It occurs also in suitable localities throughout British Burmah.

[*Circus melanoleucus*, Gmel.—Very common all over the Dibrugarh district, where they breed. One shot on the 20th of July turned out to be a ♀ in the male plumage, *vide* S. F., X, 327. They feed on birds and eggs as well as mice and insects. In the Julpigooree district I once shot a ♂ with

a small snake in its claws. They are about the boldest of the different species of Harriers seen in Assam, as they fly past well within range, but when seated on the ground it is rather difficult to stalk one of them. On the 13th April, 1885, when shooting on one of the churs of the Brahmaputra river with a couple of friends, a female of this species rose off a tangled mass of "Ooloo" (*Saccharum cylindricum*, Lin.) grass about 20 yards ahead of our elephants. On reaching the spot we found one perfectly fresh egg. The nest was a mere depression in an apology of a pad made of the dry stems, &c., of "Ooloo" grass, and was placed on a mass of tangled living grass about two feet off the ground. The country was perfectly open, with a few "Bombax" trees studded about, grass being the only cover for miles. In taking this egg home it got smashed; the pieces however were saved for comparison with any other eggs I might get of this species. A week later I was fortunate enough to get another egg at a place called Sepon, several miles inland from the Brahmaputra. There was a stretch of about 2,000 acres of ground covered with only "Ooloo" grass, and while beating this for deer, I noticed a pair of these birds chasing one another in the playful manner most birds do during the hymeneal season. The ♀ after a time was lost to view, but on our approaching the nest she flew off; I feathered, but did not get her. The nest and egg were similar in all respects to the first one, and like it got broken while carrying home. The pieces were sent to the Editor of S. F.—J. R. C.]

At the Logtak lake I saw several specimens of a very large Harrier quite of the type of females of *melanoleucus*, but decidedly larger and with a markedly more powerful flight. I was able repeatedly to examine them with glasses as they swept across, a few feet above the surface of the water, right in front of me, at distances of from 80 to 100 yards, and I entertain myself no doubt that they were *C. spilonotus*. Unfortunately all my craft proved of no avail; day after day I devoted hours to the attempt, but though there were certainly not less than five about the lake, I never could succeed in circumventing one, and so am unable to enter this species in the list.

C. spilonotus has not yet, so far as we know, been procured anywhere within our limits.

54.—Circus æruginosus, *Lin.*

Not very scarce at the Logtak lake, but only once or twice met with elsewhere in the basin and never in the hills of Manipur. I never saw this species in Sylhet or Cachar, nor has any one of late years recorded it from Assam, though it doubt-

less must occur, though possibly very sparingly, throughout the plains portion of that province.

[Not very common in the Dibrugarh district, but this very likely is from there being such few "jheels," properly speaking, during the cold weather.—J. R. C.]

In British Burmah it occurs everywhere in the plains portion of the country.

55.—Haliastur indus, *Bodd.*

Sparingly distributed throughout the basin, least rare towards the south; occasionally seen along streams in the hearts of both the Eastern and Western hills; common throughout Burmah and, I believe, the whole of Assam.

[Fairly common along the rivers, and occasionally seen inland in the Dibrugarh district, wherever there are any pools of water.—J. R. C.]

56*bis*.—Milvus melanotis, *Tem. & Schl.*

Kites are, compared with most other parts of the Empire, extremely scarce even in the basin of Manipur, and in the hills I did not see them at all. I never met with the common medium-sized Kite of India *par excellence*, to which I considered that the name *govinda* of Sykes applies. All I saw were either the large heavy flying bird with the huge pure white patch on the under surface of the wing or the little dark *affinis*. *Melanotis* occurs, though sparingly, throughout the Assam* valley. I have a specimen from Shillong, and I procured it both in Sylhet and Cachar. I have not yet seen this species from any part of Burmah except the Western portions of Upper Tenasserim and the Eastern portions of Lower Pegu.

56*ter*.—Milvus affinis, *Gould*.

This was by far the commonest Kite in Manipur, but even of this I doubt whether I saw thirty specimens from first to last. At the same time I note that, according to the people, they are more common later in the summer and during the autumn.

This is the only species that I have seen from the greater part of British Burmah, and it appears to occur throughout Assam, Cachar and Sylhet. But I am not certain that it does get up to the extreme east of the valley, as a specimen from

* [*Milvus melanotis*, Tem. & Schl.—Only observed in the Dibrugarh district during the cold season, consorting with, but not so common as, the last species.—J. R. C.]

beyond Dollah is *govinda*, and this latter also occurs in various places in Assam,* &c.

57.—Pernis ptilorhynchus, *Tem.*

I certainly identified and followed for a mile or more as it dodged from tree to tree a bird of this species—one of the dark brown type, with white, strongly black-striated lower surface and no perceptible crest, but I failed to shoot it, so some may hold it doubtful; but I am certain of the identification as I have shot scores and the flight and modes of movement are unmistakable, let alone my having twice seen it clearly at distances of 50 or 60 yards as it crossed openings in the forest. This was six or seven miles east of the Jhiri in the westernmost portion of Manipur, and as I had procured a specimen in a precisely similar locality only four or five miles west of the Jhiri in N.-E. Cachar, whence also Mr. Inglis has sent me specimens, there can be no reasonable doubt of the matter. I never saw it elsewhere in Manipur, and if it occur at all east of the Noongzai-ban range, which I much doubt, it must be extremely scarce. Except from N.-E. Cachar I have received it from no other locality in Assam as yet. In British Burmah it occurs sparingly, but its distribution there has never been at all satisfactorily worked out. It does not, I believe, occur in Southern Tenasserim (though it extends much further south), and is very rare elsewhere in that province. In Pegu it is perhaps a little less rare.

58.—Baza lophotes, *Cuv.*

I only once met with this species, and this was in the dense low-lying forest near the western boundary of Manipur between the Jhiri and Noongzai-ban. I never saw it elsewhere in Manipur, but it is everywhere a rare bird, hard to see, and crepuscular in its habits, and it may extend to other parts of the Western and the Eastern hills. I have received it from N.-E. Cachar, and Godwin-Austen obtained it near the head of the Jhiri in the Khasi hills, but this is all I know of its occurrence in Assam, Sylhet and Cachar.

[Pretty common in the well-wooded parts of the Dibrugarh district. On several occasions I have seen three and four of them soaring in circles high in the air, as stated by Mr. Gray on the authority of Dr. Jerdon. Occasionally, too, they may be seen rising in the air some 30 or 40 feet, then coming down

---

* [*Milous govinda*, Sykes.—Very common during the cold weather, when they may be seen hanging about the pools of water in the vicinity of villages. During the rainy months every day they are to be seen in the station of Dibrugarh.—J. R. C.]

again with closed wings, and up again, and so on for several times in succession. When alighting on a branch the crest is always raised. On the 24th June, 1881, I secured a nest with two young ones. The nest was a mere pad of twigs, 9 inches in diameter and 4 inches deep. On the top of the pad were a number of dead leaves, which might have been green when first placed there, as some of the twigs forming the nest had leaves attached to them. The nest was placed in a fork of small "Jamoon" (*Eugenia jambolana*) tree, in thin forest on the edge of a "pathar," and about 30 feet off the ground.—J. R. C.]

In British Burmah, I only know for certain of its having been found in the central and southern portions of Tenasserim and in Arakan.

59.—Elanus cæruleus, *Desf.*

Practically unknown in the hills, but probably numerically the most abundant Raptor in the Kopum Thull and the Manipur basin.

About the end of February they were about in families, and one day near Langtabal, the old capital, I came upon two old birds and four young ones (the latter full grown but with the entire upper plumage white tipped), each perched on one of the outer sprays of an isolated bamboo clump. The wind was blowing and they were being swung about, but they sat as if enjoying the swing. I shot the old male as he sat, on which the old female flew away, but the four young ones kept darting down distinctly trying to lift the body of their father that was lying breast uppermost on the short green turf on which it fell. Then I shot one of the young ones, but still the other three kept darting down, trying to rouse the fallen birds. This kept on for several minutes, and even when I walked up and picked up the slain, the three survivors kept hovering round me and darting down to my hands—on the one hand perfectly fearless, on the other without any attempt to strike me. Not satisfied with this they and the mother who joined them but kept out of shot followed me, hovering round and round at a gradually increasing distance for fully a mile.

I never saw any birds of prey behave thus before. Generally they were very tame, and, as a rule, let you pass the tree on which they were sitting as close as you liked without moving. Very often even, though you stopped within 20 yards and stared at them, they would not take the trouble of rising. Throughout the plains portion of Cachar, Sylhet, and the valley

of Assam,* this species is common, but it does not seem anywhere to go far into or ascend the hills to any height.

It occurs in Arakan, throughout Pegu, and in the north-western plains portions of Tenasserim, but does not seem to extend to the central or southern portions of the latter province.

In Manipur I found that, during the spring, they fed chiefly on mice.

60.—Strix javanica, *Gm.*

I never myself heard or saw this species in Manipur, but I received a specimen killed in the western portion of Manipur, lying between the Jhiri and Noongzai-ban, and it must therefore be included in our list. Elsewhere I do not think it occurs in Manipur. Mr. Inglis sent it me from N.-E. Cachar, but I appear to have no recent record of it from any other part of Assam.

[By no means rare in the Dibrugarh District, but as it has such a low call it is seldom noticed. During the seven years I was in Assam I shot over a dozen specimens, and heard numbers besides.—J. R. C.]

In Pegu it is common in all suitable localities. In Tenasserim it is excessively rare, if, indeed, it does occur there, which I have never been able to make sure. From Arakan I have seen a single specimen, but if Blyth is correct it is common there.

61.—Strix candida, *Tick.*

I found several birds of this species in grass in the Kopum Thull, well in the interior of the Western hills, and I heard of it, but never saw it, in the Manipur basin itself.

I have received it from near Shillong in the Khasi hills, and Godwin-Austen obtained it near the Kopili river. It occurs, I believe, throughout the valley of Assam, though I have never received it thence.

It has occurred in the northernmost portions of Pegu, but does not, so far as we know, extend to Tenasserim, and I have no record of it from Arakan.

62.—Phodilus badius, *Horsf.*

Although I never met with this species, it certainly occurs in the Manipur hills. In the Western hills I saw a whole wing, and in the Eastern hills some of the Tankul-Hoondoongs described it perfectly.

---

* And Cripps says: Common and a permanent resident in the Dibrugarh district.

Even where it does occur it seems always to be a very scarce and strictly nocturnal forest bird, very seldom seen and very hard to procure, yet the Tankuls knew it perfectly, and promised, indeed, to procure specimens but failed. They said there were plenty in the forests, but that it was by mere chance that they came across it, though sometimes they stumbled upon several within a few days.

I have received it from N.-E. Cachar, and from near Dibrugarh.

[In July 1879 a villager came across a female sitting on a road leading through heavy forest. It flew up into a tree, and was knocked over by a stick. I kept it alive for four days, during which time, if any one went near, it would make a hissing noise similar to that of the last species. A friend of mine picked up another specimen dead, in some heavy forest. The cause of death was the wingbone of a bat, which it had swallowed, and this in course of time had protruded through the stomach. Unfortunately he neither sexed nor measured it. The female I got had five pale fulvous yellow feathers on the crown, each feather having a small black spot at the tip. They cannot be rare in the district, but, from their strictly nocturnal habits, are seldom seen.—J. R. C.]

It certainly occurs in Northern Pegu, but we have never seen it from Tenasserim proper, nor has it been recorded from Arakan.

64.—Syrnium newarense, *Hodgs.*

Not uncommonly heard in both the Eastern, Southern and Western hills, but owing to the bad weather and cloudy nights, I only succeeded in bagging one specimen, and that at Machi in the Eastern hills.

Our three species of this type may be readily separated by a glance at their faces.

	Face, *i.e.*, space inside ruff, below and behind the eye.	Band from culmen continued as a broad superciliium over the eye.
S. newarense ...	Mingled brown, yellowish brown, or brownish white, finely barred with a darker brown; wing from 14·2 to 17·2.	White.
S. indrani ...	Bright ferruginous buff, barring obsolete; wing from 11·75 to 13·5.	White.
S. maingayi (S.F. VI. 27)	Dull ferruginous unbarred, or nearly so; wing, in two specimens, 14·0—15·0.	Dull ferruginous.

Our Manipur bird with a wing 14·5 is no doubt *newarense*, but it has still to be noticed that, while the culmen, band and supercilium is white, the face is more tinged with ferruginous buff than in any Himalayan example I have seen, while the barring is nearly obsolete.

I have received this species from near Shillong, and believe that it occurs throughout the Garo, Khasi and Naga hills.

I once received a specimen said to have been procured in the Arakan hills, but I regard this now as doubtful, and I have no other reliable record of its occurrence in Burmah, where, in Southern Pegu and Southern and Central Tenasserim, it is replaced by *S. seloputo*.

68.—Asio accipitrinus, *Pall.*

Found only once within Manipur limits, in the same dry grass in the Kopum Thull in which *Strix candida* occurred.

Mr. Inglis has sent it to me from N.-E. Cachar, but it does not seem to have been procured from anywhere else as yet in Assam, Cachar or Sylhet.

[One specimen, a female, shot in November, 1880, in the Dibrugarh district amongst the tea bushes, had eaten a rat.—J. R. C.]

It has been procured in the extreme north of Tenasserim, and Blyth records it from Arakan; it doubtless occurs in Northern Pegu also, but the fact does not seem to have been ascertained as yet.

It has to be noted that I never saw or heard of 70.—*Bubo coromandus*, though this occurs in the north Khasi hills, and I believe in the valley of Assam.

71.—Bubo nipalensis, *Hodgs.*

I never myself obtained or saw this, but I examined a flat skin of one which was killed in the northern Manipur hills, and the Tankuls of Hoondong, in the Eastern hills, knew the bird and said that it was occasionally seen in their forests.

A little further north Godwin-Austen obtained it from the Naga hills, and again in the Darrang district of the Assam valley.

[The only specimen I handled during my residence in the Dibrugarh district was one sent me alive by my friend Mr. S. E. Peal, who shot it whilst calling on a tree near his bungalow one moonlight night in February, 1883. It was a ♂ and measured:—Length, 23·50; expanse, 60·0; tail, 9·50; wings, 17·25; tarsus, 2·0; bill from gape, 2·20; weight, 5·2oz. Irides

Kolkata 700 123 ALIPORE
Accn. 449
dt. 12/12/06

brown, feet yellow, bill yellowish, cere and eyelids yellow.—J. R. C.]

It has been once procured in the northernmost portion of British Burmah, and possibly occurs (*vide* S. F., VI., 30) further south.

72.—Ketupa ceylonensis, *Gm.*

I met with a single specimen in the valley of the Limatak in the Western hills, and heard it once or twice in the Eastern hills also. I daresay it occurs in suitable localities throughout Manipur, but it is extremely scarce.

It occurs pretty well throughout Assam. I have it from Shillong, from near Dibrugarh* and from N.-E. Cachar. Though sparingly distributed it is found throughout B. Burmah in suitable localities.

From the people's description I strongly suspect that 73.—*K. flavipes*, Hodgs., occurs in the northern and north-western Manipur hills. Godwin-Austen obtained a specimen of this from the north Khasi hills, but it does not, that we know of, extend to B. Burmah.

74.—Scops pennatus, *Hodgs.*

On the 19th of March I came across four birds of this species in a thick tree in the outskirts of the village of Moirang in the Manipur basin at the south of the Logtak lake. I shot all four one after the other, but though I often heard the bell-like whistled call in both Eastern and Western hills I never shot or saw the bird again. Of the four birds three were females and had the wings 6, 6, and 5·8; the fourth an old male had the wing 5·6. These birds are identical with others from Hazara to Tenasserim.

I have it from Shillong in the Khasi hills, but from nowhere else as yet in Assam, Cachar or Sylhet, though it is sure to occur in all.

[Common in the Dibrugarh district. Once one of these flew into my bungalow at night. Often when it has been moonlight I have watched them sitting and calling on my garden fence, as well as on the bungalow roof.—J. R. C.]

It occurs, though sparingly, throughout Pegu and Tenasserim, and Blyth records it, wrongly, under the name *bakhamuna* from Arakan.

---

* Cripps writes that "it is fairly common in the Dibrugarh district, but only where there is forest about. The Assamese call it Hoodoo."

75.—Scops lettia, *Hodgs.*

Though not often seen, this species occurs commonly alike throughout the basin and along the lower spurs of all the surrounding hills.

The note of this Owl is *woo-oo*, a sharply uttered cry, the two syllables almost running into one. It is not very loud and is repeated some ten or a dozen times (after which the bird will remain silent for ten minutes or so) at intervals of about 90 seconds. The note does not approach a whistle ; it is a rather clear and not unmusical call, jerked out rather sharply. I am particular about this, because I shot several in the act of calling, and paid particular attention to the note, in regard to which I have hitherto been in error. It rarely recommences calling without changing its perch. In moonlight nights it is not difficult to follow up by the cry and shoot, but the weather was so bad that it was only on three nights that I was able to go after them. I never heard it so far as my notes show on any of the higher ranges.

The wings of males measure 6·45 to 7·0 and of females from 6·85 to 7·2. They are all identical with Sikhim, Nepalese, and Kumaon specimens.

I have this species from N.-E. Cachar, but from nowhere else as yet in Assam.

Godwin-Austen first recorded a single bird of this type as *S. lempiji* on the strength of Dr. Jerdon's identification; but there can be little doubt, I think, looking to the dimensions and description that he gives, that this particular specimen was, as he himself had surmised, one of the rufous forms of *S. pennatus*.

But on another occasion he goes on to say that all the *Scops* he had procured in the Naga hills and Asalu are undoubtedly *lempiji*. Possibly when he wrote he had not noticed the only constant difference between this latter and *lettia*, which consists in the foot and extreme basal portions of the toes in *lettia* being feathered, while in *lempiji* these parts are bare. *Certainly* all my N.-E. Cachar and Manipur birds are typical *lettia*, and it seems hardly possible that in the Naga hills, lying immediately north of these districts and between them and the Himalayas, the birds should be *lempiji*.

Lettia seems generally distributed over Arakan and Pegu, but in Tenasserim is replaced by the doubtfully distinct *lempiji*, or at any rate the Malayan form which (never having seen a Javan specimen myself) we call *lempiji*. This latter also straggles into the S.-E. corner of Pegu.

It has to be noted that I nowhere in Manipur met with either 76.—*Carine brama*, Tem., or its northern Peguan representative 76*quat.*—*Carine pulchra*, Hume. I found the former common in Cachar, and have received it from N.-E. Cachar on the very borders of Manipur. Godwin-Austen obtained it in the Khasi hills. It must needs occur, I should fancy, in the north-western and northern portions of Manipur if nowhere else, but I never obtained a glimpse of it, never even heard its chattering whisper, in any portion of the state I visited.

79.—Glaucidium cuculoides, *Vig.*

This species is very common throughout the Western hills, where I saw numbers, not a few, sitting out on low bare branches of trees or on dry stumps in the broad, hot, midday sunlight; but in the basin I never saw it, nor did we ever meet with it or hear it in the Southern or Eastern hills, and I do not think it extends to these latter. Its chuckling, vibrating call is very distinct and easily recognized.

This species occurs in the Garo, Khasi and Naga hills, and I have it from N.-E. Cachar and several localities (Joonkotollee, Khowang, Tippook) in the neighbourhood of Dibrugarh.

[Very common in the Dibrugarh district, and very noisy. For a nocturnal bird it is astonishing how long it keeps out in a blazing sun; only last December I saw a pair at 11 A.M. basking in the sun on the Burmese Pagoda, in the Eden Gardens at Calcutta. They feed on earthworms occasionally.—J. R. C.]

Again it is common in suitable localities throughout British Burmah, so that its absence from the eastern Manipur hills is, to say the least, unexpected.

80.—Glaucidium brodii, *Burt.*

Unknown in the basin, rare in the Western, common in the Eastern hills.

Of course, as remarked by Sharpe, *Athene minutilla* of Gould (B. of Asia, XXII, pl. 4, text) from Assam is only the young of *G. brodii*, for which I had long previously proposed (Rough Notes, p. 420) the name *immaculatus*. I have specimens of the unbarred youthful form from Simla, Sikhim and Manipur all precisely alike.

The bird varies much in size, and the wings run from 3·1 to 3·9. That this is an individual difference and not due to age is clear from the fact that the very smallest bird is a perfect adult, while the type of my supposed *immaculatus* has the wing 3·8. It is a female no doubt, but then I have adult females with the wing only 3·6.

In the Western Himalayas only the brown form occurs. In Sikhim almost exclusively the rufescent one, some only moderately tinged with ruddy, some with a deep ferruginous. The Manipur birds are all of the brown form, but the adults do seem to have the spots on the head and back barrings rather smaller and more sharply defined than any of my numerous Himalayan examples.

In the Himalayas it is rare to find it calling in bright daylight, though in the autumn and winter it may be heard as late as 10 A.M.; but in the Manipur hills I shot it repeatedly in the act of calling at and after midday. A very favorite perch is some bare twig jutting out 30 or 40 feet from the ground from some huge branchless trunk, close to which it sits and calls in the most persistent manner; when thus placed, you may go round and round the tree for several minutes without detecting its exact whereabouts.

The call consist of four clear whistled notes, *whoo—whoo-whoo—whoo*, very easily imitated, and the imitation promptly answered by any bird of the species near. All the small Tits and Liothricine birds hate this little Owl and are at once attracted by an imitation of its note.

Godwin-Austen says it is rather rare in the Naga hills; I have not yet received it from either the Khasi or Garo hills.

It occurs in Northern and Central Tenasserim, but is rather rare there, except about Mooleyit. The fact is that, though stragglers may be found much lower down, it is nowhere, I think, common below an elevation of about 5,500 feet, and it is certainly most abundant from that height to 7,500 feet.

Doubtless *Sitter.*—*Ninox burmanica*, Hume, must occur, as it has been sent from N.-E. Cachar and several localities in the neighbourhood of Dibrugarh and is common throughout Tenasserim. Still I never met with it, nor did I ever hear the well known *Ninox* cry at night.

[*Ninox burmanica* is pretty common in Dibrugarh. My first specimen was shot at 3 P.M. while perched on a tree that stood on the road leading out of my garden, and only 150 yards from the coolie lines. The Assamese call them "Mohcheerai" or Death birds, from a superstition that their weird call is a forerunner of death.—J. R. C.]

82.—Hirundo rustica, *Lin.*

The Manipur Chimney Swallow is one of those puzzling intermediate forms which are so common in the British Asian Empire, and which might, with almost equal propriety, be assigned to either *rustica* or *gutturalis*.

The following are the dimensions of two specimens measured in the flesh :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·1	12·5	4·5	4·7	0·4	0·6	0·6 oz.
♀ ...	6·9	12·5	3·2	4·8	0·48	0·6	0·58 oz.

Other specimens measure :—

	Wings.	*Tails.*
♂'s. ...	4·65 ; 4·5 ; 4·65 ; 4·85 ;*	3·75 ; 3·0 ; 3·8 ; 3·3*
♀'s. ...	4·5 ; 4·5 ;	3·3 ; 3·25
? ...	4·8*	3·6*

These are all Manipur specimens. A Sylhet male measured :— Length, 6·6 ; expanse, 11·8 ; tail, 3·35 ; wing, 4·5 ; tarsus, 0·39 ; bill from gape, 0·5 ; weight, 0·44oz. The colours of the soft parts, *viz.*, feet brown, bill black, irides brown, were the same in all.

Now this Sylhet male, the finest bird out of a large flock, is undoubtedly *gutturalis*, but the Manipur birds ought, I think, rather to stand as *rustica*. Four of the few I preserved have the wings 4·75, 4·8, 4·8 and 4·85, and these are the only *old* birds. The tail measurements are undoubtedly apparently rather those of *gutturalis*, but the fact is that only one single bird has the tail quite fully developed, and in that it was 4·5 (from *vent*), very nearly up to *rustica* mark, and much exceeding the longest true *gutturalis* tail.

I have dealt in detail with these two races (S. F., VI, 41), and can only repeat my doubts as to the propriety of specifically separating these two races, which so perfectly blend into each other throughout the major portion of this empire.

It certainly is curious that all the Manipur birds should incline towards *rustica*, because all the specimens I have seen from Tenasserim and Pegu, and the vast majority of those from Sylhet, Cachar, the Garo, Khasi and Naga hills and the valley of Assam,* have either been *gutturalis* or closer to this than *rustica*. At the same time both from Sadiya at the extreme east of the Assam valley and from N.-E. Cachar I have specimens referable to *rustica*.

One form or the other is common throughout the region, and in Manipur I found the somewhat larger form common to a degree. In the hills, western, southern and eastern, chiefly about water, in the Kopum Thull and the basin itself, *passim*. In the basin they were busy building early in March, and in the hills in May.

Of the specimens, whose measurements are given above, the two marked with a star (*) were at the time set down

* [The specimens which I procured from the Dibrugarh district are, as a rule, more rufescent than those of Upper India, and are altogether smaller. It is very common. The Assamese call it *Tail-doo-bee*.—J. R. C.]

by me as *tytleri*, and I was surprised to find them solitary in flocks of *rustica*, out of which their rich colouring led me to pick and shoot them; but on careful examination I find that they are merely richly coloured *rustica* and not *tytleri*. In S. F., VI, p. 42, I pointed out the differences between this latter and *cahirica*, but I do not think I have ever noticed the points by which *tytleri* may be separated from richly coloured *rustica*.

However pale the under surface of adult *rustica* or *gutturalis*, the frontal band is always a deep chestnut. This is never the case in *tytleri*, however deeply the lower surface may be tinted; the frontal band is always a rusty ferruginous, more or less dull or intense, but never *chestnut*. There is an analogous though less marked difference in the colouring of the throats in the two species. Again, however deeply tinted, the lower surface of *rustica* or *gutturalis*, the throat is always considerably deeper coloured than the breast and abdomen, but in the fullest coloured *tytleri*, the colouring of throat, breast and abdomen are absolutely identical. Lastly, in perfect adults of *rustica* and *gutturalis*, the pectoral gorget is unbroken (as in *cahirica*), while in *tytleri* it is in such invariably much broken towards the middle where the throat colour extends unaltered on to the breast.

These distinctions are founded on a very large series of Dacca specimens (whence Jerdon's type came). I find in my museum many birds entered as *tytleri*, from other localities which I now recognize to be only abnormally richly tinted *rustica* or *gutturalis* (they are not deeply coloured enough for *cahirica*), and I fear I may have given away and sent to museums some such as *tytleri*. But if so, all I can say is it is my mistake; they are not *tytleri*, in every specimen of which, from Dacca, the above distinctions hold good. I have many true *tytleri* from other localities also, but amongst those so catalogued in our museum, about five per cent. turn out to be only abnormally coloured *rustica* or *gutturalis*, chiefly no doubt the latter, which as a race runs more rufescent than the larger form.

82*ter*.—Hirundo tytleri, *Jerd.*

Doubtless the true *tytleri* does occur in Manipur; indeed I have twice noted having seen it near the capital, but during my visit I never actually shot it; all the Swallows I shot and preserved are clearly *rustica*. This is the more remarkable because Godwin-Austen says that during his visit this was the only form in Manipur during February and March; but *tytleri* is a very irregular migrant, and while some years

it abounds in Dacca, for two and three successively not a bird is to be seen. I say this on Mr. F. B. Simson's authority, who was for many years Commissioner of Dacca, to whom I owe all my specimens from that locality, and who for years specially watched this species, to which he first drew Dr. Jerdon's attention.

I have this species from N.-E. Cachar and also from Sadiya, but know nothing further of its occurrence in Assam, Sylhet or Cachar.

[I procured several specimens of this species, which I know well, having seen numbers in Dacca during my sojourn in the Dibrugarh district. They are only observed during the cold weather and at long and irregular intervals.—J. R. C.]

As to B. Burmah—in Tenasserim we only met with it about Tavoy—Mr. Oates says it is very common in Eastern Lower Pegu. It occurs in Northern Pegu and in Arakan, but its distribution is still undefined.

85*bis*.—Hirundo nipalensis, *Hodgs.*

Though not common, I met with this occasionally both in the hills and plains of Manipur.

Two males measured:—Length, 8·0, 8·0; expanse, 12·6, 12·5; tail, 4·4, 4·4; fork of do., 2·3, 2·45; wing, 4·7, 4·65; tarsus, 0·4, 0·5; bill from gape, 0·57, 0·55; weight, 0·65, 0·66oz. Legs and feet dull purplish brown; bill black; irides brown.

I found this species common about Karimganj in Sylhet, and have received it from N.-E. Cachar, but (though it doubtless occurs) from no place in the valley of Assam.

Godwin-Austen gives *H. erythropygia* from the Dafla hills, but I have little doubt that his birds really belonged to this species, which also occurs, it may be noted, in every province of B. Burmah.

85*quat*.—Hirundo substriolata, *Hume* (S. F., V, 264).

I met with this species, I believe, repeatedly in the valley of Manipur; it was always in flocks, hawking high in air. On only two occasions did I get single long shots, each of which secured a specimen. One a young male measured:—Length, 8·4; expanse, 13·1; tail, 4·4; wing, 4·9; tarsus, 0·57; bill from gape, 0·6; weight, 0·8oz. This specimen has a trace of a white spot on the inner web, near the base of the outer tail feathers.

I have this species not only from N.-E. Cachar, but also from near Dibrugarh, where, writes Cripps, "it is fairly common during the cold season." Possibly it occurs in Pegu (*vide* S. F., III, 42) and in Karenee (*vide* S. F., VI, 44).

From Sadiya also we have 85*ter*.—*H. intermedia*, Hume (S. F., V, 263), a fine Swallow of the *alpestris* and *nipalensis* type, but I saw no specimens of this in either Cachar or Manipur.

? 85*quat* (*a*).—Hirundo japonica, *Tem. & Schl.*

A single specimen shot close to Manipur town is thus doubtfully identified. It is an adult in full plumage, and, as the subjoined measurements will show, of almost *exactly* the same size as adult males of *nipalensis*, but with the rump band broader and strongly striated, and the whole lower surface with broad striations, *far* broader than are ever seen in *nipalensis*, closely resembling those of *substriolata*. But adults in this latter species have the wings 5·0, 5·1 ; even a young bird as above shown has it 4·9, while in this full plumaged male it is only 4·6.

Length, 7·3 ; expanse, 12·6 ; tail, 4·0 ; wing, 4·6 ; tarsus, 0·55 ; bill from gape, 0·58 ; weight, 0·9oz. Bill, legs, and feet black ; irides brown.

It is a much more massively built bird than *nipalensis* in this respect quite like *substriolata*, for which I took it when I shot it, but its dimensions preclude my thus assigning it, and I believe it must be identified as above.

This species has not yet been recorded from anywhere in Assam, Sylhet, Cachar or B. Burmah.

87.—Cotyle riparia, *Lin.*

I first met with this near the Logtak lake, where, on the 19th of March, I observed a huge *mixed* flock of this and the next species hawking over a meadow and shot a few of each to make sure. Again, on the evening of the 8th of May, a large flock of this present species only, appeared on the Machi ridge, where I was encamped, and hawked about (flying extremely fast and high, so that I, with great difficulty, secured a couple) until dusk. This Machi ridge is about 5,300 feet where the Martins were most abundant, and except for a small pond (which they did not in any way affect or notice) there was no water for miles.

Once more I saw a few hawking at eventide late in May about the huge broad moat that surrounds the Raja's palace at Manipur town. While, therefore, it is scarcely rare, it is, on the other hand, by no means one of the common birds you meet every day.

The wings of three specimens measure :—♂, 4·2 ; ♀, 4·1, 4·13. I have this species from N.-E. Cachar, from Sadiya, and from

Dollah, which is near the latter. It occurs, but probably as a seasonal visitant only, in many parts of Pegu and the plains portions of Tenasserim, north of Moulmein.

89.—Cotyle sinensis, *J. E. Gr.*

Occasionally seen about the larger streams in the Western and near the Southern hills. Common throughout the basin, especially about the capital and the Logtak lake. Only very rarely met with in the Eastern hills. A fine adult male, shot at Manipur town on the 23rd February, 1881, measured :— Length, 4·55 ; expanse, 10·0 ; tail, 1·85 ; wing, 3·7 ; tarsus, 0·4 ; bill from gape, 0·38 ; weight, 0·34oz. Legs and feet darkish brown with a faint purplish tinge ; tarsi feathered in front on the joint, bare elsewhere ; bill black ; irides brown.

I met with this species occasionally in moderate-sized communities all along the rivers of Sylhet and Cachar. From the valley of Assam, I do not find it recorded, and I have as yet received no specimens thence, but it almost certainly occurs there.

[Decidedly common in the Dibrugarh district, along the larger rivers, where the banks were precipitous. During the rains they migrate.—J. R. C.]

Godwin-Austen talks in his second list of this species breeding in January at Shirshang in the banks of the Lumessary river, but as he goes on to give dimensions—"Length, 12½ inches ; wing, 8¼ inches ; tail, 6½ inches, &c."—it is impossible to say to what species he referred.

This species is found in Arakan, Pegu and Northern Tenasserim.

94.—Delichon nipalensis, *Hodgs.*

I only once procured or saw this in Manipur, and that was near Tankul-Hoondoong in the Eastern hills, where, on a peak about 6,000 feet high, a small flock suddenly appeared about us, hawking at a tremendous pace, and equally suddenly disappeared, giving me only time to drop a single bird, a male, which measured :—Length, 4·4 ; expanse, 10·2 ; tail, 1·8 ; wing, 3·65 ; tarsus, 0·45 ; bill from gape, 0·4 ; weight, 0·45oz. Bill brown, paler at gape ; irides (shot out) ? brown ; tarsi and toes fully feathered ; soles fleshy ; claws whitey-brown.

According to the Tankuls who were with me small flights of this species are occasionally seen in this locality, but are more common in their hills further north. At the same time I am very doubtful whether they really distinguish between this species and *Cotyle riparia* and *sinensis* ; flights of the former of which at any rate do at times, as already recorded, appear high up on the Eastern hills.

I have never received this from any part of Assam myself, but Godwin-Austen records it in his fifth list from Koonchungbhum, in his Dafla hill list from above Doripee and again from the Eastern Naga hills. So far as we know it does not extend to Burmah, and Taukul-Hoondoong is the most southern locality at which it has been obtained.

96.—Chætura indica, *Hume.*

I met with flights of this species in both the Eastern and Western hills, once in the former, twice in the latter, but on neither occasion did I succeed in obtaining a specimen. They dashed all about, above and around, me for several minutes, but not one came within shot. I do not understand what made them so cautious everywhere in Manipur, for as a rule these birds take no heed of one, but trusting to their speed will dash past sufficiently close to permit of knocking them down with a whip were one only sharp enough.

I have this species from N.-E. Cachar and the Khasi hills, and *gigantea*, Hass., which many hold to be identical, from near Dibrugarh.

[*Chætura gigantea*, Hass., is very common in the Dibrugarh district during the rains, but they keep high up in the air hawking about, which is quite at variance with their habits in the Andamans, *vide* S. F., I, 473; but whenever there was a very heavy and sudden fall of rain, these Swifts would descend, and while the shower lasted, they would skim at lightning speed over the tops of the tea bushes; it was during these periods I managed to secure my specimens. One male shot in August, 1879, measured:—Length, 8·20; expanse, 19·50; tail, 2·40; wing, 8·20; tarsus, 0·70; bill from gape, 0·90; weight, 3·20oz. Legs and feet livid.—J. R. C.]

Doubtless the large Spinetail seen by Godwin-Austen on the Hengdon peak, at the head of the Jhiri at an elevation of 7,000 feet, was either *indica* or *gigantea* and not *nudipes* of Hodgs. (the Himalayan representative of the Australian *caudacuta*, Lath.) as Godwin-Austen fancied. I know nothing further of its distribution in Assam, Sylhet or Cachar.

One or other of the two forms (*indica, gigantea*) have occurred at various localities in all three provinces of British Burmah.

100*bis*.—Cypsellus subfurcatus, *Blyth.*

I found a flight of this Swift hawking about a stream that runs down into the Jhiri, in the lowland lying between that river and the Noongzai-ban ridge. This is the very

westernmost portion of Manipur, and I nowhere else met with it in that state.

I have it from N.-E. Cachar, and Godwin-Austen records finding a few pairs breeding in June near Shillong. But first he gives the wing at 5·1, which is smaller than that of any specimen I have ever seen, in all of which the wings have varied from 5·25 to 5·8, 5·55 being the average. Secondly, he says his is the first record of this species within the Indian area, whereas Shillong can scarcely be classed as lying within the Indian area, *and* I had long previously (S. F., II, 524) recorded a specimen from near Chanda, Central Provinces. No doubt this species must occur elsewhere in British Burmah, but we as yet have only observed it at the extreme south of Tenasserim.

A fine male, the only one I shot at the Jhiri, measured :— Length, 6·1 ; expanse, 13·4 ; tail, 2·32 ; wing, 5·6 ; tarsus, 0·41 ; bill from gape, 0·72 ; weight, 1·3oz. Legs and feet pale brownish purple ; bill blackish ; irides blackish brown.

101*bis*.—Cypsellus pacificus, *Lath*.

On the 16th of April, when on the hill above Aimole in the Eastern hills, at an elevation of about 5,500 feet, I "saw at least twenty times *Cypsellus pacificus*" (I quote from my notes), "which passed me at from 60 to 80 yards time after time ; dodge as I would I could never get within shot, but I identified them certainly."

I may add that I could not be sure whether there were only a pair or more. On the top of a two-domed, densely-forested hill was a small valley or dip dividing the two domes, and through this gap, every five or ten minutes, one or two of these Swifts would dart. They kept this up for fully two hours, during which I changed my post a dozen times in hopes of getting a shot, but they never passed within 60 yards. After that I waited another full hour, but they appeared no more, and I never saw them again in Manipur until on the return journey on the 31st of May. I watched a large flock of them hawking on a hill side near Noongba in the Western hills and again failed to get a shot.

I have received this species from N.-E. Cachar, as also from Sadiya, and from various localities in Pegu and Tenasserim ; in the former of which it seems to be very generally distributed and by no means rare.

[102.—*Cypsellus batassiensis*, J. E. Gr.—Although Mr. Hume omits it a few pairs of this species may be seen hanging about the areca nut palms growing in the villages that stud the open parts of the country in the Dibrugarh

district—J. R. C.] I did not meet with this in Manipur, nor had I, as far as I can now remember, any record of its occurrence anywhere in Assam, Sylhet or Cachar.—A. O. H.

102*bis*.—Cypsellus infumatus, *Sclat.*

I saw a few of these Eastern Palm Swifts about the villages of the Western hills; also a few about the capital itself. At Moirang, on the southern shores of the Logtak lake, they were very abundant towards the end of March, coming towards evening to roost about the palm thatches of the houses but disappearing during the daytime. Even in the evening, until it became dusk, they kept so high that it was impossible to shoot them, and then when with their rapid flight and dusky plumage they were almost undistinguishable in the growing gloom they did descend, they only made two or three turns and disappeared into the houses, and so, though I went after them two nights and saw hundreds, I only actually bagged four here. In April they were breeding in the roofs of most of the villages in the Eastern hills, and it was easy enough to shoot them, as some were about all day; but I could get no nests, all of which seemed to be in hollows in the middle of the thatch, which the people objected to my meddling with. Though they did not say so I gathered that they thought it would be unlucky to meddle with the nests.

The flight and general appearance of this species and the *Collocalia* are so much alike that, though the latter is a larger bird, has a longer wing with broader primaries and a broader, much less forked tail, I was continually shooting one for the other. Godwin-Austen found this species about Asalu and many villages in the Naga hills, but I have not seen it yet from any other places in Assam, Cachar or Sylhet.

It is common enough in Pegu and Tenasserim in suitable localities, but I have not heard of it from Arakan as yet.

103*a*.—Collocalia brevirostris, *McClell.*

This is the true Himalayan *brevirostris*. At pp. 289 and 290 (Vol. IX) I pointed out the distinctness of this species from *unicolor* of Jerdon.

I may now add that, independent of the feathering of the tarsus, *brevirostris* averages somewhat larger, is a shade paler on the rump, a shade darker on the rest of the upper surface, thus considerably enhancing the contrast, and it has, when freshly killed, a very distinct, though delicate, superciliary stripe over the posterior portion of the lores and the greater part of the eye, forming an excessively narrow, somewhat brownish, white edging to the web of one row of feathers.

This is not obliterated in good specimens, but is far less distinct than in life; in bad specimens it is just to be traced and that is all.

There is no such excessively narrow, strongly-contrasting superciliary line in *unicolor*.

When first discriminating it I referred to the excessive delicacy of the feathering of the tarsi in this species. All the specimens I shot in Manipur had the tarsi completely feathered when I picked them up. Now, while several tarsi are quite bare and several only partially feathered, only two show the complete feathering. Though the attachment of the string has something to do with it, the mischief I found was chiefly done during the skinning.

The following are full particulars of a pair :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 6·4	11·7	2·4	5·0	0·42	0·41	0·5 oz.
♀	... 6·5	11·8	2·45	5·1	0·45	0·4	0·48 oz.

Wings of others vary from 4·9 to 5·2.

Tarsi and toes brownish fleshy; tips of toes and claws blackish; tarsi-feathered in front and outside "nearly to toes" (*in one, in the other it is said*, "more than half way down"); bill black; irides dark brown.

I first met with this species in the Western hills on the Limatak, above which a number used to appear in the evenings about dusk, hawking insects but flying very fast and high, so that I had considerable difficulty in getting specimens. In the basin I do not think I ever saw them, though I may possibly have passed them for *infumatus* in the dusk, which is when one generally sees both species. But in the Eastern hills I saw them on several occasions, and twice shot them as particularly fine *infumatus* when I was shooting some of these latter for specimens.

This species was originally sent from Assam by McClelland, but in what part obtained it is impossible now to ascertain. But since then it has not been recorded apparently from any part of Assam hills or valley or Cachar, nor have I received any specimens thence. I do not find it recorded from Pegu, nor have we ever met with it in Tenasserim.

It is curious that neither in Manipur nor in any part of Assam, Cachar or Sylhet has any species of *Dendrochelidon* been met with, since one, at any rate, *coronatus*, is not only widely spread in India, but is also fairly common in the Northern Pegu hills, and occurs, though more rarely, in the northern and central portions of Tenasserim.

106.—Batrachostomus hodgsoni, *Gr. Probably=B. javensis*, Horsf. *(Naga*—Soombong.)

On Sunday, April 24th (the better the day, the better the deed), I being too ill to go out, one of the native boys of Aimole, where we were encamped, snared a female Frogmouth on its nest, of which the following are the particulars recorded at the time:—

Length, 10·3; expanse, 16·0; tail, 5·5; wing, 5·2; tarsus, 0·7; bill from gape, 1·2; width at gape, 1·11; weight, 1·61oz.

Legs and feet dull, rather pale fleshy brown, darkening on the claws and the two terminal joints of the toes; bill pinkish or reddish brown, paler on the lower mandible and towards the gape, and darkest on the culmen and tip of upper mandible; irides yellow.

The entire upper surface, chin, throat, neck all round and breast is a light bright chestnut, a trifle darker on the interscapulary region, scapulars and lesser and median wing-coverts.

There is a somewhat creamy-white stripe on each side from close to the nares, over the lores and eyes, and extending a little beyond the latter, broadest and purest white immediately over the eyes. These stripes almost meet on the forehead, behind the front row of stiff frontal plumes.

The shafts of all the chestnut frontal plumes and of a line of feathers above the white eyebrow are black and greatly prolonged, and the prolonged bristle-like portions in some cases, fully 1¼ inch in length, are thinly barbed, four to six barbs on each side, with hair-like black barbs.

The nearly white eyebrow already described is continued as a broad, ill-defined, buffy white band over the ear-coverts to the nape.

From near the gape on each side runs a stripe of more or less hidden, creamy-white tipped feathers along the sides of the neck.

On the lower and middle throat is a large, more or less triangular patch of pure white feathers, fringed at the tips with chestnut and with a dark sienna brown hair line dividing that fringing from the white.

Very nearly on a level with the lowest row of these feathers, and *almost* continuous with them, is a well-marked row of precisely similar feathers, forming a symmetrical, nuchal demi-collar.

The neck all round below the throat patch and the nuchal demi-collar unbroken chestnut, but in front of the neck just where this joins the breast, numerous similar feathers

are interspersed, and below these, extending over the lower breast and sides of the breast and almost meeting on the interscapular region, is a broad band of similar, but larger, feathers.

The entire abdomen, vent and lower tail-coverts, creamy or rusty white, mingled and mottled with pale dingy chestnut.

The outer row of scapulars have large pure white spots occupying the whole terminal portions (except in the case of the longest of all, in which the white is confined to the outer web) surrounded by an almost blackish brown line, beyond which is an almost obsolete chestnut fringe.

The wings are spotless, only on the winglet are three or four small creamy or rusty white spots, more or less framed by a dark brown or blackish line.

The inner webs of the quills are deep brown, and in the primaries this colour projects, towards their bases, more or less over the outer webs, and in the secondaries occupies half or more of these.

The tail exhibits five or six irregular broad transverse darker chestnut bands, more or less picked out, especially on the lateral feathers, with dusky dots. The tail has ten feathers. The outermost are 3·1, the penultimate 1·8, and the third pair 0·5 shorter than the four central feathers, which are nearly equal.

The mid-toe claw is scarcely perceptibly dilated on the inner edge and has *no* comb.

On the lower surface of the wing are three or four small pale chestnut spots on the margins of the inner webs of the last four or five primaries.

The wing lining is mingled dull pale rusty chestnut and a more or less fulvescent or rusty white. The lower coverts just along the carpus are obscurely barred with dark brown.

I have transcribed this lengthy description from my note book, because I believe that it is the first time that any accurate and full description has been recorded from the fresh bird before skinning of *any* species of this genus, and after skinning the collars and bands do get greatly displaced.

Now this is undoubtedly my *Batrachostomus castaneus*. This latter is so rare a species that in all these years I have only been able to obtain seven specimens of this in Sikhim.

The wings of these seven measure 5·35, 5·5, 5·23, 5·3, 5·5, 5·2, 5·15.

Of these two specimens were sexed by dissection and are females, like our present bird, so that we may now be certain that this chestnut plumage is that of this sex.

But the grey *Batrachostomus hodgsoni* is also the male of this same species. Of this I have only six specimens; of these only *one* sexed by dissection. The wings of these six measure 5·4, 5·5, 5·3, 5·4, 5·25, 5·1, so that the sexes are precisely the same size.

Now Capt. J. Butler obtained a *Batrachostomus* in the Naga hills just north of Manipur, about which Godwin-Austen wrote as follows. I quote at full length because the matter is of some importance :—

"106.—BATRACHOSTOMUS JAVENSIS, *Horsfield* ♀ ?

"This specimen belongs to the Indian Museum, Calcutta, where I found it among some skins that had been sent down by the late lamented Captain John Butler from the Naga hills, and I was, by the kind permission of the Trustees, allowed to bring it to England. It is a most interesting specimen in the rufous phase of plumage, but unfortunately the sex is not marked. It agrees with a specimen of *B. javensis* ♀ in the collection of Lord Tweeddale, and the description of the species as given in P. Z. S., 1877, p. 435, and the dimensions do not differ materially. I give a description of the Naga hill bird, interesting as being found so far to the northward.

"Entire plumage rich chestnut brown, a few white feathers at the base of the upper mandible tipped rufous and barred with black. White on chin and throat, some of the feathers on the latter crossed by a V-shaped dark line, but they only extend to the upper breast, this being covered by feathers having large, rounded white centres, bounded on the terminal margin by a narrow dark line and fringed with chestnut; towards the abdomen and flanks the white marks become narrow and lengthened. The wing is unspotted, but conspicuous white feathers margined with black are mingled with the scapulars, and there is a well-marked nuchal collar, each feather crossed by a narrow black line edged terminally by another. There is a slight mottling of dull black on the primaries and secondaries and lower back. The tail is similarly mottled and crossed by seven pale clear rufous bands; the outer penultimate tail feather has five distinct white bars on the outer web; the very short outermost feather has a terminal whitish spot.

"Wing, 5·25; tail, 5·5; tarsus, 0·6; bill from gape, 0·6; breadth at gape, 1·05; mid-toe and claw, 0·75. The long frontal plumes are black, rufous at the base.

"This bird is, I think, nearest to *B. javensis*, *B. affinis* apparently not having any white in front of the eye.

"On my submitting this paper and the specimen to Lord Tweeddale he thus wrote to me: 'This Naga hill example

of the genus *Batrachostomus* without doubt belongs to the *B. javensis* (Horsf. ex Java). I have critically compared the two and cannot detect any difference. It may turn out to be Mr. Hume's *B. castaneus*, in which case *B. hodgsoni* will become a synonym of *B. javensis*. It is a large form of *B. affinis*, but the white on the throat seems to extend higher up, as it does in the Javan species and in *B. cornutus* of Sumatra and Borneo.' Lord Tweeddale does not concur with me regarding the white mark in front of the eye, and says 'it is just as strongly marked in my examples of *B. affinis*.'"

So far as dimensions go, the agreement is perfect; the plumage scarcely corresponds so well. In none of my eight *castaneus* can the plumage be called chestnut *brown*; it is bright chestnut without a trace of *brown*. Horsfield figures *javanensis* no doubt as a chestnut brown, but he *describes* it as "ferruginous or rufous with a tint of isabella" however "*de coloribus non est disputandum*," and it will be seen that Lord Tweeddale declares that Butler's bird is undistinguishable from a true Javan specimen of *B. javensis*, and he himself had described a female of this latter species (P. Z. S., 1877, 435) as "bright rufous or chestnut," so that, pending further comparison of specimens, we may perhaps provisionally assume that our present bird is also *B. javensis*, Horsf., equal and having precedence to *B. hodgsoni*,* Gr.

Thus Lord Tweeddale himself, it will be seen, suggests, though he had for years insisted and persisted, despite all I could say (*vide* S. F., IV, 376; VI, 53, &c.) that my *castaneus* was *affinis*; a very much smaller and very differently coloured and marked bird. I may add that I do not think that the bird figured by him (P. Z. S., 1877, pl. XLV) *is affinis*; it is not a bit like Blyth's type, or any of my specimens (which have been compared and exactly correspond with this) either in colour or markings, and it has a conspicuous nuchal collar, which is wholly wanting in five out of seven *affinis*, and of which there is only the barest trace in the other two. Horsfield's type I may note had the wing 5·75, which is much larger than in any of our fourteen specimens of *hodgsoni*, while the Marquis of Tweeddale gave the wing of a Javan specimen (P. Z. S., 1877, 436), the description of which agrees well on the whole with our bird, as only 4·85.

To return to our Manipur specimen, the stomach was entirely filled with small beetles of different kinds.

It was snared upon its nest, a small massive deep cup (not

* Jerdon long ago declared a grey bird from Java in the Calcutta Museum, barely, if at all, distinguishable from *O. hodgsoni*.

a mere pad like others I have had sent me from Travancore and Sikhim, or like the one figured by Hodgson) composed externally of leaves and twigs and lined with fine hair-like flower stems of flowery grass. The nest was placed against the trunk of a small tree, say, 30 feet high at the junction with this of a bough about 3 inches in diameter and at a height of about 9 feet from the ground. The tree was situated in thin secondary forest on one of the low hills below Aimole, at a height of about 600 feet above the basin or, say, 3,100 above sea level. The nest contained one white egg, unfortunately smashed by the bird in its struggles when it found itself snared, and one just hatched young one.

The Nagas seemed to have no real knowledge of its habits or notes, though they have a distinct name for it, calling it *Soombong*, while they call all Goat Suckers *Wapputshai*. Many said it was purely nocturnal and very seldom seen; others that it also flew at times by day; all agreed that it was extremely rare.

This was the only specimen I obtained or saw in Manipur, and, except Butler's specimen from the Naga hills, I have no record of its occurrence anywhere else in Assam, Sylhet or Cachar, though it doubtless will prove to occur throughout the hills.

Ramsay obtained a male of this species in Karenee at an elevation of about 6,000 feet, and Col. Tickell obtained a rufous Frogmouth (hence as we now know a female), *probably* belonging to this species somewhere near Tounghoo. The only Frogmouth I have from Tenasserim belongs to the much smaller, browner collarless *affinis* (*vide* S. F., IX, p. 149).

107*bis*.—Caprimulgus jotaka, *Tem. & Schl. (Naga*—Wapputshai; *all Goat Suckers.)*

Goat Suckers are very scarce in Manipur, and one not only hardly ever sees them, but very seldom even hears them.

Of the birds we call *jotaka* I only procured two specimens; both I shot after dark in the Eastern hills—one at Aimole and the other at Machi—being attracted by their call. This was the only species I *heard* in either the Eastern or Western hills.

I class them as *jotaka*, though they are very small for this species, partly because of their rich intense plumage and partly because their note "chick," "chick," "chick," repeated six or seven times in rapid succession, is recognisably distinct from that of *indicus*.

The male has the wing 7·9; the female measured in the flesh is smaller still.

Length, 10·6; expanse, 22·6; tail, 5·2; wing, 7·67; tarsus

(completely feathered), 0·7; bill from gape, 1·45; weight, 2·95ozs.

Feet dark brownish purple; bill black, fleshy at gape; irides deep brown.

This bird occurs all over the Garo, Khasi and Naga hills, and Godwin-Austen got it in the Dafla hills. I have it also from near Dibrugarh,* and I now believe that a specimen sent me long ago from N.-E. Cachar, and which I then set down as *indicus*, was really *jotaka*. This species seems also to be generally, but very sparingly, distributed in Pegu and Tenasserim.

110.—Caprimulgus macrurus, *Horsf.*

One tailless specimen of this was brought me in the Western hills.

Then, on the 10th of April, when encamped at Phalel on the south-east edge of the basin just at the foot of the Eastern hills, in the midst of a sea of elephant grass, a number of Goat Suckers began to call just at dusk amongst the grass. The call was "Tschun," "Tschun," &c. They did not fly about, and I could see nothing of them; at last I spied one perched on a bare grass stem, 18 or 20 feet high, calling steadily, and shot him. Two nights later I succeeded in similarly shooting another, a female, and I believe the mate of the one previously obtained, for I shot her off the *same* stem of grass. All the while we were at Phalel we heard them; when the night was wet they called nearly all night, but when it was fine, only for about half an hour after it became dusk. Where they went to in the day I cannot conceive, as I beat that grass and all the low scrub and cover on the low hills round without seeing one; yet at night there must have been dozens round the camp.

These birds measured—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 12·7	24·0	6·8	8·4	0·67	1·51	2·85ozs.
♀	... 11·2	22·0	5·4	7·1	0·71	1·4	2·02ozs.

The feet, bare portions of bill and claws (except the serrated, dilated edge of mid-toe claw, which is light yellowish horny) deep brown; irides blackish brown.

The male is the largest *macrurus* I think that I have seen, and many would class it as *albonotatus*, but it has the very dark breast, contrasting strongly with the abdomen, which

* [107*bis*.—*Caprimulgus jotaka*, Tem. & Schl.—I give the measurements of a male:—Length, 12·60, expanse, 23·75; tail, 5·71; wing, 8·50; tarsus, 0·70; bill from gape, 1·36; weight, 2·80ozs. Not nearly so common in Dibrugarh as the next species, *C. macrurus*.—J. R. C.]

characterises *macrurus*. The female is exceptionally small, and shows hardly any dark breast, being precisely similar to the Malewoon and Pulo Seban females mentioned at the bottom of page 58, Vol. VI.

I saw no other specimens in Manipur, nor did I ever elsewhere hear their call.

In the freshly-killed bird there are three very conspicuous white or pale bands on the wing formed by the tips of the greater median and longest lesser coverts of the secondaries and tertiaries. In skins these are scarcely noticeable.

I have this species from N.-E. Cachar and from near Dibrugarh,* and I strongly suspect that the birds entered by G. Austen as *albonotatus* from the Garo hills would prove to belong to this form as defined in S. F., VI, 58.

It is very doubtful, however, whether the two should not be treated as one species (vide *loc. cit. sup.*). Throughout British Burmah it is of course common.

114.—Caprimulgus monticolus, *Frankl.*

I twice flushed this species when beating the low scrub-clad bases of the Eastern hills, just above where they rise out of the basin, and these were the only specimens I got or saw, and I never once heard at night their familiar call. It is certainly extraordinary how rare as a whole Goat Suckers are throughout Manipur.

I have this species from N.-E. Cachar. Godwin-Austen records it from the Garo hills, but this is all I know of its occurrence in Assam, Sylhet or Cachar. It occurs in Northern and Central Tenasserim, and in Arakan, and perhaps in the extreme north-east of Pegu.

114*bis*.—Lyncornis cerviniceps, *Gould.*

One evening that we spent in the Jhiri valley, a number of this species passed over, flying northwards. I saw the first soon after sunset, but they were out of shot, and I got no specimen; still the large size, colour and peculiar whistled call left no possible doubt as to the species. I never again saw or heard them in Manipur, but they certainly occur in the Eastern hills, as a Naga not only described them well, but two days later brought me a tail of one from some other village.

We have specimens precisely identical with Burmese ones both from N.-E. Cachar and from Khowang near Dibrugarh, but from nowhere else as yet in Assam, but, as it has

* [*Caprimulgus macrurus*, Horsf.—Very common in Dibrugarh. The Assamese call them *Koor-Koorea-Hoodoo*.—J. R. C.]

occurred as far north and west as Darjeeling, there can be no doubt that it will turn up in other suitable localities in Assam.

[This chastely coloured species is far from rare in Dibrugarh, but as it flies very high and is migratory has escaped observation. I got two specimens, and on several occasions saw it flying overhead, its long tail and heavy flight being particularly striking. On one occasion I noticed five individuals going west high overhead about half an hour before dusk. A male measured:—Length, 15·0; expanse, 34·75; tail, 8·20; wing, 11·75; tarsus, 0·70; bill from gape, 1·55; weight, 5·70. The Assamese call it "*Din-koo-nah*."—J. R. C.]

It is widely distributed throughout British Burmah, occurring, however, only in well-wooded country, with evergreen forests.

116.—Harpactes erythrocephalus, *Gould.*

This species (more generally heretofore known as *H. hodgsoni*) is very common in the forest between Jhiri Ghat and Noongzai-ban, and by no means rare in suitable localities further east in these Western hills; but I never saw it anywhere in the basin nor anywhere in the Eastern hills, though it may possibly occur there.

The following are the dimensions of several specimens measured in the flesh:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 13·3	17·0	7·3	5·7	0·58	1·05	3·41ozs.
,,	... 12·6	16·3	7·3	5·65	0·7	1·0	3·21ozs.
,,	... 13·0	18·0	7·5	5·9	0·7	1·08	3·425ozs.
♀	... 13·0	16·8	7·0	5·4	0·67	1·03	3·75ozs..
,,	... 13·1	17·5	7·5	5·7	0·65	1·05	3·34ozs.

In the males the legs and feet purplish fleshy; claws pale brown; soles hoary yellow; bill blackish at tips and on culmen; rest of bill, gape and orbital skin varying from a lovely violet to a rich mauve blue; irides brown. In the female the legs and feet are rather paler, in some fleshy pink; the orbital skin and gape deep lavender; basal portions of both mandibles pale blue; culmen and terminal portions of both mandibles blackish; irides crimson.

But the shades of colour vary slightly in every specimen of both sexes and change *very* rapidly after death. This species occurs in suitable localities all over Assam. I have it from near Gauhati, from Khowang and Joonkotollee (Dibrugarh),* Dollah, Tippook, &c., near Sadiya, the Garo and Khasi hills and

* [116.—*Harpactes erythrocephalus*, Gould.—Common in the Dibrugarh district, in the forests where it is generally found in dark shady places, and on trees overhanging roads leading through deep forest. Although I have seen scores in this and other districts, its note has never been heard by me.—J. R. C.]

from N.-E. Cachar. I have it also from various localities, and it is generally distributed, in Arakan, Pegu and Northern and Central Tenasserim. It is preferentially a hill or broken-ground forest bird, but may also be found in good forests in the level country.

It is to be noted that I never met with any true Bee-eater within the limits of Manipur.

117.—*M. viridis*, Lin., was pretty common in Sylhet and Cachar right up to the Jhiri, but across that river I never saw it, though it may occur as a straggler in the low land between the Jhiri and Noongzai-ban, which ornithologically belongs rather to Cachar than Manipur. I have specimens from the extreme north-east of Cachar, and Godwin-Austen has recorded it from the Khasi and near the Dafla hills, but I have no other record of it from Assam as yet.

Throughout British Burmah it is common.

118.—*M. philippinus*, Lin., again I have from N.-E. Cachar, from Sadiya and several other places in the Dibrugarh district, and it occurs, broadly speaking, throughout British Burmah in suitable localities.

[Very common in the Dibrugarh district during the rains, when it is found all over the district. They arrive about the beginning of June. Ass. *Jeea-kha-tee.*—J. R. C.]

119.—*M. Swinhoii*, Hume. Lastly I have this species from N.-E. Cachar, and from Sadiya and from various localities in all three provinces of British Burmah.

It does seem passing strange that, coming down, as all three do, to the very border of Manipur, I should yet never once have met with either of them within Manipur limits. That they *must* occur, if only as stragglers, in the Jhiri valley seems certain. Whether they occur further east in Manipur future enquiries must decide.

122.—Nyctiornis athertoni, *Jard. & Selby.*

I myself only saw a single bird of this species in Manipur, and that was in the low level forest between the Jhiri and Noongzai-ban; but one of my collectors, an intelligent man who knows the bird well and has skinned scores, affirmed that he saw it one day in the Eastern hills and shot at it when it was in the act of calling. It may be so. I give it for what it is worth, but I have my doubts, because he declared that it was uttering a particular note "Hŏŏt-Hŏŏt, Tŏŏt-Tŏŏt," that we constantly heard in the Eastern hills, but the emitter of which we could never certainly trace. Now, according to my remembrance, this is not a bit the note of *Nyctiornis*

athertoni, though that too is four-syllabled, and this puzzling note was, I believe, cuculine.

This species we have from N.-E. Cachar, the Khasi hills (and Godwin-Austen got it in the Garos also) and various localities in the Dibrugarh district.

[Confined to dense forests and a very wary bird, though its flight when disturbed is very heavy. The call is a loud grunt of four syllables. May not the cuculine call, heard by Mr. Hume's collector as mentioned above, have been that of *U. epops*.* Last January when walking about the station of Bettiah I heard a feeble, and to me very cuculine, call, and on tracing out the bird, was astonished to find it proceeded from *U. epops*. On one occasion I saw a *Nyctiornis* flying about the station of Dibrugarh.—J. R. C.]

It occurs in the North-Eastern Pegu hills, and Mr. Oates obtained it near Pegu Town, and we have it from many places in the northern and central portions of Tenasserim. I do not know of its occurrence in British Burmah, west of the Pegu Yoma.

124.—Coracias affinis, *McClell.*

Seen nowhere in either the Eastern or Western hills. Scarce in the Jhiri valley, and very thinly distributed in the Manipur basin, where I may have seen a score at most from first to last. All the four I shot, or at any rate preserved, in Manipur (for I shot one or two in bad plumage that I did not skin) are typical *affinis*.

This species occurs throughout Sylhet and Cachar, and the Assam valley† (though everywhere much scarcer than *indica* is in the plains of India); and Godwin-Austen obtained it in the Khasi hills—I suppose in some low valley. It is common in all suitable localities throughout British Burmah, except towards the extreme south of Tenasserim.

126.—Eurystomus orientalis, *Lin.*

This is another species never seen by me except in the Jhiri valley. There are numbers of places in both Western and Eastern hills where I should have expected to find it, but I never saw it. Below Noongzai-ban and between that ridge and the Jhiri I saw several, though I only shot one.

It occurs in all heavy forest in Assam and the lower Assam

---

* No; both Jhuman and I know the "*Hud-hud's*," or as we call it Hoopoos', note perfectly. It is distinctly *two*-syllabled—hut-hut, the *u* pronounced like the double *o* in foot.—A. O. H.

† [*Coracias affinis*, McClell.—Common all over the district of Dibrugarh. Ass. "*Kousa*."—J. R. C.]

hills and in N.-E. Cachar. I do not know that it occurs in Sylhet. It occurs in Arakan, Southern and Central Tenasserim and the Karen hills, and Oates records it from near Pegu town and Tounghoo, but I do not yet know of its occurrence elsewhere in Pegu proper, though it is pretty sure to be found all along the evergreen forests of the Pegu Yoma, wherever these are sufficiently dense.

127.—Pelargopsis gurial, *Pears.*

I saw this in the Jhiri valley, and obtained a single specimen far into the Western hills on the Limatak stream, but never saw it in the basin of Manipur nor in the Eastern hills.

Generally, considering the immense quantity of water about and the abundance of fish, frogs and creeping things, Kingfishers of all kinds are uncommonly scarce throughout Manipur. We have this species from many localities in the valley of Assam right up to Dibrugarh, in Sylhet and Cachar right up to the borders of the Naga hills, and Godwin-Austen records it from the Khasi hills.

[Pretty common in the Dibrugarh district along the banks of all streams. On the 22nd August, 1880, I saw one of these birds, with a small fish in its bill, enter a hole it had excavated in the rotten stem of a huge dead "Sappa" (*Michelia* sp.) tree, about 15 feet off the ground. The tree in felling smashed to pieces and destroyed the young ones.—J. R. C.]

In British Burmah it is replaced by the nearly allied *P. burmanica.*

129.—Halcyon smyrnensis, *Lin.*

Never seen either in the Eastern or Western hills, but not rare about the capital or generally in the basin. At the same time one does not anywhere see one-tenth of the number one does in any district in Oudh or the N.-W. Provinces.

It occurs throughout the valley of Assam,* Sylhet and Cachar, but not, I think, in the hills, except perhaps in some of those low valleys that run far into these. It is common throughout the less elevated portions of British Burmah, but does not occur, I believe, in either the Arakan, Pegu or Tenasserim hills.

131.—Halcyon coromanda, *Lath.*

I saw this species once in the Jhiri valley; it started close to me and I saw it as clearly as if I had had it in my hand, and

* [*Halcyon smyrnensis*, Lin.—Very common in the Dibrugarh district and seen almost everywhere. On the 27th April, 1881, I found a clutch of four fresh eggs in a hole in a river bank.—J. R. C.]

it is an utterly unmistakable bird. However I missed it somehow, and never again saw it in Manipur, so some may hold it doubtful, the more so that I have as yet no record of its occurrence from any part of Assam, Cachar or Sylhet.

[Not uncommon in Dibrugarh in suitable localities. When once a person has handled one of these birds, he can never mistake for them any others he may see in the forests, their lovely plumage being so conspicuous. They keep *exclusively* to deep dark forests, where they find their prey in the small rivulets and pools in just the same spots as *Ceyx tridactylus*, They are permanent residents, and once when travelling through dense forest I saw one of these birds fly out of a nest hole in a tree about 20 feet off the ground. Their call is loud, like that of *P. gurial*. They eat grasshoppers and beetles as well as fish. A male shot 2nd June, 1881, measured:—Length, 10·40; expanse, 16·25; tail, 2·80; wing, 4·45; tarsus, 0·63; bill from gape, 2·53; weight, 2·60ozs. Bill bright lobster red, irides bluish grey, legs and feet vermilion, eyelids brick red.—J. R. C.]

I have it both from the Sikhim Terai and the Bhutan Dooars and many parts of Tenasserim, and it occurs in E. Pegu.

Godwin-Austen obtained 130.—*H. pileata*, Bodd., somewhere, I gather, in the Eastern Naga hills just north of Manipur, and this will doubtless also be found here,* the more so that it occurs in Tipperah, Chittagong, Arakan, Northern and Southern Pegu and the central and southern portions of Tenasserim. But except the specimen obtained by Godwin-Austen I have no record as yet of its occurrence in any part of Assam, Sylhet or Cachar.

133.—Ceyx tridactylus, *Pall.*

I saw this species two or three times in both Eastern and Western hills, and shot one specimen below Tankool Hoongdoong, about the most northerly point I reached in the Eastern hills. I found this a most difficult bird to shoot, as it flies with great rapidity in the narrow, overhung, crooked, twisting, rock-bound streams in which I invariably found it; it was usually out of sight before it was possible to raise the gun. One day crawling about in the brushwood after a noisy *Pomatorhinus* (that I never succeeded in getting, though its note became perfectly familiar to all of us) I chanced to spy one sitting near the end of a bare bough overhanging the stream about 30 yards below me and shot it before it saw me. It was quite dead, but hung to the bough, one of the feet having somehow

* At the same time its normal station is a zone extending some 50 miles inland from the sea coast.

caught. We shook and shook the tree; then a man went up and tried to shake the bough, but this snapped instantly (very nearly letting the Naga into the water). Down went the bough and the bird disappeared, and for a few minutes could not be found, but was at last recovered much the worse for wear.

It occurs throughout the valley of Assam near the base of the hills (it is almost exclusively a bird of forest streams), in the Garo and Khasi hills, and in Northern Sylhet and Cachar, in Arakan, Eastern Pegu and Tenasserim.

[*Ceyx tridactylus* is not uncommon in Dibrugarh, but is never seen away from dense forest.

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	5·15	7·0	1·10	2·12	0.32	1·46	0·40oz.
♀	...	5·70	7·30	0·90	2·20	0·35	1·55	0·80oz.
♂	...	5·60	7·30	1·10	2·15	0·35	1·48	0·50oz.

Bill in ♂ basal portion dusky orange, becoming bright at tip; in ♀ the whole bill is bright orange. Legs and feet, orange red; claws pale orange; irides deep brown. On the 11th June, 1881, I came across a batch of four young, whose quill feathers were just sprouting. On the borders of the tea and about 20 feet inside the forest the parent birds had dug a retort-shaped hole in the earth that was clinging to the roots of a large overturned tree. The tunnel was six inches long, and the chamber four inches in diameter. There were pieces of the wings of beetles in the chamber. The call of the young at first was a rolling chirp, like that of a grasshopper. I did not disturb them, and by the end of a fortnight they became fully fledged, and were *non est* one day when I went to look them up. The bill of the young bird is horny brown with the anterior portion dingy white, legs and feet dingy orange yellow.—J. R. C.]

134.—Alcedo bengalensis, *Gm.*

Not uncommon in the Eerung, Limatak and other streams in the Western hills. Decidedly scarce, but still generally distributed in the basin, but only once seen in the Eastern hills. Wounded birds have a marvellous facility for creeping into crevices between boulders and disappearing. I knocked down two at the Limatak, both of which dropped on loose heaps of boulders, and both of which disappeared absolutely, though they fell within 40 yards of us, and the men ran up at once. Again, on the return journey at the Eerung, I shot and lost another in the same way. Out of eight I shot I lost four, three as above and one which fell into a deep stream that I did not fancy going into for such a bird, and I happened to be alone.

Of course this species occurs all over Assam, Sylhet, Cachar and British Burmah.

[Common all over the Dibrugarh district. On two or three occasions I have, when canoeing along the smaller streams that fall into the "Desang" river, seen a large Kingfisher, which certainly was neither this species nor *A. beavani*. The spots were quiet shady nooks, overhanging deep pools, but although I fired at the birds I could not bag them. Probably they may have been *A. grandis* referred to by Mr. Hume below.—J. R. C.]

In the Eastern hills I caught sight of a large Kingfisher of this type, which *may* have been *A. grandis*. I cannot say I have never seen that bird alive, or it may have been *A. nigricans*, Blyth, or a new species. The bird was below me and going straight away, so that I only saw its back; but it is more likely to have been *grandis*, as Godwin-Austen twice thought he saw this in N. Cachar and procured specimens in the Dikrang and the Bura Dehing. It is a terrible pity I could not fire, for all my specimens are from Sikhim and the Bhutan Dooars, and I had hitherto considered this species as confined to the bases of the hills, and streams running some short distance up, into and out from these north of the Brahmaputra.

I never saw 135*quat.*—*Alcedo beavani*, Wald. This is a bird I know well, and its absence is the more remarkable that it is not uncommon in N.-E. Cachar, whence and also from Sadiya and various localities in the Dibrugarh district* it has been sent, as also again from Eastern Pegu and many localities in Tenasserim. Had I ever met it I should immediately have recognised it, but I certainly never saw it in Manipur, though it must needs occur, if nowhere else, in the Jhiri valley.

136.—Ceryle rudis, *Lin.*

Never seen in the Eastern or Western hills; very scarce about the capital and the major portion of the basin, but rather less so towards the south of this. Still, as compared with any part of India proper, the Pied Kingfisher is excessively rare even in the basin of Manipur, and I doubt whether from first to last I saw more than a dozen there.

It is common on all the rivers of Sylhet and Cachar throughout the valley of Assam right up to Sadiya,† and has been sent from the Garo and Khasi hills. It is widely and generally distributed throughout British Burmah. How can its

* [*Alcedo beavani* is far from rare in the Dibrugarh district, but only seen in rivers and streams whose banks are densely wooded. A ♂ shot 18th December, 1881, measured:—Length, 6·40; expanse, 9·0; tail, 1·38; wing, 2·64; tarsus, 0·35; bill from gape, 2·09; weight, 0·80. Bill black, gape dull vermilion, legs and feet bright vermilion.—J. R. C.]

† [*Ceryle rudis* is very common everywhere in Dibrugarh.—J. R. C.]

rarity in Manipur be accounted for? Is the elevation too great for it?

137.—Ceryle guttata, *Vig.*

I saw this often in the Western hills; indeed it is by no means scarce on either the Eerung or the Limatak, but it was on all occasions so excessively wary that I never succeeded in getting a shot at it. Again I twice saw it in the Eastern hills, and at last shot a single specimen near the bases of these not far from Phalel. A dozen times I had been after them in vain, but on this occasion, as, in a pelting shower, I stood under a tree on the bank of a stream, one came dashing up stream within 20 yards of me, and I dropped it.

I have this from N.-E. Cachar and from near Sadiya, and Godwin-Austen records it from the Dekrang, and again from Tenga Pani and the Dehing, and I know of its occurrence in the Naga hills. It is of course a hill bird everywhere and never strays far, I believe, beyond the bases of these.

[I saw a few specimens of this bird in the "Dehing" river below Beesah. The river there is rather broad, with a sandy bottom, the hills being about five to ten miles off. They would dash past our boats well out of range, and were the cause of a deal of ammunition being wasted.—J. R. C.]

It is not very rare in the hill streams of Northern and Central Tenasserim, but I seem to have no record of it as yet from either the Pegu or Arakan Yoma.

138.—Psarisomus dalhousiæ, *Jam.*

This beautiful species was very common in the high forest of the low level between the Jhiri and Noongzai-ban. They were flying about in flocks from tree top to tree top, often quite out of shot, looking exactly like small Parakeets or Paroquets, whichever may be the right way of spelling it.

I saw a few again in the Eerung valley. Of course there were none in the basin; they are essentially forest birds, but I again met with them at Aimole in the Eastern hills.

The following are particulars of a pair:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	10·55	13·1	5·3	4·0	1·0	1·22	2ozs.
♀	11·0	13·5	5·0	4·1	0·92	1·27	2·1ozs.

Male.—Legs and feet pale leaden grey, overlaid with green; upper mandible bright green, bluish white at tip, dark blue about nares; lower mandible chrome yellow, green at base and tip and with the *extreme* tip bluish white; irides dull hazel; eyelids intense yellow.

Female.—Legs and feet greyish brown, overlaid with green; upper mandible bright green, blue about nares; lower mandible orange, green at base and tip; irides hazel; eyelids yellow.

I have seen thousands and shot a great many of these birds from the Dhun eastwards, and my experience is that they as a rule keep to the tops of the trees, the bare boughs and twigs of some gigantic cotton tree being a favourite perch. At times for facility of flight they will dart through forest glades, in the open, below the massive tree crowns, but their normal place is high up, and I have seen scores of flocks skimming over the tops of the forest.*

Is found throughout the entire high forest region of Assam, Cachar and North Sylhet, hills and plains. They are equally found in the Arakan, Northern Pegu, Karenee and Tenasserim hills as far south, at any rate, as Mooleyit and the Dawnra range.

139.—Serilophus rubropygius, *Hodgs.*

In the valley of the Limatak, while resting awhile, placidly smoking in the dense forest, I became aware of a small party of this Broad Bill, about 30 or 40 yards distant from where I was, hunting in the shade, and fluttering from festoon to festoon of the heavy creepers, that hung like huge snakes in mid air. I watched them for some minutes and then shot one, and was fully prepared to shoot the whole flock. I had heard and read so much of the accommodating nature of these *Serilophi*, how "they didn't for nobody care a rap," but would wait philosophically to be shot so long as any were left, that of course I considered the whole lot as good as bagged, so I fired, fully purposing to immortalise the whole flock, but *presto!* before I could even fire a second shot, before the dead bird touched the ground even, the rest were out of sight, and never from that day and hour was my heart gladdened by the sight of them.

Now I made sure that they had been picking insects off the leaves and boughs, but when I dissected my solitary

* [*Psarisomus dalhousiæ*, Jam.—My experience of this species has been just the opposite of Mr. Hume's, for all my birds were shot among flocks that were feeding among forest trees, certainly not more than 40 feet off the ground. One flew into my bungalow during the day in January, 1881. They very soon disappear on a shot being fired, threading their way through the foliage with wonderful rapidity.

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	...	10·25	12·0	5·10	4·0	1·0	1 30	2 10 oz.
♀	...	10·25	12·25	4·80	4·05	1·0	1·20	2·0 oz.
♂	...	10·10	12·0	4·60	3·85	1·0	1 23	1·90 oz.

Irides brownish with an inner circle of pink; legs greenish; bill greenish, the base below dull orange, mouth inside bluish. I have only noticed them in the cold weather.—J. R. C.]

specimen, a male, I found the stomach crammed with beautiful little land shells, of which I took out and preserved several quite entire. There seemed to be some remains of insects and one or two small round bodies, which may have been seeds, but I could make nothing of them even under a good strong lens. They were *not* dust shot, though they looked mighty like it, but the shells vastly predominated.

I give exact particulars of this bird, which have never before, I believe, been given:—

Male.—Length, 7·2; expanse, 10·8; tail, 3·0; wing, 3·3; tarsus, 0·85; bill from gape, 0·9; weight, 1·21oz.

The tarsi are feathered black for more than half their length. The lower portion of the tarsi and feet are as a whole greenish yellow, but the fronts of the toes between the joints and the claws are pale blue, producing a curious chequered effect. The greater part of the upper mandible, the edges and extreme tip of the lower one are bluish white. A triangular patch of deep, dull blue encloses each nare, and the extreme base of the lower mandible is of this same colour. The middle portion of the lower mandible is a rather pale green; the gape and orbital skin are wax yellow; the irides brown, speckled with gold.

This is a male, and it therefore wants the little silvery curved line on each side of the base of the throat, which distinguishes the female. The same is the case in *lunatus*, but in that species the silver band or quasi-crescent is more strongly developed.

I never but this once met with this species in the Western hills, and in the Eastern I never saw it at all.

It seems by no means rare in N.-E. Cachar, the Khasi and Garo hills, and Godwin-Austen got it in the Dafla hills, but I have not yet received it from Dibrugarh, Sadiya, &c., or from the Naga hills.

[Not very uncommon in the Dibrugarh district, but as cold weather visitants only.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	7·10	9·50	2·85	3·25	0·80	0·85	1·10oz.
♂ ...	7·40	9·60	2·85	3·26	0·80	0·92	1·25oz.
♀ ...	7·10	10·0	2·75	3·25	0·80	0·93	1·20oz.

Bill bluish, the commissure and tip white; orbital skin and gape yellow; legs and feet yellowish green; claws bluish; irides brown. They go about in small parties of 15 or 20, keeping to the better-wooded portions of the country. The female above recorded flew into my bungalow about 7 A.M. during a thick fog in December, 1880.—J. R. C.]

In British Burmah it is replaced by *S. lunatus*.

140.—Dichoceros cavatus, *Shaw.*

Near Noongzai-ban, the low westernmost ridge of the Western hills, I first heard the unmistakable call of the great Hornbill, but I neither saw nor shot it there. Of course they do not occur in the basin; they too are forest birds, but in the Eastern hills again I repeatedly heard them, and at Machi the Nagas brought in a fine *male* alive *but* minus the tail. It had been caught in a squirrel trap, but what they had done with the tail I could not find out. I released the captive, and he flew off down the slope better than I expected, since it was not easy to understand how without his long tail he could balance his huge head. Lastly, on my return journey about a mile before reaching the Jhiri, I saw a pair perched near the top of a high dead tree.

I have received this species from N.-E. Cachar, and Godwin-Austen speaks, though doubtfully, of their occurrence near Tellizo peak in the Naga hills, but I have not as yet any record of its occurrence (though it probably does occur there) in any part of the Assam valley, not even in the Dibrugarh district, whence I have so many species.

[They are not very rare in Dibrugarh. In the centre of the sheet of tea which formed my garden were a couple of huge Sappa (*Michelia* sp.) trees, and one afternoon, while passing them, one of these birds flew towards me from the very topmost branches of one of these trees. Having only snipe shot I hesitated a bit, but recollecting that "nothing venture nothing win," I fired, and down came a fine male. Measurements were:—Length, 46·50; expanse, 64·0; tail, 17·20; wing, 18·50; tarsus, 3·0; bill from gape, 7·40; weight, 5·25. Legs and feet dingy glaucous green; irides reddish brown; claws horny brown; lower mandible ivory white; base below red; sides of the lower mandible at base black, upper mandible yellow, tinged reddish; casque red above, yellow at sides, and black in front. Subsequently I continually observed these birds flying overhead, sometimes in small parties of five or six, but never managed to secure another specimen. Ass. "*Hivang.*"—J. R. C.]

It is generally distributed throughout British Burmah in suitable localities, but is specially abundant in the Arakan hills.

142.—Hydrocissa albirostris, *Shaw.*

This species was very abundant in the low-lying forest between Noongzai-ban and the Jhiri, but I never saw it again after crossing that ridge, nor do I believe that it occurs further east in Manipur.

I have specimens of this species both from N.-E. Cachar and from several localities in the Dibrugarh district.

[Very common in the Dibrugarh district, even venturing amongst thin forest in cultivation. The Assamese call them "*Hay-tuk, tek-ee.*"

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	...	30·25	37·25	12 20	11·25	2·30	4·40	2·50lbs.
♀	...	31·10	38·50	12·0	11·25	2·30	5·30	...

Legs and feet plumbeous, irides brownish red, mouth inside black, claws horny brown, naked facial skin sickly white, bill yellowish white, and black base of lower mandible reddish brown. Occasionally small parties of six and eight are met with. Permanent residents.—J. R. C.]

In both the Garo and Khasi hills it is the much larger *affinis* (*vide* S. F., VI, 102) that alone occurs, and it is clearly to this species that Godwin-Austen refers under the name of *H. coronata* when he says he shot a pair in the West Khasi hills, west of Pudrugru. Throughout British Burmah this species is common in suitable localities alike in plains and hills.

In the forest half way up the Noongzai-ban ridge I saw a party of moderate-sized Hornbills, rather bulkier birds than *albirostris*, but with smaller bills, apparently without casques. I could not get near them; they only took short flights, but they kept high up and would never let me get nearer than about 200 yards. Examining them with binoculars from this or a little greater distance they appeared much the colour of *Ocyceros birostris*, Scop., but somewhat darker, and when they flew their wings were much darker and showed a good deal of pure white. Personally I have no doubt that these birds belonged to that now lost species (*vide* S. F., VII, 167, 499) 144*ter*.—*Anorhinus austeni*, the type of which came from the North Cachar hills, of which the Noongzai-ban ridge is one of the continuations.

Godwin-Austen obtained 146.—*Aceros nipalensis*, Hodgs., in the Khasi hills, but I do not know of its occurrence in any other part of Assam, Sylhet or Cachar, and I never saw nor heard of it in Manipur. At the same time Blyth records it, I know not on what authority, from Manipur and Cachar. In British Burmah I only know of it in the higher mountains of Central Tenasserim.

146*bis*.—Rhyticeros undulatus, *Shaw*.

This species was *excessively* common on the Noongzai-ban ridge early in February, when I shot a pair, but not one was seen there on the return journey early in June.

I heard and saw this species in February, also in the Eerung valley; but after this I never again saw it anywhere in Manipur, nor did I even hear it, and the sawing noise made by its wings in flight is quite *sui generis* and audible I should say at fully a mile's distance.

The measurements, &c., of the pair I shot were as follows :—

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	45·2	65	14·5	20	2·9	9·1	8lbs.
♀	...	38·5	54	12	17	2·4	7·0	5lbs. 14ozs.

Male.—Scales on front of toes and tarsi large and glossy black; claws black; soles and sides and back of tarsi hoary, with a few small black scales on the upper part of the latter.

Bare orbital skin reddish fleshy; irides orange red; gular skin intense bright yellow, with a broad transverse black band interrupted just at the middle; bill pale horny yellowish white, reddish towards the bases of both mandibles, and the first plait of the casque chiefly reddish; the bare skin on the interior of the wing black.

Female.—Precisely similar, but the intense yellow of the gular skin in the male replaced by intense blue in the female.

In both sexes the crest is very large and full, far larger than one would fancy from merely examining dry specimens.

Noisy as the flight of this species is, it is strong and free and not at all clumsy.

We have this species from the Khasi hills (whence Godwin-Austen also records it) and from the northern parts of Sylhet, and I found it very common in North Cachar in the cold season, and shot one in the station of Silchar itself, but I have as yet no other record of its occurrence in any other part of Assam, though I know that Dr. Day procured it somewhere in the valley.

[146*bis*.—*Rhyticeros undulatus*, Shaw.—A solitary male shot in Bhamun Tea Garden by my friend Mr. H. K. Cornish, and measured by him as follows:—Length, 41·0; expanse, 67·0; tail, 13·0; wing, 20·0; tarsus, 2·30; bill from gape, 7·75. Legs and feet blackish, orbital skin pinkish, gular skin bright saffron yellow, with an imperfect dusky band transversely. Bill, basal portion tinged red, rest yellowish green, irides orange. There were no signs, it being a young bird, of the plaits peculiar to this species, but at the base of the upper mandible there was a fold of whitish skin, which would have been shed in a few days. The tail was pure white. The primary feathers exceeded the longest of the secondaries by 1·90 inches. The sound of the wings made by this species when flying can be heard from a great distance, and they fly

very high up as a rule. Assamese call them *Mah-doh-la*. They are not very rare in Dibrugarh, though very rarely to be shot.—J. R. C.]

It occurs in the southern half of Tenasserim and in Arakan, and a single specimen is said to have been obtained at Tounghoo.

147*quat.*—Palæornis indoburmanicus, *Hume*. (S. F., VII, p. 458.)

I met with a single flock of this species in the low-lying forests of the Jhiri valley, but saw it nowhere else in Manipur.

In Cachar I found it very common at the end of January, shooting it both in the station, at Lakhipur and close to the Jhiri itself. Mr. Inglis has also sent it from a little further north in Cachar. It has been sent also from Northern Sylhet and the South Khasi hills near Cherrapoonjee, and Godwin-Austen records it from the North Khasi hills, but I have not yet received it from the Dibrugarh district or indeed any part of the Assam valley. It occurs in Pegu in all suitable localities from Thayetmyo to Elephant Point and in Northern and Central Tenasserim, but not in the southernmost parts of that province, while from Arakan, though it doubtless occurs there, I have as yet no record of its having been procured. Blyth says that in Burmah this is a mountain species, chiefly or wholly confined to the loftier elevations. This is totally wrong; it don't like hilly country and never ascends the higher mountains.

148.—Palæornis torquatus, *Bodd.*

This species was common in the Jhiri valley in February, but was seen nowhere else in Manipur.

It is found in Sylhet and Cachar and throughout the valley of Assam right up to Sadiya,* but I have not received it, nor does it seem to have been recorded from either the Garo, Khasi or Naga hills; indeed, it is a plains species.

It occurs in Arakan and throughout Pegu in all suitable localities, and Wardlaw Ramsay once met with it on the lower slopes of the Karen hills, but I do not think it occurs in any part of Tenasserim proper.

* [*Palæornis torquatus* is very common everywhere in the Dibrugarh district and is a permanent resident. During the ripening of the Indian corn they commit great depredations amongst the crop. They lay in June in holes in trees.—J. R. C.]

149*bis*.—Palæornis cyanocephalus, *Lin.*

I never saw this wild myself in Manipur, but one of my taxidermists did, and whilst in Manipur a Naga brought in a much injured live bird that he had knocked down near Langtabal, the old capital, and I also saw two caged specimens that had been captured in the neighbourhood, and I learnt that later in the year, as well as I could make out about the time the rice ripens, this species is tolerably common.

This species occurs at one season or another throughout Assam, Cachar and Northern Sylhet hills and plains except upon the highest ranges. It is very common right up to the extreme head of the valley beyond Sadiya.

In British Burmah it is equally generally distributed, except in the southern portion of Tenasserim (the Mergui district), to which it does not extend.

152.—Palæornis fasciatus, *P. L. S. Müll.*

I first shot this species in Manipur in the Eastern hills at Aimole, where at from 4,000 to 5,000 feet elevation they were very common, and I met with them here and there from 3,000 feet elevation upwards everywhere in the Eastern hills. I believe I saw them on the Manipur bank of the Jhiri, but did not shoot any there, as I had just shot three on the Cachar bank of the river. They keep in small flocks, and frequent particular trees which are in fruit day after day until the tree is cleared. When occupied thus feeding they are not easily disturbed. They are very difficult to see, as they crawl about the branches in a slow stealthy way, keeping well hid by the foliage and the dense clusters of tree ferns and orchids. But when you do spy out and shoot one, if he drops dead, the others only flutter a little inside the tree but do not fly out. I have thus, in the course of half an hour, killed five out of the same flock by patient watching and persistently staring up into the tree; but if the bird shot is only wounded, and the poor thing falls screeching as they do, then the flock flies off with loud outcries, but still returns within half an hour.

It is everywhere a semi-migratory species, changing its *locale* with the seasons, according as the fruits and grains on which it feeds ripen here and there. Thus we never once saw it in the basin of Manipur, but found it abundant in the Eastern hills, while when the rice is ripe and cut it is said to swarm below and to desert the hills.

This species is widely and universally distributed throughout Assam,* to the extreme eastern outpost, Cachar and Sylhet, alike in hills and plains, and it is equally widely spread throughout British Burmah.

Godwin-Austen obtained 150.—*Palæornis schisticeps*, Hodgs., in the Khasi hills, but I have no other record of its occurrence anywhere in Assam, Cachar or Sylhet, and I never met with it in Manipur. It is said to occur in the Arakan hills, but it is doubtful whether it may not rather be the representative species *P. finschi*, which replaces *schisticeps* in Northern and Central Tenasserim and, I *believe*, in Northern Pegu also.

153.—Loriculus vernalis, *Sparrm.*

Pretty common in the forests east of the Jhiri below the Noongzai-ban ridge, but nowhere else met with in Manipur.

It is common in Northern and North-Eastern Cachar, and Godwin-Austen records it from the Khasi hills, but I have not received it thence, nor from any other part of Assam, though it is pretty sure to occur there.

It is generally distributed alike in hills and plains in well-wooded localities throughout British Burmah.

Godwin-Austen obtained 155.—*Picus majoroides*, Hodgson, on the Hengdon peak of the Khasi hills, but I have no other record of its occurrence anywhere in Assam, Cachar or Sylhet, and I never met with it in Manipur, where Woodpeckers are on the whole scarce. It does not, so far as we know, extend to any part of British Burmah.

155*bis*.—Picus manderinus, *Gould.*

This, or a variety,† was obtained by Mr. Roberts at Gonglong in the Manipur hills, and must therefore be included in our list, but I never met with it, and I may note that, except *Picus macii*, which is common in the valley, Woodpeckers are scarcer in Manipur than in any other region I have ever worked.

This species has never been procured anywhere in Assam, Cachar or British Burmah.

---

* [*Palæornis fasciatus* is very common in the Dibrugarh district indeed. Enormous flocks of them are seen morning and evening flying high overhead to and from their feeding grounds. In the morning they go east and return before dusk, roosting, I should say, in the hills. I have, however, in June found a nest with two young birds in the garden.—J. R. C.]

† For Godwin-Austen's full description of Mr. Roberts' specimen, and his view of the differences between the Manipur and Chinese specimens, *vide* S. F., V, 53.

156*bis*.—Picus pyrrhothorax, *Hume*.

This species was fully described, S. F., X, 150. I procured my only specimens at Aimole in the Eastern Manipur hills. Never afterwards did I or any of my men even see another specimen of this beautiful bird, which being, as I believe, new has never, it is needless to say, been as yet recorded from any part of Assam, Sylhet, Cachar or British Burmah.

Godwin-Austen got the true 156.—*Picus cathpharius*, Hodgs., in the Naga hills, but there is no other record of its occurrence in any other place in Assam, Cachar or Sylhet, nor is it known to extend to British Burmah.

157.—Picus macii, *Vieill*.

This species was fairly common about the capital and indeed in suitable localities throughout the basin, but we never saw it in either the Eastern or Western hills.

Though even this species is not numerically abundant it is at least ten times more so than any other Woodpecker in Manipur, and I shot more of these than of all other kinds, including piculets, put together.

The fact is I thought them a new species. Jerdon gives the wing of *macii* at 3·75 (whereas it really averages I find over 4), and this coupled with the fact that the Manipur birds have the *striæ* on the entire lower surface much more pronounced as a rule, and *often* have a regular gorget of strongly marked black splashes, of which only *traces* at most are seen in the majority of Indian specimens, misled me and I shot most I saw.

Comparing, however, now with a huge series from all parts of India, I find that the Manipur birds, though they do differ as above on the lower surface and average slightly larger, are not separable by any other point, of size, markings, or colouration.

The following are particulars of specimens measured in the flesh :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·0	13·4	3·1	4·25	0·65	1·2	1·53ozs.
♂ ...	8·2	13·7	3·1	4·3	0·67	1·1	1·6ozs.
♀ ...	7·8	13·7	3·6	4·2	0·7	1·07	1·47ozs.
♀ ...	7·8	13·65	3·0	4·2	0·7	1·08	1·52ozs.
♀ ...	7·6	13·0	3·1	4·15	0·65	1·02	1·32ozs.

The legs and feet are dull leaden or brownish leaden with more or less of a greenish shade; claws dusky; soles yellowish, hoary; the upper mandible and tip of lower dusky, or blackish or blackish leaden; the basal two-thirds (more or less) of

lower mandible and gape grey, pale leaden, or bluish-grey; irides commonly brownish red, sometimes pure brown, in one or two claret red.

I often noticed this bird in parties of three or four working up the same small trunk, one below the other, at distances of about nine inches apart and each taking a distinct line of ascent. They are very common on the larger bamboos, and on these make a pretty loud and rapid tapping, which always attracts one's attention to them if one is anywhere within a hundred yards.

This species is common throughout Assam right up to our easternmost outpost, Cachar and Northern Sylhet. I do not *know* of its occurrence in the Garo or Naga hills, but I have several specimens from Shillong; and Godwin-Austen also records it from the Khasi hills.

Blyth says it is common in Arakan, but I have not seen it from Pegu (where it seems to be replaced by *analis*), though Ramsay got it in Karenee and the Karen hills, nor have we ever met with it in Tenasserim.

157*quat.*—Picus atratus, *Bly.*

I never met with this species in Manipur until I reached Aimole in the Eastern hills. There I saw from first to last four specimens and shot them all. Further north in these hills I saw it once or twice and shot a fifth at Machi, but I met with it nowhere out of the *Eastern* hills.

Godwin-Austen records a specimen from Thingra in the Manipur hills.

The following are particulars of the specimens I killed at Aimole:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·25	14·15	2·9	4·4	0·66	1·29	1·79ozs.
♂ ...	8·35	14·5	3·1	4·57	0·75	1·18	1·68ozs.
♀ ...	8·6	14·5	3·1	4·55	0·76	1·1	1·95ozs.
♀ ...	8·5	14·4	3·1	4·56	0·77	1·16	1·98ozs.

The legs and feet are leaden dusky; claws dark brown; soles yellowish hoary; bill in some horny black, only bluish-grey at gape and base of lower mandible, but in others pale leaden grey, only dusky on the upper mandible, everywhere above the nareal ridges; irides brighter or duller lac red.

The call of this Woodpecker is very distinct, and once heard can never well be mistaken. A short time after I had shot the first female of this species, I noticed a curious creaking grating sound in some trees lower down the hill; it was *very* like the sound that two rough pieces of wood, trunks or branches of

trees make; when pressed by the wind they slowly grate against each other, and yet it seemed, somehow, not exactly that familiar sound so common in forests when there is any wind. So I followed it up carefully and at last traced it to a male of this species, which, after watching it emitting the sound for half a minute or so, I shot.

I have no record of this species having been obtained anywhere in Assam, Cachar or Sylhet, hills or plains. Neither do I think it occurs in Pegu or Arakan, but it is found in the hill forests of the central and northern portions of Tenasserim proper and has also been obtained in the Karen hills.

161.—Hypopicus hyperythrus, *Vig.*

I first saw this species at an elevation of about 5,000 feet on the Limatol range (the easternmost of the Western hills), which overlooks the basin, but I failed to shoot it. I then never saw it again till we reached the Eastern hills, and there I shot one high up in the hills above Kokshin Koonoo, at an elevation of, say, 4,000 feet, and later I shot a second at Tankul Hoondoong at about 5,000 feet. These three were the only specimens I saw in Manipur from first to last.

Godwin-Austen got a specimen in the Naga hills, but I have never obtained a specimen from, nor have I any record of its occurrence in, any other locality in Assam, Cachar or Sylhet. It is of course essentially a Hill species.

I do not think this species has as yet been noted from any part of British Burmah.

162.—Iyngipicus semi-coronatus, *Malh.* (=*I. rubricatus*, Bly.)

We only saw this once and that was on the summit of the Limatol range, the easternmost of the Western hills. In the Eastern hills we never saw it at all.

This species occurs both in the Khasi and Naga hills, and seems, indeed, to be quite common about Shillong. It may occur in the Garo hills, and certainly does in the Himalayas bounding the Assam valley to the north, but it does not descend into the valley itself or Sylhet or Cachar, being a hill bird rarely, if ever, I believe seen below an elevation of 3,500 feet.

It has never yet been recorded from any part of British Burmah.

Godwin-Austen records 163.—*I. pygmæus*, Vig., from the Khasi hills, but I have never seen it thence nor from any part of Assam, Sylhet, Cachar, or British Burmah, and

I cannot help wondering whether G. A.'s bird was really *pygmæus* with immaculate black upper tail-coverts, or the large race of *canicapillus* that I have from Manipur and the Naga hills.

163*bis*.—Iyngipicus canicapillus, *Bly*.

I first saw this in the Western hills, but failed to procure it there. In the basin I only once met with it, *viz*., at Hierock at the base of the Eastern hills, but about Aimole, *on* these latter, it was not uncommon, and I saw it once or twice further north in these at Machi and Tankul Hoondoong.

One Aimole bird, a male, is typical. Its details were as follow :—

Length, 6·05 ; expanse, 11·2 ; tail, 2·2 ; wing, 3·32 ; tarsus, 6·3 ; bill from gape, 7·6 ; weight, 0·85oz.

Legs and feet a dirty sap-green overlying dull leaden ; claws brownish leaden ; bill dusky leaden, paler and greenish on lower mandible ; irides brownish red.

Now this is a rather exceptionally large bird, as will be seen by comparing these with the dimensions given, VI, p. 127, but it is absolutely typical in plumage.

Another male, also from Aimole, has the wing 3·4 ; this is longer than *any canicapillus* I have ever seen, the largest hitherto seen being 3·35 in a bird from N.-E. Cachar.

But then there is a male from Hierock, perfectly typical in plumage, with the wing 3·61, and lastly a female from Aimole, in every way typical except that the four central tail feathers are nearly spotless, with the wing 3·6.

But, despite this larger size, these birds are not really separable from *canicapillus*.

The first half dozen of this latter species I took out led me to think that the Manipur birds and the large N.-E. Cachar birds were separable as having the plumage blacker, the occipital band (the ends of which extend on either side encircling the grey crown almost to the eye) blacker and broader, and the white barring on the wing broader and more conspicuous. But though this is true as regards about four-fifths of the Burmese birds, I soon found that here and there amongst these latter were specimens just as black with just as black occipital bands and just as conspicuous white wing bands.

There is really no constant difference except in size. In Manipur the wings run from 3·3 to 3·61, and the birds average blacker and more strongly marked. In Burmah and the Malay Peninsula the wings run from 3·0 to 3·3, and the birds average browner and have the markings feebler, but it would

clearly be absurd to make a new species out of differences of this nature.

We have this species from N.-E. Cachar and the Khasi hills, but from nowhere else as yet in Assam, Cachar or Sylhet. Throughout British Burmah it is universally distributed.

165*bis*.—Hemicercus canente, *Less.*

I found this species not very rare in the low forests lying between the Jhiri and Noongzai-ban, but I never met with it elsewhere in Manipur.

We have this also from N.-E. Cachar, but from no other place in Assam, Sylhet or Cachar. It is widely and generally distributed throughout British Burmah.

166.—Chrysocolaptes sultaneus, *Hodgs.*

I saw, but failed to obtain, a specimen of this species in the Eerung valley. I shot the bird, but it fell far below and was not to be found when ten minutes later I got down to the place. It was against the trunk of a tree overhanging a small precipice 50 or 60 feet high in the midst of dense forest. It was not 20 yards distant, back to me when I first saw it, sideways when I fired, and I could not only make sure of the species but also see that it was not one of the huge Himalayan race, but one such as we get in Cachar and Thyetmyo, too big for *strictus*, too small for *sultaneus*, but yet nearer the latter and so classed by me as such.

This was the only time I *saw* this species in Manipur, but I heard a Woodpecker very busy at work in the Eastern hills, which I believe by the sound may have been this. I went after it at once, but it must have seen me before I could catch a glimpse of it, and the sound ceased, and I heard the whirr of its wings, but never saw it.

In Assam it is found throughout the valley in suitable localities right up to Tippook; in the Garo and Khasi hills and in Northern Sylhet, and apparently both Northern and Southern Cachar. Varying slightly in size, smaller to the south, larger to the north, it is found throughout British Burmah.

I may remark that Godwin-Austen received 168.—*Muelleripicus pulverulentus*, Tem., from the Garo hills, but I have as yet never heard of it from any other part of Assam, Sylhet or Cachar (though it probably occurs in all), nor did I ever meet with it in Manipur. It is generally, though sparingly, distributed throughout British Burmah in suitable localities and will probably turn up in Manipur.

Another species which I never saw, though it is sure to occur in Manipur if only in the Jhiri valley is 171.—*Gecinus striolatus*, Bly. I have this from N.-E. Cachar and the Khasi hills, and Godwin-Austen records it apparently from the E. Naga hills and again from the Terai under the Dafla hills and near Dekrang Mukh. I have no other record of its occurrence in Assam, Cachar or Sylhet. It seems common in the northern half of Pegu, and has occurred in Tenasserim, but only in the extreme north. I do not know that it has as yet been procured in Arakan.

172.—Gecinus occipitalis, *Vig.*

I obtained a pair half way up the Noongzai-ban ridge, and I saw it once in the Eastern hills, but failed to secure it.

It occurs in suitable localities at one season or another throughout Assam (I might say hills and plains, but that I have no record of its occurrence in the Naga hills), and alike in Northern Sylhet and Northern Cachar.

[Common in the Dibrugarh district; this species is often seen quite at the base of trees, and I have seen it even *on* the ground at the root of a tree; affects thinly-wooded country more than forest. Breeds in May; its nest hole is never far off the ground, in one case only 4 feet; its call I have never heard.—J. R. C.]

It is pretty generally distributed throughout British Burmah, not however extending in Tenasserim as far south as Mergui.

Another species probably occurs in Manipur—173.—*Chrysophlegma flavinucha*, Gould., but I never met with it.

I have it however from N.-E. Cachar close to the boundary of Manipur, and Godwin-Austen records it from the Khasi hills, but as yet these are the only localities from whence I have it recorded in Assam, Cachar or Sylhet.

In Burmah we have it from Arakan, Northern and Central Pegu and Northern and Central Tenasserim.

174.—Chrysophlegma chlorolophus, *Vieill.*

I shot two females of this species at Aimole in the Eastern hills, but never met with it elsewhere. It is certain to occur in the Western hills also, but as I said before Woodpeckers are so thinly distributed in Manipur that a very prolonged and close search will be necessary before one can say positively what does not occur in any locality.

I have this species from N.-E. Cachar, from Sadiya, and a dozen different places in the Dibrugarh district, where, Cripps says, they lay in June, and Godwin-Austen gives it from the

Khasi hills. In Burmah its distribution is similar to that of *flavinucha*, except that it does not seem to extend to Central Pegu.

176.—Blythipicus pyrrhotis, *Hodgs.*

I never met with this species in the Western hills, but I saw four together near Aimole, and at Machi I succeeded in killing two females out of another party of four.

In both cases the birds were feeding either on the ground or on roots running along the ground. In both cases they were in the midst of the densest undergrowth in high forest, and but for their cries I should have known nothing of their whereabouts. They have a very loud screeching call, almost like that of a *Hierococcyx*, and are very vociferous. Hearing the noise, I crept up towards the spot; in the first case they rose from the ground about 20 yards away, but were out of sight before I could shoot. In the second place they rose quite close and I got a right and left. Their flight, at any rate when they first start, is very swift.

These were the only occasions on which I saw them, and I had no opportunity of observing their habits, of which next to nothing is known. Those I killed had fed on huge white larvæ.

Both females were precisely alike, and their measurements hardly differed a hair's breadth. They measured:—

Length, 11·25, 11·33; expanse, 18·2, 18·25; tail, 3·95, 3·97; wing, 5·67, 5·7; tarsus, 0·97, 0·95; bill from gape, 1·85, 1·86; weight, 5·1, 5·05ozs.

The bill was rather pale lemon yellow; the irides brownish red or maroon; the legs and feet blackish or leaden black; the soles dirty-yellow; the claws brown.

We have this species from N.-E. Cachar, and Godwin-Austen has noted it from the Naga hills and the Shengorh Peak of the Dafla hills, but I have as yet no other record of its occurrence anywhere in Assam, Cachar or Sylhet.

I have not yet seen this species from Pegu or Arakan, but it occurs in the northern and central divisions of Tenasserim. It is everywhere, I think, a scarce bird.

177.—Gecinulus grantia, *McClell.*

I only shot a single specimen of this Woodpecker, and that was in the Eerung valley in the Western hills, but I twice saw it, once near Aimole and once near Machi, in the Eastern hills, on both occasions in pairs.

The bird I did shoot measured:—

Male.—Length, 10·1; expanse, 14·5; tail, 3·9; wing, 5·05; tarsus, 0·84; bill from gape, 1·2; weight, 2·65ozs.

Legs and feet dull grass green; claws brown; bill white with a bluish tinge, strongest about the base of the lower mandible and nares; irides dull lac red.

We have this from the Garo and Khasi hills, from Sadiya, Tippook and other places in the Dibrugarh district, and Godwin-Austen also records it from the Garos and from the Dafla hills.

In Pegu and Tenasserim it is replaced by *G. viridis*, Bly. Neither species, so far as I know, has as yet been sent from Arakan.

178.—Micropternus phæoceps, *Bly.*

Never met with in the Eastern or Western hills, but I shot two near the capital, and saw it on two or three other occasions in other portions of the basin.

It is universally spread, though nowhere numerically common throughout the less elevated portions of Assam, Sylhet, Cachar, and British Burmah, except the southernmost portion of Tenasserim, where it is replaced by *brachyurus*.

186.—Vivia innominata, *Burt.*

I never saw this about the capital or in the central part of the basin, but I met with it at the edges of this along the basis of the hills and both high and low in both the Eastern and Western hills. It is not very common, but still I must have seen a score from first to last. It is very fond of bamboos, amongst which, for so tiny a bird, it makes with its bill a considerable clatter.

The male differs from the female in having a rather larger bill and brownish red on the forehead, which in the female is uniform with the crown.

In Assam this seems generally distributed in hills and plains, of course in suitable localities.

[Far from rare in the Dibrugarh district, and as stated the noise it makes with its bill against the bamboos often draws attention to it. Legs plumbeous, bill the same, tipped black.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	4·15	6·50	1·20	2·10	0·50	0·51	0·40oz.
♂ ...	4·15	6·50	1·20	2·20	0·50	0·53	0·40oz.—J. R. C.]

I have it from N.-E. Cachar, but I do not know whether it occurs elsewhere in Cachar or Sylhet, though it probably does throughout the north of both districts. I have never seen it

from Arakan or Pegu. Blyth notes it from the Tenasserim hills, and Bingham got a specimen at the Daylaw Choung, but in four years' collecting neither Davison nor Darling ever saw it, so it must be rare. In the Karen hills, however, Ramsay obtained a specimen.

187.—Sasia ochracea, *Hodgs.*

I procured specimens of this in both the Eastern and Western hills, but did not see it in the basin. The male is distinguished by its bright yellow forehead, that of the female being much the colour of the breast.

A female shot at Machi measured:—

Length, 3·6; expanse, 7·1; tail, 1·0; wing, 2·2; tarsus, 0·5; bill from gape, 0·6; weight, 0·37oz.

The legs and feet are light reddish fleshy; soles pale yellow upper mandible and tip of lower mandible blackish, rest of lower mandible and gape pale leaden blue; irides red.

These were decidedly rarer than the preceding species, but like this is very fond of bamboos and low thick undergrowth, so, though I only saw it six or seven times, it may not be so rare as this would indicate.

This species also I have from N.-E. Cachar and many places in the Dibrugarh district,* but from nowhere else, but Godwin-Austen gives it from near Nenglo in the Asalu hills and from the Dafla hills; and I dare say it is generally, though sparingly, distributed—as it is in Arakan, Northern and Central Pegu and Tenasserim—in suitable localities.

188.—Iynx torquilla, *Lin.*

This species was generally, though sparsely, distributed throughout the basin of Manipur, but I never met with it in either the Eastern or Western hills. As a rule, in the basin, I found it sneaking about the hedge rows of the capital and the various villages; once or twice in scrub well away from these; never in thick jungle or forest.

I have found this species in Northern Sylhet and Cachar and have it from the Garo and Khasi hills, but not as yet from either the Naga hills or any part of the valley of Assam.

* [*Sasia ochracea* is I think rare in Dibrugarh. The only specimen I secured was shot in long null grass on the banks of the "Desang" river. It was searching about the stems of the "null," a little way off the ground. Irides crimson, whereas Jerdon says they are pale brown. Possibly this is of the young birds. My specimen measured:—Length, 3·52; expanse, 6·10; tail, 0·90; wing, 2·10; tarsus, 0·52; bill from gape, 0·54; weight, 0·35oz. Subsequently I saw other specimens in tangled brushwood and forest, but failed to bag any.—J. R. C.]

[I shot two only of this species while in Dibrugarh, and saw about half a dozen more in open and thin forest about cultivation.—J. R. C.]

It occurs in Arakan, Northern and Eastern Pegu and Karenee, but we have never obtained it in Tenasserim proper.

191.—Megalæma marshallorum, *Swinh.*

The mournful wailing cry of this species "*pee yu*" "*pee yu*" was constantly heard in both the Eastern and Western hills from about 3,500 feet and upwards, but it is very wary, and it is extremely difficult to creep up anywhere within shot. Rather perhaps it is extremely sharp-eyed, and, on the other hand, difficult to distinguish high up in the lofty trees it affects, and though you can get up to the base of the tree in which it is calling (and if undisturbed it will go on calling ceaselessly for half an hour at a stretch from the same perch, with only a few short intermediate pauses) long before you can make out *its* exact whereabouts it has made *you* out as a suspicious character and has silently sloped off. Thus, though I went after it at least fifty times, I only succeeded in shooting four from first to last, and all these flying shots, the bird by a rare chance emerging from the tree so as to afford a glimpse of it as it flew away with an undulating Woodpecker-like flight. I measured two specimens, both males; in fact all four were males. They measured:—

Length, 13·2, 13·6; expanse, 19·5, 19·2; tail, 4·4, 4·2; wing, 5·7, 5·6; tarsus, 1·3, 1·47; bill from gape, 2·06, 2·11; weight, 6·6, 7·03ozs. Of the *first:* Legs and feet dull pale yellowish green; soles dirty yellow; claws black; bill wax yellow, paler on terminal halves of both mandibles and with a broad black stripe on the culmen from beyond the nares to the tip; irides brownish red. Of the *second:* Legs and feet pale leaden, overlaid with dull yellowish green; claws horny black, pale bluish at their bases; bill wax yellow, paler on terminal half of lower mandible and blackish on tip of upper mandible and culmen as far back nearly as nares; edges of lids black, lower bare lid pale greenish dusky; irides liver brown; soles dull yellow.

Below about 3,500 feet elevation I did not hear it.

I have this species from the Khasi hills, but from no other locality in Assam, Sylhet or Cachar.

It occurs in Arakan, and Ramsay obtained it in the Karen hills, but have no record of it from anywhere in Pegu, and in the Northern and Central Tenasserim hills it is replaced by *M. virens*, Bodd., the Chinese form.

192.—Megalæma hodgsoni, *Bp.*

This is another species that I only met with in Manipur in the Jhiri level, and that seems to belong to the Cachar area. Its cry is perfectly distinct, "To-to" "To-to," very loud and constantly repeated; and though this species may prove to occur elsewhere in Manipur, I certainly never heard it, and I was there in the height of the "calling" season, when if I had ever passed within half a mile of a male I must have become aware of the fact.

It is found, though in the first three rather sparingly distributed, throughout Assam,* Cachar, Sylhet and British Burmah (except the southernmost portion of Tenasserim), alike in hills and plains, but rarely found at elevations exceeding 3,500 feet. There are thousands of localities along the edges of the Manipur basin and in both the Eastern and Western hills well suited to it, and it is remarkable that I should never have met with it there.

195.—Megalæma asiatica, *Lath.*

This Barbet literally swarms in the low Jhiri forests, and the whole place resounds with their vociferous cries in the spring. It is common too throughout the Eastern and Western hills up to 4,000 feet (occasionally one meets them higher still) and the entire basin. Everywhere the forest rings with their ceaseless cries. Sometimes these sound like "*Develóp, Develóp Develóp,*" sometimes like "*Who come along, who come along, who come along.*" Two often get on two adjoining trees and try to shout each other down or again give alternate calls. "*Shezaró*" says one, "*Shezaró*" says the other, and so on as rapidly as the calls can follow each other, till in a minute or so they get out of time and the calls begin to run into each other, when, as if conscious of having made a muddle of the duet, each starts his solo "*Develóp,*" "*Develóp*" on his own account.

Godwin-Austen long ago remarked that, in the Manipur and Assam hill birds, the specimens exhibit a small well-marked crimson (he *says* scarlet, but he means crimson) patch just at the base of the lower mandible immediately below the gape, of which specimens from India show no, or but very faint, traces.

* [*Megalæma hodgsoni* is pretty common in Dibrugarh district. I subjoin measurements of four males and a female: 4 ♂. Length, 11·30 to 11·60; expanse, 16·50 to 16·75; tail, 3·05 to 3·70; wing, 5·0 to 5·20; tarsus, 1·10 to 1·16; weight, 4·60ozs. to 5·50ozs.; bill from gape, 1·63 to 1·70. ♀. Length, 10·50; expanse, 15·25; tail, 3·0; wing, 4·85; tarsus, 1·10; bill from gape, 1·63; weight, 3·85ozs.—J. R. C.]

This is quite correct. Every Manipur bird (and I shot something like 50) shows this patch distinctly, whereas not above one in three Himalayan specimens exhibit even a trace of it. In Calcutta and Dacca birds, however, most show a trace of it, and here and there one shows it distinctly.

Moreover, in the Manipur birds, the pale glistening straw yellow band, dividing the red forehead from the black coronal band, is broader and brighter than in any Indian specimens; the black coronal band is narrower, and the colours, both blue and green, are somewhat brighter and purer. But Dacca, Cachar and Sylhet birds bridge over all these slight differences, and there is no ground for separating the Manipur and Assam hill birds.

This species abounds throughout Assam,* Sylhet and Cachar, alike in hills and plains, up to elevations of 3,500 or 4,000 feet. It occurs also in the Arakan hills and the hills and adjacent forest tracts in Pegu and Northern Tenasserim. Further south in Southern Tenasserim it is replaced by the allied *M. davisoni*, nobis.

196.—Megalæma franklini, *Bly.*

Very common in the Eastern hills, where I shot numbers, but strange to say never noticed in the Western hills, though it has a perfectly distinct and characteristic call. This call heard from a distance is "*Wy-u, Wy-u, Wy-u,*" but when one is close to the bird it sounds like "*Kok wy-u, Kok wy-u,*" &c., the first syllable being lower in pitch and having less resonance. It is not found, so far as I have observed, much below 3,500 feet elevation in the Manipur hills.

The following are the dimensions and other particulars of some I measured:—

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	9·0	13 5	2 7	3·8	1·03	1·32	2·72ozs.
♂	...	9·3	13 3	2·8	4·0	1·1	1·25	2·43ozs.
♂	...	9·1	13·6	2·6	3·85	1·06	1·29	2·66ozs.
♂	...	9·0	13 7	2·7	3·88	1·06	1·30	2·74ozs.

(I can't imagine why I measured no females, *but* I didn't.)

Legs and feet dull to pale leaden, overlaid with a strong green (varying from dull to grass green) shade, strongest on feet, where in some it entirely obscures the leaden tint below; claws dusky leaden; bill black, white or bluish white at gape and base of lower mandible; irides rich chocolate brown to brownish red.

---

* [*Megalæma asiatica* is very common everywhere in Dibrugarh. The Assamese call it "Hay-too-loo-ka."—J. R. C.]

I have this from Moufloring and Shillong in the Khasi hills, and Godwin-Austen obtained it in the Dafla hills, but there is as yet no other record of its occurrence in Assam, Sylhet or Cachar, neither does it, so far as I know, occur in British Burmah, but in Karenee and the higher Tenasserim hills is replaced by *M. ramsayi*, Walden.

197.—Xantholæma hæmacephala, *P. L. S. Müll.*

I shot a solitary specimen of this species on the banks of the Jhiri on the Manipur side, and never again saw it till after I had recrossed the Jhiri on my return journey.

Its distressingly monotonous spring call "*too, too, too,*" *ad infinitum*, cannot be overlooked, and I never once heard this in Manipur, so if it does occur it must be very rare. I have it from N.-E. Cachar, and Godwin-Austen obtained it at Chatak at the extreme north of Sylhet. I also shot it near Karrimganj in this latter district and at Lakhipur in Cachar, and heard it in Silchar itself, but I have no record of its occurrence as yet in Assam hills or valley. On the other hand it is common throughout all British Burmah wherever there is thin forest or open country with clumps of trees.

198*ter*.—Megalæma cyanotis, *Bly.*

I got this both in the Eastern and Western hills, but it was far from common. I found it in thick evergreen forests at from three to four thousand feet elevation. I never saw or heard it in the valley, and its cry is peculiar, a somewhat harsh metallic double note, quite distinct from that of any other of the Barbets with which I am familiar.

I have received this species from various localities in the Dibrugarh* district right up to Sadiya, N.-E. Cachar and the Khasi hills, but have no other record of its occurrence in Assam, Sylhet or Cachar.

It appears to occur throughout British Burmah wherever there are hills and evergreen forest in the immediate neighbourhood.

199.—Cuculus canorus, *Lin.*

I heard this species occasionally in the Western hills and twice in the valley, but it was not until I entered the Eastern hills that it was at all common or that I shot it.

I shot two males, both adults, and very fine birds, with the wings 8·6 and 8·9.

---

* [*Megalæma cyanotis* is far from rare in the Dibrugarh district, keeping more to the wooded parts of the country than *M. asiatica*.—J. R. C.]

It occurs at one season or another all over Assam,* Sylhet and Cachar, alike in the hills, up to at least 6,000 feet and in the plains.

It occurs, and is probably not uncommon, in either Pegu or Karenee, but it is very rare, indeed seems to be only an occasional straggler to Tenasserim. From Arakan it has not yet been recorded.

200.—Cuculus striatus, *Drapiez.*

Observed both in the Eastern and Western hills, but only procured in the former. Of a male the wing measures 7·2, of a female 6·9. The ordinary cry of this species (which some still persist in calling *himalayanus*, Vig., though Blyth after carefully going into the question declared this equalled *striatus* of Drapiez) is, as is well known, the whistled "*kyphul-pukkha.*" But there was a cuculine bird (*I* think, though one of my men declared he saw *Nyctiornis athertoni* uttering it) in the Manipur hills that called "*Hoot, hoot—toot, toot*" and yet which we could never identify certainly. One day I heard this call in a tree high above me; looked up, saw a cuckoo-like bird at an immense height; fired and down came a female of this species. Now it may be that this species has this second call, *but* about Simla,† where in the spring "*kyphul-pukkha*" resounds from morn to night, I never remember hearing this peculiar "*Hoot, hoot-toot toot,*" which instantly attracted my attention the first day I heard it in Manipur; and, secondly, we heard this latter note in Manipur very much oftener than "*kyphul-pukkha.*"

So it is possible that the real utterer of this mysterious cry was also up in the tree, and skedaddled when I fired without my seeing it, which it well might do, it being in high forest, or it is just possible that we have all of us made a mistake about "*kyphul-pukkha.*" I have repeatedly here at Simla shot *striatus* as, I believe, the very bird making this latter call. Col. Tytler said he had done the same; but Captain Bingham was positive he shot male *micropterus* (*i.e.*, *affinis*, Blyth) in the very act of giving out this call; and it will be noticed that Jerdon (B. of I., I, 328) gives this cry as the vernacular name at Mussoorie of this very species, and Godwin-Austen says the call is *takoo-takoo*, which is identical. We have all of us shot *micropterus*, as we

* [*Cuculus canorus.*—Throughout the Dibrugarh district the well-known call of this bird is continually heard from February, both in forest and open country. It generally calls from the tops of the highest trees.—J. R. C.]

† Since heard several times in the low valleys below Simla.

believed, in the act of calling "*Bho-katha-kho.*" I did so this time in Manipur, but it was a female, and it is *possible* (I don't believe it, for I have such a personal certainty of the normal *striatus*' call, only Bingham's positive assertion staggers me)—it is just possible, I say—that the real *striatus* call may be the "*Hoot hoot—toot, toot*" [or as Jerdon gives it (*tom. cit.*, 324) "*Hoot, hoot-hoot, toot*"] and the other two those of the two sexes of *micropterus*. Both species are so abundant here that both Tytler and myself may have shot the wrong birds.

I do not believe this, but it is possible, and I merely throw out the suggestion so that local observers may this year carefully verify the notes of both sexes of both species.

I have this species from Shillong in the Khasi hills, but from no other locality as yet in Assam, Cachar or Sylhet.

In British Burmah it must be rare. I only know of its occurrence as little more than a straggler in Tenasserim and Eastern Pegu.

201.—Cuculus poliocephalus, *Lath.*

I never saw this bird, but one specimen was brought to us by a Naga, who had killed it somehow in the Western hills in the valley of the Limata. I do not know the note of this species. Can this be our "*Hoot-hoot, toot-toot*" friend?

I have received this from Shillong, where Godwin-Austen says it is very abundant in the early summer months, and from Khowang in the Dibrugarh district, throughout which, Cripps writes to me, that it is fairly common, but I have no other record as yet of its occurrence in any other part of Assam, Sylhet or Cachar, nor so far as I know does it extend to British Burmah.

203.—Cuculus micropterus, *Gould.*

I saw this once or twice in the Western hills, but never in the basin, and it was only in the Eastern hills that it was common or that I actually shot it.

Long ago (S. F., III, p. 79) I pointed out that *C. micropterus*, Gould (Jerd., 203), and *C. affinis*, Bly. (viz., *striatus apud* Jerdon *nec* Drapiez, Jer., 204), were respectively females and males of one and the same species. I re-verified this now, dissecting several birds, and found the females with the wings 7·4, 7·6, 7·8, and males with wings 8·1 and 8·3.

This species occurs in Northern Cachar and Sylhet, and in the Dibrugarh district and the Garo and Khasi hills, but as yet it has not been received or recorded from elsewhere in Assam, Cachar or Sylhet.

In Pegu and Northern and Central Tenasserim it seems to be not uncommon; Davison considered it rare in the latter province, but Bingham found it by no means rare in the Thoungyeen valley. From Arakan it has not been recorded.

206.—Hierococcyx nisicolor, *Hodgs.*

I shot one specimen (a young male with the wing 7·0) of this rare species on the 6th of April at Kokshin Koolel in the southern portion of the basin, not far from the bases of the Eastern hills.

A single specimen from the Khasi hills is the only record I have of the occurrence of this species anywhere in Assam, Cachar or Sylhet.

Similarly from British Burmah I know only of a single specimen from Thatone in Tenasserim, and a couple of specimens from North-East and South-East Pegu respectively.

207.—Hierococcyx sparveroides, *Vig.*

Seen once or twice in the Western hills, but much more common in the Eastern ones. In the basin I did not see it; indeed I do not think I met with it anywhere below 4,000 feet.

It is common in the Assam hills, and Godwin-Austen gives it from the Dekrang valley in his Dafla Hill List. I have it also from N.-E. Cachar, but not as yet from the Dibrugarh district or elsewhere.

[Far from rare, however, in the Dibrugarh district. I used often to see them about tea gardens and villages. Three males measured:—Length, 16·10 to 16·25; expanse, 24·50 to 26·20; tail, 7·60 to 9·0; wing, 9·0 to 9·70; tarsus, 1·10; bill from gape, 1·38 to 1·42; weight, 5·75 to 6·50ozs. Irides dusky yellow and orange in the fully adult bird.—J. R. C.]

In British Burmah it is generally distributed throughout Arakan, Pegu and all but the southern portions of Tenasserim, but while common in some places, chiefly the higher hills, it is rare in others, especially in the plains.

209.—Cacomantis threnodes, *Cab.*

This species was very abundant in the Manipur basin, but I met with it nowhere in the hills. They are birds of a very sneaking, slouching habit, dodging about in the brushwood, bushes and low trees.

It is a remarkable fact that out of 27 specimens preserved only three are females.

The conspicuous white band on the lower surface of the wing in adults, due to the basal inch or nearly this of the

inner webs of all but the first three quills being white, often for an instant catches the eye in the dim light of the thick undergrowth as the bird, previously invisible, starts off.

Three measured in detail :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	9·6	13·2	4·9	4 4	0·73	0·95	1·03 oz.
♀	9·3	12·6	5·0	4 35	0·7	0·95	0 96 oz.
♀	9·2	12·3	4·7	4·3	0 7	0·97	1·0 oz.

The male, a perfect adult, had the legs and feet dingy yellow; the claws dark brown; bill dark brown; inside of mouth orange red; irides orange red.

The first female, with slight traces of nonage, had the legs and feet dingy greyish yellow; bill brown, yellow at gape and base of lower mandible; edges of eyelids yellow; irides orange.

The second female, quite a young bird, entirely in the hepatic plumage, had the legs and feet dingy yellow; the claws brown; the bill black, dull yellow at gape and base of lower mandible; and the irides yellowish white.

Of some adult males I have noted the irides as ruby red; of two young ones as pale brown.

The first female and another male are in an interesting stage of plumage. Almost the entire plumage is that of the perfect adult, only all the secondaries (not the tertiaries) and their greater coverts (not a single other feather anywhere) are brown, barred with red.

In S. F. Vol. VI, p. 158, I explained that *threnodes* of Cabanis, though averaging smaller, was not specifically separable from *rufiventris*, Jerdon. Taking a dozen adult males from Manipur I find the wings vary from 4·2 to 4·65. I have Singapore specimens with wings over 4·2.

This species is very common in Sylhet and Cachar from the low-lying Sukhai, which is probably not much above 50 feet above sea level (if as much), to over 3,000 feet in the North Cachar hills. It is common too throughout the valley of Assam* up to our easternmost outpost. I do not think it

---

* [*Cacomantis threnodes* is very common in the Dibrugarh district. Fifteen specimens sexed and measured, of which eight were females. I give measurements of the largest and smallest birds :—

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	9·70	12·50	5·10	4·50	0·70	0 98	1·10 oz.
♂	...	8·70	12·25	4·50	4·45	0·70	0·95	1·0 oz.
♀	...	9·50	12·50	5·20	4 60	0·70	0·94	1 10 oz.
♀	...	9·10	13·20	4·60	4·45	0·75	0·98	1·25 oz.

Irides light brown, brownish red and red. Several planters call it the Indian Nightingale!—J. R. C.]

is normally common anywhere in the hills above 3,500 feet, but I have a specimen from Shillong, and Godwin-Austen also records it from the Khasi hills.

Throughout British Burmah it is widely and generally distributed, and in all suitable and *not too* elevated localities is very common.

210.—Surniculus lugubris, *Horsf.*

I shot a single specimen of this in the Eerung valley in the Western hills. I thought I saw another specimen some 2,000 feet below Machi in the Eastern hills, but as I did not shoot it it may have been only a young King Crow. On no other occasion, so far as I know, did I observe it in Manipur.

Male.—Length, 9·9; expanse, 15·7; tail, 5·1; wing, 5·37; tarsus, 0·67; bill from gape, 1·13; weight, 1·35oz.

This species occurs in Northern Sylhet and Cachar, and I have it from numerous localities in the Dibrugarh district.

[Common in forest in the Dibrugarh district. It has a very harsh note, which it utters only when pursued by any other bird. Irides reddish brown, mouth inside pinkish, legs and feet plumbeous. Of eight adult specimens measured the wings were from 5·25 to 5·75. A young bird (shot on the 27th June) that had just left the nest had a wing 4·76, irides deep brown, gape and mouth inside orange.—J. R. C.]

Godwin-Austen records two specimens from the North Khasi hills. I have no other record of its occurrence in Assam.

In British Burmah I only know of its occurrence in the southern half of Tenasserim, Lower Pegu, where it is common, and near Tounghoo, but Ramsay obtained it in Karenee, and Blyth records it from Arakan, whence however I have never seen it.

211.—Chrysococcyx maculatus, *Gm.*

I shot one specimen of this in the Jhiri valley, a male in incomplete emerald plumage, and measured it, &c., carefully, but the specimen is not to be found. I never again noticed the bird in Manipur.

I have it from Northern and N.-E. Cachar and from various localities in the Dibrugarh district.

[I can give full particulars of many males. They were very common in the Dibrugarh district:—

Date.	Length.	Expanse.	Tail.	Wing.	Tarsus.	Bill from gape.	Weight.	Sex.	
							oz.		
4th Aug. 1879	6·85	11·50	2·85	3·90	0·62	0·77	0·85	♂	
4th „ „	6·75	12·0	2 80	4·0	0·60	0·80	0·75	♂	
5th „ „	7·15	11·90	2·90	4·20	0·60	0·80	0·75	♂	
6th „ „	6·80	11·50	2·80	4·15	0·63	0·75	0 75	♂	Gape and orbital ring deep orange; bill yellow, with the terminal quarter dusky; irides red brown; legs and feet dingy green; mouth inside light orange.
18th April 1880	7·0	11·80	2·80	4·20	0 60	0·81	0·80	♂	
29th May „	6·85	11·80	2·90	4·20	0·60	0·83	0·85	♂	
19th June „	6·90	11·80	2·90	4·25	0·65	0 82	0·85	♂	
2nd July „	6 75	11·80	2·70	4·07	0 62	0 80	0·85	♂	
2nd „ „	7·0	11·90	2·77	4·15	0·60	0·91	0·85	♂	
7th „ „	6·80	11·0	2·70	3·90	0·60	0·82	0 80	♂	
8th „ „	6·90	11·70	2 70	4·17	0·60	0·83	0·80	♂	
15th „ „	6·70	11·40	2·80	4·17	0·60	0·83	0·80	♂	
12th Aug. „	6·70	10·70	2·70	3·90	0·60	0·77	0·85	Juv.	
3rd April 1881	7·0	12 30	2·90	4·18	0·65	0·85	0 80	♂	
11th „ „	7·0	11·80	2·75	4·0	0·60	0·80	0·85	♂	

The food consisted of ants. The testes of the bird shot on the 11th April 1881 were considerably enlarged. The only call I have heard them utter is a harsh chirr-r-r. I did not observe any in the cold weather, and cannot make out how no females were ever got. *Every one* of the above specimens was sexed by me; they principally affect forests.—J. R. C.]

Godwin-Austen notes it from the Garo hills, but beyond this I have no record of its occurrence in Assam, Sylhet or Cachar.

Blyth gives this from Arakan, and we have it from Northern and Central Tenasserim. I believe I have seen it from the Pegu Yoma, but am not sure now, and Mr. Oates records a specimen from Prome.

I have 211*bis*.—*Chrysococcyx xanthorhynchus*, Horsf., from N.-E. Cachar and Khowang in the Dibrugarh district.

[I think they must be very rare in Dibrugarh. I give the measurements of all I was able to meet with:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Bill from gape.*	*Tarsus.*	*Weight.*	
24th July 1879 ...	6 80	12·0	3·05	4·15	0·68	0·82	0·75	♂
5th Aug. „ ...	7·0	11·70	3·0	3·95	0·60	0·82	0·85	♀
8th June 1880 ...	6·75	11·0	2·80	4·10	0·65	0·80	0·75	♀

The male had the legs and feet brownish green, claws black, mouth inside, nostrils, and base of both mandibles deep orange; the rest of the bill orange yellow, with the tip of the upper mandible dusky. Irides maroon red, eyelids vermilion. The young bird has the bill horny brown, with a patch of

dirty yellow on the middle of both mandibles ; irides chocolate brown ; gape and eyelids dull vermilion ; legs and feet greenish brown. I never saw any others, although constantly on the look-out. They were shot off middling sized trees that stood amongst the tea, where they kept hopping about the branches without uttering a sound.—J. R. C.]

I have not as yet received this species from any other locality in Assam, Cachar or Sylhet. In Tenasserim we have obtained a few specimens, and it has occurred in several localities in Pegu and in Karenee, but I do not know of its occurrence in Arakan.

Again I have what I used to identify as 211*ter*.—*Chrysococcyx malyanus*, Raffles (*vide* S. F., VI, 503), from the Dibrugarh district.

It has, however, to be noticed that we know as yet so little of these rare birds that I am by no means sure now that *malayanus*, Raffles, may not prove to be one stage only of *xanthorhynchus*. (See also Mr. Oates' remarks and my note X, p. 195).

212.—Coccystes jacobinus, *Bodd.*

This is a rare bird in Manipur. I saw it perhaps five or six times in the basin and shot two, but I never observed it in any part of the hills.

I have it from N.-E. Cachar and also from Shillong, and Godwin-Austen says it was common at the latter place in June.

I have no record of its occurrence in the valley of Assam.

In quite the north of Pegu this species is common, but we have never obtained it in any part of Tenasserim, nor have I seen it from Arakan.

Godwin-Austen records 213.—*Coccystes coromandus*, Lin., from the Garo hills, and I have it from Sadiya in the Dibrugarh District,* but I have no other record of its occurrence in Assam, Sylhet or Cachar, and I never saw or heard of it (and the bird is one the Nagas would notice) in any part of Manipur. This is the more surprising because it occurs in Hill Tipperah and

* [*Coccystes coromandus* is even in the Dibrugarh district apparently rare, but owing to its frequenting thick tangled brushwood and forest perhaps it is really more plentiful than it appears. I got two specimens and saw several more.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	15·50	17·70	9·40	6·05	1·05	1·32	2·90ozs.
♂ ...	15·50	17·75	9·55	6·20	1·05	1·35	2·70ozs.

Legs and feet plumbeous, mouth inside orange, soles olive yellow ; claws plumbeous, irides brown, eyelids brown, gape orange ; bill, in fully fledged young dusky above, dusky yellow below, dusky but plumbeous at base below in adult.—J. R. C.]

Arakan, throughout Pegu, and, though rare there, in Tenasserim also. It must occur in Manipur, but I certainly never saw it there.

Again I never once met with 214*bis*.—*Eudynamis malayana*, Cab., in any part of Manipur. One would think this must occur there, but I never saw or heard it, and long before I left Manipur the nuptial season had commenced, and directly I got back in Cachar I heard the familiar loudly whistled "who are you" commonly enough.

The bird is common in Sylhet, Cachar and the Assam valley up as far, at any rate, as Sadiya, and the *E. honorata*,* which Godwin-Austen records from the Khasi hills, must needs have belonged to this species. It is common again in every province of British Burmah in suitable localities, though there, as in the case of the allied species *E. honorata*, it is in many places mainly a seasonal visitant.

215.—Rhopodytes tristis, *Less.*

Very rare in Manipur, and though my men said they had seen it once or twice in the lower hills, east and west, the only place where I saw and shot it (and then only a single specimen) was in the low-wooded hills east of Phalel.

It seems to occur all over Assam,† Cachar and Sylhet in suitable localities, wooded hills, and the forests near their bases. I have it from a great number of localities. It is equally generally distributed in British Burmah, except in the extreme south of Tenasserim, to which it does not extend.

217*quat*.—Centrococcyx intermedius, *Hume.*

A Coucal of this type is very common in the basin of Manipur, and though, owing to their rather sneaking habits, no great number are seen, their deep call resounds from morning to night in the spring all over the Manipur level and the bases of the hills that surround this. Inside the hills I do not recollect ever meeting one.

---

* [*Eudynamis honorata*.—As I identify it occurs in Dibrugarh. The Assamese call it "*Koo-lee*."

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*	
♂ ...	17·0	24·0	8·10	7·80	1·50	1·60	7·50ozs.	Shot in
♀ ...	16·0	23·50	7·75	7·55	1·50	1·58	7·50ozs.	September.

These two birds shot on the same day weigh heavier than *E. malayana*, *vide* S. F., II, 194.—J. R. C.] From the dimensions I believe these are *malayana*.—A. O. H.

† [*Rhopodytes tristis*, which the Assamese call "*Ba-moo-rah*," is common in the Dibrugarh district in thin jungle and on roadsides where these are shaded by forest. They feed on beetles, grasshoppers and other insects.—J. R. C.]

Now this Coucal is not true *intermedius;* it is too large, and especially the bill runs larger.

I measured in the flesh the finest specimen, a female, that I came across. It measured:—Length, 21·0; expanse, 25·5; tail, 10·8; wing, 9·0; tarsus, 2·62; bill from gape, 1·89; weight, 14ozs.; hind toe and claw, 1·8; claw only, 1·2.

Bill, leg, feet and claws black; soles hoary dusky; irides bright red; lower eyelid bare, pale bluish grey.

Now this is big enough for male *maximus*, in which the wings run from 9·0 to 9·5 in females, but this was the finest of very many specimens examined, and the wings of other specimens that I preserved (in February and March the majority were moulting, and these I did not preserve) are:—

Males, 8·4, 8·65, 8·25, 8·4, 8·4; females, 8·5, 8·5.

These are all adult full-plumaged birds, too small for *maximus*, but too large for true *intermedius*, of which a *very* large series from Tenasserim gave the wings of females from 7·75 to 8·4, and of males from 7·3 to 7·9.

Still they have the *green* tail and the very blue neck and breast of *intermedius*, and are nearer this in colouration and even size than the huge *maximus*, and as one cannot go splitting up every local race into species on account merely of slight differences of size, I prefer to class the Manipur birds as *intermedius*, with the remark that in this basin the birds run exceptionally large.

I have the true *intermedius* from N.-E. Cachar, and I shot it myself at Silchar, and Godwin-Austen gives a *C. rufipennis*, which must be this species, from Teria Ghât at the north of Sylhet; but though it is sure to occur I have as yet no other record of it from any part of Assam, Sylhet or Cachar.

[But it occurs in Dibrugarh. A female measured:—Length, 20·0; expanse, 23·50; tail, 10·60; wing, 7·90; tarsus, 2·80; bill from gape, 2·0; weight 13·50ozs. Bill, legs and feet black; irides red; these are pretty common near cultivation in the Dibrugarh district.—J. R. C.]

In Pegu and Tenasserim it is generally distributed wherever the country is at all open up to elevations not exceeding, I believe, 3,000 feet.

I have not of late years examined specimens of the Crow Pheasant that occur in Arakan, but believe them to belong to this species.

218.—Centrococcyx bengalensis, *Gm.*

Seen only in the Manipur level, and very scarce there. I came upon it perhaps half a dozen times in bulrushes and

high grass at the edges of swamps and jheels, but only succeeded in shooting a pair with the wings 5·5 and 6·05. By some accident the ticket of the former has been lost; the latter was sexed by my skinner, I find, as a male, but I should believe it to be a female (*vide* S. F., VI, 172).

I have this from N.-E. Cachar and many localities in the Dibrugarh district.

[This species is called by the Assamese "*Ooloo Koo-koo-ha*," from its frequenting "ooloo" and other grassy plains; they are permanent residents. A female shot 13th January measured :— Length, 14·60; expanse, 19·16; tail, 8·0; wing, 6·70; tarsus, 1·60; bill from gape, 1·22; weight, 3·65ozs. This species is more abundant than the last in the Dibrugarh district.]

I have never received it from Shillong, and do not believe it ascends so high, but Godwin-Austen got it somewhere in the Khasi hills, and he records it also in his Dafla hill list.

In Pegu and Tenasserim it is generally distributed, and I know of its occurrence in many localities. No doubt it will be found in Arakan also, but I cannot discover that I have any record of its having been sent thence.

223.—Arachnothera magna, *Hodgs.*

Seen once in the Western hills (where apparently rare), but not procured. Fairly common in the Eastern hills, where I shot four, and could have shot a dozen.

The following are particulars of a male :—

Length, 7·5; expanse, 11·5; tail, 2·0; wing, 3·7; tarsus, 0·85; bill from gape, 1·68; weight, 1·15ozs.

Legs, feet and claws clear, bright, wax orange; bill black; irides brown.

I have this from several localities in the Dibrugarh district,* and Godwin-Austen records it from the Khasi hills and in his Dafla hill list. I have no other record as yet of its occurrence in Assam, Sylhet or Cachar.

This species is recorded by Blyth from Arakan, whence I have not yet seen it. We found it rare in Northern Tenasserim; Bingham found it very common in the Thoungyeen valley of Central Tenasserim. It does not appear to occur in Southern

* [This species is found in forests as well as about villages, where it hangs about the clumps of plantains which grow in every homestead. A ♀ shot 25th January measured :—Length, 7·30; expanse, 10·0; tail, 1·80; wing, 3·42; tarsus, 0·80; bill from gape, 1·70; weight, 1·10oz. Legs and feet bright wax yellow, claws ditto, mouth inside pale yellow, bill black. Also I have noticed this bird stretching out its neck when at rest as described by Mr. Oates.—J. R. C.]

Tenasserim, nor do I know of its occurrence in Pegu, in the northern and eastern portions of which, at any rate, it seems to be replaced by *A. aurata*, Bly.

224.—Arachnothera longirostra, *Lath.*

Only observed in the Jhiri valley about half way up the Noongzai-ban ridge.

I have received this from Joonkotollee in the Dibrugarh district* and from N.-E. Cachar, and Godwin-Austen records it from the Hemeo peak of the North Cachar hills, but here my record for Assam, Cachar and Sylhet ceases, though it will doubtless prove widely distributed in suitable localities. Of the distribution of this species in Pegu also I have no certain knowledge, though I have seen a specimen from the hills a little west of Thayetmyo, and Oates procured another a little north of Pegu. In the Arakan hills, and in Tenasserim from the extreme north to the extreme south, it is rather common.

225.—Æthopyga seheriæ, *Tick.*

Very common in the Jhiri and Eerung valleys and generally in the Western hills; not uncommon either in the valley as at Booreebazar, Bishnoopur, Soognoo, Kokshin Koolel, &c., though I never saw it about the capital, but rare in the Eastern hills, where I only once procured it, and that near Machi, though a couple of thousand feet lower.

Male.—Length, 6·0; expanse, 7·0; tail, 2·7; wing, 2·2; tarsus, 0·55; bill from gape, 0·8; weight, 0·3oz.

Legs and feet dark brown; upper mandible dark brown; lower mandible dark horny brownish yellow; irides dark brown.

This species is pretty common in Northern Cachar and Sylhet and in many parts of the Dibrugarh district† ; we have it from Gowhatty and from near Shillong. Godwin-Austen also records it from the Khasi hills, but beyond this I know little of its *exact* distribution in Assam, Sylhet and Cachar.

I do not know of its occurrence in British Burmah, where throughout Tenasserim and Eastern Pegu, at any rate, it is replaced by *Æ. cara*, nobis. One of the two species occurs in

* [*Arachnothera longirostra* is common both in the forest and cultivated tracts of the Dibrugarh district.—J. R. C.]

† [*Æthophyga seheriæ* is very common in the Dibrugarh district and is mostly seen in forests. The measurements of 7 ♂ are as follows:—Length, 5·30 to 5·70; expanse, 6·20 to 6·50; tail, 2·35 to 2·80; wing, 2·15 to 2·25; tarsus, 0·53 to 0·56; bill from gape, 0·71 to 0·80; weight, 0·25 to 30. Irides brown, bill horny brown, with a livid tinge below, legs and feet dusky purplish. In May the generative organs begin to show signs of breeding.—J. R. C.]

Arakan, but which I cannot say, as when I saw the specimen 30 odd years ago I knew little of birds.

227.—Æthopyga gouldiæ, *Vig.*

Only observed in the Eastern hills (at elevations of 4,000 feet and upwards), where, especially about Aimole and Machi, it is rather common.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·6	6·4	2·9	2·03	0·5	0·66	0·28 oz.
♂ ...	5·5	6·4	2·8	2·1	0·5	0·59	0·24 ,,

Legs and feet deep, almost blackish, brown, a little paler on toes; soles dingy yellowish to hoary grey; bill blackish, a little paler on lower mandible; irides brown to reddish chocolate brown.

Godwin-Austen records this species from Mozimah in the Naga hills at the head of the Lanier R. at 6,000 feet, and I have it from the Khasi hills, but I seem to have no specimens from any other part of Assam, Sylhet or Cachar. It has been sent from Arakan, but not as yet, I believe, from any other part of British Burmah.

I cannot include in my list, but in my own mind *I am quite sure* that I saw 227*bis*.—*Æthopyga dabryi*, Verr., near the top of a high-wooded peak beyond Tankul Hoondoong, elevation about 6,000 feet. There were three or four together about the top of a high tree, and I had a good snap shot at one as he crossed a small gap in the overhanging branches immediately over my head at a height of 20 or 25 yards. I missed, but I saw distinctly the crimson scarlet breast above the bright yellow abdomen. Of course in every other respect *gouldiæ* is precisely like *dabryi*, but the crimson scarlet breast which distinguishes the latter is unmistakable. It was drizzling at the time I fired, and in two minutes came on to rain cats and dogs, and when an hour later the shower ceased, the birds were nowhere to be seen, and, though I twice revisited the spot, I never saw them again there, or elsewhere. This species has not occurred in Assam. We got it at Moolyit in Tenasserim, and Ramsay in Karenee and the Tounghoo hills, and Anderson at Momein and Ponsee in the Kakyen hills in Independent Burmah.

228.—Æthopyga ignicauda, *Hodgs.*

I shot three young birds of this species, all in bad immature plumage, in the Eastern hills, and near Machi saw one fine male with a long red tail, but failed to secure him. I never saw this myself in the Western hills, but one of my men professed to have seen and *shot* one (though he lost it in the jungle) on the Limatol range.

I have this species from Shillong and two or three localities at the extreme north of Sylhet and Cachar, and Godwin-Austen found it rather common in the Naga hills, but I do not know of its occurrence anywhere else in Assam, Cachar or Sylhet. This species does not that I know extend into British Burmah.

229.—Æthopyga nipalensis, *Hodgs.*

I only once recognised this species in Manipur, and that was at Aimole in the Eastern hills, where I shot a fine male. I may have seen others, but this was the only one I shot.

This, though a true *nipalensis* with the fiery orange breast, large bill, and bright yellow rump (not the pale yellow of *horsfieldi*), has less maroon on the upper back than any *nipalensis* I have hitherto seen. A specimen like this might well lead a person, not cognisant of the other points of difference, to fancy that *nipalensis* graded into *horsfieldi*.

We have this species from the Khasi hills, and Godwin-Austen includes it in his Dafla hill list, but we have as yet no further record of its occurrence anywhere in Assam, Sylhet or Cachar. To British Burmah, so far as I know, this species does not extend.

231.—Æthopyga saturata, *Hodgs.*

I found this species common in the Eerung valley and less so in that of the Limatak, both in the Western hills, and again I shot it at Machi on the Eastern hills. I did not see it in the basin, but I made out that several of these sun birds, though which it was impossible to say with certainty, are seen in December and January about the margins of the basin at the bases of the hills. Amongst these the people identified our skins of *saturata*.

Male.—Length, 5·9; expanse, 5·5; tail, 2·83; wing, 2·2; tarsus, 0·55; bill from gape, 0·79; weight, 0·22 oz.

Bill black; legs and feet deep brown; irides brown. We have this species from Tippook in the easternmost portion of the Dibrugarh district* and from the Khasi hills, and Godwin-Austen in his Dafla hill list says that it is common there in the Harguli and along the outer sandstone range.

So far as we know it does not extend to British Burmah, but is in Karenee and Central Tenasserim replaced by the allied *Æ. sanguinipectus*.

Godwin-Austen in his second list records *Cinnyris zeylonica* from *somewhere* (no locality given) "in the Khasi and North

* [*Æthopyga saturata* I think is very rare. A vilely skinned specimen of this species, given me by a brother planter, was the only one I ever saw.—J. R. C.]

Cachar hills, including the Garo hills and country at their base in the Mymensing and Sylhet districts." *I have never seen this yet* from any part of Assam, Sylhet or Cachar. Jerdon, however, says that it extends through Dacca (where I have myself seen it) to Assam. Whether it does so occur it certainly does not extend to Manipur, nor to any part of British Burmah.

233*sext.*—Anthreptes singalensis, *Gm.*

Only met with in the Jhiri level and to about half way up the Noongzai-ban ridge. Eastwards of this I never saw it in Manipur.

This species is tolerably common in the north of both Sylhet and Cachar, and I have received it from the Dibrugarh district* and the Khasi hills, and Shelley says that he has seen specimens collected by Godwin-Austen from the Garo hills.

Throughout British Burmah it is generally distributed in suitable localities, avoiding as a rule, however, dry country like the major portion of Upper Pegu.

Godwin-Austen obtained 234.—*Cinnyris asiatica*, Lath., at Teria Ghât in Northern Sylhet and at Bologunj (? Bholagunj), also, if my surmise is correct, in the same locality. I have *heard* moreover of its being found far up in the valley of Assam, but I do not think that I have ever *seen* a specimen from any part of Assam, Sylhet or Cachar, and I met with it this time in neither of these two latter districts, nor in Manipur. It is found, though by no means very abundantly, throughout British Burmah, not extending however, we believe, south of the river Ye in Tenasserim.

236.—Dicæum cruentatum, *Lin.*

I found this both in the Jhiri and Eerung valleys, but met with it nowhere else in Manipur. This species appears to be found in suitable localities throughout the Assam valley,† in the Garo and Khasi hills and in Northern Sylhet and Cachar, and it seems equally widely distributed in all the provinces of British Burmah.

---

* [*A. singalensis* is not common in the Dibrugarh district. A male measured:—Length, 4·40; expanse, 6·10; tail, 1·80; wing, 2·15; tarsus, 0·65; bill from gape, 0·70; weight, 0·35oz. Feet olive green, legs dusky green.—J. R. C.]

† [This tiny species is very common in the Dibrugarh district in forests and cultivation, and common in tea gardens when they are in blossom. On the 24th May, 1881, I found a nest with three hard set eggs. The nest was in a guava tree growing in a ryot's compound, and was suspended from a twig about as thick as a pencil and five feet off the ground. In shape it was like an egg, the blunt end hanging downwards and measured 2½ inches long by 2 inches broad, with the entrance at the upper side, and was composed of very fine black threads, evidently spider's webs, and lined with the cotton of the pod of "Semul" (*Bombax*, sp.).—J. R. C.]

237.—Dicæum chrysorrhæum, *Tem.*

I first saw this below the Limatol ridge, and again two or three times in the Eastern hills at elevations of from 3,000 to 4,000 feet. On each occasion that I met with it, it was solitary and feeding on tufts of parasites on huge branches of high trees.

Male.—Length, 4·25; expanse, 7·7; tail, 1·23; wing, 2·52; tarsus, 0·5; bill from gape, 0·53; weight, 0·45oz.

Legs and feet leaden dusky; bill blackish, pale plumbeous at base of lower mandible; irides orange red.

I have this species from N.-E. Cachar, and Godwin-Austen obtained it in the Naga hills, but I have no other record of its occurrence in Assam, Cachar or Sylhet.

This species occurs in Arakan and Tenasserim, but I do not seem to have any specimen of it from Pegu, and Mr. Oates says he has only observed it near Rangoon, where it is not rare.

237*ter*.—Dicæum olivaceum, *Wald.*

This species is very common in the Western hills, but does not seem to occur elsewhere in Manipur; at any rate I never recognised it.

Male.—Length, 3·3; expanse, 5·8; tail, 0·9; wing, 1·81; tarsus, 0·47; bill from gape, 0·4; weight, 0·19oz.

Legs and feet dusky leaden; upper and tip of lower mandible ditto; rest of lower mandible pale bluish horny; irides light brown.

I have this species from Shillong, and Godwin-Austen procured it at Samaguting in the Naga hills, but I have as yet no other record of its occurrence in Assam, Sylhet or Cachar. In British Burmah I only know of its occurrence in the hill portions of Northern and Central Tenasserim.

Godwin-Austen procured 238.—*Dicæum erythrorhynchus*, Lath., in the Garo hills, but I have no other record of its occurrence in Assam, Cachar or Sylhet, and I never met with it in Manipur.

[This species, although rare there, does occur in the Dibrugarh district. One I shot, a male, measured:—Length, 3·35; expanse, 5·80; tail, 1·06; wing, 1·90; tarsus, 0·45; bill from gape, 0·41; weight, 0·20oz. Bill deep orange, dusky tipped; irides brown; legs and feet dirty fleshy.—J. R. C.]

It does occur very sparingly in Central Tenasserim (Blyth must have made some mistake about its exceeding abundance about Moulmein), but I have no other record of its occurrence in British Burmah, though Blyth says it is found in Arakan.

I have received 240.—*Piprisoma agile*, Tick., from N.-E. Cachar, but there is as yet no other record of its occurrence anywhere in Assam, Cachar or Sylhet. In British Burmah, Mr. Oates records it from E. Pegu, and says he procured a specimen from Malewoon, in regard to which latter, however, I think there must have been some mistake.

241.—Myzanthe ignipectus, *Hodgs.*

Very common on the Limatol range in the Western and at Aimole on the Eastern hills, but these were the only places where I preserved specimens, and I do not know that I met with it elsewhere in Manipur.

I have this from Shillong, and Godwin-Austen also notes it from the Khasi hills, but I have no other record of its occurrence in Assam, Cachar or Sylhet, though of course, like numbers of other species of which the same has to be now said, it will probably prove, when the province is better explored, to be widely distributed wherever there are hills of four or five thousand feet and upwards.

In British Burmah it occurs in the higher hills of Central and Northern Tenasserim and in Karenee. In Pegu and Arakan I do not know of its occurrence.

From Joonkotollee (Dibrugarh district)* I have received 242.—*Pachyglossa melanoxantha*, Hodgs., and Godwin-Austen obtained it from Sopvomah in the Naga hills. I have no other record of its occurrence in Assam, Sylhet or Cachar, and I never met with it in Manipur. It does not extend, so far as is known, to any part of British Burmah.

Godwin-Austen records 244.—*Certhia nipalensis*, Hodgs., from the Naga hills, but I have no other record of its occurrence in Assam, Sylhet, Cachar or Burmah, and I did not meet with it in Manipur.

Again Godwin-Austen records 245.—*Certhia discolor*, Blyth, not only from the Dafla hills, in regard to which identification I have no doubt, but also from the Naga and East Naga hills, the specimens from which, as also Ramsay's from Karenee, must I suspect belong to the next species. I have no other record of the occurrence of *discolor* in Assam, Cachar or British Burmah, nor did I meet with it in Manipur.

* [*Pachyglossa melanoxantha* is very rare in the Dibrugarh district. I handled only one specimen, a male, whose measurements were :—Length, 4·15 ; expanse, 7·10 ; tail, 1·55 ; wing, 2·38 ; tarsus, 0·50 ; bill from gape, 0·43 ; weight, 0·35oz. Bill above horny brown, below livid ; legs and feet plumbeous ; irides orange red.—J. R. C.]

245*bis*.—Certhia manipurensis, *Hume*.

This species fully characterised, S. F., X, 151, was only met with in the Eastern hills at elevations of 5,000 feet and upwards, and even there was not very common.

I have as yet no record of the occurrence of this species elsewhere, but I cannot help thinking that Godwin-Austen's Naga hill and Ramsay's Karenee specimens identified as *discolor* may have really belonged to this species.

248.—Sitta himalayensis, *Jard. & Selb.*

Godwin-Austen records this from Aimul (which I conclude must be Aimole) in the Manipur hills. Now the only Nuthatch I saw at Aimole was *S. cinnamomeiventris*, and I cannot help suspecting some mistake, the more so that we have no other record of the occurrence of this species (*himalayensis*) anywhere in Assam, Cachar, Sylhet or British Burmah. At the same time of course Major Austen knows the birds well, and the white on the tail of *himalayensis* almost precludes the idea of a mistake.

Godwin-Austen also got in the Naga hills his apparently very distinct 248*ter*.—*Sitta nagaensis*, Godwin-Aust. This is one of the three species undoubtedly occurring within the British Asian Empire which I have never seen, and of which I have never been able to procure a single specimen. There is no other record of its occurrence anywhere.

251.—Sitta cinnamomeiventris, *Bly*.

This is the only Nuthatch that I met with in Manipur, and I only saw it on the Eastern hills at Machi, Aimole, &c., at which latter place especially it is by no means rare.

I measured a pair :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·5	9·8	1·7	3·08	0·72	0·9	0·63 oz.
♀ ...	5·5	10·0	1·8	3·07	0·7	0·85	0·6 „

Male.—Legs and feet brownish leaden with a faint green tinge; upper and tip of lower mandible blackish horny; rest of lower and extreme base of upper mandible pale bluish; irides brown.

Female.—Legs and feet greenish dusky; extreme base of upper and basal two-thirds of lower mandible pale bluish grey; rest of bill blackish; irides brown.

I have this from Shillong, and Godwin-Austen also got this in the Khasi hills. I have it likewise from many localities in the Dibrugarh district, and in his Dafla hill list Godwin-Austen notes it from Harmutti. No other record yet from Assam, Sylhet and Cachar.

[This species occurs in the Dibrugarh district. I measured only one, a male. Length, 5·90; expanse, 9·40; tail, 1·43; wing, 3·20; tarsus, 0·70; bill from gape, 0·92; weight, 0·82oz. Bill, base of culmen, gape, and anterior portion of lower mandible plumbeous, rest black; legs and feet bluish horny; irides brown. This was shot on the 19th April, and the testes were enlarged; it is rather rare.—J. R. C.]

It does not extend to British Burmah, but is replaced in Pegu and Northern and Central Tenasserim, at any rate, by *S. neglecta*, Wald.

252.—*Sitta formosa*, Bly., was obtained by Godwin-Austen at Asalu, and again on the Tomputee peak at about 5,000 feet in the Dafla hills, but there is no other record of its occurrence in Assam, Cachar or Sylhet. I did not meet with it in Manipur, and it does not, so far as we know, extend to any part of British Burmah.

253.—Dendrophila frontalis, *Horsf.*

I first noticed this species in the Limatol range of the Western hills; then at Aimole and below Machi in the Eastern hills; and, lastly, got a specimen on the 12th of May at Hierock, far down at the bases of these latter. I believe I shot every specimen I saw, *viz.*, four. It is very scarce in Manipur to what I have elsewhere seen it.

I have it from Shillong and many places in the Dibrugarh district,* and Godwin-Austen includes it in his Dafla hill list, but I have no other record as yet of its occurrence in Assam, Sylhet and Cachar.

It is common in suitable localities in all the provinces of British Burmah.

254.—Upupa epops, *Lin.*

This species occurs sparingly about the valley. I generally saw one each day I was out, but I do not think I ever saw more than three on any one day. I don't think I saw this species in the hills. Those I shot in the hills are the next species. The Manipur *epops* have the bills from forehead or frontal bone to tip, straight, 2·1 to 2·27, and the white penultimate bar to the posterior crest feathers well marked.

I got this species at Balaganj in Central Sylhet and in several other places in Sylhet and Cachar. I have it from the Khasi hills and many localities in the Dibrugarh

* [*Dendrophila frontalis* is very common in the Dibrugarh district in forest and tea gardens. At times they go about in small parties of five and six.—J. R. C.]

district.* Godwin-Austen says it is rare on the Burrail range, and indeed it is not generally *common* high up on any hills.† He also includes it in his Dafla hill list. Throughout Pegu and Tenasserim it is replaced by the next species. I have seen no Arakan specimen. Blyth says he thinks it is *epops* that occurs there.

254*bis*.—Upupa longirostris, *Jerd.*

I shot this in the valley of the Limatak in the Western hills, and again in the Sengmai Turail inside the Eastern hills, but I did not see it or at any rate shoot it (and the bird is not to be distinguished from *epops* till one has it in the hand) anywhere in the Manipur basin, though it very likely occurs there also.

These *longirostris* are pale, quite as pale as the *epops* I shot, but the bills at forehead are 2·4 and 2·5, and the white bar on the posterior crest feathers is obsolete.

I shot this at Lukipur in Cachar, and have it from further north-east in that district, but have as yet no other record of its occurrence in Assam, Cachar or Sylhet. It is generally distributed throughout Pegu and Tenasserim, but I do not know whether both or, if not, which species occurs in Arakan.

258.—Lanius tephronotus, *Vig.*

Very common in the Western hills, where it was the only Shrike observed, except in the Kopum Thull and the valley of the Limata, where I also saw *nigriceps*.

My notes fail me here, and I cannot remember whether I saw it again anywhere in the basin or the Eastern hills. Anyhow I have no specimens from either.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	9·4	12·3	4·65	4·0	1·2	0·96	1·55 oz.
♀ ...	9·4	12·3	4·6	3·9	1·1	0·95	1·41 ,,
♀ ...	9·7	12·7	4·9	3·92	1·16	0·97	1·55 ,,

Legs and feet black; soles and edges of scutæ hoary grey; bill black, leaden dusky to pale bluish horny and horny fleshy white at gape and on base of lower mandible; irides brown to deep brown.

---

* [*Upupa epops* is a common annual visitant to the Dibrugarh district. The earliest date on which I have noticed it was 1st September. Never seen in forest, nor have I heard them call in Assam. Till lately I was perfectly ignorant of their call, but only the other day in January, when walking in the station of Bettiah, I heard and saw one calling.—J. R. C.]

† Still one is often to be seen for a day on my lawn at Simla, at 7,750 feet, and I have seen stray birds at much greater elevations. Henderson (Yarkand to Lahore) met with it at 16,000 feet. But birds seen above three or four thousand feet are merely migrants halting for a brief rest.

One gets some specimens of this species, with no signs of nonage, with not only the upper tail-coverts but the rump and scapulars also light ferruginous, the whole back tinged with this and a line or even band on the forehead blackish. These birds might well be taken for some stage of *nigriceps*, but they show no trace of the white spot at the base of the primaries, which is well marked in the youngest *nigriceps*, even before it leaves the nest, directly the wing feathers are fully developed. Can these birds be hybrids between this species and *nigriceps* ?

This species is very generally distributed in Assam, Cachar and Sylhet. I shot it at *many* places, and saw it wherever I went in both these districts, and have it from N.-E. Cachar. Also from the Garo and Khasi hills, Gauhati, Tezpore and various localities in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list.

[My largest specimen, a male, shot in December, was :— Length, 9·85; expanse, 12·0; tail, 4·80; wing, 4·05; tarsus, 1·10; bill from gape, 0·93; weight, 1·65ozs. They are just as common in the Dibrugarh and Sibsagar districts as *L. nigriceps*, and are found in the more open parts of the country, roadsides where leading through forest, and even along the river banks. On one occasion a bird of this species flew into the verandah at dusk after an insect, alighted on a canvas stretcher, then hopped on to a window, and would not leave until I advanced towards it. They remain in the district (Dibrugarh) from September to April.—J. R. C.]

It occurs as a straggler in the northern portions of Tenasserim, and Blyth records it from Arakan, but I have no knowledge of its occurring elsewhere in B. Burmah, and I have never myself seen it from Arakan.

259.—Lanius nigriceps, *Frankl.*

I did not meet with this species after crossing the Jhiri into Manipur, until we reached the Kopum Thull, where it was abundant. Then, again, we found it in the broad grass-grown valley of the Limata, but these were the only places in which I observed it in the Western hills. Throughout the Manipur level it is common, as also almost everywhere in the Eastern hills, as high up as Aimole and Matchi.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 10·5	11·5	5·4	2·63	1·06	0·95	1·4 oz.
♀	... 10·2	11·55	5·2	3·6	1·05	1·0	1·3 „
♀	... 9·1	11·3	4·8	3·55	1·0	0·9	1·24 „
♀	... 9·8	11·3	5·3	3·6	1·05	0·85	1·2 „

The legs and feet are blackish brown, hoary on soles and back of tarsus; bill blackish horny, pale bluish on gape and

base of lower mandible ; irides deep brown. There are several points in regard to this very variable species that I have not hitherto seen noticed.

In the first place the young (and I have them from nestlings quite unable to fly) never exhibit those fine crescentic markings on the lower surface so characteristic of many of our other Shrikes. The entire lower surface of the youngest bird (quills only half developed, tail sprouting) is white, on the chin, throat and abdomen faintly, elsewhere decidedly, tinged with fulvous. In such a bird the forehead, crown, occiput and nape are buffy fulvous, the brownish grey bases of the feathers showing through ; the interscapular region dull ferruginous buff, the feathers with one or two very fine wavy, somewhat indistinct, transverse grey brown bars ; scapulars, lower back, rump and upper tail-coverts warm buff on the former, passing to ferruginous buff on the latter ; wings black ; coverts and tertiaries broadly margined with ferruginous ; tail, what is seen of it, brown, dark on the central two pairs, fading on the lateral ones, tipped and margined with rufescent buff. When the bird is fully fledged and has left the nest, the wings have become browner ; the central tail-feathers are only a moderately dark brown, while the lateral ones are a greyish rufescent. The fine bars on the interscapular region are still there ; the white wing spot, which shows the moment the quills develop, is well marked ; the entire head is grey, with a greater or less admixture of black, and more or less of the back is also grey.

But now it has to be remarked that the grey on *nigriceps* of, say, Mogulserai and Mirzapoor, young or adult, is very different from the grey of Manipur or Cachar birds. In the former it is the blue grey of *erythronotus*, in the latter the brown grey of *tephronotus*.

Now, in the progress towards maturity, this grey gets swallowed up, from above by the black, from below by the rufous, and in the perfect old adult the black of the head and nape descends on to the upper back a little and there meets the bright rufous of the rest of the back ; when somewhat less adult there is more or less grey, or rufous, tinged grey, between the black (which has not come quite so far down) and the rufous.

But the extension of the rufous and black are not synchronous nor according to any fixed plan.

For instance, I have a bird just out of the nest with the lines still conspicuous on the back, with head almost entirely black, only a little grey on the nape and extreme upper back, and

all the rest rufous. Again, I have a bird with no signs of immaturity, with only the forehead broadly black, the entire crown, occiput, nape, and back pure grey, and only scapulars, rump, and upper tail-covert rufous—a miniature *Lanius schach* in fact, though with less rufous on the back.

Commonly, I think, in the intermediate stages the whole top and back of the head is grey, more or less patched with black, while the entire interscapulary region is grey.

In younger birds the exterior lateral tail-feathers are entirely pale rufescent, greyish white on the lower surface, but in old adults these feathers are entirely black, narrowly margined with whitish.

In birds of the year, the tail is brown, as in *tephronotus*, but it gradually grows black; but none of these changes are synchronous. You will find birds with pure black tails, with still a good deal of grey on the back, and others without a trace of this grey, with the tails still only blackish brown on the central feathers, and not even *dark* brown on the lateral ones. Reviewing a large series from different localities of birds of all ages, the variations in the plumage are very striking, and the wonder is that in these present days, when everybody seems bent upon making new species out of every trifling variation, at any rate in the Grey Shrikes, these rufous ones have thus far escaped. And I have gone rather in detail into this question now in hopes of preventing the contagion spreading to this sub-group also. All I can say is that, though I could pick out of *tephronotus* two small series and out of *nigriceps* four, perhaps even five small series, each of which, if treated as the hapless Grey Shrikes have been treated, would constitute a distinct species, yet, with a really large series of over a hundred specimens of each, it is quite clear that there are only two distinct species—*tephronotus* and *nigriceps*, and that even these have some tendency to run into each other.

Lanius nigriceps is common in Central and Northern Sylhet and Cachar. I have it from Shillong and various localities in the Dibrugarh district, and Godwin-Austen notes it from the Garos, but I have no further knowledge of its distribution in these parts.

[This species is very common, but affects grass lands (with shrubs scattered about) more than the last species. They begin to arrive in the Dibrugarh district in the last week in July, and the majority leave by the beginning of April, evidently for Bengal, where I found numbers breeding in the Faridpur district.—J. R. C.]

It occurs in Arakan (according to Blyth), as also certainly in many parts of Pegu and in the northern half of Tenasserim.

260*ter*.—Lanius colluroides, *Less.*

I first met with this in the low-wooded hills that fringe the south-eastern portions of the Manipur basin. There it was scarce. But shortly afterwards I found it rather common high up on the Eastern hills both at Aimole and Matchi. Godwin-Austen says he found it in the Iril valley of Manipur, the Iril being a stream running down a few miles east of the capital nearly parallel to the Imphal Turail (the river of the capital), which it joins a few miles below the town.

This species, too, is very variable according to age. In a comparatively young bird the whole head and lores are iron grey, the back, scapulars, &c., are a rather bright, not deep, ferruginous, while in the old adult the lores are jet black, the head all but black, and the back, &c., the deepest and richest maroon. The differences in colour between the young and old in this species are far greater than between *L. cristatus* and *L. superciliosus*.

I have no record of the occurrence of this species in Assam, Cachar or Sylhet, or even from Arakan, but it seems rather common during the cold season pretty well throughout Pegu, though most abundant in the lower parts of the province, and rather rare in Northern and Central Tenasserim, not extending to the south of that province.

261.—Lanius cristatus, *Lin.*

Under this head I include what I believe some would separate as *superciliosus*, and perhaps also as *phœnicurus*. So far as I can make out, the first certainly, the second probably, is a stage of *cristatus*. I may be wrong, but with perhaps the largest series in the world from India, Assam, Burmah, the Malay Peninsula, Central Asia and China, I cannot separate *superciliosus* from *cristatus*. The latter, it seems to me, is simply an earlier stage of the former.

Both occur in every region from which I have specimens.

This species was not observed in the Western hills; in the basin it was fairly common on banks and patches of high grass in the midst of rice stubble. I saw it once or twice in the Eastern hills, and got two just freshly moulted on the 7th of May at Matchi high up on these.

I have or have seen specimens, collected by myself or others from all parts of Assam, including the Garo and Khasi

hills (but not the Naga hills, where, however, it must occur), Sylhet and Cachar. Godwin-Austen, by the way, gave *arenarius* from the Khasi hills, but he must mean the present species, which latter, I may add, is widely, I might say almost universally, distributed throughout all the provinces of British Burmah during the cold season.

[In the Dibrugarh and Sibsagar districts this species is common, beginning to arrive about the middle of September and leaving in April, a full fortnight later than *nigriceps*, but does not arrive till September, the earliest date I have noticed one being the 16th.—J. R. C.]

263.—Tephrodornis pelvicus, *Hodgs.*

This species was not rare in either the Eastern or Western hills, but I never met with it in the basin. Manipur birds are almost as large as Sikhim ones. Wings measure, males, 5·0, 4·92, 4·77; females, 4·8, 4·77, 4·75, considerably larger therefore than Burmese specimens (*vide* S. F., VI, 205). I have this species from N.-E. Cachar, from the Khasi hills, from Sadiya and half a dozen other localities in the Dibrugarh district, and Godwin-Austen in his Dafla hill list records finding it in the Darpang nullah at the base of the outer hills. I have no further record of its occurrence in Assam, Cachar or Sylhet.

[Very common in forest and orchards. Those shot by me in Dibrugarh seemed to run smaller than Sikhim birds. Five males measured:—Length, 8·40 to 8·65; tail, 3·40 to 3·60; wing, 4·50 to 4·82; tarsus, 0·75 to 0·85; bill from gape, 1·10 to 1·17; weight, 1·35 to 1·50oz. Seven females measured:—Length, 8·35 to 8·90; tail, 3·40 to 3·70; wing, 4·50 to 4·75; tarsus, 0·80 to 0·82; bill from gape, 1·13 to 1·19; weight, 1·30 to 1·75oz.—J. R. C.]

It is widely distributed in suitable well-wooded localities throughout all the provinces of British Burmah.

267.—Hemipus picatus, *Sykes.*

I have long ago (S. F., VI, 207, 208) dwelt at some length on the difficulty of considering the brown-backed, black-capped birds, *H. capitalis*, McClell., as distinct from *picatus*. The females are the same everywhere. Young males are found everywhere with brown backs and black heads. Only in some localities the majority of the adult males appear to retain permanently the brown backs, or these more or less intermixed with black, while in other places the adult males seem, almost without exception, to have the backs pure black.

In Manipur, though the bird was not uncommon either in the Western or Eastern hills, I unfortunately only preserved three. The first, a male from the Eerung valley in the Western hills, is typical *picatus*. Of the other two, a pair shot together at *Aimole*, the female is identical with Travancore, Ceylon and Nilgiri birds, but the male is typical *capitalis*.

I have this species, with one exception, all the males brown, or brown and black-backed, from Shillong and the Khasi hills, Sadiya and Tippook in the Dibrugarh district, but have no other record of its occurrence in Assam, Cachar or Sylhet. In Arakan, Pegu and Tenasserim this species with the black back is widely distributed, and occurs, though everywhere I think rather sparingly, in most suitable localities.

269.—Volvocivora lugubris, *Sund.* (= *V. melaschista*, Hodgs.)

This species was not met with (though I dare say it occurs there) in the Western hills. I saw it at the capital and in many places in the basin, and in the Eastern hills it was rather common.

The Manipur birds run rather smaller than Himalayan ones. The following are the dimensions of the wings of the few I preserved, taking old and young as they come :—

Males.—4·6, 4·7, 4·6, 4·6, 4·65, 4·3.

Females.—4·5, 4·5, 4·3, 4·8, 4·33.

Most of the birds are adults, and for these the dimensions are small, but the adults are the true *dark* iron grey of this species and not the paler *intermedia*. I have this from N.-E. Cachar, Shillong and several localities in the Dibrugarh district, and Godwin-Austen appears to have got it in the Naga hills (5th list) and includes it in his Dafla hill list.

As yet I can name no other localities for it in Assam, Cachar or Sylhet, but I believe it to be generally distributed. It does not extend to B. Burmah, where it is replaced by *avensis*, *intermedia* and *neglecta*.

[Affects well-wooded country like the Nepal Wood Shrike, and occasionally seen in the more open parts, being common in the Dibrugarh district. The wing measurements of the birds I shot agree with those of Mr. Hume's Manipur specimens. I have never heard this bird's note.—J. R. C.]

270.—Graucalus macii, *Less.*

Though by no means numerically abundant, I met with this species everywhere in Manipur, alike in the basin and in both Eastern and Western hills.

The Manipur birds are full sized. Wings in four males 7·0 to 7·3; in five females, from 6·8 to 7·1.

We have this species from N.-E. Cachar, Shillong and the Khasi hills and various localities in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list, but here my record as regards Assam, Cachar and Sylhet, for the present, ends.

[Fairly common in Dibrugarh, frequenting well-wooded and open country, and even the scanty shrubs on the Brahmaputra churs.—J. R. C.]

Throughout British Burmah it is widely distributed.

271*ter*.—Pericrocotus elegans, *McClell.*

Pretty common in the Western, rare in the Eastern hills, and in the basin only observed in the low-wooded mounds near the bases of the Southern and Eastern hills.

At the Jhiri I got one abnormal specimen, apparently an adult male, but with the red everywhere replaced by a beautiful uniform *orange*, far brighter and more yellow than *flammeus* even.

The colour is not patchy, as in young birds, changing to the adult, but uniform and pure, and all the black parts are glossy and in perfect order. There is no red on either web of the central tail-feathers, and there is no red on the first three primaries. It is not *flammeus*, for that has no red on the first four primaries, and it is moreover a redder orange than this bird. As a young male of *elegans* it is all right to have the first three primaries unmarked (the adult has only two such), also to have no red on the tail-feathers, for this only comes with the perfect plumage. But then I have seen hundreds and have before me some thirty young *elegans*, and yet never saw before one with this uniform gorgeous orange tint—about the colour, if my memory serves me correctly, of *Chrysœnas victor*? There is no known *Pericrocotus* of this colour. Is it a mere sport, or is there by chance an undiscriminated species in the East here? Godwin-Austen gives *flammeus* from the Khasi hills, where of course the true *flammeus* does not occur. Can the bird he thus identified have been one like mine?

I have *elegans* from N.-E. Cachar and from Sadiya and many parts of the Dibrugarh district, but, strange to say, no specimens from Shillong or the Khasi hills. Godwin-Austen records both *speciosus* and *flammeus* from the Khasi hills; the former was probably really *elegans* (when his first list was published the *Pericrocoti* had not been properly discriminated), and the latter either *elegans*, or, if there be

another undiscriminated species here, one similar to the bird above referred to.

[Very common indeed in the well-wooded portions of the Dibrugarh district. When on the feed they keep up a lively twitter, which draws one's attention to them. They go about in parties of five to twenty.—J. R. C.]

In B. Burmah it is widely distributed in suitable localities, rare in Southern Tenasserim and wanting in many parts of Lower Western Pegu. It is essentially a bird of the forests and well-wooded tracts.

Godwin-Austen includes 271.—*P. speciosus*, Lath., in his Dafla hill list, and this is doubtless correct. According to my Catalogue I have specimens of this species also from the north of the Dibrugarh district, but I cannot get at them now, and it is possible that they were incorrectly identified when catalogued. This species does not extend into British Burmah.

[172.—*Pericrocotus speciosus*, Lath.

This species undoubtedly occurs in the Dibrugarh district, and I compared my specimens with the paper on the genus *Pericrocotus* in S. F., V, page 171. W. ♂ and ♀.—3·72; 3·65; 3·85; 4·0; 3·80.—J. R. C.]

273.—Pericrocotus brevirostris, *Vig.*

I do not remember seeing this in the Western hills until we reached the Limatol range, overlooking the Manipur basin. In this latter I only noticed it in the low hills near Soognoo. In the Eastern hills it is replaced by the next race. I have this from N.-E. Cachar and Shillong, and Godwin-Austen records it from the Khasi hills and includes it in his Dafla hill list, but I have no other record of its occurrence in Assam, Cachar or Sylhet.

Blyth gives this from Arakan, Ramsay got it in Karenee, and we got one specimen, which may belong to this species (or possibly should be referred to the next race), in the pine forests of the Salween (Tenasserim), but beyond this I do not know of its occurrence in British Burmah.

273*ter*—Pericrocotus neglectus, *Hume.*

This species or race was very common in the Eastern hills, but I saw it nowhere else.

If any one considers this a doubtful species I can only say that I am now disposed to agree in this view, and set it down as merely a race of *brevirostris*. At the same time it runs smaller, the wings of the finest males not exceeding 3·4 (against 3·4 to almost 3·8 in *brevirostris*), and many are most markedly smaller; and, again, the females have bright yellow throats, not the pale yellow or yellowish white of *brevirostris*. Still the biggest males of *neglectus* are not, I think, separable, or barely so, from the smallest of *brevirostris*, and I should, as at present advised, be quite content to reunite *neglectus* and *brevirostris*. Their habits, haunts, and note are identical, and though you can tell the females directly you shoot them, the males only differ, so far as I can see, in size, and a distinction of this kind is not, according to my present views, of specific value.

I know of the occurrence of this race nowhere in Assam, Sylhet, Cachar or British Burmah, except in the hill forests of Central Tenasserim.

274.—Pericrocotus solaris, *Bly.*

A single specimen only observed, and that was high up at about 6,000 feet on a wooded peak near Tankool Hoondoong. I never saw this bird again, and even this I did not preserve, as, though I shot it, it fell far down the khud, and though we recovered the bird we could not find one single feather of its tail. However the bird was an adult male, and there could be no doubt about it.

Godwin-Austen got this in the Khasi hills, but I have no knowledge of its occurrence elsewhere in Assam, Sylhet and Cachar; and, though I have an idea that I have seen it from the N.-E. Pegu Hills, I have no record of its occurrence anywhere in British Burmah, except about Mooleyit and near Thatone, both in Tenasserim.

275.—Pericrocotus roseus, *Vieill.*

I only procured this in the south and south-east of the basin near the bases of the hills, as at Koombee, Soognoo, Phalel, Kokshin Koolel, &c. I may perhaps have seen it in the Eerung valley (my people said they saw it there), but if so I did not identify it.

It seems very common in the Dibrugarh district. I have if from Sadiya, Tippook, Kowang, Joonkotollee, &c., and Godwin-Austen reports it from the Khasi hills, but here my knowledge of its occurrence in Assam, Cachar and Sylhet ends.

[This species is abundant in the Dibrugarh district and with the usual habits of the genus. On the 31st May, 1879, I found a nest in the Bhaman Tea Garden with three fresh eggs, shooting the female as she flew off. It was of the type described in "Nests and Eggs," page 184, and was placed on the upper side of a large lateral branch of a tree that grew on the main garden road about 15 feet off the ground. All day there were people passing under this tree, but the nest was hardly visible.—J. R. C]

This species is widely, but in most places sparingly, distributed throughout British Burmah in all suitable localities.

278.—Buchanga atra, *Herm.*

Not observed in either the Western or Eastern hills; a few only were seen in the northern and central portions of the Manipur level, but in the south, especially about Kokshin, Koonoo, and Soognoo, they were more plentiful. Nowhere are they half as numerous as in the plains of India.

Every single Manipur specimen wants the rictal spot, and they run very much smaller than the Sylhet birds; for instance, one of these latter I measured for curiosity, it seemed so fine :—

Length, 13·5; expanse, 19·0; tail, 7·3; wing, 6·0; tarsus, 0·67; bill from gape, 1·15; weight, 2·075ozs. Outer exceed central tail-feathers by 3·0; bill, legs and feet black; irides lac red.

But the finest Manipur bird I measured—and it looks now nearly the finest out of some twenty specimens—a perfectly adult male, only measured :—

Length, 11·3; expanse, 17·7; tail, 5·5; wing, 5·6, &c.

Moreover, besides the want of the rictal spot (as the late Marquis of Tweedale remarked, a most inconstant character) and their smaller size, the colouring is somewhat different, all the specimens showing more or less of a purplish brownish bronzy lustre on more or less of the head, middle of back, scapulars and tertiaries, not commonly seen in adult Indian King Crows. Many, I have no doubt, would class these as *cathœcus*, Swinh., but even with these they do not agree, and the fact is that we must either keep this sub-group of Drongos all as "*atra*," or make about fifty species out of them, one for every well-defined natural area.

This species is found throughout Assam, Cachar and Sylhet, though not as a rule ascending the higher hills. It is widely distributed, but in many parts as a seasonal visitant only, throughout British Burmah in suitable localities.

[Not very common, sticking to the open grass and cultivated parts in the Dibrugarh district. The largest bird I procured,

a male, was:—Length, 12·40; tail, 6·50; wing, 6·10; tarsus, 0·90; bill from gape, 1·17; weight, 2·05ozs. Irides crimson in adults, reddish in the young. They are seasonal visitants.—J. R. C.]

I have received 279.—*Dicrurus annectans*, Hodgs., from Khowang in the Dibrugarh district, but this is the only locality in which I know it to have occurred in Assam, Cachar or Sylhet. In Manipur I did not meet with it.

[This species is found, in Dibrugarh, away from the villages, and very often in the waste open patches of grass and "pathar" land amongst the forests.—J. R. C.]

In British Burmah, too, we only have it recorded from Tenasserim, south of Tavoy, and from Lower Pegu, near Rangoon.

280*bis*.—Buchanga pyrrhops, *Hodgs.*

This species was not rare in either the Eastern or Western hills, but I never saw it down on the Manipur level, though I got it once at Bishnoopoor, only a little above this just at the base of the Limatol range.

As usual some specimens run close to *longicaudata*, and, a thing I have not seen before, two or three closely approach the grey Malayan Drongo *B. leucophaëa*, Vieill., as I call it, *B. cineracea*, Horsf., according to others. Everywhere *longicaudata* runs into *pyrrhops*, but nowhere else have I met with *pyrrhops* running into *leucophaëa*.

All the Manipur specimens may, however, be most properly classed as *pyrrhops;* all are nearer the typical form of this than those of either *longicaudata* or *leucophaëa*.

The following are particulars of a very typical *pyrrhops*:—

Length, 11·8; expanse, 16·3; tail, 6·15; wing, 5·6; tarsus, 0·7; bill from gape, 1·2; weight, 1·61ozs. Legs, feet, and bill black; irides sealing wax or vermilion red.

But in other specimens the wings vary from 4·9 to 5·75, and every gradation of size and shade of colouring is observable, and it is simply absurd to divide these, as has been done by some, into two species, *intermedia* and *pyrrhops*, differing *solely* in dimensions.

I may add that I cannot find that Hodgson ever *described pyrrhops;* he very likely did so, but I have not been able to find the reference; but if he did not, and only *mentioned* it in the list in the Zool. Misc., then Blyth's name *intermedia* must be adopted.

Austen includes this species in his Dafla list, but I seem to have no other record of its occurrence in Assam, Sylhet or Cachar.

This grey form, intermediate between what I call *leucophaëa* and *longicaudata*, is widely spread throughout the whole of British Burmah, and *every* where birds occur with wings varying in length from less than five to five and three-quarter inches.

I have typical 280.—*B. longicaudata*, Hay, from Dollah and Tippook in the Dibrugarh district, and Godwin-Austen records it from the Khasi hills, but I have no further knowledge of its occurrence in Assam, Cachar or Sylhet, nor did I meet with one such specimen in Manipur. All over Burmah it occurs along with *pyrrhops*.

282.—Chaptia ænea, *Vieill.*

I met with this species at Kumbiron and in all the river valleys in the Western hills, but I cannot remember seeing it either in the basin or in the Eastern hills. All the specimens I preserved are from the Western hills and all are *ænea*. I have this species from Northern and N.-E. Cachar, Northern Sylhet, the Garo hills, the Khasi hills and Shillong itself, and numerous localities in the Dibrugarh district, and Godwin-Austen in his Dafla hill list gives it from Harmutti and the Dikrang valley.

[Fairly common in the well-wooded portions of the Dibrugarh district, and never found far away from water. Its favourite haunts are trees that overhang the banks of rivers.—J. R. C.]

This species occurs all over British Burmah, except in Southern Tenasserim, where it is replaced by the allied form *C. malayensis*.

283.—Bringa remifer, *Tem.*

This species was common throughout the Western hills as far as the western slopes of the Limatol range, but I do not remember seeing it, nor have I any note of its occurrence anywhere in the basin or the Eastern hills, and all the specimens I preserved are from the Western ones.

The following are particulars of a pair. None of the females I shot had as long tails as the males, though some had a good deal longer than the one I happened to measure :—

	Length.		*Expanse.*	*Tail.*		*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
	To end of central tail-feathers.	To end of outer tail-feathers.		Central tail-feathers.	Outer tail-feathers.				
♂ ...	10·8	23·7	16 5	5·4	18·3	5·45	0·7	1·17	1·58 ozs.
♀ ...	10·0	18·7	15·3	4 8	13·3	5·25	0 78	1·18	1·42 „

Legs, feet and bill black ; irides brown.

There was no great difference in the size of the two birds, but in the male the internal lateral tail-feathers projected nearly thirteen inches against about eight and a half in the female.

I have this species only from Joonkotollee in the Dibrugarh district, but Godwin-Austen records it from the Garo Hills, and in his Dafla hill list remarks that a good many were seen on the Niosi ridge near the Tanir peak. Beyond this (though I believe it to be widely distributed) I have no certain knowledge of its occurrence in Assam, Sylhet or Cachar.

[Pretty common in the *dense* forests in the Dibrugarh district, where it frequents the tops of the highest trees, which they leave only to feed. Their rapid flight and the thick jungle they frequent are the reasons of their seldom being bagged. Three females that I shot measured as follows :—

Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
10·50	15·75	5·0 + 10·60	5·42	0·80	1·15	2·10 ozs.
10·55	15·50	5·15 + 8·90	5·40	0·75	1·20	2·0 ,,
10·30	15·75	4·90 + 10·10	5·45	0·80	1·16	1·90 ,,

When on the wing they are very noisy birds. My specimens were shot in the cold weather, and I cannot say if they are permanent residents.—J. R. C.]

It appears to be distributed in suitable localities (it is essentially a forest bird) throughout Arakan, Pegu and Northern and Central Tenasserim. In the southernmost division of Tenasserim we did not observe it.

284.—Dissemurus grandis, *Gould.*

I only shot, or indeed saw, a single specimen of this species, and that was in the Jhiri valley. I never again saw it anywhere in Manipur, and if it occurs elsewhere, as might be expected, it must, I think, be rare. The bird I shot was not quite as large as Himalayan ones, wing only 6·7, but it is decidedly larger than *paradiseus, apud nos,* (VI, 222), and has a fine crest almost as large as Himalayan ones.

Little is known of the distribution of this species in Assam, Sylhet or Cachar. I only have it from N.-E. Cachar, but Godwin-Austen includes it in his Dafla hill list and gives *paradiseus,* by which however he means the present species, from the Khasi hills.

We have a single specimen from the extreme north of Tenasserim, and another from the N. Arakan hills, referable to our present species, but throughout British Burmah this is replaced by *paradiseus.*

286.—Chibia hottentotta, *Lin.*

I first met with the Hair-crested Drongo in Manipur on a Bombax tree in the Kopum Thull, and once again I saw it in the basin near Soognoo. Beyond this I never met with it in Manipur. On each occasion there was a small party of five or six of the birds.

A male from the Kopum Thull is about the largest bird I ever saw. It measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 13·6	21·7	7·0	7·2	1·15	1·8	3·1 ozs.

Bill, legs and feet black ; irides deep *reddish* brown (as a rule the irides have no reddish tinge in adults). We have this from N.-E. Cachar, Shillong, Sadiya, and many other places in the Dibrugarh district, and Godwin-Austen gives it from the Garo and Khasi hills, and includes it in his Dafla hill list, but I do not know as yet of its occurrence elsewhere in Assam, Sylhet or Cachar.

[Very common in the forests all over the Dibrugarh district. None of my specimens measured as much as the one mentioned above from the Kopum Thull. The irides of all my birds were brownish red. They are very noisy birds, and during the breeding season continually keep darting at any other birds that come near their nests. During this season they have a peculiar way of darting upwards in the air, with closed wings, for about 20 feet, then down again, continuing these manœuvres for five minutes at a time. Their note is a fine loud clear whistle. From my notes I find the following : 17th May, 1879—Nest with three fresh eggs, attached to a fork of one of the outer branches of an *Otenga* (*Dillenia pentagyna*) tree and about 15 feet off the ground. 15th May, 1880—Three fresh eggs in nest 20 feet off the ground, and a few yards from my bungalow, in an *Oorian* (*Bischoffia javanica*, Bl.). 5th June, 1880—Nest with three partly incubated eggs, in one of the outer branches of a Jack (*Artocarpus integrifolia*) tree, and about 15 feet off the ground. 27th May, 1881—Three fresh eggs in nest on a Soom (*Machilus odoratissima*) tree, at the edge of the forest, bordering the tea. The nests are deep saucers, 3½ inches in diameter, internally 1½ inches deep, with the sides about ¼ inch thick, but the bottoms so flimsy that the eggs are easily seen from below ; the materials being grass roots and fine tendrils of creepers, especially if these are thorny, when they are used as a lining. The nest is always situated in the fork of a branch.—J. R. C.]

It is widely, but on the whole sparingly, distributed throughout the provinces of British Burmah, though not extending, so far as we know, to the southernmost portions of Tenasserim.

287.—Artamus fuscus, *Vieill.*

This was pretty common about Soognoo and Kokshin Koonoo at the southern end of the Manipur basin, but I did not notice it elsewhere in Manipur.

I found it common about Kareemgunge in Sylhet and many places in Cachar, between this town and the Manipur boundary, especially in the low hills east of Lakhipur, where I saw hundreds as usual sitting in rows on the bare branches of high trees or circling round in short rapid flights. I have it from N.-E. Cachar, from Shillong, Sadiya and half a dozen other places in the Dibrugarh, and Godwin-Austen records it from Asalu, and this is all I know of its occurrence in Assam, Sylhet and Cachar.

[Not common in the Dibrugarh district, where it is occasionally seen in open and thinly-wooded country. As it was observed only in the cold season I conclude it is a seasonal visitant only.—J. R. C.]

In Pegu, though somewhat irregularly distributed, it is common both in the north and to the south; Blyth records it from Arakan, whence I have not seen it, and it is a rare straggler to Tenasserim, where, in the course of four years' collecting, we never saw it, but where Armstrong obtained specimens at Amherst and Ramsay at Tonghoo (properly a part of Pegu) and the Karen hills.

289.—Muscipeta affinis, *Hay.*

I only obtained, or indeed saw, one single specimen of the Eastern Paradise Flycatcher in Manipur, and that was a male in chestnut plumage, with the central tail-feathers about four inches longer than the rest, that I shot at Aimole in the Eastern hills on the 29th of April.

We have this species from N.-E. Cachar, from Sadiya and some five other localities in the Dibrugarh district, and Godwin-Austen got one at Samagutung in the Naga hills, and includes it in his Dafla hill list, and this is all I know for certain as to its occurrence in Assam, Sylhet and Cachar.

[Very common in both the Dibrugarh and Sibsagar districts, but only in the well-wooded portions, where their grating note is continually heard in the summer. They are permanent residents, and in May the generative organs show signs of breeding.—J. R. C.]

In Burmah the exact distribution of this species has yet to be worked out. Blyth gives it from Arakan, and I have seen it from the Hill Tracts. It occurs almost everywhere in Pegu and in the Karen hills. We never obtained it in Northern Tenasserim, but found it in the evergreen forests of the central and southern sections of that province.

290.—Hypothymis azurea, *Bodd.*

Seen once but not obtained in the Eerung valley in the Western hills. Seen nowhere in the central or northern portions of the basin, but it appeared fairly common about Sagam, Soognoo and Phalel in the south and south-east of this, where numerous specimens were preserved. Not once observed on the Eastern hills.

We have this species from N.-E. Cachar, the extreme north of Sylhet, the Garo and Khasi hills, and from Sadiya and several other localities in the Dibrugarh district, but this closes our list of known localities in Assam, Sylhet and Cachar.

[Common in both Dibrugarh and Sibsagar. Their favourite haunts are roads leading through forests. A very silent bird.—J. R. C.]

Throughout all the provinces of British Burmah this seems to be universally distributed in all suitable localities.

291.—Leucocerca albicollis, *Vieill.*

This species is rare in Manipur. I shot one on the Barak R. between Kalanaga and Koomberin in the Western hills and two at Aimole high up on the Eastern hills, and these were all I saw, to the best of my belief, from first to last.

These Manipur birds are all blacker on the backs, breasts and tails than most Himalayan specimens, and they have the tippings to the lateral tail-feathers a much purer white. There are other small differences, and I dare say somebody will some day give them a distinct name, but they are not in my opinion specifically separable.

I have this species from N.-E. Cachar, Shillong, and Dollah and Kowang in the Dibrugarh district, and Godwin-Austen too notes it from the Khasi hills and includes it in his Dafla hill list. Beyond this I know nothing of its distribution in Assam, Cachar or Sylhet.

[Fairly common in the Dibrugarh district, where it frequents gardens, groves, and thinly-scattered forest.—J. R. C.]

In Burmah I have many specimens from Northern Pegu, and know that it is sparsely distributed throughout that province. Ramsay got it in the Karen hills, and we have procured it, or had it sent us, from many places in Northern and Central Tenasserim.

294.—Chelidorhynx hypoxantha, *Bly.*

I only once obtained this species, and that was below Tankool Hoondoong in the Eastern hills.

I have never seen it myself from any locality in Assam, Sylhet or Cachar, but Godwin-Austen records it from the Khasi hills, and found it very common in the Dafla hills.

Ramsay obtained it in the Tonghoo hills at the extreme north of Tenasserim (as officially demarcated, naturally it is the extreme N.-E. of Pegu), but I have never seen it from, nor have I any other record of its occurrence in, any part of British Burmah.

295.—Culicicapa ceylonensis, *Sws.*

Common everywhere in the Western hills, not met with in the basin, common again at Aimole, but comparatively rare elsewhere in the Eastern hills.

We have this from N.-E. Cachar, Northern Sylhet, Shillong, and Joonkotollee in Dibrugarh, and Godwin-Austen records it from Cherrapoonjee and includes it in his Dafla hill list.

[Pretty common in the Dibrugarh district, where it frequents forests, especially the shady spots, where it flits about after insects, which it takes always on the wing. I have never seen this species going about in parties as mentioned by Jerdon.—J. R. C.]

This species is found in suitable localities throughout British Burmah.

296.—Hemichelidon sibiricus, *Gm.*

The only locality at which I met with this species in Manipur was at the very summit of a wooded hill near Aimole, elevation about 6,000 feet, and here I shot four.

I dare say it occurs on all the highest hills of Manipur, but this was the only place where I shot it, and the only place, I think, where I saw it, though one of my men said he saw it on the Limatol range.

I have this from near Shillong, and Godwin-Austen also notes it from the Khasi hills, but I have no other record of its occurrence in Assam, Sylhet or Cachar. It has also been

sent from Arakan, Northern and Southern Pegu and from all parts of Tenasserim, but it is everywhere sparsely distributed.

297.—Alseonax latirostris, *Raffles.*

I obtained a pair of this species at Kangoee in the Eastern hills, on the range between Aimole and Matchi. I never noticed it elsewhere, though it doubtless occurs.

I do not appear to have a single specimen of this species from Assam, Sylhet or Cachar, but Godwin-Austen notes it from the Garo hills. Blyth records it from Arakan. I have not seen it yet from Northern Pegu, though it is common in the south of that province, and it occurs in Tenasserim from Tonghoo to Victoria Point, though everywhere very sparsely distributed.

299.—Alseonax ferrugineus, *Hodgs.*

I shot a pair of these, breeding, as I found when I dissected them, at the same time and place as I shot the *H. sibiricus.* They were all together on the brushwood and low trees, growing in a huge vault, as it were, formed by the crowns and higher branches of groups of enormous trees that entirely covered the broad summit of the hill. Elsewhere in Manipur I did not obtain or notice this species.

From Shillong I have specimens, but I have no other record of its occurrence in Assam, Sylhet or Cachar.

[Common in the forest tracts of the Dibrugarh district, and a permanent resident.—J. R. C.]

In British Burmah this is rare; we have it from Bankasoon, the foot of Nwalebo and the Thoungyin valley. Blyth records it from Thyetmyo, and Oates from near Pegu, and this is all I know of its occurrence in British Burmah.

301.—Stoporala melanops, *Vig.*

I believe I saw this at Limatol in the Western hills, but if so I neither noted it nor did I preserve any specimen there. In the basin I did not see it, but at Aimole, Matchi and all the hills between and near these it was common and several were preserved. Though I could not find a nest it was breeding in the Eastern hills about the end of April.

We have this from Shillong and the Khasi hills, N.-E. Cachar and Joonkotollee in Dibrugarh, and Godwin-Austen includes it in his Dafla hill list, and this is all I certainly know of its occurrence in Assam, Sylhet or Cachar.

[Common in the Dibrugarh district during the cold weather, where it frequents not only forests, but the trees that stand singly about tea gardens.—J. R. C.]

In British Burmah it is widely distributed during the cold season throughout all the provinces in suitable localities, and I dare say it breeds in the higher Tenasserim hills, as it does in the Eastern Manipur and Khasi hills.

303.—Cyornis unicolor, *Bly.*

This is everywhere a rare bird, but it occurs both in the Eastern and Western hills.

First I shot a female on the 3rd February at Noongzai-ban, and then I shot a pair on the 19th of April at Aimole, which measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·9	9·4	2·9	3·13	0·73	0·78	0·66 oz.
♀ ...	6·7*	10·0	2·7	3·07	0·7	0·7*	0·58 „

* Tip of bill damaged—these dimensions are about 0·1 too little.

Male.—Legs and feet dull pale purple; bill black; irides browner.

Female.—Legs and feet greyish brown; upper mandible brown; lower mandible bluish horny; irides brown.

I have never seen this from Assam, but Godwin-Austen got it in the Khasi and E. Naga hills, and also in the Dekrang valley in the Dafla hills.

As regards British Burmah, the Marquis of Tweeddale made out from a drawing of Tickell's, which Tickell had wrongly labelled as *Stoporala melanops*,* that this species extended to Akyab in Arakan, and this may be correct, but I have no record of its occurrence anywhere in British Burmah.

304.—Cyornis rubeculoides, *Vig.*

I first obtained this at Soognoo at the south of the basin on low-wooded hills, the last outliers of the Eastern hills, and then I found it plentiful high up on these latter at Aimole, Matchi, &c.

When we were in these parts the birds were breeding, and I never saw a female. This was the latter part of April and the first half of May, and though I had no time to seek for nests the females must have been all sitting.

The Manipur birds are quite of the Indian and not the

* Note that I have received *S. melanops* both from Akyab and other parts of Arakan.

Burmese type (*vide* S. F., VI, 227 *et seq.*) Two males measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	5·95	8·75	2·25	2·7	0·7	0·64	0·49 oz.
♀	6·0	8·6	2·4	2·7	0·61	0·65	0·45 „

The legs and feet in the first were pale greyish brown with a faint purplish tinge; in the second dull purplish brown. In both the bills were black and the irides deep brown.

I have never received this species from any part of Assam, Sylhet or Cachar, but Godwin-Austen records it from the Khasi hills.

This species occurs in all the provinces of British Burmah, but the Tenasserim birds form a recognizably distinct race *(vide VI, loc. cit. sup.)*

304*bis*.—Cyornis poliogenys, *Brooks.* (*vide* S. F., VIII, 469; IX, 96, 295.)

I only met with this species in the Western hills, from the Jhiri to the western slopes of the Limatol range. Within this area they are tolerably common, but from their skulking habits, always dodging about in low brushwood under forests, their dingy colours and the dim light of the leafy sanctuaries they affect, it is not easy to shoot them. Correct measurements taken in the flesh, together with the colours of the soft parts in life, have never been given. In three specimens (unfortunately I had no time to measure more) these were as follow:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	6·3	9·3	2·4	2·8	0·75	0·8	0·52 oz.
♂	6·1	9·1	2·3	2·9	0·73	0·76	0·56 „
♀	5·9	9·0	2·2	2·73	0·78	0·75	0·51 „

The legs and feet in the *first* were pale greyish pink; in the *second*, very pale silvery fleshy; and in the *third*, pale silvery purplish. In all the bill was black, the irides brown, and the edges of eyelids yellowish.

The males are a trifle larger and their cheeks and ear-coverts a shade greyer, but otherwise the two sexes do not differ.

I have this species from N.-E. Cachar, Shillong, and Joonkotollee in the Dibrugarh district, but there is no other record as yet of its occurrence in Assam, Cachar or Sylhet.

[I got two specimens in 1880 in Dibrugarh:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	5·80	8·0	2·30	2·80	0·70	0·75	0·50 oz.
♀	5·95	8·50	2·45	2·90	0·70	0·68	0·60 „

Bill black; legs and feet livid purple; irides brown. This species might be common, but from their skulking habits,

and the dense undergrowth which they frequent, few specime n are brought to bag.—J. R. C.]

It is not known to extend to any part of British Burmah, but I have it, I may add, from Comillah (Tipperah), from the Sikhim Terai and the Bhootan Doars.

307*bis*.—Alseonax (*olim* Cyornis) mandellii, *Hume*.

On the 19th of April at Aimole in the Eastern hills I caught sight of a dingy-looking bird poking about in the low brushwood under high forest and shot it.

It proved to be a male of this rare and little known species. The following are the details:—

Male.—Length, 5·5; expanse, 8·8; tail, 2·15; wing, 2·85; tarsus, 0·55; bill from gape, 0·66; weight, 0·41oz.

Legs and feet pale wax yellow; claws brown; upper mandible blackish brown, yellowish at tip; lower mandible dull, horny yellow; irides brown.

I believe Mr. Sharpe is right in referring this to *Alseonax* instead of *Cyornis*, where I originally located it. At the same time when I saw it the bird was poking about like a true *Cyornis*, in fact like *Cyornis poliogenys*, which, when I fired, I believed it to be, not flying out flycatcher-like as *Alseonax ferrugineus* (which he now classes by the way as *Hemichelidon*) always does.

Major Legge obtained a bird extremely like this in Ceylon, which he identifies with *Butalis muttui*, Layard.

I must remark that I do not consider this identification conclusive. The two most conspicuous features in the bird are the snow-white eye-ring and line over the lores and the yellow legs, and to neither of these does Layard allude. His description runs as follows:—

"General resemblance of *B. latirostris*, but of a far more rufous colour; this colour most prevalent on the outer webs of the wing primaries, the outer tail-coverts and the sides of the breast and belly; throat, belly and vent whitish; breast rufous ashy; back of the head dark brown. Length, 5 inches; wing, 3."

Now I must say that on the whole it seems to me that this description applies *as well* to *A. ferrugineus* as to *muttui*, *apud* Legge. You cannot possibly speak of the throat, belly and vent as *whitish*; in this latter it is clearly pure white, in *ferrugineus* it *is whitish*.

But let this pass—the main point is, are *muttui*, *apud* Legge and Sharpe, and *mandellii*, distinct. These gentlemen think so.

Mr. Sharpe says *mandellii* "differs in its browner under-surface, where the fulvous brown colour overshadows the whole breast and flanks, whereas in *muttui* the breast is white, as well as the abdomen and under tail-coverts, extending also higher up the breast than in *A. mandellii.*" I quote this *verbatim*, but do not quite understand it. Layard says of his *muttui*, "breast rufous ashy." Major Legge again says of our bird: "It is almost identical on the upper surface with the insular bird, the head being only slightly darker; but the under surface is very much darker, the flanks are much browner, and the whole breast instead of being white is tawny brown, the vent and under tail-coverts only being white; the chest is much browner than in *A. muttui*, and the white throat-patch much smaller." This distinction of breast and chest is puzzling to most people. I reckon breast from where the foreneck ends at the merry thought, to where the abdomen begins at the end of the breast bone, and I thus make out that *muttui* differs in having rather more of the breast white than *mandelliii*. But Major Legge's plate shows *very* nearly, if not quite, as much brown on the breast as in *some* specimens of *mandellii*, and seeing that in this species, not only the *amount* but the tint of the brown on the lower surface is very variable, I cannot at present avoid some doubt as to the distinctness of the two forms.

If, however, the two are distinct, then the Travancore birds are clearly *mandellii*, as there is hardly any white at all on the lower surface, and the breast, flanks, sides and even lower tail-coverts are a warm fulvous or tawny brown, or more correctly brownish ferruginous buff. Of course, none of my birds show the olive brown on breast and flanks depicted in Major Legge's plate. In all my specimens, whether from Travancore, Sikhim, Shillong or Manipur, the brown has a fulvous or "rufous ashy" tinge, and the wing-lining and axillaries are rufescent buff. I think we must for the present suspend our opinion, first, as to the applicability of Layard's name, second as to the distinctness of *muttui*, *apud* Legge and Sharpe, and *mandellii*.

This species is more common at Shillong, whence I have five specimens, than any other place of which I know; but there is no other record of its occurrence in Assam, Sylhet or Cachar, nor do I know of its extending to any part of British Burmah.

Godwin-Austen gives 307.—*Cyornis ruficaudus*, Sws., from N. Cachar, but there is no other record of its occurrence

anywhere as yet in Assam, Sylhet, Cachar or British Burmah. Could his specimen have been *poliogenys*?

308.—Cyornis magnirostris, *Bly.*

Of this species I procured a single specimen, a female, in the Jhiri valley. I never again met with it in Manipur. It was shot by one of my men, who said it was one of a pair, both of which he shot, but failed to find the male in the dense undergrowth.

I have several specimens of this from N.-E. Cachar, and Godwin-Austen obtained a male at *Asalu*, but beyond this there seems to be as yet no record of its occurrence in Assam, Cachar or Sylhet.

In British Burmah I only know of its occurrence in Southern Tenasserim.

309*bis*.—Cyornis vividus, *Swinh.*

Only in the highest-wooded hill above Aimole in the Eastern hills did I meet with this fine species. They were here, even, very scarce. I only saw two pairs, of which I shot with great difficulty two males and one female. They were hunting about in dense brushwood, only now and then showing distinctly for a second at a time. Dissection showed that they were just about to breed, also that they had fed chiefly on tiny black beetles.

I measured all I shot, with the following results:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·0	11·65	3·3	4·05	0·81	0·72	1·19 oz.
♂ ...	7·7	11·5	3·3	3·9	0·8	0·8	1·2 ,,
♀ ...	7·6	11·6	3·25	3·75	0·78	0·75	1·17 ,,

The legs and feet and claws were dark to blackish brown; the soles yellowish; bill black; irides deep brown to reddish chocolate.

I have no other record of the occurrence of this species in Assam, Sylhet or Cachar, but the so-called female *Niltava* shot by Godwin-Austen in January 1873 under the peak of Japvo, Naga hills, was, I should say, *certainly* a female of this species.

In British Burmah again I only know of its occurrence in Central Tenasserim, where on Mooleyit we procured some nine specimens.

Godwin-Austen records 310.—*Muscicapula superciliaris*, Jerd., from the Naga hills, but I have no other record of its occurrence in Assam, Sylhet, Cachar or British Burmah, and, as

he got only a single immature bird, I think we must retain this as doubtful. It might possibly have been a young female, *Erythrosterna maculata*.

311.—Muscicapula astigma, *Hodgs.*

On the Limatol range I procured a single immature female that I thus assign, but the immature females of this species and *superciliaris* run so close that it is difficult to separate them. All we have to separate them in certain stages is the somewhat coarser bill and the darker tint of the upper surface in the present species. I never met with it again anywhere in Manipur.

At Shillong it must be *very* common, for every one who has collected for me in that neighbourhood has sent me numerous specimens, and Godwin-Austen, too, got numbers there, but I have no knowledge of its occurrence anywhere else in Assam, Sylhet, Cachar or British Burmah.

Godwin-Austen obtained 312.—*Muscicapula sapphira*, Tick., at the Shoton Dorengo Peak of the Garo range, and I have it from Shillong, but I did not meet with it in Manipur, nor have I any further knowledge of its occurrence anywhere else in Assam, Sylhet or Cachar, nor does it, so far as we know, extend to British Burmah.

Another species, 313.—*Nitidula hodgsoni*, Moore, was obtained by Godwin-Austen from the Naga hills and by myself from Joonkotollee in the Dibrugarh district; but there appears to be no other record of its occurrence in Assam, Sylhet or Cachar, and this too was not met with or at least procured in Manipur, though at the time I believed I saw it on the Limatol range. It does not extend, that we know, to British Burmah.

Still another species, 314.—*Niltava sundara*, Hodgs., which I have both from Shillong and Joonkotollee, and which Godwin-Austen found to be rather common about Asalu, escaped my notice in Manipur. I have no further knowledge of its occurrence in Assam, Sylhet or Cachar, or indeed in British Burmah, though Blyth says it occurs in Tenasserim (I believe the bird he saw must have been *Cyornis vividus*), and Ramsay is recorded to have obtained it in Karenee.

[I procured two specimens of *N. sundara* in the Dibrugarh district, and saw about a dozen more in half as many years. The measurements I made were :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·60	9·40	2·60	3·25	0·82	0·84	0·80 oz.
♀ ...	6·40	9·20	2·50	3·15	0·82	0·78	0·77 „

Bill black; irides deep brown; legs horny brown in male, deep plumbeous in female; mouth inside fleshy in male, fleshy yellow in female; gape fleshy yellow. Food, seeds of some berry, ants, and coleoptera. This species I noticed only on the bushes and shrubs on the sides of roads leading through forest, and wherever the sunlight was thrown on the road through a gap in the forest trees.—J. R. C.]

315.—Niltava macgrigoriæ, *Burt.*

This species was quite common in the undergrowth in the dense jungle near the Barak, between Kalanaga and Koombiron in the Western hills, but, strange to say, I never again met with it in any other part of Manipur, or if I did so I failed to shoot or recognize it.

The following are particulars of a pair :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·3	8·1	2·1	2·5	0·7	0·58	0·39 oz.
♀ ...	5·3	7·8	1·9	2·45	0·62	0·57	0·4 „

In both the legs and feet were dusky brownish leaden, the soles hoary, the bill black, and the irides brown.

We have this species from Shillong and the Khasi hills and from the Dibrugarh district, and Godwin-Austen included it in his Dafla hill list, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[Very common in the Dibrugarh district, where both this and the last species are only seasonal visitants. This species frequents the same places as *N. sundara*, and at times is to be found in the secondary scrub that grows in the broad strips cut through forest for very wide roads. I have found small red berries (hard shelled) in the stomachs of some that I dissected.—J. R. C.]

In British Burmah we only know of it as a rare straggler to Northern Tenasserim, and as having been obtained by Ramsay in Karenee.

316.—Niltava grandis, *Bly.*

I first met with this species on the Limatol range, where it was not rare. Then the Nagas brought in a specimen from the Southern hills, where they snared the *Callophasis*, and

lastly high up on the Eastern hills they were common to a degree, and were constantly shot by mistake. Frequenting the densest shade of the undergrowth and only seen for a moment, one has to fire, and too often the bird turned out to be this. Designedly I only shot a pair in the Eastern hills, but I find I have preserved some thirty specimens thence (and many were *not* preserved), and this will give an idea of their abundance and of the nuisance they are there to a collector. I positively got to hate the bird; but in the semi-darkness, with only snap shots offered, it was impossible to distinguish these from *Cyornis vividus* which I wanted, and so I had to shoot every bird I saw under these conditions.

A male measured:—

Length, 8·6; expanse, 12·5; tail, 3·7; wing, 4·2; tarsus, 0·92; bill from gape, 0·85; weight, 1·275ozs.

The legs and feet were dusky leaden brown, with a silvery glance; the bill black and irides deep brown.

I measured a female, but the figures have become illegible, but she had the legs and feet a pale dull leaden blue, bill and irides as in male.

I have this from Shillong, and Godwin-Austen gives it from the Khasi hills and the Shengurh Peak (at 6,000 feet) of the Dafla hills, and he also got it, I believe, in the Naga hills, but beyond this I have no knowledge of its distribution in Assam, Sylhet or Cachar.

In British Burmah I only know of its occurrence at and about Mooleyit in Central Tenasserim, where we procured it.

317.—Anthipes moniliger, *Hodgs.*

Godwin-Austen's people procured this at Gonglong in the Manipur hills, and it must therefore be included in our list, but I myself never met with it.

I have it from Shillong, but know nothing further of its occurrence in Assam, Cachar and Sylhet.

This species is recorded from Arakan and Karenee, but the slightly differing *A. submoniliger*, nobis, replaces it in Tenasserim.

Godwin-Austen records 318.—*Siphia tricolor*, Hodgs., from the Khasi hills, but this is the only notice I have of its occurrence in Assam, Sylhet or Cachar. I never met with it in Manipur, and it does not, so far as is yet known, extend to British Burmah.

319.—Siphia strophiata, *Hodgs.*

I procured a single specimen of this, a female, at Koombiron, in the Western Manipur hills, and that was the only place at which I noticed it.

It is common about Shillong, and Godwin-Austen records it in his Dafla hill list from the Dekrang valley and the Tomputu Peak, and this is all I know as yet of its occurrence in Assam, Sylhet and Cachar.

In British Burmah I only know that we procured a single specimen at Mooleyit in Central Tenasserim, and that Blyth records it from Arakan, whence I have not seen it.

320.—Siphia leucomelanura, *Hodgs.*

First observed on the Limatol range in the Western hills, and then again on a forest-clad summit beyond Tankool Hoondoong on the Eastern hills. It seems very scarce. I only saw three birds from first to last—one male on Limatol and a pair on the second occasion.

From Assam I only have it from Shillong, but Godwin-Austen records it from Sadiya and from Sibsagar. I have not seen it from any part of Sylhet or Cachar (though it may occur in the north of both of these districts); nor, so far as I yet know, does it extend to any part of British Burmah.

321.—Siphia superciliaris, *Bly.*

The only place at which I noticed this was at Aimole on the Eastern hills, and there it was not uncommon. At the end of April they were about to breed. The following are exact details of a pair :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	4·4	7·3	1·75	2·35	0·68	0·5	0·26 oz.
♀ ...	4·25	6·8	1·4	2·1	0·7	0·55	0·27 ,,

In both the legs and feet were very pale silvery to fleshy pink, the terminal joints of the toes and the claws being slightly brownish. The bill was black and the irides deep brown.

I have this from Shillong. Godwin-Austen obtained it on the Hengdon Peak at 7,000 feet and in the Naga hills, and this is all we know at present of its distribution in Assam, Sylhet and Cachar. To Burmah it does not, so far as I yet know, extend.

322.—Siphia erythaca, *Bly. & Jerd.*

I first observed this little known species on the Limatol range; there they were going about in parties of six or more, males and females mixed.

In the Eastern hills at Aimole I only saw two, both adult males, the one solitary and the other in company with an old male, *Erythrosterna maculata*, which I also shot.

The following are particulars of some of the specimens I procured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 5·45	8 6	2 27	2 88	0·65	0·5	0·36 oz.
♂	... 5·4	8·5	2·05	2·8	0·62	0·51	0 41 ,,
♀	... 5·3	8·3	2·1	2 7	0·62	0·52	0·4 ,,

The legs and feet varied from dusky liver brown to plain dark brown; the bill in the first bird entirely black, in the other two blackish, horny grey on base and lower ridge of rami of lower mandible; irides deep brown. Now two pair I shot together, so that there is not the smallest doubt as to what the female of this species is. As I noted from the fresh bird, the secondary greater coverts are narrowly tipped with pale buff, forming a not very conspicuous bar, even in life (it is hardly noticeable in skins), on the posterior portion of the wing. The rump and upper tail-coverts have, the latter especially, a distinct rusty olive tinge, and there is a *soupçon* of this same on the sides of the neck and the lower part of the throat.

Now there can, I think, be no earthly doubt that this female of *S. erythaca* is Godwin-Austen's *Erythrosterna sordida*, which he shot under Japvo Peak in the Naga hills, *where* he at the same time shot the male *erythaca*.

I pointed this out in 1878, S. F., VI, 510, but yet a year later I find my friend Mr. Sharpe, B. M. C., IX, 156, retaining this *sordida* as a good species, though it is, I am compelled to believe, only the female of *Siphia erythaca*, and I therefore beg to draw particular attention to this fact.

I have this species from Shillong, and Godwin-Austen, as above, obtained it from the Naga hills, but we know nothing further of its distribution in Assam, Sylhet or Cachar.

In British Burmah we only know that we obtained it on all the higher hills of Northern and Central Tenasserim, and that Ramsay procured it in the Karen hills at 4,000 feet.

323.—Erythrosterna albicilla, *Pall.*

Although this was common up to Lakhipur in Cachar and some miles further east, I never saw it after crossing the Jhiri, until we descended from the hills into the Manipur basin, and there I got it at Bishnoopoor again, and found it pretty well all over the level. It is not numerically very abundant, but neither is it rare even about the hedgerows of the capital, and I got it at Sagam, Soognoo, Moirang and Kokshin Koolel, &c.

Moreover I got one single specimen high up at Aimole in the Eastern hills, but this was the only one I saw in these latter.

I have received this from all parts of the valley of Assam, from the Garo hills and from Shillong; from several places in Sylhet and Cachar (in many parts of both of which I myself observed it); and Godwin-Austen notes it from the Harmuti garden below the Dafla hills.

[Very common in the Dibrugarh district, and one of the earliest cold-weather visitants, remaining from September to April. Found in open country, hedgerows, &c.; a few used always to keep about my vegetable garden. I have seen them sitting high up on a tree and on a dead branch and twittering away.—J. R. C.]

It is generally distributed throughout all the provinces of British Burmah during the cold season.

Godwin-Austen gives 324.—*Erythrosterna pusilla*, Bly., from the Garo hills. It is now generally considered that Blyth's bird was only the female of *E. maculata*. It is impossible to say what bird Godwin-Austen meant, as he must have been familiar with the female of *maculata*.

He also says that he has 325.—*Erythrosterna acornaus*, Hodgs., from the Jhang valley of Manipur and from Shillong, but *acornaus*, Hodgs., according to Brooks, Sharpe, &c., is only the female of *Muscicapula superciliaris*, and Godwin-Austen could not mean *this*, while *acornaus*, Bly., is said to be the female of *E. maculata* and to = *pusilla*. I cannot, therefore, say what either of these birds may really be.

326.—Erythrosterna maculata, *Tick.*

I obtained one immature specimen of this in the Eerung valley, one adult male in that of the Limatak, and this was all I saw of the bird in the Western hills. In the basin I did not see it at all, but high up on the Eastern hills at Aimole and Matchi I found it excessively common, by far the commonest flycatcher.

A *male* measured:—Length, 4·65; expanse, 7·3; tail, 1·7; wing, 2·32; tarsus, 0·6; bill from gape, 0·52; weight, 0·27oz.

Bill, legs and feet black; irides brown.

We have this species from both the Garo and Khasi hills and from Joonkotollee (Dibrugarh district), and Godwin-Austen records it from the Naga hills.

[The only specimen I secured in the Dibrugarh district, a male, was shot in January off a "Jack" (*Artocarpus integrifolia*)

tree that grew near my bungalow, while uttering a single mellow "tweet."—J. R. C.]

Blyth records it from Arakan. Mr. Oates procured a single specimen near Pegu, but beyond this I do not know of its occurrence in Pegu. In Tenasserim *we* got it at Mooleyit and Bingham in the Meplay valley. Lastly, Ramsay procured it in Karenee.

328.—Tesia cyaniventris, *Hodgs.*

I obtained one specimen of this species between the Jhiri and Noongzai-ban in the low level forest; another high up on the Limatol range—both these in the Western hills. Again, I got three above Aimole in the Eastern hills. All five were males. The following are the particulars of some of these :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 3·9	6·35	0·7	2·05	0·98	0·63	0·33 oz.
♂	... 3·9	6·6	0·9	1·85	0·96	0·6	0·31 „
♂	... 3·9	6·3	0·7	1·86	0·96	0·57	0·34 „

Legs, feet and claws dull brown to pale rather fleshy brown; upper mandible and tip of lower deep to blackish brown; rest of lower mandible and gape dull wax yellow to orange horny; irides deep brown.

Now there are two styles of plumage in this species. In the one the whole upper parts are uniform olive green; there is a very conspicuous blackish line, traceable through the upper part of the lores, but very marked from the eye to the nape, and above this a line paler and yellower than the rest of the head. The lower parts are slaty grey, but with the chin and throat almost white and albescent on the breast and the central portions of the abdomen down to the vent.

In the other the entire forehead, crown, occiput and nape are overlaid with glistening greenish golden; the black line is much less conspicuous; there is no paler line above this, and the entire under surface is a perfectly uniform and very much deeper slate colour.

Now from the numbers of each form that we possess I suppose these to represent the two sexes. Jerdon says head of male golden green, and this may be so, but all my five specimens were males. I dissected them myself, and *all* are in the plumage first described, and therefore, according to Jerdon, females. Perhaps mine are all young birds, but this seems unlikely, and the birds show no signs of immaturity. I have never sexed this bird before myself, and out of some fifty odd specimens in the museum there is not one sexed by any one on whom I can rely; indeed I find both forms of

plumage sexed, both male and female. Can it be that the first type indicates young of both sexes and the second adults of both? The point wants clearing up. All I can say positively is, that all my five specimens killed from 2nd of February to 2nd of May are all precisely alike, all in the stage of plumage first described, and all *males*.

As to the occurrence of this species in Assam, all I know is that I have it from Joonkotollee (Dibrugarh district), and that Godwin-Austen obtained it in the Khasi hills.

[During my stay in Dibrugarh I secured only four specimens, of which I give measurements:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 3·50	5·30	0·70	1·80	0·82	0·55	0·25 oz.
♂	... 3·50	5·60	0·60	1·85	0·88	0·60	0·28 „
♀	... 3·60	5·50	...	1·80	0·85	0·58	0·30 „
♀	... 3·50	5·50	...	1·90	0·88	0·60	0·27 „

Legs and feet purplish brown in the first two, olive green in female; bill above dusky, below and gape vermilion, tip dusky; base below in female yellow; irides brown. They were shot in dense forest, while hopping about the ground among some dead leaves.—J. R. C.]

It does not extend, so far as I know, to British Burmah.

Godwin-Austen also records3 27.—*Tesia castaneocoronata*, Burt., from the Hengdon Peak at 7,000 feet, and I have it from Shillong, but these are the only records of its occurrence in Assam, Sylhet, Cachar or British Burmah.

Besides this there are three *Pnoepygas* that occur in Assam none of which I met with in Manipur, though they may prove to occur there, *viz.*, 329.—*Pnoepyga squamata*, Gould., which I have from near Shillong, and which Godwin-Austen records from the Hengdon Peak, and which Ramsay obtained in Karenee, but of the distribution of which in Assam, Sylhet, Cachar or British Burmah nothing further seems to be known.

[I have a record of only one specimen from Dibrugarh:—*Female.*—Length, 3·50; expanse, 5·50; wing, 2·0; tarsus, 0·75; bill from gape, 0·65; weight, 0·30oz.

Bill above dusky, below pale fleshy, tipped dusky; gape dusky; legs and feet dirty white. It was shot in a damp shady spot in heavy forest, while hopping about among the fallen leaves and twigs, and had eaten only insects.—J. R. C.]

Next 330.—*Pnoepyga pusilla*, Hodgs., which I have from Shillong, and which Godwin-Austen also got in several parts of the Khasi hills, but of the occurrence of which elsewhere in

Assam, Cachar, Sylhet or British Burmah nothing seems known.

Lastly 332.—*Pnoepyga longicaudata*, Moore, of which I have numbers of specimens from Shillong, and which Godwin-Austen obtained from Cherrapoonjee a little further south, and of which likewise we have no further records from any of the four provinces and districts above referred to.

332*bis*.—Pnoepyga chocolatina, *G. Aust. & Wald.*

I never met with this species in Manipur, but the type came from Kedimai in the Manipur hills.

I have never *seen* a specimen of this species, I mean one of the types, but I confess that I have doubts as to its validity, and suspect it to be only one stage of plumage of *Pnoepyga longicaudata*, and if so this latter species must be included in the Manipur list, and *chocolatina* suppressed. My reason for this suspicion is that, after the most careful study of all my friend Major Godwin-Austen seems to have written on the subject, I find I have specimens of *longicaudata* (immature as I conceive) which answer in every respect to his descriptions and dimensions, except that not one has a wing so small as he gives it, *viz.*, 1·87, the smallest wing in my birds being 1·95. Between these *longicaudata* with no black markings on the upper surface, only a little paling towards the edges of some of the feathers, and the perfect adult (as I fancy it to be) with the entire upper surface thickly marked with narrow blackish lunules, every intermediate gradation is visible.

It would be a real charity to us Indian ornithologists if Major Godwin-Austen would carefully re-examine his *chocolatina* and say whether it differs in any respect structurally from *longicaudata*, and whether he feels certain it is not, as I suggest, one stage of this latter.

An analogous mysterious form is *P. concolor*, Hodgson, carefully twice figured by him as a bird precisely similar to *P. squamata* in structure and size, but of an immaculate smoky olive brown, darker only on wings and tail. I have never seen such a specimen; it has hitherto been accepted as a stage of *squamata*. Mr. Sharpe places it without doubt as the immature bird of this species, but out of the many hundreds of specimens of this species that have passed through my hands I have never seen one at all like Mr. Hodgson's plates, and I cannot help suspecting that it is either distinct or an abnormal melanism. There is a specimen in the British Museum, and I hope Mr. Sharpe will re-examine it, for I cannot believe that

any normal stage of this bird's plumage can have so completely evaded all of us Indian collectors. To return, the only place out of Manipur whence *chocolatina* has been recorded is from Shillong, where *longicaudata* is so common that I have over 50 specimens thence.

332*ter*.—Turdinulus murina, *S. Müll.* (Blyth, *Ibis*, 1865, 47) = *Pnoepyga roberti*, God.-Aust. & Wald., *vide S. F.*, *IX*, 115.

Although I never met with this species Godwin-Austen procured it at Chakha in the Manipur hills, and it must therefore be included in our list.

I have never received it from any part of Assam, Sylhet or Cachar, but Godwin-Austen procured it at Asalu.

In British Burmah we only know of its occurrence about Mooleyit in Central Tenasserim, but the rest of the higher hills in that range have yet to be explored, and it will probably prove to occur elsewhere, the more so that we have obtained it far down the Malay Peninsula at Klang, and that the type came from Sumatra.

335.—Rimator malacoptilus, *Bly.*

Never met with by me, but procured in the Manipur hills, by Godwin-Austen. There seems to be no record as yet of its occurrence anywhere in Assam, Sylhet, Cachar or British Burmah.

336.—Brachypteryx nipalensis, *Hodgs.*

I only met with this species in the Eastern Manipur hills, but in these, both near Aimole and Matchi, it was by no means rare.

I have this from the neighbourhood of Shillong and two or three other places in the Khasi hills, but there is no record of its occurrence anywhere else in Assam, Sylhet or Cachar, and as regards British Burmah, the only place where it is known to occur is at Mooleyit, where we procured several specimens.

Godwin-Austen procured No. 337.—*Brachypteryx hyperythra*, Jerd. and Bly., at Asalu, but it is not known as yet to have occurred elsewhere in Assam, Sylhet, Cachar or British Burmah, and I did not observe it in Manipur.

Again I have 338.—*Brachypteryx cruralis*, Bly., from the Khasi hills and Shillong, but never met with it in Manipur,

nor do I know of its having been found elsewhere in Assam, Sylhet, Cachar or British Burmah, though Ramsay obtained it just outside the north-east frontier of this latter in Karenee.

All these *Pnœpygas* and *Brachypteryx* are skulking, sneaking brushwood birds, that demand close and leisurely collection, and I doubt not that as time goes on most of them will prove to be far more widely distributed than we at present have any idea of.

343.—Myiophoneus temmincki, *Vig.*

In the Western hills this was by no means rare, though far less common than in the Himalayas, but I never once saw it after leaving these, and if it does extend to the Eastern hills it must be extremely scarce there.

It must be common in the Khasi hills from the number of specimens sent me, and occurs close to Shillong itself. I have it also from N.-E. Cachar, and Godwin-Austen includes it in his Dafla hill list, but I know nothing further *certainly* of its occurrence in Assam, Sylhet or Cachar, though I have been *told* that it has been noticed both in the Garo and Naga hills.

[In December, 1881, a party of us planters went up the Dehing river fishing far above Jaipur in the Dibrugarh district and where the hills (Naga) run down to the river's edge. The bed of the river here is sandy and pebbly, with rocks jutting out at intervals, and in these places several birds were seen, but being single individuals were very wild, and none were brought to bag. Knowing the bird well I am certain of my identification.—J. R. C.]

As regards Burmah its distribution is uncertain. Blyth gives it from Arakan. I have seen a specimen from near Thayetmyo, and Ramsay is said to have procured this species in the Karen hills, but certainly in the Pegu Yoma and the hills of Northern and Central Tenasserim it is replaced by the allied but quite distinct *M. eugenii*, nobis, which however does not apparently cross the Irrawadi westwards.

344.—Hydrornis nipalensis, *Hodgs.*

I procured a single specimen of this large Ground Thrush at Matchi in the Eastern hills, but never myself again met with it in Manipur, though one of my men averred that he had seen and shot at one in the Eerung valley in the Western hills.

I have this from N.-E. Cachar, and from Sadiya, and numerous localities in the Dibrugarh district. I have not received it from Shillong, but Godwin-Austen got it in the Khasi hills, and

includes it in his Dafla hill list. Beyond this nothing is on record as to its distribution in Assam, Sylhet or Cachar.

[The first specimen I got was caught on the 1st September, 1879, in a neighbouring planter's bungalow, and was a juvenile female. They are fairly common in dense forests, and, according to my experience, are not nearly so shy as *Pitta cuculata*, the other species of Ground Thrush which I have noticed in Dibrugarh.—J. R. C.]

Blyth gives this species from Arakan, but it is doubtful whether it is really this species that occurs there or the allied *H. oatesi*, nobis, which replaces it in the Pegu hills, Karenee and the hills of Northern and Central Tenasserim.

346.—Pitta cuculata, *Hartl.*

This also we only once met with and that was just as we began to ascend the Noongzai-ban ridge from the Jhiri valley. It was a male and measured :—Length, 7·5 ; expense, 15·1 ; tail, 1·6 ; wing, 4·45 ; tarsus, 1·6 ; bill from gape, 1·09 ; weight, 2·24ozs.

Legs, feet and claws very pale silvery pink ; bill black ; irides deep brown.

I have this species from N.-E. Cachar, Sadiya and other places in the Dibrugarh district, and Godwin-Austen records it from the north Khasi Hills, but beyond this we know nothing of its distribution in Assam, Sylhet and Cachar.

[Very common in Dibrugarh, but only during the rainy season, when it is found in dense forest. When disturbed they always fly up into a tree. On the 23rd June, 1880, I got a clutch of four eggs. The nest was dome-shaped and placed on the stump of a tree, amongst a dense mass of leafy twigs ; it was made of fine twigs and roots with a few dead leaves sticking to the bottom. The forest was very dense, and the female watched her nest being robbed, from a little distance off. Again, on the 26th July, 1882, I came across another clutch of three head-set eggs, the same kind of nest, which was placed among the roots of a fallen tree. Male was caught by hand on the nest.—J. R. C.]

From all the provinces of British Burmah we have received this species, and it appears to be generally distributed in all suitable localities, though mostly, I suspect, as a seasonal visitant only.

From first to last I saw no dipper in Manipur, though the Eerung at any rate and its many affluents seemed precisely what

dippers love, but from Shillong I have several specimens of 349*bis.*—*Cinclus pallasi*, Tem. Godwin-Austen indeed gives 347.—*C. asiaticus*, Sws., from Shillong, but my specimens do not, I consider, belong to this species, and his description leads distinctly, it seems to me, to the conclusion that the birds before him were *pallasi* and not *asiaticus*.

Godwin-Austen gives 350.—*Zoothera monticola*, Vig., from both the Khasi and Dafla hills, but I did not meet with it in Manipur, nor have I any further record of its occurrence in Assam, Sylhet or Cachar, nor does it, so far as we know, extend to British Burmah.

350*bis.*—Zoothera marginata, *Bly.*

I believe I saw this both on the Limatol range and two or three times on the higher ranges of the Eastern hills, but I never could shoot it. One of the Nagas, however, brought in a tailless male that he had snared somehow. Of this the expanse was 16·1, the wing 5·17, the tarsus 1·15, the bill from gape 1·55, and the weight 3·42ozs.

The legs and feet very pale brownish fleshy; the claws browner; the bill blackish brown, livid whitish at gape and on base of lower mandible; irides deep brown.

I have no knowledge of the occurrence of this species anywhere in Assam, Sylhet and Cachar, with the exception of the West Khasi hills, whence Godwin-Austen records it.

Blyth records it from Arakan, and it occurs in the North Pegu hills, Karenee, and the hills of Northern and Central Tenasserim.

351.—Cyanocinclus cyanus, *Lin.*

Common enough in the Western hills, alike on the high Limatol ridge and on the boulders of the Barak, the Eerung and the Limatak, and not rare in the basin, where I often saw it not only out in the country but occasionally perched on the Residency outhouses; but in the Eastern hills I never shot one, nor can I certainly remember ever seeing it there.

All the specimens I preserved, over a dozen, and indeed all the birds I saw, belonged to this form, not one showed a single rufous feather.

I have this from N.-E. Cachar and met with it in many places in both Sylhet and Cachar. Godwin-Austen records it from the Khasi hills, whence I have not received it, so I suppose it is scarce there, and as regards the valley of Assam, I do not seem to have a single record of its occurrence.

This form is widely distributed throughout British Burmah.

I never obtained or saw a single specimen of 351*bis*.—*C. solitarius*, P. L. S. Müll., in Manipur, but I have it from N.-E. Cachar and the Dibrugarh district, though it has not yet been recorded from any other locality in Assam, Sylhet or Cachar. In British Burmah it is generally diffused, but is less abundant by far than the last.

I do not consider this race to be of specific value, but for convenience of record, I admit all specimens showing any red on the under surface as belonging to a race "*solitarius*." As to making two *species* out of these, and further a sub-species in which to place all birds that do not show the full amount of red on the lower surface, and designating this by a composite name varying with the amount of the red so shown, this appears to me, ingenious as it may seem, to be simply irrational. If as this proposed classification tacitly admits the two extremest forms grade by absolutely imperceptible steps one into the other, then there cannot be two species, let alone two species and one sub-species, but only one species, though this may include two or more races. Naturalists of the present day seem pretty well agreed as to what should constitute a species, the difficulty in most cases being as to the facts, but here the facts are undisputed, and the absolute union of both extremest forms, by an unbroken chain of intermediate ones being allowed, it is impossible to understand how, with any regard to logic or first principles, two species (to say nothing of that funny little sub-species *Cyana-solitaria vel Solitaria-cyana* as the case may be) can be maintained. Let me offer Mr. Seebohm a further development of his sub-species; it is surely too inaccurate merely to put *cyana* or *solitaria* first according as the bird is nearer the typical western or eastern forms. Let the full amount of red on the latter be taken as ten, and then let the extent of the red be recorded after *solitaria* in figures, thus a nearly typical eastern bird will stand as *solitaria* 9·5 *cyana*, and one with only a few red feathers as *Cyana solitaria* 0·5! Further suggestions for increased accuracy, on application, *gratis*.

[Rather rare in the Dibrugarh district, where after three and a half years' residence I got one specimen, and never saw another. The one secured was found amongst my coolie lines where he kept hopping about the roofs, then down to the ground for an insect, away round the corner, and in this way he led me a good chase for some time.

Male, 18th October, 1882.—Length, 9·10; expanse, 14·25; tail, 3·40; wing, 4·70; tarsus, 1·15; bill from gape, 1·20; weight, 1.55. Bill, legs, and feet black; irides brown; gape and mouth inside yellow.—J. R. C.]

352.—Petrophila erythrogastra, *Vig.*

I saw this occasionally in both Eastern and Western hills, but being such an excessively common bird with us in the Himalayas, I stupidly took no notes of it at the time, and now I find I have only preserved two specimens, one from the valley of the Eerung in the Western, the other from Aimole in the Eastern hills; but I could certainly have shot a dozen; they were not rare.

I have this species from Shillong, and Godwin-Austen records it from N. Cachar, but I have no further knowledge of its occurrence in Assam, Sylhet or Cachar.

I do not know that this species has ever occurred in British Burmah, but Ramsay records it from just outside in Karenee.

355.—Geocichla citrina, *Lath.*

I shot one specimen of this species on the Noongzai-ban range, but did not preserve it, it being a common bird, and we having our hands more than full; but unfortunately we never obtained another specimen—indeed I never again saw it, though my men said they saw it near Kangoee on the Eastern hills. Even if this is correct the bird must be extremely rare in Manipur between February 1st and June 1st; what it may be at other seasons I cannot say.

I have this species from N.-E. Cachar and from Sadiya, and Godwin-Austen records it from the Garo hills and from Asalu, and includes it in his Dafla hill list. It is widely and generally distributed throughout Arakan, Pegu and Tenasserim (extending to Karenee) in all appropriate stations.

358.—Geocichla dissimilis, *Bly.*

In April and May Thrushes were very numerous in the Eastern hills, but withal very wild and difficult to get at. The present species was the only one at all get-at-able. Like the rest it was always to be found on the ground, rummaging and feeding amongst the fallen leaves; but whereas *obscurus*, *pallidus*, &c., were always off like a flash of lightning at the slightest crackle of a twig within fifty yards of where they were, the present species would often only fly up a few feet on to a bare

branch, and wait there to see what was up, thus frequently affording a shot.

As this bird has never been carefully measured, &c., in the flesh, I measured a good many, sexing them afterwards carefully myself. The following are the particulars :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
Male, ad.	9·0	14·5	3·5	4·8	1·25	1·02	2·27 ozs.
,, ,,	9·2	15·0	3·2	4·73	1·3	1 2	2·53 ,,
,, ,,	9·0	14·1	3 29	4·65	1·2	1·15	2·4 ,,
,, ,,	8 65	14·0	3·15	4 6	1·1	1·12	2·2 ,,
,, im.	9·2	14·6	3·15	4·52	1·3	1·08	2 67 ,,
Female ad.	9·15	14·6	3·15	4·62	1·3	1·05	2·55 ,,
,, ,,	9·2	14·1	3·2	4·62	1·26	1·07	2·65 ,,
,, im.	8·6	14·0	2·65	4·3	1·3	0·98	2·61 ,,

In all the irides were brown, but deeper coloured in the old. In all the legs, feet, claws, bill and eyelids were yellow, more or less orange in the oldest birds, a full wax yellow in others, and in the youngest birds very pale wax yellow, shaded now on more or less of the upper mandible and tip of lower, now on the feet and especially the tips of the claws with brown ; but one male, the fourth above noted, mature as to the lower parts, but with a faint olive tinge over the slatey black, had nearly the whole bill a darkish horny brown, only a patch near the tips of both mandibles brownish yellow, and gape pale yellow. This is abnormal, as we got numbers both clearly older, apparently the same age, and clearly younger, none of which had similar bills. In this specimen, too, the legs were a very *brownish* yellow.

In the old male, not only the throat but the whole upper breast is black, the feathers of this part often *excessively* narrowly fringed at the tips with orange ferruginous ; except in very old males, the orange ferruginous feathers of the lower breast and sides are in about half the specimens excessively narrowly fringed just at the tips with blackish dusky.

In the old female there is *no* white about the throat, the entire chin, throat and upper breast are a dull olivaceous fulvous brown with black longitudinal bar-like spots.

In younger females the chin and entire front of the throat are white, and the upper breast has a ground of greyish olivaceous, more or less tinged with ferruginous, and the spots on this are more fan-like.

In younger females still the upper breast has only a grey olive ground, with no admixture of ferruginous, and there is no ferruginous even on the lower breast, this being confined to the sides, axillaries and wing-lining.

In the young male approaching maturity the upper surface is slatey, but still with an olive shade, and the head though darkest is most olive; the ground of the chin and throat is white, as in the young (not the youngest) females, but the ground of the entire upper breast (where the black will be in the perfect adult) is a pure iron grey, unmixed with olive or ferruginous, and it is largely spotted with black.

In the Dibrugarh district this species appears to be rather rare, though I have several specimens thence, and Godwin-Austen records it from the Garo hills; but beyond these I have no knowledge of its occurrence anywhere in Assam, Sylhet or Cachar, nor do I know of its having been as yet observed anywhere in British Burmah.

[I procured three specimens in all from the Dibrugarh district, where it is rare, and evidently only an occasional visitant, my birds being shot in January, 1880, among the coolie lines:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·65	14·0	3·15	4·60	1·10	1·12	2·0 ozs.
♂ ...	9·0	13·75	3·20	4·65	1·20	1 18	2·40 ,,
♀ ...	8·70	14·0	3·10	4·60	1·15	1·12	2·35 ,,

Soft parts coloured as in Mr. Hume's specimens from Manipur.—J. R. C.]

361.—Merula boulboul, *Lath.*

I shot a pair of these and saw two or three others in the wooded slopes of the Barak valley in the Western hills, but I never again met with them in Manipur. I did not preserve the specimens, as there could be no mistake about the species, and our hands were overfull, but I measured them with the following results:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	12·12	18 5	5·3	5·95	1·4	1·3	4·1 ozs.
♀ ...	11·25	17·4	4·75	5·6	1·3	1·2	3·2 ,,

Male.—Legs and feet brownish orange; bill orange red; irides brown; edges of lids orange yellow.

Female.—Legs and feet yellowish brown; bill dark brown, yellow at edges and gape; irides brown; edges of lids pale yellow.

I noted that both birds (like Sikhim specimens) were of a darker tint than our Simla ones.

I have this species from N.-E. Cachar and Shillong, but there is as yet no other record of its occurrence in Assam, Sylhet or Cachar, and it is not known to extend to British Burmah.

362.—Merula albocincta, *Royle.*

I never met with this species anywhere in Manipur, but Godwin-Austen records it from Remta in the Manipur hills, and it must, therefore, be included in our list.

There is no record as yet, I believe, of its occurrence anywhere in Assam, Sylhet, Cachar or British Burmah.

Godwin-Austen also got 363.—*Merula castanea*, Gould., in the Tura range of the Garo hills, but I never met with it in Manipur, nor is there any other record of its occurrence in Assam, Sylhet, Cachar or British Burmah.

364.—Turdus ruficollis, *Pall.*

I never saw this species in either the Eastern or Western hills, but I frequently saw it in the Manipur basin and shot several.

The following are exact particulars of those measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ad.	10·1	16·0	3·9	5·4	1·3	1·1	2·58 ozs.
„ „	10·5	16·5	4·25	5·5	1·35	1·1	2·72 „
♀ ad.	10·2	16·0	4·5	5·2	1·25	1·15	3·17 „
„ „	10·1	15·3	4·0	5·35	1·27	1·13	2·75 „
„ „	9·8	15·5	4·23	5·56	1·25	1·11	2·46 „

For remarks on the variations of plumage in this species *vide* S. F., IX, 318, *n.*

Wherever I met this Thrush it was solitary and not in parties, as one usually finds *atrogularis*—always in the level country feeding in open ground, and in Sylhet and Cachar, always where heaps of manure had been thrown down in the fields, about which heaps it was busily foraging.

I have this species from Sadiya and many other places in the Dibrugarh district, and from Goalpara, and I shot it near Karimgunj in Sylhet, and again further up in the Cachar district.

Godwin-Austen also got it in the Khasi hills, whence I have not seen it, nor indeed does my slight knowledge of it lead me to believe that it normally affects hills at all.

[Pretty common in the Dibrugarh district during the cold season. My experience of their habits tallies with that of Mr. Hume's.—J. R. C.]

I do not yet know its having occurred in any part of British Burmah, though I should expect to hear of it in the plains of Pegu.

365.—Turdus atrogularis, *Tem.*

Only twice met with in the Western, never seen in the Eastern hills, or even in the basin.

I have this from Shillong and the Khasi hills, N.-E. Cachar and the Dibrugarh district, and I also saw three near Karimgunj in Sylhet, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[Very common in Dibrugarh in the winter of 1879, which was a very dry one, but the other seasons a few were always seen about in small parties. They keep to open ground.—J. R. C.]

It does not, that I know of, extend to British Burmah.

There is another species 366.—*Turdus fuscatus*, Pall., which I have from Shillong and the Dibrugarh districts, and which Godwin-Austen records from the Japvo Peak of the Burrail range at nearly 10,000 feet elevation, and from Harmutti in his Dafla list; but there is as yet no other record of its occurrence in Assam, Sylhet or Cachar. I never saw it in Manipur, and I do not yet know of its extending to any part of British Burmah.

369*bis*.—Turdus obscurus, *Gm.*

This species, unnoticed elsewhere, was common in considerable-sized flocks in the Eastern hills of Manipur.

Full dimensions and particulars have been previously given, S. F., VI, 252, so I need not give details here.

I have numbers of this species from Shillong, where it seems to be excessively common; but this is the only record I have of its occurrence in Assam, Sylhet or Cachar. Blyth records it from Arakan, and we found it pretty common alike in hills and plains throughout Tenasserim, but I seem to have no specimens from nor any record of its occurrence in Pegu, except that Mr. Oates once obtained a single specimen a little south of the town of Pegu.

?369*ter*.—Turdus pallidus, *Gm.*

The species which I identified as *pallidus* was not rare on the Eastern hills, but extremely difficult to procure. I never saw it in the Western hills nor in the basin.

Let me first give dimensions* of three specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	9·3	15·14	3·7	5·0	1·3	1·0	?
♀	9·25	15·	3·5	4·69	1·2	1·0	?
♀	9 3	14·5	3·62	4·8	1·2	0·95	?

Legs and feet brownish yellow; bill blackish brown, yellow at gape and on base of lower mandible; irides brown.

* I did not record these myself, but believe they were carefully done.

These three specimens are obviously the same as the specimen we obtained at Mooleyit in Tenasserim (*vide* VI, 253).

Now all these specimens, one male and three females, differ alike from a Formosan specimen and from the figures P. C., 515, and F. J., pl. XXVI, in having a most conspicuous white eye-brow, almost from nostril to nape; but further Godwin-Austen, in describing a bird of this species obtained at Cherrapoonjee, says: "A pure white supercilium." And again describing birds from the Naga hills he says: "A white supercilium extends to over the ear-coverts." And I gather that this bird of his agreed well with specimens in Lord Walden's collection, collected some of them I believe by Ramsay in Karenee.

Now Mr. Seebohm in describing the adult male of *pallidus* says, "no trace of eye-stripe;" and neither in speaking of the female or young does he say that these differ from the adult male in having a strongly marked white supercilium.

But, again, he gives 3rd, 4th and 5th primaries the longest and nearly equal, and 2nd primary intermediate in length between 5th and 6th, whereas in our birds the 3rd is longest, 4th a little and 5th very much shorter, and the 2nd either longer than, or in one case only just equal to, the 5th.

There are other differences, but knowing how carefully Mr. Seebohm works, these two facts alone would suffice to show that the Burmo-Assamic form must be distinct; but unfortunately I find that a Formosan specimen has the same wing formula as ours, so this point goes for nothing. But the Formosan bird has a broader, coarser bill than ours, and its upper surface is a redder, more russet and less olive brown than any of our specimens.

I have fully described an adult female of this species, S. F., VI, 254; it will be seen that this description does not tally with Mr. Seebohm's remarks, since the entire breast, sides and flanks and abdomen (except the middle lower abdomen) are a delicate French grey (not slate grey), only some of the feathers on one side of the breast are washed with the colour of the upper surface. A male which I should have thought to be quite adult, but that one or two of the secondary greater coverts show minute buffy tips, is as like the old female as possible, except that it wants the patchy wash of the colour of the back on the one side of the breast, the whole of which is a pale French grey like the sides and flanks.

Two younger females have the breasts, sides and flanks brown, but this is a light somewhat olivaceous brown, very different from that of the Formosan bird, and all our birds have the middle of the abdomen, vent and lower tail-coverts pure white.

Lastly, none of our birds has a particle of white on the tail, which the Formosan bird has, and which is described as a character of *pallidus* by Seebohm.

I therefore incline to believe the Burmo-Assamic form distinct, and shall name it provisionally *Turdus subpallidus, nobis.*

I have this form from Shillong, and Godwin-Austen seems to have got it at Cherapoonjee, to have noticed it frequently in the Naga hills, and have obtained it on Japvo Peak and Herneo Peak. We obtained at Mooleyit in Central Tenasserim and Ramsay got it at 5,000 feet in Karenee, and this is all I know of its distribution in Assam, Cachar, Sylhet and British Burmah.

369*quat.*—Turdulus sibiricus, *Pall.*

On some of the hills near Tankool Hoondoong these birds were not uncommon, but they were excessively wary. They were always in flocks in which the black males, though greatly in a minority, were very conspicuous. Twice or thrice I saw them on trees, but more often on the ground. I never succeeded in shooting one, but one of my men got a single specimen, a female. The following are the details :—

Length, 9·25; expanse, 14·0; tail, 3·25; wing, 4·7; tarsus, 1·15; bill from gape, 1·19; weight, 2ozs.

Legs, feet and claws dull orange; bill blackish brown, dingy orange at gape and base of lower mandible; irides brown.

I have no knowledge of the occurrence of this species anywhere in Assam, Sylhet or Cachar, but in British Burmah we obtained it both at Mooleyit and Nwalebo, in Central Tenasserim, and Ramsay procured it in Karenee.

370.—Oreocincla molissima, *Bly.*

I only saw this species on one occasion, and that was on the Limatol range, and then though I shot it I did not secure it, but the bird is very common here* in winter, and I know it well. It was not 15 yards distant from me, pottering about on the ground and I was looking down on it. It did not notice me, and I hesitated in shooting because in one barrel I had a full charge of No. 4, which at that distance would have knocked it to bits, and in the other only ¼ dram of powder and ⅛oz. of dust shot, and I was not sure that this would kill it. However I fired this and knocked the bird over, but it instantly fluttered over the edge, and though I rushed after it, it got away. Still the bird may be safely included in the list, as I am certain of it. In the Eastern hills I twice or

* *Vir.*, at Simla.

thrice saw Thrushes, disappearing in the brushwood gloom, which I believed to be this species, but in no case was I near enough, or had a sufficiently good look to be certain, and so for the present I can only put this down as occurring in the Western hills.

I do not think I have ever published accurate measurements, &c., of this species, and as I have shot and measured many here I may as well give these now:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	11·0	17·5	4·4	5·72	1·46	1·25	3·5 ozs.
♂ ...	10 75	16·75	4·25	5·62	1·5	1·25	4·0 ,,
♂ ...	10·75	17·0	3 8	5·75	1·4	1·2	3·75 ,,
♂ ...	10 8	17·7	4·4	6·1	1·5	1 21	3·7 ,,
♀ ...	10·4	16·0	3·5	5·35	1·38	1·1	3·2 ,,

The legs and feet are pale fleshy to brownish or yellowish fleshy, generally a little darker on toes; the claws brown to dark horny; the bill varies from brown to brownish black, fleshy yellow, orange fleshy or fleshy brown at gape and base of lower mandible, and sometimes the edges of the upper mandible as far as the nostrils; the irides clear wood brown.

Godwin-Austen obtained this species in the Khasi hills, and Ramsay got it at Tonghoo in the extreme north of Tenasserim (as now officially constituted) and in Karenee, but beyond this I have no knowledge of its occurrence in Assam, Sylhet, Cachar or British Burmah.

371.—Oreocincla dauma, *Lath.*

Decidedly common in both the Eastern and Western hills, low down as in the Eerung valley and high up as at Aimole.

In this species some of the specimens have the general colour of the upper parts greyish brown, others ochraceous brown.

Yet it is on a like difference that Mr. Seebohm admits *O. haucii*, Swinh., as distinct from *O. varia*, Pall. It is true, he also says, that it is slightly larger, but this will not hold good since a fine Cheefoo specimen (*vide* VI, 257), which is ochraceous brown above and should therefore be *varia*, has the wing 6·6.

Our present species has been recorded by Godwin-Austen from the Garo hills, but this is the only record I have of its occurrence in Assam, Sylhet and Cachar, though, common as it is in Manipur, it is *sure* to occur in N. E. Cachar, the Khasi and Naga hills and the Dibrugarh district.

In both Northern and Southern Pegu and Northern and Central Tenasserim it occurs, but only, I think, as a straggler. From Arakan I have not seen it.

I did not meet with a single *Paradoxornis* in Manipur, though doubtless some occur. No less than four species are recorded from Assam, &c. *First*, there is 373.—*Paradoxornis flavirostris*, Gould., which I have from N.-E. Cachar, and several other localities in Sylhet and Cachar, and likewise in the Dibrugarh district, and which Godwin-Austen also notes from Bholagunj in Northern Sylhet, and from the high grass in the low country skirting the Dafla hills. I am not aware that this species has as yet been observed anywhere in British Burmah.

[During the rains when the rivers are high I have often, when travelling by boat, seen a Yellow-bellied Finch Thrush amongst the high reeds fringing the banks, which I identified as *Paradoxornis flavirostris*. This was in the Dibrugarh district, and at the lower courses of the Dehing and Desang rivers, a few miles above their junction with the Brahmaputra river.—J. R. C.]

Second, we have 473*bis*.—*Paradoxornis guttaticollis*, A. Dav. (1871)=*austeni*, Gould. (1874), which I have from Shillong and the Khasi hills only, but which Godwin-Austen also procured at Kuchai in the Naga hills. Beyond this there is no record of its occurrence as yet in Assam, Cachar, Sylhet or British Burmah.

Third, 374.—*Paradoxornis gularis*, Horsf., which Godwin-Austen obtained at Asalu, and Ramsay in Karenee, but of the occurrence of which in Assam, Cachar, Sylhet and British Burmah there is as yet no other record.*

Fourth, there is 375.—*Paradoxornis ruficeps*, Bly., which I have from the Dibrugarh district, from Shillong, Mouflong, &c., and which Godwin-Austen shot on the Hemeo Peak in N. Cachar.

This species has been received from the Arakan Hill Tracts; we procured it in the north of Tenasserim proper (Pahpoon), and Ramsay got it in Karenee at 2,500 feet, and the above

*In S. F., VI, 257, I said of this species that it was "likely to occur in the cold season, *as in Cachar or Sylhet*, in grass jungles, &c." I cannot now find that I had any warrant for the words that I have italicised. Certainly I can find no specimens from either of these districts in the museum. I must have been thinking I suppose of *P. flavirostris*.

is all I yet know of its occurrence in Assam, Sylhet, Cachar and British Burmah.

Lastly, we have 377.—*Chleuasicus ruficeps*, Bly., which Godwin-Austen procured at Baladhan, Cachar, and again near Sadiya, but of the occurrence of which elsewhere in Assam, Sylhet, Cachar or British Burmah we have as yet no certain knowledge.

380*bis*.—Suthora manipurensis, *G. Aust.*

In the Eastern hills I twice saw tiny flocks of *Suthoras*, but failed to secure specimens. The type, however, was shot by Mr. Robert of the Survey near Kara Khul of the Manipur hills, and the species must therefore be included in our list.

The only other records of its occurrence anywhere are from the Eastern Naga hills, and from the Tomputu Peak of the Dafla hills, but it is probable that the *Suthoras* seen by Davison near the summit of Mooleyit, Central Tenasserim, belonged to this species.

Godwin-Austen obtained 382.—*Grammatoptila striata*, Vig., both in the East Naga hills and below Tomputu Peak in the Dafla hills, but I never saw it in Manipur, nor do I know anything further of its distribution in Assam, Sylhet or Cachar, nor do I believe that it extends to British Burmah.

383*bis*.—Heterorhynchus humii, *Mand.* = *H. roberti*, G. Aust. and Wald.

I have never even seen an Assamese specimen of this species, and of course did not meet with it in Manipur, but Godwin-Austen records it from the Manipur hills, and it is therefore entitled to a place in our list.

The only other record of the occurrence of this species *any* where within our present limits is on the Hemeo Peak of the N. Cachar hills.

Another species *likely* to occur in Manipur, but which I never met with there, is 384.—*Gampsorhynchus rufulus*, Bly., which I have from Sadiya and Tippook in the Dibrugarh district, and Godwin-Austen recorded from the Garo and Dafla hills. This species is recorded by Blyth from Arakan, and it may occur there, but in Tenasserim, and I believe Karenee, it is replaced by the perfectly distinct (*vide* VIII, 168) *G. torquatus*, *nobis*.

[Common in the forests of Dibrugarh, where I have seen them going about in parties of ten and fifteen affecting secondary jungle by preference.—J. R. C.]

385.—Pyctorhis sinensis, *Gm.*

I first met with this in the Kopum Thull, which, though enclosed within, is not by physical characters a part of the Western hills.

Throughout the northern and central portions of the basin it is excessively common, especially about the hedge-rows of the capital, but to the south it is very scarce, and from Moirang southwards I did not notice it once till I arrived at Kokshin Koolel. In the Eastern hills, at all high up, it is as rarely seen as in the Western, but yet I did get one specimen near the highest point above Aimole.

The people have only one name for this and *P. longirostris*, looking on the former as only a small race of the latter. Both continually occur together, and in the grass when dimly seen are not to be distinguished, and many a time I shot the present species believing it to be the larger one, but as a rule *sinensis* keeps more to gardens and *longirostris* more to grass along the edges of water, be this of streams, ditches or tanks.

Though varying a good deal in colour and length of tail in every locality according to season, it is wonderful how true this bird keeps over immense areas. A specimen that I took out, killed about the same date at Jacobabad, is feather for feather identical with the Aimole bird, though the two places are some 1,700 miles apart as the crow flies, and the climates are about as different as they can well be.

I did not meet with this species in Sylhet or Cachar; perhaps these, like the southern portion of the Manipur basin, are in the parts I traversed too wet for it, nor have I, strange to say, any record of its occurrence in any part of these or of Assam, save that Godwin-Austen includes it in his Dafla hill list. It must needs occur, but this shows how imperfect our record still is.

It is common in Akyab according to Blyth, and I have seen several specimens from Northern Arakan. It is common too throughout the plains of Pegu, and occurs but sparsely in the northern half of Tenasserim, but I do not know that it has been recorded from the southern parts of this province. Ramsay, I may add, got it in Karenee.

386.—Pyctoris longirostris, *Hodgs.*

This species is excessively abundant in the Manipur basin, wherever there is long grass, and especially so where that long grass adjoins water. It does not ascend the hills anywhere to any considerable elevation. About the ditches, with their high grass hedgerows, of the capital, it is common, but perhaps it is most numerous about the Logtak lake. Except, however, in the early mornings they cling closely to their grass, show themselves but little, and are not easy to get. They thread their way through the densest grass with astonishing rapidity, and their vitality is great. If they have a spark of life left in them when shot, they are almost sure to escape, and the proverbial needle in a haystack could not be more impossible to retrieve. I preserved some fifty specimens, but I fear that in getting these I must have shot at least an equal number which I failed to recover.

Sometimes they keep in good-sized parties of six to ten birds, but again you may meet pairs or single birds far away from any of their species.

There are no accurate flesh measurements, &c., of these species on record, so I measured a good many with the following results:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·95	9·05	3·2	2·9	1·16	0·9	1·14 oz.
„ ...	10·4	10·4	4·6	2·95	1·1	0·88	1·24 „
„ ...	9·4	9·3	4·5	3·0	1·25	1·04	1·33 „
„ ...	9·6	9·6	4·9	3·16	1·3	0·95	1·21 „
„ ...	9·7	9·5	4·7	3·0	1·17	0·97	1·31 „
♀ ...	9·0	9·3	4·2	2·8	1·15	0·95	1·36 „
„ ...	9·0	9·0	4·3	2·91	1·14	0·9	1·21 „
„ ...	9·25	9·3	4·2	2·94	1·19	0·97	1·19 „

The legs and feet are brown, sometimes rather paler and greyer, with a faint fleshy or purplish livid tinge, generally darker or duskier on feet, at times whitish on the back of the tarsi; the bill is black, but commonly the lower ridges of the lower mandible are whitish; the irides white or bluish white.

I notice that, taken as a body, these birds run rather larger and darker than those from the Buxa and Bhutan Doars. In these latter too there is generally a good deal of white on the chin and upper throat, and along the central line of the lower surface of the body, whereas this is constantly entirely wanting in the Manipur birds. The difference, however, is not of specific value, for here and there Manipur birds are found that precisely match the birds from the Doars.

We have this species from N.-E. Cachar, Gauhatti and near Sadiya, and Godwin-Austen records it from Helem

in the Darrang district. This is all I know of its distribution in Assam, Sylhet or Cachar, and it does not, so far as has yet been ascertained, extend to any part of British Burmah.

Besides this Godwin-Austen records 386*bis*.—*Pyctoris altirostris*, Jerd., from the Bishnath plain and Sibsagar, but we have as yet no other record of its occurrence in Assam, Sylhet and Cachar. I never saw it in Manipur, and as to British Burmah, all we know is that Jerdon found it on churs of the Irrawadi (presumably near Thayetmyo), and that Mr. Oates rediscovered it near Pegu Town and subsequently found it common throughout Eastern Pegu. The above is penned under the assumption that *P. griseigularis*, nobis = *altirostris*—a point on which I personally am still doubtful (*vide* S. F., V, 251).

387.—Trichastoma abbotti, *Bly.*

This was not uncommon in the Jhiri level, and I again saw it in the valley of the Barak inside the Western hills, but beyond this I did not again meet with it in Manipur.

I have this from N.-E. Cachar. Shillong, and several places in the Dibrugarh district, and Godwin-Austen records it from the base of the South Garo hills, and beyond this I know nothing certainly of its distribution in Assam, Sylhet and Cachar.

[Fairly common in Dibrugarh in suitable localities, which are generally not far from water.—J. R. C.]

Throughout British Burmah this species is widely but sparsely distributed in all suitable localities, but there are large tracts in Upper Pegu and in the north of Tenasserim proper where it is apparently either very scarce or entirely wanting.

388.—Alcippe nipalensis, *Hodgs.*

This species was very common between Jhiri ghat and Noongzai-ban, in small flocks, haunting the shrubs and lower trees and keeping up an incessant chattering chirping note.

It was very common too at Koombiron, but keeping very much out of sight in the thick cover.

Thereafter I rarely saw it until we rose the Limatol range, and there it was again very common. In the basin I never saw it, but everywhere in the Eastern hills it was again abundant.

The snow-white eyelid ring of this species is very conspicuous in life, and many a poor little chap's life was

saved by this, which enabled me to identify him as a bird I did not want, when peering into the twilight under the bases of the dense undergrowth in search of the many skulkers that affect such hiding places.

The following are measurements, &c., of a few I shot:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·1	7·3	2·35	2·3	0·7	0·57	0·46 oz.
♂ ...	5·1	7·1	2·15	2·3	0·8	0·55	0·45 ,,
♀ ...	5·42	7·2	2·2	2·35	0·79	0·59	0·5 ,,
♀ ...	5·5	7·3	2·0	2·3	0·82	0·58	0·51 ,,

Legs and feet (1) pale silvery brownish fleshy; (2) pale silvery fleshy; (3) pale silvery drab; (4) pale greyish brown. Bill (1) pale bluish horny, basal portions of upper mandible dusky; (2) lower mandible, gape, tip and edges of upper mandible bluish, or horny white; rest of upper mandible dusky; (3) pale fleshy, blackish at base on nares and culmen; (4) pale horny bluish, dusky on nares and base of upper mandible. Irides light or lightish brown in all.

This species we have from Shillong and various places in the Khasi hills, and from Sadiya and several other places in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list, but beyond this I have no knowledge of its distribution in Assam, Sylhet, or Cachar.

[Common in suitable localities in the Dibrugarh district.—J. R. C.]

This species occurs in Arakan, Northern Pegu (where, however, it must be rare, as I have only seen one specimen from the Pegu Yoma), and Northern and Central Tenasserim.

388*bis*.—Alcippe phayrei, *Bly*. (= *A. magnirostris*, Wald., and *A. fusca*, G.-Aust.)

I procured single specimens of this species near Koombiron, near Kalanaga and in the Eerung valley, but met with it nowhere else.

They are not separable from Burmese specimens, of which we have an enormous series, but they run *slightly* smaller, and seem to be more decidedly buffy fulvous, not indeed than one or two of the Burmese birds, but than the great bulk of these.

The following are details of the three Manipur specimens:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·5	8·5	2·55	2·63	0·83	0·67	0·64 oz.
♂ ...	6·45	8·6	2·6	2·8	0·85	0·72	0·65 ,,
♀ ...	6·2	8·0	2·5	2·55	0·77	0·65	0·63 ,,

Legs and feet brownish fleshy; bill brown, paler and yellowish at base of lower mandible and yellow at gape; irides light to reddish brown.

For measurements of Tenasserim specimens which scarcely differ, *vide* S. F., VI, 261.

I have this species from near Kohima in the Naga hills, and there can, I think, now be no question that *A. fusca* of Godwin-Austen from these same hills is nothing but this bird.

Blyth first described this species from Arakan, we have it from Northern Pegu,* and have found it moderately common in suitable localities throughout Tenasserim.

390*quint.*—Turdinus brevicaudatus, *Bly.* (= *T. striatus*, Wald., A. M. N. H., 4th s., VII, 241; and *T. williamsoni*, G.-Aust., J. A. S. B., 1877, Part II, 44.)

I never met with this species in Manipur, but Godwin-Austen procured specimens thence, and it must therefore be included in our list.

As already remarked, S. F., VII, 262, I do not consider that the Assamese form of this bird is specifically separable from the Burmese one, though the latter *as a body* do run more richly coloured. I have this species from near Sadiya, and Godwin-Austen procured it along the southern bases of the Garo and Khasi hills, and this is all I yet know of its occurrence in Assam, Sylhet and Cachar. In British Burmah we have only as yet found it about Mooleyit in Central Tenasserim.

390*sept.*—Turdinus (?) garoensis, *G.-Aust.*

This bird is not a *Turdinus* at all, but until the entire group, *Drymocataphus*, *Trichastoma*, &c., &c., is carefully rearranged, I cannot pretend to locate it correctly.

I have already, S. F., VI, 514, explained how this species, which I at one time suspected to be identical with *T minus, nobis*, differs therefrom, and now that I have seen *garoensis* in the flesh, I see that the birds are quite distinct.

I only procured one specimen in Manipur, and that was at Noongba in the Western hills, and I measured and recorded the colours of the soft parts of this, within five minutes after I shot it, so these particulars, though differing slightly from those given by Godwin-Austen, are certainly correct.

Female (the males in the closely allied and representative *T. minus* run larger than the females, *vide* S. F., VI, 260).—

* Mr. Oates says it is common in the evergreen forests of the Pegu hills.

Length, 5·7 ; expanse, 8·0 ; tail, 2·1 ; wing, 2·4 ; tarsus, 1·04 ; bill from gape, 0·72 ; weight, 0·65oz.

Legs and feet a warm fleshy pink ; bill pale brown above, pale horny bluish below ; irides pale brownish red ; edges of eyelids reddish.

We have this—a single specimen only—from Mouflong in the Khasi hills, and Godwin-Austen procured the type in the Garo hills and obtained a second specimen in the Dekrang valley in the Dafla Hill Expedition.

391.—Stachyris nigriceps, *Hodgs.*

I shot one specimen of this in the Eerung valley, and again saw it quite close (but did not shoot it, as I was after something else) on the Limatol range, both localities in the Western hills, but I never met with it in either the basin or the Eastern hills.

The specimen I shot, a female, measured :—Length, 5·5 ; expanse, 7·2 ; tail, 2·0 ; wing, 2·3 ; tarsus, 0·8 ; bill from gape, 0·7 ; weight, 0·53oz. The legs and feet were pale dull yellow ; the upper mandible black, the lower pale bluish ; irides pale brownish orange, with a pinky tinge.

I have this from N.-E. Cachar, and from many localities in both the Khasi hills and the Dibrugarh district, in both of which it must be common. Godwin-Austen also says it was common near Harmutti near the bases of the Dafla hills.

Blyth records this from Arakan, and we have it from the Pegu hills. In Tenasserim we found it generally, but sparsely, distributed throughout the forests of the province.

Godwin-Austen gives 393.—*Stachyris ruficeps*, Blyth, from the Khasi hills. He may be correct, but as we have 393*bis*.—*Stachyris rufifrons, nobis*, not only from these, but also from the Bhotan Doars on the one side and the Dibrugarh district on the other, it seems probable that his bird was the same. I did not meet with either form in Manipur, though the latter probably occurs there, as it does also in the Pegu hills and throughout Tenasserim, where, however, it is very sparsely distributed.

[In Dibrugarh 393.—*Stachyris ruficeps*, Bly., is pretty common in tree jungle, feeding about the undergrowth ; but I only once came across 393*bis*.—*Stachyris rufifrons*, of which there was a party of some ten individuals that were feeding on insects off the flowers of a dense mass of creepers in heavy forest. I got a male bird.—J. R. C.]

394.—Stachyris chrysea, *Hodgs.*

This was not very rare on the Limatol range of the Western hills overlooking the Manipur basin, but I saw it nowhere else in the Western hills. In the Eastern hills, especially near Aimole and Matchi, it was common, and I shot several specimens.

S. chrysea we have from Mouflong in the Khasi hills, from Sadiya and from Dollah, also in the Dibrugarh district, and Godwin-Austen gives it from the Shengorh Peak of the Dafla hills. Beyond this I have no knowledge of its distribution in Assam, Sylhet or Cachar, and to British Burmah it does not, I believe, extend, though in the Northern and Central Tenasserim hills and in Karenee it is represented by *S. assimilis*, Wald.

395.—Mixornis rubricapillus, *Tick.*

I only saw this in the Western hills and only procured two specimens—one in the valley of the Limatak, the other in that of the Eerung. The particulars of one are as follow :—

Male.—Length, 5·4; expanse, 7·1; tail, 2·05; wing, 2·2; tarsus, 0·65; bill from gape, 0·72; weight, 0·4oz.

Legs and feet dull wax yellow, brownish on tarsi; bill pale leaden, dusky on culmen; irides yellowish white.

Both these specimens have the gular stripes more strongly marked than in any specimens I have seen from any part of India or Assam, thus making in this respect a close approach to *M. gularis*, Horsf., but the colour of the upper surface is that of *rubricapillus*, not the redder tint of *gularis*.

This is by no means entirely a ground bird; on both occasions that I shot it, it was in small parties hopping about long trains of creepers 20 or 30 feet from the ground.

We have this species from N.-E. Cachar, Shillong and the Dibrugarh district, and Godwin-Austen records it from the Jatinga valley near Parie ghât, and from the Dafla hills. I have no further knowledge as to its occurrence in Assam, Sylhet or Cachar.

[I have also shot this species in similar situations to those mentioned above by Mr. Hume. Common in Dibrugarh, specimens from whence had the irides in all instances of a reddish colour.—J. R. C.]

In the Arakan hills this occurs everywhere rather sparingly; in most parts of Pegu and in Tenasserim, as far south as 30° N. L., it is very common (further south it is replaced by the Malayan form), and Ramsay procured it in Karenee.

396.—Timalia bengalensis, *G.-Aust.*

It seems still doubtful whether this is really distinct from *T. pileata*, Horsf.

I never met with this anywhere in either the Western or Eastern hills, but throughout the basin wherever I went, even in the enclosures of the houses and hedges of the capital, it was abundant, sometimes in pairs, sometimes in small parties, but for all that seldom showing itself unless disturbed, as a rule threading its way through the heart of the grass and scrub forming the fence. But as soon as you begin to beat this for anything else you are sure to catch glimpses of this darting through the thinner places. Wherever there is high reed grass near water there this bird is sure to be, but clinging so persistently to the centres of the huge tufts 12 or 14 feet high and 6 to 8 feet in diameter, that you may be a long time before you even catch a glimpse of one and much longer before you shoot and *retrieve* one.

These birds vary very much in size. I ought to have measured a lot, but somehow never found the time. The two I did measure give however some idea of this variation, though both were apparently adult males.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 7·0	7·0	3·2	2·3	0·95	0·7	0·63 oz.
♂	... 7·75	8·1	3·7	2·58	0·95	0·81	0·8 ,,

Legs, feet and claws of the first a rather dark brown, of the second the tarsi were brown, feet and claws paler and greyer; soles yellowish; bill jet black; irides in one reddish brown, in the second claret colour.

The red cap varies from a clear light, almost brick red, to almost maroon.

This species I have from all parts of the valley of Assam and many places in Sylhet and Cachar. I have never received it from the hills, and do not think it occurs at any considerable elevation, but Godwin-Austen seems to have got it in the Khasi hills (perhaps in one of the low valleys running into these), and he includes it in his Dafla hill list, which, however, includes many species from the country below the bases of these.

[Pretty common in Dibrugarh in suitable localities. Any stretch of swamp reedy ground, even if enclosed by forest, generally harboured a pair or two of these birds. On the grassy churs of the Brahmaputra river they were even noticed.—J. R. C.]

In Arakan, Pegu, and Northern and Central Tenasserim this species occurs everywhere in the plains country, but except, perhaps, in Pegu it seems everywhere rather sparingly distributed.

399*bis*.—Pellorneum mandellii, *Blanf*—(=*P. nipalensis*, Hodgs.)

I found this species pretty common in the Western, rather rare in the Eastern hills. I did not meet with it anywhere in the basin. The following are exact particulars of two specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	... 6·55	9·6	2·6	2·65	1·02	0·8	0·87 oz.
♀	... 6·6	8·4	2·65	2·6	1·05	0·8	0·84 ,,

Legs and feet pale delicate fleshy or fleshy creamy white; upper mandible brown, lower mandible greenish horny or horny white, yellow at base; irides dull red, dull hazel.

Having now a large series of Assam and Manipur birds, I have again investigated Godwin-Austen's supposed species *P. pectoralis*. After the most careful comparison with a large series of Himalayan birds, and guided by G.-A.'s own indications of differences, I am compelled to say that I cannot discover one single constant point of difference between the two sets of birds, and I can only conclude that when he described this supposed species he had very few birds before him from the one or the other locality.

We have this species from N.-E. Cachar, from Sadiya and other places in the Dibrugarh district and from the Khasi hills, and Godwin-Austen also records it from the Garo and North Cachar hills. To Burmah this species does not extend.

[I append measurements of the three specimens I got :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	... 7·10	8·0	2·20	2·70	1·05	0·86	1·0 oz.
♂	... 7·15	8·50	3·0	2·80	1·05	0·93	1·10 ,,
♀	... 7·15	8·0	2·60	2·65	1·07	0·85	1·10 ,,

Legs and feet fleshy yellow, claws whitish; bill above blackish, below yellow, irides reddish brown. The above were shot on three separate occasions in dense forest in the Dibrugarh district. They were feeding among the fallen leaves on the ground.—J. R. C.]

Besides which there are in Assam three other *Pellorneums*, not one of which I met within Manipur, *viz.*, first, 399*ter*.—*Pellorneum tickelli*, Bly., which I only have from Sadiya. This was the species that at one time, *Ibis* 1878, 115,

Godwin-Austen said was the same as his *Turdinus garoensis*. How he could possibly think this I cannot understand. There must have been some strange mistake. I have good specimens of both lying before me, and merely by its deep colour (the upper surface of which is concolorous with his *Turdinus nagaensis*) a child could separate *tickelli* at a distance of ten paces.

As I write this an idea comes into my head: perhaps Godwin-Austen when he *said* my *tickelli* was the same as his *Turdinus garoensis*, *meant* that it was the same as his *Turdinus nagaensis*. This slip of the pen would explain the difficulty, for *tickelli* and *nagaensis* (which latter is identical with my *Pellorneum ignotum*, S. F., V, 334, a title that has precedence) are very close, but yet quite distinct.

The tarsus in all *tickelli* is always 1·1 or over, in *ignotum* it does not exceed 0·95. The whole feet, but especially the hind claw, are very much larger in *tickelli*. The feathers on the forehead of *tickelli* are distinctly pale shafted; there is no trace of this in *ignotum*. The bill is markedly longer in *tickelli*. This latter has the chin, centre of throat and of upper breast rusty or fulvous buff; these parts in *ignotum* are white. The wings are quite different, that of *ignotum* in which the 6th, 7th and 8th are subequal and longest is much more rounded, and that of *tickelli* in which the 5th is the longest, and the 6th, 7th and 8th progressively shorter, much more pointed. Despite the close resemblance of the upper surface, the birds are perfectly distinct, and I doubt not when this group comes to be overhauled will even be placed in different subgroups, and I am quite sure that if he ever really carefully re-examines the two forms, Major Godwin-Austen will concur in their entire distinctness.

In the meantime I hope he will correct that slip of the pen in the *Ibis* (*loc cit. sup*). All these years have I, with all the birds before me, been gnashing my teeth over this utter impossibility—Austen with an artist's eye saying my *tickelli* was his *garoensis!* And if till this day I could never make head or tail of it, what a stumbling block, to all who have not seen the birds, does this passage remain! I see perfectly, now, he did not mean *garoensis*, a totally different coloured bird, but his *nagaensis*, which *is* precisely similarly coloured above to *tickelli*, though differing as I have above pointed out.

To return to *tickelli*: In Assam I only have it from Sadiya, and I *know* of no other place in which it has occurred, except

Tenasserim, and thence I have seen only one specimen collected near Amherst by Dr. Armstrong.

Second, 390*ter*A.—*Pellorneum ignotum*, nobis, V, 334, August 1877.=*Turdinus nagaensis*, Godwin-Austen., A. M. N. H., December 1877, which I have from Dollah in the Dibrugarh district, and Godwin-Austen from the Eastern Naga hills, and which does not, so far as I know, extend to Burmah.

Third, 399*quat.*—*Pellorneum palustre*, Jerd., of which the type given me by Jerdon came from the Khasi hills, which I have from Sadiya, and Godwin-Austen from Bholaganj and Chatak in North Sylhet, and of which I can find no other record anywhere.

400.—Pomatorhinus ruficollis, *Hodgs.*

It was only in the Eastern hills that I ever saw this, and only in the neighbourhood of Matchi that it was at all common.

The following are particulars of a female:—

Length, 7·8; expanse, 8·8; tail, 3·2; wing, 3·0; tarsus, 1·18; bill from gape, 0·9; weight, 0·98 oz.

Legs and feet pale greyish fleshy; bill pale horny yellow, dusky about nares; irides dull maroon.

I quite agree with Godwin-Austen that as a body the birds from Assam, and I may add Manipur, are somewhat different from those from the Himalayas. The Assamese, &c., birds are somewhat smaller, less robust and with markedly smaller legs, feet and claws; they are as to colour a very faded, much less rufous, edition of the generality of Sikhim birds, and they have much less black or dusky on the upper mandible. But these differences are not to my mind specific, because I find that in a large series of both Himalayan and Assamese specimens, I can pick out some that do not appreciably differ. *All* the Shillong birds are not at once distinguishable from all the Sikhim ones; it is only the great majority of each that differ recognizably, and this is not sufficient to warrant specific separation.

About Shillong this is very common, and Godwin-Austen says that it is equally so in the Naga hills, and this is all we know of its distribution as yet in Assam, Sylhet and Cachar. So far as is yet known it does not extend to British Burmah.

Godwin-Austen appears to have procur ed401.—*Pomatorhinus ferruginosus*, Bly., in the Naga hills, *vide* his 6th list, and if so

this possibly extends to Manipur, but I never met with it there. At the same time I may say once for all that there were at least three *Pomatorhini*, with whose notes I became familiar in the Eastern Manipur hills, of which I never could succeed in shooting specimens. These birds mostly keep in deep forest undergrowth. You may hear them calling within thirty yards, you may wait, watch and listen, or strive to creep full length on the ground noiselessly towards them, but nineteen times out of twenty, do what you will, they see or hear you before you can catch a glimpse of them, and a moment after you hear them calling again, far away, up or down the hillside. *P. ferruginosus* was also found very abundant under Tomputu peak of the Dafla hills (which are really part of the Himalayas) at 5,000 feet by Godwin-Austen, and with reference to what he says about this species not being a noisy bird, but uttering only a faint chirp, I may note that all the many *Pomatorhini* I know have two notes, one of the chirp order, more or less low, heard all the year round, and the other a more or less rollicking call, almost exclusively heard in the breeding season, or say from March to July, though occasionally also heard at other seasons. *Ferruginosus* does not, that we know of, extend to British Burmah,* being there replaced by *phayrei* and *albogularis*.

401*bis*.—Pomatorhinus phayrei, *Bly*.

There is a subgroup of three species of this genus very closely allied, all with medium length, compressed, *deep*, moderately curved bills (as distinguished from the long, compressed, *slender*, well-curved bills of the *ochraceiceps* subgroup), which represent each other in neighbouring areas.

Crown and occiput—Blackish— (1) *P. ferruginosus*, *Bly.*, Himalayas and Naga hills.

" " Olivaceous brown. (2) Upper surface with a strong rufescent tinge; foreneck, breast and upper abdomen rather pale buff. *P. albogularis*, Bly. Central Tenasserim and Karen hills.

* Ramsay wrongly gives Blyth as an authority for the Arakan habitat of this species, *Ibis*, 1878, 135. I explained how Blyth *appeared* at one time to say this, *before* he had discriminated *phayrei*, S. F., VI., 280.

Crown and occiput—Olivaceous brown (3) Upper surface with little or no rufescent tinge; foreneck, breast and upper abdomen a rich warm buff. *P. phayrei*, Arakan hills, Tipperah, Khasi, Naga and Manipur hills.*

This latter species I found not uncommon in the Manipur hills, but exceedingly difficult to see or shoot, although, after I had succeeded in shooting two in the act of calling, I discovered that there were constantly numbers of them about, and this being the breeding season they were noisy enough, though specially so in the early mornings. The following are accurate particulars of two specimens; unfortunately I measured no males :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	9·3	10·6	4·1	3·37	1·35	1·03	1·45 oz.
„ ...	9·3	10·5	4·1	3·53	1·28	1·1	1·66 „

Legs and feet pale olive to yellowish green; back ridge of tarsi and soles yellow; claws pale horny yellow; bill coral red; irides in one yellowish white, in the other pale buff or brownish creamy white.

We have this from Shillong and the Naga hills, and Godwin-Austen records it from Cherrapoonjee, but we have as yet no further knowledge of its occurrence in Assam, Sylhet, or Cachar. It was originally described from Arakan, but does not that we know extend to any other part of British Burmah.

401*sext.*—Pomatorhinus austeni, *Hume.*

This species, already fully described (S. F., X, 152) was only observed in the higher forests of the Eastern Manipur hills, and as yet I have no knowledge of its occurrence anywhere in Assam, Sylhet, Cachar or British Burmah.

402.—Pomatorhinus schisticeps, *Hodgs.*

I only met with this species near Noongzai-ban and in the Eerung valley, both in the Western hills. It may occur in the Eastern hills also, but I never even heard it and I am familiar with its call.

---

* Blyth adds Sikhim and Tavoy, but the bird occurs in neither. *Albogularis* is found near Tavoy, *vide* S. F., VI, 514.

My specimens are typical *schisticeps*. I have this species from N. E. Cachar, the Khasi hills, Sadiya and many places in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list. It extends to Arakan and the Western portions, at any rate, of Upper Pegu, where also *leucogaster* occurs.

[I shot a pair on the 3rd April, 1879, taking the nest, which had four callow young:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	9·40	11·50	4·0	3·80	1·10	1·35	1·60 oz.
♀ ...	9·25	11·20	3·90	3·50	1·12	1·30	1·25 „

Bill pale yellow, with the base of the upper mandible dusky; legs plumbeous; soles greenish yellow; claws horny brown; irides reddish in male, pale yellow in female. They are common in the Dibrugarh district, but, as Mr. Hume has explained, very difficult to bag. The whistling call of the breeding season is heard all round when going through the denser parts of the forests. The nest I got was situated at the roots of a clump of bushes, overhanging a small river. A bridge spanning this river was within ten yards, the intervening space being open; and for such a shy bird to have chosen such an exposed situation to build in astonished me.—J. R. C.]

Godwin-Austen also gives 403.—*Pomatorhinus leucogaster*, Gould., from the West Khasi hills, but I have seen no specimen from these parts that is not far nearer *schisticeps* than *leucogaster*. I have discussed these two species and *nuchalis*, which cannot be kept separate from *leucogaster*, very fully, IX, 251, and need only here add that *schisticeps* seems to be the damp, *leucogaster* the somewhat drier climate, form.

404*quat*.—Pomatorhinus macclellandi, *Jerd*.

I first met with this species at the summit of the Limatol range overlooking the Manipur basin. Then in the basin in many places, especially towards the southern part, though I shot one pair in a hedge in the suburbs of the capital. Then again I found it common on the Eastern hills up to their summits.

I invariably found it in pairs, never in parties, but as my experience of it only covers February to June, it may later in the year collect in flocks. The male has a fairly loud, rather ringing, chuckling call, which is quite distinct from, though of the same class as that of, others of the group. The female, as in most of the genus I believe, has only a low, single-note, cry which she utters each time the male calls and almost

at the same instant. They affect thick-mingled grass and thorny bush, hedges, low scrub jungle, in which I have repeatedly seen a pair in company with a huge gabbling pack of *Garrulax galbanus*, and also long reed grass, especially where this is interspersed with bushes.

This bird has never been properly described. Jerdon's description (*Ibis*, 1872, 302) is very poor, and some of his dimensions absurd. He gives the tarsus 13·16, it is 1·25 to 1·4; bill from gape 6·8, it is 1·2 to 1·4; then the conspicuous spots on the lower parts are dusky ash to almost black, not one bit the colour, or in the least *like* the colour, of the upper parts. Godwin-Austen's description is better, but quite insufficient; there may be other allied species that his description would equally cover, and both he and Jerdon entirely ignore the most conspicuous feature in the bird, which fixes its place in the genus, *viz.*, the large, bare, dusky-leaden patch below, and extending more than 0·5 behind, the eye.

Godwin-Austen remarks that birds from the Naga hills have a longer bill, and the spottings on the breast are darker and occasionally form a demi-collar, but I do not think there is anything in this. I have a very large series of the bird from various localities, and though *everywhere* the specimens are excessively variable, I see no local peculiarities.

The following are exact particulars of this species:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	9·2	10·5	3·8	3·4	1·25	1·3	1·88 ozs.
,,	9·3	10·0	3·55	3·25	1·3	1·4	1·83 ,,
,,	9·3	10·3	3·4	3·3	1·4	1·32	1·83 ,,
♀	8·9	10·2	3·3	3·2	1·3	1·2	1·56 ,,
,,	9·3	10·3	3·6	3·3	1·28	1·39	1·7 ,,
,,	8·9	9·6	3·45	3·0	1·34	1·29	1·69 ,,

In most specimens the legs and feet are a pale drab brown, but in a good many a faint fleshy tinge is apparent, and in one or two they are a full drab; soles always yellowish. The bill is most commonly a pale horny grey, or greenish horny, or pale drab, dusky about the nares and more or less of the base of the upper or both mandibles. Rarely the whole upper mandible is dark or dusky brown. The irides are *very* pale yellow, or yellowish (rarely salmon) white. The orbital skin and bare eye-patch vary from leaden dusky to blackish dusky. More or less of the forehead, and feathers near the nares, a more or less pronounced rusty rufous. The lores and a more or less broad band under the eye varying from greyish to pure white. A short moustachial stripe varying much in length and breadth, from the base of lower mandible, blackish or dusky brown. Ear-coverts ferruginous, darker or paler,

duller or brighter in different specimens. Entire upper surface, wings and tail olive brown, in some pure, often with more or less of a rufescent fulvous tinge, specially on the sides of the neck behind the ear-coverts. Tail darker in some, and inner webs always deep brown, the olive portions of the feathers, generally (not always) distinctly and closely, though narrowly, barred with brown. Outer edges generally of earlier primaries, especially the terminal portions, sometimes of all the primaries, paler and greyer, or rather more fulvous as the case may be. Chin, throat, breast and abdomen white, sometimes very pure, often slightly sullied. These parts spotted more or less with spots which are commonly a dusky ashy olive, sometimes dingy brown, sometimes nearly dusky black. Normally there are only about three rows of these spots well apart, and these only on the base of the throat and upper breast. Occasionally there are only two or three spots altogether ; occasionally these three or *four* rows coalesce and form stripes, and then the whole of the rest of the breast and the abdomen are also spotted, sometimes quite thickly. Vent and lower tail-coverts bright ferruginous ; tibial plumes similar, but duller and shaded above with olive. Sides and flanks dull olive, or dusky ashy olive, or with a fulvous rusty tinge, or again sometimes brushed strongly on the sides of the breast with bright rusty. Inner margins of quills on lower surface of wing a kind of pale buffy fulvous, varying a good deal in tint.

Several nestlings that I procured in the middle of May (they must lay early in April) are browner and more rusty and less olivaceous than the adults, especially on the sides of the breast, body and flanks. The very youngest shows a rusty mottling over the entire breast and lower throat, where the spotting will be, while in others, a little older, this has partly cleared away, and on the cleared spaces a few of the ordinary dusky spots similar to those of adults, but paler, are observable.

But the most noticeable feature is the bill, which, in the youngest bird just able to fly, (it rose just like a quail, and I knocked it down instanter with a small charge, not knowing what on earth it was) is barely 0·5 from margin of feathers (against 1·0 to 1·2 in adults) quite thrush-like, and almost perfectly straight. In an older bird it is 0·65, but still almost straight, but in one in which it is 0·77 the curve has become apparent. This gradual development in the curve of the bill of these *Pomatorhini* is noteworthy.

We have many specimens of this species from Shillong and other places in the Khasi hills, and again from the Naga

hills. Godwin-Austen obtained it at Nenglo beyond Asalu under the Burrail range, and quotes Jerdon as an authority for its occurrence near Dibrugarh, whence we have never procured it, though I have seen a specimen from near Sadiya. This is all I know of its distribution in Assam, Cachar or Sylhet, and it does not, I believe, extend to any part of British Burmah.

405*ter*.—Orthorhinus inglisi, *Hume*.

A great deal of discussion has taken place as to whether this is a good species or not. Some hold that it is not distinct from *hypoleucus*, Bly., from Arakan. Others admit a distinction between the Arakan and Assamese forms, but hold that if the latter be specifically separated it must take the name of *albicollis*, Horsf. I have dealt with this question, IX, 253. My contention has been that whether *hypoleucus* and *albicollis* are or are not distinct—and I have not the materials for deciding this at present—both have large red patches down the sides of the neck, entirely wanting in *inglisi*. I do not wish to dogmatize; my materials, consisting of only three North Cachar and one Manipur specimen, are quite insufficient as a basis for any decided opinion, but all four are alike, and I think it best to retain them as distinct for the present, though Wardlaw Ramsay, who has examined more specimens, states, if I understand rightly, that the red patch is not a constant character, but occurs in some and not in others. It may be so, but till I can compare a sufficient series of both forms I must suspend my own opinion.

I procured only a single specimen of this in Manipur, and that in the Jhiri level, not ten miles from where my N.-E. Cachar specimens were obtained.

The following are the details of this specimen, *a female*:—Length, 11·2; expanse, 13·0; tail, 4·0; wing, 4·0; tarsus, 1·4; bill from gape, 1·4; weight, 2·47 ozs.

Legs and feet pale silvery leaden; bill pale greenish, greyish horny, more leaden towards base; irides brown.

There were only a pair, making a great noise calling, in the thickest undergrowth, and it was with great difficulty I succeeded in shooting one, which I at last descried scrambling rapidly through the bush at the height of about three feet from the ground.

I never once saw or heard the bird again within Manipur limits.

Now, if *inglisi* is a good species, then I only know for certain of its occurrence elsewhere in N.-E. Cachar, though I *suspect* it is the Western Assam form.

If however *inglisi* and *albicollis* prove identical, then we know of it from the Garo, Khasi and Naga hills, Sadiya in the Dibrugarh district, and the Dafla hills.

If *hypoleucus* is identical, then we must add Arakan to the list. In Central Tenasserim it is replaced by *O. tickelli*, nobis. I see that it is affected to assign this name to Blyth, who most certainly never published it. It may be assigned to Snooks for all I care, but as a matter of fact *I* gave the name and was the first to publish a description of the bird with a distinct specific name.

I don't believe this species occurs either in Nepal or Sikhim. Mandelli, the best local collector we have ever had in India, never got it in nearly ten years' collecting in Sikhim; and if it don't occur there it certainly does not occur further west in Nepal.

406.—Xiphoramphus superciliaris, *Bly.*

I never met with this species in Manipur, but Godwin-Austen records it from the Konchungbum peak of the Manipur hills, and it is therefore entitled to a place in our list.

I am not aware that it has ever been recorded from any part of Assam, Sylhet, Cachar or British Burmah.

407.—Garrulax leucolophus, *Hardw.*

This species occurs in both the Eastern and Western Manipur hills (not in the basin), but is much rarer there than in most parts of the lower Himalayas. I only actually shot it, near Koombiron in the Western, and half way up to Tankool Hoondoong in the Eastern hills, and I only heard or saw it about half a dozen times from first to last.

We have this species from the Khasi hills and several places in the Dibrugarh district, and Godwin-Austen gives it from the Dafla hills, but this is all I know as yet of its distribution in Assam, Sylhet or Cachar.

[Very common in all suitable localities in the Dibrugarh district, where the Assamese call it *Naga dhoopooleka*. Their loud and sudden burst of chorus, when heard close by, is startling, and causes many a pony to shy.—J. R. C.]

It extends to Arakan, but in Pegu and Tenasserim is replaced by the allied *G. belangeri*.

Then in Assam we have 408A.—*Garrulax subcærulatus*, nobis, from Shillong, which Godwin-Austen found common in the Naga hills, but which I failed to find in Manipur, and

of the occurrence of which anywhere else there is as yet no record.

Again there is the lovely 408 *quat.*—*Garrulax nuchalis*, G.-Aust., the most beautiful perhaps of the many discoveries we owe to that accomplished naturalist, which we have from Joonkotollee in the Dibrugarh district, and which was procured for him, first in the Lhota-Naga hills, and then again on the Kamlangpani. I did not procure this in Manipur, though I am almost certain I saw it in the Eastern hills north of Tankool Hoondoong, and of its occurrence elsewhere I have no record.

My specimens do not agree exactly with Godwin-Austen's description, and it may be useful to describe them, as possibly no other specimens but his and mine have yet been procured. *G. nuchalis.*—A broad frontal band, lores, a narrow band over and a trace of the same below the eye, chin, and a broad band down the front of the throat on to the upper breast, velvet black; forehead, crown and occiput a pure dark slate colour; the first two or three feathers of the forehead on each side pure white at their bases; cheeks, ear-coverts and sides of throat and foreneck, pure white, just shading below into the delicate French grey of the breast and upper abdomen, which on the former has the slightest possible, scarcely recognizable, vinous tinge; lower abdomen, wing-lining, vent, flanks, tibial plumes and lower tail-coverts olive brown; a narrow blackish line, continued from the black above the eye, over the greater part of the ear-coverts dividing these from the slaty cap; nape and entire back of neck and upper portion of interscapulary region the most intense ferruginous; rest of upper parts olive *brown* (not a trace of green about it) shaded faintly on the upper back with ferruginous; the inner webs of quills and tail deep to almost blackish brown, and the olive shade on the central tail-feathers and the outer webs of the other ones, only extending to within about half an inch of the tips, produces a sort of appearance of a dark tipping to the tail; no ferruginous tinge on the shoulder of the wing, which is merely a warm olive brown; the first three quills distinctly, the next four more or less obscurely, margined on their outer webs (*not* tipped) with hoary grey.

[I got only one specimen in the Dibrugarh district of 408*quat*, but the bird is by no means rare, as on several subsequent occasions I noticed parties of 10 and 12 when riding through forest-bordered roads.

Female.—Length, 10·30; tail, 4·40; wing, 4·20; tarsus, 1·55; bill from gape, 1·17; weight, 2·75 ozs.

Bill black; legs and feet ivory white; irides brick red.—J. R. C.]

Then we have 409*ter*.—*Garrulax gularis*, McClell., of which a good description has been quoted, III, 412, but I may give the exact measurements in the flesh of a fine male, *viz.*:—Length, 10·1; expanse, 12·12; tail, 3·75; wing, 3·65; tarsus, 1·55; bill from gape, 1·33. I have this species from Tengapani, from close to Sadiya and from Tippook, all in the eastern part of the Dibrugarh district. Godwin-Austen procured it near Lakhipur in Cachar, where I vainly hunted for it, and at Borpani in the Dekrang Dhun of the Dafla hills, and this is all we know of its occurrence anywhere. Of course I did not meet with it in Manipur.

409*quat*.—Garrulax galbanus, *G.-Aust.*

I never saw this species in the Western hills, nor in the basin, but I found it common in all the low hills that fringe the bases of the Eastern hills, and I also found a very few quite 4,000 feet up the Eastern hills below Aimole.

It was abundant in the low hills east of Soognoo, where I found them perched about in twos and threes on small scrub bushes. In similar hills east of Kokshin Koolel they swarmed, and I even shot several in the hedgerows of this place. I got them also at Phalel, Hierok and Moirang Prem, in fact all along the bases of the Eastern hills.

They have a rather feeble chirping call, which they very frequently utter, and by which we could always trace them. Sometimes we found them in large but very widely scattered flocks, more often in pairs or small parties not exceeding six. They often associate with *Garrulax ruficollis*. They feed a great deal on the ground, chiefly on insects, but not, as I found by dissection, disdaining small seeds. They prefer places where there is tall grass intermixed with trees and shrubs. They are very restless, always on the move, and when flushed from the ground fly up into trees, through the branches of which they hop and fly after the manner of *Malacocerci*.

As I had previously only a single specimen given me by Godwin-Austen I went in heavily for these birds, and at Kokshin Koolel for several days shot from 12 to 20 daily, which will give some idea of how they abounded there.

I measured a good number, and the following are exact details:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 9·1	11 5	3 75	3 57	1·38	1·15	1 89 ozs.
,,	... 9·7	12·05	4·15	3·81	1·36	1 03	1 96 ,,
,,	... 9 03	11·4	4 0	3·67	1·3	1·06	1·79 ,,
,,	... 9·3	11·7	4·0	3·7	1·28	0·98	1·87 ,,
,,	... 9·5	12 0	4·2	3·65*	1·36	1·06	1·95 ,,
♀	... 9 5	11·6	4·15	3·82	1·35	0 96	1·83 ,,
,,	... 9·5	11·4	4 2	3 69	1·3	1·04	1·85 ,,

The legs and feet are a pale silvery leaden; the bill black, whitish horny at the extreme tips; the irides brownish yellow, orange, or orange red; the bare skin below and behind the eye pale blue, and this patch extends as far back as the tips of the black ear-coverts. This bare patch is almost the most conspicuous feature in the live bird, but Austen does not mention it. For his description and remarks on the habits of this species which he procured under the Kopum range (Manipur) and about various streams that flow into the south-eastern portion of the basin, *vide* S. F., III, 394. I will redescribe it: —Chin, feathers at the base of lower mandible, lores, a very narrow frontal band, a narrow band above and a broad band below the eyes, and the ear-coverts, velvet black; forehead, crown, occiput and back and sides of neck, a greyish olive green, paler in some, duskier in others, often with a decidedly greyer tinge on the nape, and always with a more or less distinct grey shade on the foremost frontal feathers just above the black frontal band; entire mantle brown, sometimes with an olivaceous, sometimes with a faint rusty tinge, not unfrequently with a faint yellowish tinge on the lower rump and shorter upper tail-coverts; longest upper tail-coverts and basal two-thirds of central tail-feathers grey, sometimes a pure French grey, sometimes with a brownish, sometimes with a faint olivaceous tinge; rest of central tail-feathers deep brown, often obsoletely barred paler and narrowly tipped with brownish grey or brownish white or pale brown; next pair similar, but the deep brown portions longer, and more decidedly paler tipped, and with the grey on the inner webs less pronounced; the outer four pairs grey towards their bases (this grey varying in shade as above and being often more or less obsolete on the inner webs), then dark brown (except in the outermost feathers where this is paler), and then broadly tipped with pure white, for say a full inch on the outermost pair and half an inch on the feathers next, but one, to the centre ones; quills hair brown, the visible portions of the primaries shaded with a more or less pure hoary grey, and those of the secondaries and tertiaries with a more or less greyish olivaceous shade of the

colour of the mantle; throat, cheeks, breast and abdomen a beautiful maize yellow, a little more intense on the two first, more or less (scarcely at all in some) faintly shaded with greyish olivaceous on the third and almost always very pure on the last; sides of breast, body and flanks greyish olive, darker and greener, paler and greyer in different specimens; lower tail-coverts pure white; tibial plumes pale pure yellow to yellowish white, occasionally brushed here or there with the greyish olive of the flanks; edge of the wing at carpal joint and wing-lining pale yellow to yellowish white, often a little sullied. I am not aware that this species has as yet been observed anywhere in Assam, Sylhet, Cachar or British Burmah.

409*quint.*—Garrulax sannio, *Swinh.*

I only met with this species high up in the Eastern hills near Aimole, Kangooee and Matchi. Even here it was rare. I tried my best to get a large series, as the only specimens I had were Chinese, but I only succeeded in getting 13 from first to last. I preserved nearly 100 of *galbanus* and *ruficollis*, and could have got twice as many of the former and ten times as many of the latter, so this will give some idea of their relative abundance. Moreover *ruficollis* was the bird of the entire level, *galbanus* of the basis of the Eastern mountains and the low hills fringing these, while *sannio* I only found at 4,500 feet and upwards on these mountains themselves. G.-Austen records a specimen from near Kaibi in the Manipur basin, but I have never been there, and I do not know what its elevation is; but I much doubt the bird being found down in the basin, *i.e.*, at between 2,500 and 3,000 feet.

The Manipur birds are exactly similar to others I have from Foochoo from Swinhoe. The following are exact details of specimens I measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	9·7	11·6	4·1	3·72	1·33	1·04	1·98 ozs.
,, ...	9·4	12·0	4·3	3·82	1·46	1·0	2·1 ,,
,, ...	9·9	12·1	4·3	3·77	1·48	0·98	2·3 ,,
,, ...	10·1	12·5	4·5	3·92	1·48	0·96	2·35 ,,
,, ...	10·0	12·0	4·3	3·87	1·43	1·0	2·2 ,,
,, ...	9·4	11·9	4·3	3·6	1·5	1·02	2·2 ,,
♀ ...	9·7	11·8	4·1	3·65	1·37	0·97	2·13 ,,
,, ...	9·7	12·0	4·2	3·65	1·5	1·05	2·1 ,,

The legs and feet are brown, usually a pale dove brown, with or without a faint tinge of liver colour or purplish fleshy, occasionally a dull slightly reddish brown; claws

usually a shade darker ; bill deep brown to blackish ; gape, and often base of lower mandible, and bare lower lid, pale bluish grey, or bluish white, or dull fleshy grey, or pale leaden ; edges of lids and bare skin behind eye dusky to dusky leaden ; irides sometimes light brown, generally liver brown, rarely dull brownish maroon.

Forehead, crown and occiput a dull ruddy brown ; back and sides of neck and upper portions of ear-coverts, chin, throat, upper breast, a duller and generally paler shade of the same colour ; lower two-thirds of ear-coverts, cheeks, lores and a supercilium extending almost to the nape, white ; entire mantle and visible portions of quills rather pale dull olive brown ; inner webs of quills hair brown ; rump and upper tail-coverts generally a shade paler and yellower than the back ; tail a decidedly rufescent brown, the inner webs of the lateral tail-feathers towards their tips more or less wanting the rufous shade and appearing a darker purer brown ; breast brownish fulvous, a little brushed at times with olivaceous ; middle of abdomen and vent a purer fulvous ; sides of breast and body and flanks a pale earthy olivaceous brown, the longest flank feathers more or less tipped with the fulvous of the lower abdomen ; lower tail-coverts pale ferruginous, or ferruginous buff ; edge of the wing fulvous white ; wing-lining grey brown.

So far as I know this species does not occur in any part of Assam, Sylhet, Cachar or British Burmah.

410.—Garrulax ruficollis, *Jard. & Selb.*

Very common in the long grass of the Kopum Thull, and generally throughout the entire basin, where it may be met with at every turn threading its way through the lofty grass or along the bamboo and grass hedgerows, very like *Pyctoris longirostris*. Even in the enclosure hedges of the capital it swarms, but I never found it (except at the Kopum Thull, which physically is analogous to the main basin) anywhere in either Western or Eastern hills.

It seems to be almost purely insectivorous, though I did find a few small fruits and seeds in the stomachs of two or three of the many I examined.

It is quite as often in pairs as in small parties, and once or twice I came across huge flocks of 70 or 80.

These Manipur specimens as a body have the red of the sides and neck and lower tail-coverts, &c., a brighter, more orange ferruginous, than Himalayan specimens. Moreover down

towards the south-east a great number of the specimens have the whole lower abdomen this colour, and a broader or narrower band of this running up the middle of the upper abdomen, and a dash of this colour on the breast. But this difference is not specific, for some specimens are absolutely identical with Sikhim ones, but I have no doubt that a good deal further south or east a distinguishable species will turn up with the entire abdomen, and perhaps lower breast, of this orange ferruginous.

The following are exact particulars of three specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 9·7	12·0	4·5	3·8	1·3	1·0	1·8 ozs.
,,	..10·4	12·2	4·3	3·95	1·46	1·06	2·13 ,,
♀	...10·0	12·0	4·3	3·9	1·41	0·97	2·2 ,,

Legs and feet blackish brown to black; bill black; irides brownish maroon to ruby red and crimson.

This species is universally distributed throughout the higher portions of the level country in Assam, Sylhet and Cachar, but it does not, I believe, ascend the Garo, Khasi or Naga hills to any considerable elevation, nor do I *know* of its occurrence in the very low portions of Sylhet. It does not, I believe, extend to British Burmah.

[Very common in Dibrugarh, where it frequents forests, secondary jungle and even the tea gardens. Assamese, *Doo-pooleeka*.—J. R. C.]

412.—Garrulax pectoralis, *Gould*.

This species is common in the Barak valley between Kala-naga and Koombiron, and again in the valley of the Eerung, but neither in the basin nor in the Eastern hills did I ever see or hear it. I say hear it because these birds are very noisy and keep up an incessant, squeaky, fractious, querulous cry—a sort of grumbling, discontented "week, week, week," &c., through the nose.

In this species the legs and feet are pale silvery leaden; the bill dusky, pale horny bluish at the base of the lower mandible; the irides reddish brown; the pectoral gorgets in my few Manipur specimens are blacker and broader than in any others of our large series. I have this from N.-E. Cachar, Sadiya and many localities in the Dibrugarh district, and Godwin-Austen obtained it in the Khasi hills and includes it in his Dafla hill list, but this is all I know of its distribution in Assam, Sylhet and Cachar.

In British Burmah it seems somewhat sparingly distributed in all suitable localities in Arakan and Northern and Central Tenasserim and to be common in Northern Pegu.

[Fairly common in the Dibrugarh district. About the beginning of March the birds, on dissection, show signs of breeding. Gape, eyelids and orbital skin are yellow. Insects and hard seeded berries are what I have found they fed on.—J. R. C.]

413.—Garrulax moniliger, *Hodgs.*

I only found this species in Manipur in the same localities as and in company with *G. pectoralis*.

To me these two species, differing as a fact only in size, have always presented a most puzzling problem. I say differing *only* in size, because, though each varies a good deal and you may pick out specimens of the one differing very markedly in plumage from specimens of the other, as a fact both vary in precisely the same fashion, so that you can match any shade or variation of plumage in the one with a precisely similar variation in the other, if only you have sufficiently large series of both.

Well then, differing only in size, they are almost always found in the same localities, whether it be Tenasserim, Northern Pegu, Arakan, the Tipperah hills, Cachar, Manipur, the Khasi hills, Assam, the Dafla hills, the Bhotan Dooars, Sikhim or Nepal; wherever the one occurs, there the other also is sure to turn up. One may be rare and the other common, but except possibly in Southern Pegu, where the one is, there is the other likewise. Nay they very commonly, as in the Manipur Western hills and many parts of Tenasserim, &c., &c. (see also IX, 181), go in mixed flocks; yet one never gets any of intermediate sizes.

Is there any other such pair of species? There are many other pairs differing similarly only in size, but then they belong to *different* localities, and where their distribution areas interlace or overlap we do get intermediate forms.

How is the existence of these two forms to be explained on our modern principles of evolution? They breed in the same localities at the same time. They are not like some of the small waders said to have a smaller and larger form, some bred in temperate and some in high arctic regions.

They must have had a common ancestor; their food is the same (I have compared the contents of the stomachs of three of each shot in the Barak valley at the same time and the insects were the same in each), and so far as we can judge they have, *sæcula sæculorum*, been exposed to the same circumscribing conditions, and how then can we explain their persistent and sharply defined difference of size. To me this

is a mystery, and indicates that our present evolution hypothesis itself requires further evolution.

I subjoin particulars of one *moniliger* I happened to measure: *Male.*—Length, 12·1; expanse, 14·3; tail, 5·4; wing, 5·0; tarsus, 1·57; bill from gape, 1·35; weight, 3·7ozs.

Legs and feet pale silvery greyish white; bill blackish dusky, whitish horny at tips and along edges of both mandibles; irides pale orange. In this, as in *pectoralis*, the colours of the soft parts vary somewhat in every specimen.

This species has been received or recorded from all the localities in Assam, Cachar, Sylhet and British Burmah, from which *pectoralis* has been received or recorded, but not from any others, except Southern Pegu, where it is common, while *pectoralis* only occurs as a chance straggler.

413*bis*.—Garrulax merulinus, *Bly*.

I only met with this rare species high up on the Eastern hills at Matchi and Tankool Hoondoong, but some of Godwin-Austen's people obtained it a little further north than the latter place at the head of the Thobal valley, where I met with it; it was very rare and very difficult to procure. It is a terrible skulk, clinging to dense thorny scrub. A hillside that some few years previously has been denuded of trees for cultivating purposes by Kookkies and abandoned by these has relapsed into a dense thicket of wild raspberries, intermingled with strong shoots from the old tree roots, is a favourite haunt. Never will you find them in any place in which it is possible even to creep about, without cutting your way. They are rightly called *merulinus* (though this name was of course given with reference to other peculiarities) for they are very vocal and have a great variety of clear beautiful notes which they combine into a great variety of calls, and besides these they have a coughing, chuckling, oft-repeated note. Generally when two or three (they always seem to keep in parties) have been whistling their calls most musically, one of the others breaks in with this depreciatory cackle.

What hours and hours I spent after these wretches attracted, at half a mile's distance even, by their beautiful mellow notes, and after all I never once caught sight of one, and the three I shot were all shot by the sound. I have crawled into a thicket, defying thorns and creeping things, as near as possible to them, and then by having several men moving about the opposite edges of the thicket have had the whole party gradually drawn nearer and nearer, till at last they were fleeting all round me, and yet I could not catch a glimpse of one.

Yet they must have seen me as if I moved ever so little there was silence and a few minutes afterwards the music recommenced fifty yards off. Getting angry one day I took a sudden snap shot at a spot whence a very loud series of calls appeared to be issuing. A dead silence was followed by most vociferous chuckling, which rapidly retreated down the hill side. I cut my way to the spot I fired at; there was nothing there. Then I swore a good deal, and decided to cut my way out, and in doing so, at least 20 yards further on, I found my first *merulinus* dead. After that, whenever I got close to a party, I used to fire both barrels where the noise was loudest and trust to luck. I can't say I took much by this manœuvre, but there was no other device possible in the places in which I found them, and I did thus get two more birds. Elsewhere frequenting other kinds of scrub it may be different, but these wild raspberry thickets are simply the ———

The following are particulars of two specimens. I neglected alas! to measure the third :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂...	10·0	12·0	3·9	3·71	1·6	1·37	3·0 ozs.
♀...	10·2	12·2	4·0	3·7	1·6	1·3	2·84 „

Legs and feet pale brown or pale greyish brown, with a slight pinkish or fleshy tinge on the feet; upper mandible blackish; lower mandible and gape pale greyish; irides pale pinkish buff; orbital skin pale leaden.

I have several specimens from Mouflong in the Khasi hills, and from the whole lot I will give a detailed description :—

A more or less brownish grey frontal band, broad and very conspicuous in some, narrow and hardly traceable in others; lores like the frontal band, but sometimes greyer, generally more dusky; cheeks, ear-coverts, sides of neck and entire upper parts, including visible portions of wings and tail, a slightly olivaceous snuffy brown, generally more rufescent on ear-coverts and tail, and often on the quills also; the outer margins of the first four or five primaries paler on their terminal halves in most birds; the inner webs of the quills, and more or less of those of all but the central tail feathers, deep hair brown; a narrow white or yellowish white streak from just above the posterior angle of the eye over the ear-coverts—this is very conspicuous in some, hardly traceable in others; chin white to albescent buffy; throat, upper breast and central portion of lower breast and abdomen and vent buff, buffy fawn, ochraceous buff, or pale ferruginous. It differs in every one of eight specimens before me, as does the

width of the central band of the lower breast and abdomen. Feathers of the chin, throat and upper breast, with terminal fan-shaped shaft spots, blackish brown to almost black, small on the tiny feathers of the chin, large on the larger feathers of the upper breast. In some birds (and I noticed this in the fresh bird) these spots seem to arrange themselves in regular stripes, while in others they seem quite irregularly placed. Sides of the breast, body and flanks much the same colour as the upper surface and varying with this; lower tail-coverts a duller or brighter ferruginous; longest flank feathers tipped with a tint usually intermediate between that of the abdominal band and the lower tail-coverts, and some of the vent feathers often (not always) similarly tinged; wing-lining rather ochraceous buff, sometimes pure, often dingy, except just at the shoulder of the wing and the bases of the first two or three primaries where it is a greyish brown. I have this species from Mouflong in the Khasi hills, and it was described originally from a specimen obtained near Cherrapoonjee, but there is no other record of its occurrence in Assam, Sylhet or Cachar, nor is it known to extend to any part of British Burmah.

415A.—Trochalopterum erythrolæma, *Hume.*

This species, fully characterized, S. F., X, 153, was only met with in the Eastern hills, and even there only on one occasion.

Nothing at present is known, I believe, of the occurrence of this species elsewhere.

In Assam we have the allied 415*bis*.—*Trochalopterum ruficapillum*, Bly., of which I have great numbers from near Shillong, where it is very abundant, and which Godwin-Austen shot on the Hengdon peak, but of the distribution of which elsewhere nothing further is known.

No description (at all complete or accurate) of this species seems ever to have been published, and I may endeavour to supply this now.

T. ruficapillum, Bly.—The following is an abstract of the dimensions of 21 specimens of both sexes:—Length, 9·85 to 10·75; expanse, 11·6 to 12·8; tail, 3·65 to 4·75; wing, 3·6 to 4·25; tarsus, 1·4 to 1·65; bill from gape, 0·9 to 1·2; weight, 1·97 to 2·53 ozs.

Many of the birds measured were clearly not quite mature. One fine adult male, a fair average specimen of

the adults of this species, measured:—Length, 10·65; expanse, 12·65; tail, 4·6; wing, 4·11; tarsus, 1·5; bill from gape, 1·1; weight, 2·4ozs.

The legs and feet varied from brownish fleshy to a wood-brown; the bill wood-brown, dusky or blackish at bases of both mandibles; irides grey to clay colour.

More or less of the crown, the occiput, and more or less of the nape, bright chestnut; rest of crown and upper part of forehead a dull brownish maroon; the basal portion of the forehead is a more or less distinctly dusky grey, and a tinge of this grey extends more or less on to the upper forehead, and occasionally the anterior portion of the crown; the lores and the feathers at the base of the lower mandible dusky brownish maroon to black, or nearly so, often a little mingled with grey; feathers over and behind the eye continued as a broad stripe to the nape, silvery grey, obsoletely streaked with dusky; ear-coverts a rather pale silky rufous brown, a sort of compromise between the colour of the throat and that of the eye-stripe, in some specimens approaching nearer the one, in others the other, generally greyer towards their bases and more ruddy towards the tips; the chin is dull grey or dusky, a little speckled greyish; entire throat and fore-neck uniform, dusky, deep, ferruginous; interscapulary region, sides of lower neck and entire breast rufescent, varying very much in shade and tone, generally browner or more fulvous above, more ruddy below; all the feathers with more or less perceptible subterminal brown spots, generally large and conspicuous above, often nearly obsolete on the breast; middle of back a pale greenish olive grey, or better a pale greyish olive green; the feathers with traces of the brown subterminal spots and fringed paler at the tips, and often more or less brushed with the tinge of the interscapulary region; lower back, rump, upper tail-coverts, sides of body and abdomen, flanks and lower tail-coverts a dull greyish olive green, varying much in different specimens, now paler, greener, purer, now browner, duskier or more earthy; middle of abdomen more or less fulvous or rufous buff or pale dull ferruginous; tertiaries much the same colour as the lower back, more or less overlaid with golden (it varies very much); almost the whole visible portion of primaries and their coverts, secondaries and tail-feathers golden or golden olive; inner webs of quills deep brown, at times almost black; more or less of inner webs of tail-feathers hair brown—and this often shows through, even the gold wash of the central feathers producing an olive tinge; secondary greater coverts

deep maroon chestnut, and median and lesser ones more or less of this and the yellow mingled; wing-lining grey, some of the feathers more or less tipped with orange.

I ought not to omit that Godwin-Austen procured, as might have been expected, 416.—*T. chrysopterum*, Gould., the Eastern Himalayan form, on the Shengorh peak of the Dafla hills, but this is not known as yet to occur elsewhere in Assam, Sylhet or Cachar, and does not of course extend to British Burmah.

Besides this we have in Assam 417*bis*.—*Trochalopterum austeni*, Jerd., which has only been procured on the Hengdon peak at the head of the Jhiri river and on the Kopamedza peak, in both cases at an elevation of about 7,000 feet. It is not *known* to occur anywhere else in Assam, Sylhet, Cachar or British Burmah, and as I failed to secure specimens I do not enter it in this list, though I certainly SAW it above Aimole. It was in a narrow path between high grass mingled with shrubs and herbaceous plants, which stood like a wall on either side, and three of these birds successively darted across the pathway about a foot from the ground, and not a yard ahead of me. I am myself quite certain of the bird; it was in bright morning light, but of course it might be only a representative species. Of course I followed the birds, though it was awful scrub and awful ground, but during an hour's hunt I never obtained a glimpse of it, nor did I ever meet with it again. So far as I know, except Godwin-Austen, no one has ever *procured* it *any* where.

418*ter*.—Trochalopterum cineraceum, *G.-Aust.*

I only met with this in one place and that was near Aimole in the Eastern hills, where it was not very rare, though, like most of these birds, rather difficult to see and shoot. When I found them at the end of April they were always in pairs. I never saw more than two together anywhere. They have a low, rather musical, call or set of calls, for two or three times when from the call I thought I had a new species, it turned out to be this one. They keep in the densest brushwood as a rule, feeding, however, a great deal on the ground, so that by lying flat down and waiting one can generally catch a glimpse of and shoot them. I found lots of small soft fruits as well as insects in their stomachs.

The following are details of those I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂...	9·6	11·0	4·3	3·4	1 36	1·01	1·73 ozs.
„...	9·3	10·7	4·0	3·4	1·3	1·0	1·65 „
„...	9·0	10·6	3·95	3·25	1·38	0·96	1·55 „
♀...	9·35	10 6	4·1	3·3	1·37	1·0	1·68 „
„...	9·0	10·5	3·8	3·1	1·36	0·97	1·61 „
„...	8·8	10·4	3·7	3·12	1·3	0·9	1·58 „

The legs and feet were pale fleshy pink, slightly yellowish in one, slightly brownish in another; the basal two-thirds, more or less, of upper mandible, pale brown to dusky; rest of upper and entire lower mandible horny yellow, dirty yellowish horny or sullied ivory; irides pale orange yellow, pale orange buff, very pale yellow, or pale buff; edges of lids and bare skin dusky, lower bare lid pale lavender.

De coloribus, &c., but the only description yet published of this species appears to me to be downright wrong and misleading in many points.

Nareal plumes, forehead, crown, occiput, nape, and generally a streak or some blotches, extending a little below this (in one case right down to the middle of the back) black, velvet black in some, rather brownish black in others. Occasionally (there are traces of this in 5 out of 13) some of the stiffish frontal feathers have more or less of one web or the extreme tip greyish or fawny white. Lores, a broad band over and stretching far behind the eyes, a narrow band under the eye and ear-coverts, white, purest under the eye, creamy elsewhere, and acquiring a faint (or in some few a decided) fulvous tinge on the ear-coverts and the posterior portion of the eye-streak; a narrow black band from just above the posterior angle of the eye, dividing the continuation of the eye-streak from the ear-coverts; a black moustachial streak, very narrow at the gape, widening lower down; chin and throat white or creamy, or very pale fawn, entirely without streaks in any of my specimens, but in two with some of the shafts of the feathers darker. Breast and sides of the neck, immediately below the end of the moustachial stripe, pale fawn colour, with possibly a very slight vinaceous tinge; on the sides of the neck, radiating as it were from the drop-like end of the moustachial stripe, a number of small, often streak-like, black spots, which in some birds (*this was written with the fresh birds before me*) arrange themselves in regular rows, in others seem irregularly placed. These spots vary greatly in number and in the area they cover, and in one or two are almost confluent; often immediately *under* the moustachial stripe along each side of the upper throat we find a row of black dots quite unconnected

with the spots that radiate from the end; the middle of the abdomen, vent and lower tail-coverts pale fawny to pale fulvous, generally more buffy on the coverts, and rarely with a very faint ochraceous tinge there; the sides and flanks browner, in some darker, in others paler, occasionally with an earthy olivaceous tinge; sides of the neck behind the black eye-line, entire mantle (except primary greater coverts), tertiaries and outer webs of secondaries (except tips), upper tail-coverts and tail (except tips) a pale dull earthy or grey brown, variously tinged in various parts, and in different specimens with olivaceous, fulvous or very pale ochraceous. One specimen has the entire upper parts tinged with this latter; more generally this is chiefly seen about the rump and shorter upper tail-coverts. Another is almost entirely grey brown, with only traces of fulvous tinges here and there. No two are exactly alike. The primary greater coverts are black, so is the winglet sometimes, but more often hair brown, but it is broadly edged and more or less tipped with French grey. The outer webs of the primaries are a clear French grey, but this does not quite extend to the tips of the latest primaries, and these are more or less dark tipped and show the narrowest conceivable line of white at the tip, and have the grey of the outer webs a little tinged with the colour of the outer webs of the secondaries. These latter and the tertiaries have broad penultimate black bands, followed by pure white tippings, 0·1 broad on the average. All the tail feathers with broad penultimate black bands, followed by conspicuous white tippings, scarcely 0·1 wide on the central pair, increasing to fully 0·5 on the exterior pair, which generally have more or less of the basal portions a quite pure grey. Wing-lining pale fulvous, brownish on the lower primary greater coverts.

I do not know *where* Godwin-Austen procured his type; he does not specify this, but somewhere in the Naga hills I gather. There is no other record of its occurrence anywhere.

420.—Trochalopterum squamatum, *Gould.*

This was another species that I only procured in the Eastern hills, at Aimole, Matchi, &c., and there it was not very rare, but I am pretty certain of having seen it on the Limatol range, though I failed to secure it. It must be borne in mind that I worked no part of the Western hills, least of all its higher range, anything like so thoroughly as I did part of the higher eastern range, and very probably most of the species that I procured only on the Eastern will hereafter turn up on the

Western hills also. This species is well known, but no accurate flesh measurements, &c., have ever been recorded, so I may subjoin the particulars I noted.

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	10·0	12·0	4·0	3·75	1·35	0·98	2·72 ozs.
♀	...	10·35	12·0	4·2	3·6	1·57	1·03	3·02 ,,
,,	...	9·6	11·5	3·9	3·55	1·5	1·02	2·47 ,,

Legs and feet greyish or brownish fleshy or fleshy brown; bill brown to blackish horny, horny grey at gape, basal portions of lower and more or less of extreme tips of both mandibles; irides white, with a faint greenish tinge.

Note, a rather remarkable fact hitherto overlooked. All the males I obtained had grey lores, while all the females had them fulvous brown.

This species has been procured by Godwin-Austen in the Khasi and Naga hills, but I have no other record of its occurrence anywhere in Assam, Sylhet, Cachar or British Burmah.

There is another species, 421.—*Trochalopterum rufigulare*, Gould., which I have from Shillong, and which Godwin-Austen also records from the Khasi and Dafla hills, but of which I saw nothing in Manipur, and of the occurrence of which anywhere in Assam, Sylhet, Cachar or British Burmah we have no record save the above. This is a *very* variable species, and my remarks, VII, 155, should be referred to.

422.—Trochalopterum phœniceum, *Gould.*

I only saw or procured this species at Aimole and Matchi on the Eastern hills. This is another species of which accurate details were wanting.

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	8·7	10·6	3·95	3·25	1·4	0·93	1·67 ozs.
,,	...	9·0	10·1	3·9	3·2	1·3	0·87	1·7 ,,
,,	...	9·15	10·6	4·0	3·25	1·38	0·86	1·67 ,,

Legs and feet brown, with a purplish or in others reddish fleshy tinge; bill black or blackish; irides brownish maroon, lac red, crimson; bare skin round and behind eye leaden dusky to grey.

I have this species from Shillong and the Khasi hills, but I am not aware that its occurrence anywhere else in Assam, Sylhet, Cachar or British Burmah has been recorded.

425*bis*.—Trochalopterum virgatum, *G.-Aust.*

This species I found only in the higher portions of the Eastern hills, about Aimole, Matchi and Tankool Hoondoong.

At the season I met with it, it seemed to be invariably in pairs. It haunts dense undergrowths and is never seen, except by accident, and hence, though not I believe very scarce in the localities in which I found it, it is still very hard to procure. It has a peculiar soft single-note call, by following up which I procured all my specimens. I only got seven altogether though I never heard the note, after the first day on which I learnt it without trying hard for a shot. The following are exact particulars of those I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	9·6	10·5	4·35	3·25	1·4	0·86	1·86 oz.
„ ...	9·0	10·2	4·0	3·27	1·35	0.79	1·77 „
„ ...	9·77	10·6	4·4	3·33	1·35	0·9	1·86 „
„ ...	10.0	10·2	4·6	3·27	1·3	0·85	1·92 „
♀ ...	9·6	9·7	4·3	3·03	1·33	0·93	1·7 „

Legs and feet fleshy, sometimes pinker, sometimes greyer, and sometimes slightly brownish ; generally distinctly brownish on joints and claws; soles always yellowish ; bill very dark to blackish brown; irides brown, sometimes yellowish. This species somewhat reminds one of *Grammatoptila striata*.

Except lores, ear-coverts, chin and quite the upper throat, primaries, secondaries, wing-lining and tail-feathers, the feathers of all other parts more or less conspicuously white-shafted on the upper, white, buffy white or buffy-shafted on the lower surface of the bird ; nareal plumes and a long narrow supercilium extending nearly to the nape, more or less silvery white, less conspicuous than it would otherwise be owing to the very marked silvery white shafting of the entire cap, nape, &c. ; lores palish ferruginous ; from the base of the lower mandible a more or less buffy white stripe extends under the eye, covering the cheeks and expanding over the ear-coverts, the upper ones of which are a little blotched with the brownish maroon of the cap or the chestnut maroon of the throat or an intermediate tint, and this same tint, one or other of the three, occupies the space between the top of the ear-coverts and the hinder portions of the supercilium ; the chin and entire throat down to the breast a rich chestnut maroon ; as a rule the chin and upper throat, as already specified, not pale shafted, but occasionally showing traces of this even on these parts ; the ground of the cap, nape and sides of neck brownish maroon, changing into the greyish olive of the interscapulary region, scapulars, back, rump and upper tail-coverts. In some specimens the brownish maroon tinge quite ceases at the nape, in others it spreads far down the back ; the olive is sometimes very grey, sometimes decidedly brown. Occasionally there is a fulvous or rusty tinge on

the rump and lesser upper tail-coverts. Tail olive brown, (greyer or browner in different specimens, usually greyer on the lateral feathers) regularly, closely, but obsoletely barred paler, and all the laterals excessively narrowly, often obsoletely, fringed at the tips with greyish white; breast pure more or less pale buff, growing more rusty or faintly ochraceous on the abdomen and vent, and more decidedly so on the lower tail-coverts; the pale shafting is in light-coloured specimens barely traceable on the abdomen; sides, flanks and exterior tibial plumes (the interior ones are like the vent) greyish or brownish olivaceous; axillaries pale buff; wing-lining grey brown, mingled with this, and some of the primary lower greater coverts just perceptibly pale shafted; quills brown, paler on the tertiaries; the primaries, except the first, dull French grey on their outer webs, and the later of these towards their bases and the secondaries more or less nearly to their tips, tinged on their outer webs with chestnut maroon, as are usually the primary greater coverts; winglet brown, greyish on the outer webs and often more or less white tipped; secondary greater and median coverts rich chestnut maroon; lesser coverts brown, more or less tinged with this maroon, and usually the shaft stripes very conspicuous.

Godwin-Austen obtained the type at an elevation of 5,000 feet near the village of Razami under the Kopamedza ridge in the Naga hills, but there is no other record as yet of its occurrence in Assam, Sylhet, Cachar or British Burmah.

427.—Actinodura egertoni, *Gould.*

This species was excessively common in both Western and Eastern hills, everywhere in forest above about 4,500 feet elevation. They go about in small parties and are quite tree birds, clambering about, and poking into every hole and cranny and foraging about in the huge bunches of orchids and other parasites much like Tits.

All my very numerous specimens belong to the paler form of this, common in the Khasi hills, which Godwin-Austen was at one time disposed to separate as *A. khasiana.* But I have now carefully compared nearly one hundred specimens from Assam and Manipur with about half that number from the Himalayas, and I can discover absolutely no constant difference either in size or markings on tail, or in any respect except in tint. As a body the Himalayan specimens are decidedly more rufous and deeper colored, the Assamese ones are more olivaceous, fulvous and paler; and even this difference is not quite constant, since there are one or two pale non-rufous

Himalayan birds not separable from some of the best coloured Manipur and Shillong birds.

I give exact particulars of some of the Manipur specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	9·0	9·7	4·6	3·3	1·2	0·8	1·25 oz.
,,	9·2	10·0	4·3	3·3	1·15	0·89	1·38 ,,
,,	8·7	10·4	4·15	3·15	1·1	0·89	1·2 ,,
,,	8·7	10·0	4·3	3·15	1·22	0·7	1·19 ,,
♀	9·0	9·8	4·2	3·25	1·1	0·87	1·2 ,,
,,	9·1	10·1	4·4	3·3	1·2	0·8	1·24 ,,

Legs and feet pale brownish fleshy to pale brown, with a faint fleshy tinge; gape and bill pale yellowish horny; more or less of upper mandible (it varies in every specimen) a paler or darker brown, and occasionally a little brown on the subterminal portion of the lower mandible also; irides pale blue to greyish white, often tinged orange or brownish immediately round pupil.

We have this species from Shillong and the Khasi and Naga hills; Godwin-Austen obtained it on the Burrail range. All these of course the paler form, but on the Shengorh peak of the Dafla hills he obtained specimens of this species, which, as might have been expected from the locality, were identical with the more rufous Sikhim form.

This species does not extend to British Burmah, whence so far no species of the genus has been recorded, but just outside its north-east corner in Karenee, *A. ramsayi* was discovered, which is very close to the pale form of *egertoni*, but differs in its conspicuous white eye-ring, black-barred tail, primaries barred throughout their length, &c.

There are three other species at present classed in this genus, which have occurred in Assam, of which I saw nothing in Manipur, *viz.* :—

(1) 427*bis*.—*Actinodura waldeni*, G.-Aust., procured by him at 9,000 feet on the Japvo peak of the Naga hills, but of the occurrence of which elsewhere I have no record. This is a rufo-fulvous representative form of *A. nipalensis*, Hodgs. (*not* of *A. egertoni* as G.-Austen says) with conspicuous white-streaked ear-coverts.

(2) There is 427*quat*.—*Actinodura oglii*, G.-Aust., procured on the Manbhum Tila on the Tenga Pani river near Sadiya at about 800 feet, of the occurrence of which likewise there is no other record as yet. I have never seen this bird, but to judge from the plate it has not the smallest title to be included in this

genus. The chin, throat and whole sides of the head are white, the ear-coverts only being dark. There is a shower of black and white drop-like spots on the sides of the neck as in *Turdinus guttatus;* the bill is more that of *Timalia ;* the tail comparatively short, and even the wings are only obsoletely barred.

(3) *A. daflaensis*, G.-Aust., obtained by the describer on the Shengorh peak and high forest at 7,000 feet in the Dafla hills, but as yet recorded from no other locality. This likewise is a representative of *nipalensis*, a sort of chesnut above, grey head, and scarcely any barring on the tail.

429*bis*.—Malacias gracilis, *McClell.*

Common everywhere in both Eastern and Western hills in forest at 4,500 feet and upwards. Very active birds, they run along the branches dodging in and out of the bunches of parasitic ferns, orchids and mistletoe, so that it is not easy to shoot them. Occasionally for a minute they stand as a Dhyal (*Copsychus*) would, with their long tails cocked at an angle of 45° to the horizon, but though scarcely smaller they are much slenderer built birds than the common Magpie Robin, and are much more active and restless. Accurate measurements and description of this species are to this day *desiderata.*

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 9·7	11·55	4·7	3 78	1·17	1 08	1·5 oz.
,,	... 9·5	11·1	4·3	3·75	1·11	1·1	1·43 ,,
,,	... 9·67	11·7	4·7	3·86	1 13	1·05	1·44 ,,
♀	... 9·35	11·3	4·5	3·7	1·04	1·06	1·24 ,,
,,	... 9·0	11·0	4·5	3 65	1 2	0·92	1·25 ,,

Tarsi very pale brown, feet darker, claws a little darker still; bill black; irides dull red, maroon or reddish brown.

The lores, forehead, cheeks, ear-coverts, crown and more or less of the occiput, vary from black to deep smoky brown; the lores and forehead are *generally black;* the ear-coverts commonly have a brown tinge, but in some all the parts abovementioned and the whole occiput are *black*, and in others even the lores and forehead have a somewhat brownish tinge; more or less (sometimes none at all) of the occiput, back of neck, scapulars, upper and middle back, a smoky brown, varying much in tint, never very dark, often faintly shaded, especially on the nape with grey; rump and upper tail-coverts a very delicate, sometimes bluish, French grey; central tail-feathers French grey with a broad black band half an inch from the tip; lateral tail-feathers black, broadly (increasingly so as the feathers recede from the centre) tipped with French grey; chin, more or less

of throat and centre of abdomen, more or less nearly pure white; more or less of throat, breast, and abdomen on either side of the white, a varying shade, pale buff to creamy, always more pronounced towards the vent; lower tail-coverts more or less decided fulvous buff; sides of breast, body and flanks (except the tips of the longest feathers, which are colored like the vent) a faint dull grey, a shade of which often extends more or less over the entire breast also; edge of the wing, axillaries and wing-lining (except the greater primary lower coverts which are grey) pure white; tertiaries grey, margined with blackish brown on both webs, and sometimes shaded with this on the entire inner web of the longest ones.

Rest of the quills blackish brown, about the 3rd to the 7th primaries (and sometimes the 2nd and 8th also) conspicuously margined on more or less of their outer webs with silver grey. These on more and more of their bases as they recede from the front of the wing, and the remaining primaries and secondaries along their whole length margined or overlaid on their outer webs with black, having a dull green metallic gloss. Winglet and primary greater coverts and lesser coverts at shoulder of wing black, secondary and tertiary greater coverts grey, white towards their bases; rest of lesser coverts varying from deep to comparatively pale smoke brown.

This species is very common in all suitable localities throughout the Naga and Khasi hills, but I have no other record of its occurrence in Assam, Sylhet or Cachar. It does not extend to British Burmah so far as is yet known, but in the higher ranges of Tenasserim is represented by the much smaller billed and darker toned *M. melanoleucus*, Tick.

In Assam we have also 429*ter*.—*Malacias pulchellus*, G.-Aus ten, discovered by its describer at an elevation of about 8,000 feet, on the Kunha peak of the East Burrail range of Naga hills, and subsequently at about 5,000 feet elevation on the slopes of the Tomputu peak in the Dafla hills, but not as yet known to occur anywhere else and not observed in Manipur.

Another Himalayan form, 430.—*Sibia picaoides*, Hodgson, which I failed to meet with in Manipur, is recorded by Godwin-Austen from the Dafla hills, where it might have been expected to occur, and also, as I gather, from the Eastern Naga hills, but there is no other record of its occurrence in Assam, Sylhet or Cachar. In Karenee it was procured by Ramsay, and it extends, according to Col. Tickell, to the Central Tenasserim hills, though neither Davison, Darling nor Bingham, who have for

many successive years collected in these hills, have as yet met with it. It has not been even reported to occur in any other part of British Burmah.

Lastly, 432.—*Malacocercus terricolor*, Hodgs., was found in small numbers in the Darrang district, under the Dafla hills, by Godwin-Austen, who remarks that he "never got this bird on the south side of the Brahmaputra or in Cachar," and this is my experience also; but later he seems to have had a specimen sent him from somewhere near Sadiya, or the East Naga hills. Further information is required. I have seen it from near Tezpur, but never from any part of Assam south of the Brahmaputra, Sylhet or Cachar, and it does not, so far as I know, extend to any part of British Burmah.

[The *Doodur Alee* (the grand trunk road of Upper Assam) between Moran and Sepon Tea Gardens, four miles, runs through a large plain of *Borthani* or thatching grass, and it was in this that a small party of these birds had taken up their quarters for several years. In no other part of the district of Dibrugarh did I notice them, though there were several suitable localities.—J. R. C.]

439.—Chatarrhœa earlii, *Bly.*

I met with a small party of this species in the Jhiri level, in grass near the bed of the river, but I never again met with it in Manipur, though the whole basin teems with just the kind of localities it affects.

This too seems universally spread throughout the entire plains portion of Assam, Sylhet and Cachar, but I do not think it ascends the hills at all.

[I procured only one specimen, a male, out of a small party in long grass on the banks of the Desang river. This was in the last week of March, and the testes were over ¼ inch in length. I never again saw it.—J. R. C.]

In British Burmah I only know as yet of its occurrence in Pegu, in the northern portions of which, however, the allied *C. gularis* is far more common.

There is another species that, judging from the physical characteristics of the place, I should certainly have expected to meet with in the Manipur basin, and that is 441.—*Chætornis striatus*, Jerd.; but I never saw it there, nor have I any record of its occurrence anywhere in Assam, Sylhet or Cachar, save a single notice of G.-Austen's, who *seems* to have procured it in the Garo

hills, though (he unfortunately is very careless in specifying localities) it may have been from Cachar or Mymensingh. It has not yet been recorded from any part of British Burmah.

440.—Megalurus palustris, *Horsf.*

After crossing the Jhiri river I missed this species, and never saw it once in the Western hills except in the Kopum Thull; but throughout the Manipur basin it is everywhere common, and even in the gardens of the suburbs of the capital you may see a dozen any early spring morning, perched on some grass or bamboo spray, or even on the branch or twig of some low tree, singing away most vigorously, a rather loud harsh, but still not altogether unmelodious song. Or again you may see them soaring or coming down with outspread wings.

I note that the foot in this species might be designated semi-scansorial. It is deeply cleft between the middle and inner toe, and this latter is partially reversible. This peculiarity explains the rapidity and ease with which it climbs about amongst reeds and reed grass. In January the inside of the mouth is blackish. I have an idea that later in the year it was differently coloured, but I omitted to note the fact.

The following are exact details of three specimens:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 10·8	12·5	5·1	3·6	1·4	0·93	1·9 oz.
„	... 10·9	12·3	5·3	3·9	1·4	0·91	1·8 „
„	... 10·8	12·5	5·3	3·85	1·35	0·9	1·75 „

Legs and feet brown, often tinged fleshy on the tarsi; claws generally a darker brown; soles yellowish; upper mandible (and sometimes edges of lower also) blackish brown; lower mandible horny bluish or rarely greenish white; irides brown.

This species is universally distributed in all suitable localities in all the plains portion of Assam, Cachar and Sylhet, but does not, so far as I know, ascend the hills to any great elevation, though it may be found in the hills in broad valleys or on plateaux where suitable surroundings exist. Again it occurs somewhat sparingly in Arakan, and more commonly in Pegu and Northern and Central Tenasserim.

[The *Nul chaypee* of the Assamese. Very common in swampy ground and rice fields, and when these are on the borders of tea gardens, they stray into the tea bushes. They breed in April and May in the Dibrugarh district, placing their deep cup-shaped nests in tussocks of grass, wherever it is swampy, in some instances the bottoms of the nests being wet. Four seems to be the greatest number of eggs in a nest.—J. R. C.]

444.—Hypsipetes psaroides, *Vig.*

I only met with this species on the Noongzai-ban ridge a few hundred feet above Noongzai-ban. I never saw it again in either the Western or Eastern hills, and if it occurs it must be rare.

I have it from N.-E. Cachar, Northern Sylhet, Shillong and the Khasi hills, Sadiya and other places in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list.

[Common in Dibrugarh in suitable localities. They keep to forest, where they are found feeding on insects that infest the flowers of the different trees.—J. R. C.]

It is recorded by Blyth from Arakan, whence I have not seen it. I do not think it occurs in Pegu, but in Northern and Central Tenasserim it is replaced by *F. concolor*, Blyth (*vide* S. F., VI, 296), but note that this latter, so given, *fide* G.-Austen, does *not* occur in the Khasi hills.

447.—Hypsipetes macclellandi, *Horsf.*

I only procured this species on the higher portions of the Eastern hills, where it was rather common. I thought I saw it on the Limatol range of the Western hills, but failed to secure the bird I saw, and cannot therefore be certain.

A *female* measured :—Length, 9·3 ; expanse, 13·0 ; tail, 4·1 ; wing, 4·13 ; tarsus, 0·77 ; bill from gape, 1·16 ; weight, 1·66oz.

Legs and feet pale fleshy brown ; upper mandible dark brown ; lower mandible pale fleshy brown ; irides Indian red ; soles yellowish.

We have this species from Shillong and the Khasi hills, and from Joonkotollee in the Dibrugarh district, but I have no other record as yet of its occurrence in Assam, Sylhet or Cachar.

[Not very common in the Dibrugarh district, and being more wary than *H. psaroides* is not easily bagged. A male measured : —Length, 9·90 ; expanse, 13·0 ; tail, 4·50 ; wing, 4·40 ; tarsus, 0·70 ; bill from gape, 1·26 ; weight, 1·25 oz. Irides brick red ; bill dusky above, fleshy beneath ; mouth inside fleshy ; legs and feet dusky purple.—J. R. C.]

This occurs in Arakan, but does not, so far as I know, extend to any other part of British Burmah.

448.—Hemixus flavala, *Hodgs.*

This species was very common between Koombiron and Moongba and in the Ecrung valley, and I saw it occasionally

elsewhere in the Western hills. I also shot one specimen at Aimole, but this was the only one I saw in the Eastern hills, where in April and May it seemed very rare.

The following are particulars of three specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·7	12·0	3·75	3·9	0·66	0·98	1·2 oz.
,, ...	8·7	11·7	3·7	3·92	0·68	0·95	1·19 ,,
♀ ...	8·5	12·0	3·4	3·77	0·62	0·91	1·20 ,,

Legs and feet dark brown to blackish or dusky leaden ; soles and edges of scales of feet hoary ; bill black ; irides brown to reddish brown.

We have this species from Shillong and the Khasi hills, and from a great many localities in the Dibrugarh district. Godwin-Austen records it from Asalu, and includes it in his Dafla hill list, and this is all I know as yet of its distribution in Assam, Sylhet and Cachar.

[Very common in Dibrugarh, affecting forest and partially open country, occasionally straying into the tea gardens, when the tea bushes are in flower, to feed on the insects that swarm. They go about in small parties, and are by no means shy.—J. R. C.]

Blyth records this from Arakan, and it may occur there, but he also records it from Tenasserim, where it does not occur in the north, being represented by *H. hildebrandi*, nobis, and in the south by *H. davisoni*, nobis. I do not yet know that any one of the three species occurs in Pegu.

449.—Alcurus striatus, *Bly.*

I saw this species, *certainly*, on the Limatol range of the Western hills, but failed to procure it. I met with it nowhere else in these hills, but found it rather common on all the higher portions of the Eastern hills. The following are particulars of three specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·7	12·0	3·4	3·94	0·78	0·8	1·6 oz.
♀ ...	8·9	12·0	3·5	3·92	0·8	0·8	1·82 ,,
,, ...	8·6	12·4	3·6	4·02	0·73	0·82	1·59 ,,

Legs and feet deep to dark prune brown ; soles yellowish ; bill blackish to blackish brown ; irides brown.

I have not procured this species as yet anywhere in Assam, Sylhet or Cachar, but Godwin-Austen obtained it both in the Khasi hills and at the Tomputu peak of the Dafla hills.

In British Burmah we as yet only know of the occurrence of this species in the higher hills of Northern and Central Tenasserim.

451.—Criniger flaveolus, *Gould.*

This is by far the commonest of all the Bulbuls between Jhiri ghat and Noongzai-ban, and again in the valley of the Barak between Kalanaga and Koombiron. And here I was constantly shooting it by mistake, owing to its inveterate habit of skulking about in the inside of dense shrubs and low trees completely veiled in dense sheets of creepers, where in the dim religious twilight of the inner recesses it is impossible to make out to what species a slouching bird, of which one catches a momentary glimpse, belongs.

Once more I got it in the valley of the Limata, but never once met with it either in the basin or on the Eastern hills.

The following are particulars of three specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·97	12·0	3·5	3·75	0·8	0·9	1·69 oz.
,, ...	8·4	12·0	3·25	3·7	0·78	1·07	1·71 ,,
♀ ...	8·8	12·2	3·6	3·9	0·81	1·0	1·73 ,,

Legs and feet silvery grey, pale leaden grey, pale fleshy brown ; bill pale horny to leaden blue ; irides brown.

We have this species from N.-E. Cachar and from Sadiya, and a dozen other localities in the Dibrugarh district, but not from the Khasi hills. But Godwin-Austen appears to have got it there (in some low valley I suppose), and he notes that it was very abundant in the lower ground about Harmutti and Harjuli, below the Dafla hills.

I know nothing further of its distribution in Assam, Sylhet or Cachar.

[Very common, indeed, in Dibrugarh in heavy forest only, where it keeps to the undergrowth. By the middle of May yolks have formed in the ovaries of most of the females. Their food consists principally of berries, both soft and hard.—J. R. C.]

Blyth records this from Arakan and Tenasserim ; it may occur in Arakan, and has, Oates says, been actually shot near Tonghoo, but everywhere along the eastern slopes of the Pegu hills in Karenee and Northern and Central Tenasserim proper it is replaced by *Criniger griseiceps*, nobis.

Godwin-Austen apparently records 451*quint.*—*Criniger euptilosus*, Jard. and Selb. (=*Criniger tristis*, Blyth) from the Khasi hills, but there is no other record of its occurrence in Assam, Sylhet or Cachar, and the species seems out of its range here, as even in British Burmah it is only in the extreme south of Tenasserim that it has occurred. But perhaps he does not mean this species ; he says *Ixus tristis*, Blyth. So

far as I know Blyth only gave the specific name *tristis* to two of the *Brachypodidæ*, *viz.*, to the species above referred to, and to the female of *Microscelis melanoleucus* which he called *Brachypodius tristis*, and which certainly cannot occur in the Khasi hills. It is true that Jerdon, B. of I., II, 86, mentions "*Ixus tristis*, Blyth, from Arakan," but I cannot trace this species. Blyth himself ignores it in his Birds of Burmah, and Mr. Sharpe seems equally to have failed to find it. It would be a boon to us if Major Godwin-Austen would explain what species it was that he recorded from the Khasi hills as *Ixus tristis*, Bly., in his third list, page 142.

452*bis*.—Ixus flavescens, *Bly*.

I only met with this species high up on the Eastern hills. It was common about Aimole, rather rare at Matchi, and only once seen anywhere near Tankool Hoondoong.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·4	10·5	4·0	3·1	0·83	0·69	1·13 oz.
„ ...	8·2	10·75	3·75	3·0	0·87	0·7	1·05 „

Legs and feet deep prune brown, almost black; bill black; irides brown.

This species must be very abundant about Shillong from the very large number of specimens I have thence received. Godwin-Austen records it from Asalu, and this is all I yet know of its distribution in Assam, Sylhet or Cachar.

This species occurs in Arakan and in Northern and Central Tenasserim. Whether it also occurs in Pegu I do not know. Oates, I see, does not include it in his list.

452*dec*.—Iole viridescens, *Bly*.

This species appeared rather common in the Jhiri level, just inside the Manipur boundary in the first days of February, but I never saw it anywhere else in that state, and if it does occur there elsewhere it must be rare.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	7·1	10·1	3·05	3·2	0·67	0·9	0·86 oz.
♀ ...	6·9	9·93	3·0	3·05	0·66	0·8	0·8 „

Tarsi pale fleshy brown, darker and browner on feet; claws darker still; upper mandible darkish brown; lower pale brownish fleshy, bluish about gape; irides greyish pink.

I have this species from N.-E. Cachar, and Godwin-Austen records it from Lakhipur in Cachar, but beyond this I have no knowledge of its occurrence in Assam, Sylhet and Cachar.

It occurs in suitable localities in Arakan, North-eastern, Central and Lower Pegu, and throughout Tenasserim.

453*bis*.—Spizixus canifrons, *Bly*.

It was only on the Limatol range of the Western hills overlooking the basin that I ever saw this species; even here it was rare. It was a bird of which I much wanted a large series of *good* specimens (my Shillong ones being indifferent), but I only succeeded in shooting two, both males, of which the following are the particulars :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	8·7	11·7	4·0	3·75	0·7	0·8	1·57 oz.
,,	8·8	11·9	3·9	3·82	0·76	0·7	1·5 ,,

Legs and feet fleshy or brownish fleshy; claws brown; bill yellowish or creamy horny white; gape black; irides reddish brown.

I have a large series from the neighbourhood of Shillong, and Jerdon gave me a specimen shot near Cherrapoonjee, but I know as yet of no other localities in Assam, Sylhet or Cachar, whence it has been recorded, and it does not, I think, extend to British Burmah.

456.—Rubigula flaviventris, *Tick*.

This species was pretty common at Kalanaga and Koombiron and in the intervening valley of the Barak, but much less common in the Eerung, where *H. flavala* was *the* Bulbul. Further east I did not meet with it in the Western hills, nor did I see it in the basin or in the Eastern hills. I only measured one specimen, a male—Length, 8·0; expanse, 11·0; tail, 3·5; wing, 3·55; tarsus, 0·7; bill from gape, 0·8; weight, 1·17oz.

Legs and feet blackish brown; bill black; irides yellowish-white, or white with a faint yellow tinge.

I have this from N.-E. Cachar, and Godwin-Austen records it from the Khasi hills, and beyond this I know nothing of its distribution in Assam, Sylhet or Cachar. It is generally distributed in suitable localities throughout all the provinces of British Burmah, though here and there, as in North-west Pegu, rare or wanting.

From N.-E. Cachar I have 457*quat*.—*Brachypodius cenereiventris*, Bly., but I neither met with this nor the doubtfully distinct *B. melanocephalus*, Gm., anywhere in Manipur, nor is there any other record of the occurrence of

either anywhere else in Assam, Sylhet or Cachar. *Melanocephalus* is widely spread throughout British Burmah (though rare in Northern Pegu), where occasional specimens of *cenereiventris* have also been procured (*vide* S. F., VI, 319; X, 210 and *n.*)

460.—Otocompsa emeria,* *Lin.*

Found everywhere in Manipur alike in the hills and the basin. In the latter it is excessively numerous, as it is in the Eastern hills, where it goes about in parties of twenty to thirty. I have noted that one day

* According to Mr. Sharpe this ought to stand as *jocosa*, Lin., and *fusci-caudata* as *emeria*. I think this very doubtful. In the first place Mr. Sharpe fails to notice that Linnæus in an earlier part of his work, I, 137, No. 23, described one of these two birds as *Lanius emeria*. We may, therefore, ignore *Muscicapa emeria*, Lin., of I, 326, on which Mr. Sharpe bases his case. It does not matter one straw which of the two this bird is; the name must be fixed by the *Lanius emeria*, I, 137. Now this was based solely on Brisson's *Lanius bengalensis fuscus*, II, 175. Brisson *loc. cit.* gives a description not from a specimen (no dimensions given, which he always gives when he has examined a specimen) but from a bad plate of Albin's. Now the description fits either bird well, but no mention is made of white tips to the tail-feathers. Is that conclusive? Far from it. Albin's plate is admittedly a bad one, and did not show white tips to the tail, and so Brisson did not describe these. But we know that this bird came out of Mr. Joseph Dandridge's collection, and that it was received by him from Bengal, then (1735-1740) utterly distinct from the Madras and Bombay settlements, and we know that the white tipped tailed species occurs all over Bengal and the non-white tipped tailed species occurs in no part of Bengal, and it is therefore clear that it is the former and not the latter which is Linne's *Lanius emeria*.

But perhaps Mr. Sharpe may contend that Edwards' plate, No. 190, was taken from this same specimen, and that Edwards' neither in his figure nor description refers to any white tips to the tail. But the reply to this is that equally in neither does he refer to the conspicuous characteristic black or dark-brown stripe running from the base of the lower mandible under the cheeks to the back of the ear-coverts equally present in both species, and which by the way is carefully noted by Brisson in his description, *taken from a specimen of Le petit merle huppe de la chine*. If Edwards could overlook the one so he might the other. We know for certain that *Lanius emeria*, Lin., applies to either the Bengal species or the Southern Indian one, but we also know for certain that the particular specimen to which the name was applied came from Bengal, and we therefore know that it is to the white-tipped tailed species (any errors of descriptions or figures to the contrary notwithstanding) that the name *emeria* ought to be applied.

The very young bird has no red ear-tuft and no white tippings to the tail; most have a slight irregular paling on the lower surfaces of the tail-feathers about the margins at the tips, but some do not even show that. As a rule, the white tips begin to appear before the red ear-tuft, but in one specimen before me the latter has preceded the former. But in no specimen that I can find, however young of either species, is the cheek stripe wanting, and the omission of this in Edwards' figure must have been carelessness—a carelessness that deprives his omission to figure and describe the white tips of the tail of all weight.

at Aimole, "in high forest, there was a crowd of birds skirmishing about in a thick tree some hundred feet or so above my head. It was so dark, the tree was dense and the sky clouded, that I could not make out what they were, so I gave them the benefit (?) of the doubt, fired, and dropped no less than seven Red-whiskered Bulbuls. But there were other birds in the *mêlée*, for I heard notes I did not recognize and I know this bird's voice well." In the basin they commonly consort with *Molpastes burmanicus*. In the Western hills they are less numerous. All the Manipur birds have the bands at the sides of the breast very dark, and the red ear-tuft very small; they are in fact what commonly passes for *monticola*, but this latter was really founded on an abnormal specimen, three of which I have now seen, in which the red extended nearly round the eye as a sort of ring (but not meeting in front), while the ear-tuft only existed so far as it was included in part of this ring. This is not a species, but merely a monstrosity to which this species is subject. I shot one of these this time in Manipur, and have seen before one from Assam and one from Burmah.

I measured two normal specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·2	11·5	3·7	3·6	0·8	0·87	1·26 oz.
„ ...	8·4	11·1	3·6	3·55	0·8	0·9	1·25 „

Legs, feet and bill black; irides brown.

This species is common in Northern Sylhet (I did not see it in the low-lying swampy parts of Southern Sylhet), Cachar, the entire valley of Assam up to Sadiya, and in many parts of the Garo, Khasi and Naga hills.

[Excessively common all over the Dibrugarh district; when the tea bushes are in flower, dozens of them are seen at a time. The Assamese call them *Pay-too-loo-ka*. They nest in all sorts of places, tea bushes, clumps of grass, small bushes in heavy forest, but in no instance have I seen a nest ten feet off the ground, most being about four feet.—J. R. C.]

I have never seen this species in Arakan, and it is scarce or wanting in North-Western Pegu, but it is common elsewhere in the more level portions of Pegu, and generally distributed in open country throughout Tenasserim, while Ramsay also procured it in Karenee.

In Assam, Cachar and Sylhet we have everywhere (so far as all the specimens that I have received and procured from over fifty different localities go), 461.—*Molpastes pygæus*, Hodgs., or forms of this verging towards *intermedius*; in

fact I have one or two specimens, both from N.-E. Cachar and the Khasi hills, that must be classed as *intermedius*, if this latter be separated, but the great bulk of the birds are *pygœus* or nearer to this than *intermedius*.

[Very common in Dibrugarh. This species does not go about in parties like *O. emeria*. They are found all over the district, and are very troublesome at times, committing sad havoc with one's tomatoes and peas.—J. R. C.]

462*quat.*—Molpastes burmanicus, *Sharpe*.

I think this new species of Mr. Sharpe's a fairly good one. I described its characteristic features as long ago as 1875 (S. F., III, 126), but forebore to name it, since as a matter of fact these several races all run more or less one into the other; however it may be conceded, now we know it better, that this is one of the least variable and most constant within given limits of all these races, and I therefore adopt Mr. Sharpe's name.

To me none of these red-under-tail-coverts group appear congeneric with *capensis*, the type of *Pycnonotus*. I would have adopted Swainson's name *Brachippus* ,had he not himself suppressed it in reference to this group and applied it elsewhere. I am compelled, therefore, to retain my own generic name *Molpastes* for this group, and I would, as at present advised, apply *Pycnonotus* to the *capensis* and *Ixus* to the *barbatus* group. But I have never properly worked out the group and merely express my present conviction.

Mr. Sharpe's key of the several species belonging to the *Molpastes* group is faultless.

A. Ear-coverts black scarcely distinguishable from the crown of the head ... ... *M. hæmorrhous.*
B. Ear-coverts lighter than the crown of the head, and contrasting with the latter.
  a. Head distinctly capped in strong contrast to the back and mantle.
    a. Ear-coverts bronzy brown, contrasting with the black throat ... ... *M. burmanicus.*
    b. Ear-coverts light brown or ashy brown resembling the throat in colour; chin black.
      1. Breast mottled, the feathers being light ashy brown with darker brown centres ... ... *M. nigripileus.*
      2. Breast perfectly uniform below ... *M. atricapillus.*
  b. Head black as well as hinder neck, the two colors merging so that there is no distinct cap.
    a. Mantle and back blackish brown, the black distinctly pronounced on the breast, and occupying the whole of the latter ... *M. pygœus.*
    b. Mantle and back brown, much lighter than the head, foreneck, and breast brown, not black ... ... *M. intermedius.*

I have only to add that the two latter run into each other, and the last so into the capped group that of numbers of specimens it is quite a toss-up where to locate them.

With this key and my previous remarks (S. F., III, 126) no separate description of *M. burmanicus* seems needed.

I first met with this species at Kalanaga, and thereafter saw it throughout the Western hills. In the Manipur basin it was excessively common, associating with *Otocompsa emeria*, but in the Eastern hills they seemed rather less numerous.

Mr. Sharpe says that this species extends from Cachar to Pegu, and stragglers may find their way into Cachar; but all the specimens I got there, all sent me from N.-E. Cachar, Cherrapoonjee, Shillong, and Northern Sylhet, and all I got in Sylhet are either *pygœus*, or a form intermediate between this and *intermedius*.

This species occurs throughout the more level portions of Pegu, and possibly in Arakan, but Blyth says that specimens from the latter are identical with *hœmorrhous*, which is hardly likely. Rangoon examples are, Lord Walden said, *pygœus*, but all our specimens thence are *burmanicus*. But in Tenasserim this species is replaced by *nigripileus* and *atricapillus*.

463*bis*.—Phyllornis chlorocephalus, *Wald.*

I found this species common in the Jhiri level, and again in the valley of the Eerung (specimens *precisely* like Burmese ones), but beyond this valley I never again met with it in Manipur, and I think that had it occurred there I must have noticed it in the Eastern hills.

It seems to be commonly a bird of the low, damp, hot valleys, replaced higher up by *P. hardwickii*.

I have this from N.-E. Cachar, and Godwin-Austen records it from Diniapur on the Dunsiri river, and from the Kylas peak or Chickmung of the Garo hills, and this is all I yet know of its distribution in Assam, Sylhet or Cachar.

It occurs in suitable localities in Arakan, Eastern Pegu and Karenee, and is very common throughout Tenasserim.

465.—Phyllornis aurifrons, *Tem.*

I saw this a few times in the western portions of the Western hills, but only preserved one specimen, a male, which I shot on the slopes of the Eerung valley.

I never met with it in the more eastern portions of the Western hills, nor in the basin, nor in the Eastern hills. But all the species of *Phyllornis* keep very much to the tops of the highest trees, and despite their brilliant colours when in the hand are very easily overlooked.

I have this from several places in the Dibrugarh district, from between Gauhatti and Shillong, and several places in the Khasi hills, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[Common in the Dibrugarh district, where it is oftener heard than seen, for, notwithstanding the bright colour, they are not easily distinguished amongst the leaves overhead.—J. R. C.]

This species also is generally distributed in suitable localities throughout British Burmah, and has been procured in Karenee.

466.—Phyllornis hardwickii, *Jard. & Selb.*

This species was common in the Barak and Eerung valleys, and I shot one high up on the Limatol range, but I never met with it in the basin or anywhere in the Eastern hills. I did not see this in the Jhiri level, where *chlorocephalus* was so abundant, and I think it generally affects a higher elevation than this,—indeed I got it on the Limatol range above 5,000 feet.

A very fine adult male measured:—Length, 7·8; expanse, 11·2; tail, 2·9; wing, 3·61; tarsus, 0·65; bill from gape, 0·92; weight, 1·16oz. The legs and feet were dull leaden; claws dusky; soles hoary; bill black; irides brown.

I have this from Sadiya and many localities in the Dibrugarh district, and Godwin-Austen records it from the Khasi hills and includes it in his Dafla hill list. Beyond this I seem to have no note of its occurrence in Assam, Sylhet or Cachar.

[This species frequents heavy forest, and is by no means so common in Dibrugarh as the last species:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	7·85	10·75	2·95	3·85	0·65	0·96	1·40 oz.
♀ ...	7·15	10·30	2·55	3·33	0·60	0·93	0·96 „

Bill black; legs and feet plumbeous; irides brown.—J. R. C.]

Blyth records this from Arakan. I seem to have no note of its occurrence in Pegu, but we have procured it in the higher hills of Central and Northern Tenasserim.

468.—Iora tiphia, *Lin.*

I saw this nowhere in Manipur, until we debouched into the basin, where it is generally distributed; more common about the capital than elsewhere, but even there by no means

numerically abundant. I never saw this anywhere in either the Eastern or Western hills, though I shot one or two just at the bases of the latter.

I found this in many places in Sylhet and Cachar, and have it from Northern Sylhet and N.-E. Cachar, which I did not visit, also from near Gauhatti, Tezpur, Sadiya and many localities in the Dibrugarh district. Godwin-Austen includes it without remarks in both his Khasi and Dafla hill lists, but I think his birds must have come from near or below their bases, or from some low valley, as I do not think this is at all a hill bird, nor do I think it commonly or normally ascends above 2,500 to 3,000 feet.

[Generally distributed in Dibrugarh and Sibsagar, where it frequents thin forest and the vicinity of villages and tea gardens, but nowhere numerically common. By the end of May, on dissection, they show signs of breeding.—J. R. C.]

It is common in all suitable localities throughout the plains country of British Burmah.

469.—Irena puella, *Lath.*

This species was very common in the low-lying heavy forest between Jhiri ghat and Noongzai-ban, flying about in small parties in the tops of the highest and medium-sized trees and keeping up a constant "*chirik, chirik,*" but after we had once crossed the Noongzai-ban ridge I never again met with it.

I have this from N.-E. Cachar and several places in the Dibrugarh district, and Godwin-Austen includes it in his Khasi and Dafla hill lists, probably from low-lying evergreen forests in the interior valleys of the former and near the bases of the latter. At present I know nothing further of its distribution in Assam, Sylhet and Cachar.

[Fairly common in the densely forest-clad parts of the Dibrugarh district, but by no means so abundant, as in the hills towards Borhat and Namsang. They are difficult to bag, not only owing to the heavy forest, but the high trees they frequent.—J. R. C.]

It is widely spread throughout every province of British Burmah, in suitable localities, always understood, for it is essentially a bird of the evergreen forests.

471.—Oriolus indicus, *Jerd.*

I only twice saw this species in Manipur. First at Kokshin Koolel, in the south-east of the basin, a single adult male which I shot, and second near Matchi at fully 5,000 feet elevation, where

I saw a party of four, of which I knocked over two as they flashed overhead, both immature males. I have no single record of the occurrence of this species anywhere in Assam, Sylhet or Cachar.

This species is recorded by Blyth from Arakan, but must I think be rare there. It is common enough in the cold season in Southern Pegu and Central and Southern Tenasserim, but very rare in both Northern Pegu and Northern Tenasserim, except perhaps on migration in May or thereabouts.

471*ter*.—Oriolus tennuirostris, *Bly*.

I obtained one specimen of this on the Limatol ridge, the easternmost of the Western ranges, immediately overhanging the basin. I saw it nowhere else in either the Western or Eastern hills. In the basin, at least the drier, higher, central and northern portions, especially about the present capital and the old one Langtabal (about three miles south of the former), it is not very rare, and is the only Oriole I ever saw there. I may perhaps from first to last have seen twenty and shot half that number. One of Godwin-Austen's people got one near Bishnoopoor and I got it there also, but further south and east at Moirang, Gagam, Soognoo, &c., I never saw it, the country being too wet and grassy, with too few trees and gardens to suit it.

A fine *male* measured:—Length, 10·1; expanse, 18·2; tail, 3·9; wing, 5·8; tarsus, 1·0; bill from gape, 1·46; weight, 2·55ozs.

Legs and feet dusky leaden; claws brown; bill brownish pink; irides bright crimson.

I have this species from N.-E. Cachar, but there is no other record of its occurrence anywhere in Assam, Sylhet or Cachar.

Blyth records this from Arrakan; it is rather common in Northern but rarer in Southern Pegu. In Tenasserim it is excessively rare, but still we have procured it from the extreme south to the extreme north, and Ramsay obtained it in Karenee.

472.—Oriolus melanocephalus, *Lin*.

I obtained one specimen of this near Jhiri ghat, but never saw it again in Manipur territory. I have it from N.-E. Cachar, and saw or shot it in many places in Cachar. In the slightly more elevated parts of Central Sylhet, from Balaganj eastwards, I found it common, and about Karimganj it was most abundant. I must have seen fifty in a two or three hours' walk along the

bamboo and betel-nut (areca) palm belt that fringes the Kuseara river for miles westward of Karimganj, and the whole place resounded with their clear whistled "*Y-U*" or "*Wye-yon*" call. I noticed here by the way several feeding actually on the ground in the tiny field patches on the slope of the river's banks.

From Northern Sylhet, too, I have received it, and from many places in Dibrugarh, and Godwin-Austen records it from the Khasi hills, whence I have *not* seen it. Beyond this I know nothing certain as to its distribution in Assam.

[This was the only species of Golden Oriole I met with in Dibrugarh, although a strict watch was kept. They are common all over the district, but I have never noticed them feeding on the ground as stated above.—J. R. C.]

Throughout British Burmah, except in the extreme south of Tenasserim, this species is widely diffused, and Ramsay obtained it in Karenee.

474.—Oriolus trailli, *Vig.*

Generally diffused throughout the forests of the Western and Eastern hills, from elevations of 3,000 to nearly 6,000 feet; never seen in the basin. They go about singly or in pairs, in the tops of the trees and have a rather pleasant whistled call.

A fine adult *male* measured:—Length, 11·0; expanse, 17·8; tail, 4·4; wing, 5·83; tarsus, 0·97; bill from gape, 1·4; weight, 2·78ozs.

Legs and feet pale leaden blue; soles yellowish hoary; bill a delicate pale lavender; irides pale orange.

This, though a perfect adult in plumage, is not an *old* adult, the breast and interscapulary region not having yet assumed the intensely deep, almost blackish, crimson that characterizes the very old birds.

I have this species from Shillong peak. Godwin-Austen also records it from the Khasi hills, and includes it in his Dafla hill list, but beyond this I know nothing of its distribution in Assam, Sylhet and Cachar.

[Not very rare in Dibrugarh. I shot an adult male:—Length, 10·50; expanse, 16·75; tail, 3·80; wing, 5·50; tarsus, 1·0; bill from gape, 1·42; weight, 3·10 ozs. Irides salmon yellow; legs, feet and base of claws plumbeous, rest of claws white; bill and eyelids bluish grey; food berries.

During my residence of seven years in Dibrugarh I saw about a dozen others. They are very wary birds.—J. R. C.]

Blyth records it from Arakan. Once for all I may remark that this is a very long province, including two very distinct faunas. That Blyth may have received it from some place in the Arakan *hills*, I do not doubt, but that it is at all generally diffused in Arakan I entirely disbelieve. I do not know of its occurrence in Pegu,* and in Tenasserim, so far as we know, it only occurs in the extreme north, *viz.*, in the Tonghoo and Karen hills. Ramsay procured it, I may add, in Karenee.

475.—Copsychus saularis, *Lin.*

This species is common in the Manipur basin, but I do not remember, nor have I noted ever having seen it either in the Eastern or Western hills.

The Manipur specimens are mostly very typical, almost the whole of the four outer tail-feathers white (a character, however, of little value), no dark centerings to the under wing-coverts, and the females, pale like Indian ones on breasts and backs.

This species is widely distributed in all suitable localities (of course it don't live in treeless grassy swamps) throughout Sylhet, Cachar and the Assam valley right up to and a little beyond Sadiya, and Godwin-Austen gives it from the Khasi hills, and I have it from Shillong. About the Garo and Naga hills I do not know.

[Common in Dibrugarh and Sibsagar, where it is oftener found in the more open country than in dense forests.—J. R. C.]

It is widely and generally diffused throughout British Burmah, but towards the extreme south of Tenasserim begins to merge into *C. musicus*, Raff.

476.—Cercotrichas macrura, *Gm.*

I saw this in the Jhiri level, but did not shoot it there, there were so many birds to attend to; further on I found it common between Kalanaga and Koombiron, but beyond the latter I never saw it anywhere in Manipur territory.

I have this from N.-E. Cachar and Joonkotollee in Dibrugarh, and Godwin-Austen records it from the Khasi hills, but this is all I as yet know of its distribution in Assam, Sylhet or Cachar.

[Fairly common in Dibrugarh in dense forest and bamboo jungle, where their peculiar grating note, which is always

* All specimens said to be from Tonghoo have been, I believe, obtained east of the Sittang, *viz.*, Northern Tenasserim.

uttered when alarmed, betrays them. They are permanent residents.—J. R. C.]

In British Burmah it occurs everywhere in suitable, *i.e.*, wooded, localities, up to moderate elevations, and Ramsay procured it in Karenee.

477.—Myiomela leucura, *Hodgs.*

Although far from common, I yet met with this in all the higher portions alike of the Eastern and Western hills that I visited.

The following are exact particulars of two males. Curiously enough I did not come across a single female :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	7·5	11·5	3·0	3·7	1·15	0·8	0·96 oz.
„ ...	7·3	11·4	3·0	3·75	1·03	0·82	0·86 „

Legs and feet black to blackish; soles grey; bill blackish brown to black, often paler at gape and base of lower mandible; irides deep brown.

I have this species from Shillong and one or two other places in the Khasi hills and also from N.-E. Cachar, and Godwin-Austen obtained it on Tomputu peak of the Dafla hills.

In British Burmah we only know of its occurrence at 3,500 feet and upwards in the higher Tenasserim hills. Ramsay procured it in Karenee.

481.—Pratincola caprata, *Lin.*

Never met with in the hills, but I saw it everywhere about the rice stubbles and banks, and hedges about the houses, in the basin. It is not, however, numerically abundant, and several days often elapsed without my seeing one.

These Manipur males have less white about them than any other specimen, I think, I have ever seen, scarcely more than the lower tail-coverts and the lesser and median upper tail-coverts. Just the tips of the flank feathers are white, and there are one or two white feathers generally (but not even this at times) about the vent. When these are compared with some of the Western birds (apparently, quite adults) with the entire rump, lower breast and abdomen also white, the difference is most striking; but I believe Mr. Sharpe is quite right in retaining all these varying forms, which grade into one another by imperceptible degrees in one species.

I have this species from N.-E. Cachar, and procured it myself near Karimganj in Sylhet, but beyond this there is

as yet no record of its occurrence in Assam, Sylhet or Cachar. Blyth records this from Arakan ; and it is common in suitable localities (open country) throughout Pegu and Northern and Central Tenasserim, but in Southern Tenasserim it is rare. Ramsay obtained this in Karenee at 3,500 feet.

483.—Pratincola maurus, *Pall.*

I only met with this in Manipur, first in the Kopum Thull and then in the basin. The great mass of the birds belong to the large, black, intense ferruginous-breasted, and entirely rufus under-surfaced race. Some of the males had wings slightly exceeding 3·15, but this is the maximum ; none reached 3·16. I measured a pair of these large birds, also one of the small ones, and contrast the measurements:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·95	9·6	2·6	3·13	1·05	0·75	0·55 oz.
♀ ...	5·75	9·2	2·3	2·91	0·97	0·7	0·48 ,,
♂ ...	5·3	8·3	1·9	2·6	0·89	0·7	0·41 ,,

(Of course in all the bill, legs and feet were black, and irides deep brown.)

Now the third was a small typical western form, but it was shot in the same place and at the same time as the other two, and it was the extraordinary contrast that the three birds *when in the flesh* presented that induced me to measure them. Moreover I shot a good many intermediate birds, so that I am more and more convinced of the correctness of my opinion that there are not really two species but only one variable one.

This species (as a rule the large form, but occasionally the small pale form and often intermediate forms) is *universally* distributed throughout the plains of Assam, Sylhet and Cachar, and Godwin-Austen records it from the Khasi hills.

[Common all over the open cultivated parts of the Dibrugarh and Sibsagar districts. Of twenty birds measured six were only 5·30 in length. These small birds were invariably of a paler colour than the larger ones. The earliest arrival was the 22nd August, and the latest shot was on the 8th April.—J. R. C.]

It is equally universally, though in many places more sparingly, distributed throughout all the provinces of British Burmah, where the country is open.

484.—Pratincola leucurus, *Bly.*

I did not see this species, at any rate not to recognise it, until I marched from Bishnoopoor to Moirang. All about the

Logtak lake and throughout the swampy, low-lying portions of the southern half of the basin it is very common. I found it generally shy and watchful, and even if it allowed you to approach within 35 or 40 yards, it would drop off its perch, and dart away unseen through the grass stems the moment any movement towards raising the gun was attempted. At the beginning of April they were all in pairs, and males and females, alike, were invariably perched near or at the top of some high bare grass stem, that, while its leaves had all been burnt, had itself, though singed and partly blackened, survived the general conflagration, by which nine-tenths of the high grass is purposely consumed as soon as it is dry enough in February and March. I am inclined to believe that the Sindh *P. leucurus* is even more different from the eastern form than is the western dry country *P. maurus* from its eastern form. Indeed I should not be surprised if hereafter the eastern form should prove to require specific separation.

The matter has yet to be worked out; there is a very great difference in the breeding and non-breeding plumages, but with a very large series from Sindh, and a still larger from Tipperah, Dacca and other places in Eastern Bengal, and about 40 specimens from Manipur, I have not one single specimen from eastwards, male or female, in breeding or non-breeding plumage, not separable at a glance from the true *leucurus** of Sindh. I find no intermediate forms. Males and females of the eastern race are alike larger and larger-billed, and the males are far more purely black, and the females far darker, than any Sindh bird I have ever seen. And as I said before I can find no intermediate links. I will not now propose a name, but I feel pretty certain that one will have to be applied when a better Sindh series can be compared. Almost all my Sindh birds were killed in January and the first half of February, and the few killed later are bad specimens, while, though I have two Tipperah and two or three other eastern specimens killed in January and February, the great bulk of these were killed between the middle of March and the middle of April, so that a close and strict comparison, such as would justify the creation of a new species in this variable genus, is not at present within my power.

Though I have this species from all over Eastern Bengal and as far west as Colgong, yet strange to say (though it must of course occur) I have no single record of it from Assam, Sylhet or Cachar.

---

* Blyth applied the name first to a specimen collected by Burnes in Sindh.

In British Burmah I as yet only know of its occurrence in Northern Pegu and the more northern portions of Tenasserim.

486.—Pratincola ferreus, *Hodgs.*

I never chanced to see this in the Western hills, but I found it sparingly distributed all over the central and southern portions of the basin, and quite plentiful on the Eastern hills, where at Aimole it was very abundant.

I met with this near Lakhipur (in the low hills east of that place) and have it from N.-E. Cachar, the Khasi hills and Joonkotollee in Dibrugarh, but this is all I know of its distribution in Assam, Sylhet or Cachar.

[Fairly common in the cold weather (I shot and measured 7 ♂ and 4 ♀) in Dibrugarh, where it keeps to bushy ground, such as tea gardens, and is seldom seen in the open paddy fields. The male utters a tiny whistling "tweet, tweet," canary-like note but weaker. This species is figured by Keulemans in "Contributions to Indian Ornithology, Lahore to Yarkand," edited by Messrs. Hume and Henderson. The males that I have seen were none of them as blue, and the females were decidedly of a reddish brown. They begin to arrive in the first week of November and leave by the 15th of March.—J. R. C.]

This species occurs in the Arakan hills and in Northern Pegu, though there it is, I believe, rare, and to Central and Northern Tenasserim it is a mere straggler.

487.—Oreicola jerdoni, *Bly.*

Never seen anywhere in the hills, but common all over the basin, and particularly so all about the suburbs of the capital. Indeed it is one of the commonest birds in Manipur. They are very tame and familiar and sit about singing their little song on the tips of high grass stems, particularly of grass hedges, alongside a stream or wet ditch. As no full reliable measurements of this species were on record, I measured many:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·3	8·7	2·73	2·7	0·89	0·67	0·41 oz.
,, ...	6·1	8·5	2·75	2·65	0·85	0·65	0·46 ,,
,, ...	6·3	8·6	2·7	2·6	0·9	0·65	0·4 ,,
,, ...	6·2	8·6	2·75	2·77	0·88	0·68	0·44 ,,
,, ...	6·2	8·6	2·7	2·7	0·86	0·7	0·44 ,,
,, ...	6·3	8·6	2·65	2·7	0·85	0·67	0·44 ,,
,, ...	6·4	8·5	2·8	2·7	0·89	0·65	0·45 ,,
♀ ...	6·1	8·4	2·7	2·63	0·85	0·67	0·41 ,,
,, ...	6·2	8·5	2·75	2·53	0·89	0·7	0·44 ,,
,, ...	6·1	8·4	2·6	2·5	0·87	0·7	0·48 ,,
,, ...	6·18	8·2	2·5	2·47	0·89	0·67	0·44 ,,
,, ..	5·9	8·4	2·75	2·65	0·85	0·67	0·39 ,,
,, ...	6·1	8·5	2·7	2·7	0·86	0·62	0·41 ,,
,, ...	6·2	8·1	2·5	2·45	0·93	0·71	0·41 ,,

I have measured series of fully a thousand species, but never one, I think, in which there was so little variation in size and weight as in this one.

I have this species from N.-E. Cachar, and Godwin-Austen records it from Chatak in North Sylhet (I never saw it myself in either district), but I have no other record as yet of its occurrence anywhere in Assam, Sylhet or Cachar.

[On several occasions in Dibrugarh I noticed a black and white bird with the habits of a Bush Chat and frequenting "Nul" grass on the banks of streams, but which could not be brought to bag on account of its wariness, and which I have no doubt was this species.—J. R. C.]

Blanford once obtained it near Bassein, but I know no other instance of its occurrence in British Burmah, though I dare say it does occur in lower South-Western Pegu and Arakan.

497.—Ruticilla rufiventris, *Vieill.*

I did not notice this anywhere in the hills or about the capital, but quite at the end of March and at the commencement of April I found a few about Sagam, Kokshin Koonoo, &c. Whether they had been confined to this south-eastern portion of the basin, or, as seems more likely, were passing through the basin on migration, just as I happened to be at these places, I cannot say. Two measured:—

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	...	6·4	10·4	2·5	3·3	0·97	0·63	0·61 oz.
„	...	6·3	10·6	2·55	3·5	1·05	0·72	0·72 „

Bill black, yellow at gape; legs and feet black or blackish; irides deep brown.

In these Manipur birds, in the males at any rate, three points struck me.

1*st.*—The quills and greater-coverts are a rather light uniform hair brown, contrasting markedly with the median and lesser wing-coverts, which are pure black.

2*nd.*—The feathers about the vent are nearly white, forming a distinct patch there.

3*rd.*—The feathers of the nape and interscapulary region when raised are found to be all conspicuously centered with greyish white.

All these points I find are indicated in our Western Indian birds, but they are so much more strongly marked in these eastern ones that the birds look somewhat different, and when I shot them I suspected that I had a new species.

I have this species from N.-E. Cachar and Northern Sylhet, from Shillong and Mouflong in the Khasi hills, and from Tippook

Khowang and Joonkotollee in the Dibrugarh district, and this is all I yet know of its distribution in Assam, Sylhet and Cachar.

[During the cold season a few are seen in the Dibrugarh district about the more open parts of the country, but never in dense jungle.—J. R. C.]

I am not aware that this species has been observed in any part of British Burmah.

498.—Ruticilla hodgsoni, *Moore.*

I found this species very abundant in the bed of the Limata on the 13th of February, but I never again noticed it in Manipur. It was frequenting the bare boulders of the wide bed of the, at that season, shrunken stream, and numerous as it seemed it was very shy, and despite all the pains I took in stalking it, I only succeeded in securing three specimens, of which I recorded the following particulars:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·6	10·1	2·9	3·4	0·9	0·63	0·65 oz.
♀ ...	6·15	9·6	2·4	3·2	0·93	0·7	0·53 ,,
,, ...	6·25	9·85	2·7	3·28	0·95	0·69	0·54 ,,

Legs, feet and bill black; gape yellow; soles hoary dusky; irides brown; eyelid feathers in the female white, forming a not very conspicuous eye-ring.

I have never seen this from any part of Assam, Sylhet or Cachar, but Godwin-Austen appears to have received it twice from the Eastern Naga hills, and includes it in his Dafla hill list. It does not extend, so far as I know, to British Burmah.

500.—Ruticilla aurorea, *Pall.*

I first (in Manipur) met with this in the Jhiri level, then in the valley of the Eerung, and later found it sparsely distributed over the central portion of the valley, shooting it in the capital itself, and its neighbourhood and Bishnoopoor. It was however a scarce bird, and almost always seen singly. I don't think I saw above a dozen from first to last, and I never met with it in the south of the basin or anywhere in the Eastern hills.

The following are particulars of three I measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·0	9·0	2·5	3·0	0·9	0·7	0·56 oz.
,, ...	6·0	9·3	2·4	2·9	0·92	0·63	0·53 ,,
♀ ...	6·15	9·1	2·4	2·8	0·94	0·65	0·54 ,,

Legs and feet black; bill blackish brown to black, yellow or yellowish at gape in the males, and sometimes on base of lower mandible also; irides deep brown.

I have this from Northern and North-Eastern Cachar, Northern Sylhet, Shillong, Sadiya and several other places in the Dibrugarh district. Godwin-Austen procured it in the Barak valley near its sources in the Naga hills, and he includes it in his Dafla hill list.

[This is the common Redstart of Dibrugarh. It is a cold-weather visitant, frequenting open country, vicinity of villages and tea gardens, and the secondary jungle that grows along the sides of the broader roads that run through forest. They are only seen in pairs when about to migrate in March. I have never heard them utter a note.—J. R. C.]

In British Burmah I only so far know of its occurrence near Thayetmyo.

503.—Ruticilla frontalis, *Vig.*

I never saw this in the Western hills or in the basin, but at Aimole and other places in the Eastern hills it was not very rare in the latter part of April. The following are details of some I have measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 6·25	10·2	2·75	3·45	0·89	0·68	0·61 oz.
,,	... 6·3	10·4	2·8	3·47	0·9	0·7	0·65 ,,
♀	... 6·12	10·0	2·7	3·25	0·9	0·7	0·67 ,,
,,	... 6·35	10·0	2·55	3·28	0·9	0·65	0·6 ,,

Legs and feet black; soles yellowish; bill black; gape yellow; irides deep brown; eyelid-ring in the females (no note of this in the males) white.

I have this from Shillong, and Godwin-Austen records it from North Cachar (I suppose from the hills), but this is all I know of its occurrence in Assam, Sylhet or Cachar. It is not known to extend to any part of British Burmah.

505.—Rhyacornis fuliginosus, *Vig.*

I found this in all the streams in the Western hills, in the Barak, Eerung and Limata, in which latter it is excessively common, and again in the Sengmai Turail, where and above where it divides the range between Aimole and Matchi.

The following are particulars of some I measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 5·8	9·5	2·1	3·1	0·9	0·61	0·75 oz.
,,	... 5·9	9·8	2·0	3·2	0·85	0·7	0·73 ,,
♀	... 5·2	9·0	1·9	2·8	0·85	0·63	0·62 ,,
,,	... 5·5	9·3	1·7	2·85	0·83	0·65	0·65 ,,

Legs and feet and claws black to deep brown; bill black irides brown (sometimes reddish) to deep brown.

I have this from N.-E. Cachar, Shillong and the Khasi hills, and Godwin-Austen procured it in the Dikrang valley of the Dafla hills, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[I saw a couple of males one day while trolling for mahseer up the "Tarap," a small hill stream that debouches into the plains from the Naga hills, a few miles from Makum in the Dibrugarh district. Along the Dehing river, which in parts of its course in the plains is bordered by hills, not a single specimen of this species is to be seen, even so high up as Beesah in the Kamptee country.—J. R. C.]

Blyth records this from Arakan and Thayetmyo, but I have never yet seen it from the latter place or from any part of British Burmah except the Arakan hills.

506.—Chimarrhornis leucocephalus, *Vig.*

Seen in the Western hills in the Eerung, and very common in the Limatak, where however it was very shy and wild, not allowing one to get openly within shot. I never saw it in the basin, nor did I see it in the few streams of the Eastern hills I visited.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	7·6	12·0	3·0	3·8	1·2	0·75	1·2 ozs.
„ ...	7·3	11·6	2·95	3·78	1·21	0·73	1·15 „
„ ...	7·4	11·7	2 88	3·7	1·19	0·8	1·0 „
♀ ...	7·5	12·2	3·1	3·95	1·23	0 79	1·2 „
„ ...	7·0	11·7	2·7	3·55	1·17	0·75	0·98 „

Legs, feet and bill black; irides deep brown.

I have this from Shillong and the Khasi hills, and Godwin-Austen records it from the Dikrang valley of the Dafla hills, but I have no further knowledge of its occurrence in Assam, Sylhet or Cachar.

[From Jaipur in the Dibrugarh district the low-outlying spurs of the Naga hills begin. In places these run right down to the "Dehing" river, and wherever these rocks jut into that stream these birds are to be found. The "Desang" river too above "Boshat," ten miles east of Jaipur, has also a rocky and sandy bottom, where these birds also are seen. Nearly every rapid is frequented by one or two of this species. They seem particularly down on *Henicurus immaculatus*, driving away any they see from their particular haunt. They are permanent residents.—J. R. C.]

It occurs in the Arakan hills, but I am not aware that it has been observed in either Pegu or Tenasserim.

From Shillong I have several specimens of 507.—*Larvivora superciliaris*, Jerd., but I never met with it in Manipur, nor

is there any other record of its occurrence anywhere in Assam, Sylhet or Cachar, nor does it extend to British Burmah.

507*bis*.—Larvivora cyane, *Pall.*

On the 24th of April, in a low forest-clad valley east of Aimole, I came across a party of these birds, and succeeded in shooting one. They must, I think, have been migrating, first, because where stationary they are always single or in pairs, never in parties; secondly, because, though I twice revisited the spot, I never saw one there again, nor did I ever meet with the species on any other occasion in Manipur. A male measured:—Length, 5·7; expanse, 9·1; tail, 2·03; wing, 3·02; tarsus, 1·1; bill from gape, 0·79; weight, 0·63oz. Legs and feet pale fleshy white; upper mandible blackish horny; gape and lower mandible (dusky at the extreme tip) bluish or livid white; irides blackish brown.

There is no record as yet of the occurrence of this species in Assam, Sylhet or Cachar, nor am I aware that it has been observed in either Arakan or the greater part of Pegu, but we procured it throughout the better wooded portions of Tenasserim, and Mr. Oates once obtained a specimen a little south of Pegu city.

508.—Nemura rufilata, *Hodgs.*

I procured a single specimen of this species, a female, high up, a little above Aimole, in the Eastern hills on the 14th of April. I saw the male, but failed to secure it. I saw another pair later at Matchi, and shot the male, but save on these two occasions I never met with it in Manipur.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 5·9	9·5	2·3	3·15	0·9	0·65	0·53 oz.
♀	... 5·7	9·3	2·3	3·1	0·9	0·65	0·5 „

Bill, legs and feet black, duller in the female; irides deep brown.

I have never seen this species from Assam, Sylhet or Cachar, but Godwin-Austen records it from the Khasi hills. It does not that I know of occur in British Burmah.

Godwin-Austen records 509.—*Nemura hyperythra*, Bly., from the Khasi hills, but I have no other record of its occurrence in Assam, Sylhet or Cachar, nor has it been observed, so far as I know, in any part of British Burmah.

511.—Tarsiger chryseus, *Hodgs.*

I shot a single specimen of this close to Tankool Hoondoong, but never again saw it in Manipur. This was a male, apparently, though it was in May, solitary. One of my men said he had seen it on the Limatol range of the Western hills, and this is very probable.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·0	8·25	2·25	2·7	1·1	0·71	0·62 oz.

Legs and feet brownish fleshy; upper mandible blackish, its edges and lower mandible bright golden yellow; irides deep brown.

I have this both from the Khasi hills and from Kohima in the Naga hills (it is strange Godwin-Austen never got it), but there is no other record of its occurrence in Assam, Sylhet or Cachar, and I do not think it has been observed as yet in any part of British Burmah.

512.—Calliope camtschatkensis, *Gm.*

The Nagas snared a specimen of this for me at Noongba in the Western hills, but I myself saw it nowhere in either these or the Eastern hills, but in the basin I shot six or seven at Buri-bazaar, Bishnoopoor, Kokshin Koolel, and Kokshin Koonoo. I saw it nowhere else and I shot every bird I saw, so that even in the basin it is scarce. I measured by some oversight only a single bird, a *male*:—Length, 6·5; expanse, 9·3; tail, 2·4; wing, 2·9; tarsus, 1·2; bill from gape, 0·8; weight, 0·77 oz.

Legs and feet livid or purplish fleshy; bill dusky, pale bluish at gape and base of lower mandible; irides brown.

I have this both from N.-E. Cachar and Shillong, but no one else has as yet recorded it from any part of Assam, Sylhet or Cachar.

In British Burmah we only know of its occurrence in Arakan, North-western and South-eastern Pegu, and in Northern Tenasserim; but Ramsay also procured it in Karenee.

I have another species, 513.—*Calliope pectoralis*, Gould., from Shillong, but I never met with this in Manipur, and except that Godwin-Austen procured it in the Dekrang valley of the Dafla hills, there is no other record of its occurrence in Assam, Sylhet or Cachar, nor does it, so far as we yet know, extend to any part of British Burmah.

514.—Cyanecula suecica, *Lin.*

Very sparingly distributed about the Manipur basin, and never seen in the hills on either side. I only preserved a couple, and I do not think I saw a dozen from first to last.

I met with this in various parts of Sylhet from Lukkhai to Kareem Gunje, and again in Cachar, and I have received it from N.-E. Cachar and from Joonkotollee, Dibrugarh, and this is all I know for certain of its occurrence in Assam, &c.

[Doubtless this species is not very rare in Dibrugarh during the cold weather, but being great skulks they are overlooked. The three specimens I got were shot while dodging about the pea rows in my garden.—J. R. C.]

It occurs in suitable localities throughout British Burmah, except in the southern portion of Tenasserim, to which I do not think it extends.

515*bis*.—Acrocephalus orientalis, *Tem. & Schl.*

This species was not very rare about the reeds of the Logtak lake, but I saw it nowhere else in Manipur, and I had such multitudes of birds to attend to there that unfortunately I only preserved a single specimen. This, however, is in fine plumage, and well marked.

There is no record as yet of the occurrence of this species or of the nearly allied *A. stentorius* anywhere in Assam, Sylhet or Cachar.

[I secured only one specimen in Dibrugarh, and that, a male, was shot in some reed jungle on the banks of the Desang river.—J. R. C.]

Blyth records *stentorius* from Arakan, and this is probably correct, though it is doubtful whether he distinguished between this and *orientalis*, since *both* occur in Central Pegu, but in Central and Southern Tenasserim it is *orientalis* that occurs.

In and about Balaganj, Fenchuganj and Karimganj in Central Sylhet, and between the latter and Silchar, and at the latter, I procured 516.—*Acrocephalus dumetorum*, Bly., but except that Godwin-Austen records it from Chatak in North Sylhet, there is no other record of its occurrence anywhere in Assam, Sylhet and Cachar, this being a kind of bird ordinary collectors fight shy of.

It extends *fide* Blyth to Arakan, and certainly occurs in many parts of Pegu, but I am not aware that it has yet been observed (though I should expect it to occur there) in Tenasserim.

517.—Acrocephalus agricolus, *Jerd.*

I only twice saw this species in Manipur, both times in high rice stubble in the neighbourhood of the Logtak lake, and I with great difficulty secured two of the birds I saw. They were in small parties, kept very close in cover, were flushed with great difficulty, took very short flights and became invisible the instant they dropped. It is certainly, I think, rare in Manipur. The two birds measured—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·55	7·0	2·2	2·24	0·85	0·63	0·32 oz.
„ ...	5·7	7·0	2·4	2·2	0·9	0·7	0·38 „

Tarsi dull fleshy; feet a little greyer and browner, say brownish fleshy; soles yellowish; upper mandible brown, pinkish towards nares; lower mandible pink or pale fleshy, brownish towards tip, whitish towards gape; irides light brownish yellow to light hazel.

I got this at Lukkhai and two or three places in Central Sylhet, and Godwin-Austen records it from Chatak in Northern Sylhet. I also met with it at Lakhipur and two or three other places in Central Cachar, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[I secured a couple in the Dibrugarh district in some damp bushy ground bordering a paddy field.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·50	6·50	2·10	2·20	0·80	0·64	0·35 oz.
„ ...	5·52	6·50	2·20	2·20	0·80	0·65	0·35 „

Bill above dusky, below fleshy; gape fleshy; mouth inside yellowish; legs and feet fleshy brown; soles dingy yellow; irides bright olive brown; food, small beetles, ants and tiny insects. They are terrible skulks.—J. R. C.]

It has not been sent as yet from Arakan (though it is certain to occur there), but it is common in the Pegu plains, and occurs in the Thatone plains of Tenasserim, though apparently only as a rather rare straggler.

517*ter*.—Acrocephalus bistrigeiceps, *Swinh.*

Whilst beating the grass at Phalel for my new *Perdicula* (S. F., IX, 467), I once or twice caught sight of a mite of a bird, darting between the stems, and when on the second day I ceased to find any more quail, I thought I would try and shoot one of these unknown birdlets. This when I took in hand to do it proved by no means an easy task. First it was very hard to find them; it was a good hour before I roused one, and then I only had a bad snap shot. However,

I was so far lucky that I dropped this first bird which turned out to be the present species, but I never got a second either on that day or subsequently. They may not perhaps have been rare, but I had no time to look for these skulks and never noticed this species on any other occasion.

A *male*:—Length, 5·3; expanse, 6·82; tail, 2·1; wing, 2·2; tarsus, 0·8; bill from gape, 0·65; weight, 0·27oz.

Legs and feet yellowish-brown with a fleshy tinge, yellower on toes and soles and browner on claws; upper mandible and tip of lower dusky brown; rest of lower mandible and gape fleshy yellow; irides dark brown.

There is no record of the occurrence of this species anywhere in Assam, Sylhet and Cachar, and even in British Burmah all we know is that we procured it near Tavoy in Tenasserim, and that Oates has found it very common in the cold season near Kyeikpadein a little south of the town of Pegu.

518.—Arundinax ædon, *Pall.*

In and about Chundrakong, in the eastern portion of the Manipur basin, near the bases of the hills, this was by no means rare, and yet strange to say I never once saw it anywhere else in Manipur. I suppose I must have overlooked it, but the fact remains that at Chundrakong I saw a dozen and shot three, and at no other place did I see a single bird of this species from first to last.

I have this from the Khasi hills and from Joonkotollee in the Dibrugarh district, and Godwin-Austen records it from Chatak in Northern Cachar, but beyond this I have no certain knowledge of its distribution in Assam, Sylhet and Cachar.

[One specimen only, and that a male, was shot by me in Dibrugarh. No doubt more would have turned up had I looked out for them, but the ground they affect is, in Assam, so frequently found to be treacherous morasses, where one sinks to his middle, that I gave them up as a bad job.—J. R. C.]

In Tenasserim it is generally distributed in the more open portions of the province. In Pegu I only know of its occurrence near Prome and the south of this, and Blyth records it from Arakan.

Assam has another species that I never met with in Manipur, and which I now, for the first time I believe, record as pertaining to the British Asian Avifauna, and that is 518*quat.*—*Homochlamys canturiens*, Swinh., which I procured

a few miles north-east of Lakhipur, in Cachar. No one hardly could pretend to be certain of birds of this group, without comparison, but fortunately Mr. Swinhoe sent me at different times no less than four specimens of this species, *viz.*—

(1) Fungshan, Formosa, January, 1861.
(2) Amoy, China, March, 1861.
(3) ♀ Macao, 19th March, 1860.
(4) ♂ Formosa, February, 1866.

And my bird is absolutely identical with Chinese ones, save only that its upper surface has a more ruddy tone.

Blyth placed this as *Arundinax*. Swinhoe at first adopted this generic name, then changed it to *Lusciniopsis*, then to *Calamodyta*, and then he made a new genus for it, *cantans* and *minuta*, which he thus defined: "Bill moderate, with long lunate aperture to nostril, legs and feet large and strong, with powerful hind toe and claw; wings rounded with first four quills graduated, the fourth being the longest; tail moderately graduate." (P. Z. S., 1871, 353.) But in the meantime Salvadori (*Att. Acc.* Sc. di Tor. V, 511, 1870) had also created a new genus for the bird and renamed it as *Homochlamys luscinia*. Swinhoe's specific name stands, but Salvadori's generic name has precedence, and for the moment we may retain this, but Swinhoe himself went back ultimately to *Arundinax*, and comparing the two, *œdon* and *canturiens*, it is very doubtful to me whether they should be separated generically. *Homochlamys* has the same bill, with the same three very stout rictal bristles, but it has a somewhat shorter 3rd primary, a shorter and less graduated tail, and stouter legs and feet, all these proportionally of course.

Swinhoe at one time or another gave the following particulars of this species:—

Length, 6·5, 6·6; wing, 2·8, 3·0; tail, 2·9, 3·0; tarsus, 1·1; bill from gape, 0·8; bill at front, 0·5; mid-toe, 0·85; hind toe, 0·65.

Bill wood-brown, with the edge of the upper and whole of lower mandible pale flesh colour; inside of mouth chrome yellow; iris hazel; legs pale-brownish flesh colour; claws wood-brown, paling on the soles.

Forehead and crown of the head rufous brown; upper parts and tail olive brown; wings hair brown, with yellowish-brown margins; throat, under wing-coverts and belly white; eye-streak and remaining under parts ochreous grey.

"This bush-loving species, common from Canton to Shanghai, is also found in Formosa. It creeps about the hedges much

in the manner of *Sylvia cinerea* of Europe. Its song is a short trilling note, sweet, but never varied. At Shanghai it was abundant, as also at Hong-Kong and Macao. In the two last places nearly every hedge or cluster of bushes had its *L. canturiens* creeping about unseen and trolling out its abrupt song. When approached in the midst of its leafy retreat it sounds its alarm note, a harsh "*charr*," and if hard pressed quietly slips out of the other side of the bush and flits to a further cover. The gizzard of one shot contained diptera and larvæ."

The following are the dimensions from the skins of my Chinese and Cachar birds :—

		Wing.	*Tail from insertion of feathers.*	*Tarsus.*	*Bill from frontal bone.*
(1)	Fungshan ...	2·9	2·9	1·07	0·72
(2)	Amoy ...	2·95	2·8	1·05	0·7
(3)	Macao ...	2·94	3·1	1·13	0·71
(4)	Formosa ...	2·98	3·0	1·06	0·7
(5)	Cachar ...	2·96	3·1	1·06	0·7

In all the fourth and fifth primaries subequal and longest, sometimes exactly equal, and sometimes one or other a hair's breadth the longest; similar minute variations in the other quills, but they average, the third, 0·15, the second, 0·59, and the first, 1·3 shorter than the longest.

Shortest or exterior tail-feathers from barely 0·5 to fully 0·7 shorter than longest or central ones.

Though not very conspicuous or even apparent in skins until the feathers are lifted, there is a tolerably broad supercilium from near the nares, over the lores, eyes and part of the ear-coverts, the anterior portion buffy, the posterior white. The lores are brown or dusky grey, as I make out in the males, and sullied fulvous white in the females, but this difference may not be sexual, though my specimens lead to this idea.

The chin, throat and middle of abdomen are white; the breast and sides overlaid with a dingy brownish fulvous, and the flanks, vent, and lower tail-coverts a dingy brownish fulvous; shoulder of wing-lining and axillaries and inner margins of quills, white, pure or slightly creamy; the upper surface in the Chinese birds, as described by Swinhoe, but in the Cachar bird, though the cap is much reddest, the rest of the upper surface is also a distinctly rufescent brown, far more ruddy than the Chinese birds, though killed at the same period as some of them. In every other respect the birds are identical. I notice that in the best specimens there is an indication of dusky or brown lore band being continued behind the eye.

Beyond this specimen from Cachar above referred to there is no other record, so far as I know, of the occurrence of this species in Assam, Sylhet, Cachar or Burmah, but I have no doubt that it will hereafter prove to occur in all.

But besides this there are a number of small obscure skulking species which occur in Assam, none of which I procured in Manipur. I do not doubt that most of them occur there, but they are birds that require very close collecting, and for that in this first preliminary attack on the birds of Manipur I had no time. It was all I could do to shoot and preserve specimens of all the species that I met with without close search.

First of these I may note 519.—*Schœnicola affinis*, Hodgs., of which I have many specimens form Shillong and which Godwin-Austen records from Sylhet on the banks of the Megna (an odd place for this hill-loving species), but of the distribution of which in Assam, Sylhet and Cachar I know nothing further, and which is so far not known to extend to British Burmah.

Second, 519*bis*.—*Schœnicola mandellii*, Brooks (quite distinct from *Tribura luteiventris*), of which I have two specimens from Shillong, but of the occurrence of which in Assam, Sylhet, Cachar or British Burmah I have no further knowledge.

Third, there is 520.—*Locustella straminea*, Severtz.=*L. hendersoni*, Cass., *apud nos*, which Godwin-Austen records from Cherrapoonjee, and of the occurrence of which also in Assam, Sylhet or Cachar I know nothing further.

Then, fourth, I have 522.—*Tribura luteiventris*, Hodgs., from Shillong and the Khasi hills, but am not aware that it has as yet been recorded from elsewhere in Assam, Sylhet or Cachar, or from any part of British Burmah.

Again, fifth, there is 524.—*Schœnicola flaviventris*, Hodgs., recorded by Godwin-Austen from the Khasi hills, but not known as yet to have occurred elsewhere within our present limits.

Then, sixth, 525.—*Phylloscopus fuliginiventris*, Hodgs., obtained at Sadiya by some of Godwin-Austen's survey

party, but not yet recorded from elswhere within these limits.

Seventh, we have 526.—*Schœnicola fortipes*, Hodgs., from Shillong and the Khasi and Naga hills, but which I do not know to have been as yet observed elsewhere in Assam, Sylhet, Cachar or in British Burmah, though Ramsay obtained what I consider to be the young of this species (*Neornis assimilis*) in Karenee.

Eighth, I may note 527*bis*.—*Horeites pallidus*,* Brooks, also from Shillong, of the occurrence of which likewise in any of these districts and provinces no other record I believe exists.

530.—Orthotomus sutorius, *Penn.*

I did not notice this anywhere in the hills, but in the valley generally it is not rare, fluttering and hopping restlessly about the shrubs and bamboos in gardens and hedgerows. About the lanes of the capital it is excessively common, and I constantly shot it by mistake for *Prinia rufula*. It is very hard to distinguish these tiny birds, only dimly seen, dodging about the leafy recesses of bamboo clumps and thick shrubs and trees.

I have this from all parts of the valley of Assam to beyond Sadiya, from many places in Sylhet and Cachar, and from the Garo and Khasi hills. From the Naga hills I have not seen it.

[Common about villages, tea gardens, and thin tree and scrub jungle in the Dibrugarh district. It is a permanent resident.—J. R. C.]

It is generally distributed throughout the more open country of British Burmah in suitable localities.

Godwin-Austen records 530*bis*.—*Orthotomus atrigularis*, Tem., both from Shushang at the base of the Garo hills, and from the forests of the Dunsiri near Dimapur in the Naga hills, but I know nothing further as to its occurrence in Assam, Sylhet or Cachar. I have not seen it from Arakan or Northern Pegu, but it occurs in Southern Pegu and pretty well (of course in suitable localities) throughout Tenasserim.

* This is one of the species Mr. Seebohm wrongly lumps with *Horeites fortipes*, but there is some excuse for *this*, but it is simply *laughable* to see *H. brunnescens* also lumped with *fortipes*, from which it is more different than is a jackdaw from a carrion crow. When about lumping Mr. Seebohm might have thrown in the very marked *Tribura erythrogenys* which he seems to have omitted altogether.

531.—Orthotomus coronatus, *Jerd. & Bly.*

I believe I saw this species on the Limatol range of the Western hills, but I only procured it on the higher portions of the Eastern hills, where it was pretty common.

The call of this species is harsh, grating and unmusical, and far louder than from the size of the bird could ever have been expected.

A *male* measured:—Length, 4·85; expanse, 5·8; tail, 1·8; wing, 1·85; tarsus, 0·76; bill from gape, 0·65; weight, 0·21oz. Tarsi brown; feet pale yellowish brown; bill blackish, pale yellowish brown on gonys and lower edges of rami of lower mandible; irides grey brown, tinged with red.

I have this species from Joonkotollee in the Dibrugarh district, and Godwin-Austen records it from Cherrapoonjee, but beyond this I know nothing certain as to its distribution in Assam, Sylhet or Cachar.

[A male shot in the Dibrugarh district on the 20th November measured:—Length, 4·80; expanse, 5·40; tail, 1·80; wing, 1·85; tarsus, 0·75; bill from gape, 0·75; weight, 0·20oz. Bill above dusky, below paler, tinged yellow at base and gape; legs and feet fleshy yellow. This bird was shot in some brushwood on the border of a village, and although I never again noticed any, they are probably pretty common.—J. R. C.]

In Burmah I only know of it on the highest hills of Central Tenasserim, but Ramsay also procured it on the Tsankoo hills at 3,000 feet.

532.—Prinia flaviventris, *Deless.*

I never met with this in either the Eastern or Western hills, except in the Kopum Thull, a level basin, some old lake's bed, precisely analogous to the Manipur level. Throughout this latter it was generally distributed in suitable localities, it being essentially a bird of swamps and jheels, wet ditches or flooded land, where there is high grass or scrub to creep about in; for these birds are great skulks, never, apparently, willingly showing themselves, except perhaps in the early mornings and towards evening, when they will rarely mount to the summit of some lofty grass stem and twitter out their little feeble song, as a rule creeping about through the hedges and long grass near the ground, so that one rarely knows what they are till one has shot them.

At different times a good many remarks have been made about the supercilium in this species. The simple fact is that all over the country the great majority have it in the

cold weather, while none have it in the summer; it is seasonal as I explained in the case of the *Suyas*, and, as I shall hereafter show, in the case of many, if not all, of the *Prinias*.

I give particulars of two males killed on the 13th March, both still showing a dingy supercilium (in December and January birds it is very white and pure). I note the date because the colour of the soft parts also change with the season :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 6·1	5·9	3·2	1·8	0·8	0·57	0·25 oz.
„	... 6·0	5·7	3·15	1·8	0·8	0·52	0·24 „

Legs and feet fleshy buff; claws browner; bill entirely black; irides yellow with an orange tinge.

This species seems to be universally distributed in all suitable localities throughout the plains portion of Assam, Sylhet and Cachar.

[This species is common in all the "pathars" where these are uncultivated and covered with a coarse kind of grass. During the breeding season (the rains) the inside of the mouth becomes black, and this is the case with all the species of *Prinias* I have shot. They are difficult birds to preserve, as they generally are blown to pieces, and others again are never retrieved, being lost amongst the dense cover they frequent.—J. R. C.]

It is equally widely spread throughout British Burmah, but there are here wide tracts, hills or dry plains where it is unknown, and it is only in the south of Arakan, in Southern Pegu and Southern Tenasserim, so far as I know, that it is at all common.

In Assam we find also 534.—*Prinia socialis*, Sykes, or rather a bird intermediate in size between this, the Southern Indian form, and 535.—*P. stewarti*, Bly., the dry up-country race. I have it only from Shillong, but Godwin-Austen seems to have got it in the East Naga hills, and found it common in the Darrang district, in the shorter grass near the bases of the Dafla hills from the Burrie river to the Bishnath plain. I have no further record of its distribution in Assam, Sylhet or Cachar, nor do I know that it extends to any part of British Burmah.

538.—Prinia hodgsoni, *Bly.* (1844).

When I first began shooting in the Manipur valley, in February I found *P. rufula*, God.-Aust., very common, but somewhat

troublesome to shoot, as it keeps much to the centre of bamboo clumps and the heart of hedgerows. They show themselves much oftener than *P. flaviventris*, but they are very restless little mites, never hardly keeping still for two seconds, and rarely affording a fair shot.

These birds looked very familiar to me, but I was here in the home of the type of *rufula*, and I shot them steadily, and measured several with the following results:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 5·1	5·85	2·25	1·8	0·8	0·46	0·21 oz.
♂	... 4·8	6·0	2·2	1·76	0·76	0·5	0·23 ,,
♂	... 5·3	5·8	2·45	1·82	0·72	0·5	0·21 ,,
♀	... 4·8	5·5	2·0	1·7	0·75	0·5	0·21 ,,
♀	... 4·9	6·0	2·1	1·78	0·7	0·46	0·22 ,,

Legs and feet buffy fleshy, pale brownish ochre, pale brownish fleshy yellow, and fleshy buff; claws a darker or lighter brown; bill black; irides yellow, tinged with orange, to bright orange yellow.

Dimensions and colours of soft parts (barring the misprint of corneous for carneous), agree perfectly with the description of the type, and so does the plumage, only G. A. omits to notice that, in the fresh bird, there is an indistinct, or at any rate inconspicuous, greyish white line from the nares over the lores and eyes, and that the tibial plumes are brownish rusty.

In April I began to get birds very grey on the breast and beginning to look *hodgsoni*-like, but in May and June there was nothing but typical *hodgsoni* to be met with.

Returning to our museum, I find that I have lots of *rufula* and of *hodgsoni* both from the Dibrugarh district and from Shillong, but all the *rufulas* are cold season, all the *hodgsoni* summer-killed specimens.

But further when at Muddapur in Lower Bengal, Mr. Brooks kindly shot and preserved for me about 100 specimens of *P. hodgsoni*, shooting one, two or three every week right through the year, and turning up now these specimens I find that all his cold-weather *hodgsoni* are *rufula*, identical with Manipur birds; and going further I find cold-weather *hodgsoni* from all over the country precisely identical with Manipur *rufula*.

But this is not all: this *rufula* is the bird identified for me, and Brooks by Jerdon, as *P. gracilis*, and universally so designated by all modern Indian ornithologists of whom I know anything. Godwin-Austen, it is true, says that *P. gracilis*, Franklin, has a marked pale rufous forehead, but neither Franklin, Blyth nor Jerdon said anything of this, and as a fact it is almost confined to Central Indian specimens,

and is due to their hunting insects in certain flowers and getting the foreheads coloured by the pollen, as may be seen, not only in this species but in twenty others of the small insect-hunters from those localities.

I do not yet say that the true *gracilis* of Franklin (1831) is the cold-weather plumage of *hodgsoni* (I have a *Prinia* which I suspect to be Franklin's bird), but only that this is what the *gracilis* of Blyth, Jerdon and almost all modern Indian ornithologists really is.

It is absolutely certain that *rufula* is only the cold-weather plumage of *hodgsoni*, but I have to add that the young assume nearly the winter plumage as their first dress, so that though you can never get a *hodgsoni* in the winter, you do get young *gracilis* or *rufula* in July, August and September.

I may note that in this species the bills vary a good deal, not only in colour according to season (as do the legs also), but also according to age, sex, and I think individuals. Now that the identity of *hodgsoni*, *rufula*, and *gracilis* (as at present accepted) is clear, we find a solution of the puzzle referred to, S. F., VI, 348.

I only once saw this out of the basin, and that was in the Eerung valley in the Western hills, where (8th February) I killed a young female, of which the following are the details:—Length, 5·0; expanse, 5·5; tail, 2·4; wing, 1·7; tarsus, 0·75; bill from gape, 0·53 (!); weight, 0·21oz. Legs and feet pale brownish fleshy; upper mandible and tip of lower brown; rest of the latter whitish horny; irides very pale yellow. This is like the winter plumage, but altogether somewhat brighter and more rufous on head, tail and wings, the whole visible portion of the closed wings being a clear light chestnut. Though very like the winter plumage I might have suspected this to be distinct but for the many young birds shot along with their parents in the series preserved for me by Mr. Brooks.

I have this species from many places both in the Khasi hills and in the Dibrugarh district, and Godwin-Austen records it from the Naga hills, but I know nothing further of its distribution (probably very general) in Assam, Sylhet or Cachar.

[This species is common too in Dibrugarh, frequenting swampy and grassy "pathars."—J. R. C.]

This species occurs in both Northern and Southern Pegu, and Northern Tenasserim, and was obtained by Ramsay in Karenee.

From Joonkotollee in Dibrugarh I have 538*bis*.—*Prinia beavani*, Wald. I did not meet with this in Manipur, but

Godwin-Austen procured it, I gather, somewhere in the Eastern hills. It is true he identified his bird as *P. rufescens*, Bly. (which name has precedence), but I myself have little doubt that, as Blyth himself contended, the two birds are identical (though the names represent different stages of plumage), as is also, I suspect, *P. superciliaris*, Salvad.

We have no other record as yet of the occurrence of this species in Assam, Sylhet or Cachar, but it is common throughout Tenasserim in all suitable localities, and occurs both in Pegu and Arakan, though it is probably rarer in the latter.

[This species is not so common in Dibrugarh as the last.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ 23-1-80	... 4·60	5·20	2·15	1·80	0·73	0·50	0·25 oz.
♂ 7-8-80	... 4·55	4·50	1·80	1·70	0·80	0·58	0·25 „
♂ 20-11-0	... 4·85	5·20	2·25	1·80	0·75	0·55	0·32 „

Irides reddish amber; legs and feet fleshy yellow; bill black; eyelids reddish.—J. R. C.]

539.—Cisticola cursitans, *Frankl.*

I had already pointed out (S. F., V, 91) that *C. manipurensis*, G.-Aust., was only the cold-weather plumage of this species, but being in Manipur, where it is very common throughout the basin (I never observed it in the hills), I determined to make assurance doubly sure, and I shot an immense series. Many of these were *fac similes* of the specimen so artistically figured by Godwin-Austen, but all of these I was able to match exactly with specimens killed at the same time of year in various parts of India as far west as Kelat.

I have this from the Khasi hills and from several places in the Dibrugarh district, and I met with it continually all across Sylhet and Cachar, from Lukhai at the south-west corner of the former to beyond Lakhipur near the north-east end of the latter, but beyond this I have no certain knowledge of its distribution in Assam, Sylhet or Cachar.

Throughout the level grass and paddy lands of British Burmah this species is common, but there are in all the provinces, and specially in Tenasserim, huge tracts where, the country being unsuited to it, it is never seen.

541.—Cisticola tytleri, *Bly.*

I retain the name *tytleri* as already explained (X, p. 219 *n.*) for the present, though still unable to point to the exact place where Blyth published the name, because Tytler's types show

that he used the name at least three years before Swinhoe's name *volitans* was conferred.

This species is not common at Manipur, or at any rate I very seldom saw it. I shot two young males at Sagam and one adult male near the base of the Eastern hills below Tankool Hoondoong.

Long ago (S. F., V, 350) I suggested that the *C. melanocephala*, Anders., *C. ruficollis*, Walden, was only the female of this species. I have now nine *tytleri*, all males, sexed by dissection, and *five* females, all *melanocephala*.

The two young males (killed 20th March) just moulting into full plumage show that these are like the adult female. These two birds have the heads nearly the uniform pale ochre, but each has two or three feathers about the forehead, similar to those of *melanocephala*, and these are clearly old feathers, while the ochre ones are new, as many are still rolled up in the pellicle.

If any one doubts still, let him consult what my friend Mr. Oates has written (X, p. 220), and he will find that that gentleman, from independent study where the birds are common, confirms my view. Let him remember that Godwin-Austen got both forms in Manipur, I both forms from Dibrugarh, killed in the same field at the same time, that both forms have been procured at Dacca, and that Oates got both forms at Kyekpadein, and that every *tytleri* yet sexed carefully by dissection has proved to be male, and every *melanocephala* female, though we *may* expect from what the two immature males from Sagam teach us to get hereafter some *young* males in the *melanocephala* garb.

We have this, as already mentioned, from near Sadiya, and Godwin-Austen includes it in his Dafla hill list, but though it is probably widely distributed throughout this area, this is all I know for certain of its distribution in Assam, Sylhet or Cachar. It is very abundant in parts of Eastern Pegu, but as yet it has not, that I know of, been observed in any other part of British Burmah.

542.—Graminicola bengalensis, *Jerd.*

I found this species common about patches of low grass all about the central and southern portions of the Manipur basin, and Godwin-Austen records it from the head of the Barak valley, Manipur.

As Godwin-Austen remarks it is hard to bag, but it offers very pretty shooting with half a dram of powder and quarter of an ounce dust shot. With careful close beating in the small patches

of dry low grass (say two to three feet high) in which I chiefly saw it, you can always flush it once, and then you have from two to five seconds in which to knock it down before it vanishes for ever, for as a rule they will not rise twice. It is a mere knack killing them, and I missed or rather was too slow for the majority at first, but I soon came to be able to make quite certain of them by always standing with my gun to the shoulder, cocked and finger on trigger and in readiness to fire instantaneously.

Jerdon's measurements, colours of soft parts, &c., are not satisfactory, and the plumage too is very variable.

It is curious that in the very large series I preserved there are only two females, and unfortunately I measured only one of these :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 7·0	7·2	3·2	2·25	0·95	0·6	0·52 oz.
,,	... 7·3	7·8	3·8	2·35	0·9	0·61	0·58 ,,
,,	... 6·8	7·1	3·25	2·25	0·93	0·7	0·54 ,,
,,	... 6·25	6·75	2·65	2·15	0·9	0·59	0·48 ,,
,,	... 6·5	7·0	2·9	2·25	0·95	0·65	0·54 ,,
♀	... 6·0	6·75	2·53	2·1	0·88	0·6	0·46 ,,

The fourth male, and the female also, I *think*, are not quite adult.

The legs, feet and claws are a very delicate fleshy pink, at times with a slight brownish tinge; the upper mandible is deep to blackish brown, sometimes paling at the extreme tip, the lower pale horny pink; irides yellowish to reddish brown, to almost orange.

We have yet to work out thoroughly the plumage of this species, which varies a good deal in tint even in birds shot at the same season.

The whole of the upper parts of the body (excluding the rump), including the sides of the neck and upper tail-coverts, are black, or very nearly so; all the feathers of the head fringed in the cold season with brownish rusty, paler or darker, richer or duller in tint in various specimens. In June these pale fringes or margins have almost disappeared, and what remains of them have bleached almost white. The feathers of the sides of the neck, and generally of the nape also, are, even in the cold weather, fringed with *white*, and sometimes this white fringe extends, as in a February specimen before me, to the whole interscapulary region. It seems generally to do so in the June specimens, but in the cold weather, as a rule, the entire back and upper tail-coverts are fringed with a ferruginous buff, very deep-coloured in December, but growing paler as the spring advances. Nearly

the whole visible portions of the closed wings (except the terminal portions of the primaries, which are a pale grey brown, and the broad centres of the tertiaries and a few streaks on the coverts, all of which are deep brown) and the rump are a rich ferruginous buff in the cold season, fading much by June, when, by the disappearance of much of the margins, black shaft lines become visible even on the rump, while the upper tail-coverts are nearly wholly black, at any rate in some specimens. The tail is in the cold weather a deep brown, obsoletely barred, all but the central pair conspicuously tipped with white, and a trace of this on the central ones, and the white extending a little way up the outer web of the outermost feather, and with both webs of the central and the outer webs in the lateral feathers, strongly suffused for from three-quarter to half of their lengths with ferruginous buff, brightest at the extreme margins and near the bases of the feathers; but in June specimens the brown has paled somewhat, the white tippings have disappeared wholly, or nearly so, from all but the shortest lateral feathers, and the rich ferruginous buff has faded to a pale brown, or brownish grey, sometimes with, sometimes without, a faint fulvous tinge.

The lores seem to be always a sullied, greyish or creamy or pale fulvous white; the ear-coverts very pale fulvous, deepening towards their tips. Sometimes, irrespective (at least so I conclude from the specimens before me) of season or sex, there is a nearly pure white line from the nares over the lores and eyes, and sometimes a line of feathers behind this over the ear-coverts are white fringed. Generally the line is traceable immediately over the eye, if nowhere else.

The chin, throat, breast and abdomen pure silky white occasionally, more often a little sullied or very faintly creamy; sides, flanks, tibial plumes and lower tail-coverts buff, more or less ferruginous or rusty, darker and more decided, or paler and more washed out, primarily according to season (this colour fading, as the year advances, like the rest), but, secondarily, according to the individual several males killed on the same day in March varying much in tint on these parts.

The lower-tail coverts have deep brown shaft stripes, but these are scarcely noticeable in cold-weather specimens, though conspicuous in June-killed birds; edge of the wing always nearly white; wing-lining and axillaries pale buff in winter, faintly creamy white to white in summer. This

account is, of course, incomplete, because I have no specimens killed later than the 6th of June, or earlier than the 28th of December, but still it may help towards a knowledge of the changes of plumage this species goes through.

I met with this in various parts of both Sylhet and Cachar in travelling across these districts. I have it from N.-E. Cachar, as also from Sadiya and other places in the Dibrugarh district, and Godwin-Austen found it very abundant on the Bishnath plain. It does not, that I know of, extend to British Burmah.

Godwin-Austen obtained 543.—*Drymœca inornata*, Sykes (of which *D. longicaudata*, Tick., is the winter plumage), in the Khasi hills, and he includes it in his Dafla hill list; but I never saw it in Manipur, nor have I seen it myself from any part of Assam, nor, lastly, is there any other record of its occurrence in Assam, Sylhet or Cachar. I do not know of its occurrence in Burmah; Blyth no doubt records it from Arakan, but did he not fail to distinguish between *D. longicaudata* and *D. extensicauda*?

[Common in the Dibrugarh district, frequenting "burtanees" (high lands covered with long thatching grass), scrub jungle, and secondary jungle that has grown up on the sites of deserted villages.—J. R. C.]

544*quat.*—Drymœca extensicauda, *Swinh.*

Common enough in the long grass all over the Manipur basin.

A female shot 7th March (colours of soft parts vary with the season) measured:—

Length, 6·7; expanse, 6·3; tail, 3·5; wing, 1·98; tarsus, 0·85; bill from gape, 0·57; weight, 0·29oz.

Legs and feet fleshy pink, the feet tinged brownish; bill brown, pale horny fleshy at base of lower mandible; irides bright yellow.

I have no record as yet of the occurrence of this species in Assam, Sylhet or Cachar; but it occurs in *suitable* localities all over British Burmah.

I have never been able to make out Lord Walden's *D. blanfordi* from Tonghoo, but suspect that it is the immature bird of this species. I have one such that answers well to his description and dimensions.

547.—Suya crinigera, *Hodgs.*

I found this species common on the Eastern hills in May (when, of course, they were more or less completely in the

fuliginosa plumage, *vide* VII, 2), and I had procured one or two earlier in the basin.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 7·6	7·35	4·2	2·18	0·92	0·6	0·61 oz.
,,	... 7·95	7·4	4·35	2·27	0·96	0·6	0·59 ,,
♀	... 6·5	6·0	3·1	1·9	0·85	0·57	0·41 ,,

Legs and feet fleshy pink; bill black in the males (May); irides orange; bill (in the female early in April and she not quite mature as proved by the irides), blackish on upper mandible; gape and lower mandible pale fleshy; irides bright golden brown.

I did not happen to notice it in the Western hills, though it doubtless occurs there.

As to its distribution in Assam, Sylhet and Cachar, all I as yet know is that it is very common in the Khasi hills and about Shillong, whence I have a large series of specimens. In British Burmah, again, I only know of its occurrence in Northern Pegu in the immediate neighbourhood of Thayetmyo.

549*bis*.—Suya khasiana, *God.-Aust.*

I only found this high up in the Eastern hills, frequenting dense herbaceous undergrowth of Balsams and the like in forest. On the 11th of May I caught a female on her nest containing four slightly-incubated eggs. The nest was placed in a wild ginger plant, about two feet from the ground, in forest at the very summit of the Matchi hill.

The following are particulars of a pair I measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 7·3	6·2	4·0	1·98	0·93	0·57	0·4 oz.
♀	... 7·1	6·1	3·9	1·87	0·85	0·55	0·41 ,,

Male (*6th May*).—Legs and feet a red fleshy pink; claws pale brown; upper mandible blackish brown; lower, and gape, fleshy pink; irides pale orange yellow.

Female (*20th April*).—Legs and feet delicate fleshy pink; claws brownish; upper mandible dark brown; lower mandible and cutting edges of upper towards the point, pale fleshy pink; irides orange buff.

As yet I have not seen this species from anywhere in Assam, Sylhet or Cachar, except the Khasi hills in the higher portions of which it is extremely common, and the Naga hills near Kohima, whence poor Damant sent me a single speciman to identify. It does not that we know extend to British Burmah. For a discussion on this genus *vide* VII, 1, *et seq.*

From the Khasi hills I have 552.—*Neornis flavo-olivaceus*, Hodgs., but there is no other record of its occurrence in Assam,

Sylhet or Cachar, and in British Burmah I only know of its occurrence in Upper Pegu.

Then Godwin-Austen gives 552*bis*.—*Neornis assimilis*, Hodgs., from both Shillong and the Naga hills. I pointed out, S. F., VI, 351, that the birds thus identified by Jerdon, and one of them bearing Blyth's own label as *Drymœca brevicaudata*, were only immature 526.—*Schœnicola fortipes*, Hodgs. Mr. Seebohm, I see, now adopts this view in his Catalogue, so I fancy we may now suppress *N. assimilis*.

552*ter*.—Neornis albiventris, *God.-Aust.*

The original description of this supposed species is reproduced, S. F., V, 55. The type was obtained at Sengmai in the north-east of the Manipur basin.

I don't know what this bird is, and I very much doubt if it be a good species. Seebohm ignores it.

555.—Phylloscopus fuscatus, *Bly.*

This was the very first bird I shot in Manipur ; I killed it on the bank of the Jhiri, before I got out of the boat in which I crossed. I saw several more in the Jhiri level. I did not notice it in the Western hills, but found it common all over the Manipur basin, and shot one on the 2nd of May at fully 5,500 feet elevation on the Eastern hills close to Matchi.

This was the only *Phylloscopus* that could be called common in any part of Manipur ; the rest were very scarce, only seen once or twice, and only procured at all by reason of the persistence with which I hunted after them.

I measured, &c., three *fuscatus* :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 5·2	7·4	2·15	2·26	0·9	0·49	0·34 oz.
,,	... 5·0	7·3	2·0	2·42	0·87	0·53	0·31 ,,
♀	... 4·8	7·1	1·8	2·3	0·85	0·52	0·35 ,,

(1) Legs and feet brown, darker on feet ; bill dark brown, yellowish horny at base of lower mandible ; irides brown.

(2) Front of tarsi pale fleshy brown ; back of ditto, feet and soles pale yellow ; upper mandible dull brown ; lower mandible, except tip and gape, pale horny whitish ; irides brown.

(3) Legs, feet and claws yellowish olive ; upper mandible very dark brown ; tip of lower mandible pale brown ; rest of lower mandible and gape yellow ; irides dark brown.

This species seemed common in the Sylhet and Cachar districts, wherever I went, and Godwin-Austen got it at

Chatak and Bholaganj in Northern Sylhet, and I have it from Northern and North-Eastern Cachar; also from Shillong and other places in the Khasi hills, from Gauhatti, and from Sadiya and other places in the Dibrugarh district; and Godwin-Austen procured it in the woods of the Terai below the Dafla hills.

[Occurs as a seasonal visitant, being very common in Dibrugarh, where it is never seen in dense forest, but about villages, cultivation, hedgerows, and tea gardens. They arrive about the middle of September, and leave in all April.—J. R. C.]

This species is common in Arakan, and occurs in suitable localities all over Pegu, and in Tenasserim (where, however, it is scarcer) from Tavoy northwards.

556.—Phylloscopus magnirostris, *Blyth.*

I shot a single specimen of this (14th February) on the Limatol range of the Western hills, about half way down the slope, and I never procured and do not think I ever saw it again.

Male.—Length, 5·3; expanse, 8·3; tail, 2·05; wing, 2·65; tarsus, 0·73; bill from gape, 0·63; weight, 0·42oz. Legs, feet and claws pale plumbeous, greenish on the two latter; upper and tip of lower mandible dark brown; rest of lower mandible and gape yellowish fleshy; irides deep brown.

I have this species from Shillong, but have no other record of its occurrence in Assam, Sylhet or Cachar.

Blyth gives this from Arakan, I have not seen it yet from Pegu, and have it only from the central portions of Tenasserim.

556*bis*.—Phylloscopus borealis, *Blas.*

Of this also I only procured a single specimen, at Aimole, on the Eastern hills at about 5,500 feet elevation, on the 15th of April. This was a male, but I also add for comparison the exact measurements (not previously published) recorded by Davison of a female killed in the Meplay Choung, Tenasserim, on the 15th October:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	5·47	8·2	2·0	2·71	1·94	0·66	0·47 oz.
♀	5·18	7·9	1·88	2·55	1·88	0·62	?

Male.—Legs and feet brownish yellow; claws browner; upper mandible and terminal half of lower mandible darkish brown; basal portion of lower mandible and gape horny yellow; irides deep brown.

Female.—Legs and feet light dusky greenish yellow; bill horny brown; base of bill below yellow; claws horny; irides dark brown.

I am not aware that this has ever as yet been procured in Assam, and though I believe Oates has procured it in Pegu,* I only know for certain of its occurrence in British Burmah in the southern half of Tenasserim.

558.—Phylloscopus lugubris, *Bly.*

This species seemed common at the beginning of February in the Jhiri level, but I never met with it again in any part of Manipur. The following are particulars of three males :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 5·1	7·65	1·95	2·6	0·8	0·55	0·3 oz.
„	... 5·0	7·8	1·9	2·5	0·75	0·5	0·25 „
„	... 5·35	7·9	2·01	2·61	0·78	0·57	0·27 „

Legs, feet and claws brown, sometimes with a greenish tinge; upper mandible blackish brown; lower mandible and gape and in one edges of the upper near the tip horny to fleshy yellow; irides deep brown.

I have this species from N.-E. Cachar, Shillong, and Khowang in the Dibrugarh district, and Godwin-Austen procured it, I gather, in the Garo hills, but this is all I know of its distribution in Assam, Sylhet or Cachar.

In British Burmah, where I daresay it is widely distributed, I only have it from Southern Pegu, and the northern half of Tenasserim.

Godwin-Austen records 560.—*Phylloscopus viridanus*, Bly., " from high grass in bheels near Chatak " in Northern Sylhet. I did not meet with this in Manipur, nor have I any other record of its occurrence in Assam, Sylhet or Cachar. Blyth records it from Arakan, but I do not think it occurs elsewhere in British Burmah.

The specimens recorded by me, VI, 356, as *viridanus* were *plumbeitarsus* and *burmanicus*, Brooks, which is now said to be also *plumbeitarsus*.

[Not nearly so common in the Dibrugarh district as *P. fuscatus*. This species affects damper spots than that one, being found in paddy fields and reedy ground.—J. R. C.]

561.—Phylloscopus affinis, *Tick.*

I procured a single specimen of this, the only one I saw, at Kokshin Koolel in the Manipur basin on the 7th of April. I am sorry to say I forgot to measure it—a great

* Since this was written he has recorded (X, 222) meeting with it in S.-E. Pegu.

pity, as it is a species of which accurate flesh measurements and weight are desiderata.

We have it from Shillong, Gauhatti and Joonkotollee in the Dibrugarh district, and Godwin-Austen also notes it from the Khasi hills, and procured it in the plains below the Dafla hills, but this is all I know as yet of its distribution in Assam, Sylhet or Cachar.

As for British Burmah, I have never, so far as I can remember, seen a specimen thence, and though Blyth long ago noted that Sir A. Phayre had procured both this and *P. indicus* in the Tonghoo district, he subsequently excluded both from his list of the birds of Burmah.

I have 562.—*Phylloscopus indicus*, Jerd., from Dollah in the Dibrugarh district, and Godwin-Austen procured it at the base of the Garo hills, but I did not meet with it in Manipur; there is no other record as yet of its occurrence in Assam, Sylhet or Cachar, and I am not aware (but see concluding remarks on *P. affinis*, *ante*) that it has certainly ever occurred in British Burmah, though it doubtless will prove to do so.

Godwin-Austen procured 563.—*Reguloides occipitalis*, Jerd., at the head of the Jhiri river, N. Cachar, on the very frontier of Manipur, but I failed to find it there, and I have no other record of its occurrence in Assam, Sylhet or Cachar, nor have I any certain knowledge of its occurrence in any part of British Burmah. I hope Godwin-Austen will re-examine this specimen and make sure it is not a faded specimen of the next species.

[Fairly common in Dibrugarh.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	4·50	6·90	2·0	2·43	0·80	0·55	0·25 oz.
♂ ...	4·60	6·40	1·90	2·33	0·80	0·54	0·25 ,,
? ...	4·62	6·0	1·80	2·15	0·75	0·55	0·25 ,,

Legs olive green; feet greenish brown; soles bright yellow; bill dusky above, yellow beneath.—J. R. C.]

563 *bis*.—Reguloides coronatus, *Tem. & Schl.*

I procured one lovely specimen of this, the most brilliant of our Willow Warblers, at Kalanaga in the Western Manipur hills on the 4th of February. There were four or five, and I shot a second, but failed to find it in the dense jungle into which it fell. My bird was a *male* and the

following my record:—Length 5·0; expanse, 7·7; tail, 2·1; wing, 2·6; tarsus, 0·71; bill from gape, 0·56; weight, 0·28oz. Legs and feet pale brown, yellowish on feet, yellow on soles; upper mandible brown; lower mandible pale horny orange; irides brown.

There is no record as yet of the occurrence of this species in Assam, Sylhet or Cachar, and in British Burmah I only know of its occurrence in the southern half of Tenasserim, where (though Mr. Seebohm entirely ignores this as a habitat) it is really rather common, and South-Eastern Pegu.

564.—Reguloides trochiloides, *Sund.*

Rather common in the Western hills, not seen in the basin or in the Eastern hills:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	4·8	7·7	1·83	2·5	0·64	0·56	0·23 oz.
„ ...	4·65	7·4	1·79	2·4	0·68	0·57	0·25 „
„ ...	4·48	7·0	1·75	2·3	0·61	0·59	0·21 „
„ ...	4·7	6·8	1·7	2·25	0·63	0·55	0·24 „

The legs and feet varied much, the legs from brownish or yellowish grey to pale bluish, at times with a greenish tinge, and the feet from greenish to fleshy yellow; soles whitish; the upper mandible darker or lighter brown; the lower, and gape, and sometimes edges of upper mandible, pale orange to bright or again deep yellow; irides deep brown.

I have this from Shillong and Cherrapoonjee, and Joonkotollee in the Dibrugarh district, and Godwin-Austen records it from the Noa Dehing, and this is all I know of its distribution in Assam, Sylhet and Cachar.

[I only secured a single specimen in the Dibrugarh district, a female. Length, 4·35; expanse, 6·50; tail, 1·60; wing, 2·25; tarsus, 0·66; bill from gape, 0·55; weight, 0·25oz. Bill above dusky, below orange yellow; legs and feet horny blue; soles olive yellow; irides dark brown.—J. R. C.]

It occurs all over Pegu and in Northern Tenasserim and Karenee, but beyond that I have no knowledge of its distribution in British Burmah, though it is sure to occur in Arakan also.

Godwin-Austen also records from the low country of the Dunsiri, Assam, 564*ter*.—*Reguloides fulvoventer*, which has greatly puzzled us all, and of which nothing but the original record is known. I suggest that it is a carbolic-acid-bleached specimen of 570.—*Abrornis cantator*, Tick. I got this idea from Lord Walden, who thought it might be a carbolized bleaching of his *Abrornis chrysæus* (see further p. 225).

565.—Reguloides superciliosus, *Gml.*

This is the common *Reguloides* of Manipur. I got it *all over* the basin, and procured a few also in both the Eastern and Western hills. It was very abundant and very variable in size and colours of soft parts and tint of plumage.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	4·35	7·0	1·75	2·42	0·7	0·5	0·24 oz.
,, ...	4·4	7·7	1·6	2 25	0·7	0·45	0·23 ,,
,, ...	4 3	6·5	1·5	2·1	0·62	0·42	0·2 ,,
,, ...	4·4	7·0	1·7	2·3	0·68	0·4	0·19 ,,
,, ...	4 4	6·8	1·5	2·15	0·7	0·42	0·2 ,,
,, ...	4·2	6·6	1·45	2·15	0·68	0·49	0·19 ,,
♀ ...	4·25	6·75	1·37	2·0	0·62	0·5	0·22 ,,
,, ...	4·1	6·5	1·45	2·1	0·58	0·46	0·19 ,,
,, ...	4·3	6·6	1·5	2·2	0·58	0·4	0·18 ,,
,, ...	4 1	6 6	1·5	2·2	0·7	0·41	0·16 ,,

Legs and feet a darker or paler brown, or yellowish brown or brownish green, or brownish fleshy, the majority perhaps exhibiting a distinct green tinge, and the feet being commonly paler and purer coloured than the tarsi; soles generally yellow; upper mandible, and generally the tip of the lower a more or less dark brown; rest of lower mandible and gape dull yellow, reddish or fleshy yellow, light brown or whitey brown; irides in most deep brown, in a few reddish brown.

Common as I suspect this must be all over Assam, I have specimens only from Shillong, and beyond this there seems absolutely no record as yet of its occurrence in Assam, Sylhet or Cachar. It seems generally distributed, of course, in the cold season all over British Burmah.

From Shillong I also have the doubtfully distinct species 565*ter*.—*Reguloides mandellii*, Brooks, *vide* S. F., VIII, 390, 481. I met with no specimens like this in Manipur, nor have I seen any from Burmah.

566.—Reguloides proregulus, *Pall.*

Though numerically *far* less abundant than *superciliosus*, this was equally generally distributed, and I got it alike in the basin and in the Eastern and Western hills:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus*	*Bill from gape.*	*Weight.*
♂ ...	4·1	6·4	1·3	2·01	0·7	0 41	0·17 oz.
,, ...	3·8	6·1	1·3	2·0	0·62	0·41	0·18 ,,
,, ...	4·0	6·3	1·45	2·05	0 62	0·4	0·19 ,,
♀ ...	4 0	6·3	1·41	1·91	0·65	0·41	0·18 ,,
,, ...	3·7	6·0	1·25	1·88	0·67	0·41	0·17 ,,
,, ...	4 0	6·45	1·4	2·05	0·62	0·4	0·18 ,,

The legs and feet were all kinds of colours, brownish

plumbeous, dark reddish brown, pale greenish with or without a fleshy tinge, brownish yellow—no two were coloured alike—all the colours dull, so that the difference is not so very great as it looks on paper; upper mandible, and generally more or less of the tip of the lower one, deep brown to blackish; lower mandible and gape commonly yellow, or reddish yellow, sometimes a little brownish or pale reddish brown; irides deep brown.

In Assam, Sylhet and Cachar I as yet only know of this in the Khasi hills, where it must be fairly common, and in the Burrail range of the Naga hills, where Godwin-Austen says it is very common in the open forests.

Blyth records it from Arakan, and we procured a single specimen in Northern Tenasserim, and this is all I know of its distribution in British Burmah.

567.—Reguloides viridipennis, *Bly.*

I procured one beautiful specimen of this rare species (the true *viridipennis*) above Bishnoopoor, in the Manipur basin, on the 17th of February, a little way only up the slope of the Limatol range at an elevation of about 3,300 feet.

It was a *male*, and the following are the particulars:—Length, 4·4; expanse, 6·8; tail, 1·7; wing, 2·2; tarsus, 0·65; bill from gape, 0·5; weight, 0·24oz. Legs and feet rather pale brown; soles yellowish; upper mandible dark brown; lower wax yellow; irides brown.

This is not known to occur anywhere in Assam, Sylhet and Cachar, and in British Burmah I only know of it in the higher hills of Central Tenasserim.

568.—Reguloides erochrous, *Hodgs.*

Of this likewise I only got a single specimen at Aimole in the Eastern hills at about 5,500 feet, on the 15th of April. I supplement the details of this specimen with those of several other specimens that I carefully recorded at Simla.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 4·35	6·82	1·57	2 25	0·71	0·48	0·25 oz.
,,	... 4·3	6·8	1 5	2 2	0·75	0·5	0·24 ,,
,,	... 4·5	7·2	1·75	2·4	0·75	0·5	0·27 ,,
,,	... 4·25	6·8	1·5	2·3	0 69	0·49	0 23 ,,
,,	... 4·28	7·0	1 58	2 26	0 7	0 5	?
♀	... 4·0	6·2	1·37	1·98	0·7	0·45	0·18 ,,
,,	... 4·15	6·35	1·5	2·01	0·61	0·45	0·19 ,,
,,	... 4·15	6·1	1·4	2·2	0·7	0·48	0·2 ,,
,,	...*4·2	7·0	1·6	2·4	0·7	0·5	0·22 ,,

* I suspect this was wrongly sexed. I marked it female with a query, and it seems quite too large for a female.

The legs and feet are a dull pale green, sometimes a little brownish, and the feet often rather paler than the tarsi; claws generally a pale brownish green and soles yellow; upper mandible blackish; tip of lower brown; rest of lower mandible and gape yellow; irides deep brown.

I have this from Shillong, and Godwin-Austen procured it in the Naga hills, and this is all I know as to its occurrence in Assam, Sylhet and Cachar.

In British Burmah I only know of its occurrence at Mooleyit in Central Tenasserim at 5,000 feet and upwards, but Ramsay obtained it in Karenee at only 3,000 feet.

569.—Cryptolopha burkii, *Burt.*

I got only two specimens of this in Manipur—one in the Eerung valley in the Western hills, where it was rather common, and one in the low hills east of Phalel in the eastern portion of the basin. I saw it once, I think, below Aimole in the Eastern hills, but preserved no specimen there. It is certainly not common in Manipur. My specimens must be classed as *burkii*, as they are nearest this, but they have rather more grey about the head than Sikhim examples, though not nearly so much as in *tephrocephala*, and the bills too are intermediate in size.

A *female* measured:—Length, 4·6; expanse, 6·5; tail, 1·8; wing, 2·1; tarsus, 0·78; bill from gape, 0·53; weight, 0·24oz. Legs and feet yellowish brown, in another dull wax yellow; upper mandible deep brown, or blackish; lower, in one pale yellowish brown, in the other brownish wax yellow; irides hazel, in the other brown.

Jerdon omits to notice the conspicuous yellow eyelid ring, and he describes the tail wrong. The inner webs of the *two* outer tail-feathers on each side are nearly all white, also the terminal half (more or less) of the inner web of the third feather (counting from outside) on each side.

I shot this in the station of Silchar in January, and have it from Northern Sylhet and Northern Cachar, Shillong and Joonkotollee in Dibrugarh, and Godwin-Austen records it from Asalu, but beyond this I have no information as to its distribution in Assam, Sylhet or Cachar.

Blyth records it from Arakan, but the very closely allied *tephrocephala*, which replaces *burkii* throughout Pegu and in Northern and Central Tenasserim, had not then been discriminated, and it *may* be this form and not *burkii* that occurs in Arakan.

570.—Abrornis cantator, *Tick.*

I only once saw this, on the 16th of April, a good way below Aimole in the Eastern hills, at an elevation of about 3,500 feet. I unfortunately blew the specimen to pieces, firing the wrong barrel, and could neither measure or preserve it, but I identified it certainly.

There is no record of its occurrence in Assam, Sylhet or Cachar, unless God.-Austen's *R. fulvoventer* is this (*vid. sup.* p. 221). In British Burmah there is no record of its occurrence, but Ramsay obtained in the Karen hills the bird Lord Walden renamed *Abrornis chryseus*, and this in my opinion is the same species. The description answers to a feather.*

572.—Abrornis xanthoschistus, *Hodgs.*

This was the only *Abrornis* that seemed at all common in Manipur. I saw it repeatedly in both the Western and Eastern hills, and preserved specimens at Koombiron, Aimole (where it was specially abundant in April) and Matchi.

Looking at it as a common Sikhim bird I only measured a single specimen, and I am now sorry I did not measure more, because I find that all the seven Manipur specimens differ from the Sikhim ones in having the grey less extended down the back, and *perhaps* rather more grey on the sides of the face; but they are not, in my opinion, specifically separable, though the peculiarity seemed to deserve mention.

A *male* measured:—Length, 4·3; expanse, 6·55; tail, 1·6; wing, 2·08; tarsus, 0·7; bill from gape, 0·5; weight, 0·24oz. Legs and feet pale greyish brown; upper mandible darkish brown; lower ditto pale reddish yellowish brown; irides light brown.

I have this from Shillong and other places in the Khasi hills, and Godwin-Austen includes it in his Dafla hill list, but beyond this its exact distribution in Assam, Sylhet and Cachar is unknown to me. Blyth records this species from Arakan, but I do not know that it has been observed in either Pegu or Tenasserim.

From Joonkotollee, Dibrugarh, I have received specimens of 572*bis*.—*Abrornis jerdoni*, Brooks (*vide* S. F., III, 245*n*, and IX., 228), but it has not yet been reported from any other locality within our present limits, and I did not meet with it in Manipur.

* Since this was written, it has been pointed out to me that Mr. Sharpe has already made this identification. He is certainly right.

[I found these in heavy forest, and shot them while they were flitting about the topmost branches. They are far from rare, and are permanent residents.—J. R. C.]

Then Godwin-Austen records from Sadiya, 572*ter*.—*Abrornis flavigularis*, G.-Aust., of which nothing further is known, and which may be a good species, but may also well be a carbolized bleached specimen of *A. jerdoni*, which seems common in that part of the Dibrugarh district.

574.—Abrornis superciliaris, *Tick.*

Only once met with below Tankool Hoondoong in the Eastern hills—a single greatly injured but unmistakeable specimen brought in by one of the Nagas.

I have this from Tippook in the Dibrugarh district, and Godwin-Austen records it from the Garo hills, and that is all we know of its occurrence in Assam, Sylhet and Cachar.

This species occurs in both Northern and South-eastern Pegu, and is generally distributed in well-wooded localities throughout Tenasserim, but I have no other record of its occurrence in British Burmah.

From Joonkotollee, Dibrugarh, I have 575.—*Abrornis poliogenys*, and Godwin-Austen records it from Cherrapoonjee in July, but I failed to observe this in Manipur, and beyond the above we know nothing of its distribution in Asesm, Sylhet and Cachar or British Burmah.

[Pretty common in Dibrugarh, in forest, where they keep to the upper branches of the trees.—J. R. C.]

576.—Abrornis affinis, *Hodgs.*

I shot one specimen of this in low-wooded hills near Sagam, in the southern part of the basin of Manipur, on the 29th of March. I never again met with it. There was a party of six or seven, but I only succeeded in getting one, and that was skinned before I got in and so I did not measure it.

I have this from Shillong, Godwin-Austen procured it in the Naga hills, but I know nothing further of its distribution in Assam, Sylhet or Cachar, and am not aware that it extends to any part of British Burmah.

577.—Abrornis albogularis, *Hodgs.*

Of this too I only shot a single specimen at Aimole on the Eastern hills, at about 5,000 feet elevation, on the 16th April,

but I saw it two or three times in the Eastern hills, when after birds I more required. It is extremely common in Sikhim.

Godwin-Austen obtained this in the forests on the slopes of the Kylas or Chikmang Peak in the Garo hills, but beyond this I have no record of its occurrence in Assam, Sylhet, Cachar or British Burmah.

578.—Abrornis castaneiceps, *Hodgs.*

I never met with this in Manipur myself, but Godwin-Austen shot a specimen at the head of the Iril valley, the northern extremity of the Manipur basin, and it must therefore be included in our list.

He also records meeting with it several times in the Naga hills, and I know nothing beyond this of its occurrence in Assam, Sylhet or Cachar, nor am I aware that it has as yet been observed anywhere in British Burmah.

584*bis*.—Henicurus guttatus, *Gould.*

This pretty Forktail was tolerably common in both the Eastern and Western hills. The first I saw was fluttering about the almost dry face of a precipice (which during parts of the year is veiled by a lovely waterfall), about a thousand feet above the Eerung river. In all the little tributary streamlets of the Limata it was common.

Then I shot it in a tiny streamlet, just below Aimole, that supplies that village with water; again down in the Sengmai Turail just inside the hills; and lastly high up above Matchi, where there was a mere trickling thread through forest. I measured a few:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	10·4	12·7	5·3	4·0	1·2	1·0	1·42 oz.
♀ ...	9·5	11·5	4·75	3·7	1·1	1·0	1·26 ,,
,, ...	9·5	12·0	5·0	4·0	1·1	0·95	1·28 ,,
,, ...	9·5	11·3	4·8	3·7	1·12	1·0	1·27 ,,

Legs and feet a very delicate pale pinky white; bill black, irides brown.

It is curious that not only these three but all the females I shot have the feathers of the occiput and nape brown centred. Hitherto I have always considered this the last trace of immaturity. I now suspect that it is the normal plumage of the adult female, though some very old females are in this respect like the males.

I have this from Shillong and other places in the Khasi hills, and Godwin-Austen too got a young bird of this species

at Cherrapoonjee, but I do not know yet of its certain occurrence elsewhere in Assam, Sylhet or Cachar.

Blyth records this from Arakan, but I do not know of its occurrence elsewhere in British Burmah.

584*ter*.—Henicurus leschenaulti, *Vieill.*

I only once shot this in the stream along the course of which we ascended to Tankool Hoondoong in the Eastern hills. It was a narrow torrent rushing down a stony bed, entirely closed in on all sides and above by dense forest. Here there were several, though I only secured a single specimen, a *male*. Length, 11·3; expanse, 13·55; tail, 6·0; wing, 4·27; tarsus, 1·29; weight, 1·89oz. The legs and feet are a delicate fleshy white; bill black; irides brown.

This is the larger race that some would separate from the Javan *leschenaulti* as *sinensis* of Gould, but I have now seen many of these, and do not think them specifically separable. Godwin-Austen says that specimens that he procured in the Dafla hills are *larger* than Chinese birds, yet the dimensions he gives fall short of three out of four Chinese specimens I have.

I have never seen this from any part of Assam, Sylhet or Cachar, but Godwin-Austen records it both from the Dafla and Eastern Naga hills.

In British Burmah it is found in the northern and central portions of Tenasserim, but not elsewhere, so far as I know.

585.—Henicurus immaculatus, *Hodgs.*

Between Jhiri Ghat and Noongzai-ban this was most abundant, and I saw it in all the intervening country and found it swarming in the Eerung, but eastwards of this I have never noted that I saw it, and I certainly did not preserve a single specimen after leaving the Eerung valley. Had I seen it in the Eastern hills I should certainly have shot it. The following are details of some I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	9·0	11·2	4·5	3·6	1·1	0·9	0·87 oz.
„ ...	9·0	10·6	5·0	3·6	1·05	0 9	0·82 „
♀ ...	8·7	10 7	4·3	3·4	1·06	0 87	0·87 „
„ ...	8·6	11·0	4·3	3·65	1·09	0·89	0·86 „

Legs and feet pale fleshy, or fleshy white, or delicate creamy white; bill black; irides brown.

This is the common species of Assam. I have it from N.-E. Cachar, Northern Sylhet, the Garo and Khasi hills, from near

Gauhatti, and several localities in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list from the Dekrang valley. It occurs in Arakan and throughout the Pegu hills, but does not extend, I believe, to any part of Tenasserim.

[This delicate little creature is found not only in the beds of rocky streams but in all the *dense forests* of Dibrugarh wherever these are damp and dark, and along the muddy banks of the streams that run through them. Their cheery whistle is often heard, though the bird is invisible owing to the jungle.—J. R. C.]

586.—Henicurus schistaceus, *Hodgs.*

I found this in all the streams of the Western hills, it being specially numerous in the Eerung and Limata, but I never saw it in either the basin or the Eastern hills.

The following are details of some specimens:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 10·25	12·0	5·5	4·1	1·15	0·95	1·05 oz.
♀	... 9·4	11·2	5·0	3·8	1·15	0·93	0·9 „
„	... 9·4	11·0	4·7	3 5	1·1	0 98	0 95 „

Legs and feet (1) delicate fleshy white, (2) faintly bluish white, (3) pinky white with a leaden tinge on front of tarsi and toes; bill black; irides brown.

I have not received this as yet from anywhere in Assam, Sylhet or Cachar, but Godwin-Austen procured it in the Dekrang valley of the Dafla hills and in the E. Naga hills.

Blyth records it from Arakan, and it is found throughout Tenasserim, but I have no note as yet of its occurrence in Pegu, in the north of which, however, it most probably does occur.

Godwin-Austen procured 587.—*Henicurus scouleri*, Vig., in the Dekrang valley (Dafla hills) and in the E. Naga hills, but I never saw it in Manipur, and I have no further knowledge of its occurrence in Assam, Sylhet or Cachar, and it does not, I believe, extend to any part of British Burmah.

Godwin-Austen also records having procured 589.—*Motacilla maderaspatensis*, Gm., on the Upper Barak river; whether inside Manipur limits or north of this, as is most probable I cannot say. I suppose there is no mistake about the species, but I met with this species nowhere and as yet have no single record of its occurrence anywhere in Assam, Sylhet or

Cachar, and it does not, that I know of, extend to any part of British Burmah.

589*bis*.—Motacilla hodgsoni, *G. R. Gr.*

I only saw this Wagtail in the basin. It was rather common about the capital and northwards of this, though much less so than the next species, and growing more and more rare southwards. I met with this species in several parts of Cachar, and I have it from Gauhatti and the Dibrugarh district. Godwin-Austen procured it at Tezpoor, and records it from the Eastern Naga hills; beyond this its distribution in Assam, Sylhet and Cachar is not yet ascertained. I am not aware that it has been recorded from any part of British Burmah, but I have one typical specimen formerly erroneously set down as *luzonensis* (*leucopsis*) from Dargwin in Northern Tenasserim.

[This Wagtail is pretty common in the cold weather.—J. R. C.]

590.—Motacilla leucopsis, *Gould.* (= M. luzonensis, *apud Auct.*) (= M. felix, *Swinh.* v. X, p. 224, *n.*)

This was abundant on the boulders of the dry bed of the Limata, in the Kopum Thull, and all over the basin of Manipur.

This species is widely diffused all over Assam, Sylhet and Cachar, though not as a rule ascending the hills much above 3,000 feet. I have it from too many localities for it to be worth enumerating; it is clearly found everywhere except high up on the higher hills.

[The commonest Wagtail in Dibrugarh, where I have shot them as early as the 9th September. They frequent open country, tea gardens, paddy fields, roads, even where these lead through forest, and beds of rivers.—J. R. C.]

It occurs in Arakan, throughout Pegu and in the northern half of Tenasserim, always, as a rule, in open or cultivated country only.

591*bis*.—Motacilla dukhunensis, *Sykes.*

This species was, I think, scarce in the basin of Manipur; at any rate I shot very few, but both preceding species are much more conspicuous, and I may have overlooked it; anyhow I only preserved specimens from the capital, Bishnoopur and Kokshin Koolel.

I procured it at Kategara in Central Sylhet, and have it from Northern Sylhet near Seria Ghat. I saw it in several places in Cachar, though it did not seem common there, and have received it from the extreme N.-E. Cachar, from Shillong and various parts of the Dibrugarh district, and this is all I know for certain (though it must occur all over the valley) of its distribution in Assam, Sylhet or Cachar.

[By no means so common in Dibrugarh as *M. leucopsis*, but far from rare.—J. R. C.]

It occurs throughout Northern Tenasserim and Pegu, being common in the south, rarer to the north, but I do not seem to have any actual record of its occurrence in Arakan, where, however, it will certainly be found.

591*quat.*—Motacilla ocularis, *Swinh.*

I paid so little attention to Wagtails that a specimen of this species that I shot and preserved at Kokshin Koonoo, I passed over at the time as *dukhunensis*, and only discovered my error on reviewing my specimens now. I cannot say whether it is rare or common, but the specimen proves that it does occur in the basin.

I have this from N.-E. Cachar and Joonkotollee in the Dibrugarh district, and this is all I know of its distribution in Assam, Sylhet and Cachar.

[This species too is not rare in Dibrugarh, but nowhere numerically common.—J. R. C.]

I have it also from Lower and Central Pegu and Northern Tenasserim, but know nothing further as to its occurrence in British Burmah.

592.—Calobates melanope, *Pall.*

This too was rather common about the boulders of the dry beds of the Limata and Eerung in the Western hills, and I saw it occasionally about the capital and elsewhere in the basin, but except about Kokshin Koolel and Koonoo it was everywhere scarce, despite the abundance of meadows, swamps, pools, rills, rivers and ditches.

It is generally, though sparingly, spread throughout the valley of Assam up to Sadiya. I have it also from Shillong, and Godwin-Austen procured it at Cherrapoonjee, in the Eastern Naga and in the Dafla hills.

It occurs in suitable open localities all over Tenasserim, in Southern and Central Pegu (if not in Northern Pegu also), and in Arakan, but is nowhere, I believe, numerically abundant.

593.—Budytes cinereocapillus, *Savi.*

This was common in the Kopum Thal. I saw and shot one in the bed of the Limata (both these in the Western hills), and I think I noticed it about half a dozen times in the basin, where it seemed decidedly rare.

I did not notice it myself in either Sylhet or Cachar (though it is sure to occur in all suitable localities in both), but I have it from N.-E. Cachar and Shillong, and Godwin-Austen, in his Dafla hill list, says he got it at Narainpur.

It is extremely common in suitable localities all over Burmah, except in the southernmost portions of Tenasserim, where we did not observe it. Ramsay also is recorded to have procured it in Karenee at 3,000 feet elevation.

I have recorded 593*ter.*—*Budytes flavus*, Lin. (the Indian form, *beema*, Sykes, *dubius*, Hodgson) from N.-E. Cachar and from Tippook in the Dibrugarh district, but I did not notice it in Manipur, nor have I any other record as yet of its occurrence in Assam, Sylhet or Cachar. In British Burmah I only know that it occurs in Southern Pegu, and is common in the southern half of Tenasserim.

594.—Budytes calcaratus, *Hodgs.*

I only once shot this species in Manipur, *viz.*, at the Logtak lake, on the 20th of March. How often I overlooked it taking it for the comparatively common *B. citreola* I cannot say.

I have this from N.-E. Cachar, several places in the Dibrugarh district, and the neighbourhood of Gauhatti, and Godwin-Austen records it apparently from the Khasi hills. Beyond this I have no record of its occurrence in Assam, Sylhet or Cachar.

[Abundant in the cold weather in Dibrugarh in paddy fields and tea gardens. They assume their breeding plumage, and leave by the first week in May.—J. R. C.]

Of its distribution in British Burmah I only know that we obtained a single specimen at Pahpoon in Northern Tenasserim.

594*bis.*—Budytes citreola, *Pall.*

Although I met with this all over the Manipur basin it was only about Kokshin Koonoo and Koolel and one or two other places that it was at all common. The fact is that, though the southern half, especially, of the valley, seems peculiarly adapted for these Wagtails, being half swamp and water

meadows, the grass is everywhere too coarse, and there is very little fine grass or smooth sward. In the few places where I met with this, *B. citreola* was abundant enough.

I procured this both in Sylhet and Cachar in several places, and have it from all over the Dibrugarh district, but beyond this I have no exact knowledge of its occurrence in Assam, though it is doubtless found throughout the valley. It has not yet been recorded from British Burmah.

[Pretty common in the Dibrugarh district.—J. R. C.]

595.—Limonidromus indicus, *Gm.*

This was occasionally seen high up on the Eastern hills in the neighbourhood of Aimole, Matchi and Tankool Hoondoong—in every case I think (at the end of April and during May) at an elevation of at least 4,500 feet, and one I shot at fully 6,000 feet. Except in these Eastern hills I never chanced to meet with it anywhere in Manipur.

In Assam, Sylhet and Cachar, I only have it from Shillong and N.-E. Cachar, and do not know of its having been observed elsewhere as yet in those districts.

It is essentially a thinly-distributed, *forest*-haunting species, and is found in suitable localities throughout British Burmah.

596.—Anthus maculatus, *Hodgs.*

Very common in the Western hills, where it haunts the road sides in pairs, parties or singly, and is with *Culicicapa ceylonensis* one of the commonest birds along the hill roads. In the basin it seemed scarcely less common, and too often was shot by mistake when perched high up on tall trees or poking about on the ground in the heart of some dense hedge or bush. I never knowingly shot it, nor did we preserve all I did shoot, and yet I have brought away over twenty specimens. In the Eastern hills it is much rarer, but even there I shot it high up at 5,500 feet and upwards during April and the first half of May. I did measure one of these wretches and may as well record the particulars.

Female.—Length, 6·65; expanse, 10·65; tail, 2·5; wing, 3·12; tarsus, 0·84; bill from gape, 0·6; weight, 0·78oz. Legs, feet and claws pale fleshy; upper mandible palish brown; lower mandible pale fleshy; irides deep brown.

I obtained a rather peculiar variety of this species:—

♂.—Manipur city	...	... 22-2-81.
♀.—Moirang ...	...	... 14-3-81.
♂.—Above Matchi at 6,000 feet		... 10-5-81.

Now in all these birds the more or less rich yellowish or greenish olive of the entire upper surface is replaced by a grey, much the same as the grey in the breeding plumage of *rosaceus*. The wing bands are white, and in two out of the three there is not the faintest trace of any buffy tinge on the lower surface; on the third there is just a trace of this. These birds *look* totally unlike *maculatus*. Out of some hundreds killed at different seasons in all parts of Assam, India and Burmah, I find nothing like them, but the wings, bills, feet, claws, all are those of *maculatus*—nay the birds are feather for feather the same so far as I can make out; they differ only in colour, and this will hardly suffice to constitute a species. Still as a variety these birds are very marked, and when I shot the first I thought it must be a new species, until I compared it with two of the ordinary type shot the same day, and failed to discover the slightest difference beyond that of colour.

I am sorry now I did not go in for shooting Pipits, but I should have had to neglect something else. The other two, like all the other Pipits, were shot by mistake. Still as shooting by accident I got three of these to about thirty of the others, there must apparently be a great number of these grey birds, for I saw thousands of Pipits.

I procured and saw *maculatus* of the normal type all over Central Sylhet and Cachar, and have it from various localities in the Khasi hills, and a great many in the Dibrugarh district, and Godwin-Austen notes that it was common in December in the Dafla clearings, but beyond the above I know nothing certain of its distribution in Assam.

[Very common in Dibrugarh in almost all situations. In the beginning of May they leave, especially after a heavy shower of rain and thunderstorm.—J. R. C.]

In Burmah it occurs everywhere in suitable localities during the cold season.

I note that I have 597.—*Anthus trivialis*, Lin., recorded from N.-E. Cachar. I cannot find the specimen, and I suspect some mistake, for there is no other record of it from anywhere in Assam. I never saw it in Manipur, and in all British Burmah I only know of one specimen having occurred, which was obtained by Mr. Oates in the Pegu hills in thick jungle on the 10th of April.

599.—Corydalla richardi, *Vieill.*

Common in the rice stubbles of the Kopum Thal and the Manipur basin generally. I shot a good many of this and

rufula, but only two of *striolata*. Brooks' diagnosis of these very closely affined species (S. F., I, 360) is excellent, and the spread of foot and length of tarsi are infallible guides, but too much stress must not be laid on the length of the hind claw, for though in *richardi* this is generally 0·63 to 0·74, I have one very fine male now before me with the hind claw only 0·52, or less than it often is in *striolata*, but then the tarsi in this male are 1·3, and despite the short hind claw the spread of foot is 2·23—dimensions never approached by *striolata*.

A couple of male *richardi* measure :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 7·9	12·0	2·95	3·6	1·27	0·89	0·98 oz.
,,	... 7·2	11·7	2·9	3·7	1·2	0·85	1·05 ,,

Legs and feet pale yellowish fleshy, browner on joints and claws; bill pale yellowish horny to pale fleshy, brown on nares and more or less of culmen; irides a lighter or darker brown.

I met with this all through Central Sylhet and Cachar, and have it from the extreme N.-E. Cachar, also from many places in the Khasi hills, but beyond this I have no knowledge of its occurrence in Assam, Sylhet or Cachar. It occurs in all cultivated and open lands throughout British Burmah during the cold season, but is much commoner in some parts than in others.

[Though not numerically common, this bird is far from rare in Dibrugarh.—J. R. C.]

600.—Corydalla rufula, *Vieill.*

This species was common about the rice stubbles in the Kopum Thal and the basin of Manipur, but perhaps most abundant in the damp lands, mostly freshly-ploughed rice fields, between Bishnoopoor and Moirang.

I enter all my specimens as *rufula*, because as a body they are much closest to this, but it has to be noted that they run rather dark, and that some might perhaps be classed by some as *C. malayensis*, Eyton, which is very doubtfully specifically separable. The only distinctions that exist between the two forms are pointed out VI, 366.

I did not somehow notice this in either Sylhet or Cachar. Either it is scarce there, or I overlooked it. Pipits and Wagtails are not birds I go after or attend to much now-a-days, but I have it from N.-E. Cachar, the Khasi hills and Jonkotollee in Dibrugarh, and this is all I yet know of its distribution in Assam, Sylhet and Cachar.

[Common in Dibrugarh, keeping to paddy fields, waste lands and road sides.—J. R. C.]

Except in Northern Pegu, whence I have not seen it, though even there it probably *occurs*, this species is common in suitable localities all over British Burmah.

I may note that from Joonkotollee, Dibrugarh, I have a specimen that must (*if* the two species are maintained) be recorded as 600*bis*.—*Corydalla malayensis*, Eyt. This has occurred at the extreme south of Tenasserim, but, so far as I know, nowhere else in Assam, Sylhet, Cachar or British Burmah.

[Having preserved only one specimen, I cannot say if this bird is common or not—J. R. C.]

601.—Corydalla striolata, *Bly.*

I only preserved two specimens of this—one shot close to the capital, one at Kokshin Koolel. They are probably scarcer in Manipur than either *rufula* or *richardi*, as I preserved, I find, about twenty of each of these and only two of *striolata*.

I have this from Shillong and many places in the Dibrugarh district, where it must be common right up to and beyond Sadiya, and Godwin-Austen records it from the Mahadeo peak, Asalu, but this is all I yet know of its distribution in Assam, Sylhet or Cachar.

[Common in Dibrugarh, where it is a permanent resident.—J. R. C.]

In British Burmah I only know of its occurrence as a rare straggler in Southern Tenasserim, but it must, I should suppose, occur equally in Pegu and Arakan.

605.—Anthus rosaceus, *Hodgs.*

Rather rare in Manipur, where however one occasionally comes across it in the basin in small parties in damp localities.

I measured a few, all males, as they turned out:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 7·0	11·5	3·0	3·5	0·9	0·7	0·75 oz.
,,	... 6·85	11·8	2·95	3·6	0·85	0·8	0·78 ,,
,,	... 7·0	11·5	2·9	3·6	0·9	0·73	0·77 ,,

Spread of foot in (1), 1·7.

Legs and feet fleshy pink, brownish on joints; upper mandible brown, paler, and with a fleshy tinge on lower

mandible, and especially the base of this and gape; irides brown to deep brown.

Some birds killed before the close of February have the whole breast vinaceous and have nearly lost all the spots. One killed on the 20th of April shows as yet no signs of summer plumage.

This is *the* Pipit of Sylhet; it is essentially a bird of wet localities. In Cachar it is less abundant. We have received it from N.-E. Cachar, Shillong, Cherrapoonjee and numerous localities in Dibrugarh, but beyond this I know nothing of its distribution in Assam, nor has it ever that I know been observed anywhere in British Burmah, except in Arakan, *fide* Blyth.

[Common in suitable localities in Dibrugarh, where it is found in damp open places, such as paddy fields and "pathars." —J. R. C.]

605*bis*.—Anthus cervinus. *Pall.*

A single specimen of this species was shot by one of my men, near the bases of the Eastern hills below Aimole in April. I think I saw a flock of these Pipits in some low fine wet grass near Phalel on the 10th of April. I noted at the time that I thought they were this species, but they were very shy, and I could not bother after them at the time. About ten days later the specimen referred to was shot not far from where I saw these. If I am correct, this was, I believe, the only place in which we saw them in Manipur.

I have never seen this species yet from anywhere in Assam Sylhet or Cachar, but Godwin-Austen records it from the Khasi hills. At the same time he does not record *rosaceus* which is so common, and there may have been some mistake. Throughout the central and northern portions of Tenasserim, this species is generally distributed wherever the country is open and not too elevated. It is very common in the plains of Lower Pegu, very scarce apparently in the north. It has also been sent from the south of Arakan.

605*quat*.—Anthus blakistoni, *Swinh.*

On a newly-ploughed field, in which however a quantity of fine grass or young rice was growing (I did not notice particularly at the time) near the margin of the Logtak lake, on its eastern marshy shore, I met with a flock of dark-legged Pipits, of which I shot a couple as they rose out of the boat. I did not look at them at the time, as the shot roused birds

I wanted, after which I went, but at night when examining the birds I found that they were a female of *blakistoni* and a male of the species referred hitherto to *ludovicianus* (*vide* VIII, 485).

There are three very closely allied forms of Water Pipits with dark legs, which, in India at any rate, are not yet by any means well known, and which may yet in winter plumage be discriminated at a glance.

	Breast spots.	*General tint of upper surface.*	*Striations on upper surface*
(1). A. spinoletta ...	Brown, large, rather hazy.	Brown	... Feeble & vague.
(2). A. blakistoni...	Brown, small, rather well defined.	Rather lighter brown	Well defined.
(3). A. ludovicianus (apud *Brooks*)	Blackish large, crowded, strongly marked.	Much darker brown	... Obscure.

Now as regards the first I am doubtful if it does occur in India. Its occurrence depends upon two or three specimens I have from the Punjab in full breeding plumage which may belong to this species, European specimens of which they closely resemble, or to *blakistoni*, of which I have no eastern specimens in breeding plumage. Anyhow all the large series I have of this form of Pipit in winter plumage are clearly *blakistoni*. I know that many people unite this latter and *spinoletta* (Verreaux identified specimens of the former which I sent him home to name as the latter), but when a good series of both in winter plumage are compared (as I have just compared about twenty of one and fifty of the other), it seems inconceivable that such a mistake should occur. A child could be taught in five minutes to separate them with absolute certainty.

To return: I never saw any of these dark-legged Pipits again. I returned the next day to the place where I believed I had shot them (though I could not be quite sure, as I had shot nearly two hundred birds of sorts that day), but could not find any. I may have missed the place, or they may have been migrating, but they must, I think, be rare, as their dark legs caught my eye as they rose, and would have done so I think had I previously seen them, and after this I kept a good look-out for them, yet never saw any more.

I have no record as yet of the occurrence of this species in either Assam, Sylhet, Cachar, or any part of British Burmah.

605*sext.*—Anthus ludovicianus, *Gm.*

This is the species thus identified by Brooks, see his interesting remarks, VIII, 485. I have this shot by him both

on Senchal above Darjeeling and Mooltan, so there is no mistake as to this being the bird. I have also one from Sindh killed by Butler, and a Chinese specimen labelled *A. japonicus* by Swinh. All these specimens, as well as the bird I shot in Manipur, are males.

Now, though these birds are very close to the American *ludovicianus*, I am by no means sure that they are identical. I have a pair from Pennsylvania, one from Seal Island, Harbour Coast of Labrador, and one from the Kurile Islands, and I observe first that our males are only about the size of the American females, and the American male is considerably larger. Second, all four specimens exhibit a buffy tinge on the lower surface, of which there is no trace in any of our birds. I have, however, too few specimens of either to come to any positive conclusion, and be the correct name what it may, there is no doubt as to the bird which is a very well marked form. There is no record of the occurrence of this species as yet in Assam, Sylhet, Cachar or British Burmah.

608.—Cochoa viridis, *Hodgs.*

This species was commoner in the forests of the Eastern Manipur hills, at elevations of 3,500 to 5,500 feet, in April and May, than anywhere else that I have ever met with it. I did not see it in the Western hills.

I found it sometimes in pairs, sometimes in small flocks, often feeding on the ground, at times high up on forest trees. At Aimole (the first place at which I met it) in thick forest two largish birds flew out of a tree high overhead; for the moment they were hidden, and when they came in view they were out of shot, and from their flight and harsh note I thought they were large black Woodpeckers. One of the Nagas outside marked them into a tree. I made my way there, crept up under the tree alone, and after peering about some time caught sight of one in a huge tree, next the one they were supposed to be in, sitting dove-like on a small branch just where it joined the trunk, not much (if at all) less than 60 yards from the ground.

I fired with No. 3 shot, and it dropped dead and turned out to be *C. viridis*; the other bustled out on the opposite side of the tree when I fired at the first, and I was unable to get a shot. Again below Matchi I came upon a flock of six feeding on the ground, at least they flew up from the ground, where this was covered with a small jungle fruit, similar to what I found in their stomachs. They scattered into some bushes through which they made their way up into the

surrounding trees, out of which I gradually shot five. It was clearly a favourite feeding ground, and they were unwilling to leave the neighbourhood.

I shot over twenty, and not one of these had eaten anything but small fruits and berries. Hodgson says he has taken small univalve mollusca and several kinds of aquatic insects out of them, but I found absolutely nothing but fruits and berries in all the specimens I examined, and most carefully.

Very little seems known of this species in Europe. My friend Mr. Sharpe only describes the adult male and says nothing of the strikingly different female, young and immature. David and Oustalet equally content themselves with describing an old male, which, however, they describe as "d'un vert *éclatant!*" Can they ever have seen the bird?

Gould alone, 30 odd years ago, figured correctly an immature female (he did not know that it was this), and made remarks as to differences of plumage, which might have led to a clearer conception of the species. But even he, quoting Hodgson, describes the bird as brilliant parrot-green, and figures it far too bright, pure and light.

Having now a series of more than 30 carefully sexed specimens from various parts of the Himalayas eastwards of the Ganges (Bhagiratti), I have never got it west of that river, and the Manipur hills. I will try to clear up the differences of plumage observable, and give some useful particulars as to dimensions, colours of soft parts, &c.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*	
♂, *ad.* ...	11·15	17·5	4·7	5·73	1·08	1·28	3·37	ozs.
„ „ ...	11·0	18·0	4·7	5·8	1·12	1·3	3·5	„
„ „ ...	10·75	16·3	4·3	5·38	1·1	1·2	3·08	„
„ „ ...	11·3	17·5	4·4	5·6	1·17	1·35	3·68	„
„ „ ...	11·25	17·0	4·5	5·62	1·1	1·25	3·08	„
„ *jun.* ...	11·45	17·6	4·7	5·72	1·07	1·18	2·44	„
♀, *ad.* ...	11·5	17·5	4·4	5·62	1·15	1·25	4·32	„
„ „ ...	11·0	17·0	4·0	5·38	1·0	1·3	4·12	„

In the adult males the legs and feet are a sort of dark prune brown, but paler and with a fleshy tinge about the base of the tarsi and toes, the feet in fact, not the toes. The feet are clumsy, and there is a fleshy coloured sole-pad at the back of the tarsus above the hind toe. This latter is quite on the inside of the foot opposite the inner toe, while the soft pad is opposite the central and outer toe. The back of the tibio-tarsal articulation is also soft, pad-like, and of a fleshy pink colour. The front of the tarsi have often a silvery or leaden glance. In the immature male (No. 6 above) in the second plumage (*vide infra*) the feet are paler and pinker,

and the pad at the back of the lower part of the tarsus more prominent and pinker than in the adults. The adult females, which are more massively built than the males, have the tarsi brown with a pinkish tinge, and the feet brownish pink. In the quite young females the legs and feet are pink, only slightly brownish; in all the soles are greyish to yellowish horny; the bill black, a little brownish in females; the gape and orbital skin pink. As a rule I think the irides are pure brown, but in two they were brownish orange and in one dull brownish maroon.

Both sexes have three distinct parallel stages of plumage, and in all three stages the sexes differ, in that the delicate blue grey of the males of the greater portion of the outer webs of the secondaries and their great coverts is in the females more or less replaced by delicate clear rather pale, as I should call it, ochraceous olive brown.

Mr. Sharpe's description of the adult male is correct enough, but I may note a few points. The older the bird the darker and purer and the less olive the green of the upper surface; the purer the green and the less when held away from the light the yellowish or olivaceous tinge on the lower surface; the more blue there is about the abdomen and the more the deep purplish blue of the ear-coverts extends over the cheeks and the less traces there are of any ochraceous tinge on the lower tail-coverts.

Note that in all adults, younger or older, of both sexes, if you hold the birds between yourself and the light near the level of the eye, you will see the whole green portions of the plumage shot with ruddy gold and the grey of the tail with golden.

The adult females only differ from the males, in that the grey of the outer webs of the secondaries is replaced, except just where it precedes the black tips, by an ochraceous olive brown, while the grey of the outer webs of their greater coverts is replaced, on the inner halves or more of these, by the same colour. The extent of this brown varies in the individual and not according to age; in some a mere speck of grey remains on the secondaries between the brown and the black tips; in others nearly a quarter of an inch.

The second plumage differs from the adult in having the chin, upper throat, entire cheeks, ear-coverts and a patch behind these pure white, and the rest of the lower surface a bright ochraceous orange, quite pure on the middle of the abdomen and lower tail-coverts, a little brushed with green on

the breast, sides and flanks. This plumage is the same for both sexes, saving the difference in the wings above explained, which is the same alike in adults, in second and in first plumage.

As the bird approaches maturity the lower surface gets more and more brushed with green, the white of the chin and upper throat becomes ochraceous and then brushed greenish; that of the sides of the head becomes blue, the patch behind the ear-coverts first disappearing. But long after the bird has in other respects assumed the adult plumage, a more or less strong ochraceous tinge remains on the lower tail-coverts.

In the first plumage (which reminds one of *Merula*, *Turdus*, and *Pitta*) both sexes have the entire top and back of the head with the feathers dusky at their bases, white with a faint bluish tinge towards their tips, and fringed all round these with black; the ear-coverts a purer white, more or less tipped with a narrow line of black; the entire mantle and upper tail-coverts, the feathers greyish brown at their bases, more or less green medially, and with large more or less fan-shaped golden buff subterminal spots fringed with black. Even the secondary greater coverts, all but the first two or three, though otherwise similar to those of adults, male or female, as the case may be, exhibit these conspicuous spots; quills, winglet, rest of greater coverts and tail as in adults; entire lower parts buff, richest on the breast, with everywhere, except on the chin and throat (and in some there are traces of it even here) narrow black tips to the feathers. Here and there, especially on the abdomen, the grey dusky bases of the feathers show through.

The lower surface of the bird is just that of so many of the Blackbirds and Thrushes.

So too in the young of *C. purpurea* the lower surface is just exactly that of a young Blackbird.

The upper surface of the young *viridis* at once recalls, at any rate so far as the mantle goes, a corresponding stage in *Hydrornis nipalensis*.

When I add that the eggs of *Cochoa purpurea* are barely separable from those of *Merula boulboul*, while those of *viridis* are very similar, and that the nests of both are clearly those of Thrushes, these facts of nidifications, coupled with the changes of plumage above described and their almost purely frugivorous habits, are sufficient, I think, to prove that the *Cochoas* can have no earthly connection with *Tephrodornis* and *Hemipus*, with which Mr. Sharpe unites them.

But his family of *Prionopidæ* is to my mind altogether unnatural, a jumble of the most incongruous genera. *Platylophus* has no more relation to *Tephrodornis* than has *Cochoa*. Certainly, despite its peculiar bill, feet and colouration, *Cochoa* is much more nearly akin to *Merula* than to *Tephrodornis*.

I have this species from N.-E. Cacher, but I am not aware of its having as yet been recorded from any other place in Assam, Sylhet, Cachar or British Burmah; but its range extends from the Himalayas as far west as the Bhagiratti to Cochin-China and Fokein on the east, and it will turn up doubtless in the Naga and Tenasserim hills, if nowhere else within our present limits.

609.—Pteruthius erythropterus, *Vig.*

I first met with this on the higher portions of the Limatol range of the Western hills, where it seemed rather scarce, and then I found it extremely abundant everywhere on the higher parts of the Eastern hills.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 6·9	10·0	2·85	3·15	1·14	0·75	1·26 oz.
,,	... 6·65	10·3	2·1	3·18	1·09	0·86	1·3 ,,
,,	... 7·8	10·9	2·46	3·3	1·06	0·85	1·42 ,,
,,	... 7·9	10·6	2·6	3·3	1·1	0·85	1·45 ,,
♀	... 6·7	10·4	2·3	3·3	1·1	0·82	1·25 ,,
,,	... 6·82	10·63	2·32	3·35	1·1	0·83	1·05 ,,
,,	... 6·58	10·3	2·2	3·21	1·1	0·89	1·25 ,,
,,	... 7·65	10·5	2·4	3·35	1·08	0·81	1·37 ,,

Legs and feet fleshy, in some pinker, in some whiter; claws a darker or paler brown; soles yellowish; lower mandible and edges of upper mandible from gape to below nares pale blue or plumbeous; rest of upper mandible black, occasionally horny black; irides greyish lavender, deep grey, deep blue grey, greenish grey, grey blue, pearly blue grey, pale green speckled with white, and varying a little in every specimen. *Never* amber, as Godwin-Austen gives.

Some specimens, as will be seen, are much larger in the bodies and weigh considerably more than others. There is very little difference in wings and tails; it is in the length of the body that the great difference exists, and this was very conspicuous in the fresh birds.

I have this species from the Khasi hills, and Godwin-Austen includes it in his Dafla hill list, but there seems to be no further information as to its distribution in Assam, Sylhet or Cachar, nor do I know that it extends to British Burmah. It is true Anderson obtained it in Independent Burmah, but

it is replaced in Karenee and the higher hills of Central Tenasserim by the closely-allied *P. æralatus*, Tick.

There is another species, 610.—*Pteruthius rufiventer*, Bly., obtained by Godwin-Austen in the Naga hills, and which is pretty sure to occur in the Manipur hills, but which I never succeeded in finding there, and of the occurrence of which in Assam, Sylhet, Cachar or British Burmah nothing further is known.

611.—Allotrius melanotis, *Hodgs.*

I only procured this on the higher portions of the Eastern hills, and even here it was far from common. This bird has never, I think, been properly described, or the differences between the male and the female correctly pointed out. Jerdon described the male imperfectly, and described a different species, *xanthochloris*, as the female. Godwin-Austen described a female (not quite correctly), but without apparently being aware that it was a female and differed widely from the male.

The adult male has the feathers of both eyelids pure white; the lores (much overhung by the frontal feathers), and a line completely encircling the white eye-lid ring, black, this line involving the bases of the ear-coverts; median portion of the ear-coverts bright canary yellow, the tips black, forming a conspicuous transverse line across the side of the upper neck; chin, cheeks and throat light to almost deep chestnut; cap a dull golden olive, sometimes greener, sometimes yellower, brightening to almost pure yellow immediately above the bill; over the eye a greyish white band, widening and becoming greyer posteriorly, where it blends with the broad pure grey nape band, a narrow paler line of which runs down behind the transverse black band already referred to for about half its length; the rest of the upper parts are a bright golden olive, varying a good deal in tint in different specimens; the tail is blackish brown to quite black, the central feathers overlaid with olive, the exterior ones white, and the intermediate ones more or less broadly or narrowly tipped, and often margined on the interior webs towards their tips, with white; the amount and distribution of the white on these feathers varies at times remarkably. The lesser wing-coverts are dark grey, at times a little washed with the colour of the back; the median and greater coverts are black; the median and secondary greater coverts conspicuously tipped with white, forming two distinct wing bars; the quills are blackish brown,

margined on the outer webs with French grey; the tertiaries more or less washed with the colour of the back, and these and the later secondaries narrowly margined at the tips with white; the lower parts from the throat bright gamboge yellow; the whole of the middle of the breast more or less strongly suffused with a tinge of the throat colour; axillaries, wing-lining and inner margins of quills silky white.

The female differs in being altogether duller coloured above and below; in having the chin and upper throat a sort of dull pale fawn colour, and the lower throat and entire breast yellow; in having the chestnut, and a far paler shade of this than in the male, confined to the cheeks or nearly so; in having the white tips of the median and greater coverts (which are brown instead of black) replaced by light chestnut; in having the grey margins of the quills nearly obsolete, and the outer webs of the secondaries especially much washed with a tinge of the back colour, and in much the same change having taken place in the lesser coverts.

We have this from Shillong, and Godwin-Austen records it from Hengdon and Cherrapoonjee, and beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

I do not know of its occurrence in British Burmah. Blyth recorded it from Tonghoo, but it is questionable whether the bird he referred to did not belong to *A. intermedius*, nobis, which we have from the higher Tenasserim hills, and which is much nearer to the true *A. œnobarbus*, Tem.

612.—Cutia nipalensis, *Hodgs.*

I only once *saw* this species properly, and then there were a small party hopping and running along the branches with a rapidity that was surprising; they were fully eighty yards from me, and before I could get within shot they had raced from tree to tree out of sight. But a few days later catching a glimpse of something which I took for a small squirrel skurrying along a branch some 35 or 40 yards straight above me, I fired a snap shot and down fell one of these birds. I never got a second specimen.

The bird I got was a lovely *male*. The following were the particulars I recorded:—Length, 7·1; expanse, 11·2; tail, 2·1; wing, 3·41; tarsus, 1·2; bill from gape, 0·9; weight, 2·05 ozs. Legs and feet rich wax yellow; claws pale yellowish horny; bill black, pale leaden blue at gape and base of lower mandible; irides brown.

Godwin-Austen records this from both the Dafla and Eastern Naga hills, but I know nothing further as to its occurrence in

Assam, Sylhet or Cachar. We do not *know* that it extends to any part of British Burmah, but Ramsay procured it in Karenee at 6,000 feet.

613.—Lioptila annectans, *Bly.*

Only seen in the higher portions of the Eastern hills from an elevation of 4,500 feet upwards, but common there. They creep about the branches of large trees in forest, very much like creepers, though neither quite so rapid or jerky in their movements.

In most of these Liotrichine birds there is a difference, slight but sufficient, (though at times only of a single feather) in the plumage of the two sexes; but in this species I can discover none, and the consequence was that, though I measured a great many, all I measured proved to be males. It seems sufficient to reproduce the details of six of these :—

	Length.	*Expanse.*	*Wing*	*Tail.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	7·3	9·3	3·05	3·0	1·0	0·75	0·82 oz.
,,	7·4	9·3	3·25	2·84	1·01	0·76	0 88 ,,
,,	7·4	9·7	3·3	3·05	0·94	0·77	0·93 ,,
,,	7·7	9·5	3·35	3 07	0·9	0·77	0·91 ,,
,,	7·8	9·5	3·45	3·15	0·98	0·75	0·86 ,,
,,	7·4	9·0	3·2	2·9	0·97	0·75	0·82

Legs and feet wax yellow; claws, more or less of them, brownish; bill black; gape and more or less (from $\frac{1}{3}$ to $\frac{2}{3}$) of basal portion of lower mandible yellow; irides chocolate, brownish chocolate, brownish maroon, claret red, greyish chocolate brown.

Jerdon's description is not only incomplete but downright wrong in several particulars.

The lores, forehead, crown, occiput, cheeks, ear-coverts, back and upper halves of sides of neck, and a very broad band running down each side of the back to about the middle of the back, black; the nape and back of neck streaked with white; the middle of the upper back, the whole of the lower back, rump and upper tail-coverts, a rich ferruginous chestnut; scapulars, on to which the black bands descend, a pale more or less rusty buff; wings black; lesser and median coverts more or less (it varies very much) fringed at the tips with grey; greater secondary coverts tipped with light chesnut; quills, except tertiaries, conspicuously margined on their outer webs with grey; tertiaries tinged with chestnut on their outer webs towards their bases and margined elsewhere with white; tail black; all but the central feathers (and these even often show a trace of it) tipped with white, each feather, as they recede

from the central ones, more and more broadly; chin, throat, lower half of sides of neck, breast and abdomen, pure white; flanks, vent, lower tail-coverts, pale, (more or less) rusty, buff; wing-lining, axillaries and inner margins of quills white.

I have never seen this species from anywhere in Assam, Sylhet or Cachar, but Godwin-Austen records it from the head of the Jhiri river close under the Burrail range. In the higher hills of Tenasserim and Karenee it is replaced by *L. saturata*, Wald. (*L. davisoni*, nobis, V, 110), but I am not aware of the occurrence of either species in Pegu or Arakan, the hills being perhaps scarcely high enough.

From Shillong and other places in the Khasi hills, I have 614.—*Liothrix luteus*, Scop., but I never met with this in Manipur, nor do I yet know of its occurrence anywhere in Assam, Sylhet and Cachar, except in the Khasi hills. Blyth records it from Arakan, but I am not aware that it has been observed elsewhere in British Burmah.

615.—Mesia argentauris, *Hodgs.*

In the Western hills I only saw and shot a single pair on the high Limatol range, but in the higher portions of the Eastern hills it was very common, though I never shot it except by mistake, it not being a bird we wanted.

I measured a single *male*:—Length, 7·0; expanse, 9·5; tail, 2·8; wing, 3·0; tarsus, 1·02; bill from gape, 0·63; weight, 0·94oz.

Legs and feet pale brownish wax yellow; bill clear bright wax yellow; irides claret colour to lac red.

Jerdon remarks: "The female is said to differ in the tail-coverts being fulvous yellow instead of red, but I found them precisely similar, the young only having those parts coloured as above." There is no doubt that Jerdon is wrong. I have dissected numbers elsewhere and a dozen or so in Manipur. The adult male has the tail-coverts, upper and lower, crimson, deepest on the upper and more or less tinged with yellow towards the bases of the lower. In the adult female the upper tail-coverts are a slightly brownish, or, at times, in places reddish, golden, the lower, ochreous or ochraceous buff.

I have this from Kohima in the Naga hills, and Godwin-Austen gives it from the Khasi hills, and includes it in his Dafla hill list. Beyond this I know nothing of its distribution in Assam, Sylhet or Cachar. It occurs in the higher hills of Northern and Central Tenasserim, but not so far as we

yet know in either of the other provinces of British Burmah, though Ramsay obtained it in Karenee.

Another species that I failed to find in Manipur, and which I have never seen from any part of Assam, Sylhet or Cachar, is 616.—*Siva strigula*, Hodgs., which Godwin-Austen procured in the Khasi hills and includes in his Dafla hill list. This species is said to have been obtained in the Tonghoo hills, and this may be so, or it may have been the nearly allied *Siva castaneicauda*, nobis, which replaces it further south in Tenasserim. Be this as it may it is not known to occur anywhere else in British Burmah.

617.—Siva cyanuroptera, *Hodgs.*

Common above 4,500 feet, alike in the Western and Eastern hills.

I only shot a few, and unfortunately both I measured were males, though these are distinguishable from the females by their rather larger size, the somewhat darker shade of the back and purer tint of the tail and, *generally*, of the wings also.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·2	8·1	2·55	2·5	0·9	0·6	0·64 oz.
„ ...	6·4	8·0	2·7	2·5	0·95	0·65	0·61 „

Legs, feet and claws pale brown, often with a fleshy tinge: (1) bill dull wax yellow, greenish dusky about nares and tip of upper mandible; (2) upper mandible pale brown; nares, gape, and greater part of lower mandible wax yellow; irides brown (?) I have this from the Khasi hills, and Godwin-Austen includes it in his Dafla hill list, but there is no other record as yet of its distribution in Assam, Sylhet or Cachar.

I do not think this occurs in British Burmah in the Tenasserim hills. We found it replaced by the *very* closely allied form, *S. sordida*, nobis. Ramsay is said to have procured *cyanuroptera* in Karenee, but it may have been *sordida*.

618.—Minla ignotincta, *Hodgs.*

Only seen in the higher parts of the Eastern hills, where it was by no means rare.

The following are particulars of some I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·65	8·0	2·2	2·55	0·83	0·64	0·51 oz.
♀ ...	5·6	7·8	2·2	2·46	0·84	0·62	0·58 „
„ ...	5·6	7·75	2·2	2·45	0·89	0·6	0·5 „

Legs and feet grey brown to greenish leaden, with a wax yellow tinge on toes (sometimes extending to the tarsi), more decided in males than in females; soles wax yellow; upper mandible and tip of lower blackish brown; rest of lower mandible horny grey or bluish greenish horny; irides greyish or brownish white. Jerdon says: "The female is white beneath and the colours somewhat duller." As a fact, with a good series, there is no appreciable difference in the colour of the lower surface of the two sexes. The real differences are: (1) In the male the upper back and scapulars are a sort of chocolate brown, coutrasting with the brown of the rump; in the female the chocolate brown is wanting, and rump, back and scapulars are unicolorous. (2) In the male the basal portions of the outer webs of the quills are crimson; this is wanting in the female. (3) In the male the margins of the tail-feathers are crimson; in the females, a dull salmon red or pink.

Godwin-Austen found this very numerous in the woods about Sekhamih, Naga hills, in January, but I have no other record of its occurrence elsewhere in Assam, Sylhet, Cachar or British Burmah.

618*bis*.—Minla rufogularis, *Mand.*

At Noongzai-ban in the Western hills I shot a single specimen of this rare (in collections) species, and anxious as I was to get more I never again met with it.

The following are the details of my specimen, a *female*—Length, 5·0; expanse, 6·8; tail, 1·7; wing, 2·15; tarsus, 0·85; bill from gape, 0·6; weight, 0·51. Legs and feet pale yellowish horny brown; bill black; inside of mouth yellow; irides (?).

I have this from Dollah, near Sadiya, and Godwin-Austen tells us that it was pretty numerous in the Dafla hills at 3,000 feet, but beyond this we know nothing of its distribution in Assam, Sylhet or Cachar, nor is it believed to extend to any part of British Burmah.

619.—Minla castaneiceps, *Hodgs.*

I found this species pretty common in the Eastern hills in April and May at 4,000 feet and upwards. I did not see it, though it is sure to occur there, in the Western hills. I have this from Shillong and other places in the Khasi hills, but have no other record of its occurrence in Assam, Sylhet or Cachar. This species is found in the higher hills of Central and Northern Tenasserim, extending into Karenee, but does not, so far as we know, occur elsewhere in British Burmah.

Godwin-Austen procured 620.—*Minla cinerea*, Bly., in the Khasi hills, but this is all I know as yet of its distribution within our present limits, and I failed to meet with it in Manipur.

621.—Proparus chryseus, *Hodgs.*

I only once met with this species near the very summit of a high-wooded hill, some few miles from Tankool Hoondoong in the Eastern hills. It must be very scarce, for I was always keenly on the *qui vive* for all these little Tits, and the bird is very conspicuous and distinct, yet I certainly never saw it but this once.

Godwin-Austen obtained it both in the Dafla and Eastern Naga hills, but I know nothing else about its distribution in Assam, Sylhet or Cachar. To British Burmah it is not known to extend.

Another species obtained by Godwin-Austen on Japvo peak of the Burrail range at about 9,000 feet, is 622.—*Proparus vinipectus*, Hodgs. I did not see this in Manipur, nor do I believe it has been observed by any one else anywhere in Assam, Sylhet, Cachar or British Burmah.

622 *ter.*—Proparus mandellii, *G.-Aust.*

I found this species very common at 5,000 feet and upwards in the Eastern hills. In the Western hills I did not see it.

They keep in small parties of three to six in number, and haunt the low brushwood, balsams and other plants growing in the deep shade of forests. They are active, nimble, restless little beasts, always on the move, up this creeper, down that, seldom offering a good shot, though by no means shy or difficult to approach.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·63	7·3	2·5	2·25	0·88	0·62	0·61 oz.
,, ...	6·1	7·1	2·5	2·25	0·86	0·57	0·58 ,,
♀ ...	5·7	6·8	2·3	2·15	0·81	0·57	0·58 ,,

Legs and feet pale brown (with sometimes a faint fleshy tinge), more or less tinged with wax yellow; bill black; irides reddish maroon.

I have this from various places in the Khasi hills. Godwin-Austen found it very common in the Naga hills, and includes it in his Dafla hill list, and this is all I know as yet about its distribution in Assam, Sylhet or Cachar. It has not been observed in British Burmah, but in the higher hill forests of

Central and Northern Tenasserim is replaced by the nearly allied *P. dubius*, nobis.

623.—Ixulus flavicollis, *Hodgs.*

Seen once on the Limatol range of the Western hills, but nowhere else in these latter. Very common in the higher portions of the Eastern hills, where, haunting as they do the depths of the forests, ceaselessly dodging in and out of the dense undergrowth, I was perpetually shooting them by mistake.

This species is very variable in tint, partly according to sex, partly to age, and partly, I think, as an individual difference. The lores and moustachial stripe vary from black in an old male to a brown unicolorous with the crown in a (? young) female; the cap and crest from quite a dark to quite a light somewhat rufescent brown; the nuchal collar from intense ferruginous orange to light straw buff; the sides of the breast, body and flanks from a strongly marked olive, a little tinged here and there with ferruginous, to a pale earth brown; the middle of abdomen, vent and lower tail-coverts from a warm buffy yellow to dull white; and the brown of the mantle similarly varies much in depth of colour. Besides this in some specimens the feathers of the greater part of the throat and upper breast have conspicuous though narrow dark shaft stripes; in the majority only the shafts themselves are dark, while in a good many there is not a trace of this.

Godwin-Austen records this from the Khasi hills and from the Shengorh peak of the Dafla hills, but as yet I know nothing further of its occurrence in Assam, Sylhet or Cachar. It has never been observed in any part of British Burmah.

From Shillong I have 624.—*Ixulus occipitalis*, Bly., and Godwin-Austen records it from the Dafla hills, but I never met with it in Manipur, nor do I know anything further as to its occurrence in Assam, Sylhet, Cachar or British Burmah.

624*bis*.—Staphidea castaneiceps, *Moore.*

This was only observed in the Eastern hills at 5,000 feet and upwards, and even there seemed very rare. I only twice saw it, first at Aimole on the 20th of April, a single specimen in company with *Ixulus flavicollis* and a lot of other little birds hunting in the brushwood; and, secondly, on the 20th of May high up above Tankool Hoondoong, at an elevation of about 5,800 feet, when I came across a small

party, exclusively of this species, hunting in the half-withered foliage of a recently-felled evergreen oak.

A *male* measured:—

Length, 5·4 ; expanse, 7·5 ; tail, 2·2 ; wing, 2·34 ; tarsus, 0·65 ; bill from gape, 0·5 ; weight, 0·44oz. Legs and feet orange brown ; bill brown ; irides brown.

I have this from both the Garo and several localities in the Khasi hills, and Godwin-Austen says that it is common in these and in the Naga hills, and that he obtained one specimen in the Dekrang valley of the Dafla hills, and this is all we yet know of its distribution in Assam, Sylhet or Cachar. It does not, so far as I know, occur anywhere in British Burmah, but it probably does extend to the extreme north of Tenasserim as Ramsay got it in Karenee at 5,200 feet.

There is a nearly allied species with an ash-grey head, 624*ter*.—*Staphidea plumbeiceps*, Godwin-Austen, obtained in the Dibrugarh district near Sadiya and Brahmakund, which I have never seen, and of the occurrence of which anywhere within our present limits nothing further is yet known.

628.—Yuhina nigrimentum, *Hodgs.*

I obtained a single specimen of this plain-coloured little Hill Tit, high up on a wooded hill a little north-east of Tankool Hoondoong. I never, that I know, met with it again in any part of Manipur.

Godwin-Austen records it from both the Naga and the Shengorh peak of the Dafla hills, but beyond this nothing is known of its occurrence in Assam, Sylhet, Cachar or British Burmah.

630.—Herpornis xantholeucus, *Hodgs.*

I shot this first in the Eerung valley in the Western hills, and met with it in two or three other places in these, but always below 4,000 feet. I shot another in some low hills close to Phalel in the basin of Manipur, and again on the less elevated portions of the Eastern hills. In Manipur I nowhere saw the bird above 4,000 feet, and it was nowhere at all common, but I saw single specimens or pairs, perhaps a dozen times from first to last.

The following are details of *a male*:—

Length, 5 ; expanse, 8·4; tail, 2·0 ; wing, 2·7 ; tarsus, 0·7 ; bill from gape, 0·62 ; weight, 0·43oz. Legs and feet fleshy

pink; upper mandible rather pale brown; lower mandible, gape, and edges of the upper mandible, pale horny fleshy; irides pale brown.

I have this from N.-E. Cachar and from Shillong, and Godwin-Austen records this from the Hengdon peak, at the head of the Jhiri river at 5,000 feet, and from Harjuli, 3,000 feet up on the road to the Tomputu peak in the Dafla hills. Beyond this I know nothing certain of its distribution in Assam, Sylhet and Cachar. It is common in the Arakan hills as also in the Pegu hills, and is sparingly distributed throughout the evergreen forests of Tenasserim.

631.—Zosterops palpebrosa, *Tem.*

This species was common in the basin of Manipur, and was very often seen flitting restlessly about the bamboos and small trees in the enclosure hedges of the capital. I never saw it anywhere in the hills.

I have this from N.-E. Cachar, Sadiya and many other localities in the Dibrugarh district, and Godwin-Austen records it from the Khasi hills (I suppose from low valleys or plateaux, for it is nowhere a high hill bird), and this is all I yet know of its distribution in Assam, Sylhet or Cachar.

[Common in Dibrugarh, frequenting scrub jungle and tea gardens. When the bushes in the latter are flowering, these birds are very abundant. On the 18th May 1881 I found a nest, about 30 inches off the ground, in a tea bush, on the edge of the forest, with three fresh eggs. It was cup-shaped and suspended from three twigs, composed of fine moss, cobwebs, and grass fibres, and lined with silk-cotton (*Bombax*) and fine grasses. The egg cavity was 1″·60 deep, and 1″·50 diameter. The female was shot as she flew off the nest.—J. R. C.]

It occurs sparingly in Arakan, Northern and South-eastern Pegu, and the extreme north of Tenasserim, but nowhere else in Burmah so far as I know.

632.—*Sylviparus modestus*, Burt., was common in small parties in April on the high parts of the Eastern Burrail range under the peaks of Japvo and Khunho. I never met with this in Manipur, nor have I any other information as to its occurrence in Assam, Sylhet, Cachar or British Burmah.

634.—Ægithaliscus erythrocephalus, *Vig.*

I think I saw this on the Limatol range of the Western hills, but I could not secure a specimen and am not sure. On the Eastern hills I twice saw small parties, and each time secured a single specimen.

These specimens represent a recognizably distinct race, which differs from all Himalayan examples: (1) in having the white band running from the top of the eye backwards over the ear-coverts, replaced by black, slightly streaked with fine lines of white; (2) in having a pure white pectoral band dividing the black throat patch from the chestnut of the breast, with which it contrasts strongly, and from which it is abruptly defined; (3) in having the breast band, sides of breast and abdomen and flanks, a clear light chestnut, very different from the pale washed-out colour of these parts in Himalayan specimens; and (4) in having the black throat patch smaller.

I myself should not separate this form specifically; those who do may call it *Æ. manipurensis.*

The following are the details :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 4·3	5·9	2·1	1·97	0·63	0·27	0·2 oz.
♀	... 4·15	5·6	1·85	1·84	0·55	0·32	0 2 „

Male.—Legs and feet warm reddish mahogany brown; claws darker; bill black; irides bright yellowish white.

Female.—Legs and feet very pale orange brown; bill black; irides creamy white.

Godwin-Austen records this from Kohima in the Naga hills, but beyond this I have no knowledge of its occurrence in Assam, Sylhet or Cachar. It has not yet been observed in British Burmah, but Ramsay obtained it in Karenee.

644.—Parus monticolus, *Vig.*

Only observed at Matchi on the Eastern hills and very scarce there. I only shot two specimens. A male measured :— Length, 5·25; expanse, 8·25; tail, 2·25; wing, 2·68; tarsus, 0·73; bill from gape, 0·52; weight, 0·52oz. Legs and feet lavender; claws darker; bill black, a little yellowish at gape and extreme tips; irides hazel or reddish brown.

I have this from the Khasi hills, and Godwin-Austen says it is common enough in the Naga hills, but beyond this nothing seems to be known of its distribution in Assam, Sylhet or Cachar, nor is it known to extend to British Burmah.

645.—Parus nipalensis, *Hodgs.*

This, too, though generally diffused in Manipur, alike in hills and plains, was very scarce. I first saw it at Kalanaga, then on the Limatol range, both these in the Western hills. Then near the capital and again at Sagam, both in the basin, and then near Kangoee on the Eastern hills, but I saw it on no other occasion.

A *female* measured :—

Length, 5·8 ; expanse, 8·7 ; tail, 2·55 ; wing, 2·82 ; tarsus, 0·69 ; bill from gape, 0·52 ; weight, 0·6oz. Legs and feet bluish leaden ; claws darker ; bill blackish brown, horny white at tip and edges ; irides dark brown.

I have this from many localities in the Dibrugarh district, where it seems to be very common, and Godwin-Austen gives it from the bases of the Garo hills, and includes it in his Dafla hill list, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[Common in Dibrugarh, where it frequents gardens, hedges, villages, but not noticed in very heavy forest. The natives say they are very destructive to the "Mooga" (*Antheræa, Assama*, Helf.) silkworm, when these are reared in the jungles in a semi-wild condition.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·40	7·60	2·40	2·55	0 60	0·51	0·50 oz.
„ ...	5·35	7·70	2·35	2·55	0·65	0·54	0·50 „
♀ ...	4·75	7·0	1·90	2 35	0·60	0·46	0 35 „
„ ...	5 20	6·80	1·95	2·35	0·70	0·50	0·50 „

Bill black ; legs plumbeous, deeper on the feet.

They breed in holes in trees at no great height, even as low down as 30 inches from the ground. The insides of the holes are lined with dry leaves, goat's and cow's hair, and fibres. By the middle of May fully-fledged young are to be found. On two occasions I found five young in each nest. Assamese call them "Bhudder-Koolee."—J. R. C.]

This species occurs in Northern Pegu, and is common in the tidal jungle about Elephant Point, &c., below Rangoon, and we obtained a single specimen in the mangrove swamps south of Thatone, but never saw it elsewhere in Tenasserim, and that is all I yet know of its distribution in British Burmah.

649.—Machlolophus spilonotus, *Bly.*

Very common on the higher portions of the Manipur hills, alike the Eastern and the Western, as on the Limatol range, Aimole, Matchi and Tankool Hoondoong.

I have this from several parts of the Khasi hills, but I have no record of its occurrence elsewhere in Assam, Sylhet or Cachar, and in British Burmah I only know of its having been obtained in the higher hills of Central Tenasserim, though Ramsay, I may note, obtained it in Karenee, at only 3,000 feet elevation. In Manipur I did not see it much, if at all, below 5,000 feet.

650.—Melanochlora sultanea, *Hodgs.*

Occasionally seen throughout the Western and Eastern hills, from low down in the valleys of the Barak and Eerung to the highest parts of the hills I visited, but nowhere numerically abundant.

A male measured :—

Length, 8·4; expanse, 13·0; tail, 3·95; wing, 4·25; tarsus, 0·9; bill from gape, 0·7; weight, 1·38ozs. Legs and feet dull leaden blue; bill black; irides dark brown.

I have this from N.-E. Cachar, the Khasi hills and numerous localities in the Dibrugarh district, and with these localities ends my knowledge of its distribution in Assam, Sylhet and Cachar.

[Common in Dibrugarh in suitable localities, *i.e.*, forest tracts, where they flit about in small parties and in pairs.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·25	12·75	4·0	4·30	0·85	0·70	1·35 ozs.
,, ...	7·90	12·50	3·70	4·15	0·86	0·65	1·25 ,,
♀ ...	7·40	11·85	3·66	4·0	0·85	0·67	1·28 ,,

Irides reddish brown; legs and feet plumbeous; bill black.—J. R. C.]

It occurs, everywhere rather sparingly I believe, in Arakan, in all the Pegu hills, and throughout Tenasserim, and Ramsay obtained it in Karenee.

660—Corvus macrorhynchus, *Wagl.*

This, the only Crow in Manipur, is pretty common in the basin and the Kopum Thal, but scarce in most parts of the hills.

I got one male, apparently full grown—(Length, 20·0; expanse, 36·0; tail, 7·2; wing, 12·1; tarsus, 2·4; bill from gape, 2·55; weight, 1lb. 8oz.)—with the basal portion of the lower mandible, the gape and a bare band inside each ramus of the lower mandible fully one-eighth of an inch wide, a delicate pinky flesh colour, and the irides silvery grey. Of course usually all the parts above described as pink are black and the irides brown.

I found this species all over Sylhet and Cachar, and have it from various places in the Assam valley to beyond Sadiya, also from Shillong; and Godwin-Austen records it from the Naga hills, and says that at Sopoomah it was extremely numerous in January. He also includes it in his Dafla hill list as abounding at the Naraynpur Camp.

[Fairly common in Dibrugarh, where it is found in the densest forest, as well as open cultivated country. They generally go about in pairs, and breed during June and July.—J. R. C.]

It seems generally diffused throughout British Burmah; it is common all over Pegu, but rarer in both the other provinces.

All through Sylhet and Cachar to its eastern boundary I met with 663.—*Corvus splendens*, Vieill. It was common about the few bazaars and about the station of Silchar itself, but as a rule in both districts far less common than *macrorhynchus*. But once I crossed the Jhiri into Manipur I lost sight of it, and as a fact the Manipur people, who call it the "*Myan kwak*," or Cachar crow, assure me that it never enters Manipur territory. Neither does it occur in the Naga hills. In the Assam valley, though very scarce to what it is in India, it occurs right up to Sadiya.

[About the station of Dibrugarh, this species is common all the year round; and the same may be said to be the case wherever there are large villages and several tea gardens clustered together, but in the greater part of the country they are only seen during the cold season, either in pairs or small parties, leaving these haunts in April.—J. R. C.]

It did not formerly extend to any part of British Burmah, but a few are said now to have domiciled themselves at Kykphyo in Arakan. Elsewhere in Pegu and Tenasserim this species is replaced by *C. insolens*, nobis.

Another species that I have from Shillong is 669.—*Garrulus bispecularis*, Vig. I did not secure this species in Manipur (though I repeatedly saw about Aimole, &c., a Jay of this type) nor, except in the Khasi hills, do I know of its having been observed as yet anywhere in Assam, Sylhet, Cachar or British Burmah, though in parts of Pegu and in the northern and central portions of Tenasserim it is replaced by *G. leucotis*, nobis.

Again, another species that I failed to see in Manipur, though one of my men professed (and I have no doubt he was correct)

to have seen it in the Eastern hills, a little north of Tankool Hoondoong, is 671.—*Urocissa occipitalis*, Bly., which Godwin-Austen procured at Sekhamih in the Naga hills at 5,000 feet in February. I say *occipitalis*, because I doubt the claim of *magnirostris*, Bly., to specific rank. Otherwise the Naga hill bird is said to have belonged to this latter race. Neither form has been elsewhere observed in Assam, Sylhet or Cachar so far as I yet know, but the so called *magnirostris* occurs in Arakan, Northern (not I believe Southern) Pegu, and Northern and Central Tenasserim.

673.—Cissa chinensis, *Bodd.*

I never saw this species either in the Eastern hills or in any part of the basin, and in the Western hills, though I saw it three times, I only once succeeded in shooting a specimen, and that was one of a pair, and between Kalanaga and Koombiron. This specimen killed 5th February is a *male* in perfect brilliant chrysophase green plumage, with every feather perfect. I dare say I have shot a hundred of these in my time, and yet this is the first absolutely perfect bird I ever myself procured.

The following are particulars:—

Length, 15·3; expanse, 17·5; tail, 7·9; wing, 5·6; tarsus, 1·7; bill from gape, 1·45; weight, 7ozs.

1st	lateral	pair	1·45	shorter than central	tail feathers.
2nd	„		2·15	„ „	„
3rd	„		2·65	„ „	„
4th	„		3·3	„ „	„
5th	„		4·05	„ „	„

Bill, eyelid ring, legs and feet vermilion; claws and soles more orange; irides dull crimson.

I have received this species from N.-E. Cachar. Godwin-Austen seems to have obtained one at Cherrapoonjee, and he includes it in his Dafla hill list, but beyond this I have no information as to its occurrence in Assam, Sylhet or Cachar.

[On two occasions, while nearing the station of Jaipur in Dibrugarh, I saw small parties of this species in some scrub jungle that bordered the road. There was no mistaking it, as I know the bird well, having shot it in Sylhet. A low range of hills are near Jaipur.—J. R. C.]

This species occurs in the Arakan hills, throughout the Pegu hills, and in Northern and Central Tenasserim.

In Manipur I never once saw 674.—*Dendrocitta rufa*, Scop., but in Central Sylhet I found this common* in the bamboos about the villages on the banks of the rivers between Fenchuganj and Karrimganj, and in these, morning and evening, they constantly uttered their harsh chattering call, totally distinct from their other curious metallic, child's-toy-cart-like, semi-musical note heard at other times. All through Cachar, too, I found it pretty common up to and a little beyond Lakhipur, but further east I never saw it. Like *Corvus splendens* the little Jhiri river seems to mark *here* its eastern-most limit. I have this also from Northern Sylhet and N.-E. Cachar, and from Joonkotollee in the Dibrugarh district, and I gather that perhaps Godwin-Austen obtained it in the Khasi hills, though the specimen he notes may have come from Cachar. Beyond the above I have no knowledge as to its distribution in Assam.

[Pretty common in Dibrugarh, where they are called "Kola Khoa," *i.e.*, plantain-eaters. Open forest with villages near and tea gardens are where they are mostly found. I noted the colours of the soft parts to be the same as Mr. Hume's specimens.—J. R. C.]

I do not know whether this occurs in Arakan, but it is found in suitable localities all over Pegu and Northern and Central Tenasserim.

676.—Dendrocitta himalayensis, *Bly.*

I met with this in both the Western and Eastern hills, as low down as the valley of the Eerung and as high as the highest point we ever reached, which, according to my calculations, did not exceed 6,500 feet. Though widely distributed, it was numerically scarce.

The Manipur specimens begin to show a transition to the Tenasserim form *D. assimilis*, nobis. They have the sides of the neck and upper back grey, as in *himalayensis* (not brown as in *assimilis*), but they have the ear-coverts brown, as in *assimilis*, not blackish dusky as in *himalayensis*, and they have the throat patch also brown and much restricted in extent as in the former. I am myself indisposed now to give specific rank to this kind of race, but having had occasion to review a series of the two forms to-day, I cannot but see that *D. assimilis* is a better marked race than many now-a-days

* Of two or three specimens I shot here, I noted legs and feet brownish dusky leaden; bill dusky leaden, pale leaden blue towards base of lower mandible; irides lac red.

universally accepted as valid species, *e.g.*, *Culicicapa burkii* and *tephrocephala*.

We have *D. himalayensis* from N.-E. Cachar, the Khasi hills and Sadiya, and numerous localities in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list, but I know nothing further of its distribution in Assam, Sylhet or Cachar.

[The "Kok-long-ah" of the Assamese is common in the Dibrugarh district, where it is found in the well-wooded parts. They commit great havoc among the "mooga" silkworms, which are bred in a semi-wild condition on clumps of the Soom (*Machilus odoratissima*, Nees) tree. They are very noisy birds, and have a peculiar jerky flight. On the 15th June 1880 I found a nest with three fresh eggs. It was fixed in the middle branches of a sapling, about ten feet off the ground, in dense forest, and was built of twigs, presenting a fragile appearance; the egg cavity was 4½ inch and 1 inch deep, and lined with fine twigs and grass roots. At the beginning of May females, when dissected, have the egg yolks well developed.—J. R. C.]

Blyth records this species from the Arakan hills, and Ramsay is said to have obtained it in the Tonghoo hills in Karenee, but all our specimens from the hills of Northern and Central Tenasserim are *D. assimilis*. From Pegu I have as yet seen neither form.

From Sadiya, Tippook and Dollah, all in the easternmost part of the Dibrugarh district, I have 677.—*Dendrociatta frontalis*, McClell., and Godwin-Austen records it from the Dafla hills, but I never saw it in Manipur, nor have I any further knowledge of its occurrence anywhere in Assam, Sylhet or Cachar, nor does it, I believe, extend to any part of British Burmah.

Again from Joonkotollee in Dibrugarh I have 681.—*Sturnus vulgaris*, Lin. There is no mistake about it; it seemed so out of its range, that I have just turned up the specimens again which were collected (with all my other Khowang and Joonkotollee specimens) by my friend Mr. Cripps. There is no other record of the occurrence of this species, so far as I know, anywhere in Assam, Sylhet, Cachar or British Burmah, and I certainly never saw it in Manipur.

[Two specimens of this were secured at different times, October 1880 and November 1881, in my flower garden. The soft parts were: Legs and feet dusky purple; bill brown,

whitish along commissure; irides, outer circle, brown, inner ditto white. No others were ever seen.—J. R. C.]

683*bis*.—Sturnopastor superciliaris, *Bly*.

This species was fairly common all over the Manipur valley or basin, but I observed it nowhere in the hills.

I do not think this species occurs in Assam, Sylhet or Cachar. Godwin-Austen no doubt says that the Cachar bird is *superciliaris*, but for reasons given below I am unable to concur with him.

I have not seen this species from Arakan, but I have it from both Northern and Southern Pegu, and from all parts of Tenasserim where the locality is suitable, from Mergui northwards.

In Sylhet* I found 683.—*Sturnopastor contra*, Lin., common; in Cachar too I shot several, and all were true *contra*. I scrutinized every bird of this kind I saw in Cachar; not one *superciliaris*. From N.-E. Cachar I have received several specimens; all are *contra*. Under these circumstances, though not disputing the fact that Godwin-Austen may have obtained *a* specimen of *superciliaris* from some part of Cachar, I must traverse his contention that "the Cachar bird is *superciliaris*." From Sadiya and four other places in the Dibrugarh district all the specimens likewise are *contra*, as is also one from Northern Sylhet. Further I know not concerning its distribution in Assam, Sylhet or Cachar. I do not think it extends to Arakan, and in Pegu and Tenasserim it is represented by *superciliaris*.

[In Dibrugarh they are pretty common, and in September they congregate in flocks, but whether they migrate afterwards or not I am unable to say. The birds I shot were true *contra*, and measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	9·30	14·25	2·30	4·65	1·30	1·45	3·25 ozs.
♂ ...	9·40	14·60	2·80	4·75	1·35	1·51	2·90 „
„ ...	9·40	13·50	3·0	4·60	1·25	1·42	2·75 „
♀ ...	9·80	14·40	3·0	4·60	1·30	1·55	2·90 „

Legs and feet ivory-yellow; irides ivory-white; orbital skin orange-yellow; bill, basal half deep orange, rest ivory-white. In winter the legs and feet are horny-brown.—J. R. C.]

* I happened, I do not know why, to measure one female, and may as well record the details. Length, 9·2; expanse, 14·3; tail, 2·95; wing, 4·6; tarsus, 1·28; bill from gape, 1·45; weight, 2·45ozs. Legs and feet dingy-pale yellowish fleshy; terminal half of bill white; basal portions and orbital skin orange-red; irides yellowish-white.

684.—Acridotheres tristis, *Lin.*

Very common about the valley, but never seen in the hills, though it is elsewhere by no means confined to the plains, being found in the Himalayas, for instance, up to over 7,000 feet.

This species seems to be found throughout the less elevated and more open portions of Assam, Sylhet and Cachar, as far east as Sadiya, Tippook and Dollah. I have it also from both the Garo and Khasi hills, but not from the Naga hills, though it may occur there too for all I know.

[Common in Dibrugarh. I noticed a fringe of tiny black feathers on the eyelids of these birds.—J. R. C.]

It is generally distributed throughout the drier, more open and inhabited portions of British Burmah.

From N.-E. Cachar and many localities in the Dibrugarh district, I have 686.—*Acridotheres fuscus*, Wagler, but I never met with it in Manipur, nor have I any further certain knowledge as to its distribution in Assam, Sylhet or Cachar.

[A forest-loving species and fairly common in Dibrugarh, where they go about in pairs and small parties. They breed in May and June, in holes in trees, at various heights from the ground.—J. R. C.]

Throughout British Burmah it is very generally distributed, though rare in the drier portions of Upper Pegu. In Southern Pegu it is commoner than *tristis*, and universally its station is, broadly speaking, a more humid one, and that of *tristis* a drier one.

686*ter*.—Acridotheres albocinctus, *G. Aust. & Wald.*

Seen only in the basin. Occur there in large numbers, but are very locally distributed. They affect low-lying and damp localities. Thus about the capital itself they are scarcely ever seen; getting to Booree Bazar, which lies very low, they are common; a little further on at Bishnoopoor, which stands high and dry, they are unknown; but directly one leaves this and *en route* for Moirang, dips into the old lake bed, and everywhere about the Logtak lake they are again pretty common.

In food and habits they scarcely differ from *A. tristis*. You may meet them singly, in pairs, in small parties or straggling flocks not less than 60 or 80 in number. You may see them feeding on the ground, about the platforms of the

empty market-places in villages, perched on bamboos, feeding busily on the insects and nectar of the huge fleshy crimson flowers of some tall silk-cotton tree, or again consorting with some herds of buffalos in some wet meadow, half of them at least perched about the heads and backs of the beasts and the rest parading about in a dignified manner on the intervening sward.

They feed chiefly on insects, worms and tiny frogs and lizards, but I also found plenty of rice in the crops of some specimens.

According to the people they are only seasonal visitants, arriving towards the close of the year from the south, and leaving when the rains set in, in May or June; but some say that during the rains some, at any rate, are found up in the hills. They breed in April, in holes in trees. They were beginning to prepare nests when I was at Moirang, but none had then laid, and when in May I re-descended to the basin further north I saw very few and could find no nests.

The following are details of the specimens I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	10·4	16·3	3·4	5·1	1·49	...	3·5 6ozs.
„ ...	10·5	16·6	3·6	5·3	1·5	1·3	3·77 „
„ ...	10·4	16·3	3·5	5·2	1·4	1·4	3·48 „
„ ...	10·3	16·2	3·4	5·05	1·46	1·26	3·65 „
? ...	10·1	15·8	3·5	5·06	1·4	1·3	3·41 „
♀ ...	10·0	15·8	3·38	4·9	1·35	1·3	3·15 „
„ ...	10·0	16·0	3·15	5·1	1·46	1·35	3·42 „
„ ...	10·2	16·0	3·6	5·0	1·4	1·25	3·05 „
„ ...	10·0	16·1	3·3	5·05	1·45	1·35	3·27 „

Legs and feet full, sometimes rather deep, wax yellow; claws a paler or darker brown, whitish horny at tips; bill pale wax yellow, with a touch of red or orange on the sides of the lower mandible just at its base; irides yellowish to bluish white to pale cærulean blue.

No complete description of this species has yet appeared.

The chin, cheeks, lores, ear-coverts, forehead, crown, occiput and sides of the head are black, not a deep intense black, but rather dull and dusky; the frontal feathers narrow, stiff, more or less disintegrated-webbed, forming a conspicuous erect brush, 0·3 to 0·4 long; feathers of the rest of the top and back of the head very narrow, elongated, forming a full occiptal crest, glossed, and with their shafts more highly glossed; throat a dull grey black; on each side of the neck a large patch, dull fulvous on its upper margin, fulvous white elsewhere; the patches meet *neither* in front nor behind by more than half an inch, though in some *skins* they might appear to meet, or nearly so, behind; more or less

numerous white splashes or marks or shaft stripes on the feathers adjoining the ends of the spots that point to the interscapulary region; the entire mantle, rump and upper tail-coverts are deep brown, but the interscapular region, scapulars, rump, and all but the longest upper tail-coverts are glossed with a dull greenish black, the two former most strongly so; the tail blackish brown, all but the two central feathers conspicuously tipped with pure white; entire lower parts from the breast dusky ashy, much the same as, though a shade paler than, the throat, becoming more or less brownish on the longest flank feathers; vent feathers and lower tail-coverts, all of which are tipped (the latter conspicuously so) with white, and tibial plumes, blackish brown; axillaries, greater primary coverts, &c., a pale grey brown, tipped white; all the coverts about the shoulder of the wing blackish-brown, faintly margined paler; wings a deep brown, almost blackish in some specimens on earlier quills, winglet and lesser coverts; the second feather of the winglet is always white on the outer web near the tip, and occasionally this extends to the inner web just at the tip; all the primaries are broadly white towards their bases, the first long one almost exclusively on the inner web, the others on both webs.

In fine specimens there is a more or less faint greenish or purplish gloss over wings and tail and even the lower parts.

These birds are at times very shy, and generally become so when in flocks, after they have been fired at once, but at times they are just as tame as the common Myna. When sitting or flying with the light *behind* them, it is impossible to distinguish them from *tristis;* they are the same size, have the same wing patch, &c., but when on the ground, or with the light falling on them, their dark colour and the white neck patch distinguishes them at once.

So far as is yet known this species occurs nowhere in Assam, Sylhet, Cachar or British Burmah.

686*quat.*—Acridotheres siamensis, *Swinh.*

I only observed this in the south and south-east of the Manipur basin, and even there it was extremely scarce. Once in a hundred times one sees a pair of these consorting with a lot of *A. albocinctus*, where these are feeding upon the simul (or silk-cotton) trees. According to the people they arrive with and disappear at the same time as *A. albocinctus*. Both species are taken from the nests and kept in cages and taught to say a few words. You constantly see *albocinctus*

occasionally *siamensis* (that is when you *do see* this, which is not often) feeding on the same trees with *A. tristis* and *Sturnia malabarica*, but they never consort with these; they go to the same *restaurant*, but they are dead cuts. Manipur specimens agree entirely with others from Siam and Tenasserim.

The following are details of specimens I shot :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	10·6	17·4	3·5	5·4	1·5	1·3	3·91 ozs.
,, ..	10·1	17·0	3·2	5·33	1·6	1·41	3 73 ,,
♀ ...	10·2	16 5	3 7	5·3	1 57	1·3	4·05 ,,

Legs and feet bright to full wax yellow; claws brown; bill rich wax yellow; irides light reddish to orange brown or hazel. I have already briefly described this species (IX, 285), but may add that it is *very* like *A. albocinctus*, fully described above, but differs in having a longer and less brush-like frontal crest; a greater depth of white on the wing, specially on the hinder primaries; white instead of white-tipped under tail-coverts; no white-tippings to flank or vent-feathers; broader white tippings to the lateral tail-feathers and no white neck patches.

How it differs from *A. cristatellus*, L., of China is explained by Swinhoe's original description, S. F., VI, 389.

This species has never as yet been recorded from any part of Assam, Sylhet or Cachar, and the only place whence it has been procured in British Burmah is in the Tenasserim hills, between Tavoy and Siam. Wardlaw Ramsay, however, procured it just north-east of Tenasserim in Karenee.

688.—Sturnia malabarica, *Gm.*

This species is very common in the Manipur basin, often in pairs, more commonly in small parties, and during the latter part of February and the first half of March is almost invariably seen on the silk-cotton trees *(Bombax Sp.)* and coral trees *(Erythrina indica)*, feeding on the nectar of their showy blossoms or on the insects these attract.

The great variations in tint observable in specimens of this species has been noted (VI, 391), but amongst the series I shot in Manipur the contrast is greater, I think, than in any other series I ever examined, there being several birds a bright chestnut from the upper breast downwards, only deeper and most intense on the lower surface of the tail, and others in which, except the lower surface of the rectrices, all these parts are nearly white, and this in males not apparently immature.

In the hills this was very scarce. This species occurs all over the plains portion of the Assam valley, Sylhet and Cachar, where the country is not too wet and treeless. It is found also in the Garo and Khasi hills, and Godwin-Austen records it from the Dafla hills. In Tenasserim we have only met with this in the southernmost portions of the province. In Lower Pegu it is very common, but it is rare in the upper part of that province. It is also common in Arakan.

[The "Kat Halik" (Wood Mynah) of the Assamese is common in Dibrugarh, going about in parties and flocks, except during the breeding season. They congregate in flocks about the months of February and March, at which time a great part of the forest trees are in flower, and these birds, with others of the same genera, feed on the nectar and insects to be found in the flowers. The measurements of some are given below:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	8·30	12·50	2·80	4 10	1·0	1·0	1·60 ozs.
,, ...	6 80	11·0	1·90	3 60	0·90	0·90	1·30 ,,
♀ ...	7·80	11·50	2·50	4·0	0·85	1·0	1·65 ,,
,, ...	8·10	12·40	2·70	4·0	0 90	1·05	1 95 ,,

Irides milky white; legs yellow; bill, base cobalt blue, then grey, shading to yellow at the tips. Young birds just off the nest have the base of the lower mandible livid, and the base of the upper mandible dusky; the rest of bill dusky yellow; legs dusky fleshy. On the 27th May I found a nest with three callow young and one fresh egg. The birds had excavated a hole in a rotten and dead tree about 18 feet from the ground, and had placed a pad of leaves only at the bottom of the hole. They build both in forest as well as the open cultivated parts of the country.—J. R. C.]

688*bis*.—Sturnia nemoricola, *Jerd.*

I shot a great number of *S. malabarica*, shooting one day what I supposed to be a pair of these near Manipur khas; the male proved to have one winglet feather in each wing pure white.

In the basin I never shot another, but observing a pair at Aimole, the first I had seen there, the male proved to be a typical *leucoptera*, *i.e.*, a pronounced type of *nemoricola*. In neither case were the females distinguishable from others of *malabarica*, but as they were in company with single males of *nemoricola*, and no other birds of either form were anywhere near (indeed at Aimole, from first to last I only saw

this one pair) I set them down as *nemoricola*. I have already very fully discussed this form, S. F., VI, 390 (see also IV, 323 and VII, 48), questioning its specific validity, and contending that it is merely an albinoid form to which *malabarica* constantly tends, and the two male specimens obtained in Manipur certainly support this view. The one killed near the capital is as richly coloured underneath and has as grey a head as nine-tenths of *malabarica*, but it has just one pure white feather in each wing. The other has the lower breast, abdomen, vent and lower tail-coverts *pure* white, the head as white as any *Sturnia blythi*, and a great patch of white winglet and coverts on each wing.

This form has not yet been recorded from any part of Assam, Sylhet or Cachar, but it is pretty sure to be found if well looked for. I only got two males to about 35 male *malabarica* in Manipur.

In Tenasserim it is most abundant northwards of Tavoy. In Lower Pegu it is very common, in Upper Pegu rare. Whether it also occurs in Arakan I cannot say.

688*ter*.—Sturnia sinensis, *Gm*.

I never succeeded in getting a specimen of this species; indeed I only once came upon a party of seven, and that was near Matchi on the 30th April.

I am quite sure in my own mind of the species. I examined them with glasses as they sat perched on a bare tree at a little over one hundred yards distance before I went after them. The nearly white head, grey back, black wings with white shoulders, grey breast and white bellies, could belong to nothing else. I never before saw the birds alive, but I am sure of it. When I had got within about 60 or 65 yards they flew off. I fired instantly, but it was too far, and they went straight away due east, I watching them with my glasses until they disappeared.

This species has never been observed in Assam, Sylhet or Cachar. In British Burmah it only occurs that I know in Lower Pegu, whence Lesson long ago, and Mr. Oates in recent times, have obtained it.

From Central and N.-E. Cachar I have 690*bis*.—*Calornis chalybæus*, Horsf., and Godwin-Austen procured it in the Khasi hills, but I never met with it in Manipur (though it probably occurs there at any rate in the *Jhiri* level), and I have no other information as to its occurrence in Assam,

Sylhet or Cachar. This species occurs in Arakan and the southern half of Tenasserim, but not so far as I know in Pegu or Northern Tenasserim.

691.—Sarraglossa spiloptera, *Vig.*

I saw a few of these on the western slope of the Noongzai-ban ridge, but did not shoot any, I had so many birds, and thereafter I never once met with this species in Manipur, and I doubt whether it occurs there, as it is a very marked and unmistakeable bird, and I should surely have noticed it.

I have this species from N.-E. Cachar and from Joonkotollee in the Dibrugarh district, and Godwin-Austen records it from the Garo hills, but beyond that I have no exact knowledge of its distribution in Assam, Sylhet or Cachar.

[In the cold weather this species is seen in good-sized flocks in the well-wooded portions of the Dibrugarh district. When not feeding these birds are very wary, and fly well out of of range. Their food consists of insects which they find in the flowers of the forest trees, red tree ants, and berries. In adults the bill is black, gape and base of lower mandible yellow; in young birds horny brown, with the gape and lower mandible (base) yellow; legs black in adults, horny brown in the young; irides creamy white.—J. R. C.]

In British Burmah I only know for certain of its occurrence near Rangoon, and one or two other places in Lower Pegu, and in the Karen hills at the extreme north of Tenasserim. But it has been said to have been obtained at Mooleyit in Central Tenasserim, where however we failed to observe it.

693.—Eulabes javanensis, *Osb.*

This species was very numerous in the Jhiri level between Jhiri Ghat and the Noongzai-ban ridge, in small parties flying about from tree top to tree top, or perched on the higher bare branches of very tall forest trees. But this too I never again saw in Manipur after crossing the Noongzai-ban ridge.

I have this from Northern Sylhet, N.-E. Cachar, Shillong, and other places in the Khasi hills, Sadiya and many other places in the Dibrugarh district, but this is all I know of its occurrence in Assam, Sylhet or Cachar. It is common in all suitable localities throughout British Burmah.

[Common during March to October in Dibrugarh, after which they retire to the hills which border the east and south of the district. About the tea gardens in Dibrugarh there are always a number of dead trees standing, and in these the grackles nest, choosing those that are rotten, in which they excavate a hole. I have seen numbers of nests, but as these were so high up, and the tree so long dead and rotten, no native would risk going up.—J. R. C.]

693*ter*.—Ampeliceps coronatus, *Bly*.

A small party of this species passed over me flying up the course of the Barak as I stood on the bank about to cross, and I shot one, a male. I never again met with it in Manipur. The details of this bird were as follow: *Male*.—Length, 9·0; expanse, 16·4; tail, 2·4; wing, 5·15; tarsus, 0·97; bill from gape, 1·09; weight, 3·73ozs.

Legs and feet wax yellow with a fleshy tinge; claws brown; bill bright wax yellow; base of lower mandible and gape greenish blue; irides deep brown; orbital skin wax yellow, with a slight orange tinge; edges of lids dusky black.

In Assam, Sylhet and Cachar I only know of its occurrence in N.-E. Cachar.

In British Burmah, though *said* to have been sent from Mergui, I only *know* of it from the country about and between Moulmein and Tavoy in Central Tenasserim, and again from near Tonghoo at the extreme north of Tenasserim, and further from China-bukur and Elephant Point below Rangoon, and from near Kyekpadein in Pegu.

I found 694*bis*.—*Ploceus baya*, Bly., very common about the bases of the low hills, east of Lakhipur, Cachar, but I never once saw it, at any rate to recognize it, anywhere inside the Manipur frontier. I have it from N.-E. Cachar and various places in the Dibrugarh district, and Godwin-Austen records it from the Khasi hills, but this is all I certainly know as to its distribution in Assam, Sylhet and Cachar. It is common in suitable localities all over British Burmah. I may perhaps remark that since I wrote about this species (III, 153; VI, 398), I have received numbers of males shot when breeding, showing that this species *never* assumes the *full* yellow back and breast of the smaller Continental Indian species, which latter must, therefore, be the true *philippinus*. (See also VIII, 331.)

[The "Took-ra" of the Assamese is common in Dibrugarh in suitable localities during the rainy season, when they

breed; but in the cold weather I never noticed them.—J. R. C.]

Besides this we have from Dollah and Sadiya in the Dibrugarh district specimens of 694*ter*.—*Ploceus megarhynchus*, nobis (S. F., VI, 400), but I never met with this in Manipur, nor have I any knowledge of its occurrence elsewhere in Assam, Sylhet, Cachar or British Burmah.

696.—Ploceus bengalensis, *Lin.*

I first met with this in large flocks in the reed grass towards the upper eastern end of the Kopum Thal, and directly I entered the Manipur basin at Bishnoopoor I again found them common. Even in the gardens and small compounds in the suburbs of the capital they were everywhere to be seen in good sized flocks—now clustered for a few minutes on some bamboo spray, now dropping softly in twos and threes into the garden, and now alarmed by something wheeling round and round in small or largish flocks.

They were common everywhere in the basin, but about Soognoo they were in tens of thousands; a large extent of grass had been just burnt, and they were feeding in dense parties where the ashes lay thickest.

The following are particulars of some I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·0	9 35	2·0	2·9	0·86	0·65	0·84 oz.
♀ ...	5·9	8·7	1·95	2·7	0·8	0·64	0·78 ,,
,, ...	5·8	9·0	1·95	2·7	0·83	0·63	0·71 ,,
,, ...	5·8	8·6	1·9	2 7	0·81	0·61	0·71 ,,

On the 13th of February the legs and feet were brownish fleshy pink; the bill in the *male* had the upper mandible dusky brown, the lower mandible pale lavender; in the females, the upper mandible light brown, the lower whitish horny, with a pinky bluish tinge; irides brown.

Jerdon does not describe the spring plumage, and I well remember years ago when I first got specimens in February, puzzling vainly over them.

From the 15th January to the 15th April the adult male has the cap dusky brown, almost blackish towards the forehead, obsoletely streaked with brownish grey, and the nape and extreme upper back this same brownish grey, streaked with the dusky brown of the crown; the rest of the mantle, tertiaries and secondaries blackish brown; all the feathers, including tertiaries and secondaries, broadly edged with fulvous buff, often paling much towards the extreme margins; rump

and upper tail-coverts dull buffy brown, changing gradually about March (sometimes earlier, sometimes later) to a grey brown, faintly and obsoletely streaked darker; tail brown, growing greyer as the season advances, all the feathers narrowly margined with sordid white; primaries deep brown, all but the first two margined on the outer webs, above the emarginations, with dull yellow; from the nares, over lores, eyes, and ear-coverts a long narrow supercilium, partly yellow, partly white, the yellow growing brighter and preponderating more and more as the season advances; lores grey brown; ear-coverts grey brown; a short deep brown band from the lower posterior margin of the eye running under the supercilium and melting into the ear-coverts; a similar band from the gape also melting into the ear-coverts; between these two bands, immediately under the eye, a yellowish white patch, becoming yellower as the season advances; from the base of the lower margin of the lower mandible on either side a deep blackish brown line or narrow band down each side of the throat; the space between these lines and the gape bands more or less bright yellow; the chin and throat between the two lines generally pale yellow above, white where the throat joins the breast band, but sometimes it is all yellow, sometimes all white, and the two colours are very variously intermingled in different specimens; a transverse deep brown line on the sides of the neck behind the ear-coverts; a parallel, more or less long and bright, yellow band immediately behind this line; the entire breast jet black, the black often, during the earlier part of the period (but not always even in January), more or less obscured by buffy fringes to the feathers; the rest of the lower parts buffy, albescent on the middle of the lower abdomen, and faintly streaked (or dark shafted) immediately below the breast band and on the sides and flanks with brown or grey brown.

The females and young males differ, first in the colour of the bills as above explained; second, in the striations of the head being generally better marked, and a less grey brown; third, in the stripes about the face being less marked and the ear-coverts rather paler; fourth, in often wanting the throat lines; fifth, in the black breast band being much narrower and always much obscured by the pale tippings to the feathers; and, sixth, in the generally somewhat paler tone of both the upper and lower surface, and the comparative absence of striations on this latter.

I obtained this species in many places in both Sylhet and Cachar, and have it from others in the Dibrugarh district,

but beyond this I have no exact knowledge of its distribution in Assam.

[Common in rice fields and grassy swamps in the Dibrugarh district. When not breeding they go about in small parties. The nests are suspended from small bushes, reeds, and grass stems, and always overhang water.—J. R. C.]

I doubt whether this species occurs in British Burmah. I have never seen it from any part of that Province. I know that long, long ago, before he had paid much attention to birds, Blanford recorded it from Thayetmyo, but I am not sure that at the time he distinguished between the winter plumage of this species and *P. manyar*.

698.—Amadina rubronigra, *Hodgs.*

This species was common in the long grass about Chundrakong and Moirang Prem in the eastern portions of the basin, but except about these places it was decidedly scarce, despite the vast extent of rice stubbles which it so affects.

It was common all about Sylhet and swarmed in the rice stubbles near new Karimganj, and I noticed there that, of the numbers I shot on the 25th of January, more than half were young birds. The youngest, just able to fly, had the head and nape a light sandy brown, and the rest of the upper surface (except the tail) a light brownish rufescent sandy, the whole lower surface a light fawny albescent, except three feathers which are the cinnamon of the adult. Others that are older have the head and nape a purer and darker brown, and the rest of the upper parts darker, a dull rufescent brown. Some have the lores already black, and almost all exhibit one or two feathers on the lower surface, which prove the species they belong to.

In Cachar, too, I met with it in several places, and have it from the extreme N.-E. Cachar and Northern Sylhet, and from Shillong and other places in the Khasi hills and from many places in the Dibrugarh district, but this is all I know of its exact distribution in Assam.

[Common in the Dibrugarh district in cultivated and grassy country, in small flocks. They are permanent residents.—J. R. C.]

This species seems to occur more or less abundantly in suitable localities all over British Burmah.

699*bis*.—Amadina subundulata, *G.-Aust.*

I first met with this species near Bishnoopoor on the 17th of February. There were a flock of fully 200 feeding on a patch

of ground, used as a sort of rice-market. I fired one barrel of snipe shot into them as they rose at about forty yards, and secured twenty-three, out of which no less than fourteen were immature birds. Thereafter I came across them in small parties (never again in so huge a flock) pretty well all over the basin.

Having now a very large series from Manipur, about 30 from Assam and Cachar and several more from the neighbourhood of Moulmein, I am glad to be able to suppress two species of mine, *viz.*, *A. inglisi* and *A. superstriata*. The latter name, of course, I gave before *subundulata* was given, but it was not *published* till several months later.

I cannot, indeed, exactly *match* the types of either *inglisi* or *superstriata*, even out of my very large series of *subundulata*; those of the former are as grey on the rump as *nisoria*, those of the latter small and *striated*, very strongly on the upper surface, but I *have* some specimens sufficiently near them to convince me that these are merely extreme and abnormal forms of *subundulata*, and I gladly give both supposed species the *coup de grace*.

I have *A. subundulata* from N.-E. Cachar, from Shillong, Mouflong and other places in the Khasi hills, and from many places in the Dibrugarh district, but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[This is the commonest Munia in Dibrugarh, where, except during the breeding season, they go about in small flocks, frequenting the open country. They breed in August and September, making their nests, at no great height, in trees, very often on those growing alongside of houses. Five is the number of eggs in each nest according to my experience. —J. R. C.]

In Burmah this species is common all over Pegu and Northern Tenasserim, and occurs sparingly in Central Tenasserim.

I do not know whether it is this species or *A. punctulata*, Lin., that occurs in Arakan, but probably the former.

702.—Amadina acuticauda, *Hodgs.*

I only observed this species in the Eastern hills at from 3,000 to 4,000 feet elevation, and never near the summits of the higher hills. It was nowhere at all abundant.

I have this from N.-E. Cachar, Doobri near Gauhatti, the Darrang district (where Godwin-Austen also got it below the bases of the Dafla hills), Sadiya, Tippook and many places in the Dibrugarh district, and Godwin-Austen records it from the

West Khasi hills (I never received it from Shillong), but this is all I know of its distribution in Assam, Sylhet and Cachar.

[Nowhere numerically common, but during the rains a few pairs are generally seen in the more open parts. They are very fond of feeding on the roads. I never was able to find a nest of this species.—J. R. C.]

It occurs in suitable localities in all the provinces of British Burmah, but seems rare or wanting in the extreme south of Pegu.

West of new Karimganj,* and indeed in several other places in Sylhet and Cachar, I observed and shot 704.—*Estrelda amandava*, Lin., and Godwin-Austen records it from the Khasi hills, but I never met with it in Manipur, nor have I any further knowledge of its distribution in Assam, while in parts of Pegu and the parts of Tenasserim lying between the Salween and the Sittang, it is replaced by *E. burmanica*, nobis, identical, according to Ramsay, with *E. flavidiventris*, Wallace.

[The only occasions on which I saw small parties of this species was when out after big game on the "churs" of the Brahmaputra river in the Dibrugarh district, and again in the large tracts of grass country near the Moran Tea Garden and Jaipur, during the cold weather.—J. R. C.]

Another species that I failed to notice in Manipur was 706.—*Passer domesticus*, Lin. (or *P. indicus*, J. & S., for those who prefer it). I have this from several places in the Dibrugarh district, and Godwin-Austen gives it, I gather, from the Garo hills, and includes it in his Dafla hill list, doubtless from the country at the bases of these. Beyond this I have no note of its distribution in Assam, Sylhet or Cachar.

[Common in the Dibrugarh district wherever there are human habitations, especially in the station of Dibrugarh, but not so abundant as *Passer montanus*. The Assamese call the sparrow "Ghun Suroee."—J. R. C.]

In parts of Arakan and the greater part of Pegu this is common, but in Tenasserim it is extremely rare, and occurs there only, I believe, as a chance visitant. In the course of four years collecting we only twice met with it.

* I happened to measure one of the specimens I shot here, and may note the particulars. *Female*:—Length, 4·4; expense, 6·2; tail, 1·6; wing, 1·35; tarsus, 0·55; bill from gape, 0·35; weight, 0·35oz. Length and feet very pale fleshy; bill red, blackish on culmen and gonys; irides orange red.

708.—Passer cinnamomeus, *Gould.*

Only seen in the Eastern hills, but pretty common there from 4,500 feet and upwards.

These Manipur birds are not to be separated from Himalayan ones, but they do seem, taking a series, rather greyer on the lower surface, and their beautiful white wing bars, equally conspicuous in both sexes, do seem somewhat more pronounced.

I give a few details :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·6	8·8	1·9	2·74	0·7	0·49	0·68 oz.
,, ...	5·6	8·7	2·0	2·73	0·63	0·48	0·68 ,,
♀ ...	5·4	8·3	1·97	2·54	0·65	0·45	0·61 ,,

Legs and feet (1) dingy rather fleshy, (2) very pale dove brown, (3) dull dove brown ; claws dark brown; bill black; irides (1) rather olive brown, (2) brownish yellow, (3) light yellowish brown.

I have this from Shillong, and Godwin-Austen says that it is occasionally seen under the Burrail range of the Naga hills, but this is all we yet know of its distribution in Assam, Sylhet or Cachar.

I do not know that this species occurs in British Burmah, unless *P. assimilis*, Wald., from Tonghoo, should be referred to this species.

710.—Passer montanus, *Lin.*

This is the House Sparrow of the Manipur basin, where it is very abundant. Dozens may be seen feeding together in any of the multitudinous little lanes that divide the enclosures surrounding each mat hut in the capital. In the larger villages they are equally numerous, but it is rare to meet it anywhere well way from houses.

I have this from Shillong, and from Sadiya and other places in the Dibrugarh district, and Godwin-Austen gives it from the Garo and Khasi hills, but I have no further details of its distribution in Assam, Sylhet or Cachar.

[This is the House Sparrow of the Dibrugarh district, where it is very common.—J. R. C.]

It appears to be pretty common throughout British Burmah, and throughout Tenasserim and parts of Pegu and Arakan ; it is the House Sparrow, though not so in Northern Pegu, for instance, where *indicus* holds its own.

717.—Emberiza spodocephala, *Pall.*

I first met with this species in long grass in the narrow valley of the Limata, near the rest house. In all the more

humid portions of the basin of Manipur they were very common, though, unless looked for, they are not very often seen, and one only catches glimpses of them as they flit past, the eye being attracted by the conspicuous white in the tail. The males are much more often seen than the females, partly because the plumage is more conspicuous, and partly because they are somewhat less skulking in their habits, but they are *invariably* in pairs, never in flocks, parties or single, and having shot the male you can always, if sufficiently patient, find the female also.

High grass and water are what they require, but any ditch, however small, provided it has water in it and is overhung by tall grass, satisfies them, and they are quite common in the hedgerows dividing the little compound enclosures of the capital. Often too you see them in open country in bamboos and grass at the margins of rice fields, and, though they clearly prefer high grass, you can only say that they are always in cover, always near water, and always in pairs.

The following are details of some I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·3	8·8	2·3	2·85	0·7	0·49	0·63 oz.
„ ...	6·15	9·05	2·5	2·86	0·76	0·5	0·65 „
„ ...	6·4	9·04	2·6	2·88	0·75	0·46	0·64 „
„ ...	6·2	9·1	2·55	2·8	0·77	0·47	0·75 „
„ ...	6·5	9·2	2·8	3·0	0·77	0·54	0·68 „
„ ...	6·4	9·0	2·55	2·83	0·7	0·42	0·56 „
„ ...	6·5	9·01	2·8	2·7	0·75	0·47	0·66 „
♀ ...	6·0	8·5	2·3	2·65	0·8	0·44	0·6 „
„ ...	5·9	8·5	2·25	2·6	0·7	0·5	0·57 „

Legs and feet fleshy pink brownish on joints, to pale brownish fleshy; claws brown; upper and tip of lower mandible dark brown to blackish dusky; rest of lower mandible and gape pale fleshy, pale horny fleshy, pale bluish fleshy, pale pinky white, and whitish horny; irides brown.

The specimens (and I preserved an enormous series besides all I had before) vary considerably, and in order to make quite sure of the changes of plumage, one needs summer-killed specimens, of which I have none, my Chinese specimens even being killed in November. I note, first, that these Chinese specimens differ from all Indian ones in having the throat and breast almost grey, nothing like so green as in our birds, and also in having the wings and flanks far more tinged in places with rufous. Second, I suppose *personata* is a good species, as Swinhoe so decided, but I have females that exactly match the female of *personata* as figured in the "Fauna Japonica," and some not quite mature males, not having yet assumed the green below that differ only from the male *personata*, as figured *tom. cit.*,

in having lost the yellow superciliary stripe over the ear-coverts, and being only dusky, and not yet *black*, about the base of the bill. *E. sulphurata*, which I have from Amoy, is quite distinct; not black about the base of the bill, all yellow below, and the cap a much brighter, yellower, more vernal green than in *spodocephala*, but to judge from the plate, I confess, I should have doubted the distinctness of *personata*.

In the quite adult male, as I make out, the lores and an ill-defined band all round the base of the lower mandible (including the chin) and a similar band round the eyes (growing dusky posteriorly) are black; throat and entire breast, ear-coverts, sides of neck, forehead, top, back and sides of head, nape and a portion of the upper back, unmarked, greyish olive green above, decidedly yellower below. Many specimens show a few brown spots on either side of the nape, some show more or less blackish spottings, not only there, but all over the crown, at the tips of the ear-coverts, or on the upper throat, some in one place, some in another, some in all these places, some a few only, some very numerous spots.

The rest of the lower parts a pure yellow intermediate between primrose and sulphur, often, but not always, paling more or less on the lower tail-coverts. Sides and flanks with conspicuous longitudinal dusky streaks, blacker, browner or greener in different specimens, and generally with a touch of rufescent or fulvous buff, on more or less of the sides or flanks or both. Externally, except just at their tips, the tibial plumes are brown of varying shades, at the tips and internally, yellow, like the abdomen.

The rest of the upper and middle back and scapulars a rather light brown, sometimes a warm wood brown, sometimes an olive greenish brown (and all intermediate shades are observable); the feathers centred with blackish brown, so as to produce sparrow-like streakings; rump and upper tail-coverts unstreaked, uniform, often the same colour precisely as the ground of the back, often greener and with much less brown in the colour, at times only a slightly duller and greyer shade of the head.

Wings hair-brown, blackish or very deep brown on exposed portions of tertiaries and coverts, and all the feathers margined, and very broadly so on both these latter, with a lighter colour, varying from light chestnut to buffy white, always most rufous on the tertiaries and palest on the tips of the secondary greater and median coverts, but varying very much in different specimens.

The tail brown, varying much in depth of colour, but always paler on the central, darker on the lateral feathers, and generally

(some do not show a trace of this) more or less margined on the outer webs with brownish or rusty fulvous, or yellowish brown, as the case may be. About half or a little more of the outer tail feather white, diagonally arranged, so that on the outer web the white extends nearly to the base, while as a rule the brown extends on the inner margin of the inner web to within about three-fourths of an inch of the tip. But the amount of white varies much in different specimens, and while many have the tips pure white, many have a brown shaft stripe or irregular patch at and near the tip.

In some specimens the axillaries, wing-lining and inner margins of the quills are all pure white; in some the axillaries are pure pale yellow, and in a few the wing-lining is more or less tinged with this colour.

In rather younger males, the crown is distinctly striated with black, the throat is yellow, the breast mottled with this colour, and a dusky line is visible running from the lower edge of the lower mandible on each side down the sides of the throat; the sides and flanks are browner and more strongly striated.

In a less advanced specimen the black in the mature bird is replaced by blackish dusky; there is a slight brownish cast on the well striated crown; the whole lower surface is pale yellow, only the breast a little streaked with greyish green, and there is just a trace of the pale supercilium.

Males younger than this seem precisely like the general run of females. These have the whole cap unicolorous with the back (which varies in tint much as in the male) and streaked like it with blackish brown, sometimes as broadly as the back, sometimes much more narrowly; there is no black round the base of the bill or eyes; the lores and ear-coverts are brown, the latter generally bounded by a darker band or line of spots, and there is as a rule a broad conspicuous, at times somewhat buffy, yellow band from the nares over lores, eyes and ear-coverts. But, strange to say, some specimens show barely a trace of this, as I noted in the fresh birds, though otherwise differing little. The chin is usually whitish; the rest of the lower parts yellow, commonly less pure, and paler than in the adult male; the whole breast is faintly shaded with brownish grey or greyish green, or intermediate tints, rarely with a faint fulvous tinge in it, and is narrowly streaked or spotted in some with dark brown, and from the lower ridge of each ramus of the lower mandible a dark brown line, or line of spots, runs down each side of the throat, dividing off a band of yellow on the cheeks and is lost in the breast streaking. The rest of the bird is like the nearly adult male, and varies in tints as does this. In other females, old ones

I suppose, the ground of the cap, nape and extreme upper back has a strong greyish olive tinge, and these mostly show no supercilium.

One female, I suppose a perfectly mature or perhaps very old bird (it is the only one out of about 40, and I sexed it myself), has the entire cap, &c., including sides of the neck, as green as in many males, but the crown and nape are well striated; there is no trace of a supercilium; the upper throat is mottled with the greyish green of the crown, and the breast is entirely of this colour, only mottled with yellow here and there; the throat stripes in this case of this same dusky greyish green are only dimly traceable.

But that there is no dusky round the base of the bill, and that I sexed it myself, I should certainly have set this down as a not quite mature male.

I have tried, after a careful study of over 100 sexed specimens, to give an idea of the changes and variations of plumage in this species, but it must not be forgotten that all my specimens were obtained between the middle of November and the middle of April.

I shot this species myself in several places in Central Sylhet and all across Cachar (a pair in the station of Silchar itself), and I have it from N.-E. Cachar, and Godwin-Austen says it was common in the marshes between Bholaganj and Chatak (North Sylhet), and we may assume that in the cold season it is generally distributed over both these districts, but as regards Assam, hills and valleys, all I know is that I have received specimens from Joonkotollee in the Dibrugarh district.

[This cold weather visitant is pretty common, if hunted for, in the Dibrugarh district. They frequent grassy, reedy, and scrubby jungle amongst paddy fields and around villages. I have noticed them in pairs and small parties of from four to six individuals.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	... 5·40	7·90	2·40	2·60	0·70	0·47	0·60 oz.
♂	... 6·0	8·0	2·60	2·75	0·70	0·50	0·65 „
„	... 6·05	8·50	2·60	2·80	0·70	0·47	0·65 „

Legs and feet fleshy; irides brown; bill fleshy below, dusky above. Their food consists of paddy and hard seeds of kinds.—J. R. C.]

This species does not, that I am aware of, extend to any part of British Burmah.

719.—Emberiza fucata, *Pall.*

We first came upon this species in the Kopum Thall, where it was, with *E. pusilla*, very common about the grass and rice

stubbles, but rarely seen until flushed, and then rising generally in threes and fours pretty nearly out of shot. Then again in the Manipur basin it was pretty common, though not nearly so much so as *E. spodocephala*, and not one-tenth as numerous as *E. aureola*. We found it nowhere on the hills, but everywhere in the basin it was to be met with always in scattered parties of from four to ten haunting dry half burnt grass, rice stubbles and the like.

The following are details of those I measured, unfortunately all males.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·43	8·6	2·3	2·6	0·82	0·49	0·68 oz.
„ ...	6·4	9·2	2·4	2·8	0·84	0·49	0·73 „
„ ...	6·3	9·1	2·5	2·8	0·85	0·5	0·7 „
„ ..	6·7	9·5	2·7	2·8	0·9	0·5	0·77 „

Legs and feet pale fleshy pink, brownish on joints and claws; upper mandible, and generally tip of lower, brown, usually pale, never dark; lower mandible and gape much paler, and with a fleshy tinge or fleshy pink, or bluish horny pink or pale fleshy whitish; irides brown.

The female only differs in being browner and less grey about the cap, back and sides of the neck; in having the rufous pectoral band almost (or quite, but these are younger birds I think) obsolete, and I think (judging from skins) rather smaller size. I have not myself as yet seen this from any part of Assam, Sylhet or Cachar, though I doubt not it will prove to occur in all, but Godwin-Austen procured it at the head of the Barak valley in the Naga hills.

[Fairly common and found in the same places* as *E. spodocephala.*

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·15	8·40	2·50	2·75	0·75	0·55	0·75 oz.
„ ...	6·40	8·70	2·55	2·73	0·75	0·54	0·78 „

Irides brown; legs and feet pale fleshy; bill above dusky, below fleshy.—J. R. C.]

In British Burmah I only know of its occurrence in the more open portions of Northern and Central Tenasserim and Pegu.

720.—Emberiza pusilla, *Pall.*

This too was first met with in Manipur in the Kopum Thall, as already mentioned, in company with *E. fucata.*

* I must say I think this a mistake. I have shot both *spodocephala* and *fucata* in many places, but have always found the former in wet, the latter in dry spots. —A. O. H.

Here they were much more numerous than this latter, and even in the Manipur basin, all over which we occasionally found them, this was, though in a lesser degree, the case. They were, however, more difficult to shoot, they clung even more closely to cover, and when roused flew only a few yards and immediately dropped. The white of the inner web of the external tail-feather shows out very conspicuously when they fly. They affected precisely the same localities as *fucata*, and in Manipur (it is very different elsewhere) we almost invariably found the two together.

The following are particulars of those I measured :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	5·5	8·5	2·3	2·65	0·65	0·4	0·47 oz.
„ ...	5·7	8·6	2·4	2·77	0·61	0·4	0·45 „
„ ...	5·9	8·6	2·3	2·8	0·7	0·4	0·51 „
„ ...	5·83	8·7	2·4	2·75	0·71	0·46	0·5 „
♀ ...	5·7	8·6	2·3	2·68	0·62	0·44	0·48 „

Legs and feet brownish fleshy to pale fleshy pink ; claws browner; upper and tip of lower mandible pale to darkish brown ; rest of lower mandible and gape pale horny pink, or pale bluish horny, with or without a pinky tinge, or pale brownish fleshy ; irides brown.

Taking a large series I cannot discover any constant difference between the sexes, though the crowns in the females are commonly rather duller coloured, and in many cases I by this predicted the sex correctly previous to dissection.

I found numbers of this species in a dense reed grass and scrub belt that lined the sloping banks of a long tank-like hollow, manifestly a portion of some old river bed a few miles east of Phenchooganj in Central Sylhet. There were no *fucata* here. I got it again near Karimganj, and twice in the Cachar district, and I had previously received it from Shillong and from Joonkotollee in the Dibrugarh district, and Godwin-Austen records it from the base of the Garo hills, and says it was one of the commonest birds in the Naga hills at from three to five thousand feet elevation.

Occurring, thus, almost at sea level in Sylhet, it is curious that in British Burmah we only know of its occurrence at above 5,000 feet on Mooleyit in Central Tenasserim. Ramsay, however, got it in Karenee at 5,500 feet. We never once observed it on the hills, Eastern or Western, in Manipur.

[This species is the commonest Bunting in Dibrugarh, and affects drier cover than the others. The white on the tail-feathers is very conspicuous when in flight in these birds.

The following measurements are of birds killed from October to April:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	5·50	6·30	2·25	2·60	0·65	0·47	0·50 oz.
♂ ...	6·10	7·75	2·50	2·65	0·65	0·44	0·50 ,,
♀ ...	6·25	8·50	2·50	2·70	0·75	0·50	0·75 ,,
,, ...	5·55	7·50	2·55	2·76	0·65	0·43	0·48 ,,
,, ...	5·60	7·70	2·25	2·60	0·65	0·43	0·45 ,,
♂ ...	5·75	8·20	2·45	2·67	0·70	0·43	0·48 ,,

Legs and feet dusky fleshy; irides brown; bill above dusky, below base fleshy, rest bluish.—J. R. C.]

722*bis*.—Euspiza rutila, *Pall.*

Near Phallee on the 10th April I came across a small flock of these perched on some bamboos overhanging a piece of unburnt rice stubble. I did not recognize them, and as they rose I fired, and, though it was a very long shot, succeeded in dropping one, a male. They flew right off, and I never again saw any of this species. My bird measured: Length, 6·4; expanse, 9·2; tail, 2·7; wing, 2·95; bill from gape, 0·5; weight, 0·66oz. The legs and feet were pale fleshy pink, a little brownish on front of tarsi and joints, and browner on claws; the upper mandible brown, not very dark; the lower and gape pale brownish fleshy; irides brown.

There is no *record* of the occurrence of this species in Assam, Sylhet or Cachar, but I have seen a specimen long ago from near Tezpoor. It occurs, but as a straggler only, I believe, in both Upper and Lower Pegu and in Tenasserim north of Moulmein.

723.—Euspiza aureola, *Pall.*

This species is found everywhere about the Manipur basin, often in parties of ten to twenty, but more commonly in flocks of from fifty to two hundred birds. Often one sees a whole flight perched upon the high stems of an acre or so of giant grass, the delicate yellow of the lower surfaces, especially of the males, showing out at a distance like flowers. All about the capital they are common on all the hedgerows and on and about the low earthen platforms in front of the palace, where every evening the chief market is held, they swarm in hundreds during the early part of the morning, and everywhere in the villages, where similar markets on a smaller scale are held twice or oftener in the week towards sunset, the market places the next morning "after the fair" are sure to be crowded with them.

The males have a rather sweet chirping song which they pour forth in March and the early part of April perched on the bare tops of small trees, and when a number are singing or chirping together quite a pleasant little concert is produced.

To the best of my belief they leave by the end of April. Neither in May nor June (I was little in the basin, it is true) did I notice any.

The following are details:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 6·5	9 6	2·7	3 01	0·82	0·53	0·81 oz.
,,	... 6·6	9·6	2 6	3·03	0·8	0·52	0 88 ,,
,,	... 6 5	9·3	2·52	2·97	0·78	0·5	0·84 ,,
♀	... 6·1	9·3	2·4	2·8	0·8	0·5	0·71 ,,
,,	... 6·1	9·1	2·6	2·77	0·9	0·5	0 69 ,,

Legs and feet brown, darkest on feet; upper mandible blackish brown or dusky; tip of lower mandible brown; gape and major portion of lower mandible pale horny fleshy, or brownish white, or pinky horny; irides brown.

The changes of plumage of this species do not seem to be understood. Jerdon is absolutely wrong in several particulars, and Dresser very hazy. Whence he got the female he figures I do not know. Out of some 400 specimens we have not one anything like so grey. If his figure is correct it must be summer plumage which we never see.

The *adult* female scarcely varies at all from the 15th of October to the 1st May. Individuals vary a good deal though killed in the same month, but you can match every November bird with some April bird, with two exceptions: these latter are always a clearer yellow on the lower surface with less of the brownish fulvous wash (with or without obsolete darker striations) on the lower throat and breast, and are always a colder and rather greyer brown on the upper surface.

The females of the year, even as late as the next April, are a colder brown above and a paler duller hue below, and much more distinctly striated on the breast than the adults.

Now all through October, November and December, the great body of the adult males are undistinguishable from the adult females, but early in January the yellow of the lower surface begins to brighten, the maroon gorget begins to peep out, and maroon begins to appear on the tips of the ear-coverts and the forehead and in the two crown stripes. By the end of January the breast band is very clear, though the tips of its feathers are still narrowly fringed with yellow; the entire cap, nape, rump and upper tail-coverts are maroon, though the feathers are still excessively narrowly fringed with light brown;

here and there on the back the maroon is showing through, and the white shoulder patch is nearly clear.

During February the yellow of the lower surface brightens still further; the white on the wings generally gets quite pure; the huge maroon patches on the sides of the breast below the gorget appear; the whole upper surface becomes deep maroon, still, as a rule, except in old birds on the cap, obsoletely fringed with light brown, and the stripe from the gape running under and round the ear-coverts and joining that which, starting from the posterior angle of the eye runs over these, becomes with this latter blackish. During March the ear-coverts themselves become blackish, and dark or blackish spots begin often to show on the maroon of the back, and the points of the forehead get dusky. Just about the end of the month black becomes more or less intermingled in the chin and lores. By the middle of April the entire chin, upper throat, lores, cheeks, ear-coverts, forehead and anterior half (nearly) of crown have become black. This change is very rapid. I never got a bird in which the change was complete before 1st April, and out of 37 birds that I killed at one shot on the 14th of April there were 15 adult males altogether, in all of which the change was complete.

The above correctly represents the general course of the changes as observable in a large series, killed in each month, in Manipur, Tenasserim, Cachar, Eastern Bengal; the Sikhim Terai and Bhutan Dooars arranged according to dates of killing; but two points have to be noted: First, the dates given are the *average;* some birds are always a little ahead, some a little behind. Thus out of 37 adult males killed in January (after allowing for the differences in date of each) five are decidedly behind, and three distinctly in advance of the great body. Second, the dates apply to adults; in young birds, born in the preceding summer, the changes are much delayed and very irregular; thus, too, birds of this age killed on the 11th of April have indeed the entire black muzzle as in the adults (except that the black does not advance so far on to the crown), and a little maroon mingled with the broad crown and nape stripes, but the whole of the rest of the plumage, above (except that it is somewhat colder in tint) and below (except that the fulvous wash has disappeared) is that of the adult male in November.

On an average I find that rather less than one-third of the males are birds of the year.

Now if any one will carefully detail the changes between the 1st of May and the end of September, we shall begin to understand the bird.

I forgot to note that in some males—but these are certainly the exceptions—the gorget is visible as a somewhat narrow, sub-surface-lying brown band even in October, November and December.

Both in Sylhet and Cachar, I mean the parts I visited, I shot this species occasionally, but it was only in small parties. I saw no large flocks, and compared with Manipur it was very scarce. I have received it from N.-E. Cachar, and Godwin-Austen records it from Sonainganj in Sylhet, so that it is probably generally, though sparsely, distributed through both these districts.

I have it from many localities in the Dibrugarh district, and Godwin-Austen includes it in his Dafla hill list (I suppose from the Darrang district at their bases), but I know nothing further certainly of its distribution in Assam. This species appears to be generally distributed in suitable localities throughout British Burmah, but is decidedly rarer in Upper Pegu than elsewhere.

I see Dresser says that Captain Marshall told him that he "found this species in the N.-W. Provinces of India near Lahore," and I suppose this will be quoted for the next fifty years as a locality for *aureola*, say and do what one will. But most certainly *if* Captain Marshall ever *did* say this, it was a *lap. ling.*, and he really intended to speak of *luteola*, for *aureola* has never occurred in *any* part of the Punjab (of which Lahore, which is not in the N.-W. Provinces at all, is the capital), let alone so far west as Lahore.

[By no means common in Dibrugarh.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	... 6·10	8·30	2·50	2·77	0·82	0·50	0·60 oz.
♂	... 5·90	9·10	2·25	3·0	0·82	0·50	0·85 ,,
♀	... 6·20	9·20	2·40	2·90	0·80	0·52	0·85 ,,

Legs and feet horny brown; irides brown; bill above dusky, below fleshy. They frequent hedgerows and villages, but are very silent birds.—J. R. C.]

724.—Melophus melanicterus, *Gm.*

At Bishnoopoor, Sagam, Koombee and low down on the Eastern hills near the Sengmai stream, I observed and obtained single specimens, and I saw it two or three times more in other places, but it was decidedly rare. Godwin-Austen, however, says that during February and March he found this species very numerous in the high grass skirting the Iril, particularly about Kaibi, but this is in the north of the basin which I did not explore.

I have no record of its occurrence in Assam, Sylhet or Cachar.

In Tenasserim, we only observed this in the plains country between the Sittang and the Salween. Blyth gives it from Pegu, but it must be very locally distributed if it does occur there at all, as I have never seen a specimen thence, and Mr. Oates seems never to have met with it. In Arakan it is more common. Ramsay, I may note, obtained it in Karenee.

727.—Mycerobas melanoxanthus, *Hodgs.*

Though always on the look-out for this bird I never saw it until on the return journey on the 29th of May, when descending from the Limatol range into the valley of the Limata, and when still about 1,000 feet above the latter stream, a party of about a dozen birds suddenly passed overhead. I could not tell what they were, and fired, bringing down one which proved to be this species, a female. I am quite certain I never met with these birds before or after in either the Eastern or Western Manipur hills.

Godwin-Austen, however, received specimens from Koonchungbum, further north in Manipur. There is no record as yet of the occurrence of this species anywhere in Assam, Sylhet, Cachar or British Burmah.

From the Khasi hills, Godwin-Austen records 736.—*Hæmatospiza sipahi*, Hodgs., and he notes that the Khasias often capture these birds at Surarim and bring them in for sale to Shillong. This is our unique record of its occurrence anywhere in Assam, Sylhet, Cachar or British Burmah.

736.—Propyrrhula subhimachala, *Hodgs.*

I never saw this bird anywhere in Manipur, but Godwin-Austen records it from Remta in this state, and it must therefore be included in this list.

There is no record of its having ever been observed in any part of Assam, Sylhet, Cachar or British Burmah.

738.—Carpodacus erythrinus, *Pall.*

I never *observed* this in the Western hills (though it is sure to occur there), but found it sparingly distributed all over the Manipur basin, and rather common in the latter half of April and the first half of May in the Eastern hills up to an elevation of fully 6,000 feet.

It was not until the 8th of May that I procured any male in full breeding plumage, with the entire cap, nape, sides of neck, rump, chin, throat, and upper breast one uniform brilliant crimson.

I have this species from several places in the Khasi hills and from N.-E. Cachar, but this is all I know of its distribution in Assam, Sylhet and Cachar.

[These birds were observed by me only in April during their migration.

		Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀	...	6·10	9·50	2·25	3·25	0·75	0·48	0·85 oz.
♂	...	6·30	9·50	2·35	3·25	0·77	0·50	0·85 ,,
,,	...	6·35	9·70	2·30	3·30	0·78	0·52	0·85 ,,
♀	...	5·90	9 30	2·50	3·15	0·78	0·52	0·85 ,,
,,	...	6·10	9·50	2·35	3·20	0·75	0·52	0·80 ,,

Legs and feet pale horny brown ; bill horny brown ; the base of lower mandible and gape dingy yellow ; irides brown.

These measurements are slightly in excess of those given by Jerdon ; my specimens were all more or less in the breeding plumage.—J. R. C.]

Blyth records it from Arakan, I have received it from the north of Pegu, and Ramsay procured it at Tonghoo in the extreme north of Tenasserim (as officially constituted, for this is really a part of Pegu and does not geographically properly pertain to Tenasserim), but beyond this I know nothing of its occurrence in British Burmah.

Godwin-Austen doubtfully identifies a female Rosefinch he procured on the Mahadeo peak, Asalu, as 742 —*Propasser rhodochrous*, Vig. There is no other notice of the occurrence of this species in Assam, Sylhet, Cachar or British Burmah.

750.—Hypocanthis spinoides, *Vig.*

As noted at the time, I believe that I saw this species on the Limatol range of the Western hills, but I failed to procure a specimen, and I should not have entered it in this list had not Godwin-Austen recorded it from Khajinghon, Manipur.

We have no record of its occurrence anywhere in Assam, Sylhet, Cachar or British Burmah.

From Lakhai at the south-west corner of Sylhet right through this district and Cachar I found 754.—*Mirafra assamica*, McClell., common alike in green fields and dry rice stubbles. They rise when flushed something like quail, and fly low and

straight, so that it is always easiest to shoot them flying. I measured several, and may record here the details:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·4	11·2	2·1	3·25	1·08	0·7	1·08 oz.
„ ...	6·3	11·2	2·08	3·4	1.06	0·73	1·04 „
„ ...	6·25	10·75	2·1	3·1	1·02	0·75	0·98 „
„ ...	6·2	11·0	1·95	3·2	1·0	0·75	0·95 „
„ ...	6·2	11·4	2·2	3·3	1·1	0·7	1·1 „
♀ ...	5·85	10·5	2·05	3·0	1·0	0·67	0·89 „

Legs and feet varying from fleshy pink to brownish fleshy, commonly browner on joints; upper and often extreme tip of lower mandible brown, never light, sometimes very deep; rest of lower mandible, gape and sometimes lateral basal portions of upper mandible also, pale fleshy, pearly grey or horny white; irides light brown to light hazel; the hind claw is long, and the spread of foot (1·85 to 1·97) considerable.

I have this species also from N.-E. Cachar and Northern Sylhet and many localities in the valley of Assam right up to Sadiya in Dibrugarh, but I never once saw it in Manipur, nor is it known to occur anywhere in British Burmah, except in the lowlands of Arakan lying between the hills and the sea.

[Pretty common in open cultivated country all over the Dibrugarh district, where they are permanent residents. —J. R. C.]

Another species 761.—*Calandrella brachydactyla*, Leisl., I have from Shillong and also from Joonkotollee in the Dibrugarh district, but I never met with it in Manipur, nor do I know anything further of its distribution in Assam, Sylhet or Cachar, nor has it as yet been observed in British Burmah.

[By no means rare in the cold weather when single birds are met with in paddy fields and waste lands.—J. R. C.]

Again another species, 762.—*Alandula raytal*, Bly., is common along the course of the Brahmaputra in Assam, though quite how far up towards the head of the valley I do not know, nor am I aware that this occurs, except on the banks and churs of that river, anywhere in Assam, Sylhet or Cachar. I did not of course get it in Manipur; there is no *large* river, with wide belts of pure sand, such as this species requires, and in British Burmah I only know of it on the banks and churs of the Irrawadi in Upper Pegu.

[This species is confined in Assam to the Brahmaputra and Dehing river beds, as these are sandy and of great expanse.—J. R. C.]

767.—Alauda gulgula, *Frankl.*

This species was sparsely distributed about the drier portions of the Manipur basin. About Bishnoopoor and Booree Bazar I noticed several and shot a few, but further south in the damper lowlands I shot none and saw, I believe, very few ; of course I never saw it in the hills.

I did not notice this anywhere in Sylhet or Cachar, nor, strange to say, have I any specimens from or note of its occurrence in any part of Assam, Sylhet and Cachar, save that Godwin-Austen includes it (I suppose from the low country below them) in his Dafla hill list. It occurs in Arakan throughout South-eastern Pegu, and in Tenasserim, about Moulmein and between the Sittang and Salween. Further as yet I know not.

[The Lark that I found fairly common in Dibrugarh was *A. australis*, which Mr. Hume in his "List of the Birds of India" considers a questionable species.* Not having specimens either of this or *A. gulgula* at hand I am unable to state the differences, which were pronounced ones, or else I would have entered them as *A. gulgula*, which he found in Manipur. I give measurements, however, of those that I shot in April and September :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·15	10·20	2·35	3·50	0·85	0·60	0·65 oz.
,, ...	6·40	11·80	2·70	3·80	0·85	0·60	0·75 ,,
♀ ...	6·0	10·50	2·10	3·55	0·85	0·55	0·80 ,,

Irides olive brown, legs and feet dusky fleshy; soles yellow ; claws horny brown ; bill dusky above, fleshy beneath. Their note was like that of *A. raytal*, Bly., but louder of course.—J. R. C.]

771.—Treron nipalensis, *Hodgs.*

This Pigeon seemed rather common in the low forest between Jhiri Ghat and the Noongzai-ban range, but I never again met with it in Manipur.

This species I have from low down in both the Garo and Khasi hills, Northern Sylhet, and N.-E. Cachar, and from

* With some of Brooks' types and a large series of both forms before me, forms which melt into one another, I have never been able quite to satisfy myself of their distinctness. It is simply out of the question that Mr. Cripps in the jungle, with no specimens for comparison and without even having ever seen one of the Southern Indian birds, should be able to pronounce correctly as to his birds being *australis* and not *gulgula*.—I am morally certain that they were *not australis* ; even if this be a good species, it does not occur on the slopes and about the bases of the Nilghiris, to turn up again plentiful in Dibrugarh and occur nowhere else in the enormous intermediate area.—A. O. H.

Sadiya, Khowang and Joonkotollee in the Dibrugarh district, and Godwin-Austen remarks that it was not uncommon in the Dunsiri forest between Deenapur and Golaghat, and that he shot it again on the road to Shillong near Gauhatti. I have no further exact details of its occurrence in Assam, Sylhet or Cachar.

[Very common, indeed, in the well-wooded portions of the Dibrugarh district. They go about in parties of from 10 to 40, having a very swift flight, but very little in the way of shot brings them down. When feeding they are not easily frightened, and I have often remained for over an hour under a tree, having shots as opportunity offered.—J. R. C.]

It occurs in *suitable* localities in all the provinces of British Burmah, but of course there are wide tracts, especially in Pegu, where the station is unsuited to its habits, and where it is never seen.

[*772.—Crocopus phœnicopterus*, Lath.*

The "Haitha" of the Assamese is common in Dibrugarh, and is not so strictly confined to primeval forest as the last species. They are permanent residents, and go about in pairs, and small parties of seldom over a dozen in number. —J. R. C.]

773*bis*.—Crocopus viridifrons, *Bly*.

I never myself saw this alive in Manipur, but one of our men shot one in the Jhiri level, and it must, therefore, be included in our list.

We have it from N.-E. Cachar, and Godwin-Austen gives it from the Khasi hills, and includes it in his Dafla hill list, and this is all I yet know of its distribution in Assam, Sylhet or Cachar.

This species occurs in the more thinly-wooded plains portion of Central and Northern Tenasserim and in the greater part of Pegu, but I have not seen it yet from Arakan or the south-western portions of Pegu, though I know it occurs as far south as Bassein at any rate.

---

* I omitted this species purposely. It has been said to occur in suitable localities, though everywhere sparsely, throughout the well-wooded portions of the valley of Assam, north of the Brahmaputra, but I have never myself examined specimens, and the only specimens ever examined, so far as I know, by a competent ornithologist from any part of this tract were pronounced by him (Godwin-Austen) to be *viridifrons*, and I am not at all sure that Mr. Cripps realizes the very slight differences between the two species.—A. O. H.

774.—Osmotreron bicincta, *Jerd.*

Only twice seen in Manipur, first on the Noongzai-ban ridge, and then in the valley of the Limata. Never met with in the basin or in the Eastern hills, and apparently very scarce even in the Western hills. I dare say this occurs in the Jhiri level, but I did not see it there, and the fact is I was too short a time there to at all exhaust the birds of that teeming locality.

I have this species from N.-E. Cachar, Godwin-Austen gives it from Chatak in Northern Sylhet, and I have it from Sadiya, Dollah, Khowang and Joonkotollee in the Dibrugarh district, but this is all I know as yet of its distribution in Assam, Sylhet and Cachar.

[Pretty common in Dibrugarh in small parties. They have the same habits and frequent the same places as *T. nipalensis*, and I have several times shot the two species, while feeding, off the same tree. The early morning, and again after 4 P.M., is when the Green Pigeons principally feed.—J. R. C.]

It occurs throughout Tenasserim, is common in Lower, somewhat rare, I believe, in Upper Pegu, and very abundant in Arakan.

776.—Osmotreron phayrii, *Bly.*

Once shot in the Western hills high up above the valley of the Barak, and, *I believe*, seen on two other occasions in these same hills, but never met with in the Eastern hills.

I have this species also from N.-E. Cachar and the Dibrugarh district, and Godwin-Austen records it from the Khasi hills and includes it in his Dafla hill list, but beyond this I have no certain knowledge of its occurrence in Assam, Sylhet or Cachar.

[Very common in Dibrugarh. On a large Ficus tree in fruit I have seen over 200 at a time feeding. When disturbed they fly off in large parties; but soon return.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	12·0	19·25	4·20	6·45	0·85	0·85	7·80 ozs.
♀ ...	10·60	17·75	3·65	5·80	0·75	0·85	5·90 „

Legs and feet lake; bill, base dull blue, rest bluish white; eyelids pale yellow; orbital skin bluish; irides reddish with an inner circle of blue. All these Green Pigeons would make very good eating were it not for their toughness and a peculiar smell they have when roasted.*—J. R. C.]

* Skinned, not merely plucked, and *jugged*, they are excellent.

O. phayrii occurs pretty well throughout Central and Northern Tenasserim and throughout the Pegu and Arakan hills, but it does not occur in the greater portion of the plains of Pegu.

778.—Sphenocercus sphenurus, *Vig.*

Repeatedly seen, and even more often heard (its sweet plaintive whistling note being quite unmistakable), in the Western hills, but never observed in the Eastern ones.

I have this species both from Shillong and other places in the Khasi hills, and from .N.-E Cachar, but I have as yet no other record of its occurrence in Assam, Sylhet or Cachar. In British Burmah, thus far, I only know of its occurrence in the hill forests of Northern and Central Tenasserim and Pegu.

779.—Sphenocercus apicaudus, *Hodgs.*

This is the only Green Pigeon that I found really common in Manipur. It abounds in both the Western and Eastern hills from low down as on the banks of the Eerung in the former to the highest points I visited in the latter. It is never seen in the basin.

I found them always in good sized flocks of from 20 to 30 birds, keeping well to the tops of the highest forest trees. The consequence was that, what with having to use No. 2 shot, and what with the immense height they fell, and what with the facility with which their feathers knock off, not one in ten of the birds I shot were fit to skin. Even of these, owing to their extreme fatness, half the skins are spoilt. Yet so much clean wood ashes was used in the process that they might be said to have been skinned *in* ashes. The only really perfect, dry, clean skins were treated thus: After the skin had been removed, and its inside rubbed and rubbed with ashes till it *seemed* quite dry, the skin was completely filled with clean ashes and loosely sown up, papered and exposed to hot sun for two days. Then, the skins having been relaxed, the ashes were carefully removed, and ordinary stuffing substituted. All the four skins thus treated are perfect, all the others are more or less disfigured by grease. Of course this can be all removed by turpentine, but this is a most laborious business, and the feathers never, I think, look quite the same after it.

I recommend this system for trial; it is not *better* than the hot, washed-bran process recommended in my VADE MECUM, but it is less trouble, and one always has woodashes available in camp in India, whereas the carrying the bran and then recleaning it each time after use is a bore.

I have always found these birds fat, but never anything like what they proved to be in Manipur, owing I suppose to the great proportion of small jungle berries and fruits in the Manipur forests even in the spring (February to June), during which my visit was paid.

Well, if I did not get many good skins I got many delicious meals, for these birds kept till they are tender, and roasted gipsy fashion in clay are simply perfect. I never before thought much of Green Pigeons, unless they were jugged, but these were quite out of the common way.

They are rather stupid birds. You mark a flock on to a tree. You get under it and walk round and round, peering up into the green depths. You know that there are at least twenty large birds above you, and you know by falling berries and twigs that they are hard at work feeding, but they keep quite quiet, and it is often quite impossible, even with binoculars, to see a single bird, embowered as they sit in leaves coloured precisely like themselves. Then you shout, and kick the trunk of the tree and stand eager for a shot, but "they sit beside their nectar" careless of the bolts below, and at last you adopt the only feasible plan, and that is to get some one to fire into the tree at a bird, if he has chanced to spy one, otherwise by guess, and take a brace as they fly off. These guess shots are by no means always thrown away, one such one day brought down four birds. Notwithstanding the firing of three barrels one or two are generally sure to return to the tree and settle on it before your eyes in less than a minute, when, of course, seeing them alight it is easy to pot them. But in from ten minutes to half an hour the whole of the rest of the flock is sure to return, and though you drop a couple of them as they pass to the tree, the rest alight as if nothing had happened and so *da capo*. One afternoon at Matchi I bagged 13 without moving, sitting in the shade under a stockade that commanded a fair shot of all birds coming to and leaving a tree which happened for the day to be the object of their devotions. Their flight is smooth but not very rapid. They have a fine mellow whistled call, louder, and not so sweet, but more varied than that of *sphenurus*, and alike in the Eastern and Western hills this call becomes one of the most familiar of the "Voices of the Woods."

I measured the first pair I shot, and may record the details:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	16·3	20·1	8·5	6·3	0·9	1·0	9·7 ozs.
♀ ...	14·3	19·0	7·1	6·35	0·9	0·93	8·1 „

Legs and feet crimson to deep coral red; claws pale brown; corneous tips of mandibles pale horny green; nares blackish;

cere and bare lores and orbital skin (the latter rather duller and more leaden in females) pale smalt blue; irides normally, inner ring blue, outer pink to coral red, but in a good many pale reddish orange or orange buff.

I have this species from near Sadiya in the Dibrugarh district, and Godwin-Austen records it from the Khasi hills. Beyond this I have no certain knowledge of its occurrence in Assam, Sylhet or Cachar.

[On several occasions when going about the "Desang" river near Joonkotollee I have seen parties of this species along the banks, but they kept to the tops of the highest trees, and I only managed to secure one.

	Length.	*Expanse.*	*Tail*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	16·0	20·25	7·60	6·60	1 0	0·90	9·25 ozs.

Bill smalt blue, horny portion bluish white; legs and feet crimson pink; irides buffy pink with an inner circle of pale bright blue. In the cold weather these birds used to come down into the plains for a short distance from the Naga hills. I never noticed them in the rains.—J. R. C.]

In British Burmah I only as yet know of the occurrence of this species in the hill forests of Northern and Central Tenasserim.

780.—Carpophaga ænea, *Lin.*

I both saw and heard this species in the Jhiri level, and though I failed to shoot a specimen (my gun missed fire at a very fair shot), it is a bird with which I am quite familiar, and which is quite unmistakable, but after crossing the Jhiri level and the Noongzai-ban ridge I never again met with it, and though I thought I heard it in the Barak valley, it was a mile away and I cannot be certain.

I have this from N.-E. Cachar, Dollah and Khowang in the Dibrugarh district, and Godwin-Austen gives it from the Garo hills, and says it was in enormous numbers at the hot saline springs of Namba on the Dunsiri river, and this is all I know of it in Assam, Sylhet or Cachar.

[This species is common in the well-wooded portions of the Dibrugarh district, where it is called "Purgoomba" by the Assamese. Those I measured were :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	17·30	28·80	6·50	9·40	1·05	1·45	17 60 ozs.
♀ ...	16·75	27·50	6·25	9·10	1·10	1·32	16 0 ,,
♂ ...	16 60	28·25	6·0	9·20	1·10	1·30	15·50 ,,
,, ...	16·75	28·50	6·25	9·45	1 10	1·35	16·0 ,,
,, ...	17·80	30·50	6·60	9·50	1·12	1·40	18·0 ,,
♀ ...	17·20	30·0	6 30	9·55	1·15	1·15	18·20 ,,

Irides red brown; orbital ring dull purple; legs lake; claws black; cere dull purple; bill leaden blue. On the 29th July, 1879, I saw one of these birds fly up into a tree, that stood on the border of the tea garden, with a twig in its bill. On the 7th of August I sent up a man, but the nest had been deserted. The nest was a very meagre affair of the usual columbine type.—J. R. C.]

It is common all over British Burmah in suitable localities.

From Shillong I have 781.—*Carpophaga insignis*, Hodgs., and Godwin-Austen says it was in enormous numbers in April at the hot saline springs of Namba on the Dunsiri, and pretty common at No. 9 Camp in the Dekrang valley of the Dafla hills, and that Beavan procured it at Molshai in the North Cachar hills, but it has not yet been recorded from anywhere else in Assam, Sylhet or Cachar, and it is not known to extend to British Burmah. I saw nothing of it in the Western Manipur hills, and in the Eastern it is represented by the next species.

[Not uncommon in the Dibrugarh district where they are found towards the south-easterly portion, and even there very locally distributed, as the only places in which I noticed them were Jaipur and between the Noharanee and Sepon Tea gardens. When on the wing these birds are readily distinguished from *C. œnea* by their greater size and whitish under tail-coverts.—J. R. C.]

781*ter*.—Carpophaga griseicapilla, *Wald.*

I only met with this species in the Eastern hills, where it was not uncommon, and where morning and evening its dull double drum-like and very base call was generally to be heard. But it was wary to a degree, and often as I went after it I only succeeded in procuring four specimens from first to last. Two I fairly stalked after wasting half a day after each, and two (on different occasions), startled by some of my people, by good luck flew over the forest where I was standing, and, long shots as both were, dropped to my gun to my exceeding delight.

I measured all four birds, but the figures for two have been somehow lost:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	20·0	31·0	8·1	9·9	1·25	1·45	1lb 7 oz.
„	19·0	29·0	8·1	9·5	1·04	1·4	1 „ 4 „

Legs and feet a rich purplish lake or lake purple; claws pale drab or brown, paling at their bases; soles whitey brown; corneous tips of both mandibles pale brown or pale

drab; rest of bill and gape coloured like the feet in some, a pink lake in one; irides bluish white; bare lower lid hoary white.

I have never seen this species myself from any part of Assam, Sylhet or Cachar, but I have no doubt that this is the undetermined species that Godwin-Austen found so numerous in the forests above Garilo (Chota Asalu) in January, and which he says Lieut. Beavan also shot at Molshai in the North Cachar hills.

In British Burmah this species has as yet only been observed in the higher hills of Central Tenasserim, and in the Karen hills at the extreme north of Tenasserim.

782.—Alsocomus puniceus, *Tick.*

I saw this Pigeon for certain once in the valley of the Eerung, Western hills. I had a careful look at it with binoculars at less than one hundred yards distance, but though it did not leave the place only took short flights of a quarter of a mile or so, and though I followed it for hours until I was dead beat, I never could get within sixty yards. I did get within seventy yards the first time, and fired as it flew off and knocked a lot of feathers out and clearly hit it, but I could not, do all I would, bag the wretch. Once more on the Limatol range, and once again near Aimole *I believe*, I saw single birds of this species fly past at about 100 yards distance; but I could only catch momentary glimpses of them through the trees and I cannot be *sure*.

I have this species from N.-E. Cachar and many places in the Dibrugarh district, and Godwin-Austen found it at the hot saline springs of Namba on the Dunsiri river in April but beyond this I know nothing of its distribution in Assam, Sylhet or Cachar.

[Common, and a permanent resident in Dibrugarh, where it frequents the well-wooded tracts. Some I measured were—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*	
♂ ...	16·0	27·0	6·30	8·90	1·05	1·10	12·75	ozs.
,, ...	16·10	27·0	6·70	9·10	1·0	1·0	14·0	,,
♀ ...	15·75	26·0	6·40	8·70	0·90	1·05	14·0	,,
♂ ...	15·75	26·25	6·30	8·75	1·0	1·05	13·0	,,
♀ ...	15·50	25·60	6·30	8·55	0·90	1·05	13·60	,,
♂ ...	15·75	26·50	6·50	9·10	1·10	1·0	18·0	,,
,, ...	16·20	27·75	7·0	9·30	1·10	1·10	16·0	,,

Bill purplish at base, horny portion bluish green, with a pale tip; legs and feet pale lake; claws white; irides orange and pale orange in some; eyelids and orbital skin, dull purplish.

They live exclusively on jungle fruit.—J. R. C.]

It is sparingly distributed in Central and Northern Tenasserim. It occurs in Pegu in the dense evergreen forest near China Bakir (below Rangoon), and Oates says that it is generally, though sparsely, distributed throughout that province. Blyth records it from Arakan, and says that it is not uncommon on Ramri Island, and I have seen a specimen from Cheduba Island.

In Western Sylhet I saw a good many of 788.—*Columba intermedia*, Strickl., but missed it in Eastern Sylhet, and never saw it anywhere in Cachar or Manipur, nor have I any note of its occurrence anywhere in Assam, hills or plains. In Burmah, Blyth says it is as common as in India, but I do not believe it occurs in *any* part of either Tenasserim or Pegu. It may occur in Arakan, but I have never seen any specimen thence.

791.—Macropygia tusalia, *Hodgs.*

Not observed in the Western hills or the basin, but not uncommon (though very shy) in the higher forests of the Eastern hills. They are very difficult to get and I only shot six, but their loud aggressive call, "*Coo-oo, Coo-oo,*" &c., was continually heard near Aimole and Matchi, and more rarely further north near Tankool-Hoondoong.

Jerdon errs in saying that "the female differs in having the forehead and cheeks pale vinaceous yellow, the nape less brightly glossed, the barring (on the upper surface) more developed than in the male and especially on the tail; in the chin being pale buffy.....; the crown is likewise barred." Every word of this is wrong as applied to the adult female. The adult female is a trifle smaller than the male, but her chin, forehead and cheeks and the entire upper surface are precisely like the males, and all the points of difference above enumerated refer only to the immature female.

The female really differs in having the entire lower surface, except the chin, middle of upper throat, middle of lower abdomen, vent-feathers and middle of lower tail-coverts, closely barred and in having the purple and green reflections of the breast nearly obsolete in most, and even in the oldest birds much feebler than in the male.

By some oversight I only measured a single bird, of which the following are the details :—

Male.—Length, 16·0 ; expanse, 22·3 ; tail, 8·1 ; wing, 7·45 ; tarsus, 0·95 ; bill from gape, 0·97 ; weight, 9ozs.

Legs and feet a rich purplish red ; soles and edges of scales hoary ; bill black ; edges of eyelids dull red ; bare orbital skin pale leaden ; irides (1) a narrow ring of pale yellow, (2) a broader pink ring, blackish towards both margins, (3) a narrow French grey ring.

I have this from the Khasi hills and from Khowang and Joonkotollee in the Dibrugarh district, and Godwin-Austen records it from the Mahadeo peak, but beyond this I have no knowledge of its occurrence in Assam, Sylhet or Cachar.

[Not uncommon in the Dibrugarh district, but so very shy that I only got two specimens on separate occasions, which were shot while feeding with *T. meena* and *T. suratensis* in paddy fields in the cold weather.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	15·84	21·75	8·50	7·50	0·90	0·95	6·58 ozs.
„ ...	15·90	22·25	8·0	7·60	0·95	0·95	6·70 „

Legs lake pink ; feet dusky pink ; bill black ; irides purplish ; orbital skin dusky blue.—J. R. C.]

In British Burmah I only know of the occurrence of this species about the higher hills of Central and Northern Tenasserim, and even here it is very scarce. Ramsay, however, procured it in Karenee.

793.—Turtur meena, *Sykes.*

This species occurs very sparingly in both the Western hills and all over the basin, but it does not, it seems, extend to the Eastern hills; at any rate I preserved no specimens, have no note of its occurrence, and cannot remember ever seeing it there.

I have this species from N.-E. Cachar, the Khasi hills, Sadiya and other places in the Dibrugarh district, and Godwin-Austen notes it from Harmutti in his Dafla hill list.

[Very common in Dibrugarh, where it is found all over the district, and is a permanent resident.—J. R. C.]

This species occurs in Northern Tenasserim almost throughout Pegu and in Arakan, in parts of which latter I am informed it is, at times, extremely common.

795.—Turtur suratensis, *Gm.*

Very sparingly distributed in the Manipur basin, and not noticed at all in the hills on either side.

In Sylhet I saw this everywhere, and it was very common about Phenchuganj and Karimganj. I also saw it all across Cachar. In the Dibrugarh district it is very common, and I

have it from every single locality from which I have received any birds, and Godwin-Austen gives it from the Khasi hills.

[The "Koo-po-hoo" of the Assamese is a permanent resident and very abundant. They breed in the cold weather.—J. R. C.]

In British Burmah this species is represented by *T. tigrinus*.

It is curious that, while all the specimens I preserved from Sylhet, Cachar and Manipur are *T. suratensis*, I received from N.-E. Cachar a genuine specimen of 795*bis*.—*Turtur tigrinus*, Tem. There is no other record of its occurrence in Assam, Sylhet or Cachar, but it is perhaps *the* commonest Dove all over British Burmah.

796.—Turtur risorius, *Lin.*

We saw this nowhere in the hills, but found it common in the Manipur basin. This species was not uncommon in Cachar (I did not notice it, though I dare say it occurs, in Sylhet), and has been sent me from Joonkotollee in the Dibrugarh district. Godwin-Austen records it from the Garo hills, and this is all I know of its distribution in Assam.

[A few couple may be seen in the cold weather about the more open parts of the Dibrugarh district.—J. R. C.]

In British Burmah I only know of its occurrence in Northern Arakan and Northern Pegu, in both of which I believe it to be rare.

797*bis*.—Turtur humilis, *Tem.*

This species is excessively abundant in the Manipur basin, and about the villages, in the evenings, gathers in large droves, clustering on the tops of high trees or some bare summit of a huge bamboo, so thickly that a dozen or more may be dropped with a single barrel.

I have this species from N.-E. Cachar, and it is probably this species (though it may have been *tranquebaricus*) that Godwin-Austen records from the Garo hills. Beyond this I know as yet nothing of its distribution in Assam, Sylhet or Cachar, in neither of which latter districts did I myself meet with it.

This species is generally distributed throughout the more open and cultivated portions of Tenasserim and Pegu. I have never seen a specimen from Arakan, where, according to

Blyth, it is *tranquebaricus* that occurs, but I should doubt the fact, and suspect that there also it will prove to be *humilis*.

[In June 1879, when in charge of the Bhaman Tea Garden, which is in about the centre of the Dibrugarh district, I saw a male red Turtle Dove, but as I did not bag it I cannot say whether it was *tranquebaricus* or *humilis*.—J. R. C.]

798.—Chalcophaps indica, *Lin.*

I saw and shot a single female of this species on the western flanks of the Noongzai-ban range, but never again saw it anywhere in Manipur. I have it from N.-E. Cachar, the Garo and Khasi hills and from Khowang in the Dibrugarh district, but this is all I know of its distribution in Assam, Sylhet or Cachar.

[Common and a permanent resident in the well-wooded parts of the Dibrugarh district. The Assamese call it "Matee Koopohoo," *i.e.*, ground dove.—J. R. C.]

It is common in suitable localities throughout all the provinces of British Burmah.

All over the Assam valley, growing scarcer as you approach Sadiya, and not extending anywhere eastwards of this, we have 803.—*Pavo cristatus*, Lin. This species occurs also far into the Garo hills, but, so far as we know, it does not occur in either the Khasi or Naga hills or in Sylhet or Cachar, nor did I see it or hear of it anywhere in Manipur.

[Old planters assured me that about 20 years ago Peafowl were occasionally seen on the banks of the "Desang" and "Dehing" rivers, wherever they were well-wooded. The only one of this species that I saw was a male, which belonged to the District Superintendent of Police, who informed me he got it from North Lakhimpur, which lies on the north bank of the Brahmaputra river, Dibrugarh being on the south bank.—J. R. C.]

Throughout British Burmah (and in Chittagong also) this species is replaced by 803*bis*.—*Pavo muticus*, Lin., which does *not*, however, so far as I can ascertain (despite all that has been said to that effect), extend to any part of Assam, Sylhet or Cachar.

803*quat*.—Polyplectrum tibetanum, *Gm.*

I only once met with this species in Manipur, and that was in the Jhiri level, where I know from the people that it is *common*. It extends through the Western hills, they told me

to the western base of the Limatol range, and no further. It does not occur in the basin, nor is it ever seen in the Eastern hills.

It is generally distributed in all suitable localities throughout Assam, hills and plains (as far east at any rate as about the 90° E. Long.), Sylhet and Cachar. I have no certain knowledge of its occurrence in Eastern Assam, *viz.*, in Lakhimpur, Sibsagar and Dibrugarh.

[I saw the skin of a cock bird shot near Sonari in Sibsagar, and they have been procured near Jaipur in Dibrugarh. Both these places are not far from the base of the Naga hills, and the country about is undulating and hillocky ground well-wooded, which is just the sort of place these birds frequent; but they nowhere enter the plains proper, in Dibrugarh at all events.—J. R. C.]

This species is common in Arakan, and again not rare in the hill forests of Central and Northern Tenasserim, but though it has been repeatedly stated to occur in Pegu, I have been unable to verify this, and Mr. Oates does not include it in his list of the birds of that province.

On the eastern borders of Assam lie the Mishmi hills, a little more than nominal appanage of that province, and from these hills are yearly brought down skins and live specimens of 804*bis*.—*Lophophorus sclateri*, Jerd. This species does not, so far as I could learn, extend to Manipur, nor has it been discovered in any other part of Assam or British Burmah. It is probably confined to localities where the hills rise to 9,000 or 10,000 feet elevation.

Another species hitherto brought only from these Mishmi hills, and observed nowhere else within our present limits, is 805*bis*.—*Ceriornis temminckii*, J. E. Gr.

Throughout the Naga and other Assamese hills south of the Brahmaputra and eastwards from the Burrail range to the higher hills south-east of Sadiya, at elevations of from 5,000 feet in winter to 9,000 and upwards in summer, we have 806*bis*.—*Ceriornis blythi*, Jerd. It is not found elsewhere in Assam, Sylhet, Cachar or British Burmah, but from what the Manipuris told me it would appear that this species occurs in some very high hills in the north-east corner of their territory. This is the more probable that my lamented friend Mr. G. Damant found it near the villages of Kohima, Khenoma,

and Mozemah, all pretty close to the Manipur frontier. However, I cannot for the present include this in the Manipur list.*

809*bis*.—Callophasis humiæ, *Hume*.

I have already dealt fully with this species, IX, 461. It is not known as yet to occur anywhere in Assam, Sylhet, Cachar or British Burmah.†

---

* As this is passing through the Press, Dr. Watts, who visited Manipur the year after I did, informs me that he shot several of these in the N.-E. Manipur hills.—A. O. H.

† Long after this was written Godwin-Austen's people procured other specimens of this lovely species, including females, which I failed to secure. These specimens were obtained on the peak of Shiroi furar in North-East Manipur, near the Naga hills boundary. Both sexes are figured. P. Z. S., 1882, 715, and from the letter-press accompanying the plate I quote the following:—

"*Description of Female* (in the collection of Godwin-Austen).—Throughout of a pale ochreous brown tint, with a nude red patch surrounding the eye. *Above*—head rusty brown, each feather with a small subterminal black spot; the ground colour fades on the back of the neck into pale ruddy ochraceous, each feather having a light spot with a subterminal black band; these merge into the darker feathers of the nape and upper back, where the above light spot becomes broadly white and triangular or arrowhead-shaped, set in velvet black, the tip of the feather being ashy grey-brown. The lower back and rump is a pale ochre brown, speckled finely with black, the feathers having a subterminal large black spot or streak, this becoming larger towards the upper tail-coverts, which are more ruddy ochraceous, with splashes of black brown near the webs. The tail is maroon or chestnut, the two central feathers tipped with white, a subterminal black bar three-quarters of an inch from the end, and six imperfect bars of the same colour at the above distance apart, which do not extend across the shaft. The outer tail feathers similar, but with no black on the outer webs, and only a slight indication of the black bar on the margin of the inner web. *Below*—including side of neck, throat and breast, of a dull pale sienna brown, slightly greyish, some of the feathers on the side of the neck with small black tips. From the upper breast, the sides, thigh-coverts to the abdomen the feathers have a whitish ochre centre and an edging of the same tint, producing a crescentic barring or ornamentation to those parts; a few of the feathers on the right and left anterior breast have half the web black with a central white bar. Abdomen dull dingy pale ochreous. The under tail-coverts are mottled, black, white and ruddy brown; the longer feathers being tipped pure white, succeeded by a black bar, then rich chestnut and black at the base. The scapulars and secondary coverts are on the inner web, more or less velvet black, mottled with the same colour on a sienna ground, on the outer web, narrowly tipped whitish, forming three wing bands (two distinct, one rather broken). The secondaries are mottled in the same manner with four irregular blackish bars crossing every feather, every bar margined on the outside with pale ruddy ochre and margined at the end with pale ochre. The primaries are dark sepia brown, with four elongate ochre spots on the outer web, the inner web at all these points having a mottling of chestnut. Wing greyish within. *Dimensions*: Wing, 8·25; tail, 7·0; bill in front, 1·0; bill from gape, 1·2; tarsus, 2·2."

The female of this species differs from that of *P. Elliotti* (its nearest known ally) in wanting the black on the throat and the white underparts that characterize both sexes of that species.

810*ter*.—Euplocamus horsfieldi, *G. R. Gr.*

Though seldom seen this species is pretty common everywhere in suitable localities, alike in hills and plains throughout Manipur. I shot it in half a dozen places in the Western hills, in which it is most abundant, in the Jhiri and Eerung rivers, at Booree Bazar in Bishnoopoor, Sagam and many places in the basin, and every part of the Eastern hills I visited—not on the summits of the hills, but in valleys below these where there were streams and forests. I had a specimen brought in from the extreme south of Manipur, snared at the same place and time as the *Callophasis*. And again another was brought in from the north, on the road to Kohima.

The following are particulars of some I measured:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	25·5	29·0	10·8	9·25	3·45	1·37	2 lbs. 10 ozs.
,,	25·0	30·0	10·0	8·9	3·4	1·4	2 ,, 12 ,,
♀	21·0	28·0	8·5	8·6	2·93	1·4	2 ,, 5 ,,
,,	21·7	28·7	8·7	8·7	3·1	1·38	2 ,, 12 ,,

These were the finest birds I shot. Other males weighed 2lbs. 4ozs.; 2lbs. 6ozs.; 2lbs. 4ozs.; 2lbs. 1oz.; 2lbs. 3ozs.; other females, 2lbs. 7ozs.; 2lbs. 1oz.; 2lbs.; 1lb. 13ozs.; 1lb. 15ozs.

Legs and feet a delicate pale drab, with in some a faint greenish, in some a pinkish, and in some a silvery tinge; bill pale horny green, more or less dusky about nares and on cere; irides orange, orange red, pale orange brown; bare facial skin crimson, rather paler in the female.

This species occurs in suitable localities throughout Assam, Sylhet and Cachar, alike in the hills up to 4,000 feet elevation and in the plains. It also extends into parts of Northern Arakan. Elsewhere in Arakan it is replaced by *E. cuvieri*, and in Pegu and Northern and Central Tenasserim by *E. lineatus*, except at the extreme north of the latter, where *E. crawfurdi* begins to make its appearance.

[Very common in all the forests of Dibrugarh, and called "Doreek" by the Assamese, who snare, by the aid of decoys, numbers of them, especially in the breeding season. Those I measured were:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	24·0	30·0	9·50	9·60	3·25	1·40	32·0 ozs.
♀	20 75	27·0	7·25	8·25	2·60	1·30	32·0 ,,
♂	22·0	28·0	9·20	9·25	3 0	1·40	33·75 ,,
,,	22·75	28·50	9 30	9·10	3·10	1·40	31·50 ,,
,,	22 75	29·0	9·10	9 20	3·0	1·20	32·50 ,,
,,	23·75	29·0	9·80	9·50	3·10	1·35	33·75 ,,
♀	19·50	23·25	7·25	8·0	2·75	1·56	24·0 ,,
♂	22·50	27·0	9 25	8·65	3·10	1·25	16·50 ,,

Legs and feet in male greenish; the spurs horny white; claws pale horny; facial skin in both sexes bright crimson; bill in female pea green, the base being tinged dusky; irides brick red in male, dusky red in young female.

The decoy birds kept by the Assamese do not seem to be afraid of their masters, but the moment they see an European they commence to flutter and beat their wings against their cage bars. These birds feed in the early morning and just about sunset, at which times fair sport can be had on the public roads, wherever these are damp and dark owing to the forest trees overhanging them, into which these birds come to feed. I have seen them at times feeding in company with *Gallus ferrugineus*.—J. R. C.]

812.—Gallus ferrugineus, *Gm.*

Though this species seemed very scarce, we procured it in the low valleys and about the bases of both Eastern and Western hills. It is certainly not one-tenth as numerous as the Kalij, and while the Nagas readily trapped both this and the Wood Partridges, they never once brought in a specimen of the present species. From first to last we only got four, all of which I shot myself, three in the Western, one in the Eastern hills, all low down, and I saw three others.

This species is generally distributed in suitable localities throughout the whole of Assam, Sylhet, Cachar and British Burmah, alike in the plains and the less elevated portions of the hills.

[Common in suitable localities in Dibrugarh.—J. R. C.]

818.—Francolinus vulgaris, *Steph.*

Thinly distributed, wherever there is long grass and water, about the Manipur basin. I am very doubtful whether the Eastern form of the Black Partridge should not be specifically separated from the Western Indian one, which is identical with that of Persia, Palestine and Cyprus.

Long ago I noticed the very peculiar colouring of some Black Partridges Mandelli had from the eastern portions of the Sikhim Terai and the Bhutan Dooars. Then I noticed it in a Shillong specimen, then in a Cachar one, and now in Manipur I found that all the birds, male and female, are of this type.

They differ from the Western type (1) in having the ground of all the feathers of the interscapulary region, scapulars, coverts, and tertiaries, *black* instead of brown; (2) in having a broad band of unbroken black unspotted with white on the

back of the neck and extreme upper back,* below the chestnut collar; (3) in having the white transverse lines on the middle back, rump, upper tail-coverts and central tail-feathers much narrower; (4) in having the pale margins to the feathers of the crown and occiput entirely pale buff (instead of partly this colour and partly white), and almost obsolete.

There are other minor differences, but perhaps not equally constant, such as in the males the absolutely uniform lower tail-coverts, the colour of the tibial plumes, &c.

I am doubtful about giving them specific rank; those who decide to do so should call them *Francolinus melanonotus*, the Black-backed Francolin.

They do not differ in size from the common Black Partridge. The following are the exact dimensions of one pair of the Manipur birds:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 14·7	20·0	3·85	5·9	2·05	1·18	1lb. 2 ozs.
♀	... 14·0	18·3	3·8	5·5	1·7	1·08	14 ,,

Male.—Legs and feet dull fleshy orange; claws brown; bill black; irides hazel.

Female.—Legs and feet pale reddish orange; claws brown; upper mandible and tip of lower mandible dark brown; rest of lower mandible, gape and edges of upper mandible, except at top, pale fleshy brown; irides brown.

This species, and as far as my specimens go this black backed form of it, is generally distributed in all suitable localities throughout Sylhet, Cachar, the Garo and Khasi hills, and the Assam valley as far east as the western portions of Lakhimpur, but it is believed not to extend further east up the valley at present,† nor have I heard of it in the Naga hills.

This species does not extend to British Burmah, in one small portion of which, *i.e.*, in the valley of the Irrawaddy from Prome northwards, it is replaced by *F. chinensis*, which is also very common in Karenee.

From Cachar and other localities we have 823.—*Ortygornis gularis*, Tem. This does not occur in Manipur unless possibly in the Jhiri valley, but it occurs throughout the low country of Assam to Sadiya (and even beyond this), Sylhet and Cachar; as a rule it is confined to the plains, but may be met with in

* This though very marked in all fresh birds and in some good specimens is entirely lost in others, in which the necks have been pulled in.

† I say at present, because as the Lakhimpur and Dibrugarh districts get cleared it is sure to extend to these.

low valleys running into the Garos, and has exceptionally been found as high as 4,000 feet on the Cherrapoonjee plateau. It does not occur on the Naga hills, nor is it known to extend to any part of British Burmah.

[The Swamp Partridge or "Hoe-koo-lee" of the Miris is confined to the churs and banks of the "Brahmaputra" river wherever they are covered with "null" (*Arundo karka*, Roxb.) jungle, and there it is very difficult to get more than a brace or so, as the cover is too dense to allow of employing beaters. While a party of us were shooting over one of these churs on the 12th April 1884, one of the gentlemen caught by hand a hen bird on her nest. Although the five eggs were only half incubated, she never flew off. They were laid in a depression at the bottom of a clump of "khuggree" grass, of which there was a perfect mass growing around.—J. R. C.]

It is somewhat difficult to say *what* Wood Partridges do occur in Assam, as Godwin-Austen, who has chiefly procured them, has been perpetually changing his mind as to what species he had—an astounding thing, seeing that a child could separate them. However to follow his latest utterances. In the Naga hills he obtained 824.—*Arboricola torqueolus*, Valenc.

I have never seen this from the Naga hills, Damant never got it there, and, as far as I know, it has occurred nowhere else in Assam, Sylhet or Cachar, and it does not extend to British Burmah. It does not occur in Manipur.

824*bis*.—Arboricola atrogularis, *Bly*.

One specimen of this species was brought to me at Noongzai-ban, having been snared somewhere a few miles north along that range. We never met with the bird again.

This is *the* Common Wood Partridge of Assam, very common all over the Dibrugarh district and all along the valley of Assam south of the Brahmaputra to the western slopes of the Garos. Further it occurs in suitable localities in both Sylhet and Cachar. We have this from N.-E. Cachar, not *intermedius*, which Godwin-Austen seems to have got in the North Cachar hills—I suspect a good deal further north than where our specimens came from. This species does not extend to any part of British Burmah.

[Very common in the forest only, where the whistling of these birds is heard principally in the mornings and evenings.

The Assamese call them "Duboi," and snare them with horse-hair nooses and a decoy bird.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	11·40	16·50	1·90	5·60	1·50	0·94	10·25 ozs.
,, ...	11·40	16·10	2·30	5·40	1·50	1·0	9·75 ,,
,, ...	11·10	16·0	2·30	5·35	1·50	1·0	7·0 ,,

Legs, feet and claws lobster red; bill black; irides brown; skin of the head, cheeks, throat, and mouth inside deep reddish pink.—J. R. C.]

In the Dafla hills Godwin-Austen obtained 825.—*Arboricola rufigularis*, Bly., but this does not occur anywhere in Assam, Sylhet or Cachar out of the Himalayas to which the Dafla hills belong. In the higher hills of Tenasserim we have a modified form of it, 825*a*.—*A. tickelli*, nobis., which is intermediate in its characters between *rufigularis* and *intermedius*.

From the north of the Goalpara district I have received a single specimen of 825*bis*.—*Arboricola mandellii*, nobis, which is therefore entitled to a place in the list of the birds of Assam, but it has been recorded from no other part of Assam, Sylhet or Cachar, and it does not extend to British Burmah.

824*ter*.—Arboricola intermedius, *Bly*.

This species was very common in the Eastern Manipur hills at elevations of 4,000 feet and upwards. In the Western hills I did not see it.

It frequented chiefly the thinner jungle, on the slopes of the hills, which has grown up where in past years the primeval forest had been felled for cultivation. They run terribly, and without dogs it is only by the merest chance that one can get a shot at them. As a rule they never fly, only when, caught between two or three beaters, there is no other means of escape do they make up their minds to show themselves, and then they rise with a rush with comparatively little noise, and sweep away smoothly and very rapidly down hill.

But though hard to shoot, because so rarely to be seen, they are easy to snare on the hedge and noose system, and we got numbers. They feed chiefly on small berries, jungle fruit, birds, grain and seeds of different kinds, but I also found a few grubs and soft-bodied insects in their stomachs. Their call is a very

full, soft whistle, which some of the Nagas can imitate admirably, and thus make all the birds in the neighbourhood, if there be any, reply and announce their whereabouts.

The following are measurements :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	11·2	19 0	2 2	5·75	1·85	0·95	12 ozs.
„	11·3	19·0	2·8	5·55	1·72	1·0	12 „
„	12·6	18·7	2·8	5 76	1 83	1·03	13 „

N.B.—I measured three females also, but they are not to be found.

Legs and feet coral pink ; claws, sometimes the same, brownish at their edges, sometimes more of an orange ; bill black ; gape, eyelids and bare orbital space dull lake to dull crimson ; irides light brown to dull hazel.

Godwin-Austen procured this in the Northern Cachar and Naga hills, but I know nothing further of its occurrence in Assam, Sylhet and Cachar. It seems to occur throughout the Arakan hills, but not to cross the Irrawaddy eastwards into Pegu or Tenasserim, where *A. brunneipectus* and *chloropus* are the common species, but in Independant Burmah it turns up again, as I have specimens from Bhamo.

825*quint.*—Bambusicola fytchii, *Anders.*

First at Aimole and then at Matchi in the Eastern hills I caught single specimens of this species in hedge snares that I had set for any ground birds, but specially for *Arboricolas* and Kalij. As I caught only two of this species to about one hundred, more or less, of the other two species, I suppose it is rare. I never saw it anywhere, except on these two occasions after it had been snared.

The following are particulars of the two specimens I obtained :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	13·7	18·1	4·6	5·7	2·0	0·8	12 ozs.
♀	13·5	18·3	4·32	5·8	1·7	0·77	12 „

Male.—Legs and feet pale brownish grey, or drab grey, the toes slightly darker than the tarsi, the latter with the faintest olivaceous shade ; upper mandible deep brown ; lower mandible brown ; irides orange hazel.

Female.—Legs and feet pale French grey, with a green shade most marked on the tarsi ; bill dull horny brown, yellowish at extreme tips ; irides dull hazel red.

The male and female only differ in plumage (as I pointed out in the "Game Birds"), in that the dark stripe behind the eye formed by the tips of the ear-coverts is in the male

very dark, black in some, blackish in others, while in the female it is a dull and not dark cinnamon rufous. The female has no spurs.

These specimens had fed, the one on birds and leaves and tiny berries, not an insect except one small white grub, the other on seeds, a small fruit and lots of insects, crickets, grasshoppers, small caterpillars, and ants.

I never set any traps in the Western hills, and do not *know* that it occurs there, but one of my men declared he saw it high up on the Western slope of the Limatol range at a place where there is a lot of grass.

This species occurs in the Garo, Khasi, North Cachar and Naga hills, E. and W., it being particularly common about Shillong. Beyond this I know nothing further of its distribution in Assam, Sylhet or Cachar. It does not extend, so far as we know, to any part of British Burmah, though it doubtless occurs in Upper or Independant Burmah.

827*ter*.—Perdicula manipurensis, *Hume*.

I have fully described this species (IX, 467), and have nothing further now to say about it. I only met with it along the bases of the Eastern Manipur hills, and I am not aware that it extends to any part of Assam, Sylhet, Cachar, or British Burmah.

829.—Coturnix communis, *Bonn*.

I shot a single specimen of the Common Quail near the capital in Manipur, but though I beat many likely patches and saw a good many Rain Quail, I never saw a second of this species.

The Common Quail is very scarce in Assam. I have it from Sylhet (several localities), Northern Cachar (I got one at Silchar itself) and Shillong.

Godwin-Austen got it at Cherrapoonjee. Colonel Graham recorded that he had met with it in Goalpara, Kamrup, Durrang and Lakhimpur, in all of which it was rare, but that further east it did not occur.

[In Dibrugarh the Grey Quail is decidedly rare. During the cold weather a brace or two might be picked up in the season in the paddy fields of the open parts of the country. I saw only one female that was shot not far from the station of Dibrugarh.—J. R. C.]

Blyth records it from Arakan, Blanford procured it in Pegu, and I have received it from the Bassein district, but it

is an extremely rare straggler to both Arakan and Pegu, and in Tenasserim I doubt whether it has ever occurred. Ramsay, however, obtained it in Karenee.

830.—Coturnix coromandelica, *Gm.*

This species was occasionally met with in burnt and half-burnt grass in the central and drier portions of the basin, especially about the bases of the hills. Perhaps I saw 30 from first to last, but of these I saw fully half one day, the 4th March, near Lumshang on the Kanjoop road, when I bagged 5½ couple. On no other occasion did I see more than a couple in the same neighbourhood.

I have as yet no record of its occurrence anywhere in Assam, Sylhet or Cachar, or even in Arakan (though it is common in Chittagong) or Tenasserim, but it is common in and about Thayetmyo in Upper Pegu, and I have received it from the south of the Bassein district.

[This species is not so rare as the last, as every season a few brace are shot by planters in the rice stubbles and grass lands round about the station of Dibrugarh.—J. R. C.]

831.—Excalfactoria chinensis, *Lin.*

I first saw this in Manipur, in the Kopum Thall, in the Western hills—a single bird. After that I often met with two or three in different parts of the valley. They were more numerous about Soognoo than any other place I visited. I killed six couple and ought to have killed ten had I not been shooting infamously that day. It is found, I think, all over Assam. It is very common in Cachar, less so perhaps, but still common in Sylhet. I have it from Shillong, and Godwin-Austen says it comes in at Cherrapoonjee about August. He also includes it in his Dafla hill list, and I have it from Sadiya. It is widely distributed throughout British Burmah, but everywhere chiefly, though not exclusively, as a seasonal summer visitant (*vide* IX, 196 ; X, 236).

[I looked persistently after this species, but strange to say never came across it in the Dibrugarh district. The short grass-covered lands they frequent cover a large area of the district, especially the churs of the Brahmaputra river, which I have repeatedly beaten over, but never a bird was to be seen.—J. R. C.]

833.—Turnix plumbipes, *Hodgs.*

I think this species must be very scarce in Manipur. I only saw it four times—once in the valley of the Limata in the

Western hills, twice in the basin, and once in the Eastern hills, and I only procured it twice, *viz.*, at Phalel in the basin and near Aimole. At the latter place, as I was standing near my hut, one of this species suddenly appeared flying close to me and settled at my feet. I walked forward two paces intending to flush and shoot it. It did not rise. It had dropped into a tiny bunch of grass perhaps five inches in diameter, on clean close cropped sward. So I looked carefully into the bunch and there was the Quail, warm but stone dead. It bore no signs of injury. I skinned it myself, it was absolutely uninjured. I opened it carefully, it was a male with apparently every organ (and I opened the skull) in perfect order. What possessed that hapless Quail to die thus then and there is past my comprehension. The Phalel bird (also a *male*) measured :—

Length, 6·6 ; expanse, 11·7 ; tail, 1·3 ; wing, 3·5 ; tarsus, 1·06 ; bill from gape, 0·71 ; weight, 2·22ozs.

Legs and feet very delicate pale leaden blue; claws almost white ; bill dull brown, dull bluish albescent at gape and base of lower mandible ; irides white.

This species is tolerably common in both Sylhet and Cachar, and we have it from various places in both the Khasi and Garo hills, and again from the valley from near Gauhatti, from Tezpoor, and from both Khowang and Joonkotollee in the Dibrugarh district. So that one may conclude that it is generally distributed throughout Assam, Sylhet and Cachar, alike in the less elevated hills and in the plains, but as a fact I do not *know* of its occurrence in the Naga hills.

[The Indo-Malayan Bustard Quail is common in all the Dibrugarh tea gardens in the rainy season. They breed then, and evidently migrate, as during the cold weather none are to be seen. I measured the following :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	6·10	10·50	1·0	3·20	1·03	0·72	2·20 ozs.
♀ ...	6·75	10·75	1·20	3·40	1·05	0·77	3·0 ,,
♂ ...	6·0	10·50	1·10	3·15	0·93	0·70	1·75 ,,
,, ..	5 80	10·60	1·15	3·10	0·90	0·70	1·65 ,,
♀ ...	6 50	10·70	0 90	3·35	1·0	0·74	2 10 ,,
,, ...	7·0	11·50	1·30	3·55	1·0	0·78	2 30 ,,
,, ...	6·70	11·50	1·30	3·65	1·0	0·76	2·47 ,,

Legs and feet leaden blue in male, yellowish green in female; irides chalky white in both sexes; bill horny brown, paler at gape, where it is nearly white; in female leaden blue.—J. R. C.]

It appears to be equally generally distributed in suitable localities throughout the several provinces of British Burmah.

834*bis*.—Turnix maculosa, *Tem.*

I only once met with this Quail, and that was in one of the compounds in a suburb of the capital.

I have no actual knowledge of its occurrence in any part of Assam, Sylhet or Cachar, but Godwin-Austen, misled by Jerdon, records *Turnix joudera* under the name of *T. dussumieri* from the Naga hills, and as the Manipur bird and Hill Tipperah birds are all *maculosa*, I cannot help suspecting that the Naga hill bird must be the same.

[I shot only two specimens during my stay in Dibrugarh, and they were flushed in a grass field. The bird is decidedly rare.—J. R. C.]

This species occurs everywhere in British Burmah, but is very sparingly distributed in Tenasserim.

835.—Turnix dussumieri, *Tem.*

Of this species also I only obtained a single specimen, and that was in the valley of the Limata in the Western hills.

I have never seen this from any part of Assam, Sylhet, Cachar or British Burmah, but Godwin-Austen records it from the Khasi hills, and Oates says he procured a pair at Pegu.

The Florican, 838.—*Sypheotis bengalensis*, P. L. S. Müll, does not occur in Manipur, but it is found throughout the entire valley of Assam, from the Manas river on the west to the Mishmi and Abor hills on the east. It does not occur in Cachar, nor I believe, though the contrary has been asserted, in Sylhet, nor does it extend to British Burmah.

[The "Ooloo-mora" of the Assamese is nowhere numerically common in the Dibrugarh district, but very locally distributed, and year by year to be found in those same spots. One of these places was the Dibrugarh race course, which has been deserted now, as they were so persistently hunted when once the fact of their being there became known. I knew of four other places in the district, large stretches of grass and paddy lands. They are also occasionally found when beating the churs of the Brahmaputra.—J. R. C.]

Another species, 843.—*Glareola lactea*, Tem., was, I gather, obtained by Godwin-Austen in Sylhet, but I have never yet seen it from any part of Assam, Sylhet or Cachar, nor did I meet with it in Manipur.

[I once saw a flock of these far inland on the sandy bed of the "Desang" river at Borhat, where the stream runs through some outlying spurs of the Naga hills. There were about 400 birds I should say. On the sands of the "Brahmaputra" I have often seen them.—J. R. C.]

It is generally distributed in suitable localities (it is rarely found far from large rivers) throughout Arakan, Pegu, and that portion of Tenasserim that lies between the Sittang and Salween, but it has not been observed as yet in any other part of the latter province.

845.—Charadrius fulvus, *Gm.*

Once at the Logtak lake in a water meadow or marsh on the eastern side, I came upon a small flock of these and shot a couple by a lucky hit. I could not get at them, so I moved away to a clump of reeds, and then several men I had left for that purpose gently put them up, and they came straight over me flying only about 20 yards high; this was the only occasion on which I saw the species in Manipur.

In Assam, strange to say, the only place from which I have received a specimen is Shillong. What the bird was doing there I cannot guess.

Godwin-Austen I gather procured it in Sylhet. I never saw it in either this district or Cachar, but Mr. Eden tells me it occurs in enormous numbers in Sylhet, but is scarce in Cachar. I have not at present any further knowledge of its distribution in Assam, Sylhet or Cachar.

[Far from rare in Dibrugarh, but very locally distributed, sticking to large, open and damp "pathars." During seven years I only bagged about a dozen, as the small parties met were very shy, and I never went expressly after them. The earliest bird shot was on the 20th of September.—J. R. C.]

It is generally distributed throughout British Burmah during the cold season.

846.—*Ægialitis geoffroyi*, Wagl., somewhere in Sylhet. I did not meet with it in Manipur, nor have I any other record of its occurrence in Assam, Sylhet or Cachar.

As far as I can make out Godwin-Austen seems to have procured

This species appears to occur all along the coasts of British Burmah, as far south at any rate as Amherst, below which in Tenasserim we did not meet with it; but it is not, I think, found anywhere far inland.

847.—Ægialitis mongolica, *Pall.*

There were several small flocks of this species about the wet meadows of the Logtak lake, and here I shot several. I have no note of seeing it elsewhere, and this is the only locality from which I preserved specimens, but I have an idea I saw it about one or two other large pieces of water.

I have as yet no record of its occurrence anywhere in Assam, Sylhet or Cachar, though doubtless it will prove to occur in all.

It is common everywhere along the coasts and estuaries of British Burmah, and is found pretty well all over Pegu.

From both N.-E. Cachar and Joonkotollee in the Dibrugarh district, I have received 848*bis.*—*Ægialitis placida*, G. R. Gr., but I have no other record of its occurrence in Assam, Sylhet or Cachar. I did not *procure* it in Manipur, and I do not think it extends to British Burmah. Though, however, I failed to procure it, I believe that a small Plover of this type that I saw on the banks of the Barak river in the Western hills really belonged to this species.

[Saw about half a dozen in Dibrugarh in as many years, but bagged only one, as they are very shy birds. I only noticed them in the "Desang" river, which is a rather smallish river with high well-wooded banks.

Male.—Length, 8·75; expanse, 17·0; tail, 3·25; wing, 5·35; tarsus, 1·20; bill from gape, 0·84; weight, 2·25ozs.

Bill black, base below yellow; legs and feet soapy yellow; claws black; irides earthy brown. This bird was shot on the 23rd November 1880.—J. R. C.]

848.—Ægialitis cantiana, *Lath.*

I only once saw this in Manipur, and that was at the Logtak lake; there was a small party of about six or seven at a rather bare spot on the western shore of the lake.

There is as yet no record of the occurrence of this species anywhere in Assam, Sylhet or Cachar.

In British Burmah it seems to occur all along the coasts and estuaries, except perhaps in the extreme south of Tenasserim, but in Burmah it seems to be scarcely ever found, as it so constantly is in India, far inland, though Ramsay did procure it at Tonghoo.

849.—Ægialitis dubia, *Scop.*

This species was pretty common about the jheels and on river banks in the Manipur basin, and I saw it once on the Eerung river in the Western hills.

I also procured it and saw it in several places in Sylhet, but I have as yet no knowledge or record of its occurrence in Assam or Cachar. It is generally, though rather sparingly, distributed throughout all the provinces of British Burmah.

[Rather uncommon in Dibrugarh, where pairs, and occasionally small parties, are seen in the beds of the larger rivers and in damp meadows, wherever these are of any extent.—J. R. C.]

850.—Ægialitis jerdoni, *Legge.*

This too was not uncommon in the Manipur basin in the same localities as the last.

I have as yet no record of its occurrence anywhere in Assam, Sylhet or Cachar. I have received this from near Akyab, in Arakan, from Northern Pegu, where it seems rather common, and from Central Tenasserim, in which province it must be excessively rare.

854.—Chettusia cinerea, *Bly.*

I first met with this in Manipur in the Kopum Thall, and then I found it generally distributed throughout the basin, but everywhere numerically scarce and so extremely wild and wary that it was almost impossible to procure specimens. Indeed it was only at the Logtak lake that I succeeded in getting any, and there I only secured five.

They were not nearly so wild in either Sylhet or Cachar, in both of which districts I observed them in many places and shot several. I have no record as yet of its occurrence in any part of Assam.

[I came across a party of seven one cold season in a large damp "pathar" in the Dibrugarh district, but they were so wary that I failed to get a specimen. On the other hand I have shot numbers in Dacca and Sylhet, where they allow one to get within range.—J. R. C.]

This species is generally distributed throughout Pegu, Central Tenasserim, and the tract lying between the Sittang and the Salween, but I believe that it is nowhere numerically abundant. Doubtless it must occur in Arakan, but I have no record of its occurrence there.

In both Sylhet and Cachar I observed 855.—*Lobivanellus indicus*, Bodd., but it appeared extremely scarce. I have no record as yet of its occurrence in Assam, and in Manipur and British Burmah it is replaced by the following species.

855*bis*.—Lobivanellus atronuchalis, *Bly*.

On the 12th and 13th of May, at and about Hierok and Chundrakong, at the bases of the Eastern hills, I saw and shot this species for the first time in Manipur. Whether it does not occur in the south and west of the basin, which I had previously explored without ever meeting with it, or whether it is a seasonal visitant arrived in the basin generally since I had gone up into the Eastern hills, I cannot say.

So far as we yet know this species does not occur in Assam, Sylhet or Cachar. Throughout the plains portions of British Burmah it is everywhere common, and it is occasionally found in the hills also, though it does not ascend these to any great elevation as a rule. Ramsay obtained it in Karenee.

857.—Hoplopterus ventralis, *Cuv*.

I first saw a few about the Logtak lake, and then I found it very common on the stony banks of the Chakpee, just above its junction with the Toyang or lower course of the Imphal Turail. I noticed it nowhere else in Manipur. I observed it both in Sylhet and Cachar, but it was very scarce in both, and I have no knowledge as yet of its occurrence in Assam.

[I do not know how this species escaped the notice of Godwin-Austen and his collectors, for it is fairly common in the beds of the larger rivers. During the rainy season they stick to the Brahmaputra, spreading up the "Dehing," "Desang," and similar sized rivers in the cold weather.—J. R. C.]

It occurs all over British Burmah, almost exclusively about the banks of the larger rivers. Ramsay procured it in Karenee.

858.—Æsacus recurvirostris, *Cuv*.

Some little distance below its junction with the Chakpee the Toyang, here become a tolerably big river, encloses near its right bank a shoal of water-worn boulders, which averaged about one foot above water level when I visited the place. On this shoal I found a single pair of the present species, and this was the only time I met with it in Manipur.

I have no record of its occurrence anywhere in Assam, Sylhet or Cachar.

[One cold season in December a party of half-a-dozen of tea planters, of whom I was one, started from Jaipur in Dibrugarh to go up the "Dehing" river fishing. The banks all the way up to Busa in Kamptee territory are low, except for about 15 miles of the south-easterly bank, where the low ranges of the Naga hills run down to them, and there are large stretches of sand, where single individuals and pairs of this species were noticed, and although one of us had several long shots every day at some of them, we failed to get a single specimen.—J. R. C.]

It occurs sparingly about the banks of the larger rivers in Arakan, Pegu and Central Tenasserim.

863.—Grus antigone, *Lin.*

I saw a good number of Sarus towards the lower southern end of the Kopum Thall, and in the basin I saw a good many at different times about the larger jheels and especially at and about the Logtak lake.

I am pretty certain the Sarus does not occur in Cachar, and I have no knowledge of its occurrence in Sylhet. In the valley of Assam it is common as far as the Darrang district, and occurs, though more sparingly, in the Lakhimpur district, but is not found I think further east.

[Found in pairs about the damp "pathars" and paddy fields in Dibrugarh. In June, 1883, when cutting across from Ting Kong to Jaipur, I came across a party of 20 birds near one of the villages that lay in my route.. Assamese, "Khoor-Sung."—J. R. C.]

It occurs in the level portions of Arakan and Pegu, and in those few parts of Tenasserim where there are wide plains as in the valleys of the Attaran and Sittang.

On the 13th of March, when between Booree Bazar and Bishnoopoor, a small flock of Cranes passed me at a distance of about 250 yards, flying low and due north. I got on to a small mound and watched them for probably more than a mile with my glasses, but when I lost sight of them, they were still flying steadily away northwards. Now, whatever they were, they were certainly none of our Indian species—*antigone, leucogeranus, communis, virgo.* They were of a uniform dark hue, much darker than *communis*, and had the whole head and upper parts of the neck pure white. Of

course one says at once "*Grus monachus* no doubt." But so far as I have been able to study the distribution of this group it is simply *impossible* for *monachus* to be in Manipur in March. I never saw the birds on any other occasion, and I don't pretend to know what they were, beyond this that they were Cranes of the *monachus* type and probably some undescribed species.

[As we were steaming up the "Brahmaputra" in March, 1879, and within a few miles of the station of Dibrugarh, I saw about 400 yards off a flock of about 70 birds, which undoubtedly were Cranes, but of which species I cannot say. Of course inland, where my residence afterwards was, these birds were never to be seen, nor did I, when travelling on the Brahmaputra by steamer on several occasions, ever again notice any.—J. R C.]

867.—Scolopax rusticola, *Lin.*

The Woodcock is not, I know, very rare in Manipur during the cold season, but I only shot a single specimen not far from Bishnoopoor, at the foot of the Western hills, and this was the only one I saw.

In the Naga hills it is common, and it occurs in many parts of the Khasi and Garo hills, regularly if not abundantly. In both Northern Sylhet and Cachar a few are found yearly, as they are about the eastern end of the Assam valley, and even in other parts of this latter stragglers occasionally turn up.

[On two occasions I saw Woodcock in Assam, but unfortunately had no gun in my hand; and several planters, who knew the bird well at home, have told me of their having shot them in Dibrugarh, but they are nowhere numerically common.—J. R. C.]

This too is the case throughout the major portions of Arakan, Pegu and Tenasserim, as far south at least as Tavoy, but there are localities in the Arakan hills, and other places like Tonghoo, where they are regular and pretty numerous visitants.

868.—Gallinago nemoricola, *Hodgs.*

This species—I only shot three there—must be common in Manipur, for we hardly ever beat any piece of heavy grass in wet ground without flushing one. I had no time to waste going after them, so only shot those that came in my way, but I am sure I saw at least a dozen from first to last. It occurs in both the Garo and Khasi hills, and in the Dibrugarh district, but

beyond this I know nothing of its distribution in Assam Sylhet or Cachar.

[Mr. L. G. Ilbert when shooting over a pathar near the Moran Tea Garden in the cold weather, flushed and shot a bird which he said "was of the colour of, but very much larger than, a snipe, and with a heavy flight like a Woodcock's." Although his servant was told to keep it carefully till next day, to send over to me, the fool served it up with some snipe which had been shot at the same time. Another bird was shot in the Tingri Tea Seed Garden near Jaipur. This was described as being "larger than a snipe with a heavy flight too," but whether they were *G. nemoricola* or *G. solitaria* it is impossible to say.—J. R. C.]

This species has never I believe been procured in any part of British Burmah, but Davison, who has shot numbers of this species on the Nilgiris, is certain he flushed one once at the extreme south of Tenasserim.

From both the Garo and Khasi hills and from the Dibrugarh district I have received specimens of 869.—*Gallinago solitaria*, Hodgs.; but I did not meet with this in Manipur. I have no further knowledge of its distribution in Assam, Sylhet or Cachar, and it is not known thus far to extend to any part of British Burmah.

870.—Gallinago sthenura, *Kuhl.*

This is *the* common Snipe of Manipur, and very abundant it is, but owing to the greater part of the basin being equally well suited to their tastes, they are very much scattered about, and you nowhere see any considerable numbers together. You meet with them everywhere, even in all the ditches of the lanes of the capital, but I did not meet with more than three or four spots in which it was possible to kill more than eight or ten couple, and yet I think I never went out one day anywhere in the basin up to the close of March without shooting two or three couple of these birds—not that I ever looked for them or went after them, but that in a day's prowling about a certain number were sure to jump up in front of one, offering shots not to be resisted, and the great majority I killed with "collecting" cartridges, half a dram of powder and quarter ounce of dust shot.

I measured a pair, and may as well record the details:—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂	... 10·5	17·0	2·5	5·1	1·38	2·23	4·85 ozs.
♀	... 10·55	18·0	2·3	5·13	1·3	2·55	4·63 ,,

Male.—Legs and feet pale drab, with the faintest possible greenish tinge; claws dark brown; margin of upper mandible and terminal two-fifths of both dark brown; rest of bill a pale drab brown; irides deep brown (11-4-81).

Female.—Legs and feet greenish grey, bluish on joints; terminal two-thirds of bill deep brown; basal one-third pale horny brown; irides deep brown (12-3-81).

This species is universally distributed throughout Assam, Sylhet and Cachar, and equally so throughout British Burmah, though decidedly less here abundant than in Assam.

[Snipe are common in the Dibrugarh district from September to April, but very erratic in their movements. When they arrive, the paddy lands are several inches under water, and it is not till after the 15th October that they are to be found in them. Until then they must be looked for among the lines of bushes in the tea gardens, about the high lands on the outskirts of villages, and fields abandoned by ryots and overgrown with short grass or bushy jungle. I recorded the following:—

	Length.	*Expanse.*	*Wing.*	*Tail.*	*Tarsus.*	*Bill from gape.*	*Bill at front.*	*Weight.*		*Pintail feathers.*			
Female	10·60	16·50	4·90	2·20	1·30	2 43	2·50	4·85	ozs.	R	8	L	8
Male ..	10·58	17·0	5·30	2·45	1·25	2·40	2·37	5·0	,,	,,	7	,,	8
Female	10·90	17·50	5 35	2·05	1·32	2·55	2 58	4 75	,,	,,	6	,,	6
,, ...	10·85	17·25	5·33	2 22	1·35	2·58	2 62	4·40	,,	,,	7	,,	7
Male ...	9·90	16·75	5·0	1·90	1·32	2·24	2·27	4·45	,,	,,	8	,,	8
Female	10·70	17·0	5·35	2·20	1·35	2·48	2·50	4 15	,,	,,	7	,,	6
Male ...	10·25	16 75	5·10	2·15	1 20	2·37	2·40	4·0	,,	,,	8	,,	8
Female	11·13	17·10	5·30	2·35	1·30	2·63	2·71	4 25	,,	,,	7	,,	7
Male ...	10·90	17 10	5 30	2 25	1·30	2·40	2·43	4·0	,,	,,	7	,,	7

Irides brown; bill brown; base below pale horny brown; legs greenish grey, tinged dusky at the joints.

In March and April after a few heavy showers the water lodges in the "pathars," and there is a growth of grass, &c., from six inches to a foot high, and wherever the Snipe find these conditions they are very plentiful, and very good shooting is to be had without much heavy walking, as the ground is not too soft, but in the cold weather the ground they frequent is of such a spongy oozy nature that their pursuit is more a pain than a pleasure.—J. R. C.]

871.—Gallinago cœlestis, *Frenzl.*

Occasionally met with about the Manipur basin, to judge from those I killed in about the proportion of one to five Pintails. I noted 235 Snipe (I did not note quite all I killed), out of which 40 were Fantails.

This species also is generally distributed throughout Assam Sylhet and Cachar, but is, I gather, less abundant everywhere

taking the season all through, than the Pintail. It occurs as a rule sparingly throughout Arakan and Pegu, and in Tenasserim it is little more than a chance straggler to the central portions of the province, and only a little less rare in the tract between the Sittang and the Salween.

[At the beginning of the season the Common Snipe is oftener shot, but when fair Snipe-shooting is to be had in Dibrugarh in March and April, for every one of this species shot, five of the Pintail are bagged. I record measurements of three :—

	Length	*Expanse.*	*Wing.*	*Tail.*	*Tarsus.*	*Bill from gape.*	*Bill at front.*	*Weight*
Female	10·62	18 10	5·02	2·50	1·23	2 50	2·55	3·70 ozs
,, ...	11 50	17·70	5.27	2·55	1·25	2·95	3·03	3 60 ,,
Male ...	10 80	16·60	5·10	2 35	1·23	2·66	2 75	3 05 ,,

They are found under the same conditions as the last species.—J. R. C.]

872.—Gallinago gallinula, *Lin.*

This must be very rare in Manipur, because, despite the constant traversing of nooks and corners exactly suited to its tastes, I never but once saw a Jack from first to last. One day at the Logtak lake, as a man landed to pick up a duck I had dropped as it passed overhead, he put up a Jack ; it was a very awkward shot as he flew towards the stern of the canoe and I was in the bows facing forward, and one has to be very gingerly in turning, and so though he dropped at once I thought I had missed. He dropped in a thick bed of reed grass, and I landed with all the men, but I could neither find his "remains" nor succeed in again flushing him.

In Sylhet this is not uncommon, but in Cachar it is very rare. I shot one myself in the former district, near Lakhai. I have had others sent me from both districts. In Assam I only know that Col. Graham recorded having, in the course of years, shot a few in the Dibrugarh district.

[This is decidedly rare in Dibrugarh, as I only saw two in Jhelum "pathar" near the Moran Tea Garden, and another planter showed me the skin of one he had shot near Jaipur. —J. R. C.]

In Pegu I only know for certain of its occurrence near the mouth of the Bassein river. Formerly Mr. Oates recorded (III, 182) that it was occasionally killed in Upper Pegu, but he has apparently now changed his opinion (X, 239, *n.*). I have no record of its occurrence in Arakan, and in Tenasserim I only know of its being occasionally shot in the neighbourhood of Moulmein.

873.—Rhynchœa capensis, *Lin.*

Occasionally seen in the basin, but the only specimen I happened to preserve was one caught in the Residency Gardens by one of Colonel Johnstone's gardeners.

It is pretty common in the valley of Assam, especially towards the eastern end, and I observed it myself in both Sylhet and Cachar, besides having previously received specimens from these districts, but it is scarce in both of them. Godwin-Austen too records it from the North Khasi hills.

[Pretty common, and a permanent resident in Dibrugarh. On the road from Khowang to Sessa there was a large lake, the bed of a river years ago, whose shelving sides were clothed with a dense growth of small bushes, and in these was a "sure find" of half a dozen of this species. They are very local in their distribution.—J. R. C.]

It is tolerably common in both Arakan and Pegu in suitable localities, but in Tenasserim it occurs only as a rare straggler.

875.—Limosa ægocephala, *Lin.*

Only met with about the Logtak lake and one or two other of the larger jheels, singly and in twos and threes, never in large flocks as is so usual further west.

I have no certain knowledge of the occurrence of this species anywhere in Assam, Sylhet or Cachar, but either this or the smaller eastern representative race, *L. melanuroides*, Gould., occurs occasionally about Dibrugarh.

Blyth records this from Arakan. In Pegu I have received it from the Bassein river, and Oates says it is common in the Sittang, and canal and adjacent creeks. In Upper Pegu and Tenasserim it only occurs as a chance straggler.

877.—Numenius lineatus, *Cuv.*

There were three Curlew at the Logtak lake that wouldn't be shot at any price. Curlews are often troublesome to circumvent, but it can be accomplished by patience, but these three were entirely too wideawake, and though I tried it on every day I saw them, and there were only these three, sometimes at one part of the lake and sometimes at another, I never got within one hundred yards of them. I never saw any of this species elsewhere in Manipur.

Nor have I any record of the occurrence of this Curlew anywhere in Assam, Sylhet or Cachar. I do not doubt that it occurs in all—I merely mean that I do not *know* such to be the fact.

In British Burmah it is more or less common everywhere along the coast line and its immediate neighbourhood, but it is much rarer inland.

In the Noa Dehing, in the extreme east of the Dibrugarh district, some of Godwin-Austen's survey people obtained a specimen of 879.—*Ibidorhynchus struthersi*, Vig. There is no other record of its occurrence in Assam. I did not hear of it anywhere in Manipur, nor does it extend to Sylhet, Cachar or any part of British Burmah. It is a high-mountain, rocky-torrent-bed bird, though in the cold season it occasionally descends these beds nearly to the level of the plains.

880.—Machetes pugnax, *Lin.*

A few Ruffs and Reeves haunted a shallow near the north end of the Logtak lake, but I saw them nowhere else. It does not seem generally known in India; that when fat and in good condition, as we generally get them, this species is one of the best of all birds for the table. To my mind they are superior to everything but Woodcock.

I have no record of the occurrence of this species anywhere in Assam, Sylhet or Cachar. Blyth records it from Arakan, I have received it from the Bassein estuary, and Oates says it is common in the creeks near the mouth of the Sittang, &c. In Tenasserim we never saw this species except at its western-most limit on the banks of the Sittang.

884*bis*.—Tringa ruficollis, *Pall.*

This too I only once saw in Manipur, and that near the Logtak lake. I was constantly on the look-out for all birds of this class, but they are very scarce in Manipur, and this, usually the commonest, was the scarcest of the few species I did see.

I have seen this species from Sylhet, and Godwin-Austen seems to have procured it there, but I never met with it myself in either Sylhet or Cachar, nor have I any record of its occurrence in any part of Assam.

It is generally distributed throughout Arakan and Pegu, but is very scarce in Tenasserim, and indeed so far as our observations go is merely a straggler to the central portions of the province, and is only at all abundant in the tract between the Salween and Sittang.

In both Sylhet and Cachar I observed 885.—*Tringa temmincki*, Leisl., and I have received this species from

Joonkotollee in Dibrugarh; beyond this, I know nothing of its distribution in Assam. I did not observe this species in Manipur; one would say that it was certain to occur there, but though I kept a very sharp look-out for all birds of this class, I certainly never saw it.

[Fairly common in suitable localities in the district of Dibrugarh.—J. R. C.]

This species occurs throughout British Burmah, but seems scarce everywhere, except in Central Tenasserim and the tract between the Salween and Sittang.

891.—Rhyacophila glareola, *Lin.*

Pretty common everywhere, especially about the sides of the ditches, dykes, and tanklets that are studded about the capital and its suburbs.

This species is also pretty common in both Sylhet and Cachar, in many parts of both of which I observed it myself, and from whence I had previously received specimens. I have also received specimens from two or three localities in Dibrugarh, and doubt not that it occurs throughout the valley; but I do not *know* that this is the case.

[Common during the cold weather in Dibrugarh, frequenting wet ditches, pools and river beds.—J. R. C.]

Throughout British Burmah it is universally distributed; and, though perhaps rather scarcer in Lower Pegu, is on the whole fairly common everywhere.

892.—Totanus ochropus, *Lin.*

Very common all about the Manipur basin, and often seen also about the streams inside the hills.

It was almost equally common throughout both Sylhet and Cachar, and I have it from the Dibrugarh district, but beyond this have no *actual knowledge* of its distribution in Assam.

[This too is very common in Dibrugarh during the cold weather, and found in the same places as the last species.—J. R. C.]

In Pegu and Arakan it is fairly common, but in Tenasserim it is very scarce.

893.—Tringoides hypoleucus, *Lin.*

The common Sandpiper was pretty common in Manipur alike in the Kopum Thall, the basin and the streams of the lower valleys of the hills.

I found it common all about Sylhet and Cachar, and I have it from the Dibrugarh district; of course this too must occur all over the valley of Assam, but the fact is not on record.

[Far from rare in Dibrugarh in suitable localities.—J. R. C.]

It is extremely common throughout the whole of British Burmah.

894.—Totanus glottis, *Lin.*

This species seemed very scarce about Manipur. I do not think I saw a dozen from first to last, and the majority I did see were about the Logtak lake.

It was less scarce, but still by no means plentiful in Sylhet and Cachar, in both of which I noticed it on several occasions. I have no record of its occurrence anywhere in the Assam valley, though of course it must occur there.

[Fairly common in Dibrugarh along the courses of the smaller rivers in small parties and pairs, and occasionally in large pools and "jheels' in pairs or solitary.—J. R. C.]

It is common all over British Burmah in suitable localities.

895.—Totanus stagnatilis, *Bechst.*

Comparatively common about the marshes and water meadows lying around the Logtak lake, but not observed by me elsewhere. I have as yet no record of the occurrence of this species anywhere in Assam, Sylhet or Cachar.

This species seems scarce in Arakan and Upper Pegu, common in Lower Pegu, and so rare in Tenasserim that we only once met with it there, *viz.*, at the Yeaboo hot springs on the Attaran.

897.—Totanus calidris, *Lin.*

Very scarce; only seen at the Logtak lake, and even there only a very few.

I observed it in both Sylhet and Cachar, but it seemed everywhere scarce. It has been sent me from N.-E. Cachar. I have no record as yet of its occurrence in any part of the Assam valley.

[Rare, I should say in Assam, as only one was seen by me in seven years, and that was one day when shooting duck in a large jheel, which was overgrown with weeds and patches of tall reeds, at the mouth of the "Desang" river in the Sibsagar district. —J. R. C.]

This species is common in Tenasserim, less so in Arakan and Lower Pegu, and decidedly scarce in Upper Pegu.

898.—Himantopus candidus, *Bonn.*

I saw a small flock of these for the first time on the 11th of March in a flooded meadow near Booree Bazar, and then again I found a few small parties hanging about the Logtak lake; but these were the only localities in which I met with it in Manipur.

I did not notice it myself in either Sylhet or Cachar, nor have I any record of its occurrence in either of these or in the valley of Assam; but from his second list I gather that Godwin-Austen probably procured it in Northern Sylhet.

It is tolerably common in Arakan and Lower Pegu, scarcer in Upper Pegu, and only found in Tenasserim in the extreme north and in the country lying between the Sittang and Salween.

900.—Parra indica, *Lath.*

This species is very common in the Manipur basin, and is to be seen about almost every single piece of water, big or little.

I observed it in many parts of Sylhet, and saw it near Silchar. I have also received it from N.-E. Cachar, and from several places in the Dibrugarh district, but I have no further knowledge of its distribution in Assam.

[Fairly common in Dibrugarh in suitable localities, and a permanent resident.—J. R. C.]

This species is common in Arakan, Pegu and Tenasserim to as far south as Amherst or a little further; below Tavoy it does not occur.

901.—Hydrophasianus chirurgus, *Scop.*

This species was seen occasionally in Manipur, but was not nearly so commom as the last.

I have received it from N.-E. Cachar, and myself observed it in Sylhet in several places. I have no record as yet of its occurrence in any part of Assam.

It is generally, but rather sparingly, distributed in Arakan and Pegu, but in Tenasserim it only occurs in the extreme north and in the tract between the Sittang and the Salween.

902.—Porphyrio poliocephalus, *Lath.*

Occasionally seen about the swamps and jheels of the basin, but extraordinarily numerous about the Logtak lake, where

half a dozen large troups may be seen every morning grazing about the marshy ronds that surround the lake, or on different floating weed islands. I have received this from N.-E. Cachar, and observed it twice, once near Lakhai, once near Karimganj in Sylhet, but I know nothing of its distribution in Assam. Blyth records this from Arakan. In Pegu Mr. Oates says it is common in very large swamps and tracts of flooded grass lands; in Tenasserim we only know of its occurrence in the central portions of the province and the tract lying between the Sittang and Salween.

903.—Fulica atra, *Lin.*

The common Coot occurs, though not in any great numbers except at the Logtak lake, about all the large ponds and jheels of the Manipur basin.

Strange to say I have as yet no record of its occurrence anywhere in Assam, Sylhet or Cachar, and I myself did not observe it in either of the two latter districts.

In Tenasserim it only occurs, so far as we know, in the tract lying between the Sittang and the Salween, and in the extreme north about Tonghoo. Though I have not seen it from Pegu, Oates found it common at one large swamp north of Pegu Town, but even he has seen it nowhere else in that province. Blyth records it from Arakan, whence I have never seen it.

Both in Cachar and in the Dibrugarh district specimens of 903*bis.*—*Podica personata*, G. R. Gr., have been procured, but nothing further is known of its distribution in Assam, Sylhet or Cachar. I did not procure or see this species in Manipur, but I am pretty confident, from the careful description given me, that it occurs in the north-east of Manipur. In Burmah we only know of it in Pegu from the Engmah swamp and near Shwaygheen, but it is very sparingly distributed almost throughout Tenasserim in suitable localities. It has been also sent from Karenee.

Another species 904.—*Gallicrex cinereus*, Gm., has been sent me from Joonkotollee, Dibrugarh, and has been recorded by Godwin-Austen from the Khasi hills. But I know nothing further of its distribution in Assam, Sylhet or Cachar, and I never saw it in Manipur, though there can be little doubt that it occurs there.

[I found this bird fairly common in Dibrugarh, where it is to be found in the cultivated pathars, as well as those

overgrown with a species of grass that grows during the rains to a height of four feet. None of the planters knew the bird, and they thought I was hoaxing them when I mentioned that it was very good eating.—J. R. C.]

In Northern and Central Tenasserim, Pegu and Arakan, it occurs in all suitable localities.

905.—Gallinula chloropus, *Lin.*

Common about all pieces of water, large and small, throughout the Manipur basin, even in the tanks in the Residency compound. I observed this in Sylhet and have received it from N.-E. Cachar, and Godwin-Austen includes it in his Dafla hill list, but beyond this I know nothing certain of its distribution in Assam, Sylhet or Cachar.

Blyth records this from Arakan, and it occurs in Northern Pegu and Northern and Central Tenasserim.

907.—Erythra phœnicura, *Penn.*

This was rather common about the lanes and compound hedges of the capital, and I saw it once or twice elsewhere, but except at Manipur itself it was decidedly scarce.

I observed this species in Central and have received it from Northern Sylhet; also from N.-E. Cachar and several localities in the Dibrugarh district, and that is all I know of its distribution in Assam, Sylhet or Cachar.

[This is very common all over the district of Dibrugarh. I have come across it on the sides of roads leading through forest even.—J. R. C.]

It is pretty common in suitable localities throughout British Burmah.

Mr. Chennell procured 908.—*Porzana akool*, Sykes, in the North Khasi hills, but I have no other record of its occurrence in Assam, Sylhet, Cachar, or indeed British Burmah, and I did not meet with it in Manipur.

I have received 910.—*Porzana bailloni*, Vieill., from N.-E. Cachar, and Mr. Chennell procured this also near the base of the North Khasi hills, and this is all I know certainly of its distribution in Assam, Sylhet and Cachar, though from different sources I have *heard* of its having been shot pretty well all over all these. I never saw these in Manipur; it has occurred in all the provinces of British

Burmah, but is everywhere I believe scarce, and its skulking habits have hitherto prevented our gaining any very accurate knowledge of its distribution.

Again there is 911.—*Porzana fusca*, Lin., which Godwin-Austen procured at Shillong, but which I failed to find in Manipur, and of the occurrence of which in Assam, Sylhet or Cachar I know nothing further.

[I measured only one specimen, but noticed numbers about the Dibrugarh district when travelling about. The one I got was shot in July, as he flew off the nest, which contained three slightly incubated eggs. The nest was a mere pad of dry grass, resting on the water, which was a foot deep; grass 18 inches high grew all round this damp water meadow, which skirted one side of the tea garden.

Male.—Length, 8·50; expanse, 12·25; tail, 1·70; wing, 3·95; tarsus, 1·45; bill from gape, 1·03; weight, 2·25ozs.

Irides crimson; legs and feet pinkish vermilion; orbital ring bright red; bill horny brown.—J. R. C.]

This species has been sent from Arakan, and in Pegu appears to be generally distributed if not common, but it does not, so far as I yet know, extend to Tenasserim.

Although I cannot include it in my Manipur list, I am quite sure that once near the base of the Eastern hills, below Tankool Hoondoong, at an elevation of about 3,500 feet, I saw 911*bis*.—*Porzana bicolor*, Wald. I was walking along a marshy path about four feet wide through high reed grass, bulrushes, &c., when two Rails darted across the path within a yard of my feet. I hunted long and vainly for them, but never saw them again; still my eyes were fixed on the very spot they crossed at the moment they appeared, and personally I feel sure of the species. Godwin-Austen procured this species at Shillong, but this is all we know of its occurrence in Assam, Sylhet and Cachar, and there is no reason to suppose that it extends to British Burmah.

913.—Hypotænidia striata, *Lin.*

I only once met with this species in Manipur, and that was near Sagam at the extreme south of the basin. I caught sight of something in the early morning moving in some thin rush, a large rat as I thought, fired and discovered it was a Blue-breasted Banded Rail. I think it must be very rare, for not one of the Manipuris or Nagas—and I showed it to the whole village—recognized it.

I have received this species from Sylhet and N.-E. Cachar and Godwin-Austen procured it at Shillong. This is all I certainly know of its distribution in Assam, Sylhet or Cachar; it is generally distributed throughout British Burmah, and in Pegu is common in all suitable localities.

915.—Leptoptilus argalus, *Lath.*

I never met with this species about the capital nor at the Logtak lake, nor does it, according to the people, occur in these parts except very exceptionally as a straggler. But I got one and saw two others on the Toyang close to its junction with the Chakpee, and marching from Koombee to Kokshin Koonoo, I came upon a party of at least 40 perched on the tops of a group of leafless trees (*Bombax, sp.*) on the banks of the Koga river. These were the only two occasions on which I met with this species in Manipur. Strange to say, though it must occur there, I have as yet no single record of its occurrence anywhere in Assam, Sylhet or Cachar.

[Common in Dibrugarh during the cold weather, and I have noticed solitary birds as late as the end of May. They seem to prefer quiet but damp pathars well hemmed in with forest. I have never seen them in large flocks as in Sylhet.—J. R. C.]

Although this species occurs in every part of British Burmah occasionally, it is only common, I believe, and then only as a seasonal visitant, in parts of Arakan, Lower Pegu and Central Tenasserim.

[*916.—Leptoptilus javanicus*, Horsf.

Just as common, in Dibrugarh, as the last species, and a permanent resident. How was it missed by Godwin-Austen? During the rains they are seen stalking about almost every lonely pathar. The Assamese call them "Tokla-Moora" or bald head, a soubriquet by which a popular planter, "who had no hair on the top of his head," was commonly known.—J. R. C.]

917.—Xenorhynchus asiaticus, *Lath.*

Except at the Logtak lake, where I saw several pairs, this was very scarce in Manipur, and according to my notes I only saw it on three other occasions, once near Booree Bazar, once near Sagam, and once near Hierok.

In Assam Col. Graham informed me that this occurred in the Dibrugarh district, and Godwin-Austen recorded it from Bishnath and other places in the Darrang district, but this is all I yet know of its distribution in Assam, Sylhet or Cachar.

[Though not numerically common, this bird is one of the features of river and pathar scenery in Dibrugarh. They are very wild and difficult to bag. The Assamese call it "Teliaherenga."—J. R. C.]

It is sparsely distributed throughout Arakan and Pegu in suitable localities, but in Tenasserim we only met with it quite in the north.

[*918.—Ciconia nigra*, Lin.

In December 1883 when Snipe-shooting with a friend over some pathars near Ting-Kong Tea Garden we came across a flock of 70 individuals of this species. They allowed us to get up to within 100 yards, and we counted them. I had only snipe shot, and had a long shot, but did not bring any down. There were two Black-necked Storks (917) and about a dozen White-necked Storks (920) along with them. I never again noticed this species.—J. R. C.]

?919.—Ciconia alba, *Bechst.*

I enter this species with a doubt. I saw a party of six or seven birds near the Logtak lake which I set down without doubt as belonging to this species. I did not go after them; it was no use killing the poor things which are not fit to eat, and I had no doubt as to what they were. Subsequently it has occurred to me that they may have been *not* this species, but the eastern *C. boyceana*, Swinh. I never again met with them, and future observers must clear up the doubt.

I have no record of the occurrence of this species in Assam, Sylhet or Cachar; nor, though included by Mason in his list, have I any reason to believe that it occurs in any part of British Burmah.

In both Sylhet and Cachar (but only once in the latter district, shortly after entering it) I observed 920.—*Dissura episcopa*, Bodd., but I have no other record of its occurrence in Assam, Sylhet or Cachar, though Godwin-Austen records it from "the Brahmaputra," a somewhat vague locality. I did not meet with this in Manipur to the best of my belief, and at any rate I have nowhere recorded seeing it.

[This common and permanent resident of the Dibrugarh district seems to have escaped the notice of all previous collectors. They are found in all suitable damp localities. I have come across a pair feeding in a tiny pool in heavy forest.—J. R. C.]

It is sparingly distributed where the country is suitable to it throughout British Burmah.

[922.—*Ardea fusca*, Bly.

The only one I saw was on the 28th February 1879, above Nigriting in Golaghat, Assam. We were steaming up the Brahmaputra, and the bird was sitting at the water's edge under the shade of a huge tree. I never again noticed it.—J. R. C.]

923.—Ardea cinerea, *Lin.*

Very scarce in most parts of Manipur and even at the Logtak lake, where there were a good number, there were certainly not more than one of this species to every twenty of the Purple Heron.

I observed this species in Sylhet and in the westernmost portions of Cachar, but I have as yet no further record of its occurrence in Assam, Sylhet or Cachar.

[Rather scarce in Dibrugarh. This species clings more to well-wooded and small river banks than swamps.—J. R. C.]

In British Burmah this species is very locally distributed. In parts of Arakan, the plains of Lower Pegu, and the plains of Tenasserim between the Sittang and the Salween, it is common at one season or another. Elsewhere in Tenasserim we only saw a few about the Pakchan at the extreme south, and in Upper Pegu it is scarce.

924.—Ardea purpurea, *Lin.*

Though seldom seen elsewhere, this species was extremely common about Lake Logtak.

I observed it in both Sylhet and Cachar, and had previously received it from the latter, but I as yet know nothing of its distribution in Assam.

[Pretty common in reedy swamps in Dibrugarh, where they are permanent residents.—J. R. C.]

It is very common, especially about reedy swamps, in Arakan and Pegu, but very sparingly distributed, and in the plains portion only, in Tenasserim.

925.—Herodias torra, *B.-Ham.*

I observed a very few of this species at the Logtak lake, but saw it nowhere else in Manipur.

I did not myself notice it, nor have I as yet any record of its occurrence in Cachar, Sylhet or Assam.

[Common in the Dibrugarh district in wet meadows and jheels, but nowhere numerous.

Male.—Length, 37·0; expanse, 53·0; tail, 6·90; wing, 13·80; tarsus, 6·50; bill from gape, 5·40. (1-6-1880.)

Legs and feet black; bill orange yellow; irides golden yellow; orbital skin greenish yellow.—J. R. C.]

It is common all over British Burmah.

926.—Herodias intermedia, *Hass.*

Pretty common all over the Manipur basin about all jheels and good sized ponds, and here and there on streams, but extremely numerous about the Logtak lake.

I have received this from N.-E. Cachar and I observed it myself in many places in both Sylhet and Cachar, but I know nothing yet certainly of its distribution in Assam.

[Rather uncommon in Dibrugarh. For every one of this species that one comes across, twenty of *H. garzetta* are seen.—J. R. C.]

In British Burmah I only know for certain of the occurrence of this species in Pegu, where Mr. Oates says it is generally, though sparsely, distributed.

927.—Herodias garzetta, *Lin.*

This species was very common everywhere about the Manipur basin.

I observed it also wherever I went in Sylhet and Cachar, and I have also received it from Northern Sylhet and N.-E. Cachar. Again I have it from Tippook in Eastern Dibrugarh, but this is all I *know* of its distribution in Assam.

[Very common, and a permanent resident in Dibrugarh.—J. R. C.]

It is generally distributed throughout the more level portions of Burmah, though scarce immediately along the sea coast, and more common in Pegu than elsewhere.

929.—Bubulcus coromandus, *Bodd.*

In Manipur, as elsewhere, this species is common in the meadows, especially about the herds.

It is common in Sylhet, and I also twice observed it in Cachar, but here it seemed less common. I have also received it from Joonkotollee in Dibrugarh, but I have no further knowledge of its distribution in Assam.

[This too is very common and a permanent resident in Dibrugarh. In winter the legs of this species are black ?—J. R. C.]

It is universally distributed in suitable localities and generally common throughout all the provinces of British Burmah.

930.—Ardeola grayi, *Sykes.*

This species is very sparsely distributed throughout the Manipur basin, in the eastern portions of which, at any rate, it occurs in the same ponds as the next species.

I observed it all over Sylhet and Cachar, and I had previously received it both from Northern Sylhet and N.-E. Cachar, but I know nothing of its distribution in Assam.

[Abundant in Dibrugarh, frequenting alike damp pathars and paddy fields, and even pools in deep forest.—J. R. C.]

It is common in the low country throughout British Burmah, and was procured by Ramsay in Karenee.

930*bis.*—Ardeola leucoptera, *Bodd.*=A. prasinoscelis, *Swinh.* S. F., VI, 481, VIII, 161.

It was only in the eastern portions of the basin that I noticed this species, early in April, about Kokshin Koonoo, &c. It was very scarce, and I only secured two specimens, both in full breeding plumage. I saw three others, but unlike *grayi* they were so wary that I could not shoot them.

The following are the details of my two specimens :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♂ ...	20·7	33·1	3·0	9·0	2·42	3·4	1 lb.
,, ...	21·1	32·5	3·2	9·1	2·4	3·4	14 ozs.

Soles and tibiæ pale yellow; tarsi and toes pale yellowish green; claws pale brown; bill yellow in middle, black on terminal inch, bluish at base; irides golden yellow; bare orbital skin greenish yellow.

I have no knowledge of the occurrence of this species anywhere in Assam, Sylhet or Cachar, and in British Burmah I only know of its occasional and rare occurrence in the lower central and southern portions of Tenasserim.

931.—Butorides javanica, *Horsf.*

Very scarce in Manipur. In the Western hills on the 12th February, straying at dusk down to where two streams meet in the Limata, and there is a slight rapid, I saw a little Green Bittern fishing in the rapid and shot him. Again near the Logtak lake, pushing through a mass of bulrush and reed interspersed with bushes in quest of a wounded duck that I had seen drop there, I flushed one of these birds.

These were the only occasions on which I met with this species.

I have this species from Northern Sylhet (and I shot one myself near new Karimganj), and from N.-E. Cachar; also from near Sadiya in Dibrugarh. Godwin-Austen in his Dafla hill list records meeting with it on all the large-wooded rivers and streams there. Beyond this I have no certain knowledge of its distribution in Assam, Sylhet or Cachar.

[Common along the water's edge of all well-wooded rivers and creeks, where it sticks to the dark shady spots. I do not recollect ever having noticed it in swamps. The Assamese call it "Kona-moochree."—J. R. C.]

The Green Bittern is common along the banks of all the streams and rivers, especially those well-wooded, throughout British Burmah, and is also occasionally met with in swamps and marshes.

932.—Ardetta flavicollis, *Lath.*

I only met with this about the Logtak lake; all these *Ardettas* are great skulks and crepuscular in their habits; it is very rare to see any of them unless flushed by beating the thickets in which they pass the day. I only saw two from first to last, but I did not hunt or beat for them, and they may not be so scarce as they seemed to me.

I have received this from N.-E. Cachar, and Godwin-Austen, I gather, procured it in Sylhet, but beyond this I know nothing of its distribution in these districts or in Assam.

[The "*Ay-jan*" of the Assamese is common, and a permanent resident in Dibrugarh. In the mornings and evenings, as they fly to and from their feeding grounds, is the best time and easiest way of getting them. The colours of the soft parts are: Irides deep bright orange; legs and feet black; bill black at base, brown at the sides, and pale greenish white below, darkening to dusky at base.—J. R. C.]

This species appears to be generally distributed in suitable localities throughout all the provinces of British Burmah, but it is very scarce in most parts of Tenasserim.

933.—Ardetta cinnamomea, *Gm.*

Common about all the rushy swamps and jheels, &c., throughout the Manipur basin. A pair used to frequent a large tank in the Residency grounds until it was emptied to be cleaned and enlarged.

This species appears to be very common all over the less elevated portions of Assam, Sylhet, and Cachar. I have had it sent from almost every district and from too many localities to recapitulate.

[Very common in suitable localities all over the district of Dibrugarh. On the 9th June I got a clutch of five hard set eggs amongst some rush in a damp "pathar." The nest was a thin pad of grasses, and wet with water, on which it was floating. On the 4th July I got another clutch of four very slightly incubated eggs, snaring the male on the nest. On the same day, and near the last nest, I found another with four young about ten days old. These birds feed on fish and earth-worms.—J. R. C.]

This too is generally distributed throughout British Burmah wherever streams or jheels are bordered by dense cover of rush and reed or brushwood, but I fancy it is very rare in the northern half of Tenasserim east of the Salween.

934.—Ardetta sinensis, *Gm.*

I only saw one single specimen of this near Sagam in the extreme south of the basin; but this is a species which haunts rice fields by preference, and which, when this has all been cut, retires to the densest and most secluded cover. I dare say had I waited until the rice was again well up, I should have seen plenty of them.

I have received this from near Shillong and from N.-E. Cachar, and Godwin-Austen seems to have procured it somewhere in Sylhet, but this is all I know of its distribution in Assam, Sylhet and Cachar.

[This skulk is occasionally flushed in the cold weather in Dibrugarh when beating for large game among the swamps that are overgrown with long elephant grass. They are, however, rarer than the last species.—J. R. C.]

This too I believe to be generally distributed all over British Burmah, in all localities where any considerable amount of rice is grown, and even where there is little cultivated rice, where stretches of fine grass or wild rice swamp occurs, but it is a bird that is seldom seen unless carefully hunted for.

936*bis*.—Goisakius melanolophus, *Raffl.*

Although I obtained no specimen of this species I can certainly include it in our list. As with another canoe about 40 yards distant I was pushing through a tangled mass of

bulrush and reed on the eastern side of the Logtak lake, they getting aground on a small rise where bushes were intermingled with the other dense water growth, I put up an adult of this species. I did not see it for a minute, and when I fired it was fully 60 yards away, and I did not bring it down. It flapped on heavily another hundred yards and dropped into another thicket; but, despite all I could do, I could not get at this place. There was not water enough for the smallest canoe, nor ground enough to support the lightest man—it was a shivering quaking mass of turf bog; a very thick mass of rotten vegetable debris, with a live green coating, floating, but so thick that we could not open out a canal through it. At one season this is quite dry and firm, but we had had a great deal of rain and the lake was very full.

I have received this from N.-E. Cachar and from Khowang in the Dibrugarh district, and Godwin-Austen records it from "the Dipur Bhil, Eastern Assam."

[I append details of the pair I shot in Dibrugarh :—

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*
♀ ...	19·90	37·50	3·30	10·50	2·80	2·75	19 0 ozs.
♂ ...	20·0	38·0	3·80	11·05	2·90	2·70	21·0 „

Irides bright yellow, with an outer-ring of orange; legs and feet ochre in front, yellowish green behind; claws yellowish white; gape yellowish green; nude loral skin greenish blue; bill, base of upper mandible and lower mandible bluish; from nostrils to tip of upper mandible black. In the male the irides are greenish yellow; legs and feet greyish brown; bill horny grey; culmen dusky; naked orbital skin dusky green; gape livid; eyelids rosy-pink.

The female was shot on the 17th July and the male on the 15th September. They had eaten fish and crabs and earthworms, and were shot during the day while roosting on trees overhanging pools in dense forest.—J. R. C.]

In British Burmah all we know is that we observed this once in the extreme south of Tenasserim, and Major J. R. Abbott once shot it on Ramri Island, Arakan.

937.—Nycticorax griseus, *Lin.*

Common in Manipur. In a village between Bishnoopoor and Moirang we disturbed a huge flock out of a number of high silk cotton trees by a shot at a White-patch Myna.

I have received a specimen of this species from Shillong, and that is the only thing I know about its distribution in Assam, Sylhet or Cachar.

[Pretty common in the Dibrugarh district. During the day they generally frequent dark places in heavy forest, roosting on the small trees overhanging pools of water. At dusk when flying to their feeding grounds their well known note is often heard.—J. R. C.]

Throughout British Burmah this species is common.

In Sylhet I observed 938.—*Tantalus leucocephalus*, Penn.; but I have no information as to its occurrence in Assam and Cachar, and I failed to meet with it in Manipur. It is very scarce there, but has occurred in all parts of Tenasserim. It is more common in Lower Pegu and Arakan, but very scarce again in Upper Pegu.

940.—Anastomus oscitans, *Bodd.*

This was met with here and there about the entire basin, but occurred in immense flocks at the Logtak lake.

Godwin-Austen, I gather, procured this somewhere in Sylhet, but thus is all I know as yet of its occurrence in Assam, Sylhet or Cachar.

[These are fairly common. One of their breeding places is up the Tingri river, a small stream with a muddy oozy bottom and dense forest along its banks which falls into the "Dehing" river a few miles below Jaipur in Dibrugarh. On the 3rd September 1884, about 20 half-fledged birds procured from these were brought to me by the boatmen, who said there were scores of nests.—J. R. C.]

Blyth records this from Arakan, and Mr. Oates once procured a specimen at Thayetmyo.

There is no other record of its occurrence in Pegu, and we have never met with or heard of it in any part of Tenasserim.

941.—Ibis melanocephala, *Lath.*

By no means a common bird in Manipur (though I saw a good many at the Logtak lake) and looked upon as a foreign bird; hence the name "*urok*," meaning paddy bird, and "Miyan," a term applied to things from Cachar and equivalent to the Hindustani "*purdesee*." Thus *Corvus splendens*, never seen in Manipur, is talked of by them as the "Miyan kwak," or Cachar or foreign crow.

I have no record as yet of the occurrence of this species in Assam, Sylhet and Cachar, though I have no doubt that it *does* occur in all. Blyth records this from Arakan, Oates says it

occurs in large flocks all over the plains of Lower Pegu, and we found it not uncommon in the plains of the central portions of Tenasserim, but saw it nowhere else in that province.

943.—Falcinellus igneus, *S. G. Gm.*

Common about the rice flats and water meadows and jheels of the basin of Manipur, and said to be a permanent resident, but from the people calling it "Miyan" I should doubt its breeding there, and the great majority of the Logtak boatmen said that they had never seen its nest; when I was at the lake it was very abundant there.

I saw it in Sylhet and in Cachar—in the former in several places, in the latter only near Silchar itself. I know nothing of its distribution in Assam.

This species has been sent from Arakan and has been observed near Thayetmyo, but there is no other record of its occurrence elsewhere in British Burmah.

945.—Anser cinereus, *Mey.*

I saw a few specimens of this Goose at other smaller pieces of water, and there were large numbers of them at the Logtak lake.

It occurs along and in the neighbourhood of the Brahmaputra right up to Sadiya, and I saw it in Eastern Sylhet, and know now of its occurrence in many parts of that district, but I have no record as yet of its having been observed in Cachar. No Goose that we know of occurs in any part of British Burmah.

[This species, although common in the Dibrugarh district, is by no means so plentiful as *A. indicus*. This species is usually found on the vast stretches of sand in that river, but occasionally strays inland to wherever there are large pathars to feed. In October 1884, when steaming from Jatrapore to Dhubri in the "Fox," a flock of about 60, who were closely packed, allowed the steamer to approach within 60 yards before taking wing, and as is usually the case in such occurrences there was not a gun on board.—J. R. C.]

Colonel Graham, a great sportsman, and for *many* years Deputy Commissioner of Dibrugarh, informed me that 946.—*Anser brachyrhynchus*, Baill., occurred commonly on the Brahmaputra. I cannot say whether he was in error or not. No one else has recorded this species from any part of Assam, Sylhet or Cachar, and I did not meet with it in Manipur.

[Once when I was away in Dibrugarh, my assistant, at the Dehing Saw Mills, shot a party of three Geese, which he ate, but never even kept the heads or legs of. Now he described them as being like the Grey Lag in plumage, &c., but very much smaller. Col. Graham says they are common on the Brahmaputra. Now I travelled up and down, during the cold weather, from Dibrugarh to Desang very frequently for two years, and I never once saw them, though I saw hundreds of the Grey Lag and Barred-headed Geese. Possibly, and for all I know, they may be more frequently to be noticed in this district than anywhere else in India, but I never saw one and they certainly are not common.—J. R. C.]

949.—Anser indicus, *Lath.*

The Barred-headed Goose was decidedly less common when I was there, both at the Logtak and elsewhere in Manipur, than the Grey Lag, but still I saw a good few, as the Scotchman has it, and shot five or six, a greater feat, wild as they are, than shooting a hundred in the Doab.

Mr. Eden records this species from Sylhet, where, however, he says that it is rare, and Mr. Forsyth records it from the Brahmaputra at Dhubri, but beyond this I have still no information as to its distribution in Assam, Sylhet or Cachar.

[This is the common Goose of Dibrugarh, where large flocks are seen on the Brahmaputra sands, and are netted by natives who come up every year from near Gauhatti. They stray inland to the pathars and jheels in small parties, to feed during the day, and it is a veritable feat to get within range then, for, what the reason is I cannot say, they are much wilder in Assam than in any other part of India. The station of Sibsagar is built on the bund of a huge tank about a mile square, and every day, from about 11 A.M. to 5 P.M., flocks of this species, with occasionally a few Grey Lag, calmly swim about the tank. No one is allowed to fire at them, and they were very fond of resting in packs a few yards, so close in fact to the shore that you could have shied a biscuit amongst them, in front of the Kutcherry and Deputy Commissioner's house which were contiguous. One would have thought they knew that no harm would come to them there. One of the Assistant Commissioners, a C. S., who shall be nameless, told me that he had repeatedly gone just outside of the station and fired at them when *en route* to and from this tank, but they were wary enough to keep out of range, and that he had never bagged one. Col. A. E. Campbell told me that for all the time (13 years) he was

Deputy Commissioner of Sibsagar, he had annually noticed these birds frequenting the tank. Has such an occurrence been noticed anywhere else in India? In Hume and Marshall's "Game Birds of India," page 81, Vol. III, Tickell is reported to have said, "all along Tirhoot, Chupra, and the Terai they appear to be unknown." I am writing this at Bagaha on the banks of the "Gunduck" river, and from January to the end of April 1888 their call used to be heard every day. Mr. W. H. Blake, who is an old resident of the place, assures me they are annually seen in numbers, and during the old days, when there was no Railway to Bettiah, he noticed and has shot them while travelling by boat along the whole length of the "Gunduck" to its junction with the Ganges near Dinapore. In Assam the natives call them Bonooria Hans."—J. R. C.]

From near Sadiya, I received a specimen of 950.—*Sarcidiornis melanonotus*, Penn., and Godwin-Austen also records this species from Upper Assam, but I have as yet no other record of its occurrence in Assam, Sylhet or Cachar. It probably does occur in Arakan, though I have been unable to verify the fact. It is generally distributed in Pegu, and common in most large swamps and lakes, but though Ramsay procured it near Tonghoo, we never observed it in Tenasserim proper, nor do we believe that it occurs there *now*, except perhaps as a rare straggler.

951.—Nettopus coromandelianus, *Gm.*

Pretty common at the Logtak lake, and seen occasionally over the south and east of the basin, amongst other places in the Toyang at its junction with the Chakpee, and in a small nullah east of Kokshin Koonoo.

This species occurs all over Assam, Sylhet and Cachar. It is found all over British Burmah, but is very scarce in Southern Tenasserim.

[Though nowhere numerically abundant, the Cotton Teal is found in Dibrugarh during the rains wherever there are jheels amongst open cultivated country, going about in pairs and retiring during the cold weather to large reedy swamps.—J. R. C.]

952.—Dendrocygna javanica, *Horsf.*

Seen occasionally all over the Manipur basin, but nowhere in large numbers. There were two or three pairs in a tank in the Residency grounds—wild birds that had been

attracted there by the captive Grey Lag and Barred-headed Geese and some few ducks that Col. Johnstone kept there.

It occurs all over Assam, right up to Sadiya, and is common in both Sylhet and Cachar. Again it is pretty common over the whole of British Burmah, but is rarer in Upper Pegu than elsewhere.

[The " Horali " of the Assamese is scattered during the rains all over the district of Dibrugarh, where they breed. On the 29th of May I took a clutch of nine fresh eggs. Mr. W. G. Parcell, a tea planter, when coming down the Dehing river on the 22nd September 1880, saw them on the sands packed in dense flocks of sizes, some numbering thousands of individuals, and the boatmen assured him that they always did so before migrating.—J. R. C.]

Mr. M. Eden, writing from the Mirzapoor Tea Estate, says that 953.—*Dendrocygna fulva*, Gm., is by no means uncommon in this part of Sylhet, where he usually sees about one of it to five of the common Whistling Teal. I have no record as yet of its occurrence in Assam or Cachar, nor do I know of its occurrence in Arakan or Tenasserim proper, but it appears to be sparingly distributed throughout Pegu.

954—Casarca rutila, *Pall.*

Pretty common at the Logtak lake, and occasionally seen elsewhere in the Manipur basin.

This species is common in Sylhet, rather rare in Cachar, and occurs along the whole course of the Brahmaputra right up to Sadiya.

[Common in the cold weather along the courses of all the large rivers in the district of Dibrugarh.—J. R. C.]

It occurs throughout Arakan, Pegu and Northern Tenasserim (not I believe south of the Gulf of Martaban) for the most part sparingly, but along the course of the Irrawaddy in considerable numbers.

From Dollah at the extreme east of the Assam valley, I have received 955.—*Anas leucoptera*, Bly. It is rare in the Darrang, common in the Lakhimpur district. Godwin-Austen records it from Dinapur on the Dunsiri river, from the interior of the Garo hills, and from near Tezpoor in the Darrang district. I know nothing further of its distribution in Assam, Sylhet or Cachar. Specimens have in days long past been sent from Southern Tenasserim, but we have never succeeded in meeting with it there, nor have I any other record of its

occurrence in any part of British Burmah. I neither saw it nor heard of it in Manipur.

[This, hitherto rare, Wood Duck is commoner in the Dibrugarh district than is supposed, but, from its retiring habits and the nature of the country it affects, is seldom seen. It is a permanent resident, frequenting lonely weedy pathars in dense forest, and far away from villages.

	Length.	*Expanse.*	*Tail.*	*Wing.*	*Tarsus.*	*Bill from gape.*	*Weight.*	
Male.	27-1-1881	31·50	56·25	7·20	14.50	2·25	2·85	5lbs. 14 ozs. a pair
F.	17-2-1881	29·25	47 50	7 0	13 62	2·05	2·86	4 „ 2 „ } shot to-
Male.	17-2-1881	32·40	51·40	7·60	15·10	2·25	3 04	6 „ 6 „ } gether.

Irides crimson ; legs and feet orange yellow, tinged dusky, which latter colour is wanting in the female ; claws horny brown ; bill, lower mandible, pale orange yellow, blotched with black along the sides ; upper mandible dusky orange red, blotched with black at tip and base, and sparingly along commissure, greenish about the nostrils ; nail at tip of beak dusky pink.

Food, principally vegetable matter with a few small pieces of pebble. The ovaries of No. 2 showed signs of the breeding season approaching, and the testes of No. 3 were the size of kidney bean seeds, say ¾ inch long. When cooked they have a very muddy flavour.—J. R. C.]

Again Mr. Eden has lately informed me of his having shot 956.—*Tadorna cornuta*, S. G. Gm., near the Mirzapoor Tea-Estate in Sylhet, and Mr. Forsyth has reported it from the Brahmaputra near Dhubri. Beyond these facts I know nothing of its occurrence in Assam, Sylhet or Cachar. I did not see it, nor does it I believe occur, in Manipur, where Damant also, who paid a good deal of attention to the water birds, never observed it, and it does not, I believe, extend so far south as any part of British Burmah.

957.—Spatula clypeata, *Lin.*

Scarcely seen anywhere in Manipur except at the Logtak lake, and even there they were not in any great numbers.

This species occurs throughout Assam right up to and even a little beyond Sadiya, as also in Sylhet and Cachar, but they are rare in the latter district. It does not extend that I know of to any part of British Burmah, though Anderson found it not uncommon further north in Independent Burmah.

[Rather scarce in Dibrugarh, where they are seen in swamps, sometimes in those alongside of villages, and in company of the tame ducks.—J. R. C.]

Mr. Inglis assured me that, though very rare there, he had more than once shot Mallard, 958.—*Anas boscas*, Lin., in Cachar. Presumably he was able to recognize the bird, but I have no other record of its occurrence in Assam, Sylhet, Cachar or British Burmah, and neither I nor Damant met with it in Manipur.

959.—Anas pœcilorhyncha, *Forst.*

This is *the* Duck of Manipur, common in every pond and jheel, and in many mere ditches 15 or 20 feet wide, and excessively abundant and very tame on the Logtak lake. While the rest of the wild fowl at the lake were exceptionally wild, the Grey Ducks were tamer than I have ever seen them elsewhere. As a rule they only swam a little out of the way of the boats, and very seldom, if ever, dreamt of rising unless these approached within thirty yards of them. As I had a good many persons with me who eat wild fowl and were glad to get these, I daily, when at the lake, shot from six to ten Grey Ducks, but I *could* have shot twenty or thirty of these daily, all sitting shots, at distances between 35 and 40 yards. Nay sometimes a pair or two floating leisurely just outside some thin rush bed have allowed the boat to pass quite unconcernedly within even ten or fifteen yards.

This species occurs all over Assam right up to Sadiya, and also in both Sylhet and Cachar, but it seems to be everywhere comparatively scarce.

[This fine Duck is common, though nowhere numerically abundant, and a permanent resident in Dibrugarh. They frequent the paddy fields and swamps in pairs, which congregate in small parties during the cold weather. A female shot on the 24th April had one fully formed egg in her stomach and the yolks of five more. The female shot on the 23rd May was in company with three young ones, a few days old. The generative organs are enlarged by the first week in March.—J. R. C.]

It also occurs in Northern Arakan, but not so far as I know in either Pegu or Tenasserim.

960.—Rhodonessa caryophyllacea, *Lath.*

This species is very scarce in Manipur; I only saw it at the Logtak lake, and there I only saw one party that kept up in a weedy lagoon at the north-east corner of the lake, where it was impossible to get them. I did get a single

bird, but that was only by lying upon several occasions in a thick reed bed and getting them driven. Three times they went in the wrong direction, but having at last made out their line I laid up in the right place the fourth time and knocked down a brace, of which however I only recovered one; I had no dogs.

This species occurs in Sylhet, and has been procured in various parts of the Assam valley right up to Sadiya, but alike in Assam and Sylhet (I seem to have no record of its occurrence in Cachar) it appears to be excessively rare, little more than an occasional straggler. Blyth records this from Arakan, but it does not, I believe, extend to either Pegu or Tenasserim.

961.—Chaulelasmus streperus, *Lin.*

Very fairly common at the Logtak lake, but rare elsewhere in Manipur.

This occurs, though sparingly, all through the Assam valley as far as Dibrugarh, and I myself observed it in the eastern half of Sylhet, but I seem to have no *record* as yet of its having been observed (of course it must occur) in the western half of Sylhet or in Cachar.

Blyth records it from Arakan; I do not know, for certain, of its occurrence in Pegu or Tenasserim.

962.—Dafila acuta, *Lin.*

Only met with in Manipur on the Logtak lake, and there by no means numerous.

It appears to be common in suitable localities throughout Assam, Sylhet and Cachar, as it is also in Arakan and Pegu. But in Tenasserim it only occurs, so far as we know, in the tract west of the Salween and in the country round Moulmein.

[Fairly common in Dibrugarh.—J. R. C.]

963.—Mareca penelope, *Lin.*

Next to the Grey Duck and Tufted Pochard, the Wigeon is certainly the commonest duck in Manipur. Not only was it *abundant* on the Logtak lake, but I saw and shot it on almost every jheel I visited.

I have as yet no record of its occurrence anywhere in Assam, Sylhet or Cachar.

Blyth records it from Arakan, Mr. Oates does not admit it into his Pegu list, but not only did Mason include it but Col. McMaster, who was really reliable and was stationed in Pegu,

said it was more common there than in India. In Tenasserim it does not, we believe, occur.

964.—Querquedula crecca, *Lin.*

The Common Teal was only observed by me in Manipur at the Logtak lake, and even there it was by no means abundant.

This species seems to be rather sparingly distributed throughout Assam; in Sylhet it is common, but in Cachar much less so.

[Pretty common in Dibrugarh, but very wary. I never saw a flock numbering over 30 individuals. As a rule they are seen in parties of six and eight.—J. R. C.]

It is sparingly distributed throughout Arakan, Pegu and Tenasserim west of the Salween, but it does not occur, I believe, elsewhere in this latter province.

965.—Querquedula circia, *Lin.*

The Garganey is far more plentiful in Manipur than the Common Teal, and I shot a good many at other places besides at the Logtak.

I myself observed this species in several places in both Sylhet and Cachar, and it is common I know in the former district. In the Assam valley it extends up to our eastern-most outpost, but is everywhere, I believe, thinly distributed.

It is rather common in Arakan, Pegu and Tenasserim, west of the Salween, and is also occasionally shot in the neighbourhood of Moulmein.

967.—Fuligula rufina, *Pall.*

The Red-crested Pochard was only seen at the Logtak lake, and in comparatively very small numbers; it is one of the rarest of the ducks that I observed on that lake.

It occurs occasionally throughout the valley of Assam as far as Sadiya, but I have no record yet of its occurrence in Sylhet or Cachar, or in any part of British Burmah.

968.—Fuligula ferina, *Lin.*

The Pochard was fairly common in small parties about the Logtak, and I shot it also on a jheel close to the capital on the road to Kunjoop, and again in a small jheel far south below Sagam.

This too has been recorded from various parts of Assam as far east as Sadiya, but not as yet from Cachar or Sylhet, or any part of British Burmah.

969.—Fuligula nyroca, *Güld.*

Rather scarce in Manipur. I saw it however at two jheels, besides the Logtak, where it was often seen without its being at all in force.

As regards Assam, Sylhet and Cachar, the only thing I know is that Inglis shot and sent me a specimen from N.-E. Cachar. No one else has apparently observed it.

Blyth records it from Arakan, but this requires confirmation, and so far as we know it does not occur in either Pegu or Tenasserim.

971.—Fuligula cristata, *Leach.*

Next to the Grey Duck, the Tufted Pochard is the commonest duck in Manipur as a whole, while looking only to the Logtak it is *the* commonest. The entire huge lake is covered with them from end to end ; all other species seem dotted about on the black and white background they form. During the period at which I visited the lake there must, I believe, have been several hundreds of thousands of this species there. The lake was a failure, no great variety, not a single new or rare duck or goose, but every part of it was crowded with this species as I never saw any other *large* lake crowded with any species. The Manchur lake in good years is an infinitely better place for sport, but if we deduct Coots, which are in millions at the Manchur, I believe that the actual tale of water fowl at the Manchur would fall below that of the Logtak, solely by virtue of the incredible numbers of the Tufted Pochard that swarm over the latter lake.

I have often noticed that, while swimming about, the males of this species appear to have a *huge* white patch on each wing, whereas when you shoot them there is a very small extent of white on the wing. I never before took the trouble to solve this little problem, but at the Logtak I discovered that this species has huge pure white, sub-axillary flank tufts, *inside* which when swimming it nestles the wing, the major portion of which it thus hides.

To this day I have no record of its occurrence in any part of Assam, Sylhet, Cachar or British Burmah, and yet it needs *must* occur in all but the latter.

In many parts of Assam the Merganser, 972.—*Mergus merganser*, Lin., has been observed in streams issuing from the Himalayas ; from the Monas in the Kamrup district eastwards. It has also been observed near Sadiya and the streams

of the Garo and Khasi hills, and in both Northern Sylhet and Cachar near the bases of these, and in the North Cachar hills. They do not extend so far south as any part of British Burmah.

[In the upper reaches of the Dehing river above Jaipur and Makum, flocks of both adult and young birds were seen by me. They never stray far away from the hills.—J. R. C.]

974.—Podiceps cristatus, *Lin.*

At Booree Bazar a Naga brought me in a living specimen of this species that he had disabled with a *goolel* (!), or pellet bow, in a neighbouring jheel. Again at the Logtak lake I saw about half a dozen from first to last. I met with this species nowhere else in Manipur. I have no record as yet of the occurrence of this Grebe in any part of Assam, Sylhet, Cachar or British Burmah.

975.—Podiceps minor, *Gm.*

Very common all over Manipur, even in the broad ditch surrounding the Palace premises in the centre of the capital. I observed this in many places both in Sylhet and Cachar, and had previously received it from both, but I have as yet no certain knowledge of its occurrence in any part of Assam.

[Sparingly distributed in Dibrugarh in suitable localities.—J. R. C.]

The Little Grebe is common all over Arakan and Pegu, and occurs in Tenasserim west of the Salween, but not, we believe, elsewhere in that province.

979.—Larus ichthyætus, *Pall.*

The great Black-headed Gull was only seen at the Logtak lake. About this were scattered some 20 adults and young, but they were so wary that I only succeeded in securing a pair. These were the true *ichthyætus*, not the smaller *innominatus*.

I have no record as yet of the occurrence of this species anywhere in Assam, Sylhet or Cachar.

It occurs all along the Arakan and Pegu coasts, as far as the mouth of the Sittang and inland for some distance up this and the larger rivers of the Irrawaddy Delta; it also occurs about the mouth of the Salween, but I have not as yet observed it on the Tenasserim coast south of Amherst.

980.—Larus brunneicephalus, *Jerd.*

Common about all the larger jheels of the Manipur valley, including the Logtak lake, and at one moderate sized jheel at Booree Bazar met with in a flock of at *least* ten thousand individuals. This was on the 1st of March, and about half had already assumed the dark hood.

It seems quite incredible, but several people both at Booree Bazar and at the Logtak declared that this species bred in a marsh near the latter during the rainy season. I cannot believe it.

I observed this species in several of the rivers of Sylhet, but have no record of its occurrence, nor did I observe it in Cachar. It is found occasionally, but I believe very sparingly, right up the Brahmaputra to Dibrugarh.

[A few are occasionally seen on the Brahmaputra river, and I have shot them at the mouth of the Dehing river.—J. R. C.]

Throughout British Burmah it is common along the entire coast line and up the creeks and river estuaries inland during the cold season.

981.—Larus ridibundus, *Lin.*

I only *certainly* saw one bird of this species in Manipur, which I shot at the Logtak. Easy as it is to distinguish this and the preceding at a glance, when in the hand by the colours of the lower surfaces of the primaries, one cannot be so sure of them seen at a distance on the wing. This was the only one that I saw and *recognized*, and it being new to my list shot, but amongst the thousands of Gulls that I saw and passed as *brunneicephalus*, there *may* have been a good many of this species also.

I have received this from close to Dibrugarh, and Godwin-Austen records it from the junction of the Dunsiri and Brahmaputra, and also *apparently* from somewhere in the E. Naga hills, and this is all I know of its distribution in Assam, Sylhet and Cachar.

It has not yet been recorded from any part of British Burmah.

983.—Sterna anglica, *Mont.*

Also pretty common in suitable localities throughout the Manipur basin.

I observed this in Eastern Sylhet, and this is all I know of its occurrence in Assam, Sylhet or Cachar.

In British Burmah it occurs more or less commonly all along the entire coast from the borders of Chittagong to Mergui. Also in many places it is found up the creeks and estuaries far inland.

984.—Hydrochelidon hybrida, *Pall.*

Not uncommon about all the larger jheels and marshes of the Manipur valley, where, according to the people, it breeds.

I observed this myself in both Sylhet and Cachar, but have as yet no record of its occurrence in Assam. It is common in the low country of Arakan, in Lower Pegu (only), and in the southern portions of Tenasserim and west of the Salween. We have not observed it in any other part of that province.

985.—Sterna seena, *Sykes.*

This species was pretty common also in Manipur on the larger streams and about several of the jheels. At the Logtak I only saw one or two.

I observed this in many places alike in Sylhet and Cachar, but as yet have no record of its occurrence in Assam.

[Common along the courses of all the rivers in Dibrugarh, and even far inland where it hawks about the paddy fields and pools of water.—J. R. C.]

It is common in all the rivers and creeks and all suitable places in British Burmah from Moulmein northwards.

987.—Sterna melanogastra, *Tem.*

I only saw a single specimen of this species in Manipur, and that was at the Logtak lake. This is a species that it is impossible to overlook, and the bird must, therefore, be a mere chance straggler to Manipur.

I myself observed this as common in the rivers of Sylhet and in Cachar as far as Silchar, and I have had it sent me from N.-E. Cachar. It is common on the Brahmaputra and its larger affluents as far, at any rate, as near Dibrugarh, whence I have received specimens.

[This affects the same places as the last, but is not so abundant.—J. R. C.]

From the Brahmaputra near Dhubri I have received 988*quat.* —*Sterna gouldi*, Hume. (S. F., V, 326; IX, 131, &c.) I have no other record of its occurrence in Assam, Sylhet or Cachar, and I never met with it in Manipur.

This species is common in Pegu and Arakan, but we have not observed it in Tenasserim.

From the same locality has been *reported* to me (no specimen sent) 994.—*Rhynchops albicollis*, Sws.; and this is the only record I have of its occurrence in Assam, Sylhet or Cachar, though I observed it myself only a few miles from Lakhai at the south-west corner of Sylhet.

This species is common in the Salween, but we believe occurs in no part of Tenasserim east or south of this. It is common in the Sittang and in all the rivers of Pegu and Arakan.

From the Barak river, near Dilkushah in N.-E. Cachar, Mr. Inglis obtained and sent me as pecimen of 997.—*Phæton flavirostris*, Brandt. Of course this was an accidental straggler, some storm-tossed wanderer flown inland, like the Skua (*Lestris pomarhinus*) procured by Tickell in a meadow near Moulmein. Still it *has* occurred and is entitled to a place in the Assam list, though it has *not* occurred, and is never likely to occur, anywhere else in Assam, Sylhet or Cachar.

In British Burmah it has occurred on the southern coast of Pegu, but this is all I yet know of its distribution there.

1003.—Pelecanus javanicus, *Horsf.*

I only observed a single specimen of this species in Manipur, and that was at the Logtak lake, but I could by no manner of means get within shot of it (I had no rifle with me), and after I had shot at it with S. S. G. green cartridges out of a heavy duck gun two or three times it left the lake.

I have as yet apparently no record of the occurrence of this species in Assam, Sylhet or Cachar.

This species visits the plains of Lower Pegu, and the corresponding plains of Tenasserim west of the Salween, in enormous numbers during the rainy season and breeds there. Tenasserim they leave in November. In Pegu they remain till the end of February. Elsewhere in Burmah, and even in these localities between March and August, this Pelican is extremely rare.

1004.—Pelecanus philippensis, *Gm.*

This species was in considerable force at the Logtak lake; there must have been nearly a hundred when I was there, but later in the season, according to the boatmen, they visit the lake in thousands.

I have as yet no knowledge of the occurrence of this species in any part of Assam, Sylhet or Cachar, though I dare say it occurs in all.

[This species begins arriving in the district about June, and by October large flocks are seen flying about. They leave about January.—J. R. C.]

This species frequents the same localities as the last in British Burmah, but it is more generally diffused over, and is more of a permanent resident in both Arakan and Pegu.

Godwin-Austen records 1005.—*Phalacocorax carbo*, Lin., from the Lumessary river, near Rywick, in the Garo hills. I have as yet no other record of its occurrence in Assam, Sylhet or Cachar, and I did not meet with it myself in Manipur, though, according to the Logtak boatmen, it would seem to occur there occasionally.

[Flocks of these were seen by me on the Dehing river above Makum.—J. R. C.]

This species is very common in Lower Pegu and in the southern portions of Tenasserim west of the Salween. It occurs, though sparingly, in Arakan and Upper Pegu, and in Tenasserim, east of the Salween, and south of Moulmein, has only been observed at Tavoy.

1006.—Phalacrocorax fuscicollis, *Steph.*

This was common at the Logtak lake (though less so than the next species), but I saw it nowhere else in Manipur. I have no record of the occurrence of this species in Assam, Sylhet or Cachar. It is very common in the creeks between the Sittang and the Salween, but was not observed by us elsewhere in Tenasserim. It is very common again in Lower Pegu, near to and west of the Sittang, but scarce elsewhere, apparently, in that province. I have no record of its having been observed in Arakan.

1007.—Phalacrocorax pygmæus, *Pall.*

This species was common to a degree all over the Manipur basin, and at the Logtak lake it literally swarmed. One of these little Cormorants perched on the top of a bare tree is an invariable adjunct to every Manipur view.

I observed this on several occasions in Sylhet. I saw it close to Silchar and have received it from N.-E. Cachar. I have it also from Joonkotollee in the Dibrugarh district, and know of its occurrence in most of the districts of Assam.

[Common all over Dibrugarh in all the paddy fields, road-side cuttings, and pools of water.—J. R. C.]

It is common throughout every province of British Burmah.

1008.—Plotus melanogaster, *Penn.*

This species seems very scarce in Manipur. There were a few about the Logtak lake, and I saw one in a stream running into the Jhiri river, just inside the Manipur frontier, but these were the only occasions on which I met with it in that State.

It occurs in both Sylhet and Cachar, but I have no record of its occurrence in Assam.

It is more or less common in suitable localities throughout every part of British Burmah.