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A REVISED HAND-LIST OF THE BIRDS OF THE CHIENGMAI REGION.

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In a previous volume of this periodical appeared the author's first paper on the birds of Chiengmai and Doi Sutep *.

In the years that have elapsed since its publication, knowledge of the subject has been considerably increased, both by his own work and by that of others, notably the researches of Baron Rodolphe Meyer de Schauensee of Philadelphia (U. S. A.). The total number of forms now known from the district is over four hundred, which, considering the limits arbitrarily set to the area, is sufficiently remarkable. A number of these, as yet found only by the writer, have not been formally recorded in any publication. It is now possible to amplify the first hand-list (while at the same time withdrawing certain doubtfully recorded forms), to correct a number of obvious errors in identification, and to give much more complete information relating to migration and altitudinal range.

A brief survey of local topography was given in the introduction to the previous paper, and to this little is to be added. The only change of major importance during the past five years has been the construction of a motor highway up Doi Sutep to an altitude of 3,300 feet. It is still too early to know what effects this may have

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on the montane avifauna, although it may be supposed that eventually large numbers of people will be enabled to reach the wilder parts of the mountain, and that the transportation now available will lead to the destruction of trees, especially pines, for sale as fuel.

It might be repeated here that the so-called "Chiengmai Region" is roughly a rectangle twenty kilometres east and west and thirty-six kilometres north and south, with Chiengmai-town situated at its centre. While much of this area is more or less lacking in ornithological distinction, yet it does include some comparatively large marshes near its southern edge, is longitudinally bisected by the river Me Ping, and embraces the whole of the mountain known as Doi Sutep. Whereas the city and plain of Chiengmai lie approximately 1,000 feet above sea-level, the summit of Sutep reaches 5,500 feet, and between these extremes are found several quite distinctive biotic zones. For more detailed information, the interested reader is referred to the paper mentioned above.

COLYMBIDAE.

Poliocephalus ruficollis capensis (Salvad.). Indian Little Grebe.

The Grebe occurs irregularly and in small numbers at certain favoured localities throughout the year, except in the dry months of April and May. It seems to be locally a wanderer, since at any one place the number of individuals present fluctuates from week to week. The largest number yet recorded at one time and place was twelve, 8 February, 1930

(Deignan).

PHALACROCORACIDAE.

2. Phalacrocorax niger (Vieill.). Javanese Cormorant.

A rare visitor to the larger ponds and marshes: one, 21-24 July, 1930; two, 30 September, 1931; one, 5 December, 1931 (all by Deignan).

ARDEIDAE.

3. Ardea cinerea rectirostris Gould. Eastern Grey Heron.

This species is widely distributed on the plain, though in small numbers, from 19 October (1931) to 29 March (1929); an exceptionally late individual was seen 26 May, 1930 (Deignan).

- 4. Ardea purpurea manillensis Meyen. Eastern Purple Heron.
 Present, chiefly on the large marshes, from 5 September
 (1930) to 1 November (1930), always in very small numbers.
- 5. Butorides striatus javanicus (Horsf.). Indian Green Heron.
 In this district an uncommon bird along the river; the only records are: two, 20 September, 1935; one, 23 September, 1930; one, 4 October, 1930; one, 2 January, 1929.
- 6. Ardeola bacchus (Bonap.). Chinese Pond-Heron.
- 7. Ardeola grayii (Sykes). Indian Pond-Heron.

Birds of this genus are very common except during the months between March and August, when they are rare or absent. Unless they are in nuptial plumage, it is not possible to distinguish between them in life, but when they are wearing distinctive dress, bacchus seems to be much less numerous than grayii.

- 8. Bubulcus ibis coromandus (Bodd.). Cattle-Egret.

 A very common species from 9 August (1930) to 12

 March (1929), but absent during the remainder of the year.
- 9. Casmerodius albus modestus (*Gray*). Eastern Large Egret.

 Present throughout the year, but much more numerous during the rains, when as many as two hundred can be seen in a single flock on the large marshes.
- 10. Egretta garzetta (Linn.). Little Egret.

 This species, like the preceding, occurs throughout the year, but becomes much more plentiful in the rainy season.
- 11. Mesophoÿx intermedia intermedia (Wagl.). Intermediate Egret.

The only definite record is one taken 17 October, 1931 (Deignan), but there can be little doubt that this species is often overlooked amongst the other and more numerous white Herons.

12. Nycticorax nycticorax nycticorax (Linn.). Common Night-Heron.

A winter visitor which is seldom seen; the extreme dates are 8 September (1930) and 1 February (1933).

13. Ixobrychus sinensis sinensis (Gm.). Yellow Bittern.

Common on the great marshes, rare elsewhere, from 28 June (1930) to 19 September (1931). Two or three were present from 30 January to 11 February, 1936 (Deignan).

- 14. Ixobrychus cinnamomeus (Gm.). Chestnut Bittern.

 This Bittern occurs from 26 January (1931) to 23 October (1929); during the rains it is abundant everywhere.
- 15. Dupetor flavicollis flavicollis (Lath.). Black Bittern. Not uncommon on the great marshes from 26 July (1930) to 19 September (1931); an exceptionally late bird was taken 24 November, 1931 (Deignan).
- 16. Botaurus stellaris (Linn.). Common Bittern.

A very rare winter visitor; one was taken 14 February, 1931 (Deignan), another was frequently seen between 14 January and 14 February, 1936.

CICONIIDAE.

17. Anastomus oscitans (Bodd.). Open-bill Stork.

Fairly common on the large marshes from 5 September (1930) to 1 November (1930). One was observed flying over the city, 10 June, 1930 (Deignan).

ANATIDAE.

18. Gheniscus coromandelianus (Gm.). Indian Pygmy Goose.

Common, principally on the great marshes, from 1 June (1929) to 3 October (1935). There are also a few winter records: one, 20 December, 1930; two, 7 March, 1936 (Deignan).

19. Dendrocygna javanica (Horsf.). Javanese Whistling-Teal.

Abundant on the marshes from 28 June (1930) to 19 September (1931); several were also noted in March, 1936 (Deignan).

20 Querquedula querquedula (Linn.). Garganey.

Present in small numbers from 24 October (1931) to 20 February (1936).

21. Nettion crecca (Linn.). Green-winged Teal.

The only definite record is a bird taken 5 December, 1931 (Deignan), but it is probable that this species occurs rather frequently during the cold weather.

22. Dafila acuta acuta (Linn.). Pintail.

Uncommon from October to 20 February (1936), after which time there is scarcely enough open water for its needs.

23. Nyroca nyroca (Güldenst.). White-eyed Pochard.

An immature male, shot and kindly presented to the writer by Mr. W. Leigh Williams, then of the Bombay-Burmah Trading Corporation, 22 November, 1931, is thus far the only record for Siam.

24. Nyroca baeri (Radde). Baer's Pochard.

A solitary male was seen 30 December, 1930, and a female was taken 3 March, 1936 (Deignan).

ACCIPITRIDAE.

25. Aviceda leuphotes (Dumont). Black-crested Baza.

Four were seen at the foot of Doi Sutep, 20 March, 1936 (Deignan); the only other local record is a male taken 12 March, 1928 (De Schauensee).

- 26. Pernis apivorus ruficollis Less. Indian Honey-Buzzard.
- 27. Pernis apivorus orientalis Tacz. Siberian Honey-Buzzard.

A great incursion of Honey-Buzzards occurred in the cold season of 1935-1936 and specimens were brought the writer from all parts of our area; all of these were taken on the plain except one specimen from Doi Sutep at 3,300 feet. The extreme dates were 1 October, 1935 and 12 May, 1936. On 1 November, no less than six were seen at one time soaring over the city.

28. Milvus lineatus (Gray). Black-eared Kite.

A common winter visitor, especially near the river, from 20 October (1931) to 21 March (1929).

29. Haliastur indus indus (Bodd.). Brahminy Kite.

Very common, especially near the river, every month of the year except April, for which there is but a single record (one, 30 April, 1935).

30. Accipiter gentilis schvedowi (Menzb.). Eastern Goshawk.

An immature male, which came into the writer's possession in November, 1931, is the only specimen yet known from Siam; it had been recently killed and crudely skinned by a peasant. A pair of what may well have been this species were seen flying about the cliffs of Doi Chiengdao at the end of December of the same year (Deignan).

31. Accipiter badius poliopsis (Hume). Burmese Shikra.

A very common lowland species, which often enters town gardens.

32. Accipiter trivingatus indicus (Hodgs. or Pears.). Northern Crested Goshawk.

A female taken 18 December, 1932 (De Schauensee) is the only definite record.

33. Accipiter virgatus nisoides Blyth. Indo-chinese Sparrow-Hawk.

Fairly common in the more open evergreen on Doi Sutep
from 2,500 to 3,500 feet.

Other races of this species occur here during the cold weather.

34. Butastur indicus (Gm.). Grey-faced Buzzard-Eagle.

Of rather rare occurrence in winter in the dry forest on the lower slopes and at the base of Doi Sutep.

35. Butastur liventer (Temm. & Lang.). Rufous-winged Buzzard-Eagle.

Not uncommon in the dry forest, ascending the mountain to at least 2,700 feet.

36. Hieraaëtus kienerii kienerii (*E. Geoff.*). Rufous-bellied Hawk-Eagle.

An adult of this unmistakable bird was observed by the writer, 1 February, 1936, soaring above the summit of Doi

Sutep. On 15 February, a second adult was seen in the foothills just south of our area. In neither case was there any possibility of taking the specimen.

37. Spizaëtus nipalensis fokiensis Kirke Swann. Chinese Hawk-Eagle.

De Schauensee took a female at 4,500 feet, 27 February, 1933; this is the only definite record of its occurrence, but a large proportion of the big Hawks of Doi Sutep seem to belong to this species.

- 38. Aquila rapax vindhiana Frankl. Indian Tawny Eagle.

 The only record is a female taken 20 December, 1928
 (De Schauensee).
- 39. Aquila nipalensis nipalensis Hodgs. Eastern Steppe-Eagle. A male collected by De Schauensee, 20 December, 1928, is the only record.
- 40. Ictinaëtus malayensis (Temm.). Black Eagle. At least one pair of these birds are resident on Doi Sutep at 5,500 feet, and were found to be breeding at that altitude in April and May, 1931.
- 41. Sarcogyps calvus (Scop.). King-Vulture.

 Common on the plain and frequently seen on Doi Sutep, even above the highest ridges.
- 42. Pseudogyps bengalensis (Gm.). Indian White-backed Vulture.

Very common on the plain; large numbers of them roost on the lower slopes of the mountain, as well as in tall trees throughout the city. There is no indication that they breed in our area.

43. Circus melanoleucus (Penn.). Pied Harrier.

A common bird of the ricefields and marshes from 6 October (1931) to 14 March (1930).

44. Circus æruginosus æruginosus (Linn.). Marsh-Harrier.

Rather uncommon in winter; specimens have been taken in December by De Schauensee and Deignan.

45. Hæmatornis cheela burmanicus (Kirke Swann). Burmese Crested Serpent-Eagle.

A common forest bird on Doi Sutep to the summit, and also occurring in small numbers on the plain.

46. Pandion haliaëtus haliaëtus (Linn.). Osprey.

The only record is a solitary adult which was present at a small pond from 29 December, 1930 to 2 January, 1931 (Deignan).

FALCONIDAE.

47. Falco tinnunculus saturatus (Blyth). Burmese Kestrel.

Uncommon in winter from 13 October (1931) to 1 February (1930). There is one record for Doi Sutep, 18 October, 1929 at 3,300 feet (Deignan).

48. Falco peregrinus calidus Lath. Eastern Peregrine.

A rare winter visitor; the only local records are: one 8 November, 1930, and two flying northward, 7 March, 1931 (Deignan).

49. Falco severus severus Horsf. Burmese Hobby.

Three records: one at 1,800 feet, 14 June, 1930 (Deignan); one on the plain, 14 October, 1935 (Deignan); one, 23 December, 1932 (De Schauensee).

50. Microhierax cærulescens burmanicus Kirke Swann. Burmese Red-legged Falconet.

Common on the mountain to 3,000 feet, more rarely to 5,500; on the plain it is widely distributed in winter.

51. Neohierax insignis cinereiceps (Stuart Baker). Tenasserim Falcon.

An uncommon winter visitor to the dry forest on the lowest slopes of Doi Sutep; it is here from 23 October (1930) to 28 January (1933).

PHASIANIDAE.

52. Excalfactoria chinensis chinensis (Linn.). Blue-breasted Quail.

The only record is a male taken on the plain, 28
February, 1931 (Deignan).

53. Coturnix coturnix japonica Temm. & Schleg. Japanese Grey Quail.

A female taken by the writer, 31 October, 1935, is the only example recorded from Siam. The bird was solitary, feeding in a grassy area amongst ricefields.

54. Francolinus pintadeanus phayrei (*Blyth*). Phayre's Burmese Francolin.

A fairly common species in the dry forest of the plain and the lower slopes of the mountain, and occasionally met with in the open oak forest at 4,600 feet.

55. Tropicoperdix chloropus chloropus Elyth. Green-legged Hill-Partridge.

Of rare occurence in the heavy evergreen on Doi Sutep. De Schauensee took a male at 4,500 feet, 3 February, 1933, and an immature bird was collected by Deignan at 3,500 feet, 24 August, 1935.

56. Arborophila brunneopectus brunneopectus (*Blyth*). Brownbreasted Hill-Partridge.

Common in the evergreen from 3,500 feet to the summit of Doi Sutep.

57. Arborophila rufogularis tickelli (*Hume*). Tenasserim Rufousthroated Hill-Partridge.

Common in the heavy evergreen from 4,500 to 5,500 feet.

58. Gallus gallus gallus (Linn.). Red Jungle-fowl.

This bird is still rather common in the vicinity of Doi Kham, a low projection at the southern end of Doi Sutep, where there is extensive dry, deciduous forest, and rare elsewhere in the deciduous forest of the plain and lower mountain slopes. De Schauensee records one taken at 2,500 feet on Doi Sutep. Whether Jungle-fowl occur naturally in the mountain evergreen is doubtful: fowls are kept at most of the hill-bungalows by the native watchmen, and probably wander off occasionally into the jungle.

59. Syrmaticus humiæ burmanicus (Oates). Burmese Barredbacked Pheasant.

This Copper Pheasant occurs uncommonly in the open oak forest above 4,600 feet.

60. Gennæus nycthemerus ripponi Sharpe. Yunnan Silver Pheasant.

Uncommon from 4,600 to 5,500 feet.

TURNICIDAE.

61. Turnix suscitator interrumpens Rob. & Stuart Baker. Tenasserim Hemipode.

Common in waste lands on the plain.

62. Turnix maculatus maculatus Vieill. Burmese Hemipode.

Common on the plain in the same localities as the preceding species.

Birds of this genus occur sparingly in open places on Doi Sutep up to 5,500 feet, but no specimens have yet been taken.

There is a popular belief here that fire will not burn where Hemipodes make their home, and for this reason they are frequently kept caged in houses as a cheap form of fire insurance.

GRUIDAE.

63. Antigone antigone sharpii (Blanf.). Burmese Sarus Crane.

The Cranes seem never to alight within our area, but are frequently seen during the cold weather flying north or south, high overhead. They are recorded here from 8 December (1931) to 23 March (1930).

RALLIDAE.

64. Rallus aquaticus indicus Blyth. Indian Water-Rail.

A solitary bird was seen 28 February, 1931 (Deignan); in the week of 4-11 February, 1936, the species was locally rather common and three specimens were taken by the writer.

65. Rallus striatus gularis Horsf. Indian Blue-breasted Rail.

Apparently rare. Specimens have been taken in November, 1930; 23 and 28 June, 1935 (Deignan).

Porzana pusilla pusilla (Pall.). Eastern Baillon's Crake.

A rare bird of passage; the only records are: one, 4 February, 1936; one, 30 March, 1929; one, 26 April, 1935 (Deignan).

- 67. Porzana fusca bakeri Hartert. Northern Ruddy Crake. Rare and local from 28 January (1936) to 8 May (1935).
- 68. Amaurornis phænicurus chinensis (Bodd.). Chinese Whitebreasted Rail.

Very common on the plain throughout the year.

Gallinula chloropus indicus Blyth. Indian Moorhen. 69.

The Moorhen appears in winter locally and in small numbers; it is present from 19 September (1931) to 30 March (1929).

70. Gallicrex cinerea (Gm.). Water-cock.

A common bird in the ricefields and marshes from 5 March (1931) to 26 September (1931).

71. Porphyrio poliocephalus poliocephalus (Lath.). Indian Purple Coot.

This fine species, which occurs only on the largest marshes, is locally common from 28 June (1930) to 1 November (1930); a solitary bird was seen 11 February, 1936 (Deignan).

72. Fulica atra atra Linn. Common Coot.

A specimen was taken locally 17 November, 1931 (Deignan). In December of the same year, the Coot was found to be very common on a great marsh some fifty miles south of Chiengmai. As there are no other formal records for Siam, it is impossible to say whether this species is present regularly in winter, or whether it appears only occasionally.

JACANIDAE.

Metopidius indicus (Lath.). Bronze-winged Jacana. 73.

This bird has not yet been recorded in October and November, but presumably occurs in small numbers, since it may be found locally even during the driest months.

74. Hydrophasianus chirurgus (Scop.). Pheasant-tailed Jacana. Somewhat less common than the preceding species and not yet recorded between 26 March (1929) and 26 July (1930).

ROSTRATULIDAE.

75. Rostratula benghalensis benghalensis (*Linn.*). Painted Snipe. While this bird is present throughout the year, it is common and generally distributed only during the rains.

CHARADRIIDAE.

- 76. Hoplopterus duvaucelii (Less.). Indian Spur-winged Plover.
 - The Spur-wing is usually to be found on some extensive sandbars of the Me Ping, a few miles above Chiengmai, or on the dry ricefields immediately behind them. The number present at any one time varies greatly; they seem to be more numerous during the rains. The largest flock recorded was twenty-five birds, 1 August, 1931.
- 77. Lobivanellus indicus atronuchalis Jerd. Burmese Red-wattled Lapwing.

A common resident of the plain.

- 78. Microsarcops cinereus (Blyth). Grey-headed Lapwing. A fairly common winter visitor from 8 September (1930) to 14 March (1930).
- 79. Charadrius dubius jerdoni (Legge). Jerdon's Ringed Plover.

 This attractive little bird has been recorded every month of the year, chiefly on the river sandbars, but also in sloughs and rice-fields; it probably breeds in small numbers. It is very common from September to March, when its numbers are augmented by visitors from the north.
- 80. Charadrius placidus *Gray*. Long-billed Ringed Plover.

 One example was collected from a flock of the preceding species, 22 December 1928 (De Schauensee).
- 81. Charadrius alexandrinus dealbatus (Swinh.). Chinese Kentish Ployer.

Fairly common on the river sandbars from 3 October (1935) to the end of March; it has also been recorded in June and August, so a very small number of them may be present throughout the year.

82. Pluvialis dominicus fulvus (Gm.). Eastern Golden Plover.

A very uncommon winter visitor, or possibly merely a bird of passage, since it has been recorded only in October and February; the extreme dates are 4 October (1930) and 17 February (1932). It occurs in small flocks on dry ricefields.

SCOLOPACIDAE.

83. Scolopax rusticola rusticola Linn. Common Woodcock.

An uncommon but regular winter visitor on the plain; it has been recorded here from 1 January (1931) to 3 March (1932).

- 84. Capella gallinago gallinago (Linn.). Fantail Snipe.
- 85. Capella stenura (Bonap.). Pintail Snipe.

Snipe are abundant migrants and common winter residents at all suitable places on the plain, occurring from 22 August (1931) to 25 April (1935). While it is difficult to distinguish between the two species in the field, there is reason to believe that stenura arrives earlier and leaves later than gallinago; stenura seems to be the more numerous during the months of migration, gallinago during the winter.

The writer, in his previous paper, erroneously listed Capella megala (Swinh.), due to misidentification of a specimen of stenura; there is still no good record for its occurrence in Siam.

86. Actitis hypoleucos (Linn.). Common Sandpiper.

Very common everywhere in the lowlands from 1 August (1931) to 3 April (1931).

87. Tringa ocrophus Linn. Green Sandpiper.

Common from September to 28 March (1931); one, 11 July, 1931 (Deignan).

- 88. Rhyacophilus glareola (Linn.). Wood-Sandpiper.

 Abundant from September to 14 March (1930); one, 11
 July, 1931 (Deignan).
- 89. Pisobia subminuta (Middend.). Long-toed Stint.

 Two records: 30 January, 1932 (Deignan); 26 January, 1933 (De Schauensee).
- Pisobia temminckii (Leisl.). Temminck's Stint.
 Common from 1 November (1935) to 16 February (1932).
- 91. Glottis nebularius (Gunn.). Common Green-shank.

 Two records: one, 4 October, 1930; two, 20 September,
 1935 (Deignan).

BURHINIDAE.

92. Esacus recurvirostris (Cuvier). Great Stone-plover.

The only record is a solitary bird on some large sandbars of the Me Ping, a few miles above the city, 15 and 22 December, 1928 (Deignan).

GLAREOLIDAE.

- 93. Glareola maldivarum Forst. Large Indian Pratincole. An irregular visitor in small numbers from 23 March (1929) to 27 June (1931).
- 94. Glareola lactea Temm. Small Indian Pratincole.

This species, like the preceding, occurs irregularly, and is even less common. The only records are: one, 9 March, 1929; two, 23 March, 1929; about twenty, 8 December, 1931 (Deignan).

LARIDAE.

The only record for the occurrence of any member of this family is an unidentified Tern seen 5 December, 1931, above one of the large marshes south of Chiengmai. The bird was fairly high and flying northward. Unfortunately, not only was the distance too great for a shot, but the light was too poor to admit of positive identification of species.

COLUMBIDAE.

95. Crocopus phænicopterus viridifrons (Blyth). Burmese Green Pigeon.

An irregular visitor, sometimes common; it seems to be present chiefly during the rains.

96. Treron curvirostra nipalensis (Hodgs.). Small Thick-billed Green Pigeon.

Like the last, this bird is an irregular visitor; it has been recorded in May and October.

97. Sphenocercus apicaudus apicaudus (Blyth). Pin-tailed Green Pigeon.

A rare bird in the evergreen from 4,600 to 5,500 feet.

98. Sphenocercus sphenurus sphenurus (Gould). Wedge-tailed Green Pigeon.

Uncommon in the evergreen from 3,000 to 5,000 feet; so far, it has been recorded only in November and December.

99. Ducula badia griseicapilla Wald. Grey-headed Imperial Pigeon.

A very common resident of the mountain evergreen from 3,500 to 5,500 feet, occasionally as low as 2,800.

100. Muscadivora ænea sylvatica (*Tick.*). Indian Green Imperial Pigeon.

Once taken on Doi Sutep in October; this species is plentiful in other parts of North Siam where there is lowland evergreen.

- 101. Chalcophaps indica indica (Linn.). Indian Emerald Dove.

 On the mountain this little bird is common in the evergreen from 2,000 to 3,300 feet.
- 102. Columba livia intermedia Strickl. Indian Blue Rock-Pigeon.

 This introduced species is common on the plain in a feral state.
- 103. Streptopelia chinensis tigrina (Temm. & Knip). Burmese Spotted Dove.

An abundant bird everywhere in the lowlands.

104. Streptopelia orientalis meena (Sykes). Indian Rufous Dove.

Rather uncommon in the dry, deciduous forest of the

plain and the lower mountain slopes; it has been recorded only in the months of March, May, and August.

105. Enopopelia tranquebarica humilis (Temm. & Laug.). Burmese Red Turtle-Dove.

Common in the lowlands, especially near the river.

106. Macropygia unchall tusalia (Blyth). Bar-tailed Cuckoo-Dove.

An uncommon bird of the evergreen from 2,700 to 5,500 feet; it has been recorded only from February to September.

 Macropygia ruficeps assimilis Hume. Burmese Little Cuckoo-Dove.

A rare species of the evergreen; it has been recorded four times between 3,500 and 5,500 feet, in the months of March, July, September, and December.

108. Geopelia striata striata (Linn.). Barred Ground-Dove.

This species was introduced from Java by H. H. Chao Keo Nawarat na Chiengmai, the present Hereditary Chief of Chiengmai. While the exact date has not been ascertained, it is said that the birds were brought in before the railway reached Chiengmai, and that they were released where the railway station now stands. They have become fairly common about certain villages within a radius of some ten kilometres of the place of release. That the foreign provenance of the species is well known to the villagers, is shewn by the vernacular name, "nok khao cha-wa," or "nok khao ya-wa."

PSITTACIDAE.

109. Psittacula eupatria indoburmanica (Hume). Large Burmese Paroquet.

Irregularly present in our area at any season.

110. Psittacula cyanocephala bengalensis (Forst.). Eastern Blossom-headed Paroquet,

Between twenty and thirty, two of which were adult males, were found on the plain, 19 March, 1931 (Deignan).

111. Psittacula himalayana finschi (Hume). Burmese Slatyheaded Paroquet.

A rare and irregular visitor to Doi Sutep. The only records are: five at 3,300 feet, 21 February, 1931 (Deignan); three at 3,300 feet, 12 March, 1932 (Deignan); at least one at 3,200 feet, 19 December, 1932 (De Schauensee).

112. Psittacula alexandri fasciata (Müller). Indian Red-breasted Paroquet.

Irregularly common on the plain, sometimes abundant; occasionally found on Doi Sutep to 4,600 feet. This species, like its congeners, wanders widely in accordance with the ripening of various fruits.

113. Coryllis vernalis vernalis (Sparrm.). Indian Loriquet.

Not uncommon in the more open evergreen from 3,000 to 3,500 feet; the only lowland record is a solitary bird seen 4 September, 1930 (Deignan).

CUCULILAE.

114. Cuculus canorus bakeri Hartert. Khasya Hills Cuckoo.

A specimen, presumably of this form, was taken at 2,100 feet, 7 March, 1931 (Deignan).

115. Cuculus micropterus micropterus Gould. Indian Cuckoo.

There are no records for this species except during the song-season, which runs from 12 March (1932) to 7 June (1930). They are heard from 2,700 to 5,500 feet.

116. Hierococcyx sparverioides sparverioides (Vigors). Large Hawk-Cuckoo.

A rather common resident from 2,700 to 5,500 feet, but rarely seen, and then likely to be mistaken for an accipitrine Hawk. It is heard singing from 21 February (1931) to 14 June (1930).

117. Cacomantis merulinus querulus Heine. Burmese Plaintive Cuckoo.

The local status of this bird is very curious. On 27 February (1930, 1931, 1932), it appears in numbers and thereafter can be heard singing everywhere in the lowlands until mid-June. During the rains its numbers decrease until by September it has become a rare bird; between September and the following February it is recorded only about once a month, except in November, when it seems to be completely absent. Immature birds are very seldom seen. It would be interesting to correlate these facts with its movements as observed in other parts of Siam.

118. Penthoceryx sonneratii sonneratii Lath. Indian Banded Bay Cuckoo.

A rather rare winter visitor, occurring both on the plain and on the mountain to 4,600 feet. The extreme dates are 9 November (1930) and 22 March (1930).

- 119. Chalcites maculatus maculatus (Gm.). Indian Emerald Cuckoo. Rare from 4,600 to 5,500 feet, once (30 December, 1931), at 2,300 feet. It has been met with only from December to February.
- 120. Surniculus lugubris dicruroides (Hodgs.) Indian Drongo-Cuckoo.

Apparently rare; it has been found in March, August, and September, both on the plain and on Doi Sutep to 4,000 feet, in open forest. It is, without doubt, often mistaken for a Drongo and thus overlooked.

121 Clamator coromandus (Linn.). Red-winged Crested Cuckoo.

This species occurs chiefly as an uncommon migrant, passing through our area between 3 September (1930) and 16 November (1929), and again between 9 February (1929) and 8 March (1929). An immature bird was brought to the writer, 19 July, 1935, and an adult was seen, 27 July, 1935. It is usually found in villages.

122. Eudynamis scolopaceus malayanus Cab. & Heine. Malay Koel.

The Koel has been recorded only during the song-season, which runs from March to May; at that time it is not uncommon in the dry, open forest on the lower slopes and at the foot of the mountain.

123. Rhopodytes tristis longicaudatus (Blyth). Large Malay Green-billed Malkoha.

A common resident in thickets on the plain; on Doi Sutep it occurs in the more open evergreen from 2,000 to 4,500 feet.

- 124. Centropus sinensis intermedius (*Hume*). Hume's Coucal. Common on the plain at brushy places.
- 125. Centropus benghalensis benghalensis (*Gm.*). Lesser Coucal.

 Fairly common in winter on the plain and up to 5,500 feet in high grass and thickets; it is present from 2 November (1931) to 2 April (1931).

TYTONIDAE.

126. Tyto alba javanica (Gm.). Javanese Barn-Owl. A common lowland species, especially in the city.

STRIGIDAE.

127. Strix leptogrammica newarensis (Hodgs.). Himalayan Brown Wood-Owl.

Apparently very rare in the evergreen at 5,500 feet where but one specimen has been taken (Aagaard).

128. Ketupa zeylonensis leschenaulti (Temm. & Laug.). Bengal Brown Fish-Owl.

A specimen was taken in the dry forest at the foot of Doi Sutep, 25 October, 1231; another, near the village of San Kampheng, 2 March, 1932 (Deignan).

129. Otus bakkamœna letta (*Hodgs.*). Burmese Collared Scops-Owl.

A common resident of the city, and probably equally so in the out-villages.

In the writer's previous paper, Otus sunia modestus (Wald.) was listed on the basis of De Schauensee's record of Otus giu, a synonym. Inasmuch as these Owls are difficult of identification, O. b. lettia is very common in the district, and no other collector has yet taken O. s. modestus, it seems best to withdraw the latter from the list until there is further evidence of its occurrence.

Athene brama pulchra Hume. Burmese Spotted Owlet. 130.

A very common lowland species which is largely diurnal; its weird cries are a familiar sound in city gardens.

- 131. Glaucidium cuculoides brugeli Parrot. Siamese Barred Owlet. Not uncommon in the dry forest on the plain, and ascending Doi Sutep to the summit.
- Glaucidium brodiei tubiger (Hodgs.). Eastern Collared Pygmy 132. Owlet

Seldom seen but frequently heard on the mountain from 2,700 to 5,500 feet; its song is heard every month in the year.

Ninox scutulata burmanica Hume. Burmese Brown Hawk-133. Owl.

An apparently rare species of the plain, recorded in January, February, July (once), and October.

CAPRIMULGIDAE.

134. Caprimulgus macrurus ambiguus Hartert. Burmese Longtailed Nightjar.

Locally common on the plain.

135. Caprimulgus monticolus burmanicus Stuart Baker. Burmese Mountain-Nightjar.

Locally common on the plain.

Caprimulgus asiaticus siamensis De Schauens.* 136 De Schauensee's Nightjar.

Locally common on the plain and the lowest slopes of Doi Sutep.

^{*} Proc. Acad. Nat. Sci. Philadelphia, v. 85, 1933, p. 373.

Needless to say, the various members of this genus are distributed over all types of country when hunting, and are local only in so far as their resting-places are concerned. The first two species are found at places where there is short grass and low bush-cover; siamensis prefers the rocks and hard ground of the dry forest. The Nightjars of North Siam seldom or never rest on the branches of trees.

MICROPODIDAE.

137. Micropus affinis subfurcatus (Blyth). Malay House-Swift.

Several dozen were seen over a small pond with Cypsiurus, 10 August, 1929. On 11 and 12 May, 1935, a species of Micropus, presumably this one, was common above the summit of Doi Sutep. The House-Swift is very local in North Siam, and never a domestic species as it is in some parts of its range. In April and May, 1931, a breeding-colony was found at Doi Angka; the nests were built against a rock precipice.

138. Cypsiurus batassiensis infumatus (Sclater). Eastern Palm-Swift.

An abundant species wherever there are Palmyra and coconut palms.

139. Hirundapus giganteus indicus (Hume). Brown-throated Spine-tail.

Rather common over the highest ridges of Doi Sutep from 26 September (1936) to 2 April (1931).

140. Collocalia fuciphaga innominata Hume. Oustalet's Greyrumped Swiftlet.

This Swiftlet occurs irregularly throughout the year, from the foot of the mountain to 5,500 feet.

HEMIPROCNIDAE.

141. Hemiprocne coronata (Tick.). Indian Crested Swift.

A common resident of the plain; it occurs rarely on the mountain to 3,300 feet.

142. Harpactes erythrocephalus erythrocephalus (Gould). Redheaded Trogon.

A common bird in the evergreen, especially in shady, watered ravines, from 2.500 to 5,500 feet.

143. Harpactes oreskios uniformis (Rob.). Robinson's Yellow-breasted Trogon.

Somewhat less common than the preceding species, but occurring with it from 2,500 to 5,500 feet; at the lower limit of its altitudinal range it is found occasionally in the dry, deciduous forest.

ALCEDINIDAE.

144. Ceryle rudis leucomelanura Reichenb. Indian Pied Kingfisher.

Fairly common at certain seasons, chiefly along the river. It appears with the rains at the end of May and is present until the end of September. There is no record for October or Nevember, but it occurs again in December and stays until the end of March; during these months it is at its greatest abundance. It is a very conspicuous bird and probably seems more numerous than it really is.

145. Alcedo atthis bengalensis *Gm*. Common Indian Kingfisher.

A very common species on the plain, except during the

driest months (early April to early June), when it completely disappears.

146. Ramphalcyon capensis burmanica (Sharpe). Burmese Storkbilled Kingfisher.

Since this bird requires rather deep water, it occurs here only locally and in small numbers; it is absent from 25 March (1929) to 29 June (1929), and has not yet been recorded in August.

147. Halcyon smyrnensis fusca (Bodd.). Indian White-breasted Kingfisher.

This is the only Kingfisher present every month of the year, but its numbers are much decreased in April and May. It is a lowland bird, but ascends the mountain a few hundred feet along the larger streams.

148. Lacedo pulchellus amabilis (Hume). Pegu Banded Kingfisher.

Apparently an uncommon species, but probably often overlooked, for it inhabits the evergreen and is usually a very silent bird. It occurs from 2,200 to 3,800 feet, and has been recorded from 17 November (1931) to 20 February (1932), and again from 29 July (1931) to 29 August (1931). It is without doubt present at other seasons as well.

MEROPIDAE.

149. Merops orientalis birmanus Neumann. Burmese Green Beeeater.

An abundant lowland species and often seen on the slopes of Doi Sutep to 1,800 feet; a straggler was found at 5,525 feet (the highest point of the mountain), 26 February, 1932 (Deignan).

150. Merops superciliosus javanicus Horsf. Brown-breasted Bee-eater.

Locally common during the rains at marshes and along the river; it is present from 25 May (1935) to 5 September (1930). An exceptional record is three birds, 5 and 9 March, 1931 (Deignan).

151. Merops leschenaulti leschenaulti Vieill. Bay-headed Bee-eater.

This species has the most limited range of any bird of regular occurrence here. Two or three pairs occur at 5,500 feet from 28 February (1933) to 10 May (1930), breeding at this place in April. During their stay they confine themselves to an open space a few hundred feet long and less than one hundred wide, bordered by evergreen jungle, which they do not enter. A single specimen taken at 4,600 feet in the spring of 1931 (Aagaard) constitutes the only exceptional record.

152. Alcemerops athertoni (Jard. & Selby). Blue-bearded Bee-eater.

An uncommon bird on Doi Sutep from 2,800 to 5,500 feet. There is some evidence that this species is locally migratory in the fact that on 25 June, 1930, a pair were seen on the plain, and nearby one or two others; on 3 July, 1930, a

single bird was found in the same neighbourhood; one or twowere seen in dry, lowland scrub, 1 August, 1931; and a lowland specimen was taken 27 June, 1935 (Deignan).

CORACIIDAE.

153. Coracias benghalensis affinis Horsf. Burmese Roller.

Common on the plain and sometimes seen on the lowest slopes of the mountain. There is but one record for May, in which month it may be breeding.

UPUPIDAE.

154. Upupa epops longirostris Jerd. Burmese Hoopoe.

Rather common on the plain; it rarely straggles up Doi Sutep, where it has been recorded at 2,000, 2,600, and 4,500 feet.

BUCEROTIDAE.

155. Dichoceros bicornis (Linn.). Great Hornbill.

A common resident of the mountain evergreen, where the trees are tallest, from 3,300 to 4,600 feet. There appears to be some sort of migratory movement in this species, doubtless induced by the seasons of fruits: a flock of ten were seen 13 December, 1930, at 2,000 feet, flying straight and high from the plain toward the mountain; on 20 December of the same year, a flock of six were seen over the city, so high as to be almost invisible to the naked eye, flying directly toward Doi Sutep.

156. Hydrocissa malabarica leucogastra (Blyth). Burmese Pied Hornbill.

An uncommon bird of the dry forest at the base and on the lower slopes of the mountain; it has been found up to 2,200 feet. It has been recorded only from November to-February.

157. Rhyticeros undulatus (Shaw). Malay Wreathed Hornbill.

An adult of this species, said to have been taken from a nest on the mountain and reared in captivity, was given the writer by a monk at the Wat on Doi Sutep. The bird was blind in both eyes. During several months in which the specimen was kept alive in the garden, it ate nothing but fruit and never touched water. There is no other record for our area, but the species is sufficiently common in North Siam, and might escape detection in the heavy forest it inhabits.

158. Aceros nipalensis (Hodgs.). Rufous-necked Hornbill.

Uncommon in dense evergreen from 3,800 to 5,500 feet; it is usually found in small flocks, occasionally on the ground.

159. Ptilolæmus tickelli tickelli (Blyth). Tickell's Hornbill.

A single record: a male taken at 3,500 feet, 22 February, 1933 (De Schauensee).

CAPITONIDAE.

- 160. Megalaima virens virens (Bodd.). Great Chinese Barbet.
 Very common in the evergreen from 2,700 to 5,500 feet.
- 161. Thereiceryx lineatus intermedius Stuart Baker. Burmese Lineated Barbet.

Very common in the dry forest on Doi Sutep up to 2,200 feet, less so on the plain.

162. Cyanops asiatica davisoni (*Hume*). Davison's Blue-throated Barbet.

Very common in the evergreen from 2,700 to 4,600 feet.

163. Cyanops duvaucellii cyanotis (Blyth). Indian Blue-eared Barbet.

Apparently rare; it is recorded at 5,500 feet in January and August.

164. Cyanops franklinii ramsayi (Wald.). Ramsay's Golden-throated Barbet.

Abundant from 4,500 to 5,500 feet, rarely down to 2,500 feet.

165. Xantholæma hæmacephala indica (Lath.). Burmese Crimson-breasted Barbet.

The Coppersmith is abundant everywhere in the low-lands.

PICIDAE.

166. Picus vittatus eisenhoferi (Gyld.). Siamese Scaly-bellied Green Woodpecker.

An uncommon bird amongst bamboos and in dry forest, on the plain and on Doi Sutep to 2,000 feet.

167. Picus canus hessei (Gyld.). Burmese Black-naped Green Woodpecker.

Uncommon, in the same places as the preceding species, on the plain and on Doi Sutep to 3,200 feet.

168. Picus chlorolophus chlorolophoides (Gyld.). Burmese Smaller Yellow-naped Woodpecker.

A common species of the evergreen from 2,400 to 5,500 feet.

169. Picus erythropygius nigrigenis (Hume). Red-rumped Green Woodpecker.

Rather uncommon in the dry forest, on the plain and on the mountain to 2,700 feet.

170. Chrysophlegma flavinucha lylei Kloss.. Siamese Larger Yellow-naped Woodpecker.

Fairly common in the evergreen from 2,700 feet to the summit.

- 171. Dryobates atratus (Blyth). Stripe-breasted Pied Woodpecker.

 Rather common on Doi Sutep from 4,500 feet to the summit.
- 172. Dryobates analis longipennis (*Hesse*). Siamese Pied Woodpecker.

A common lowland bird, more or less confined to groves of *Butea frondosa*.

173. Dryobates hardwickii canicapillus (Blyth). Burmese Pygmy Woodpecker.

Common in the dry forest of the lower slopes to 2,700 feet, less so on the plain. It occurs occasionally in the open oak forest from 3,300 to 4,600 feet.

174. Blythipicus pyrrhotis pyrrhotis (Hodgs.). Red-eared Bay Woodpecker.

Two records: a pair at 3,500 feet, 23 February, 1930; one at 3,500 feet, 25 July, 1936 (Deignan).

175. Micropternus brachyurus phaioceps Blyth. Northern Rufous Woodpecker.

A fairly common resident in tall bamboo and dry forest on the plain and the lowest slopes of Doi Sutep.

176. Dinopium javanense intermedium (Blyth). Burmese Goldenbacked Three-toed Woodpecker.

An uncommon species on the plain and on the mountain to 2,000 feet.

177. Chrysocolaptes guttacristatus guttacristatus (*Tick.*). Tickell's Golden-backed Four-toed Woodpecker.

Uncommon on the plain and to the summit of Doi Sutep.

178. Mülleripicus pulverulentus harterti Hesse. Indian Great Slaty Woodpecker.

This magnificent species appears irregularly on Doi Sutep between 2,200 and 2,700 feet in the dry forest. Three birds were present from 9 January to the end of March, 1932; two were found 25 July, 1936 (Deignan).

179. Macropicus crawfurdi crawfurdi (*Griff.*). Burmese Great Black Woodpecker.

Of rare occurrence on Doi Sutep. The only definite records are; two, 2,000 feet, 9 January, 1932; one, 1,500 feet, 1 and 8 March, 1932; one, 1,750 feet, 29 July, 1931 (Deignan). It has also been reported once or twice in the open forest at 4,600 feet.

180. Vivia innominata malayorum (Hartert). Malay Speckled Piculet.

Not uncommon on Doi Sutep from 2,200 to 4,600 feet.

181. Sasia ochracea reichenowi Hesse. Burmese Rufous Piculet. A single record: one on the plain in bamboo, 2 July, 1930 (Deignan).

182. Jynx torquilla japonica Bonap. Japanese Wry-neck. A fairly common winter visitor on the plain from 18 September (1936) to 14 March (1931).

EURYLAIMIDAE.

183. Corydon corydon laoensis De Schwiens. Siamese Dusky Broadbill.

This race was described from three specimens taken at 3,300 feet on Doi Sutep by De Schauensee in 1928; since that time no collector has met with the species in our area.

184. Serilophus lunatus lunatus (Gould). Silver-breasted Broadbill.

Of rare occurrence in flocks from 2,700 to 5,300 feet,

185. Psarisomus dalhousiæ dalhousiæ (Jameson). Long-tailed Broadbill.

A rare bird of the evergreen from 3,300 to 4,600 feet.

PITTIDAE.

186. Pitta oatesi oatesi (Hume). Fulvous Pitta.

Three records: a pair, 5,400 feet, 3 and 10 February, 1936 (Deignan); a pair at "Chiengmai," 10 February, 1933 (De Schauensee).

187. Pitta cyanea cyanea Blyth. Blue Pitta.

This bird, which lives on or near the ground in the thickest evergreen, is apparently rare; it has been recorded from 3,500 to 5,000 feet in the months of February, May, August and December.

ALAUDIDAE.

188. Mirafra assamica marionæ Stuart Baker. Siamese Bush-Lark.

Very common on the plain in dry places with light bush-cover,

HIRUNDINIDAE.

- 189. Delichon urbica nigrimentalis (Hartert). Fohkien House-Martin.
- 190. Delichon urbica whiteleyi (Swinh.). Siberian House-Martin.

 House-Martins are irregularly common in winter, both on the plain and on Doi Sutep. The few that have been collected indicate that whiteleyi is the bird of the lowlands, while

nigrimentalis occurs only the mountain; further collecting may show, however, that the altitudinal ranges of the two overlap or coincide. On the plain they are present from 23 November (1929) to 20 March (1931); on the mountain from 15 November (1930) to 2 April (1931).

House-Martins were found to be very numerous at 5,500 feet on the exceptionally late dates of 11 and 12 May, 1935 (Deignan).

De Schauensee's record for *D. u. cashmeriensis* (Gould) on Doi Sutep is doubtless due to misidentification of *nigrimentalis*.

- 191. Hirundo rustica gutturalis Scop. Eastern Common Swallow.

 These Swallows appear between 13 July (1935) and 21
 July (1929, 1930), and thereafter are irregularly common on the plain until the following spring. The latest date is 29
 March (1929).
- 192 Hirundo daurica nipalensis *Hodgs*. Hodgson's Red-rumped Swallow.
- 193. Hirundo daurica striolata Temm. & Schleg. Chinese Redrumped Swallow.

A single specimen of *striolata* was taken by Williamson's collector in June, 1917; all other local specimens have been *nipalensis*. Like the other Swallows, this bird is highly erratic in its appearances: it is irregularly common from 23 November (1929) to 24 July (1930), and in the other months completely absent. It occurs both on the plain and on Doi Sutep to 5,500 feet.

- 194. Hirundo smithii filifera Steph. Indian Wire-tailed Swallow.
 - This Swallow, whose occurrence in the Me Ping Gorges has been recorded elsewhere by the writer, was noted at one locality on the plain from 28 January to 14 February, 1936, the number of birds seen at one time never exceeding four. A specimen was taken on 30 January.
- 195. Krimnochelidon concolor sitaungensis Stuart Baker. Shan States Dusky Crag-Martin.

The only example taken within our area was collected by De Schauensee at 4,500 feet, 13 July, 1933. The species occurs irregularly throughout the year, most frequently at 5,500 feet. It has also been found at Doi Chiengdao in December (Deignan) and in January (De Schauensee), and Riley records it in April and November from Doi Nangka. *

CAMPEPHAGIDAE.

 Pericrocotus flammeus fraterculus Swinh. Burmese Scarlet Minivet.

A common bird of the evergreen from 2,700 to 5,500 feet.

- 197. Pericrocotus brevirostris affinis (Horsf.). Assam Short-billed Minivet.
- 198. Pericrocotus brevirostris neglectus Hume. Hume's Shortbilled Minivet.

Both races of this species have been recorded from Doi Sutep by Chasen and Kloss, and again by De Schauensee. The former has been taken from 1,000 to 4,600 feet, the latter from 4,000 to 5,500. Since Short-billed Minivets are found below 4,600 feet only during the cold weather, it seems safe to say that affinis is present only as a winter visitor, whilst neglectus is the breeding form of the mountain.

- 199. Pericrocotus solaris solaris Blyth. Yellow-throated Minivet.

 Common in the evergreen from 4,500 to 5,500 feet.
- 200. Pericrocotus cinnamomeus vividus Stuart Baker. Barmese Small Minivet.

An uncommon winter visitor from 12 December (1932) to the end of March (1932), occurring from 1,200 to 2,800 feet.

201. Pericrocotus roseus roseus (Vieill.). Rosy Minivet.

A rather rare winter visitor on the mountain between 1,500 and 3,500 feet. It is present from 16 December (1928) to 23 January (1932).

^{*} Mr. Riley's "Nangka" seems to be a mis-spelling of Rangka, a mountain about thirty miles north-east of Chiengmai; it should not be confused with Angka, more than 8,000 feet high, which lies some forty miles south-west of Chiengmai.

- 202. Lalage melaschista (Hodgs.). Dark Grey Cuckoo-shrike. A fairly common bird in the evergreen from 2,000 to 4,600 feet.
- 203. Coracina javensis siamensis (Stuart Baker). Siamese Large Cuckoo-shrike.

Very common in open forest from the base of Doi Sutep to the summit; casual on the plain.

DICRURIDAE.

- 204. Dicrurus macrocercus cathœcus Swinh. Chinese Black Drongo.

 An abundant permanent resident on the plain.
- 205. Dicrurus macrocercus thai Kloss. Siamese Black Drongo.

 De Schauensee attributes to this race a bird collected on the plain, 31 January, 1933.
- **206.** Dicrurus leucophæus mouhoti (*Wald.*). Mouhot's Pale Ashy Drongo.

Common on Doi Sutep from 2,000 to 4,500 feet.

- 207. Chaptia ænea malayensis Blyth. Malayan Bronzed Drongo.

 Very common in the evergreen from 3,000 to 5,500 feet.
- 208. Chibia hottentotta hottentotta (Linn.). Indian Hair-crested Drongo.

Rather common in the dry forest from the base of Doi Sutep to 2,700 feet. It has not yet been recorded in July and August.

209. Chibia hottentotta brevirostris Cab. & Heine. Chinese Haircrested Drongo.

Uncommon from October to January on the topmost ridges of the mountain.

210. Bhringa remifer latispatula De Schauens. Broad-racqueted Drongo.

Very common in the evergreen from 2,700 to 5,500 feet, especially above 3,300 feet.

211. Dissemurus paradiseus rangoonensis (Gould). Burmese Large Racquet-tailed Drongo.

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Common in dry forest on the plain and lower slopes to 2,700 feet, less so in the evergreen to 3,500 feet.

ORIOLIDAE.

212. Oriolus chinensis tenuirostris Blyth. Burmese Black-naped Oriole.

Rather common in winter from 3,000 to 5,500 feet. It is present from 18 October (1929) to the end of March (1932).

213. Oriolus xanthornus xanthornus (Linn.). Indian Black-headed Oriole.

Uncommon throughout the year in the dry forest of the plain and the lower slopes to 2,850 feet.

214. Oriolus traillii trailli (Vig.). Maroon Oriole.

Common in the evergreen from 3,300 to 5,500 feet, occasionally in winter as low as 2,000 feet.

IRENIDAE.

215. Irena puella puella (Lath.). Fairy-Bluebird.

Common on Doi Sutep, especially in fruiting trees, from 1.750 to 3,500 feet.

CORVIDAE.

216. Corvus macrorhynchus macrorhynchus Wagl. Indian Jungle-Crow.

This is a domestic species, found in the city and villages and about temples; it ascends Doi Sutep in small numbers to 3,300 feet, keeping to inhabited clearings. The Crow is much less numerous here than in most Siamese towns and is in no sense a plague.

217. Urocissa erythrorhyncha magnirostris (Blyth). Burmese Red-billed Blue Magpie.

Common in small flocks in the dry forest of the plain and the mountain-slopes to 2,700 feet.

218. Cissa chinensis chinensis (Bodd.). Green Magpie.

Uncommon on Doi Sutep in dense evergreen from 2,000 to 5,000 feet. It is most common in July, and only slightly

less so in August, but has not yet been recorded at all from September to December.

219. Dendrocitta rufa sakeratensis Gyld. Siamese Rufous Tree-Pie.

Uncommon in the dry forest, on the plain and on Doi Sutep to 1,500 feet, once (23 August, 1930), a single bird at 3,000 feet. It has been found on the mountain only from March to August, which may indicate a very slight vertical migration.

220 Dendrocitta formosæ assimilis Hume. Burmese Hill Tree-Pie.

Common throughout the year in tall evergreen forest from 3,200 to 5,500 feet.

- 221. Crypsirina temia (Daudin). Black Racquet-tailed Magpie. Common on the plain in tall bamboo.
- 222. Garrulus leucotis leucotis Hume. Burmese Jay.

Common in the dry forest of the lower slopes, less so in clearings and open forest up to 5,500 feet. It occurs casually on the plain.

PARADOXORNITHIDAE.

223. Suthora poliotis feæ Salvad. Salvadori's Suthora.

De Schauensee took examples of this rare bird at 5,500 feet in February and July, 1933.

224. Psittiparus gularis gularis (*Gray*). Grey-headed Parrot-bill.

Common in flocks from 4,500 to 5,500 feet, occasionally down to 3,500.

PARIDAE.

225. Parus major commixtus Swinh. Burmese Great Titmouse.

A solitary singing male with greatly enlarged gonads was taken in the pines at 5,200 feet, 25 January, 1936 (Deignan). There is no other record for our area, although the species is not uncommon both on Doi Chiengdao and on Doi Angka.

226. Machlolophus xanthogenys subviridis (Blyth). Burmese Yellow-cheeked Titmouse.

Common in flocks at the edge of the evergreen and in the open oak forest, from 3,300 to 5,500 feet.

227. Melanochlora sultanea sultanea (Hodgs.). Indian Sultan Titmouse.

This species seems to be merely a straggler. There are two records: one at 2,850 feet, 30 December, 1931; one at 2,800 feet, 6 February, 1932 (Deignan).

SITTIDAE.

228. Sitta castanea neglecta Wald. Burmese Nuthatch.

This bird is surprisingly uncommon here, for there is an abundance of the dry jungle it seems to prefer. The only records are: one at 1,800 feet, 20 June, 1931; one sometime in September at about the same altitude (Deignan); one at 5,500 feet in the spring of 1931 (Aagaard).

- 229. Sitta europæa nagaensis Godw.-Austen. Naga Hills Nuthatch.

 Common in pines or evergreen from 5,000 to 5,500 feet, sometimes down to 4,500 feet.
- 230. Sitta magna Wardl. Ramsay. Giant Nuthatch.

 This fine bird is not uncommon in heavy evergreen from 4,600 to 5,500 feet.
- 231. Sitta frontalis frontalis Swains. Velvet-fronted Nuthatch.

 Very common on Doi Sutep from 2,700 to 5,500 feet.

CERTHIIDAE,

232. Certhia discolor shanensis Stuart Enker. Karenni Treecreeper.

Not uncommon in deep evergreen forest from 4,500 to 5,500 feet.

TIMALIIDAE.

233. Garrulax chinensis propinquus (Salvad.). Black-threated Garrulax.

Rather rare in the dry, lowland forest; it has not yet been recorded between August and January.

234. Garrulax leucolophus diardi (Less.). Siamese White-crested Garrulax.

Abundant in the dry forest of the plain and the mountain slopes to 2,700 feet, occasionally as high as 3,200 feet.

235. Garrulax pectoralis meridionalis Rob. & Kloss. Siamese Black-gorgeted Garrulax.

Very common in dry forest or evergreen to 3,500 feet, rarely up to 5,000 feet.

236. Garrulax moniliger bakeri De Schauens.* Baker's Black-necklaced Garrulax.

De Schauensee took specimens of this bird in January, 1933, on the plain in dry forest, the only mountain record is one collected in August at 2,700 feet from a flock of G. p. meridionalis (Deignan).

237. Garrulax strepitans strepitans Blyth. Tickell's Garrulax.

Common in heavy evergreen from 3,300 to 5,500 feet.

238. Garrulax erythrocephalus melanostigma Blyth. Blyth's Redheaded Garrulax.

Recorded only from May to October between 4,600 and 5,500 feet; it is probably present throughout the year, but in the dense evergreen it inhabits is exceedingly difficult to find.

239. Pomatorhinus nuchalis Tweed. Tweeddale's Scimitar-Bab-

Uncommon in the evergreen from 3,300 to 5,500 feet.

240 Pomatorhinus ochraceiceps ochraceiceps Wald. Ochraceousheaded Scimitar-Babbler.

Rather rare in the evergreen from 3,000 to 4,500 feet.

241. Timalia pileata intermedia Kinn. Burmese Red-capped Babbler.

Very common in flocks on the plain, in high grass, bamboo, and clumps of bushes. Unless one knows its notes, it is easily overlooked.

242. Gampsorhynchus rufulus torquatus Hume. Hume's Whiteheaded Babbler.

^{*} Proc. Acad. Nat. Sci. Philadelphia, v. 87, 1935, pp. 409-410.

Rare in the evergreen from 3,000 to 4,500 feet; it has been recorded only in July and August.

Chrysomma sinensis sinensis (Gm.). Indian Yellow-eyed 243. Babbler.

Uncommon on the plain and usually with Timalia pileata intermedia.

Pellorneum ruficeps subochraceum Swinh. Malay Spotted 244. Babbler.

Uncommon but generally distributed on the plain and to the summit of Doi Sutep, except in the evergreen.

245. Pellorneum ignotum cinnamomeum (Ripp.). Rippon's Babbler.

This species occurs very rarely from 5,300 to 5,500 feet in an area thickly covered with high grass. It keeps to the ground and might easily be mistaken for a mouse.

246. Napothera brevicaudata brevicaudata (Blyth). Short-tailed Wren-Babbler.

Two were found in dense evergreen at 3,800 feet, 7 March, 1931 (Deignan).

247. Napothera epilepidota bakeri (Haringt.). Baker's Wren-Babbler.

Not uncommon in the evergreen from 4,600 to 5,500 feet.

Stachyris nigriceps davisoni Sharpe. Malay Grey-throated 248. Babbler.

Fairly common in the evergreen from 4,600 to 5,500 feet, occasionally as low as 3,500 feet.

249. Stachyris chrysæa assimilis Wald. Burmese Golden-headed Babbler.

Uncommon in the evergreen from 4,600 to 5,500 feet.

250. Mixornis gularis minor Gyld. Gyldenstolpe's Yellow-breasted Babbler.

Very common in bamboo on the plain, and fairly common on Doi Sutep from 2,000 to 3,500 feet.

251. Alcippe poioicephala karenni Rob. & Kloss. Lower Burma. Quaker-Babbler.

Rare at 3,500 feet, where two or three specimens have been taken in March, 1932 and December, 1935 (Deignan).

252. Alcippe nipalensis fratercula Ripp. Shan States Quaker-Babbler.

Very common from 3,500 to 5,500 feet.

253. Pseudominla castaneiceps castaneiceps (Hodgs.). Chestnutheaded Tit-Babbler.

Two records; a male at 5,500 feet, 6 February, 1933 (De Schauensee); a female at 5,500 feet, 6 February, 1936 (Deignan). This species is very common in the evergreen on Doi Angka, forty miles south-west.

254. Heterophasia picaoides cana (Riley). Riley's Long-tailed Sibia.

Common in flocks from 5,000 to 5,500 feet, occasionally down to 4,500 feet.

- 255. Leioptila melanoleuca læta De Schauens. Doi Sutep Sibia.

 Abundant from 4,600 to 5,500 feet.
- 256. Leioptila annectans saturata Wald. Walden's Sibia. Common from 4,600 to 5,500 feet.
- 257. Staphida striata striata (Blyth). Tickell's Staphidia.

 Rather common from 4,500 to 5,500 feet, rarely down to 3,500.
- 258. Siva cyanouroptera oatesi *Haringt*. Oates's Blue-winged Siva.

 Apparently rare from 4,800 to 5,500 feet, but it is a quiet, inconspicuous bird which might easily escape detection.
- 259. Erpornis zantholeuca zantholeuca Blyth. White-bellied Herpornis.

Common from 2,700 to 4,000 feet, rarely down to 2,100.

260. Cutia nipalensis nipalensis Hodgs. Nepal Cutia. This rare bird has been taken thrice, in February, July, and September, at 5,500 feet. 261. Pteruthius flaviscapis æralatus Tick. Tickell's Shrike-Babbler.

Common from 3,300 to 5,500 feet, both in the evergreen and in the open forest.

262. Pteruthius ænobarbus intermedius (*Hume*). Hume's Shrike-Babbler.

Rare at the edge of the evergreen from 4,400 to 5,500 feet.

263. Mesia argentauris argentauris *Hodgs*. Silver-eared Mesia. Common from 5,000 to 5,500 feet, along the ridge of

the mountain.

AEGITHINIDAE.

264. Aegithina tiphia tiphia (Linn.). Common Iora.

A very common bird on the plain; on Doi Sutep it occurs in small numbers as high as 3,800 feet, in or at the edge of second-growth.

265. Chloropsis aurifrons aurifrons (Temm. & Laug.). Goldenfronted Chloropsis.

Common from the base of the mountain to 2,500 feet, casually to 4,600 (De Schauensee).

266. Chloropsis cochinchinensis cochinchinensis (*Gm.*). Burmese Chloropsis.

Common from 2,500 to 3,500 feet, more rarely to 4,000 feet. This species is more silent and much less conspicuous than its congeners.

267. Chloropsis hardwickii hardwickii Jard. & Selby. Orange-bellied Chloropsis.

Common above 3,000 feet, especially so from 4,500 feet to the summit.

PYCNONOTIDAE.

268. Griniger gutturalis henrici Oust. Siamese White-throated Bulbul.

Very common from 2,400 to 3,800 feet, in second-growth and at the edge of the evergreen.

- 269. Microscelis psaroides concolor (Blyth). Burmese Black Bulbul.
 Common in high trees at the edge of the evergreen from
 2,900 to 5,500 feet. It is very conspicuous at fruiting trees.
- 270. Microscelis leucocephalus (Gm.). White-headed Black Bulbul.

 This bird is a very rare and irregular winter visitor.

 De Schauensee took one from a flock of ten at 5,500 feet, 30December, 1928. On 22 February, 1936, the writer found the
 species numerous in fruiting trees between 2,700 and 3,000feet. Microscelis psaroides concolor was even more numerous
 in the same trees, but at no time did the two forms mingle
 when in flight. It should also be mentioned that when the
 flocks were alarmed, the black-headed birds were always the
 last to leave the tree and the first to return.
- 271. Cerasophila thompsoni Bingham. Bingham's White-headed Bulbul.

Very rare on Doi Sutep. The only records are: one at 5,500 feet, 30 December, 1928 (De Schauensee); two at 5,300 feet, 2 April, 1931 (Deignan); two at 3,800 feet, 13 and 14 May, 1935 (Deignan).

This species was fairly common at 5,000 feet on Doi Chiengdao at the end of December, 1931 (Deignan).

272. Ixos flavala hildebrandi (*Hume*). Hiidebrand's Brown-eared Bulbul.

This bird was erroneously listed in the writer's previous paper as *Pycnonotus hainanus* (Swinh.), a species which almost certainly does not occur in Siam at all. The Brown-eared Bulbul is rather common from 3,000 to 4,000 feet, rare as low as 2,700.

273. Ixos mcclellandi tickelli (Blyth). Tickell's Bulbul.

Very common at the edge of the evergreen from 2,700 to 5,500 feet.

274. Alcurus striatus (Blyth). Striated Green Bulbul.

A rare bird along the highest ridge, from 5,200 to 5,500 feet.

275. Otocompsa jocosa erythrotis (Bonap.). Burmese Red-whiskered Bulbul.

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An abundant species in the city and villages. De Schauensee reports "loose flocks composed of hundreds of these birds... on the slopes of Doi Sutep at about 1,500 feet" in December.

276. Otocompsa flaviventris flaviventris (*Tick.*). Black-crested Yellow Bulbul.

Abundant on the mountain to 3,800 feet, but not in the evergreen; it also occurs in small numbers in the dry lowland forest.

277. Iole virescens lönnbergi (Gyld.). Lönnberg's Iole.

A silent and inconspicuous bird occurring in small numbers from 2,000 to 3,500 feet.

278. Pycnonotus flavescens vividus (Stuart Baker). Muleyit Bulbul.

Within its range, this is the most abundant bird on Doi Sutep. It occurs in grass-land and at the forest's edge from 4,600 to 5,500 feet, locally down to 3,500.

279. Pycnonotus cafer chrysorrhoides (Lafresn.). Chinese Redvented Bulbul.

Locally common on the plain and occurring on Doi Sutep to 5,500 feet, though never in the evergreen.

280. Pycnonotus blanfordi blanfordi Jerd. Blanford's Olive Bulbul.

Abundant in the lowlands and occasionally found on the lowest slopes of Doi Sutep.

281. Microtarsus atriceps major (Rob. & Kloss). Indian Black-headed Bulbul.

Very rare on Doi Sutep, The only records are: a pair, 12 January, 1929 (De Schauensee); two at 2,700 feet, 31 May, 1933 (Deignan).

TURDIDAE.

282. Tesia cyaniventer cyaniventer *Hodgs*. Slaty-bellied Shortwing.

One taken in March, 1931, at 4,600 feet (Aagaard).

283. Larvivora cyane cyane (Pall.). Siberian Blue Chat.

A rather rare winter visitor, recorded as yet only in January and February. It is found in bamboo jungle from the base of Doi Sutep to 2,800 feet.

284. Saxicola caprata burmanica Stuart Baker. Burmese Stone-Chat.

A common resident of the lowland fields and hedgerows.

- 285. Saxicola torquata stejnegeri (Parr.). Japanese Stone-Chat.

 A common winter visitor on the plain from 16 September (1931) to 3 April (1931); once on Doi Sutep in a clearing at 3,300 feet, 7 March, 1931 (Deignan).
- 286. Rhodophila ferrea haringtoni (Hartert). Eastern Dark-grey Bush-Chat.

A very common and conspicuous winter visitor on the mountain from 10 October (1936) to 25 March (1931). It occurs from 1,300 to 5,500 feet, but never in the evergreen.

287. Enicurus schistaceus schistaceus (*Hodgs.*). Slaty-backed Forktail.

A common bird of the mountain streams from 2,000 to 3,600 feet.

288. Enicurus leschenaulti indicus Hartert. Leschenault's Forktail.

Uncommon from 3,500 to 4,600 feet, rarely down to 2,500. This species avoids the wider streams and keeps to tiny rills flowing through ravines in heavy evergreen.

289. Phænicurus auroreus (Pall.). Daurian Redstart.

The only record is a female taken by De Schauensee at 1,500 feet, 1 February, 1933.

290. Cyanosylvia suecica robusta (Buturl.). Chinese Red-spotted Blue-throat.

The Blue-throat winters regularly in small numbers at suitable localities. The extreme dates are 24 October (1931) and 28 March (1931).

291. Calliope calliope (Pall.). Common Ruby-throat.

A fairly common winter visitor on the plain from 7 October (1936) to 3 April (1931). De Schauensee took a female on Doi Sutep at 2,500 feet, 28 January, 1933.

292. Ianthia cyanura (Pall.). Siberian Blue-tail.

A pair occurred at 5,500 feet from 7 to 12 December, 1928; the male was taken by De Schauensee.

293. Ianthia rufilata rufilata (Hodgs.). Nepal Blue-tail.

A solitary female was collected at a clearing in the evergreen at 4,500 feet, 8 February, 1936 (Deignan).

294. Muscisylvia leucura *Hodgs*. White-tailed Blue Robin.

One record: a female taken at 3,200 feet, 24 February, 1931 (Deignan).

- 295. Copsychus saularis saularis (Linn.). Indian Magpie-Robin.

 Abundant in the city and villages.
- 296. Kittacincla malabarica interposita Rob. & Kloss. Siamese Shama.

This fine singer is fairly common on the plain in bamboo groves; on Doi Sutep it occurs somewhat less commonly both in bamboo and in the evergreen up to 4,600 feet.

297. Turdus boulboul (Lath.). Grey-winged Blackbird.

A solitary male was taken at 5,500 feet, 25 January, 1936 (Deignan); it has not previously been recorded from Siam.

298. Turdus obscurus Gm. Dark Thrush.

Thus far known only as a spring migrant in our area. De Schauensee found it "not uncommon" in February and March, 1933, on Doi Sutep; the writer found hundreds in the evergreen from 3,500 to 5,500 feet, 1 April, 1931 (on the following day, retracing his steps, only one individual was seen, at 5,500 feet); Aagaard took one example on the mountain sometime in the spring of 1931.

299. Geokichla citrina innotata Blyth. Malay Orange-headed Ground-Thrush.

De Schauensee collected three specimens at 4,500 feet, 21 July, 1933.

300. Oreocincla aurea aurea (Hol.). White's Golden Thrush.

A female was taken 12 January, 1936 (Deignan), in a city garden, where it was feeding in the open on a newly spaded flower bed. A male was taken 7 March, 1936 (Deignan), in dry deciduous jungle on the plain. Birds of this genus normally occur in evergreen hill-forest.

301. Oreocincla dauma socia Thayer & Bangs. Yunnan Golden Thrush.

A rare species in dense evergreen from 4,500 to 5,500 feet; it seems to be present only in winter.

302. Zoothera marginata marginata Blyth. Lesser Long-billed Thrush.

A single record: one at 3,500 feet in the evergreen, 29 August, 1931 (Deignan).

303. Monticola rufiventris sinensis A. C. Meinertzhagen. Chinese Chestnut-bellied Rock-Thrush.

A rare winter visitor, recorded from November to February, in dense evergreen between 4,500 and 5,500 feet.

304. Monticola solitaria pandoo (Sykes). Indian Blue Rock-Thrush.

A very common winter visitor on the plain, more rarely found up to 5,500 feet, but never in the evergreen. It is here from 5 September (1931) to 2 April (1931).

305. Monticola gularis gularis (Swinh.). Swinhoe's Rock-Thrush.

The only record is a male taken by De Schauensee at
1,500 feet, 18 December, 1932.

306. Myophonus cœruleus cœruleus (Scop.). Violet Whistling-Thrush.

This black-billed species occurs sparingly in winter at the summit of Doi Sutep, where specimens have been taken in January (Deignan).

307. Myophonus temminckii eugenei Hume. Burmese Whistling-Thursh.

Common, especially at waterfalls, from the base to the summit of Doi Sutep.

Myophonus stonei De Schauens, is withdrawn from the list as being synonymous with M. t. eugenei.

308. Cochoa viridis Hodgs. Green Thrush.

This aberrant Thrush has been taken thrice on Doi Sutep: 8 and 21 July, 1933, at 4,500 and 5,500 feet (De Schauensee); 16 July, 1935, at 5,400 feet (Deignan). It seems to be a completely arboreal species, and often hawks for insects from the top of a high tree.

SYLVIIDAE.

309. Acrocephalus stentoreus amyæ Stuart Baker. Mrs. Stevens's Great Reed-Warbler.

Several specimens of this bird have been taken from November to January; in life it is indistinguishable from the next.

310. Acrocephalus arundinaceus orientalis (Temm. & Schleg.). Eastern Great Reed-Warbler.

A locally common winter visitor, recorded from 8 January (1932) to 3 April (1931).

311. Acrocephalus bistrigiceps Swinh. Von Schrenck's Reed-Warbler.

Locally common from 2 November (1935) to 3 April (1931).

312. Acrocephalus concinens concinens (Swinh.). Chinese Paddy-field Warbler.

Locally common on the plain from November to February. One was taken at 2,300 feet on Doi Sutep, 30 December, 1931 (Deignan); another by Aagaard at 4,600 feet in the spring of 1931.

313. Locustella certhiola minor Dav. & Oust. David's Grasshopper-Warbler.

A male was taken at a lowland marsh, 28 November, 1935 (Deignan).

 ${\bf 314.} \quad {\bf Locustella\ lanceolata}\ ({\it Temm.}). \ {\bf Streaked\ Grasshopper-Warbler.}$

A rare winter visitor: a specimen was taken on the plain, 17 February, 1931, and there is a sight record for November (Deignan); one was collected at 4,600 feet in the spring of 1931 (Aagaard).

- 315. Orthotomus sutorius patia *Hodgs*. Burmese Tailor-bird.

 Abundant on the plain, and found locally on Doi Sutepto 3,500 feet.
- 316. Cisticola juncidis malaya Lynes. Malay Streaked Fantail-Warbler.

This species occurs on the plain throughout the year, but is common only from June to September.

317. Cisticola exilis equicaudata Stuart Baker. Siamese Goldenheaded Fantail-Warbler.

A female was taken on the plain, 14 January, 1936 (Deignan).

- 318. Franklinia gracilis (Frankl.). Franklin's Wren-Warbler.

 Very common on the plain in bushy places.
- 319. Franklina rufescens rufescens (Blyth). Rufescent Wren-Warbler.

Common on the plain and the mountain to 5,500 feet but never occurring in the evergreen.

320. Megalurus palustris Horsf. Striated Marsh-Warbler.

A rare winter visitor; it has been recorded in January and from 7 to 14 February, 1936, and a specimen was taken 17 February, 1931 (Deignan).

321. Phragamaticola aëdon rufescens Stegm. Stegmann's Thick-billed Warbler.

A fairly common winter visitor from 20 December (1932) to 23 March (1931) on the plain; on Doi Sutep, one was taken at 2,200 feet, 12 March, 1932 (Deignan). The writer has a lowland specimen dated 3 May, 1935, and has collected this bird in May at a number of other localities in North Siam; it is perhaps the last of our winter birds to leave.

1932.

322. Herbivocula schwarzi (Radde). Radde's Bush-Warbler.

A not uncommon winter visitor from 23 December (1932) to 2 April (1931). It occurs chiefly on the plain in dry localities, but was found by De Schauensee up to 2,500 feet on Doi Sutep, and the bird of 2 April, 1931, was taken by the writer at 5,400 feet.

- **323.** Phylloscopus affinis (*Tick.*). Tickell's Willow-Warbler. De Schauensee took a pair at 3,000 feet, 22 December,
- **324.** Phylloscopus fuscatus fuscatus (Blyth). Dusky Willow-Warbler.

A very common winter visitor, especially amongst bamboos growing near water, from 30 September (1936) to 14 March (1931).

325. Phylloscopus armandii armandii (Milne-Edw.). Milne-Edwards's Willow-Warbler.

De Schauensee took a male somewhere in our area, 28 January, 1933.

326. Phylloscopus proregulus forresti Rothsch. Forrest's Willow-Warbler.

Two were collected by Aagaard in the spring of 1931 at 5,500 feet.

327. Phylloscopus inornatus inornatus (Blyth). Plain-coloured Willow-Warbler.

By far the commonest of all the Willow-Warblers here, from the plain to 5,500 feet. It has been recorded from 26 September (1936) to 3 April (1931).

328. Acanthopneuste borealis xanthodryas (Swinh.). Swinhoe's Willow-Warbler.

One record: a female taken on the plain, 27 October, 1935 (Deignan).

329. Acanthopneuste nitidus plumbeitarsus (Swinh.). Middendorff's Willow-Warbler.

Taken by De Schauensee in December and January; he notes that it was found only in the lowlands.

330. Acanthopneuste tenellipes (Swinh.). Pale-legged Willow-Warbler.

One was collected by De Schauensee at 5,000 feet, 27 February, 1933.

331. Acanthopneuste occipitalis coronatus (Temm. & Schleg.). Temminck's Willow-Warbler.

A common winter visitor from 26 September (1936) to 1 March (1933). It occurs on the plain and to the summit of Doi Sutep.

332. Acanthopneuste reguloides harterti Stuart Baker. Baker's Willow-Warbler.

One was taken at the summit of the mountain, 1 February, 1936 (Deignan).

333. Acanthopneuste davisoni Oates. Davison's Willow-Warbler.

Common throughout the year from 4,800 to 5,500 feet.

It is the only Willow-Warbler in our area in summer.

334. Seicercus burkii tephrocephalus (Anders.). Anderson's Flycatcher-Warbler.

Common from the end of September to 3 April (1931); it occurs on the plain amongst bamboos *, and on Doi Sutep in the evergreen from 2,000 to 5,500 feet.

335. Abroscopus superciliaris superciliaris (*Blyth*). Burmese Yellow-bellied Flycatcher-Warbler.

The only record in our area is one at 3,500 feet, 12 July, 1930 (Deignan), but it is a common bird in North Siam wherever there is extensive bamboo-jungle.

336. Urosphena squameiceps squameiceps (Swinh.). Short-tailed Warbler.

A rare winter visitor. The only records are: one at 3,500 feet, 12 December, 1931; two at 2,700 and 3,500 feet, 29 February, 1936; one at 3,500 feet, 5 March, 1932 (Deignan). In every case the bird was on the ground in the densest type of evergreen forest.

^{*} Recent investigations lead the writer to believe that all lowland representatives of this species belong to a race other than tephrocephalus.

337. Suya superciliaris superciliaris Anders. Anderson's Hill-Warbler.

Very common in grass-land from 4,500 to 5,500 feet.

338. Prinia flaviventris flaviventris (Deless.). Yellow-bellied Prinia.

Rare and irregular on the plain; it has been recorded in February and July, 1931, and in January, 1932 (Deignan).

339. Prinia inornata burmanica Haringt. Burmese Plain-coloured Prinia.

A very common lowland bird throughout the year.

MUSCICAPIDAE.

340. Hemichelidon sibirica subsp. ? Sooty Flycatcher.

The writer has two specimens of a form of this species, collected on Doi Sutep, 26 September, 1936.

341. Siphia strophiata strophiata Hodgs. Orange-gorgeted Flycatcher.

Uncommon from 6 December (1928) to 1 March (1933); it occurs from 4,500 to 5,500 feet.

342. Siphia parva albicilla (Pall.). Eastern Red-throated Flycatcher.

A very common winter visitor on the plain from 20 September (1930) to 3 April (1931); it occurs sparingly on Doi Sutep to the summit. Many individuals assume the nuptial plumage before leaving here.

343 Muscicapula hodgsonii (Verr.). Rusty-breasted Blue Flycatcher.

A rare bird from 4,600 to 5,500 feet.

344. Muscicapula hyperythra hyperythra (*Blyth*). Rufous-breasted Blue Flycatcher.

The only record is one taken at 4,500 feet, 16 December, 1928 (De Schauensee).

345. Muscicapula superciliaris æstigma (Gray). Little Blue-and-White Flycatcher.

One record: a male taken at 4,200 feet, 26 February, 1932 (Deignan).

346 Muscicapula melanoleuca melanoleuca Blyth. Indian Little Pied Flycatcher.

A common and conspicuous resident from 4,500 to 5,500 feet.

347. Muscicapula hainana (*Ogilv.-Grant*). Ogilvie-Grant's Blue Flycatcher.

An example of this bird taken by De Schauensee on the plain, 20 December, 1932.

348. Muscicapula unicolor unicolor (Blyth). Pale Blue Flycatcher.
Uncommon in the evergreen from 4,600 to 5,500 feet.

349. Muscicapula banyumas whitei (Haringt.) White's Blue Flycatcher.

Common on Doi Sutep in bamboo and evergreen jungle from 2,100 to 3,500 feet.

350. Muscicapula tickelliæ indochina (Chas. & Kloss). Chasen's Blue Flycatcher.

Fairly common on the plain in bamboo groves.

351. Eumyias thalassina thalassina (Swains.). Indian Verditer Flycatcher.

Not uncommon at the edge of the evergreen from 2,700 to 5,500 feet; in winter it occurs sparingly on the plain.

352. Anthipes moniliger leucops (Sharpe). Sharpe's White-gorgeted Flycatcher.

This bird has been recorded only in February and March, from 5,000 to 5,500 feet (De Schauensee, Deignan). It seems to be very rare.

353. Culicicapa ceylonensis ceylonensis (Swains.). Grey-headed Flycatcher.

Very common in the evergreen from 2,500 to 5,500 feet; in winter it is frequently found on the plain in bamboo groves.

354. Niltava grandis grandis (*Blyth*). Indian Large Niltava. Common in the evergreen from 3,500 to 5,500 feet.

355. Niltava vivida oatesi Salvad. Rufous-bellied Niltava.

Rather uncommon in heavy evergreen forest from 3,500 to 5,500 feet.

Niltava williaminæ De Schauens. and Niltava smithi Riley are withdrawn from the list, each name being a synonym of N. v. oatesi.

356. Niltava sundara denotata Bangs & Phill. Yunnan Lovely Niltava.

A winter visitor, recorded from 31 October (1931) to 6 February (1932). It occurs not uncommonly from 4,500 to 5,500 feet, rarely down to 2,500.

357. Niltava macgrigoriæ (Burton). Small Niltava.

A young male was taken by De Schauensee at 4,500 feet, 18 July, 1933. There is no other record for our area, but the species was not uncommon on Doi Angka in April and May, 1931 (Deignan).

358. Tchitrea paradisi indochinensis Sal. Indo-chinese Paradise-Flycatcher.

This bird occurs from 2,700 to 3,500 feet; the extreme dates are 29 February (1936) and 23 August (1930), so it appears to be merely a summer visitor. It is decidedly uncommon here and does not assume a white plumage, so far as is known.

359. Hypothymis azurea styani (Hartl.). Northern Black-naped Flycatcher.

A common species on the plain, and in the evergreen from 2,000 to 3,500 feet.

360. Leucocirca albicollis albicollis (Vieill.). White-throated Fantail-Flycatcher.

Abundant in the evergreen from 3,200 to 5,500 feet.

MOTACILLIDAE.

361. Motacilla ocularis Swinh. Streak-eyed Wagtail.

Probably common in winter, but not often distinguished from the next species. It has been recorded from 2 November (1931) to 16 February (1932).

362. Motacilla leucopsis Gould. White-faced Wagtail.

Abundant on the plain from 19 September (1930) to 29 March (1929).

363. Motacilla cinerea melanope Pall. Eastern Grey Wagtail.

Very common from 5 September (1931) to 23 April (1935), chiefly on the plain, but sparingly on Doi Sutep along the larger streams to 2,700 feet. There are two exceptional records: one of a pair was collected at 1,800 feet, 25 July, 1936; a solitary individual was seen at the base of the mountain, 3 August, 1929 (Deignan).

364. Motacilla flava thunbergi Billb. Grey-headed Yellow Wag-

Fairly common on the plain from 1 November (1935) to 14 March (1930). At the beginning and end of their stay they are often abundant.

365. Motacilla citreola citreola Pall. Yellow-headed Wagtail.

This, the least common of the local Wagtails, occurs only on the plain at very wet, grassy places, and leaves the district as they become too dry for its liking. It is here from 9 November (1931) to 10 February (1936).

366. Dendronanthus indicus (Gm.). Forest-Wagtail.

Three records: one at 3,300 feet, 31 August, 1929; one at the foot of Doi Sutep, 21 November, 1935; one on the plain, 19 March, 1936 (Deignan).

367. Anthus hodgsoni yunnanensis Uchida & Kuroda. Yunnan Tree-Pipit.

Abundant in winter, both on the plain, and on Doi Sutep from 2,700 to 5,500 feet; they are recorded from 10 October (1936) to 3 April (1931).

368. Anthus novae-seelandiæ richardi Vieill. Richard's Pipit.

Specimens have been taken in October, November, and
January; it is probably very common, but overlooked.

369. Anthus novae-seelandiæ rufulus Vieill. Indian Pipit.

A very common lowland bird throughout the year.

370. Anthus campestris godlewskii (Tacz.). Taczanowski's Tawny Pipit.

Several specimens taken between October and March seem to be referable to this species, which, like A. n. richardi, must be overlooked amongst the thousands of Pipits which occur here in winter.

371. Anthus rufogularis Brehm. Red-throated Pipit.

Locally common from 9 November (1931) to 30 January (1932). It occurs together with the Yellow-headed Wagtail, and, like that species, leaves when its haunts become too dry.

ARTAMIDAE.

372. Artamus fuscus Vieill. Ashy Swallow-shrike.

Very common in the lowlands throughout the year; rarely it occurs on Doi Sutep up to 2,700 feet.

LANIIDAE.

373. Lanius collurioides collurioides Less. Burmese Shrike.

From 14 March (1930, 1931) to 25 May (1935) this species is completely absent from our area, and, until the end of June, it is decidedly rare; thereafter, until the following March, it is one of the commonest lowland birds.

374. Lanius nigriceps nigriceps (Frankl.). Indian Black-headed Shrike.

This Shrike is absent from 3 March (1931) to 13 July (1935); during the rest of the year it is a fairly common bird on the plain, with its numbers probably reinforced in winter by migrants from farther north. In April and May, 1931, this bird was not uncommon in suitable territory at high elevations on Doi Angka (Deignan), so it presumably leaves here to breed on neighbouring mountains.

375. Lanius tephronotus (Vig.). Grey-backed Shrike.

A rare winter visitor to clearings on Doi Sutep; it has occurred at 3,300 and 5,500 feet between early December (1928) and 21 February (1931).

376. Lanius cristatus cristatus Linn. Little Brown Shrike.

A very common bird on the plain from 5 September (1931) to 4 May (1935).

377. Hemipus picatus subsp.? Indian Pied Shrike.

No. 2, 1936.

Common in flocks at the edge of the evergreen from 2,000 to 3,500 feet.

378. Tephrodornis gularis vernayi Kinn. Siamese Wood-Shrike.

Common in loose bands in the evergreen from 2,000 to 5,200 feet.

STURNIDAE

379. Gracula religiosa intermedia Hay. Indian Grackle.

Erratically common on Doi Sutep from the lowest slopes to about 4,500 feet; occasionally it occurs in fruiting trees on the plain.

380. Sturnia malabarica nemoricola Jerd. White-winged Starling.

From 19 November (1931) to 12 February (1931) these arboreal Mynahs are found in enormous flocks on the plain, and occasionally on Doi Sutep to 3,300 feet. At other seasons they are present only locally and in very small numbers. Of the winter birds, the majority have the alula black, while many other individuals have it parti-coloured. The few found here during the hot season and the rains are quite typical nemoricola, with the alula white.

This species practically confines itself to the neighbour-hood of *Butea frondosa*, which, on the plain, is widely grown as a vehicle for the culture of the lac-insect. Even a solitary tree of this kind in a town garden will sooner or later attract them. Not only is this true in winter, when the trees are leafless and covered with large scarlet flowers, but it is equally the case with the resident individuals, which habitually breed in holes in them.

381. Gracupica nigricollis (Payk.). Black-necked Starling.

An abundant bird on the plain, and occasionally on Doi Sutep to 1,500 feet.

382. Acridotheres tristis tristis (Linn.). House-Starling.

An abundant species on the plain near human habitation. Old residents allege that it was a rare bird here at the beginning of this century.

383. Aethiopsar grandis grandis (Horsf. & Moore). Siamese Crested Starling.

Abundant everywhere on the plain, rarely found on the lowest slopes of Doi Sutep.

384. Sturnopaster contra floweri Sharpe. Siamese Pied Starling. Very common in the lowlands.

Sturnopastor contra superciliaris Blyth occurs in some parts of North Siam, but Chiengmai birds are the "black-backed" floweri.

NECTARINIIDAE.

- 385. Aethopyga siparaja seheriæ (*Tick.*). Indian Scarlet Sunbird.

 A decidedly rare species here, found only in lowland fruit gardens. It has been recorded only from December to June.
- 386. Aethopyga gouldiæ dabryi (Verr.). Dabry's Sunbird.

 A very rare winter visitor on Doi Sutep, recorded from December to March. De Schauensee took one at 1,500 feet; otherwise it has been found only at 5,500 feet.
- 387. Aethopyga saturata sanguinipecta Wald. Walden's Sunbird.

 A common species of the evergreen from 3,300 to 5,500 feet.
- 388. Leptocoma asiatica intermedia (*Hume*). Burmese Purple Sunbird.

A very common lowland bird, both in gardens and in the dry, deciduous forest. The males are in nuptial plumage from the middle of December to the end of May.

389. Leptocoma jugularis flammaxillaris (Blyth). Burmese Yellow-breasted Sunbird.

Very common on the plain, and occasionally on Doi Sutep to 3,000 feet (De Schauensee). It appears that this

species has no distinctive non-breeding dress, for full-plumaged males are equally common every month of the year.

390. Arachnothera magna aurata Blyth. Pegu Streaked Spiderhunter.

Common, especially at fruiting or flowering trees, throughout the year, from 3,300 to 5,500 feet.

391. Arachnothera longirostra longirostra (Lath.). Little Spider-hunter.

A single record: one on the plain, 10 July, 1930 (Deignan).

CHALCOPARIIDAE.

392. Chalcoparia singalensis interposita Rob. & Kloss. Siamese Ruby-cheek.

The Ruby-cheek is uncommon and rather local. It occurs on the plain, and in second-growth from 2,000 to 3,300 feet.

DICATIDAE.

393. Dicæum cruentatum siamense Kloss. Siamese Scarlet-backed Flower-pecker.

A very common species on the plain in gardens and in the dry, deciduous jungle; in the same type of growth it occurs sparingly on Doi Sutep to about 1,800 feet.

394. Dicæum chrysorrheum chrysochlore Blyth. Burmese Yellow-vented Flower-pecker.

This bird is of rare occurrence on Doi Sutep. The only records are: two at 3,300 feet, feeding amongst the orange flowers of a liana, 4 July, 1931; one at 3,600 feet, 12 July, 1930; one at 3,300 feet, 20 July, 1929 (feeding in the very liana mentioned above); two at 2,200 feet, 31 October, 1931 (Deignan).

395. Dicæum sanguinolentum ignipectus (Blyth). Fire-breasted Flower-pecker.

Very common from 4,600 to 5,500 feet, occasionally found down to 3,200 feet.

396. Dicæum concolor olivaceum Wald. Plain-coloured Flower-pecker.

Fairly common on the plain, chiefly in the dry forest, and on Doi Sutep to 3,500 feet.

ZOSTEROPIDAE.

397. Zosterops palpebrosa cacharensis Stuart Baker. Cachar White-eye.

This bird is common in flowering and fruiting trees from 3,300 to 5,500 feet.

398. Zosterops simplex williamsoni Rob. & Kloss. Williamson's White-eye.

The status of this species is uncertain, but it appears to be merely a winter visitor, chiefly on the plain, where it is far from common. It has been recorded from 27 November (1928) to 1 March (1933).

399. Zosterops erythropleura Swinh. Red-flanked White-eye.

This rather rare bird has been taken on Doi Sutep at 5,500 feet, by De Schauensee in December, by Aagaard in March.

PLOCEIDAE.

- 400. Passer montanus malaccensis Dubois. Malay Tree-Sparrow. Abundant in the city and villages.
- 401. Passer flaveolus Blyth. Pegu House-Sparrow

 This attractive species is common in open country on the plain, usually avoiding human habitation.
- 402. Ploceus philippinus infortunatus Hartert. Malay Baya.

 Very common on the plain. After the breeding-season they gather into large flocks; one seen 11 November, 1931, comprised more than a thousand individuals.
- **403.** Uroloncha striata acuticauda (*Hodgs.*). Hodgson's Striated Munia.

A common species of the ricefields; it also occurs in small numbers on Doi Sutep to 3,800 feet.

404. Uroloncha punctulata topela (Swinh.). Chinese Spotted Munia.

An abundant lowland species, in fields and gardens.

405. Amandava amandava (Linn.). Indian Red Munia.

One of two was collected 1 June, 1935, at the edge of the city. There is no other local record, although this species has been diligently sought by the writer since 1928. It might be well to add that these acted like genuinely wild birds, and that Amandava has never been noted here as a cage-bird.

FRINGILLIDAE.

- 406. Mycerobas melanozanthos (Hodgs.). Spotted-winged Grosbeak.

 This fine bird was added to the Siamese avifauna by
 De Schauensee, 1 March, 1933, when he took one from a flock
 of four at 5,500 feet. The writer found a flock of four, again
 at 5,500 feet, 12 May, 1935, and at least two were seen 23
 June, 1935, in a pine at 5,300 feet. A male was collected at
 5,500 feet, 2 February, 1936 (Deignan). The males frequently
 utter a soft, whistled "phew—phew-phew-phew (-phew)"
 with the first note stressed.
- 407. Emberiza pusilla Pall. Little Bunting. One was taken at 5,000 feet, 4 February, 1933 (De Schauensee).
- 408. Emberiza aureola Pall. Yellow-breasted Bunting

 More than 300 of these Buntings were found in a single
 flock at one of the large marshes, 17 October, 1931 (Deignan);
 when next the place was visited, 5 December, 1931, they were
 common and generally distributed over the area. They doubtless occur regularly in winter.
- 409. Emberiza rutila Pall. Chestnut Bunting.

 This is a rare winter visitor from 3,300 to 5,500 feet; it has been recorded from 13 February (1932) to 12 March (1932).
- 410. Melophus lathami (Gray). Crested Bunting.

The Crested Bunting is a rare visitor to clearings and grassland on Doi Sutep, from 2,700 to 5,500 feet; it has been recorded only between 30 December (1931) and 2 April (1931). The writer found it very common in open country at about 3,500 feet on Doi Angka in April and May, 1931, and it was plentiful on the plains about Chiengrai and Chiengsen in April, 1929, so we may assume that its scarcity on Doi Sutep is due only to the limited area of suitable territory.

BIBLIOGRAPHY.

Chasen, F. N. & C. Boden Kloss.

On birds from Doi Sutep, 5,600 feet, North Siam.

Journ. Siam. Soc., Nat. Hist. Suppl., Bangkok, vol. 8, no. 4, 1932, pp. 231-248.

Deignan, H. G.

The birds of the Chiengmai region.

Journ. Siam Soc., Nat. Hist. Suppl., Bangkok, vol. 8, no. 3, 1931, pp. 131-176.

Gairdner, K. G.

Occurrence of the Burmese Barred-back Pheasant (*Phasianus humiæ burmanicus*), near Chiengmai, N. Siam.

Journ. Nat. Hist. Soc. Siam, Bangkok, vol. 3, no. 3, 1919, p. 229.

Riley, J. H.

Descriptions of four new birds from the mountains of northern Siam. Proc. Biol. Soc. Washington, vol. 42, 1929, pp. 161-164.

Riley, J. H.

Descriptions of three new birds from the mountains of northern Siam. *Ibid.*, vol. 42, 1929, pp. 165-166.

Riley, J. H.

Notes on Niltava smithi.

Ibid., vol. 46, 1933, pp. 65-66.

Rogers, C. H. & H. G. Deignan.

Birds new to the Kingdom of Siam or otherwise noteworthy.

Proc. Biol. Soc. Washington, vol. 47, 1934, pp. 91-92.

De Schauensee, R. Meyer.

Additions to the bird fauna of Siam.

Proc. Acad. Nat. Sci. Philadelphia, vol. 86, 1934, pp. 3-4.

De Schauensee, R. Meyer.

A collection of birds from Siam.

Ibid., vol. 80, 1928, pp. 553-579.

De Schauensee, R. Meyer.

Description of a new form of *Bhringa* from the hills of northern Siam. *Ibid.*, vol. 81, 1929, pp. 475-476.

De Schauensee, R. Meyer.

Descriptions of three new birds from northern Siam.

Ibid., vol. 81, 1929, pp. 469-470.

De Schauensee, R. Meyer.

A further collection of birds from Siam.

Ibid., vol. 81, 1929, pp. 523-588.

De Schauensee, R. Meyer.

A new race of Caprimulgus asiaticus from North Siam.

Ibid., vol. 85, 1933, p. 373.

De Schauensee, R. Meyer.

A new race of Garrulax moniliger from northern Siam.

Ibid., vol. 87, 1935, pp. 409-410.

De Schauensee, R. Meyer.

Zoölogical results of the third De Schauensee expedition, Part II.

Birds from Siam and the Southern Shan States.

Ibid., vol. 86, 1934, pp. 165-280.

