By

HERBERT STEVENS, M. B. O. U.

Part IV.

(With a plate.)

(Continued from page 1030 of Volume XXIX.)

169. The Bay-backed Shrike. Lanius vittatus Val.

Recorded as ascending the Himalayas to 4,000' or 5,000'.

I have no information in support of these distribution limits, which may refer to the North-West; should it actually occur in Sikkim, it can only be as a rare vagrant. It is not represented from the Sikkim Himalaya in the National Collection.

170. The Indian Black-headed Shrike. Lanius nigriceps nigriceps (Frankl). "Bhadraya" Paharia, used for all Shrikes.

Commonly occurs as a breeding species from elevations of 3,500'-6,000'.

171. The Grey-backed Shrike. Lanius schach tephronotus (Vig).

Generally distributed at higher elevations than L. nigriceps.

Observed at Chungthang in the interior of Sikkim at 5,350' in March, and occurs commonly around Gopaldhara during "the cold weather," though not much in evidence at the nesting season, yet observed in May, 13-5-16*, a solitary bird also, 18-4-23. Blanford found it common in Lachung 8,000'-9,000' in the beginning of September, three weeks later all had disappeared. Nesting in Tibet at 14,000', (Bailey).

172. The Brown Shrike. Lanius cristatus cristatus L.

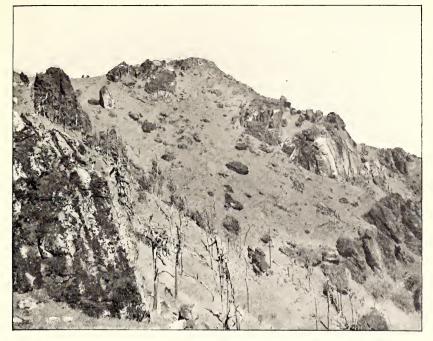
A cold-season migrant to the hills and valleys at moderate elevations on its descent to the plains. A few birds remaining in all probability, for brief periods in favourable localities. Obtained at an elevation of 1,600' in the Tista Valley, (G. E. Shaw). Gopaldhara, 4,720' and under. First arrivals noted 17-9-16,* 22-9-20*, 20-12-11*; a male seen on several occasions hereabouts. All records refer to single birds.

173. The Brown-backed Pied Shrike. Hemipus picatus capitalis McClell.

This dainty, diminutive Shrike is beautifully adapted to an arboreal life, Occurs commonly at *all elevations up to 5,000'* or thereabouts; frequenting the foliage of secondary-growth and lofty trees and found in small parties at all times, excepting at the breeding season.

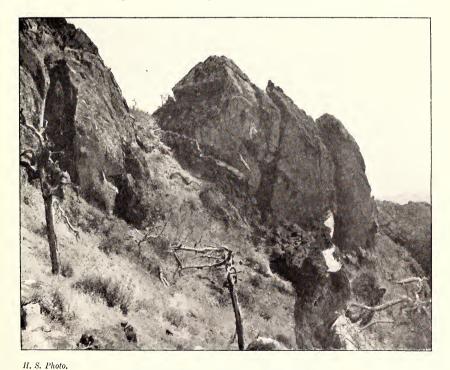
174. The Nepal Wood-Shrike. Tephrodornis pelvicus pelvicus (Hodgs).

Strictly *a plains species.* Obtained up to an elevation of 3,300' in the Tista Valley, (G.E. Shaw). Mandelli obtained it breeding at 3,000', Ging near Darjeeling.



H. S. Photo.

SANDAKPHU SUMMIT. 11,923', South Face. Haunts of Pyrrhocorax graculus, Loxia curvirostra himalayensis, Gypaëtus barbatus grandis, &c. March, 1912.



BOULDERS. South Face, Sandakphu. Haunts of Troglodytes nipalensis nipalensis, Läiscopus collaris nipalensis, &c. March, 1912.

.

175. The Indian Scarlet Minivet. Pericrocotus speciosus speciosus (Lath).

Generally distributed up to an elevation of 5,000' or thereabouts. It does not congregate in parties during "the cold weather" to the same extent as P. *brevirostris*; as I have, more frequently than not, observed it in pairs in December. In the hills, abnormally coloured females are occasionally to be seen; which is similarly the case with P. *brevirostris*, when the yellow-coloured portions of the plumage are replaced in a varying degree by a beautiful tint of rich orange.

One such bird observed at Gopaldhara on the 13-4-16*. A description is given of two specimens as there is a differentiation in these characters from the normal. Gopaldhara, 4,720', 31-12-11, Q? On dissection I failed to satisfy myself as to its correct sex. Forehead, paling posteriorly up to the crown, orange; sides of the head and the whole lower plumage from the chin to the under tail-coverts paling from orange into deep yellow; abdomen silvery white, as in typical specimens:—this character which is apparent in wellprepared skins, has been missed by Oates. Rump orange, tinged green, deepening into the orange of the upper tail-coverts, greater wing-coverts with a spot of orange on the outer web and in a lesser degree on the inner web yellow, forming a wing-bar; two of the later secondaries with the cross band and the oval spot near the tips of the outer webs orange; outer pair only of the tail feathers yellow, remainder of the tail as in the normal bird, only the yellow is replaced by orange; other parts similarly coloured as in typical specimens.

Gopaldhara 4,700', Q 27-2-19. Orange colour confined to forehead, sides of the head, chin to the throat, patchy only on breast, upper tail-coverts mixed orange and greenish-yellow; two of the secondaries with the cross band and one with the oval spot near the tip of the outer web orange; tail similarly deeply coloured as in the previous specimen.

176. The Assam Short-billed Minivet. Pericrocotus brevirostris affinis McClell. Male "Raja lall," Female "Rani chara", Paharia.

Recorded for the Himalayas up to 10,000'. It came as a surprise to find this: Minivet at such extreme elevations during a severe winter; when the more congenial climate of the plains would have been in keeping with what was an every-day occurrence in Assam at a similar period of the year. Sandakphu to Saburkum, 19-2-12*. Observed on the Nepal-Sikkim Frontier at 11,000', in parties flitting about the tops of the gaunt, dead pines on the ridge. At this time the bare branches were wreathed in snow and the trunks were laden with an accumulation of icicles projecting out at right angles for some two to three feet in length,--the result of an interminable, piercing, westerly wind, while the ground was obliterated in heavy snow-drifts. The whole effect making a scene of exquisite grandeur yet withal of intense loneliness. The brilliant splashes of colour in these Minivets came as a welcome relief and as a reminder that some birdlife not only did exist, but that these Minivets were able to withstand such intense cold with little, appreciable discomfort. Sandakphu summit, 11,900', early March 1912, a few birds in evidence, very restless; every appearance of hot weather in the plains : the valleys being obscured in a haze.

Abnormally coloured females observed amongst a small party of normal Minivets at Gopaldhara at 4,700′, on the 13-5-16*, and at 3,800′, on the 22-1-18*. One, obtained out of a party of eight to ten individuals at 4,720′, on the 27-2-19, has the entire parts, which are coloured yellow in the normal female, replaced by orange, and, whereas the crown is merely tinged with yellow in normal examples, in this specimen it is a deep orange similar to the breast; the wing patches, upper tail-coverts and tail are more intense in colour showing this beautiful tint to greater perfection; the back is also more ashy than green.

At Gopaldhara this Minivet is to be found in parties before the end of June, which points to it being an early breeding species.

177. The Yellow-throated Minivet. Pericrocotus solaris Blyth.

Confined to *low elevations* in the Tista Valley. Obtained on one occasion at an elevation of 5,800', 5,30-3-18, above Mangpu, (G. E. Shaw). Blanford is recorded as having observed this Minivet at 10,000' in Sikkim. It is almost incredible such an authority should be mistaken in his identification, in which case this altitude is remarkable for this frequenter of the hot, moist valleys.

Dikchu, Tista Valley, 2,300', 23-2-20, a large party of both sexes disporting in the trees at close quarters, and very confiding as they settled within a stone's throw on the light vegetation along the road-side. There can be little doubt that Blanford's record refers to an upward dispersal through the Lachung Valley; his specimen was obtained out of a flock above Lachung.

178. The Rosy Minivet. Pericrocotus roseus roseus. (Vieill.)

Recorded as occurring in the Himalayas up to 5,000'. Entirely absent so far as my observations go to prove in the Sikkim-Himalaya. Represented in the National Collection by a single pair $\Im \ Q$ collected in January 1874 from the Sikkim Terai, so probably has some status at extreme low limits.

179. The Dark Grey Cuckoo-Shrike. Campophaga melanoschista melanoschista. (Hodgs).

A summer migrant to the hills. Occurs in the Rungbong Valley up to 5,000' at all events and breeds around this elevation. Obtained up to 4,500' around Mangpu (G. E. Shaw), where I heard it calling for the first occasion in 1917 on the 29th of March. In the Rungbong Valley, my observations place its arrival at later intervals : one secured at 4,600', \bigcirc 30-3-11, several noted on the 7-4-16*, and a pair on the 6-5-15*. Obtained at Sookia Pokhari at 7,200' and Dentam at 4,500', (C. M. Inglis). Its call is a mournful, plaintive, whistling "phew", "phew", "phuit" as best described in syllables, and must not be confused with any of the Cuckoos. It occurs during the cold season at the foot of the hills. Bhotan Ghat, Raidak River, Eastern Dooars, where a \heartsuit was obtained on the 24-1-22 showing the ovaries active.

180. The Himalayan Large Cuckoo-Shrike. Graucalus macei nipalensis Hodgs.

Partial to open, forested tracts. An irregular migrant to the Rungbong Valley, occurring up to an elevation of 4,720' at Gopaldhara. Obtained in the Tista Valley up to 3,600', (G. E. Shaw), and found at the base of the hills during the cold-season. Sungma, 4,500', $\bigcirc 5$ -9-17, (C. E. Brown). Gopaldhara, 4,500', $\bigcirc 2$ 23-2-18, three birds altogether, the odd remaining bird, frequenting the vicinity of their old quarters for some brief period afterwards. 23-3-16*, a pair observed in "the garden". Three birds seen on the 17-7-14*.

181. The Ashy Swallow-Shrike. Artamus fuscus Vieill.

The Swallow-Shrike is a summer visitor to the hills, arriving in the Rungbong Valley during the latter days of March and first week in April; departing about the first week or later in October. Gammie speaks of it making its appearance in the Tista Valley (Mangpu) the last week in February, and leaving in the last week in October. A warmer atmosphere pervades throughout of plains-birds \mathbf{this} deep valley, in evidence which numerous disperse in an upward direction, which absentpoorly are or represented in the steeper minor valleys which have a closer affinity

NOTES ON THE BIRDS OF THE SIKKIM HIMALAYAS. 57

in their fauna with higher limits. Reported from Dentam in the interior at 4,500' by Mr. C. M. Inglis. In the Rungbong Valley, it appropriates the upper foliage of the lofty "rungbong" (Lepcha) palms, (*Carvota urens*), wherever, these are found as at Seeyok and Turzum, up to an elevation of 5,600'. Earliest arrivals: Gopaldhara, 23-3-16*, a pair noted ; thurbo, 4,300', 18-4-11*, about half-a-dozen birds frequenting the sago palms, first noticed to-day, but their arrival had probably escaped my notice. Latest departures : 7-10-16*, at 4.700'. Numbers seen on the 18-9-17*. A single bird seen about, on the 23-9-17*, which finally disappeared on the 8-10-17*. 20-10-15*. 3,450', 23-10-21*, two noted to-day in the bare branches of some "siris" trees; a score or more the following day hereabouts. During August, they move further afield, when I have observed them at the bottom of the valley at 3,500,' 17-7-14*; three noted; 24-7-16, a party at rest on the single telegraph wire, edging up to one another with lively twitterings and partially extended wings. 26-7-15*, three noted. It takes full advantage of the swarms of termites which on occasions emerge from the ground, to fill the air around. Specific instances of these occurrences noted on the 25-4-18*, 15-5-15*, 16-5-18*. Seen to catch Butter. flies, Huphina sp.? or Appias sp.? 31-8-17*.

3,400', 9-7-21*, Swallow-Shrikes in some numbers, Drongos, a Hair-crested Drongo C. hottentotta, Bulbuls--(Molpastes bengalensis and Otocompsa leucogenys), Campophaga melanoschista, Oriolus trailii, Cuculus canorus, C. micropterus, and C. intermedius (a pair), Dendrocitta himalayensis, Swallows, and odd Swift and Jungle-Crow, all busy at work gorging on the termites; some were more adept at the game than others, but the Swallow-Shrikes appeared to make the most of their time and secure their quarry with the least exertion. Other such occasions mentioned previously when the white ants rise in myriads, yet I have never actually witnessed a diverse congregation of birds to partake of the feast as at this particular event.

182. The Burmese Black-naped Oriole. Oriolus indicus tenuirostris Blyth.

Recorded for the "Darjiling Terai, Bhutan and Buxa Doars. Rare, but apparently a permanent resident." I have no information in respect to this Oriole.

183. The Indian Oriole. Oriolus oriolus kundoo Sykes.

Recorded for the Himalayas up to 9,000,' which evidently refers to its status in the N. W. Himalayas. There is only a remote chance of meeting with it, notwithstanding its distribution in the plains is stated to be as far east as Manbhoom.

184. The Indian Black-headed Oriole. Oriolus xanthornus xanthornus (L) = (0. luteolus (L.) Auct).

The correct nomenclature of this species is Oriolus xanthornus xanthornus (L). which takes precedence of "luteolus" and "melanocephalus" See Ibis. Vol. v., No. 1, January 1923, p. 74. (A review of the Genus Oriolus, Meinertzhagen.)

Recorded for the Himalayas, probably not above 4,000'. Entirely a plains Oriole. A reported occurrence of an Oriole seen below the Bannockburn Estate in the Great Rangit Valley by the late Mr. E. A. Werdicke most likely referred to this species. Neither Mr. G. E. Shaw nor myself have come across Golden Orioles in these hills. I found this bird common in the "open country" around Kumargram, some few miles out from the hills of the Eastern Dooars.

185. The Maroon Oriole. Oriolus trailii. (Vig.)

Resident, irrespective of season and generally distributed, occurring chiefly in scattered pairs at all elevations from the base of the hills up to 7,500' or thereabouts.

Eleven specimens examined: Six females in this series, inclusive of a breeding female obtained 13-3-11 along with the adult male, bear out my observations which have previously been remarked upon by Mr. A. M. Primrose, Journal B. N. H. S., Vol. XXI, page 676, that the adult female differs from the adult male in coloration, in its "less defined" gloss of its sombre plumage; dull black head, neck, chin and throat; maroon-brown back; dull maroon upper and under tail-coverts; outer portion only of the outer webs and two middle tail feathers entirely maroon-brown, remaining portion of tail dull maroon; brownish breast and pale underparts streaked with brown. Information is desirable as to the sex of birds having the forehead, chin to vent throughout streaked; the period required before the male reaches full maturity, and if any females actually do breed in similar garb to the adult males.

186. The Indian Grackle. Eulabes intermedia intermedia (Hay).

Confined to *low elevations*, in all probability not to be found much above 2,500'. Observed below Tindharia and around Nurbong at 2,200' and obtained in the Tista Valley up to 1,600', (G. E. Shaw). Nurbong, 2,050', 27-2-14, a party of ten Hill Mynahs; first heard calling on the 18-2-14; but located to-day in the trees surrounding the bungalow.

Sepoydoorah, 2,000', 11-3-14, observed a party of ten birds hereabouts-Bhotan Dooars, Jainti to Newlands; numerous parties observed in heavy forest during January 1922.

187. The Spotted-winged Stare. Psaroglossa spiloptera (Vig).

Recorded as found up to 6,000' in the Himalayas; which limit is too great an extreme for Sikkim. Obtained up to 3,800' in the Tista Valley at Mangpu, (G. E. Shaw). Sepoydoorah, 2,000', 16-4-15*, a party observed at close quarters.

188. The Rose-coloured Starling. Pastor roseus (L).

Recorded as found in the lower ranges of the Himalayas as far east as Sikkim. It can only occur as a very rare straggler to this district ; and I have no information in support of its claim for inclusion. Stragglers of common plains-birds, nevertheless, do at times go far beyond their more or less defined limits and this fact must not be lost sight of. In this case I fail to see why this Pastor which is a cold-weather migrant to the plains should ascend the hills even to moderate elevations, and as there is no defined migration route through Sikkim ; it is fair to presume these birds have entered the plains at a more westerly point. I have searched through a large series in the B. M. Collection. It is represented by only one specimen from Nepal, (Hodgson), and none from Sikkim. Behar specimens in some numbers from whence mine have come. (C. M. Inglis).

189. Finsch's Starling. Sturnus vulgaris poltaratskyi Finsch.

Recorded as a winter visitor to the Himalayas as far east as Dibrugarh in Assam. I have no record of any true Starling occurring in these hills. Evidently they arrive by a south-easterly route in the North-West Himalayas and on their descent to the plains spread out in an easterly direction. I failed to obtain a specimen during my sojourn in the Dibrugarh district of Upper Assam. It is not represented from the Sikkim-Himalaya in the National Collection.

190. The Grey-headed Myna. Sturnia malabarica malabarica (Gm).

A plains Myna entering the hills in a similar manner to other low elevation species. Obtained in the Tista Valley at all elevations up to 3,860', Mangpu, (G. E. Shaw). Entirely absent at anything approaching this elevation in the Rungbong Valley. Gammie speaks of it as occurring around Mangpu in the same places as *Artamus fuscus* frequents, where it breeds on the ridges at from 2,500'-4,000'.

191. The Common Myna. Acridotheres tristis tristis (L).

A common scavenger in the station of Darjeeling. To some extent locally migratory or merely a more or less general descent to lower limits is undertaken in the "cold weather" as I have noticed Mynas around Gopaldhara in December, 26-12-21, when all the breeding birds had long since left. There is a corresponding influx of their numbers into the hills during the breeding season, when it is a common occurrence to see them squabbling and hear the discord that takes place preparatory to nesting. The roof of the bungalow at Gopaldhara on many occasions being the scene of "a rough and tumble", when the rogues roll down, locked together by beak and claw, squawking all the time they are descending in rapid transit to the ground, to the accompaniment of the cautious elementinstigators but non-active participants. Once harmony reigns, the worries of life are by no means ended, as the arrival of inquisitive rats bent on the pillage of their nests must cause them anxiety and loss. Through the experience gained at the expense of the crafty rat, their attentions have been confined to taking possession of the most secure, limited nesting-sites available. Notwithstanding their apparent unruly behaviour on arrival, which is only another instance of the keen struggle for survival which is not always so obvious, they are sure of a welcome, as any shortcomings are amply repaid by the useful work they perform in the compound, unfortunately they are by no means content to employ their energy at this useful if not so congenial pursuit, as on occasions marked and affectionate attention has been paid to the luscious caterpillars of some cherished Saturnid moth I was endeavouring to carefully nurse on the verandah, as if they had been put there for their special benefit.

192. The Bank Myna. Acridotheres ginginianus (Lath.)

Obtained in the *plains* of the Darjeeling district (G. E. Shaw).

193. The Indian Jungle Myna. Æthiopsar fuscus fuscus (Wagl)

Recorded as resident and ascending the Himalayas up to about 8,000'.

Neither Mr. G. E. Shaw nor myself have been able to locate this Myna and apparently it is absent or extremely rare in Sikkim.

194. The Pied Myna. Sturnopastor contra contra (L).

Occurs commonly at Jalpaiguri and possibly may extend in its range to the foot of the hills.

195. The Himalayan Sooty Flycatcher. Hemichelidon sibirica cacabata (Penard).

Recorded as a permanent resident in the Himalayas, occurring as high as 13,000' in summer. This Flycatcher is undoubtedly *migratory*, as it is *absent from moderate elevations during "the cold weather"*. No evidence is available, as to where their quarters are at this period of the year. Oates remarks "it appears to be entirely absent from the plains of India". It is much more plentiful on the downward movement at Gopaldhara in the second week of October, than it

is on arrival in the first week of April. Specific observations around 4,720' have been noted during October 1911. 16-10-19*, 11-10-20*, 7-10-21*, plentiful and observed at higher elevations. On the 12-10-21*, during a dirty spell of weather, some birds were at the bottom of the valley at 3,500'. Whilst stragglers may ascend to extreme limits as recorded, the majority breed at elevations of from 6,000'-7,000'. Gopaldhara, 5,250', $_{\circ}$ 12-4-17. Mai "Khola", East Nepal, $26\cdot4-22\cdot5\cdot12$; eggs taken with the parent bird \mathfrak{P} , on latter date at an elevation of about 7,000'. Obtained around Mangpu at elevations of from 2,000'-4,500', (G. E. Shaw) and on Tonglo, (C. M. Inglis). Blanford met with it in the Lachung Valley at 9,000', in September. It keeps to the outermost, naked branches, and not the leafy boughs, from which it sallies out, to return again times innumerable, to its identical point of vantage.

Seven specimens examined : \mathcal{J} Wing, 73-75, av., 74; \mathcal{Q} wing, 72-74, av., 73.

196. The Ferruginous Flycatcher. Hemichelidon cinereiceps Hodgs.

Recorded as a permanent resident in the Himalayas from about 4,000'.8,000.' This Flycatcher has the same zonal distribution and is *similarly migratory as its near ally*, though it is much more sparingly distributed. Mai "Khola ", East Nepal, \bigcirc 9-4-12, \bigcirc 27-4-12, \bigcirc 8-5-12, upper reaches of the valley around 7,000'. Sookia Pokhari, 6,500', 26-5-12*, observed hereabouts in forest. Gopaldhara, 5,300', 17-9-21, a single bird in the forest. Obtained above Mangpu at 7,300', (G. E. Shaw), and at Jore Pokhari at 7,400', and Rinchenpong at 6,000', (C. M. Inglis).

197. The Orange-gorgeted Flycatcher. Siphia strophiata Hodgs.

Recorded for the "Himalayas up to 12,000' in summer, descending to the lower valleys in winter"; which is certainly the case, as odd birds no doubt, remain at the base of the hills; while the great majority undoubtedly migrate farther south and evidently pass over the plains. Commonly occurs in the Rungbong Valley, December to March, from 3,500'-4,700', and around Kalo Pokhari, on the Singile La Ridge at 10,000', in March and April; males at this time predominating. Obtained at as low an elevation of 1,200' in the Tista Valley, (G. E. Shaw). Kalo Pokhari, 10,160', 24-5-12, nest, a slight composition of moss, lined with bents, containing a single feather of a female Tragopan and three white eggs, situated twenty feet above the ground, in a crevice of a large branch of a tree on the slopes of the forested mountain-ridge: the eggs vary much in size. Blanford mentions it from the Lachen and Lachung valleys at the recorded limit in September.

Eleven specimens examined. The colour of the throat patch in the female varies in depth of colour, and sometimes is quite as deep orange-rufous as in the male; when this occurs, the chin and throat are also black. \mathcal{J} Wing, 71-77, av., 74; \mathcal{Q} wing, 69-73, av., 71.

198. The Eastern Red-breasted Flycatcher. Siphia parva albicilla (Pall.).

Undoubtedly nests at no great distance above Gopaldhara, 4,720'. Much more in evidence in October, than it is in March during the latter part of the month, when on its upward migration. Gopaldhara, 4,720', 21-9-16*, \mathfrak{P} or immature \mathfrak{F} . 24-9-19* \mathfrak{P} . or immature. \mathfrak{F} 26-9-17*, a few in evidence. 24-9-18, females or immature males in evidence. 3,750', \mathfrak{P} 28-10-19, one or two about. 4,450', \mathfrak{P} 12-10-19. 4,720,' \mathfrak{P} 12-10-19. 4,500', \mathfrak{P} 16-10-19, adult males extremely rare.

Absent during the cold-weather months, November to February, at Gopaldhara. Numerous along the level, forested ground at the base of the hills from Jaint to Kumargram in January 1922. Thurbo, 4,500', Q 22-3-11, Q 28-3-20. Gopaldhara, Q 7-4-16. One adult male only, seen on the upward migration over a period of nine years.

Obtained at elevations of 3,800', Q 10-11-19. 3,000', J 20-4-21, (G. E. Shaw). Sukna, 500', J 22-11-19, (C. M. Inglis).

Five specimens examined : all females. Wing, 67-69, av., 68.2.

8 Four filariæ taken out of the eye cavity of this specimen.

199. The Rusty-breasted Blue Flycatcher. Cyornis erythacus hodgsonii (Verr.).

Recorded for Sikkim during March and April. Occurs at moderate elevations on migration, both at its ascent and descent to and from its breeding habitat, but only sparingly distributed. Sookia Pokhari, 6,500', 3 18-1-12*, observed in the bed of a mountain stream, a few paces from the track through the forest. Gopal-dhara, 4,720', 3 21-3-16, wing, 74. Mangam, near Ringim Gompa, 4,300', interior of Sikkim, 3 23-2-20, wing, 74, procured in light trees near road-side. Bhotan Ghat, (Base of the hills) Raidak River, Eastern Dooars, 9 27-1-22, wing, 68. Obtained at elevations of 3,200', 9 16-2-19. 3,600', 3 21-2-20, around Mangpu above the Tista Valley, (G. E. Shaw).

200. The Rufous-breasted Blue Flycatcher. Cyornis hyperythrus (Blyth).

A summer migrant to elevations, probably not exceeding 7,000' on the Outer Ranges. Plentiful at Gopaldhara around an elevation of 5,000', where it breeds in forest. Males obtained at the time of arrival in 1921 at elevations of from $5.250'.5,500', \mathcal{J} \subset 5.4.21$, testes developed, evidently about to nest; many others seen. 6,000 13-5-23,* several observed in forest Seeyok, 6,300, 22-5-23*, a pair, with their fully fledged young in the precincts of the forest. Specimens obtained in the Mai "Khola", East Nepal, 1st April to 22nd May 1912, at an elevation below 7,000'. Obtained at 2,000', \mathcal{Q} 18-3-20, in the Tiata Valley, and at 6,500', \mathcal{J} 29-6-19, above Mangpu, (G. E. Shaw', Gopaldhara, 5,200', 7-10-21*. I saw a male on the ground making a somewhat fruitless attempt to demolish a large earth-worm; which it eventually flew away with, though this feat was by no means an easy undertaking.

Soft parts. : Iris hazel; bill black; tarsus pinkish-plumbeous.

201. The Slaty-blue Flycatcher. Cyornis tricolor tricolor (Hodgs.).

Occurs at all elevations from 3,450'-10,000' according to season on the Outer Ranges, and in all probability descends to the foot of the hills during "the cold weather." Obtained at elevations of from 3,600'-5,200' around and above Mangpu, (G. E. Shaw). Kalo Pokhari, 10,000', \Im 7-5-12, observed also on other occasions in dense thickets of "maling" bamboo, rarely seen as it shuns observation in these haunts. Gopaldhara, 4,700', $\Im \ 25-3-11$, $\Im \ 31-3-11$; 3,500', $\Im \ 8-2-19$; 4,250', $\Im \ 4-2-19$, Thurbo, 4,300', $\Im \ 25-3-11$.

202. The White-browed Blue Flycatcher. Cyornis superciliaris (Jerd).

Recorded for the "Himalayas, Kashmir to Sikkim, found up to 12,000' in summer". I have failed to locate this Flycatcher. All specimens collected on the off-chance of being this species proving to be *C. astigma*. Represented in the B. M. Coll. \mathcal{J} March 1874. \mathcal{Q} collected near Darjeeling by J. Gammie.

203. The Little Pied Flycatcher. Cyornis blythi (Roths.). For this nomenclature see Novitates Zoologicæ, XXVIII, 1921, page 48.

This Flycatcher is absent around Gopaldhara at 4,720' during the coldweather months, November to January, and though it nests hereabouts, it is not much in evidence during the summer. It is much more plentiful at the foot of the hills in the Eastern Dooars during the winter, than it was in North Lakhimpur, Upper Assam, where I only met with it on one occasion in December 1907 during a period of seven years. Gopaldhara, 4,700', 28-30-3-11* plentiful at this time; several secured. Nurbong, 2,000', $\Im \ \ 2$ 28-2-14*, Gopaldhara, 4,720', $\Im \ \ 5-3-16^*$; $\Im \ 12-3-18$. $\Im \ 14-3-18$; $\Im \ 8-3-18$, two pairs noted to-day, 4,500 31-5-23,* a pair and fully fledged young located in the "siris" (*Albizzia* sp.) trees. 4,720', $\Im \ 25-7-20$, in moult. $\Im \ 25-7-20$, juvenile, in spotted upper plumage. $\Im \ 2-10-19$, a bird of the year. Bhotan Ghat, Eastern Dooars, $\Im \ 20-1-22$, others seen on several occasions, as far out from the hills as Kumargram village, Gopaldhara, 4,720', $\Im \ 24-9-19$; 5,000', $\Im \ 16-10-14^*$. Obtained at the foot of the hills around Sukna at 500', (G. E. Shaw). Recorded up to *an elevation of 7,000'* in the Himalaya.

204. The Little Blue and White Flycatcher. Cyornis astigma (Hodgs).

Obtained at Gopaldhara at 4,720', \mathcal{J} 21-3-16; \mathcal{Q} 22-3-16; \mathcal{Q} 29-3-16; \mathcal{J} 9-4-19, the \mathcal{Q} probably in the vicinity. $\mathcal{J} \mathcal{Q}$ 19-4-18, the male being secured. \mathcal{J} 30-9-19, a juvenile in process of change from the female phase into that of the adult male. \mathcal{J} 2-10-19, juvenile, in similar plumage to the previous example. Obtained around Mangpu at an elevation of 4,600', \mathcal{J} 14-4-21, and 4,700', \mathcal{Q} 24-9-20, (G. E. Shaw).

This species has a similar zonal distribution at the breeding season as C. blythi, yet occurring with less frequency, and the above records constitute the sum total of its appearances which have come under my observation.

205. The Sapphire-headed Flycatcher. Cyornis sapphira (Tiek).

Recorded as a permanent resident in Sikkim, which may be correct in so far as a few birds evidently stay in the warmer portions of the valleys. Its rarity accounts for the lack of information respecting its movements. Observed at Thurbo, 4,500', \mathcal{F} 3-4-11*, and obtained at Gopaldhara, 4,720', \mathcal{F} 19-4-18, also in the Mai "Khola" in East Nepal, 7,000' approximate, \mathcal{F} 4-4-12. \mathcal{F} 11-4-12, Tista Valley below Mangpu at 2,400', \mathfrak{P} 29-1-20, (G. E. Shaw).

206. The Pale Blue Flycatcher. Cyornis unicolor unicolor Blyth.

Recorded for Sikkim,—Namchi, "breeding" (Mandelli). I anticipate it being discovered in the foot-hills. This species is well represented in the British Museum by 17 σ σ and 16 φ φ collected in every month of the year, but unfortunately without any indication of the elevations. I am indebted to Mr. Thomas Wells for all the trouble he has taken in searching through the series of this bird and many others in the National Collection, with the view to throwing light on the distribution areas of many species which at present are only imperfectly known.

207. The Blue-throated Flycatcher. Cyornis rubeculoides (Vig).

Recorded for the "Himalayas up to 6,000' or 7,000". These limits appear to be too high for Sikkim, otherwise I could hardly have failed to meet with it at intermediate elevations. My impression is that it does not reach far beyond the foot-hills, with a similar distribution and at low elevations as was the case when it arrived on the north frontier of Upper Assam. Obtained at all elevations from Sukna at 500', to below Mangpu at 3,760', in the Tista Valley; which supports a plains-fauna, and this fact lends its due weight to my contention. Mr. Shaw's records are as follows—500' \mathcal{F} juv. 12-12-19. 2,700', \mathcal{Q} 28-6-20. 3,300', \mathcal{J} 19-5-18. 3,500', \mathcal{F} 11-4-18. 3,760,' $\mathcal{J} \mathcal{Q}$ 15-1-19. This last occurrence is of especial interest as it points to some birds remaining in suitable haunts at moderate elevations throughout the year.

208. The Large-billed Blue Flycatcher. Cyornis magnirostris Blyth.

Recorded as resident in Sikkim. Apparently as rare in Sikkim as it was in the Naga Hills on the north-eastern frontier of Upper Assam. I erroneously recorded this Flycatcher from the Miri Hills, Vol. XXIII, No. 2, Nov. 20, 1914, page 256, which record refers to *Ianthia hyperythra*. Represented in the B. M. Coll. by 10 \mathcal{F} and 5 \mathcal{Q} collected in every month from April to October without locality and elevation data.

209. The Pigmy Blue Flycatcher. Nitidula hodgsoni (Moore).

Recorded as resident in Sikkim up to 7,000' or higher. Decidedly rare. Obtained in the Mai "Khola" Valley, East Nepal, $\gtrsim 21-3-12$, and in the Tista Valley at 1,500', \bigcirc 30-1-20, (G. E. Shaw). There is every likelihood of this delicate, diminutive Flycatcher moving south with the advent of "the cold weather," and ascending into the hills to breed in the summer. I have recorded it from the foot of the Dafla hills in the third week in March where, however, it was only once met with. Our meagre records substantiate Oates' statement in that some birds are resident in the warmer portions of the valleys in the foot-hills, and as my single specimen was procured at a similar elevation of around 7,000'; it is fairly certain to ascend to some appreciable extent. Well represented by numerous specimens in the B. M. collected by Mandelli; several of which were obtained in Sikkim during the cold-weather months, at which period of the year he also got it from the Bhotan Dooars.

210. The Verditer Flycatcher. Stoparola melanops melanops (Vig).

Generally distributed up to 10,000', (Tonglo) during the summer and commonly observed at all elevations according to season. The earliest observation on the upward movement noted at Gopaldhara, 4,720', as that of a 35-3-16.* Singhik, 4,600' in the interior of Sikkim, on the 13-3-20*. They congregate in small parties towards the breeding season. It commonly nests at 4,000'-5,000', and up to its highest summer limit. During the third week in May the young are fully fledged.

Obtrusive habits combined with an unusual greenish-blue type in coloration cause it to be conspicuous everywhere.

211. Hodgson's White-gorgeted Flycatcher. Anthipes monileger monileger (Hodgs).

Recorded for "Sikkim up to about 7,000' or so". (Lebong at 5,800', breeding, Mandelli). Obtained in the Mai ("Khola") Valley, East Nepal, Q8-4-12. Gopaldhara, 6,000, 'a male presumably, 24-5-23, giving forth to the best of its vocal efforts, with a rapid quivering of the wings, from its stance amongst brush wood in the close forest. Apparently only locally distributed. Oates doubts Hodgson's specimens as having been obtained in *Nepal where it occurs*, though how far to the west is not known.

212. Brooks's Flycatcher. Anthipes poliogenys (Brooks).

Recorded by Hume from the Sikkim Terai as stated by Oates. I have no specimen from the foot-hills of Sikkim. One $\Im 27$ -1-22, from Bhotan Ghat,

Raidak River, Eastern Dooars, as the only specimen obtained, seems to point to it being none too plentiful. We found it a common bird in Upper Assam.

Oates makes no distinction between the sexes. My specimens are not sufficient satisfactorily to settle this point from an examination of skins. There is, more often than not, a general facies difference with a bird in the flesh as fieldnaturalists will bear out, even if there is not some slight colour difference apparent in many birds which are generally considered to have the sexes similarly coloured. On comparing the single skin from the Bhotan Dooars, this female has the forehead, crown, nape and ear-coverts more greyish-brown in comparison with skins from Assam, in which these characters are olive-brown; the rufous on the under parts is not as intense in colour ; this difference I regard as sexual. Oates rightly draws attention in the discrimination of this female and "Cyornis rubeculoides" which closely resemble one another, to the large 1st primary of A. poliogenys, yet this is not so easy to follow as may be inferred from his remarks. Cyornis rubeculoides is a slighter bird, has the rufous tinge commencing from the chin, and of a brighter tint on the breast, even in comparison with males of A. poliogenys; the forehead, sides of the head and ear-coverts are more rufous than olive. I can detect no difference in the size and shape of the bill between the two Wherever possible it is advisable to collect the females, when the species. birds are in pairs towards the breeding season.

213. Layard's Flycatcher. Alseonax muttui (Layard).

Recorded "summers in Sikkim." I have so far failed to locate it. Amongst the British Museum material are three skins obtained by Mandelli in Native Sikkim, in August, September and November 1873-75.

ALSEONAX LATIROSTRIS (Raffl.) is recorded as having a wide range and occurring in the Himalayas as far west as Chamba. The B. M. Coll. contains no specimen from Sikkim, but it is interesting to know Mandelli obtained three specimens in the Bhotan Dooars in April, 1874-76, and there are other examples from Nepal, (Nepal Valley and Khatmandu) collected in April by Scully 1877. It has been recently recorded from the Dooars by Inglis from which locality O'Donel obtained specimens in July, Ibid, Vol. XXVI, 1920, page 993.

214. The Grey-headed Flycatcher. Culicicapa ceylonensis ceylonensis (Swains).

Recorded as resident in the Himalayas up to 8,000'. This is another common Flycatcher which occurs at *all elevations from plains-levels*, irrespective of season though the majority frequent the valleys in "the cold weather." Noted as particularly plentiful in the Rungbong Valley in February 1918, at elevations of from 3,400'-6,000'.

This species is strictly resident and moves little in comparison with even some of the other supposed sedentary Flycatchers.

215. The Large Niltava. Niltava grandis (Blyth).

In all probability occurs up to an altitude of nearly 8,000'. It breeds commonly above Gopaldhara at elevations of from 4,700'-6,000'. Confined to forest where it is resident throughout the whole year. Obtained as low as 2,500' in the Tista Valley, (G. E. Shaw). During "the cold weather," they are partial to a purple berry,—name of tree unknown, which stains the stomach and vent. Often to be seen on the ground. The tail feathers when not worn, are pointed at the tips, in just as marked a degree as in *Ianthia*. This character also holds good in Niltava sundara and Siphia strophiata, and possibly has some significance as regards the correct relationship with the so called Bush-Robins, as the habits of these two species of Niltava are somewhat similar and a few of the Flycatchers spend a portion of their time on or about the ground, and in this habit differ from the true Muscicapidæ.

216. The Rufous-bellied Niltava. Niltava sundara Hodgs.

There is a possibility of this Niltava reaching the extreme limit of 8,000' as recorded, though my records place its zonal distribution at somewhat lower limits than N. grandis. Obtained above Mangpu up to an elevation of 7,000', (G. E. Shaw). Occurs commonly around Gopaldhara as a resident, breeding species. It is generally distributed, and notwithstanding its gaudy plumage, more often than not overlooked as it keeps to dense undergrowth in forest.

217. The Small Niltava. Niltava macgrigoriæ (Burton).

Oates records this Niltava as breeding in Nepal and Sikkim from April to June at elevations of from 3,000'-5,000'. Occurs commonly around Gopaldhara during the breeding season up to 6,000' or thereabouts. More plentiful at the bottom of the Rungbong Valley in "the cold weather" at 3,500'. Obtained up to 3,600' around Mangpu, (G. E. Shaw). There is little doubt that it occurs at the foot of the hills.

218. The Indian Black-naped Flycatcher. Hypothymis azurea styani (Hartl).

Apparently confined to the Lower Foot-hills. Observed on one occasion on the Nagri Spur at an elevation of 4,300', date and month overlooked, though it was probably, May. Obtained up to an elevation of 1,400' in the Tista Valley. (G. E. Shaw).

219. The Yellow-bellied Flycatcher. Chelidorynx hypoxantha (Blyth).

Occurs up to an elevation approaching 12,000', (Sandakphu) on the Outer Ranges in summer and found at all intervening heights from the plains at the base of the hills, both on the downward and upward migration. I found this pretty, little Flycatcher equally as plentiful at the base of the hills in the Eastern Dooars in January 1922, where it extended into the plains as far out as Kumargram, as it was in Upper Assam during "the cold weather." A single bird observed at the end of March 1917, at 10,500' above Karponang, the first arrival. Kalo Pokhari, 10,60'. First week in April, 1912. Every morning a party of a dozen or thereabout, males and females in equal numbers are to be seen flitting about the trees on the ridge above my camp, almost oblivious to my presence in the fearless manner they approach me at close quarters. 26-4-12, Q obtained. This party left on the 4-5-12, for still higher ground. Tista Valley, February 1920, single birds everywhere obstrusive in the interior, at elevations of 2,000' and upwards. Congregating in small parties near Singhik at 4,600' on the evening of the 12-3-20. Nurbong, 2,200', 22-2-14, an odd bird or two uttering a feeble "tsip," "tsip", towards evening, seeking the topmost branches of the trees, searching for food until sunset. Namsoo, 2,100', 13-3-14*, in evidence here-abouts. Gopaldhara, 4,700', 323-12-11. 6,200', 24-7-17*. Lepcha Jagot, 7,150', 21-8-19*, a single bird observed. I consider these two latter observations remarkable for the extraordinary low limits at this time of the year which may denote a lower breeding habitat unless they referred to unpaired birds. Since observed above Gopaldhara at 6,150', 22-5-23 Blanford met with it on the Cho La Range in August at 12,000', but did not notice it in the interior above 8,000'.

220. Baker's White-throated Fantail Flycatcher. Rhipidura albicollis stanleyi Stuart Baker. "Naklay chara", Paharia.

The local name signifies very appropriately the obstrusive antics of this sprightly little fop, which is the exact translation of the word without having to

resort to slang in current use. Strictly resident. Commonly breeds at all elevations up to 6,000'. Its nest is a masterpiece in avian construction, and needs no detailed description as it is referred to in the "Fauna" and other articles.

The white-browed Fantail Fly-catcher. Rhipidura aureola aureola. Less.

is recorded as ascending the Himalayas up to 4,000' or 5,000'. I failed to locate this Fantail Fkycatcher in Assam and the same thing has so far happened in Sikkim. I am more than curious to know its exact status. It is not represented in the National Collection from Sikkim.

The Indian Paradise Fly-catcher. Tersephone paradisi paradisi (L).

is recorded also for the Himalayas from Sikkim eastward. It probably only occurs at low elevations during "the rains". I have not met with this remarkable bird; the eastern form of which "affinis" was well known to me in Assam.

221? The Northern Indian Pied Bush-Chat. Saxicola caprata bicolor Sykes.

Recorded as "ascending the Himalayas up to 8,000,' probably in summer only". I have no record in support of this assertion for the Sikkim Himalaya, and I very much doubt if it has any status whatsoever in these hills which appear to be too far east of its accepted distribution, and though it is recorded for Assam; I entirely failed to meet with it during my sojourn in Upper Assam. Specimens in my collection are from Tirhoot (C. M. Inglis.) and South Sylhet (C. B. Antram). Both of these localities represent the limits of its winter distribution to the east in the plains fairly accurately. This is a well-marked species and not likely to be overlooked. I have since had the opportunity of examining the B. M. series of this Chat which is not represented from Sikkim : the nearest localities being Nepal and the plains (Behar).

222. The Indian Bush-Chat. Saxicola torquata indica (Blyth).

223. The Japanese Bush-Chat. Saxicola torquata stejneri (Parrot).

Recorded for the Himalayas under *Pratincola maura* and as "breeding at all heights up to 5,000"." These Chats are an extremely difficult group. Oates has lumped several races or even good species in his treatment of *P. maura*. All our Indian birds appear to be relegated to three forms which are generally regarded as cold-weather migrants only to the plains. Distribution according to Stuart Baker. Measurements given by Hartert.

S. t. indica. Breeding Kashmir and N. W. Himalayas. J wing, 67-72. S. t. stejneri. Breeding East Siberia and Japan. J wing, 67-705. S. t. prezewalskii. Breeding Turkestan and Tibet. J wing, 72:5-75.5.

After an examination of all my available material from Assam and Sikkim. Unfortunately, all the skins "might be called" cold-weather examples and poorly represented from Sikkim : twelve and four respectively ; there is no appreciable difference in size of 5 Assam and 2 Sikkim males, wing 71.7.73, av. 72.3, exclusive to a single \mathcal{J} obtained at the foot of the hills, 26-3.10, "in fat condition" preparatory to migrating, noted on the label, wing 75. This bird agrees with *S.t. prezewalskii* as regards the wing measurement and possibly, is this form. Another \mathcal{J} 5-11-19, obtained at 6,000' above Gopaldhara on the Semana-Mirik Ridge with wing, 66.5, is altogether a smaller bird with white under parts and can only be relegated to *S. t. indica*, yet in common with every other specimen there is no vestige of white at the base of the tail; "*indica*", is said to have the "tail-feathers with rather less than the basal quarter white."

NOTES ON THE BIRDS OF THE SIKKIM HIMALAYAS. 67

Colour differences are very difficult to decide in this group, though these males have very rufous breasts and the females, creamy throats. Two of the above series were collected in the plains as late as the 11th and 16th of April in different years; when I have found S. *leucura* with testes and ovaries active, exactly two months earlier. Had these birds got to ascend to extreme heights I could well understand their late departure. I cannot conceive that the vast network of mountains and valleys in the Eastern Himalayas and far beyond, does not afford the necessary conditions for a breeding mounds of S. t. stejnegeri for instance. There is the alternative of an enormous breeding range, and our imperfect knowledge does not yet allow of any splitting of numerous races from well-defined breeding areas.

My impression is, a large proportion of these birds breed in the foot-hills at moderate elevations, while a few may remain in the plains to the northeast, apart from cold-weather migrants of other forms, and Oates rightly states "The Indian Bush-Chat breeds so abundantly at all moderate levels in the Himalayas that it is not improbable that the Himalayas form the northern limit of its range". This statement seems substantially correct. The difficulty exists none the less, when the true migrants are mixed up with the low-elevation breeding bird during "the cold-weather" as it is practically impossible to separate them by size or colour. Blanford records S. t. indica as common in the Lachung and Lachen valleys in September and the beginning of October apparently migrating, but did not meet with it on the Cho La Range; he remarks on it as first seen at Lachung on the 9th of September, Large numbers were seen on migration and specimens obtained at 17,000' in September by Mr. A. F.R. Wollaston during the Mt. Everest Expedition and Mr. N. B. Kinnear refers to a specimen obtained at 12,000' in nestling plumage in August. I have recorded S. t. stejneri from the base of the Dafla Hills as early as the 20-8-07*, and numerous records during this month on later dates over several years. Seen as late as the 25-4-10* in the plains of Upper Assam.

I have now satisfied myself beyond all doubt that the Chat which comes up to breed around Gopaldhara at elevations from about 4,500' up to 5,500' and apparently is to be found at somewhat higher limits possibly up to 7,000' in East Nepal in S. t. indica. Every year a few birds are to be seen in the Rungbong Valley, when at 4,700' the earliest arrivals have been noted 7-4-16* 4,000' 10-4-11*; 4,500' 22-4-23*; a pair. The adult breeding bird and eggs have been obtained while the juvenile in spotted plumage has been observed on the 11-7-23. I doubt if there is over more than half-a-dozen pairs at Gopaldhara which might be regarded as a small colony as it appears to be very capricious in the choice of a breeding habitat, which is boulder-studded, steep ground, and roughly cultivated. When the maize grows up in the adjacent ground under better cultivation; the birds utilize the stalks which reach a height of some 12-15' and have almost the dense close growth of a reed-bed, at this time they keep much to the ground when feeding, and seldom appear to perch on the extreme tops of the stalks. It is remarkable that this chat should have been also recorded at such extreme heights.

224? The White-tailed Bush-Chat. Saxicola leucura (Blyth).

It is with some misgivings that this bird is introduced into the fauna of the Sikkim Himalaya as I now relegate all the birds which have been observed in the hills during the last ten years and which at the time were put down as this species, to be no other than S. t. indica. In the light of subsequent information, there can be little doubt the majority of the birds remain in the plains throughout the whole year and they breed at the plains-level much earlier than was suspected, before their breeding grounds are

submerged with the rise in the rivers and before the S. W. Monsoon has exerted its full force. A series from Dhunsiri Mukh on the Brahmapootra obtained on the 14-2-11 are undoubtedly breeding birds and my remarks anent the advanced condition of the sexual organs on the labels, bears out this deduction; while specimens obtained at Hessamara on the Subansiri, where I obtained Chat's eggs, are in April, in well-worn breeding plumage.

225. Hodgson's Bush-Chat. Saxicola insignis (Blyth).

Recorded for the "Lower Hills of Sikkim, (Mandelli). Summer quarters **not** known, probably central hills of Nepal and Sikkim." All efforts to locate this Chat have been without avail. Some allowance must be taken into consideration for the secretiveness of all Chats at the breeding season in common with many birds which are obtrusive at other times.

226. The Dark Grey Bush-Chat. Oreicola ferrea ferrea (Gray).

This Bush-Chat has a somewhat, higher breeding distribution than the breeding birds of the two Saxicolas. It commonly occurs at that time of the year at *elevations of from 6,000'-8,000*' chiefly nesting in April and May. *Cuculus canorus* has a predilection for the nest of this bird, with the result that possibly it is victimized more than any other bird in these hills. I have never seen this Chat during the breeding season at any great distance, from its haunts which is usually ground under rough cultivation or scrub-growth, but on the 18-6-23" at Gopaldhara, a single bird had been in the habit of frequenting the compound at dusk for the last two or three evenings, for which unusual incident there was no accounting, 24-8-23" three birds seen to perch at intervals on the lofty "Utis" tree adjacent to the bungalow this evening but only to remain for brief periods. Blanford records it from Northern Sikkim in Autumn at 7,000'-9,000' but less common than about Darjiling.

227. The Slaty-backed Forktail. Enicurus schistaceus Hodgs.

Apparently mainly confined to *moderately low elevations* in the foot-hills. Obtained in the Tista Valley at elevations of from 1,200'-1,500'. (G. E. Shaw). Gopaldhara, 3,750, 29-5-23,* four fully fledged youngsters in nest, located in one of the "kholas."

228. The Eastern Spotted Forktail. Enicurus maculatus guttatus Gould.

Occurs in hill streams at all elevations from 3,500' and probably somewhat lower up to 7,500' or thereabouts in winter. Breeds commonly at elevations of from 4,000'-5,000' in the Rungbong Valley. Obtained between Ghoom and Sookia Pokhari at 7,200', \bigcirc 19-1-12, and equally plentiful in the Mai Valley at similar and lower limits in East Nepal. When taken by surprise, they utter a shrill note and invariably take refuge in the vegetation along the bank of the "Khola", when a perceptible, whirling movement of the tail is apparent. On these occasions they settle on the branches of light growth and above the ground.

229. The Black-backed Forktail. Enicurus imaculatus Hodgs.

Only found at *low limits in the foot-hills*. Obtained in the Tista Valley at elevations of from 500'-1,500'. (G. E. Shaw).

230. The Assam Forktail. Enicurus leschenaulti indicus Hartert.

Only occurs at *low elevation*, where it has been obtained at the plains-levels of 500'. (G. E. Shaw).

231. The Little Forktail. Microcichla scouleri scouleri (Vig.)

Generally distributed at all elevations up to 8,000', and possibly breeding at somewhat lower limits. I have failed to observe it up to an elevation of 11,000' in summer, as recorded for the Himalayas. It commonly occurs in the Rungbong River in "the cold weather", and observed as numerous in the Tista River and streams between Dikchu and Singhik at a similar period of the year.

232. The White-capped "Redstart. Chaimarrornis leuco cephala $(Vi_{\mathfrak{L}})$.

This sprightly and charming Redstart commands attention with its striking plumage and lively actions when during "the cold weather" it is to be found at all elevations from the foot of the hills upwards. During the summer the majority breed around and below 7,000' and evidently at much higher limits, the remaining few. Recorded at about 20,000' in summer, exact elevation evidently 17,500' (Stolickza) which extreme height refers to the N. W. Himalayas. Blanford records it from the Cho La Range at 12,000' (August) and from Northern Sikkim at 10,000' (September). "In the middle of October in the Lachen Valley, all had descended below 10,000'."

233. The Plumbeous Redstart. Rhyacornis fuliginosa (Vig.)

This more sombre coloured Redstart is not less attractive by reason of its smaller size, as it has all the varied actions of its more conspicuous companion, the White-capped Redstart, and has a similar distribution. Recorded up to 13,000', which is probably an extreme limit. My April to June records place its breeding range on the Outer Ranges from 7,000' downwards. There is every likelihood, however, or it attaining much higher limits in the interior in summer; yet, I have no records to substantiate this supposition. Blanford records it from the Cho La Range 11,000'-12,000' (August) also at the same season below 3,000'. In September and October not above 7,000' in Northern Sikkim.

234. The Blue-fronted Redstart. Phœnicurus frontalis Vig.

Recorded "seldom below 5,000', in summer 14,000' or even higher at that season." This Redstart has been obtained around Mangpu above the Tista Valley at elevations of from 2,500'.5,000' in the cold weather. (G. E. Shaw). In the Rungbong Valley my observations almost coincide with its lowest limit reached at this period of the year. Whilst it is generally distributed around Mirik, 5,200'and along the ridge upwards; a few birds may be seen every year during the coldweather months,—November and December,—around the Gopaldhara Bw. at 4,720'.

I found it fairly numerous on Tonglo at 10,000' in the winter of 1911-12, only males, however, at this extreme limit, although every opportunity was taken to keep a sharp look-out for the female and secure specimens. At all times there seemed to be a disparity of the sexes. $4 \sigma \sigma'$ collected 23-29-1-12. Gopaldhara, 4,720', 9 9-10-15, earliest arrival noted. 4,500', a single 9 30-3-20, latest departure. Other records: Nigali, near Mirik, 5,300', σ' 23-3-11. Ghoom to

Sookia Pokhari, 7,000', 3 19-1-12; 7,200', 9 9-2-17. Chungthang, 5,350', 24-2— 11-3-20*. Sandakphu, 11,900,' 9 8-3-12. Kalo Pokhari, 10,160', 3 1-4-12; 92-4-12. 9 10-4-12, in fat condition. Mr. Shaw's records are 3,500', 9-2-19; 3,700', 2-3-19; 4,000', 19-12-12; 5,000', 14-12-12, and refer to all males.

"In contrast to the last species (*R. rufiventris*) which abounds in the plains of India in winter, but crosses the snows to breed, this Redstart which rarely, if ever, visits the plains but which Jerdon found abundantly around Darjiling in winter, evidently breeds in the higher hills of Sikkim. I met with it on the Cho La Range and again abundantly in the Lachung and Lachen valleys at from 12,000'-14,000' and at Yumthang on September 12th and 14th. I shot three birds in spotted plumage. I, several times at high elevations both on the Cho La Range and in Northern Sikkim saw another species of Ruticilla which was perhaps *R. caeruleocephala*." (Blanford).

235. The White-throated Redstart. Phœnicurus schisticeps (Gray).

This handsome Redstart occurs on the Singile La Ridge of the Outer Ranges in winter, not below an elevation of 10,000'. In the Interior it has been observed at Gangtok at as low an elevation as 5,800' $\cancel{3}$ 21-2-20^{*}. Invariably found in pairs at this period. Tonglo, 10,074', $3 \triangleleft \cancel{3}, 2 \heartsuit \textcircled{2}$ 23—26-1-12, Sandakphu, 11,929,' $3 \triangleleft \textcircled{2}, 28-2-12, \char{2}, 2-3-12$, all procured on the bare mountain-tops. Lachung, 9,500'-10,000', $4 \triangleleft \Huge{3} 2 \image \Huge{2} 1-4-3-20$, numerous, males "in fat condition"; which certainly points to early nesting, the birds being congregated on the winter snow-line. Observed at Chungthang 5,350,' 24—25-2-20^{*}. None were visible on the 11-3-20, which was to be expected as they were already much above Lachung. Observations at Gangtok, 5,800,' 21-22-2-20, when one or two were seen to be particularly tame, on the outskirts of "the station". Blanford strangely enough, makes no mention of meeting with it in the interior.

236. Hodgson's Redstart. Phœnicurus hodgsoni Moore.

Curiously, this Redstart rarely occurs at moderate elevations on migration. It is to be found sparingly in the Bhotan Dooras, where it is confined to the river-beds: a similar habitat it frequented in Upper Assam during the cold weather. Observed on one occasion at Gopaldhara at 3,440' on the upward migration, exact date overlooked. Chungthang, 5,350', \mathcal{J} 11-3-20, no female seen, but may have been in the neighbourhood. Bhotan Ghat, Raidak River, Eastern Dooars, \mathcal{J} 26-1-22, \mathcal{Q} 19-1-22 one or two males scatter at wide intervals along the river-edge and an equal number of females; both sexes keeping apart; the females farther inside, away from the river and on the outskirts of the forest.

237. The Indian Redstart. Phœnicurus ochruros rufiventris. (Vieill).

Recorded as procured by Mandelli in June in Native Sikkim.

Found on the *Outer Ranges on migration*. My meagre records point to this Redstart as being of rare and accidental occurrence.

Gopaldhara, 4,500, 31-9-21*, a pair observed at fairly close quarters; they had disappeared a few days afterwards, on their descent to the plains. 4,720', Q12-4-16, an interesting date on account of the late appearance, noted as "in fat condition"; undoubtedly a very late straggler on its upward journey to its breeding grounds. Seeyok, 5,200', 30-10-20*, a glimpse obtained of a female which I identified as this Redstart.

"Not seen on the Cho La Range but abundant in the Lachen and Lachung valleys during the latter parts of our stay in them. The first specimen was sho at Momay Samdong, 15,000', on September 21st. In this case there could be no question that the birds migrated from beyond the passes, because none were seen before the date mentioned, even in the highest parts of the valleys at 15,000'-18,000' whilst afterwards they were abundant everywhere and on one occasion in the middle of October we saw them at 4,000' in the Tista Valley. It certainly, I should say, does not breed in Sikkim." (Blanford.) Large numbers observed on migration at 20,000' during the Mount Everest Expedition. (A. F. R. Wollaston.)

238. Guldenstadt's Afghan Redstart. Phœnicurus erythrogastrus grandis (Gould).

Recorded "Himalayas, Kashmir to Sikkim, summer 10,000'-14,000' or even higher in winter, descends to 5,000'." Whatever its winter extreme limit is in the N.-W. Himalayas; there is only a remote chance of meeting with it in Sikkim at this recorded low elevation and that would be in the far interior, where it might occur at Chungthang. Blanford met with it in the Lachen and Lachung valleys at 14,000' in the autumn of 1870; his specimens are in the B. M. Coll., Donkia Pass, 16,500', \Im 20-9-70. Kangra Lama Pass, 14,000', \Im 5-10-70, and represented by four others of which a \Im juv., July 1873 and \Im Q October 1873, were collected by Mandelli. The Mount Everest Expedition obtained this Redstart at an elevation of 17,500'. I have not been fortunate to come across it anywhere in the interior in the winter and as far as its status is in Sikkim; it appears to be well above the snow-line even in winter.

(To be continued.)

Ø