

H. S. Photo.

SINGILE LA, 12,126', AND EVEREST.

From Phalut, 18th February, 1912.



H. S. Photo.

PHALUT SUMMIT, 11,811'.
18th February, 1912.

NOTES ON THE BIRDS OF THE SIKKIM HIMALAYAS.

By

HERBERT STEVENS, M.B.O.U.

Part II.

(With three plates.)

(Continued from page 518 of this volume.)

FAMILY-PARIDE.

14. The Indian Grey-Tit. Parus major cinereus (Vieill).

Recorded for the Himalayas at all altitudes up to 9,000' or more according to Oates. This distribution is entirely erroneous for the Sikkim Himalaya. I have failed to locate this Tit even at the lowest limits; it may have some status in the Tista Valley at elevations approaching the plains-level; all efforts to prove this conjecture have been to the contrary, and so far it has only been obtained at the foot of the hills in more or less open country at 500' by Mr. G. E. Shaw. I suspect the heavily forested tract along the foot-hills demarcates its distribution more effectively than any appreciable rise in elevation is likely to affect any extension at dispersal, and this appears to be the case on the north frontier of Assam; also P. monticolus is a predominant species and the two Tits have well defined breeding distribution areas. Unless there is an overlapping in its eastern limits with "commixtus", Parus major tibetanus Hart., which occurs in the Chumbi Valley in Tibet may well be a good species.

15. The Green-backed Tit. Parus monticolus monticolus (Vig.) "Chichin Kothi," Paharia.

Oates states it appears to be found chiefly from 4,000'-8,000' in elevation. In the Eastern Dooars, January 1922, I found it in small parties in forest at the base of the hills at almost the plains-level. Bhotan Ghat, Raidak River, & Q, 26-1-22. Mr. N. B. Kinnear has shown me a specimen recently obtained by the 2nd Mt. Everest Expedition at 12,000' in summer from the Chumbi Valley in Tibet, and there can be little doubt this species is extending its distribution limits. Dikchu, Tista Valley, 2,150', 22-2-20* and 13-3-20,* and at a somewhat lower elevation to the south of this place, to even 8,800' in Lachung, where I saw a pair in the winter, 28-2-20.*In Gangtok at 5,800', 21-2-20* I observed this Tit to be gregarious for the first time in large parties of fifteen to twenty birds composed entirely of this species, foraging on the ground. It breeds commonly in the Rungbong Valley from 4,000'-5,000' in April and May; clutches sometimes number seven eggs (4-4-18).

Ten specimens examined:

d Wing 65-67, av. 65.9. ♀63-64, av. 63.3.

Soft parts: Iris, hazel; bill, horny-black, tip and edges of lower mandible lighter; tarsus, plumbeous-blue.

16. The Red-headed Tit. Ægithaliscus concinna iredalei (Stuart Baker).

Strictly sedentary. Occurs at elevations of from 5,000'-7,500' on the Outer Ranges, not moving to any appreciable extent below its lowest limits in the cold weather. In the Interior observed above Chungthang in the Lachung Valley on the 11-3-20* at an elevation of 6,000'. Around Singhik at 4,600' on the 12-3-20* and between Singhik and Dikchu in the Tista Valley on the 13-3 20* at an elevation of 3,500'. Mai ("Khola") Valley, East Nepal, commonly occurs

from 6,000'-7,000'. The distribution as stated generally from 6,000'-10,000' is, in the latter instance, undoubtedly too high an altitude for the Eastern Himalayas as it does not overlap in its distribution with A. ioschistos. Gopaldhara, 4,720', 16-7-21* a pair of these Tits amongst a large party of small birds composed of Phylloscopi, Zosterops, Certhia discolor (pair). &c., &c., searching the trees around the compound daily, particularly bad weather; this elevation. at this time of the year being considered worthy of record.

Nine specimens examined;

♂ Wing 47-51; av. 49-8. \ \ 46-49.

The Rufous-fronted Tit. Ægithaliscus ioschistos (Hodgs.).

This charming, diminutive species shares in all the varied actions of the true It seems to be impervious to cold and its copious plumage is significant of this fact. It is generally distributed at elevations of from 9,000'-10,000', and rarely descends under stress of weather except perhaps evading the heavy snowfalls in winter, when its zonal distribution is modified from 8,000'-9,000', and then may be found in small parties of eight to ten individuals, otherwise only in pairs in April, May and onwards. Kalo Pokhari, Nepal side of the Frontier, 9,500', $\sigma = 12-4-12$. Sikkim side of the Frontier, 10,000', $\sigma = 18-4-12$.

3 \$\frac{2}{3}\$ 27-4-12. One pair also observed at 10,000', 19-5-12.* Partial to Rhododendron forest (below the belt of the pines at the breeding season). Blanford states "probably only pine forest" where he met with it on two occasions only in the autumn: Lachung Valley at 10,000', Lachen Valley at 9,000'. My own experience is that birds give the pine forests a wide berth if they can obtain sustenance in other more favourable haunts. It occurred around Karponang in the winter, 9,600', \$\frac{2}{2} 24-3-17. Lachung, common around 8,800' and lower, from the 25th of February to the 11th of March 1920, frequenting light trees, bushes and scrub-growth adjacent to the river; absent from the pine forests which were practically devoid of all insect and in consequence bird-life, a single pair at an extreme, high-winter limit of 9,500', 28-2-20.*

Eight specimens examined:

Hing 55-60; av. 56.8. ♀ 56-57; av. 56.7. Iris, naples (dark lemon) yellow.

The Yellow-browed Tit, Sylviparus modestus modestus 18. (Burton)

Sparingly distributed, yet locally common. Found from an elevation of 6,500'-9,500'. On one occasion obtained at Gopaldhara at 6,000', Q 26-12-20, and a probable record for Singhik in the interior of Sikkim, at 4,600', 24-2-20.* Lachung, 8,600', & 27-2-20, a few birds noticed. Kalo Pokhari, 9,500', several obtained in March and April, 1912. Senchal, 7,500', 3 7-2-17. Semana

Basti. (below) at 6,500', 8-2-18.*

Easily overlooked and most difficult to locate owing to its insignificant size and duil green plumage, as it haunts the tops of the trees when in leaf, at times it may be seen amongst low tree-growth. Oates describes a ring of feathers round the eye yellow, edge of wing and the under wing-coverts bright yellow; these colours are absent in my specimens which would be more aptly described as greenish-white: in one example, 3 18-3-12, the edge of the wing hardly showing any imperceptible difference in colour to require notice.

Seven specimens examined:

d Bill from feathers at base 5-6.5, av. 5.9; wing 58-64, av. 60.6.

♀ Bill 6-6.5, av. 6.3; wing 55-58, av. 56.5.

The Indian Black-spotted Yellow Tit. Machlolophus 19. spilonotus spilonotus (Blyth).

Sparingly and locally distributed. Resident at as low an elevation as 4.700' in the interior of Sikkim, (Singhik, February, 1920). Found generally at 6,500'-8,000', on the Outer Ranges. The elevation of 3,000' as stated by Oates, is in need of revision, as it is far too low a limit for the Sikkim Himalaya. Observed near Ghoom at 7,200′, 17-1-17.* A pair obtained in the Mai. ("Khola") Valley, East Nepal, 28-3-12, at an elevation of 8,000′ approx., also, a of and a 2 obtained on the 27-4-12, at 7,000′ approx. Soft parts: Iris brown; bill dark plumbeous-horny; tarsus bluish-plumbeous.

The Sultan Tit. Melanochlora 20. sultanea sultanea (Hodgs.).

Confined to the hot, steamy valleys. Commonly occurs in the Tista Valley at low elevations up to 2,500' at Dickchu, 23-2-20*. A small party once observed in the Rungbong Valley at 3,500' in January 1912, denoting an upward movement.

21. The Himalayan Cole-Tit. Lophophanes ater æmodius (Hodgs.).

Resident throughout the winter at high elevations along the Singile La Ridge. Commonly occurs from Tonglo to Phalut at 10,000'-12,000', from January to March, and numerous around Kalo Pokhari at 10,160', in April and May, similarly on the Nepal-Sikkim Frontier. Karponang, 9,500', in March 1917. Lachung, 8,800' observed in February and March 1920, seeking food amongst the scrub-growth around the village in severe weather. Blanford records it as less common than the other two species, but far from rare in the pine forests with a similar distribution.

Five specimens examined:

d Bill from feathers at base 7; wing 58-60, av. 59.

2 Bill 7; wing 55-58, av. 56.7.

22. The Sikkim Black Tit. Lophophanes rufonuchalis beavani (Blyth).

Resident on the Outer Ranges with a similar distribution in elevation as L. a. emodius, but more plentiful. Tonglo, 10,000', January. Kalo Pokhari, 10,160', March, April, May. Occurred around Lachung at 8,800' in February and March 1920, being driven with inclement weather into the village. Blanford records it as by far the commonest Tit in the pine forests of Sikkim, both on the Cho La Range and in the northern valleys.

Nine specimens examined:

Bill from feathers at base 9-9.5, av. 9.1; wing 67-72, av. 70. 2 Bill 9-10, av. 9.3; wing 64-69, av. 66.5.

Soft parts: Iris dark brown; bill horny-black; tarsus plumbeous.

23. The Brown Crested Tit. Lophophanes dichrous dichrous (Hodgs.).

Commonly occurs as a resident on the Outer Ranges from an elevation of 9,000'-12,000'. Less numerous in the interior of Sikkim where I have noticed a marked disparity of its numbers compared with the other Cole-Tits.

Parties of this Tit, L.a. aemodius and L.r. beavani seen on numerous occasions, occupied taking food on the ground amongst the snow, particularly when foraging between dwarf rhododendron and birch on the mountain slopes and summits in January and February. I did not observe it in the Lachung Valley in February and March 1920. I may also have overlooked it in taking down my notes at Karponang in 1917. Blanford records it from 8,000'-13,000' (August, September), northern Sikkim.

Six specimens examined:

Bill from feathers at base 8-9, av. 8.5; wing 71-74, av. 72.5.

Ŷ Bill 7-8, av. 7.4; wing 67-70., av. 68.8.

Soft parts: Iris red-brown; bill horny-black; tarsus slaty-plumbeous.

FAMILY—PARAUOXORNITHIDÆ.

The Great Parrot-billed Babbler. Conostoma æmodium (Hodgs.) "Tuti" Paharia.

Sparingly distributed on the Singile La Ridge. More plentiful in the mountains of the interior at 10,000'-12,000'. Kalo Pokhari, 10,500', \$ 27-4-12, secured on the Sikkim side of the Frontier, in "maling" bamboo-growth. Karponang, 10,000', & 24-3-17, one of a pair, surprised near the roadside in dense bamboo thickets.

Two specimens examined:

d Bill from feathers at base 22; wing 125-128.

Soft parts: Iris stone-yellow, (yellow ochreous-stone); bill ochreousyellow, lighter at tip; tarsus ochreous-plumbeous or plumbeous-horny; claws of a similar shade.

The Brown Suthora. Suthora unicolor (Hodgs.). 25.

Resident in the Interior of Sikkim from 6,500', and at 10,000' on the Singile La Ridge, correspondingly with a suitable, dense bamboo-growth which is the habitat of this Crow-Tit in common with other interesting species. It occurs both on the ridges in the outer ranges and in the valleys of the far interior; as it is strictly sedentary I am confident I located these birds in the identical place where Blanford recorded them from. Occurs sparingly on Tiger Hill, above Darjeeling. Obtained at 8,500', 28-9-19. (G. E. Shaw).

Kalo Pokhari, 10,000', \$\frac{2}{3}\cdot 2-5-12\$, \$\frac{7}{3}\cdot 7-5-12\$, found in parties of half a dozen or thereabouts, so could not yet be breeding.

Kedom, Lachung Valley, 6,500', \$\frac{3}{3}\cdot 26-2-20\$. 7,200', \$\frac{9}{3}\cdot 26-2-20\$.

Five specimens examined at \$\frac{1}{3}\text{Bill from feathers at base 14-15, av. 14-6}; wing \$8.

Soft parts: Iris stone grow of a beautiful tint a bill declaration for the state of the state

Soft parts: Iris stone-grey of a beautiful tint; bill fleshy-yellow for twothirds, remaining portion at tip of both mandibles lighter yellow; tarsus greenish-grey.

The Black-fronted Suthora. Suthora poliotis humii **2**6. (Sharpe).

Found at a lower elevation than Suthera fulvifrons, probably about 6,000'-8,000' on the Outer Ranges and as low as 4,500' in the Interior. More addicted to a varied tree and scrub-growth, and therefore more generally distributed but far from common; a pair of birds or at the most a small party accompanying a mixed assortment of Babblers, etc., Kalo Pokhari, Mai ("Khola")

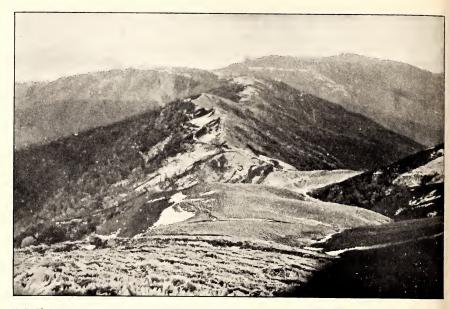
Valley East Nepal, 7,500', & 7-3-12, obtained in dense bamboo-growth.

Singhik, 4,700', & 24-2-20, probably three or four pairs in a mixed party of small Babblers, inclusive of a pair of *Machlolophus spilonotus*. Gopaldhara 5,700', 26-3-18,* evidently one pair only. I had observed a small party at 6,000"

on a previous occasion. Not previously recorded for Nepal.

Oates states Sikkim where this species appears to be common at and "above Darjeeling". This locality can only refer to Senchal to the south, and there is every likelihood of it still being found there in much the same quarters as Suthora unicolor has been located.





H. S. Photo.

SINGILE LA RIDGE.

Looking south to Sandakphu from Phalut. February, 1912.



H. S. Photo.

SINGILE LA RIDGE.
Looking south to Tonglo from Sandakphu. March, 1912.

Two specimens examined:

Bill from feathers at base 7; wing 45-47.

Soft parts: Iris brown; bill black.

27. The Fulvous-fronted Suthora. Suthora fulvifrons fulvifrons (Hodgs.)

Sparingly distributed on the Singile La Ridge, more plentiful in the Interior of Sikkim at altitudes of 9,000'-10,000' in suitable localities, wherever the dense "prong" and "maling" bamboo covers the mountain slopes, as it apparently only frequents this habitat. Prong is the Lepcha name for the bamboo Arundinaria aristata, Gamble., 10,000' and upwards. Maling (Paharia) A. racemosa Munro., 5,000'-9,000', 15'-20' in height. Kalo Pokhari, Nepal side of the Frontier, 9,000', \$\frac{2}{2}\cdot 22-5-12\$, all obtained in dense thickets of "maling" bamboo; they feed in a great measure on vegetable substances and the insects in the crevices of the unopened sheath of the bamboo. Karponang, 10,000', \$\frac{2}{2}\cdot \frac{2}{2}\cdot 18-3-17\$, secured out of a large party of twenty to thirty birds in "prong" bamboo jungle.

Six specimens examined:

d. Bill from feathers at base 7, av. 7; wing 56-57, av. 56.7.

Pill 6.5-7, av. 6.8; wing 55-56, av. 55.5.

Soft parts:—Iris red-brown; bill horny-pink; culmen with a broad band dark-horny; tarsus brownish plumbeous.

28. The Red-headed Suthora. Suthora ruficeps ruficeps (Blyth).

Recorded for Sikkim. I have failed to locate it, and I have no hesitation in stating it to be decidedly rare. Probably confined to a restricted area in the interior.

29. The Red-headed Parrot-billed Crow Tit. Psittiparus ruflceps ruficeps (Blyth).

Locally distributed and a partial migrant, occurring irregularly in "the rains" in the Rungbong Valley, evidently it extends by dispersal in an upward direction at the nesting period and recedes towards the plains during the "cold weather."

Nagri-Spur, at 3,800′, a small party observed on the 11-1-12, in dense secondary bamboo and reed-growth. Mangpu at 3,700′, a small party in scrubgrowth. Gopaldhara, 4,000′, observed about a dozen birds mixed with Actinodura, Mesia, etc., keeping up a lively commotion on the 17-7-16.*4,200′, six birds noted hereabouts on the 4-4-17.*3,500′-3,600′, a pair seen in company with other small birds, Babblers etc., amongst the bamboos, 7-6-21.* Three located in the "siris" trees in the garden on the 18-5-20.* These records constitute the whole evidence available from personal observations.

Obtained at Namchi, 4,500', 16-12-12. (G. E. Shaw). Recorded breeding

in May at 2,000', (Gammie).

30. The Grey-headed Parrot-billed Crow Tit. Psittiparus gularis gularis (Gray).

Evidently rare and locally distributed. Recorded, for Sikkim at 6,000′–8,000′, by Oates. The high limit evidently refers to Mandelli's mention of its nesting on the 17th May. Mangpu at 3,600′, 3 5-11-21 and at 3,600′, \$\times\$ 18-12-20. (G. E. Shaw).

These are the only records that have come to my knowledge during ten years. Represented in the National Collection by specimens from this same locality (Gammie) and other specimens from Sikkim collected by Blanford,

Mandelli and others.

FAMILY-TIMALIIDÆ.

Sub family-TIMALIINÆ.

31. The Rufous-necked Laughing-Thrush. Dryonastes ruficollis (Jard. & Selby).

Recorded by Oates "probably not above 4,000' and mostly at the foot of the hills." Resident in the Rungbong Valley up to an elevation of 4,550', where it is only found in patches of rank grass, reeds and mixed light tree-growth along the bed of the river. Occurs up to an elevation of 4,100' around Mangpu and at all intermediate elevations in the Tista Valley, and reported from near Rinchenpong at an elevation of 5,400'. (C. M. Inglis). Essentially a plains Laughing-Thrush which has extended its distribution both in the valleys of the outer ranges and in the interior, wherever this more or less necessary habitat supplies the required seclusion and its wants. The minor valleys of the outer hills ordinarily do not support a plains fauna above an elevation of 2,500', while strict low-elevation species invariably occur in the Tista Valley for a distance of some fifty odd miles from where the river disgorges its waters into the plains, and in many cases reach a corresponding, higher altitude. The dispersal of this species into the valleys of the interior provides an excellent case in point.

32. The Grey-sided Laughing-Thrush. Dryonastes cærulatus cærulatus (Hodgs.).

This Laughing-Thrush appears to have a better defined status in the lengthy, deep valleys than it has in the minor valleys to the west, although generally it is somewhat locally distributed. Occurs around Gopaldhara in the Rungbong Valley at elevations of from 4,500'-4,700'. Obtained above Mangpu at 5,600', (G. E. Shaw) and at Rinchenpong at 5,400', (C. M. Inglis). Gammie mentions it as breeding in the Tista Valley from 3,500'-5,000'.

33. The Himalayan White-crested Laughing-Thrush. Garrulax leucolophus leucolophus (Hardw.).

On the Outer Ranges at the junction of the Balasan and Rungbong Rivers, is not found above 2,500' around Namsoo, and in the "kholas" on the Ambootia flat at 3,200'. In the Interior of Sikkim throughout the Tista Valley reaches a limit of about 4,500'. Oates records it up to 6,000', so far I have failed to locate it at this elevation. Gammie refers to it breeding in the Tista Valley up-to 3,500' and doubts Hodgson's breeding limits of 5,000' or 6,000' as above quoted. (Hume's Nests and Eggs of Indian Birds. [Oates] Vol. I, p. 47).

34. The Black-gorgeted Laughing-Thrush, Garrulax pectoralis pectoralis (Gould),

Commonly found at low limits in the Great Rangit and Tista Valleys. Obtained as high as 5,600' above Mangpu, (G. E. Shaw). Entirely absent from the Rungbong Valley, even at the lower reaches of the river around Namsoo, where there is ample undergrowth in the forest; no single occurrence has come to my notice. The erratic distribution of this Laughing-Thrush is another instance in proof of an extensive penetration in the deep valleys of the interior.

35. The Necklaced Laughing-Thrush. Garrulax moniliger (Hodgs.).

Occurs at low limits in the Great Rangit & Tista Valleys. Obtained up to an elevation of 3,900', (G. E. Shaw). Apparently it has no status in the minor valleys to the west at any altitude approaching 2,000', as at Namsoo, where a certain, few 'plains species' are to be found.

36. The White-throated Laughing-Thrush. Garrulax albogularis albogularis (Gould).

Very locally distributed, yet found in large parties in favourable localities at an elevation of not less than 6,000'.

Mai ("Khola") Valley, East Nepal, 5 & 3, 3 \, \, 2, 8,500', 22-3-12. Observed sparingly along the Ridge above Pokharibong on the Nagri Spur at 6,000'.

A party of about eight individuals observed in forest below Semana Basti at about 6,700', 6-5-23 at a time of the year when other species of Laughing-Thrushes of lower elevations are only to be found in pairs. Oates records this species at all elevations up to 8,000' or 9,000'. This distribution is erroneous for the Sikkim Himalaya.

The White-spotted Laughing-Thrush. Ianthocincla 37. ocellata ocellata (Vig.).

"Moonali Bhiakoorah," (Paharia) so called owing to its spotted back resembling in some measure the Tragopan which is locally called the Moonal.

Occurs on the Singile La Ridge, Nepal-Sikkim Frontier, at elevations of from 9,000'-10,000'. Odd birds are to be found at the extreme limits in winter at 10,000' on Tonglo, 26-1-12; specimens collected from January to August.

Soft parts: Iris stone-yellow; bill horny, a broad band on culmen shading into the colour of the lower mandible at the edge of the bill; tarsus fleshy tinged above dusky.

38. The Rufous chinned Laughing-Thrush. Ianthocincla rufogularis rufogularis (Gould).

Recorded as found chiefly from 5,000'-8,000'. This distribution for Sikkim and the hills on the North frontier of Upper Assam is erroneous. Locally distributed at "low elevations" in the foot-hills. It occurs in the Tista Valley from 3,700'-3,900', (G.E. Shaw), and in the Great Rangit Valley, Dentam at 4,500'. (C. M. Inglis). It thus has some status in the deep valleys of the interior.

39. The Sikkim Red-headed Laughing-Thrush. Trochalopterum erythrocephalum nigrimentum (Oates).

Generally distributed from 4,000'-7,000' or even 8,000', and obtained on

Sandakphu during the winter at 10,500', 15-2-12, one of a pair.

Plentiful around the station of Darjeeling throughout the whole year, as this species in common with the rest of the Laughing Thrushes is strictly sedentary. It will be noticed, on the Outer Ranges, I record a higher distribution for this species in comparison with T. subunicolor.

40. The Nepal Crimson-winged Laughing-Thrush. Trochalopterum phœniceum phœniceum (Gould).

Occurs plentifully in the Rungbong Valley from 3,000'-6,000', and has been recorded at almost the plains level from the Buxa Dooars. (C. M. Inglis).

Gopaldhara, 5,800', of \$\overline{9},24-10-21,* in dense under-growth in forest, evidently occurs at the upper limits of its range during "the cold weather."

41. The Plain-coloured Laughing-Thrush. Trochalopterum subunicolor subunicolor (Hodgs.)

Notwithstanding this species is well represented by Mandelli's specimens from the interior of Sikkim in the B.M. Collection, it appears to be extremely local and sparingly distributed. It occurs in the Mai Valley in East Nepal at elevations of 6,000'-7,000'. The elevation of 11,000' as stated by Oates is in need of revision in modification for the Outer Ranges. I have failed to locate this Laughing. Thrush in any other part of the country. Blanford obtained it at 9,000' in the Lachung Valley and at 11,000' on the Cho La Range, where in the interior it occurred higher than its congener T. e. nigrimentum.

42. The Black-faced Laughing-Thrush, Trochalopterum affinis affinis (Blyth).

Oates rightly records this species up to an altitude of 13,000', which is no doubt a summer limit as they come lower down in winter in the Interior to an appreciable extent which is not noticeable on the Outer Ranges. This is the only instance of a descent to lower limits that I am aware of amongst the Laughing-Thrushes; and is easily accounted for by the nearness of the snow-line hereabouts. Blanford's remark" ranges above all other forms and is subalpine," is very appropriate.

Occurs in parties in the winter at 10,000' on the Singile La Ridge. Observed as low as 5,350' at Chungthang, in the latter days of February 1920; a striking diffe-

rence in altitude at a similar period of the year.

Chungthang, 24—26-2-20, several in the vicinity of the few scattered dwellings comprising the village; at this time the maidan was occupied by numerous Blackbirds, Thrushes, Redstarts, &c., and these Laughing Thrushes came well out into the open, always with an eye to a secluded retreat near-at-hand; all had disappeared on my return on the 11-3-20,* specimens obtained on the former occasion.

43. The Blue-winged Laughing-Thrush. Trochalopterum squamatum (Gould).

Generally distributed in suitable localities from 4,500'-7,000' to the west of Darjeeling and occurs in East Nepal at similar altitudes, but nowhere approaches the low limit of 2,000' as stated by Oates. In the Tista Valley it has a distribution in elevation from about 3,000'-8,000', (G. E. Shaw). 3,500' upwards,

(Gammie).

The sexes differ as follows according to my sexed specimens. Male: Lores, forehead and ear-coverts grey; back and breast more olive than in the female; tail black. Female: Lores, forehead and ear-coverts rufous; back and breast tinged rufous; tail tinged olive; upper tail-coverts deep rufous in comparison with the male; this last character, however, does not always hold good; one of my specimens has a conspicuous white patch on the throat. There do not appear to be any specimens of *Trochalopterum lineatum (Vig.)* from Sikkim in the B.M. Coll., the species occurs in West Nepal though the exact limits of its distribution to the east is indefinite.

44. The Striated Laughing-Thrush. Grammatoptila striata striata (Vig.). "Bhiakoorah" Paharia. Used without distinction for all Laughing-Thrushes and even Scimitar Babblers. sometimes with the addition of a vague prefix.

Commonly occurs on the Outer Ranges from 3,500'-7,000' or somewhat higher. In the Interior of Sikkim to be found around 2,500', above Dikchu. Occurs from 4,500'-7,500' above Mangpu and upwards to Senchal. (G. E. Shaw). Recorded by Oates for the Himalayas from 6,000'-9,000' which is in need of correction for the Eastern Himalayas at all events.

45. The Bengal Babbler. Turdoides terricolor (Hodgs.).

A 'plains' Babbler, generally and commonly distributed in the Sikkim Teral and Bhotan Dooars. Recorded "appears to ascend the hills to about 5,000'." With the exception of the following record, neither Mr. G. E. Shaw nor myself have met with it at anything approaching this altitude. I have no hesitation in regarding this occurrence as merely accidental, as it is extremely unlikely

to be overlooked. Gopaldhara, 4,550', 4-5-21,* a pair observed hereabouts; these birds rose at my feet to settle on an adjacent tree whence their vivacious movements, particularly a whirling oscillation of the tail, were very pronounced.

46. The Slaty-headed Scimitar-Babbler. Pomatorhinus schisticeps schisticeps (Hodgs.)

Evidently confined to the lower foot-hills. Obtained in the Tista Valley below Mangpu at 3,800', (G. E. Shaw). Entirely absent from the minor valleys in the west of the Darjeeling district at anything approaching this elevation. Mandelli is mentioned as having obtained it breeding at Namtchu(Namchi) and Yendong. The first-named place is overlooking the Great Rangit Valley, the whereabouts of the last locality is unknown to me unless it refers to Tendong.

47. The Nepal Coral-billed Scimitar-Babbler. Pomatorhinus ferruginosus (elyth.)

Sparingly distributed. Occurs at elevations of from 4,000'-6,000' in the Rungbong Valley. So far Mr. G. E. Shaw has failed to obtain it in the Tista Valley where Gammie obtained it breeding at 5,000'. There is a likelihood of it being overlooked as it is anything but a common bird. Evidently less numerous in Sikkim than it was in the far Eastern Himalayas (Daphla & Miri Hills) at similar altitudes.

48. The Nepal Rufous-Scimitar-Babbler. Pomatorhinus ruficollis ruficollis (Hodgs.)

Generally distributed from 4,700' in the Rungbong Valley to as high as 10,000' on the Singile La Ridge in winter, at which last-mentioned elevation it has been observed in pairs in company with parties of small Babblers. Obtained at 9,500,' 2 6-2-12, and around Mangpu, at 5,000', (G. E. Shaw), also at Rinchenpong at 5,400', (C.M. Inglis), Rishap (Rashab), 4,500', (Gammie). Gopaldhara, 5,800', & 2 24-10-21, in forest undergrowth, a pair only. 5,500', 18-5-23*, youngsters on the wing, accompanied by their parents, on the forest outskirts. In my experience there appears to be a marked absence of Scimitar Babblers in the Interior of Sikkim, despite a sufficiency of undergrowth; where there is a paucity of this vegetation, even in forested country, there is little chance of meeting with them. These birds are not gregarious as the Laughing-Thrushes and invariably occur in pairs.

Soft parts: Iris crimson-brown; bill, basal half of upper mandible black tapering along commisure, remaining portion yellowish-horny, deepest at gape;

tarsus pale plumbeous-horny; soles dull plumbeous-yellow.

49. Harington's Rusty-cheeked Scimitar-Babbler. Pomatorhinus erythrogenys haringtoni (Stuart Baker).

Commonly occurs and is quite the most plentiful of all the members of this genus. Found in the Rungbong and Mai Valleys from 3,500'-6,500'. Obtained as low as 1,200' in the Tista Valley. (G. E. Shaw). An elevation of 10,000', as stated by Oates, is far too high a limit for the Sikkim Himalaya. Breeds very early in comparison with some of the other Babblers. Young birds to the number of four in the nest, 27-4-12, at 7,000' approx. Mai "Khola", East Nepal.

50. The Slender-billed Scimitar-Babbler. Xiphiramphus superciliaris Blyth.

Evidently not previously recorded from Nepal. Hodgson records it breeding from 3,000'-6,000'. I have failed to meet with it at anything approaching these limits. Gammie, obtained it on the Mahalderam Ridge at 7,000' breeding. Kalo Pokhari, Singile La Ridge. Obtained both in Nepal and Sikkim, April and

May at elevations of from 3,000'-10,000'. It was found during these months in pairs in the dense "maling" bamboo thickets on the mountain slopes. Its call is unmistakable, yet not easily described in syllables.

Soft parts: Iris pale stone-yellow; bill dusky-black, lightish at tip of

lower mandible; tarsus and claws, plumbeous.

51. The Bengal Red-capped Babbler. Timalia pileata bengalensis (Godw-Aust)

Recorded for the lower hills along the border of Sikkim, &c. Obtained in the plains of the Darjeeling district (G. E. Shaw), and I have observed it in "low-lying" ground, a few miles out from the base of the hills in the Eastern Dooars. It is unlikely to be found in the valleys, unless it has worked its way along the beds of the main rivers, lavishly overgrown with reed and heavy grass-jungle. There is small chance of locating it anywhere else, and the foot-hills are out of the question as they are covered with forest.

52. The Rufous-bellied Babbler. Dumetia hyperythra (Franklin).

Probably this Babbler has a clearer defined status to the west of this area, though recorded for the Lower valleys in Sikkim. Its whereabouts is unknown to me. It is not represented from the Sikkim Himalaya in the B. M. Collection.

53. The White-headed Shrike-Babbler. Gampsorhynchus rufulus rufulus (Blyth.)

Occurs in the Tista Valley at low elevations where I have observed it com-

monly between Melli and Tar Khola.

To my mind I associate this Babbler, as typical of a host of others, with steep, broken ground, thickly studded with bamboos and a diverse tangle of secondary undergrowth,—a different phase of verdure to that of the grander forested tracts which do not undergo a transformation of colour to the same extent, yet are similarly subject to a period of prolonged drought followed by months of an incessant deluge; when the whole aspect of the vegetation suddenly passes rapidly from varied tints of brown to vivid greens. Nowhere are these effects seen to better advantage than in this valley, when at times; it seems as if every living plant was endeavouring to extract the last ounce of moisture and nutriment out of the shallow soil, awaiting the never-failing monsoon, when all forms of life are bathed in drenching rain and steamy heat.

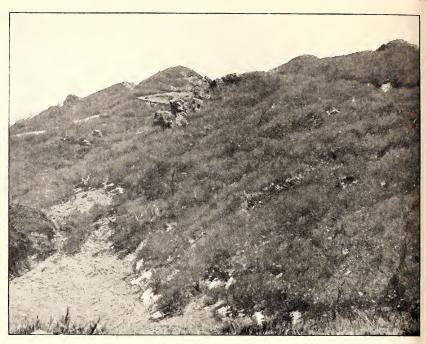
54. The Indian Yellow-eyed Babbler. Pyctorhis sinensis sinensis (Gmel.).

The exact status of this Babbler in the Sikkim Himalaya is very obscure. Recorded for every portion of the Empire and found in the hills up to 5,000′. I have signally failed to locate this Babbler and very much doubt if it occurs unless at the plains-level. Represented in the series of the B. M. Coll. by one specimen from Sikkim and three from Darjeeling without other data as to exact localities, etc.

55. Mandelli's Spotted Babbler. Pellorneum ruficeps mandellii (Blanf.)

Mainly confined to the *Terai* of the foot-hills, which supports a plains fauna. Occurs around Namsoo up to 3,000′, and below Mangpu in the Tista Valley up to an elevation of 3,800′, (G. E. Shaw).





H. S. Photo.

DWARF RHODODENDRON.

Sandakphu, 11,923'. North face of the summit. March, 1912.

Haunts of Lophophanes ater æmodius, L. rufonuchalis beavani, L. dichrous, Certhia familiaris nipalensis, C. stoliczkæ, Phænicurus schisticeps, Troglodytes nipalensis, Montifringilla nemoricola, &c., &c.



H. S. Photo.

MAI ("KHOLA") VALLEY, EAST NEPAL.
From Kalo Pokhari, May, 1912.
Forest of Oak, Chestnut, Magnolia, Rhododendrons, Maples, Laurels, &c., &c.
Haunts of Ianthocincla ocellatum, Xiphirhynchus superciliaris, Lioparus chrysotis,
Arborophila torqueola, Tragopan satyra, &c., &c.

56. The Long-billed Wren-Babbler. Rimator malacoptilus (Blyth).

Rare. Gopaldhara, 5,600′, 1-2-21*. A pair in forest undergrowth with their usual fearlessness. Although they were under observation within a few paces I was unable to follow their movements for more than a brief interval as they shipped away like small rodents in the broken and steep ground. Recorded, "only at considerable elevations." What is inferred by this distribution is evidently incorrect as it has been more frequently met with at moderate elevations.

57. Abbott's Babbler. Malacocincla sepiaria abbotti (Blyth).

Obtained at *plains-levels* around 500 elevation in the Darjeeling district (G. E. Shaw).

58. The Nepal Babbler. Alcippe nipalensis nipalensis (Hodgs.).

Commonly distributed from the *plains-level up to 6,000'*. Very partial to thick cover in general with numerous other small Babblers.

59. The Black-throated Babbler. Stachyris nigriceps nigriceps (Hodgs.) "Moostay", Paharia.

Commonly occurs from the plains-level up to 6,000' at all events. I have no record of it attaining 10,000' in summer as stated by Oates. Breeds at all intermediate elevations. Equally plentiful, both in the interior and on the outer ranges.

60. The Nepal Golden-headed Babbler. Stachyris chrysæa chrysæa (Blyth).

Generally distributed and fairly numerous at similar altitudes as S. nigriceps. Commonly nests around Gopaldhara at 4,500′-5,500′. Apparently not much in evidence around Mangpu, yet it occurs in the upper reaches of the Tista Valley around Toong at 3,850′.

61. The Red-headed Babbler. Stachyridopsis ruficeps ruficeps (Blyth).

Found at all moderate elevations upto 7,500'. Tonglo, 3 ? 25-5-12. More numerous below 6,000'. Obtained at elevations of from 6,200'-7,400' on the eastern side of the district above Mangpu, (G. E. Shaw). Breeds commonly around Gopaldhara and in the Mai "Khola" in East Nepal.

62. Harington's Red-fronted Babbler. Stachyridopsis rufifrons ambigua (Harington).

This Babbler occupies a lower zonal distribution area than S. ruficeps. Obtained in the Tista Valley, March and April, at elevations of from 2,500'-2,600'. (G. E. Shaw). A locality where numerous plains-species penetrate the hills which species are entirely absent or poorly represented at similar elevations to the West.

63. The Yellow-breasted Babbler. Mixornis rubricapilla rubricapilla (Tick.).

Probably does not occur beyond the base of the 'coot-hills, where it has been obtained at the plains-level. (G. E. Shaw).

64. The Dusky-green Babbler. Pseudominla cinerea (Blyth).

Extremely locally distributed. Occurs in the Interior at elevations probably not exceeding 4,000' in the hot, moist valleys. Toong, Tista Valley, 3,850', 24-2-20. I found these birds in a mixed company of other small Babblers of which Stachyris chrysæq was noticeable in light tree-growth on this occasion, which was somewhat at variance to my experience in former years when they freely came under my observation in the Miri Hills on the Assam frontier; they were then exclusive in their habits and kept apart from the mixed assortment of birds so frequently to be met with, when on their rounds.

65. The Chestnut-headed Babbler. Pseudominia castaneiceps castaneiceps (Hodgs.).

Generally distributed at elevations of from 3,500' in the Rungbong Valley up to 10,000' on the Singile La Ridge according to season; so far not obtained below 5,900' above Mangpu, (G. E. Shaw). Observed commonly between Shamdong and Singtam at 2,400', 15-3-20. Frequents the bottoms of the valleys in the winter months, gradually ascending with the advent of the warmer weather to its extreme limits; then found in company with Tits, Yuhinas &c.—a totally different assembly from its "cold weather" associates; it breeds plentifully at 5,000'. Ghoom to Sookia Pokhari, 7,300', \$\frac{19-1-12}{2}\$. Kalo Pokhari, 10,000', \$\frac{1}{2}\$ 17-4-12. Equally common in the Mai "Khola" in East Nepal, April and May 1912.

66. Hodgson's Fulvetta. Fulvetta vinipecta vinipecta (Hodgs.).

Recorded distribution "11,000' or more." Mandelli obtained it breeding

on Senchal where it commonly occurs nowadays.

Generally distributed from 7,000'-12,000'. Observed below Semana Basti, at 6,500', 8-2-18.* Occurs at all intermediate elevations, irrespective of season, as numbers frequent the summit level of Tonglo at 10,000' in the winter, January and February 1912. Numerous parties in scrub-growth around the village of Lachung at 9,000' in February and March 1920. Evidently breeds around Jalapahar and Katapahar, circum. 8,000', as it commonly occurs there in "the rains." 17-4-21,* numerous and obstrusive. Ghoom, 7,300', 19-1-12, large parties about, bitterly cold and misty weather. Sandakphu, 11,500', 21-5-12. Nest composed of moss, bents and strips of bamboo leaves enclosing a cup-shaped hollow lined with hair, containing three eggs of the recorded type.

Soft parts: Iris pale greenish-yellow; bill upper mandible and terminal half of lower mandible dark horny, base of lower mandible pinkish-horny;

tarsus and claws dull horny, somewhat lighter than bill in colour.

67. The Golden-breasted Tit-Babbler. Lloparus chrysotis (Hodgs).

Widely distributed but far from numerous. Occurs mostly at *elevations* of from 6,500'-10,000', at a somewhat lower zonal area throughout the year according to season, than *Fulvetta vinipecta*. Partial to dense growth on steep ground. Kalo Pokhari, Mai "Khola", East Nepal, 8,000'-10,000', March to May. Lachung Valley, Sikkim, 7,200', 26-2-20, a small party intermingled with other small birds in forest. Sonada to Mangpu, 6,750', 19-5-21*, in small parties hereabouts in ("gopi") bamboo thickets in forest.

Soft parts: Iris brown; bill deep plumbeous; base of membrane pinky.

white; tarsus dark ochreous fleshy.

Sub-family—SIBIN.

68. The Long-tailed Sibia. Sibia picaoides picaoides (Hodgs.).

Found from the base of the hills up to a little over 2,500'. An elevation of 5,000'

as stated by Oates, is much too high a limit for Sikkim.

Namsoo, 2,000', 23-1-17*. A large party observed frequenting the flowers of the "simal" (Bombax) cotton trees. It came under my observation beyond Singtam in the Tista Valley at 1,800' in February and March 1920. Obtained in the lower limits of the Tista Valley below Mangpu at 2,500'. (G. E. Shaw).

69. The Black-headed Sibia. Leioptila capistrata capistrata (Vig.).

In the Rungbong Valley occurs as low as 3,400′, and is found at all elevations up to 8,300′, (G. E. Shaw,) around which elevation it occurs on Senchal in the outer hills. In the Tista Valley observed at an extreme low elevation, near Rasab, of 1,700′ and 1,850′, 15-3-20′*, frequenting "simal" (Bombax) trees when in flower, and around Dickchu at 3′000′ in February. Only recorded from 5,000′. 8000′. On occasions familiar to a degree. Gopaldhara, 28-6-23*, a single bird came on to the verandah, searching the pots of geraniums in quest of spiders. This Sibia is a sprightly bird with a loud, pleasing whistle. It is quite a characteristic feature of the bird-life in the station of Darjeeling.

70. Blyth's Sibia, Leioptila annectens annectens (Blyth).

The type locality is evidently Darjeeling and is thus recorded for Sikkim at an elevation of 4,000′ and upwards. Apparently only locally distributed. I have failed to locate it anywhere in the vicinity of Gopaldhara at all elevations of from 3,450′ to over 6,000′, and it remains one of my desiderata. Information in respect to its status is lacking. Represented by mounted specimens in the Darjeeling Museum.

The B.M. Coll. contains 13 specimens. February, June-August, November,

without precise data of locality and elevation.

71. The Nepal Bar-wing. Actinodura egertoni egertoni (Gould).

Commonly occurs in the Rungbong Valley at elevations of from 4,000'-6,000' and similarly in the Tista Valley up to an elevation of 5,500'. (G. E. Shaw). This Bar-wing is much more partial to secondary growth of scrub than it is to well-wooded tracts, being much less arboreal than the Sibias and in its habits shows in this respect some resemblance to the Laughing-Thrushes.

72. The Nepal Bar-wing. Ixops nipalensis nipalensis (Hodgs.).

More or less numerous at elevations of from 7,000'-10,200' on the Outer Ranges. On one occasion observed near Sookia Pokhari. It frequents the tops of the trees in parties at high elevations. Although this Bar-wing belongs to a genus of tropical birds, it has a distinct Palæarctic distribution. 4,000' at its lowest limit as recorded by Oates is entirely erroneous for Sikkim, Singile La Ridge, Nepal-Sikkim Frontier, slopes of Tonglo, circum. 8,500' δ 20-1-12. Kalo Pokharl 10,000', δ δ 7-2-12, 10,160' δ 22-3-12, winter records.

73. Hume's Staphidia. Staphidia striata rufigenis (Hume).

Obtained in the Tista Valley at elevations of from 2,000'-5,100'. (G. E. Shaw)-It is absent from the western parts of the district, and has no status at similar elevations in the Rungbong Valley.

74. The Stripe-throated Siva. Siva strigula strigula (Hodgs.).

75. Hodgson's Blue-winged Siva. Siva cyanouroptera cyanouroptera (Hodgs.).

Generally distributed on the Outer Ranges at all elevations up to 5,500'. It moves down the slopes of the hills to some slight extent during the cold weather while its upper limit is exceeded in the Interior even in winter, when I saw am odd pair in company with a party of Minla ignotincta at 5,800' in Gangtok on the 21-2-20.* It is often to be seen around Gopaldhara at 4,700' in December and January, intermingled with Minlas and several Pteruthius erythropterus, or a pair of P. melanotis. Observed in parties on the Semana-Mirik Ridge at 6,000', 6-5-23.

76. The Stripe-throated Yuhina. Yuhina gularis gularis (Hodgs.).

The first under-mentioned occurrence most probably denotes a descent from the Senchal Ridge, when two specimens were obtained on one occasion at Mangpu, 3,800′, 4-4-18 (G. E. Shaw), a remarkable record in altitude, up to 10,000′ on the Singile La Ridge, where it commonly occurs on Tonglo summit in January and February, and numerous at Kalo Pokhari at 10,160′ in March. Found in parties which haunt the tops of the trees with lively twitterings. This Yuhina ascends the highest on the Outer Ranges in comparison with the other two species, and has a decided Palæarctic status. Blanford states "Less common than Y. occipitalis in the pine forests above Lachung, though still by no means rare. Common above 10,000′ on the Cho La Range where I did not meet with Y. occipitalis. (August.) I have failed to meet with it in these localities at similar elevations in the winter, and there is little doubt it occurs in the bottoms of the valleys in the interior at this period of the year, when it is certain to ascend to a much more appreciable extent than is possibly the case on the outer ranges.

77. The Slaty-headed Yuhina. Yuhina occipitalis occipitalis (Hodgs.).

This Yuhina belongs to an Oriental genus, but equally with the previous species has a definite Palæarctic status. Generally distributed from about 6,500′-10,200′ on the Outer Ranges, at which higher limit it occurs during mild spells of weather in the winter, but is apparently absent during the severe weather. In the Interior occurs however at 9,000′ in the winter in the bottoms of the valleys, where it appears to attain a higher limit than Y. gularis, as I observed several south of Lachung at 9,000′ on the 26-2-20*. Singile La Ridge, Kalo Pokhari, 10,160′, 16—19-3-12, several in evidence, having arrived from the valleys below, on to the ridge, with the advent of hot weather. This Yuhina and Y. gularis were partial to the rhododendron trees, and kept up a lively time when probing their bills into the flowers in search of insect food. Semana Basti, 6,500′,

8-2-18*, plentiful hereabouts. Blanford states "Jerdon says rare near Darjeeling, is very common and abundant in the pine forests between 8,000'-10,000' in the Lachen and Lachung Valleys" (September & October).

78. The Black-chinned Yuhina. Yuhina nigrimentum nigrimentum (Hodgs.).

Strictly confined to the hot, moist valleys, and thus has a tropical status. Occurs in the Tista Valley in the interior up to an elevation of 2,300' in February and March. Obtained in the lower reaches of this valley at 1,200', (G.E. Shaw). Gammie obtained it breeding at Rungbee at about 3,500'. In former years it was obtained in the Miri Hills on the north frontier of Upper Assam at 4,000' in the cold season.

Dickchu to Singhik, 2,300', 23-2-20 and 13-2-20, in large parties, confined

to this species, haunting the foliage of the evergreen trees.

The distribution "considerable elevations only" for the Eastern Himalayas as stated by Oates is entirely erroneous.

79. The Chestnut-headed Ixulus. Ixulus occipitalis (Blyth).

Gammie is mentioned having obtained it breeding at Rungbee at about 3,000', and it is thus recorded by Oates for Sikkim. It is probably restricted to the base of the hills or at moderate elevations, a similar distribution in altitude, as its status is to the North-East, in the foot-hills of Upper Assam.

80. The Yellow-naped Ixulus. Ixulus tlavicollis (Hodgs.).

Recorded at elevations of from 5,000'-8,000' for the Himalayas. It extends in its distribution from the foot of the hills up to 7,500'. Equally plentiful in the interior of Sikkim at a similar period of the year around Singhik at 4,600' as it is around Gopaldhara at 4,720'. Odd parties observed near Jainti, Eastern Dooars, at the plains-level in January 1922. Gopaldhara, 4,700,' &, 31-12-11. Semana basti, &, 20-1-12. Observed on the Semana—Mirik Ridge at 6,500', in parties, feeding on the Yellow Raspberries (Kubus sp?) in early June, 1923.

Kalo Pokhari, Mai "Khola," East Nepal, Q 2-5-12. Blanford records it from (Lamteng) Lachen at 9,000' in September, which denotes a deep penetration in the interior along the defile of the Tista Valley.

81. The White-bellied Herpornis. Erpornis xantholeuca xantholeuca (rlodgs.).

Confined to the deep, hot valleys and has a tropical status. In the Tista Valley, it occurs up to an elevation of 3,300' in the outer hills. (G. E. Shaw.) Oates rightly remarks: "it does not appear to be found above 4,000' or 5,000." These limits leave a wide margin in altitudinal distribution, as there is no likelihood of any record being forthcoming from the upper extreme limit quoted, at all events in the Sikkim Himalaya.

Sub-family.—LIOTRICHINAE.

82. The Indian Red-billed Liothrix. Liothrix lutea callipyga (Hodgs.).

"Jharjhari," Paharia, probably also used for Mesia.

It is unfortunate no two authorities agree as to the exact rendering in nomenclature of this species, which is sometimes referred to as Liothrix luteus callipygus. Hodgson appears to have named it callipyga.

Amongst the smaller songsters, the delightful notes of this cheery, vivacious bird at the breeding season are by no means without variety and compass. A resident, and commonly distributed at all elevations from 3,400'-7,400' and possibly higher as it is recorded "at 5,000'-8,000' or lower for the Himalayas."

It forages much on the ground in secondary-growth, whilst it may often be seen haunting creeper-festooned trees at some height from the ground, invariably

in parties before and after the nesting season.

This bird in common with several others, Mesia argentauris, Suya atrogularis, &c., has accommodated itself to the cultivated tracts under "tea" of the Darjeeling District, notwithstanding it suffers considerable depletion of its eggs at the nesting season, as the Paharia youth spares nothing in the egg and bird line which comes his way. The benefit these numerous small insectivorous Babblers bestow is by no means fully appreciated or even realized.

83. The Nepal Cutia. Cutia nipalensis nipalensis (Hodgs.) "Motum pho," Lei cha.

Locally distributed. Apparently found chiefly at an elevation of 7,000' on the Outer Ranges. Occurs as low as 5,000' in the Interior of Sikkim. Ghoom, 7,000' 17-1-17*, in parties. Singhik, 5,200', 12-3-20, a small party. Mai ("Khola") valley, East Nepal, ₹ 16-4-12. Obtained at an elevation of 5,900', ₹ 28-6-19 and as low as 4,500', ♀ on one occasion, 23-5-20, above Mangpu. (G. E. Shaw.) Soft parts.: Iris dull red-brown; bill horny-black, basal half of lower mandible bluish-horny tapering to a point; tarsus gamboge-yellow; claws light horny.

84. The Red-winged Shrike-Tit. Pteruthius erythropterus (Vig.).

Irregularly distributed from 4,000'-6,000' and apparently locally migratory. Recorded by Oates in its distribution for the Himalayas 2,500', (Jerdon) 10,000', (Stolickza). I have no acquaintance with this Shrike-Tit occurring at these extreme limits. Noted as common at Gopaldhara at elevations of from 4,000'-5,000', September, October, November, December, February, and at the end of March over a period of ten years. Its appearances, however, being somewhat erratic. Strictly confined to well-forested country. Found around Singhik at 4,600' in February and March. Obtained at elevations of from 3,700', March, to 4,500', April, at Mangpu, (G. E. Shaw.) Gopaldhara, 5,700', 26-3-18 *, several noted in company with a host of various small birds. 5,500', 10-2-19 *, many noted under similar conditions. 5,000', 7-10-21*, observed an odd bird or so hereabouts.

Soft parts: Iris stone-grey; bill bluish-horny, upper mandible dark horny-blue; tarsus, pale fleshy.

85. The Chestnut-throated Shrike-Tit. Pteruthius melanotis melanotis (Hodgs.).

This dainty Shrike-Tit is not common, yet occurs in pairs in the wooded portions of these hills where it is widely distributed at moderate elevations. Recorded for the "Himalayas at high elevations 7,000' or so." Obtained at elevations of from 2,700', January, to 6,200', March, in the Tista Valley. (G. E. Shaw.) In the Rungbong Valley occurs from 3,500'-6,000', and somewhat higher in "the rains," a pair observed at 6,200', 1-6-23*, on the Semana-Mink Ridge. Its actions are very slow compared with the agility displayed by Minla ignotincta, Pseudominla castaniceps with which and others pecies it often keeps company. Observed in the interior of Sikkim at Singhik at 4,600', and below Chungthang at about 5,000' in February and March. I have never observed more than one pair of this Shrike-Tit on any one occasion mixed up with other birds, wh reas, P. erythropterus often occurs in small parties of the two sexes.

My experience of this bird in the Sikkim Himalaya further confirms my observations on the North Frontier of Assam in regard to its zonal distribution.

Soft parts: 2 Iris brown; bill, upper mandible dark of mbeous-horny, lower mandible similar only lighter; tarsus fleshy; claws pale horry.

86. The Green Shrike-Tit. Pteruthius xanth chloris xanthochloris (Hodgs.).

Generally distributed both in the Interior and on the Outer Ranges.

This Shrike-Tit occurs at higher limits than the other two members of this

genus and has a decided Palæarctic status in its distribution area.

During the winter it may be found at elevations of from 7,000'-9,500' at which last elevation I obtained it at Lachung, 3 2-3-20, and at 9,600', at Karponang Q 24-3-17, which may be regarded as extreme high winter limits, as pairs were only in evidence, although these elevations are likely to be exceeded in the summer. It frequents low trees during the winter, and with the approach of twarmer weather when it undoubtedly ascends to some extent, occupying the tops of the highest trees. This last trait combined with its dull green plumage renders it inconspicuous amongst the dense foliage, and it is secured with difficulty. Soft parts: Q. Iris brown; bill bluish-slaty.

87. The Rufous-bellied Shrike-Tit. Hilarocichla rufiventer (Blyth).

Sparingly distributed. Evidently does not transcend the limits of 6,000'-8,000' to any appreciable extent on the Outer Ranges. Occurs on Senchal at 8,000', Gopaldhara, 6,000', 5-11-19, two females secured out of a party frequenting the tops of lofty trees in forest.

Soft parts: 2 Iris dark stone-grey; bill bluish-horny, upper mandible

dusky; tarsus dark fleshy-horny; soles pale yellow.

88. The Common Iora. Ægithina tiphia tiphia (L.).

Commonly occurs from the *Plains-level* up to 4,740′, at all events around Gopaldhara, and obtained in the Tista Valley, up to an elevation of 5,600′, above Mangpu. (G.E. Shaw.) This latter record is no doubt an extreme limit for this Iora, as Oates rightly infers "it does not appear to ascend the hills higher than 3,000′ being strictly a bird of the plains." My own impression is that it is extending its distribution under favourable conditions. It has obtained a higher limit in the Tista Valley, which is only one instance of many similar cases, which receive notice under specific circumstance.

89. The Fire-tailed Myzornis. Myzornis pyrrhoura (Hodgs.).

Locally distributed. On the Singile La Ridge occurs up to 10,160', in March and April, both in Nepal and Sikkim, and in all probability not found below 7,500' or thereabouts. Apart from a doubtful observation below Ghoom at 7,500*. my records without exception refer to the Nepal-Sikkim Frontier at Kalo Pokhari, 5 of 6,6 2 2, collected between the 19th of March and the 30th of April

Jerdon appropriately names this bird a Flower-picker. It was this fact which first gave me the clue to its whereabouts, otherwise I expected to find a Creeper-like bird haunting the tree trunks as mentioned by Oates; whereas, it was an agreeable surprise to see it "hovering with a rapid beating of the wings at the flowers" of the Rhododendron trees. It is generally silent and unobtrusive even at or towards the nesting season when birds are at their iveliest. Its note is a feeble but distinct call. Blanford records it as common

on the Cho La Range at 11,000' in August where it was obtained amongst brush wood, on mossy banks and once was shot on the ground. "Not seen in Upper Sikkim." I have also not met with it in the interior. It certainly occupies a lower zone during the winter and ascends to breed at these recorded limits.

Soft parts: Iris brown; bill black; tarsus ochreous horny tinged with

green; claws dark horny.

90. The Gold-fronted Chloropsis Chloropsis aurifrons aurifrons (Temm.).

Occurs at low elevations in the Tista Valley, and has a tropical habitat. Obtained up to 2,300' in elevation. (G. E. Shaw.)

The Orange-bellied Chloropsis. Chloropsis hardwickii hardwickii (Jard. & Selby).

Resident at all elevations up to 5,500' in the Rungbong Valley, and occurs up to a similar altitude in the Tista Valley, 5,000'. (G.E. Shaw). It possibly reaches the limit of 6,000' as recorded by Oates.

92. The Silver-eared Mesia. Mesia argentauris argentauris (Hodgs.).

The Mesia is more addicted to secondary scrub-growth than forest. It utilizes the "tea-bush" in common with Liothrix to a great extent at the nesting period. Recorded from 3,000'-7,000'. Obtained in the *Tista Valley as low as 1,500'*. (G. E. Shaw.) I have no information respecting its status at plains-level as was the case in the foot-hills of the North frontier of Upper Assam. It is common at all elevations in the Rungbong Valley up to 5,500', but here again it has been overlooked below 3,000', if it actually does occur below this limit.

93. The Red-tailed Minla. Minla ignotincta (Hodgs.).

This species frequents all well-wooded tracts. During "the cold weather," it invariably is found in parties which intermingle with other tree haunting species; as they methodically search the tree trunks and foliage, they are very Tit-like in this habit. It is generally distributed at all elevations up to 8,500' according to season, at which elevation it occurs on Senchal. Blanford records it from Lachen and Lachung at 9,000', but not higher in September and October. It is commonly resident around Gopaldhara at 4,500'-6,000', between which limits it breeds, and is equally plentiful in the interior of Sikkim. Gangtok, 5,800', 21-2-20.* Around Jainti, Eastern Dooars, at the base of the hills, a party of this Minla came under my observation in early January, 1922; I did not meet with them at a later period. I have formerly recorded it from the Gorges of the rivers in Upper Assam at similar low-levels in "the cold weather."

(To be continued.)