#### SOME BIRDS OF BILLITON ISLAND

by

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(With a sketch-map).

The avifauna of Billiton Island, between Sumatra and Borneo, is imperfectly known. Our knowledge of it is almost entirely derived from the collection made in 1888 by Dr. A. G. Vorderman, of which he published an account in the "Natuurkundig Tijdschrift v. Nederlandsch-Indië" vol. L, 1891, pp. 411-519. He discussed ninety-three species.

Dr. W. L. Abbott visited the island in 1904 but the birds he obtained and presented to the United States National Museum have not been determined: one new form has been described from them. (*Malacocincla abbotti eritora* Oberh., Smithsonian Miscellaneous Collections, 74, No. 2, 1922, p. 11).

The majority of Vorderman's specimens are probably in Holland but a few were given by him to the Zoological Museum, Buitenzorg, Java, whose Director, Dr. K. W. Dammerman, has submitted them to me for examination. A number of the birds having olive or brown plumages have suffered postmortem changes, but the type and paratype of the new form of Eurylaimus javanicus that I have proposed are in very good condition.

Billiton Island, owing to its situation, is of considerable interest. It lies half way between Sumatra and Borneo, within the 40-metre contour line surrounding the former but separated from the latter by slightly deeper water, for to the eastward of the island there runs in a North and South direction a narrow trough with depths of 40 to 50 metres connecting similar and greater depths in the South China and Java Seas. Billiton is, however, zoogeographically the most intimate link we have between the Sumatran and Bornean provinces of Malaysia.

Its fauna should be rather more Sumatran than Bornean in affinities but the forms of Eurylaimus javanicus, Chotorhea rafflesi, Anuropsis malaccensis and Cyanoderma erythroptera and the presence of Prionochilus thoracicus indicate the strong influence of the Bornean province.

- 1. Rollulus roulroul (Scop.). VÖRDERMANN, p. 510.
  - 1 9. Wing 135 mm.
- 2. Turnix suscitator suscitator Gm.

Areoturnix plumbipes Vorderm., p. 513.

1 d. Wing imperfect.

Not separable from typical Javanese males and another from Palembang.

3. Treron curvirostra curvirostra (Gm.).

Treron nasica Vorderm., p. 499. Wing 140 mm.

- 4. Treron fulvicollis fulvicollis (Wagl.). VORDERM., p. 501. 1 3, 1 \, Wings 150, 148 mm.
- Caloenas nicobarica (Linn.). VORDERM., p. 509.
   1 ex. Wing imperfect. From Lima Islet in the Gaspar Straits.
- 6. Glareola isabella Vieill.. VORDERM., p. 515.

1 sex inc., Tandjong Pandan. June 1888. Wing 164; tarsus 45 mm. The present example does not agree with the measurements given by VORDERMANN so that he probably obtained more than one specimen. There is no dark area before the eye, the breast is mottled with indistinct darkish spots and the longest primary hardly exceeds the next. It is apparently an immature example of the species which is of very rare occurrence in Malaysia.

7. Accipiter virgatus gularis (Temm.).

1 & ad., 1 & imm., 1 & ad. (Brautigam coll., 20 Jan., 2 and 3 March 1914). Wings & imm. 164, ad. 167; & 190 mm.

8. Psittacula longicauda longicauda (Bodd.).

Palaeornis longicauda Vorderm., p. 418.

2 d. (Brautigam coll., Jan. 1914). Wings 150, 157 mm.

- 9. Eurystomus orientalis orientalis (Linn.). Vorderm., p. 441.

  1 sex inc. Wing 190 mm.
- 10. Halcyon coromanda minor (Temm. & Schleg.).
  1 ♂, 1 ♀. (Brautigam coll.). Wings ♂ 104; ♀ 100 mm.
- 11. Halcyon concreta concreta (Temm.).

Caridagrus concretus Vorderm., p. 437.

1 d. Wing 110 mm.

12. Hierococcyx fugax nisicolor (Hodgs.).

1 9. (Brautigam coll, 5 March 1914). Wing 172; bill, tip to nostril, 16 mm.

An immature bird with the upper surface dark brown barred with tawny.

13. Rhopodytes sumatranus (Raffles). Vorderm., p. 432.

1 sex inc. Wing 136 mm.

A rather small example.

#### 14. Chotorhea rafflesi (Less.) subsp.?

Chotorhea versicolor Vorderm., p. 432.

1 sex inc. Wing 123 mm.

A bird with a paler, more turquoise blue eyebrow and throat and size slightly larger than a series from Palembang, South Sumatra (Wings 113 - 120).

It may be just possible to maintain Bornean birds as distinct on account of paler blue colour than in typical Sumatran individuals with which I have only recently been able to compare them: in which case I should place this Billiton example with the former and call it C.r. borneensis Blasius (Type locality: S. E. Borneo). But Bornean individuals are not constantly different and I am somewhat doubtful as to whether the use of borneensis is justified.

## 15. Meiglyptes tukki tukki (Less.). Vorderm., p. 427.

1 ♂, 1 ♀. Wings 102, 105 mm.

#### 16. Micropternus brachyurus badius (Raffles).

Micropternus brachyurus Vorderm., p. 429.

1 &, 1 \, Wings 115, 113 mm.

# 17. Sasia ochracea abnormis (Temm.). Vorderm., p. 430.

1 imm. sex inc. Wing 55 mm.

#### 18. Eurylaimus javanicus billitonis subsp. nov.

Eurylaemus javanicus Vorderm., Nat. Tijd. Ned. Ind., L. 1891, p. 441. Intermediate between E. j. harterti van Oort, of Sumatra and E. j. brookei Rob. & Kloss, of Borneo. Males differ from the former in having the throat, foreneck, and breast below the black band more vinous (less suffused with lead colour) and the black breast-band narrower, the crown also less leaden: from the latter in having the foreneck rather darker and the breast-band more pronounced: in brookei it is obsolete.

Specimens examined. Two males. Collected in Billiton Island on 5th April 1914 by D. F. A. Brautigam. Buitenzorg Museum Nos. 1158, 1159. Type No. 1159. Wing 108 mm. (Wing of paratype imperfect: 105 mm.).

#### 19. Eurylaimus ochromalus ochromalus Raffles.

Eurylaemus ochromelas Vorderm., p. 444.

1 9. Wing 77 mm.

#### 20. Rhinomyias umbratilis (Strickl.) subsp.

Hyloterpe brunneicauda Vorderm., p. 460.

1 sex inc. in moult. Probably of the typical form which occurs in Borneo, Sumatra and the Malay Peninsula.

#### 21. Pericrocotus igneus igneus Blyth.

Pericrocotus ardens Vorderm., p. 456.

1 ♂, 1 ♀. Wings 73, 73 mm.

## 22. Aegithina viridissima (Bp.).

Iora viridissima Vorderm., p. 470.

3 ♂. Wings 61, 61, 62 mm.

#### 23. Chloropsis viridis zosterops Vig.

Phyllornis sonneratii Vorderm., p. 492.

1 9. Wing 92 mm.

### 24. Chloropsis cochinchinensis icterocephala (Less.).

Phyllornis icterocephala Vorderm., p. 473.

1 d. Wing 81 mm.

The scapulars and rump are strongly washed with Chrysophase grading (Ridgway) and the upper tailcoverts are of the same colour, these are being thus much lighter and brighter than in *icterocephala* (Less.) Sumatra and the Malay States. The specimen, however, is in very we plumage and this may be the cause of the peculiarities shown.

#### 25. Alophoixus phaeocephalus phaeocephalus (Hartl.).

Criniger phaeocephalus Vorderm., p. 480.

1 sex inc. Wing 95 mm.

# 26. Pycnonotus plumosus Blyth, subsp. Vorderm., p. 475.

1 sex inc. Wing 82 mm.

The Banka bird probably belongs to the typical form with red irid

# 27. Pycnonotus erythropthalmos Hume, subsp.

Pycnonotus pusillus Vorderm., p. 476.

1 sex inc. Wing 72 mm.

In bad condition: probably, like Sumatran birds, belonging to typical form (syn. cynachrus Oberh., Sumatra).

# 28. Pellorneum capistratum nigrocapitatum (Eyton).

Drymocataphus nigricapittatus Vorderm., p. 485.

1 sex inc. Wing 72 mm.

The Banka bird has been distinguished as P. c. nyctilampis (OBERT Smithsonian Misc. Collections, 74, No. 2, 1922, p. 18): upper par darker and duller than the typical race. This specimen cannot now be separated from the latter.

### 29. Aethostoma rostratum (Blyth) subsp.

Setaria pectoralis Vorderm., p. 488.

1 sex inc. Wing 67 mm.

It is impossible to say if this now much degraded specimen belongs to the typical form which occurs in Sumatra (syn. buxtoni Tweedd.). It has an almost complete band of brown feathers across the breast, but his feature is often present in topotypes though the breast is generally white.

#### 30. Anuropsis malaccensis (Hartl.) subsp.

Brachypteryx malaccensis Vorderm., p. 487.

1 sex inc. Wing 67 mm.

This specimen, collected in 1888, is now very like the Sarawak race, A. m. saturata Rob. & Kloss, on account of the dark sides of the head and deep tawny sides and flanks. It is perhaps A. m. docima Oberh., of the adjacent island of Banka (Smithsonian Misc. Coll., 72, No. 2, 1922, p. 10) which, in addition to the above characters, has the upper parts dark slaty brown rather than rufescent.

#### 31. Cvanoderma erythroptera (?) apega Oberh.

OBERH., Smithsonian Misc. Collections, 74, No. 2, 1922, p. 8, Banka Id. Cyanoderma erythropterum Vorderm., p. 483.

3 sex inc. Wings 56, 57, 58 mm.

These skins, though in bad condition, seem to agree with the description of the Banka bird:- small, crown nearly all plain slate colour, upper parts bright ferruginous.

In these respects they are closely resembled by C. e. rufa Chasen and Kloss, of the south coast of Borneo, which, however, is larger with more grey on the nape.

#### 32. Turdus obscurus obscurus (Gm.).

2 9. Wings 117, 121 mm.

# 33. Orthotomus atrogularis atrogularis Temm.

Orthotomus flavoviridis Vorderm., p. 494.

1 d. Wing 48 mm.

OBERHOLSER has named the bird of Banka O. a. eumelas (Smithsonian Misc. Collns., 76, No. 6, 1923, p. 6) and suggests that Sumatran birds may be the same. I cannot see any differences between them and examples of the typical race.

# 34. Chalcostetha calcostetha calcostetha (Jard.).

Chalcostetha insignis Vorderm., p. 467.

1 d. Wing 62 mm.

# 35. Aethopyga siparaja siparaja (Raffles).

Aethopyga siparaja Vorderm., p. 466.

1 d. Wing 51 mm.

- 36. Lepotocoma brasiliana brasiliana (Gm.).

  Nectarophila hasselti Vorderm., p. 466.

  1 ♂. Wing 51 mm.
- 37. **Dicaeum trigonostigma** (Scop.). VORDERM., p. 465. 3 3, 1 9. Wings 3 47, 48, 49; 9 48 mm.
- 38. Prionochilus percussus ignicapillus (Eyton).

  Prionochilus percussus Vorderm., p. 461.

  1 ♂, 1 ♀. Wings ♂ 54; ♀ 50 mm.
- 39. Prionochilus maculatus maculatus (Temm.). Vorderm., p. 464. 1 &, 1 \copp. Wings & 49; \copp 47 mm.
- 40. Prionochilus thoracicus (Temm.). Vorderm., p. 461.
  2 d. Wings 57, 63 mm.
  Known from Borneo (type locality) and the Malay Peninsula. Vor-

Known from Borneo (type locality) and the Malay Peninsula. Vor-DERMANN includes Sumatra in the distribution, but I have not found any definite records.

41. Chalcoparia singalensis sumatrana Kloss.

Chalcoparia singalensis Vorderm., p. 469.

1 & Wing 57 mm.

Apparently not differing from Sumatran birds.