

LIST OF BIRDS COLLECTED IN NORTH-WESTERN AUSTRALIA AND ARNHEM-LAND BY MR. J. T. TUNNEY.

BY ERNST HARTERT, Ph.D.

**D**URING the years 1901 to 1903 Mr. J. T. Tunney collected mammals and birds in the north-western parts of West Australia and Arnhem Land, the northern portion of what is somewhat incongruously called "Northern Territory of South Australia."

All these districts, especially the latter, belong to the less known ones of Australia, and therefore Mr. Tunney's collections increase our knowledge to some extent. He even discovered a few new forms, in addition to such exceedingly rare birds as *Ptilinopus cineta alligator* and *Petrophassa rufipennis* Collett, the beautiful *Pitta iris*, etc., etc.

The Tring Museum is much indebted to Dr. Bernard Woodward, the curator of the Perth Museum, Western Australia, who arranged the expedition, and to the zeal and industry of Mr. Tunney.

During the work on these birds I came across several open questions which can only be answered by our ornithological friends in Australia, and we hope that they will soon do so. Many collectors are so fond of egg-collecting that they neglect the collecting of birds, even in countries which are quite insufficiently known. The many problems still unsolved with regard to species and subspecies show that this is a great mistake.

I have employed trinomials for forms which agree with others in their main features and at the same time represent them geographically, but there are doubtless more birds which must eventually bear three names; to decide finally about all cases in which trinomials may be used means a thorough study of all Australian birds and their allies. Mr. Campbell, in his admirable book on the nests and eggs of Australian birds, has sometimes recognised such geographical representatives or subspecies, but Australian ornithologists have not yet generally advanced sufficiently to thoroughly study and distinguish the local forms (subspecies) of birds, and to use the eminently practical and short method of trinomial nomenclature. I hope they will not only follow my lead, but employ trinomials even more frequently than I have done in this short and merely informal article. My greetings to our ornithological brethren in Australia—to those I know and to those I hope to know in future!

A complete set of the birds here enumerated is in the Rothschild Museum at Tring, a second one in the Perth Museum, Western Australia, and some have been presented to the British Museum (Natural History), South Kensington, London.

1. *Dromaeus novaehollandiae* (Lath.) (? subsp.).

*Casuarinus novaehollandiae* Latham, *Ind. Orn.* ii. p. 665 (1790).

2 ♂♂, 1 ♀, Strelly River, N.W. Australia, 1, 4. ix. 1901 (Nos. R. 230, 231, 232).

1 ♀, Shaw River, N.W. Australia, 27. viii. 1901 (No. R. 229).

1 pull. Mary River, Northern Territory, 14. ix. 1902 (No. 929).

2 pull. 40 miles west of Avergne Station, Northern Territory, 25. vi. 1902 (Nos. R. 552, 553).

The material at present at my disposal does not enable me to discuss the question of the existence of one or more subspecies of *Dromaeus novaehollandiae*, but there is no reason why there should not be several. Some specimens are very reddish, but that is evidently not a subspecific character, but due to the reddish soil with which they are smeared.

## 2. *Megapodius duperreyi tumulus* Gould.

(Cf. *Nov. Zool.* 1901, p. 136.)

11 specimens, Alligator River, September 1903 (Nos. 1631—1641).

*M. d. tumulus* differs from *M. d. duperreyi* by its darker and more rufous upperside and larger size.

## 3. *Turnix maculosus* (Temm.).

*Hemipodius maculosus* Temminck, *Pigeons et Gall.* iii. pp. 631, 757 (1815: Australia).

♂ ad., ♂ pull., South Alligator River, October 1902, April 1903, on the river flats, in the long grass. "Iris white, legs yellow." (Nos. 810, 1177.)

## 4. *Turnix castanotus* (Gould).

*Hemipodius castanotus* Gould, *P. Z. S.* 1839. p. 145 (N.W. Australia)

♂ ♀, South Alligator River, and 20 miles west of it, near the hills, on quartzite ground. "Not numerous." (Nos. 1178, 1179.) "Iris and feet yellow."

A specimen from Obogama in N.W. Australia, received from Mr. Robert Hall, is lighter on the back, rump and tail, with the feathers of the back with large black patches.

## 5. *Turnix velox* Gould.

*Hemipodius velox* Gould, *P. Z. S.* 1840. p. 150 (interior of N. S. Wales).

1 ♂, 3 ♀ ♀, Nullagine, N.W. Australia, April 1901. "Iris and feet whitish." In flat country, especially on the river flats. (Nos. R. 126 to R. 129.)

## 6. *Synoicus australis* (Temm.).

*Coturnix australis* Temminck, *Pigeons et Gall.* iii. pp. 474, 740 (1815: Australia, Capt. Baudin, Paris Museum).

7 ♂ ♀, Lewis Island, July 1901 (Nos. R. 199 to 205).

2 ♂ ♂, Brock's Creek, Northern Territory, August 1902 (Nos. R. 535, 536).

16 ♂ ♀, Alligator River, July to November 1903 (Nos. 891 to 898, 1171A, 1539, 1540, 1650 to 1653, 1716).

## 7. *Ptilinopus cincta alligator* Collett.

*Ptilopus (Leucotreron) alligator* Collett, *P. Z. S.* 1898. p. 354 (Alligator River).

♂ ad., in granite ranges ten miles east of South Alligator River, 85 miles from the coast, 10. viii. 1903. "Colour of iris red, leg red." (No. 1536.)

♀ ad., shot in jungle near sandstone cliff at head of west branch of South Alligator River, 22. v. 1903 (No. 1178H).

(Cf. *Nov. Zool.* 1904, p. 179.)

8. *Ptilinopus swainsoni ewingi* Gould.

*Ptilinopus ewingi* Gould, *P. Z. S.* 1842. p. 19 (Port Essington).

4 ♂♂, 4 ♀♀, (South) Alligator River, 5, 6, 7, 9, 10. x. 1903 (Nos. 1608—1620).  
“Caught in jungle at Kaparegoo. Iris orange, legs green, bill greenish.”

9. *Myristicivora spilorrhoea* (Gray).

*Carpophaga spilorrhoea* G. R. Gray, *P. Z. S.* 1858. pp. 186, 196 (Aru Is. and New Holland—Port Essington).

1 ♀, Mary River, Northern Territory, 12. ix. 1902 (No. 714).

7 ♂♂, 5 ♀♀, South Alligator River, 5, 7. x. 1902, 9, 21. xi. 1902, 21, 22, 30. ix. 1903 (Nos. 1604 to 1607). “Iris brown (black), feet bluish in some, greenish yellow in other specimens.”

10. *Geopelia humeralis* (Temm.).

*Columba humeralis* Temmiuck, *Trans. Linn. Soc. London*, xiii. p. 128 (1821: Broad Sound, Australia).

2 ♂♂, 2 ♀♀, Lewis Islands, N.W. Australia, 1. vii. 1901 (Nos. R. 178 to R. 181).

1 ♂, Ord River, East Kimberley, W. Australia, 17. vi. 1902 (No. R. 545).

1 ♀, Brock's Creek, 5. viii. 1902 (No. R. 544).

2 ♂♂, 1 ♀, (South) Alligator River, 2, 7. ix. 1903, 13. xi. 1902 (Nos. 1626, 1627, 1717). “Iris yellow, legs pink, bill bluish.”

11. *Geopelia placida* Gould.

*Geopelia placida* Gould, *P. Z. S.* 1844. p. 55 (Port Essington).

*Geopelia tranquilla* Gould, *P. Z. S.* 1844. p. 56 (N. S. Wales).

1 ♂, Derby, 7. iii. 1902 (No. 1625).

2 ♂♂, Margaret River, Derby, W. Australia, 20, 25. iv. 1902 (Nos. R. 502, R. 505).

2 ♂♂, Eureka, Northern Territory, 2, 23. ii. 1903 (Nos. 1082, 1083).

1 ♂, 2 ♀♀, 1 juv., (South) Alligator River, 27. iii., 9, 10. iv., 15. ix. 1903 (Nos. 1301, 1172, 1172b, 1173c).

“Iris white, legs pink. Numerous, found in all parts.”

12. *Geopelia cuneata* (Lath.).

*Columba cuneata* Latham, *Ind. Orn. Suppl.* p. lxi. no. 8 (1802: “Habitat in Nova Hollandia”).

1 ♂, 2 ♀♀, Derby, 7. iii. 1902 (Nos. 1621 to 1624).

1 ♂, 1 sex ?, Ord River, East Kimberley, 22. v. 1902 (Nos. R. 503, 504).

“Iris red (pink), feet flesh-colour (white), bill dull blue (black).”

13. *Chalcophaps chrysochlora chrysochlora* (Wagl.).

*Columba chrysochlora* Wagler, *Syst. Av. Columba* spec. 79 (1827: description solely referable to the Australian form. Synonyms and some of the localities—Ceylon, Java, Sumatra, China!—erroneous).

(Cf. *Nov. Zool.* 1904, p. 183.)

2 ♂♂, 1 ♀, South Alligator River, 7, 9. x. 1903 (Nos. 1628, 1629, 1630).

“Iris brown, feet pink.”

14. *Phaps chalcoptera* (Lath.).

*Columba chalcoptera* Latham, *Ind. Orn.* ii. p. 604 (1790: Norfolk Island.—? errore).

1 ♂, Margaret River, Derby, W.A., 25. iv. 1902 (No. R. 501).

1 ♂, twelve miles from Victoria Station, Northern Territory, 4. vii. 1902 (No. R. 538).

1 ♂, Cullen River, Northern Territory, 24. vii. 1902 (No. R. 539).

1 ♀, Broek's Creek, Northern Territory, 18. viii. 1902 (No. R. 537).

"Iris brown, legs pink, bill black."

15. *Petrophassa rufipennis* Collett.

*Petrophassa rufipennis* Collett, *P. Z. S.* 1891. p. 354, pl. xxviii. (Arnhem Land, N. Australia).

11 ♂♂, 12 ♀♀, South Alligator River (mostly ten miles east of), July, August 1903 (Nos. 1515 to 1533, 1174D, 1175E, 1176F, 1177G). "Iris and legs brown (legs black). In and near granite ranges, about 85 miles from the coast."

16. *Geophaps smithii* (Jard. & Selby).

*Columba smithii* Jardine & Selby, *Ill. Orn.* ii. pl. civ. (about 1836: "New Holland," cf. text to pl. ciii).

♂♀, Cockatoo Springs, East Kimberley, W. Australia, 20. vi. 1902 (Nos. R. 541, 543).

1 ♂, Cullen River, Northern Territory, 24. vii. 1902 (No. R. 542).

2 ♂♂, 1 ♀, South Alligator River, and 25 miles east of S. A. R., 6. xi. 1902, 20. viii. 1903 (No. 716, 1534, 1535).

"Iris white (silvery grey). Legs dull pink. Bill black."

17. *Lophophaps plumifera* (Gould).

*Geophaps plumifera* Gould, *P. Z. S.* 1842. p. 19 (N.W. coast of Australia).

(*Lophophaps plumifera* Gould, *nee* Salvadori!)

2 ♂♂, 1 ♀, Hall's Creek Road (Derby), 17, 21. iv. 1902 (Nos. R. 507 to R. 509).

2 ♀♀, Margaret River, Derby, 25. iv. 1902 (Nos. R. 510, 511).

2 ♀♀, Fitzroy River, N.W. Australia, 200 miles up the river from Derby, 9. iv. 1902 (Nos. R. 506, 512).

1 ♂, Wyndham District, October 1898 (No. 294).

I am using the name *plumifera* for the birds enumerated as *L. leucogaster* in *Cat. B.* xxi. p. 535. By some error Count Salvadori applied the name *plumifera* wrongly to the bird correctly named *ferruginea*. Gould describes and figures his *plumifera* as having a white pectoral band and abdomen ("centre of the abdomen snow white," cf. *Handb. B. Austr.* ii. p. 136).

Mr. Rothschild has kept specimens of this graceful little Pigeon alive for some years. They do well on seed-food, and are extremely pretty. It is interesting to see, however, what changes are effected in their plumage through being in captivity and in a foreign climate. After some moults in many specimens the cinnamon crest feather and the hinder part of the crown become ashy grey like the forehead, and the entire upper surface becomes darker, in some specimens almost blackish.

This is one out of many examples which might serve to warn authors who are fond of describing "new species" from cage-birds in zoological gardens. No doubt some such forms have really been good new species (for example, *Chrysotis bodini*) but some have so far remained unique, and are likely never to be discovered in a wild state, because they are merely cage-variations.

Whether *L. leucogaster*, described from "Macbrihanish Station" in South Australia, is slightly different from the typical N.W. Australian *plumifera*, must remain doubtful, until specimens have been compared, but the figures and description agree so well with N.W. Australian birds, that I am inclined to think they are quite the same. Evidently Gould did not believe in his own "species." It is very amusing to read his excuses for naming it, in the *B. of Australia*.

### 18. *Lophophaps ferruginea* Gould.

*Lophophaps ferruginea* Gould, *Handb. B. Australia* ii. pp. 137, 138 (1865: Gascoigne River W. Australia).\*

(*Lophophaps plumifera* Salvadori, *Cat. B.* xxi. p. 533, nec Gould!)

6 ♂♂, 3 ♀♀, Nullagine (Taylor's Creek), N.W. Australia, April 1901 (Nos. R. 83 to R. 91).

Probably there are only two species of *Lophophaps*: *L. ferruginea*, with a cinnamon abdomen, and *L. plumifera* (= *leucoastra*) with a white abdomen. The specimens of *L. ferruginea* vary somewhat, some being deeper cinnamon, some paler, but this is apparently merely due to freshness of plumage. The specimens collected by Mr. T. Carter at Point Cloates, W. Australia, are rather pale and have very striking grey bases to the feathers of the upper back. It is possible that these belong to a new subspecies.

### 19. *Ocyphaps lophotes* (Temm.).

*Columba lophotes* Temminck, *Pl. Col.* 142 (1823: Australia).

1 ♂, Mt. Hatley, Hall's Creek Road, Derby, 16. iv. 1902 (No. R. 499).

♂♀, Soda Springs, Hall's Creek Road, Derby, 23. iv. 1902 (Nos. R. 495, R. 500).

3 ♂♂, Margaret River, 13, 20, 25. iv. 1902 (Nos. R. 494, 496, 497).

1 ♂, Elvira River, 14. v. 1902 (No. R. 498).

2 ♂♂, Avergne Station, Northern Territory, 27. vi. 1902 (Nos. R. 540, E. 546).

"Iris pink. Feet pink. Bill black, pink at base."

(Possibly specimens from N. S. Wales and Victoria are slightly more brownish above, less pale?)

### 20. *Poliolimnas cinereus* (Vieill.).

*Porphyrio cinereus* Vieillot, *Nour. Dict.* xxviii. p. 29 (1819: "Pays inconnu." Type from Java, cf. Pucheran, *Rev. & Mag. Zool.* 1851, p. 563).

♀ ad., South Alligator River, 18. xi. 1902 (No. 817). "In reeds near swamp. The only one I have seen here."

♂ ad., Alligator River, 28. x. 1903 (No. 1614). "Sixty miles from the coast."

\* In *Cat. B. Brit. Mus.* my friend Count Salvadori says that there is no description (*descr. nulla*) in the *Handbook*. It is true there is no description on p. 137, but there is a detailed one on p. 138 which by some accident was overlooked by the usually most careful of authors of "*Cat. B.*"

21. **Porphyrio melanotus** Temm.

*Porphyrio melanotus* Temminck, *Man. d'Orn.* ii. p. 701 (1820 : Australia).

6 ad., 2 juv., South Alligator River, September—October 1902, September 1903 (Nos. 978, 984, 1709). “Iris reddish, legs red.”

The Arn birds, generally united with *P. melanotus*, seem to form a distinct race with larger frontal shield and brighter blue underside, but our material is not sufficient at present to form a definite opinion.

22. **Colymbus fluviatilis novaehollandiae** (Steph.).

*Podiceps novaehollandiae* Stephens, in Shaw's *Gen. Zool.* xiii. pt. 1. p. 18 (1826 : Australia).

1 ♂ ad., Lyon River, 3. iv. 1902 (No. 514).

5 ♂ ♀, immat., South Alligator River, November 1902 (Nos. 917 to 921).

23. **Hydrochelidon hybrida** (Pall.).

*Sterna hybrida* Pallas, *Orn. Rosso-Asiat.* ii. p. 338 (1811 : S. Volga and Sarpa).

2 ♂ ♂, (South) Alligator River, 6. xi. 1902, 23. ix. 1903 (Nos. 816, 1645).

24. **Gelocholidon nilotica macrotarsa** (Gould).

[*Sterna nilotica* Gmelin, *Syst. Nat.* i. p. 606 (1788 : ex Hasselquist ; Egypt. Cf. *Nor. Zool.* 1902. p. 604.)]

*Sterna macrotarsa* Gould, *P. Z. S.* 1837. p. 26 (Tasmania).

2 ♂ ♂, (South) Alligator River, 7. xi. 1902, 29. viii. 1903 (Nos. 815, 1706).

Australian examples may easily be distinguished from European and North African ones by their larger bills, and American ones by their very small beaks.

25. **Hydroprogne caspia** (Pall.).

*Sterna caspia* Pallas, *Nor. Comm. Petrop.* xiv. i. p. 582, pl. xxii. fig. 2 (1790).

2 ♀ ♀, Lewis Island, N.W. Australia, 28. vi., 2. vii. 1901 (Nos. R. 186, 187).

“Iris and legs black.”

26. **Sterna dougalli gracilis** Gould.

(Cf. *Nor. Zool.* 1902, p. 594.)

5 ♂ ♂, 4 ♀ ♀, Bedout Island, N.W. Australia, 26 to 28. v. 1901 (Nos. R. 26 to R. 34).

27. **Sterna bergii** Licht.

*Sterna bergii* Licht., *Vcz. Doubl.* p. 80 (1823 : Cape of Good Hope).

3 ♂ ♂, 3 ♀ ♀, Bedout Island, N.W. Australia, May 1901 (Nos. R. 35 to R. 40). Many of the well-known eggs were found.

28. *Sterna fuliginosa* Gm.

*Sterna fuliginosa* Gmelin, *Syst. Nat.* i. p. 605 (1788: ex Buffon, Forster, Latham, etc. "Hab. in mari atlantico, americano, indico, australi septentrionali . . .").

5 ♂♂, 5 ♀♀, Bedont Island, N.W. Australia, 20 to 28. v. 1901 (Nos. R. 16 to R. 25).

There are no doubt subspecies also of this bird, but I cannot at present discuss them satisfactorily.

Many eggs were taken.

29. *Anous stolidus pileatus* (Scop.).

(Cf. *Nor. Zool.* 1900, p. 9.)

Apparently the Australian form is the same as that of the North Pacific. Sometimes the forehead is very white.

6 ♂♂, 4 ♀♀, Bedont Island, N.W. Australia, May 1901 (Nos. R. 6 to R. 15).

This bird had also eggs during the visits.

30. *Larus novaehollandiae* Steph.

*Larus novaehollandiae* Steph., in Shaw's *Gen. Zool.* xiii. pt. i. p. 196 (1826: ex Latham).

1 ♂ juv., Lewis Island, N.W. Australia, 27. vi. 1901 (No. R. 185).

31. *Haematopus unicolor fuliginosus* Gould.

[*Haematopus unicolor* Wagler, *Isis*, 1832, p. 139 (ex Forster's MS., loc. New Zealand).]  
*Haematopus fuliginosus* Gould, *B. Australia* vi. pl. 8 (1845: Australia).

It seems to me that Australian specimens of the black Oyster-catcher can easily be distinguished by their bills being much stouter and more rounded in front on the culmen, not so sharp, knife-like, as in *H. unicolor* from New Zealand.

♀, Lewis Island, N.W. Australia, 1. vii. 1902 (No. R. 188).

32. *Haematopus longirostris* Vieill.

*Haematopus longirostris* Vieillot, *Nour. Dict. d'Hist. Nat.* xv. p. 410 (1817: Australia).

1 ♂, 2 ♀♀, Lewis Island, N.W. Australia, 24. vi., 3, 5. vii. 1901 (Nos. R. 182 to R. 184).

1 ♀, Port Headland, 5. viii. 1901 (No. R. 225).

"Iris red, legs pink."

33. *Erythrogonys cinctus* Gould.

*Erythrogonys cinctus* Gould, *P. Z. S.* 1837. p. 155. ("In Novâ Cambriâ Australi").

♂, South Alligator River, November 1902 (No. 900).

34. *Lobivanellus miles* (Bodd.).

*Tringa miles* Boddart, *Tabl. Pl. Ent.* p. 51 (1785: ex Buffon & Brisson. Locality erroneously Louisiana! We may accept Australia as the typical locality.)

8 ♂♀ ad., South Alligator River, 17, 30. x. 1902, 12. xi. 1902, 24. viii., 11. ix. 1903 (Nos. 913 to 916, 1642 to 1644, 1743).

1 ♀ ad., Eureka, 13. i. 1903 (No. 1033).

1 ♂ juv., Hall Creek, 16. iv. 1902 (No. R. 515).

“ Iris yellow, legs pink.”

**35. Ochthodromus veredus (Gould).**

*Charadrius veredus* Gould, *P. Z. S.* 1848. p. 38 (Northern Australia).

2 ♂♂, 8 ♀♀, all in winter plumage, (South) Alligator River, October to November 1902, September 1903 (Nos. 885 to 890, 1775 to 1777, 1780, 1782).

“ Iris black (brown), legs yellowish (brown), bill black.”

**36. Ochthodromus mongolus (Pall.).**

*Charadrius mongolus* Pallas, *Reise*, iii. p. 700 (Mongolia).

1 ♂, Bedout Island, 28. v. 1901 (No. R. 41).

**37. Aegialitis ruficapillus (Temm.).**

*Charadrius ruficapillus* Temm., *Pl. Col.* v. pl. 147. fig. 2 (1832: “L'Océanie”).

♂ ad., Lewis Island, 4. vii. 1901 (No. R. 194). “ Iris brown, legs black.”

♀, Derby, 5. iii. 1902 (No. 1606).

**38. Aegialitis melanops (Vieill.).**

*Charadrius melanops* Vieillot, *Nouv. Dict. d'Hist. Nat.* xxvii. p. 139 (1818).

♂, Meda Station, Kimberley, 8. ii. 1902. “ Iris brown (dark), feet flesh-colour, bill pink at base, black at tip ” (No. 400).

♀, South Alligator River, 6. xi. 1902 (No. 897).

**39. Himantopus leucocephalus Gould.**

*Himantopus leucocephalus* Gould, *P. Z. S.* 1837. p. 26 (“Australia et insulis Java, Sumatra”).

5 ♂♂, 3 ♀♀, South Alligator River, October and November 1902, June and August 1903 (Nos. 907 to 912, 1180, 1707). “ Iris and legs red, bill black.”

**40. Numenius cyanopus Vieill.**

*Numenius cyanopus* Vieillot, *Nouv. Dict. d'Hist. Nat.* viii. p. 306 (1817: Australia).

1 ♂ ad., Derby, W. Australia, 19. xii. 1901 (No. 362).

**41. Numenius phaeopus variegatus (Scop.).**

(*Cf. Nov. Zool.* 1904, p. 186.)

1 ♀, Derby, W. Australia, 19. xii. 1901 (No. 363).

**42. Numenius minutus Gould.**

*Numenius minutus* Gould, *P. Z. S.* 1840. p. 176 (New South Wales).

*Mesoscolopax minutus* Sharpe, *Cat. B. Brit. Mus.* xxiv. p. 371.

I do not think that it is advisable to separate this bird **generically** on account of the back and sides of the metatarsus being more largely scintillated,



the scutellae not being broken up as in *Numenius*, where these portions are reticulated. If such a character alone is made use of for generic separation, why is it not done with *Heteractitis brevipes* and *incanus*?

1 ♀, Port Headland, 4. x. 1901 (No. R. 306).

4 ♂♂, 6 ♀♀, (South) Alligator River, October and November 1902, September and October 1903 (Nos. 893 to 896, 1778, 1779, 1781, 1783, 1784, 1785).

43. **Heteractitis brevipes** (Vieill.).

*Totanus brevipes* Vieillot, *Nouv. Dict.* vi. p. 410 (1816).

1 ♂, Port Headland, 5. viii. 1901 (No. R. 227).

44. **Heteropygia acuminatus** (Horsf.).

*Tringa acuminatus* Horsf., *Trans. Linn. Soc. Lond.*, xiii. p. 192 (1821 : Java).

2 ♂♂, (South) Alligator River, 21. x. 1902, 25. ix. 1903 (Nos. 891, 1776).

45. **Hydralector gallinacea** (Temm.).

*Parva gallinacea* Temminck, *Pl. Col.* v. pl. 464 (1828).

The ♀ seems really to be larger than the ♂; the young have no black chest.

♂♀, near Mary River, Northern Territory, 12, 22. ix. 1902 (Nos. 820, 828).

5 ♂♂, 6 ♀♀, South Alligator River, October 1902 (Nos. 818, 819, 821 to 827, 829, 829A).

“ Iris brown, legs greenish yellow.”

46. **Stiltia isabella** (Vieill.).

*Glareola isabella* Vieillot, *Analyse* p. 69 (1816 : “ habite l’Australasie ”).

3 ♂♂, 5 ♀♀, South Alligator River, October and November 1902 (Nos. 898 to 905). “ Iris brown, legs brown.”

47. **Burhinus grallarius** (Lath.).

*Charadrius grallarius* Latham, *Ind. Orn. Suppl.* p. lxxvi. (1801 : Anstralia).

(*Charadrius magnirostris* Latham, *Ind. Orn. Suppl.* p. lxxvi. precedes the name *grallarius*, but it is doubtful if the former can be accepted.)

1 ♀, Shaw River, N.W. Australia, 28. viii. 1901 (No. R. 224).

1 ♀, Union, Northern Territory, 27. ix. 1902 (No. 830).

2 ♂♂, 2 ♀♀, South Alligator River, March, May, June 1903 (Nos. 1181 to 1184).

“ Iris yellow. Legs pale yellowish olive.”

48. **Esacus magnirostris** (Vieill.).

*Oedincemus magnirostris* Vieillot, *Nouv. Dict. d’Hist. Nat.* xxiii. p. 231 (“ La Nouvelle Hollande ”).

1 ♂, 1 ♀, Lewis Island, N.W. Australia, June 1901 (Nos. R. 189, 190).

49. **Eupodotis australis** (J. E. Gray).

*Otis australis* J. E. Gray, in Griffith’s ed. Cuvier’s *Animal Kingdom*, Birds, iii. p. 305 (1829 : Australia).

1 ♀, Box Soak, N.W. Australia, 26. ix. 1901 (No. 228).

50. **Antigone australasiana** (Gould).

*Grus australasiana* Gould, *B. Austr.* vi., pl. 48 (1848).

1 ♂, Ewaka, Northern Territory, 23. i. 1903 (No. 1054).

7 ♂ ♀, Alligator River, June and August 1903 (Nos. 1345 to 1348, 1807, 1808, one without label). "Iris yellow, legs purplish black."

51. **Ibis molucca** Cuv.

*Ibis molucca* Cuvier, *Règne Animal*, i. p. 520 (1829).

7 ♂ ♀, South Alligator River, September, October, November 1902, 1903 (Nos. 858 to 862, 876, 1792). "Iris and legs brown."

52. **Carphibis spinicollis** (Jameson).

*Ibis spinicollis* Jameson, *Edinburgh New Phil. Journ.* xix. p. 213 (1835).

2 ♂ ad., 1 ♂ juv., South Alligator River, 1. xi. 1902, 17. vi. 1903 (Nos. 863, 1185, 1186). "Iris brown, legs dull pink, black in the young."

53. **Plegadis falcinellus** (L.).

*Tantalus falcinellus* Linnaeus, *Syst. Nat.* ed. xii., 1, p. 241 (1766: "Hab. in Austria, Italia, circa laeus").

14 ♂ ♀, South Alligator River, October, November 1902, June, September 1903 (Nos. 864 to 873, 1187, 1791).

54. **Platalea regia** Gould.

*Platalea regia* Gould, *P. Z. S.* 1837. p. 106 ("Novâ Cambriâ. Australia").

7 ♂ ♂ ♀ ♀, South Alligator River, November 1902, October 1903 (Nos. 875, 877, 878, 879, 880, 1786 to 1788). "Iris red, reddish, black, brown."

55. **Xenorhynchus asiatica** (Lath.).

*Myeteria asiatica* Latham, *Ind. Orn.* ii. p. 670 (1790).

♂ juv., Mary River, 2. x. 1902.

♂ ♀, South Alligator River, November 1902; 7 ♂ ♀, June and August 1903 (Nos. 882, 884, 1349, 1802 to 1806).

56. **Ardea sumatrana** Raffl.

*Ardea sumatrana* Raffles, *Trans. Linn. Soc.* xiii. p. 325 (1822).

1 ♂ juv., South Alligator River, 21. x. 1902 (No. 874). "Iris yellow."

57. **Mesophoyx plumiferus** (Gould).

*Herodias plumiferus* Gould, *P. Z. S.* 1847. p. 221 (N. S. Wales).

I am inclined to unite the genus *Mesophoyx* with *Herodias* and *Garzetta*. The serrations on the mandible are so fine, the male ornaments not practical as generic characters, the bills so variously shaped, that I cannot see the use of these many genera of *Ardeidae*.

8 ♂ ♀, Alligator River, October 1902, August 1903 (Nos. 848 to 855, 1751).

1 ♂, east of Mary River, Northern Territory, 21. ix. 1902 (No. 847). "Iris yellow, legs black."

58. *Herodias alba timoriensis* Less.

1 ♂ ad., South Alligator River, 16. x. 1902 (No. 857). One without label.

59. *Notophox pacifica* (Lath.).

*Ardea pacifica* Latham, *Ind. Orn. Suppl.* p. lxx. (1801 : Australia).

♀ ad., South Alligator River, 24. x. 1902 (No. 836). "Iris yellow, legs black."

60. *Notophox picata* (Gould).

*Herodias picata* Gould, *P. Z. S.* 1845. p. 62 (Port Essington).

I see no reason for rejecting the name *picata*, because there is an *Ardea picata* Raffles (1822), which is a synonym of *Dupetor flavicollis* Lath.

16 ♂ ♀, 1 juv., Alligator River, October, November 1902, September 1903 (Nos. 837 to 848, 1744 to 1750). "Iris yellow, legs yellow." On the open river flats.

61. *Demiegretta sacra* (Gm.).

♀ in slate-grey plumage with white throat-stripe, Lewis Island, N.W. Australia, 26. vi. 1901 (No. R. 191).

62. *Butorides javanica stagnatilis* (Gould).

*Ardetta stagnatilis* Gould, *Proc. Zool. Soc.* 1847. p. 221 (Port Essington).

♂, Derby, W. Australia, 19. xii. 1901 (No. R. 364).

63. *Dupetor flavicollis gouldi* (Bp.).

(Cf. *Nor. Zool.* 1903, p. 63).

♀ ad., South Alligator River, 8. iv. 1903 (No. 1179 *i*).

64. *Nycticorax caledonica* (Gm.).

2 ♀ ad., 4 ♂ juv., Alligator River, October, November 1902 (Nos. 831 to 835, 1708).

1 ♂ ad., 1 ♂ juv., Eureka, Northern Territory, January, February 1903 (Nos. 1034, 1127).

1 ♀ juv., Nullagine River, 17. iv. 1901 (No. R. 149).

1 ♀ ad., Coongan River, N.W. Australia, 5. iv. 1901 (No. R. 150).

65. *Cygnus atrata* (Lath.).

Specimens were received from Onslow, N.W. Australia ; Augusta, S.W. Australia ; Oyster Harbour, Albany, S.W. Australia, all more or less immature. A young in down from T. Carter, obtained near Point Cloates, W. Australia. 26. vii. 1900.

66. *Anseranas semipalmata* (Lath.).

11 ♂ ♀ ad., Alligator River, October 1902, October 1903 (Nos. 937, 939, 941, 943, 944, 1711, 1798 to 1801).

1 ♂, 1 ♀, near Mary River, Northern Territory, 22. ix. 1902 (Nos. 938, 941).  
“ Iris brown, feet yellow.”

Many of the specimens have the white under-surface soiled with rust-brown, apparently from water containing iron.

67. *Nettapus pulchellus* Gould.

*Nettapus pulchellus* Gould, *P. Z. S.* 1841. p. 89 (N. Australia).

3 ♂ ♂, 3 ♀ ♀, South Alligator River, October 1902 (Nos. 931 to 936).

1 ♂, Mary River, Northern Territory, 12. ix. 1902 (No. 930).

3 ♂ ♂, 2 ♀ ♀, Margaret River, Northern Territory, August 1902 (Nos. R. 547 to 551).

Found on most of the watercourses in the parts visited by Mr. Tunney, though not very numerous.

68. *Dendrocygna arcuata* (Horsf.).

*Anas arcuata* Horsf., *Zool. Res. in Java*, pl. 65 (1822: Java).

7 ♂ ♀ ad., South Alligator River, October 1902, June 1903 (Nos. 960 to 965, 1191).

2 ad., Meda Station, 27. i. 1902 (Nos. R. 377, 378).

69. *Dendrocygna eytoni* (Eyton).

*Leptotarsis eytoni* Eyton, *Mon. Anat.* p. 111 (1838: ex Gould MS.—Australia).

1 ♂, 3 ♀ ♀, South Alligator River, October 1903 (Nos. 1793 to 1796).

1 ♂, Mary River, September 1902 (No. 959).

1 ♂, 1 ♀, Glencoe Station, 3. xii. 1902 (Nos. 957, 958).

1 ♂, Mt. Ringwood, 24. ix. 1902 (No. 966).

1 ♀, Meda Station (Derby), 28. i. 1902 (No. R. 376).

70. *Tadorna radjah rufitergum* subsp. nov.

*Anas radjah* Garn., *Voy. Coqu.*, *Zool.* i. 2, p. 302 (1828: Buru.)]

Comparing the Australian specimens with our large series from the Moluccan Islands and New Guinea, Mr. Rothschild and I found that the former differ strikingly from the latter (*i.e.* typical *radjah*) by their chestnut or dark chestnut, instead of brownish black upper back.

Type of *T. r. rufitergum*: ♂ ad., South Alligator River, 13. x. 1902. Tunney coll. (No. 975).

Count Salvadori (*Cat. B. Brit. Mus.* xxvii. p. 176) has already drawn attention to the differences of Australian specimens, but has not given a name to them. The larger size of the Australian bird is not constant in a series, though generally noticeable.

12 ♂ ♀ ad., 1 juv., South Alligator River, October—November 1902, June 1903 (Nos. 967 to 977, 1189, 1190). “ Iris and legs white.”

71. *Anas superciliosa* Gm.

*Anas superciliosa* Gmelin, *Syst. Nat.* i. p. 537 (1788 : New Zealand).

5 ♂ ♀, South Alligator River, October 1902 (Nos. 949 to 953). "Iris brown."

1 ♂, near Mary River, Northern Territory, 22. ix. 1902 (No. 954).

1 ♀ juv., Nullagine Road, 4. v. 1901 (No. R. 152).

2 ♀ juv., Carbarana Pool, Nullagine Road, 3. v. 1901 (Nos. R. 153, 154).

72. *Anas gibberifrons* S. Müll.

*Anas gibberifrons* S. Müller, *Nat. Gesch. Ned. Ind., Land- en Volkenkunde*, p. 159 (1839-44 Celebes).

2 ♂♂, 1 ♀, Alligator River, October—November 1902 (Nos. 945 to 947).

1 ♂, Minnies Pool, Derby, 16. iv. 1902 (No. R. 516).

2 ♂♂, 1 ♀, Condon Road, May 1901 (Nos. 53 to 55).

73. *Stictonetta naevosa* (Gould).

*Anas naevosa* Gould, *P. Z. S.* 1840. p. 177 (W. Australia).

1 ♀ ad., South Alligator River, 10. x. 1902 (No. 948). "Iris brown."

74. *Nyroca australis* Eyton.

*Nyroca australis* Eyton, *Mon. Anat.* p. 160 (1838 : ex Gould MS.).

1 ♂, 1 ♀, 10 miles west of and near South Alligator River, November 1902 (Nos. 955, 956). "Iris white, legs brown."

75. *Phalacrocorax sulcirostris* (Brandt).

2 ♀ ♀, South Alligator River, November 1902 (Nos. 922, 923).

76. *Phalacrocorax melanoleucus* (Vieill.).

1 ♂ ad., Alligator River, 29. viii. 1903 (No. 1710).

77. *Plotus novaehollandiae* Gould.

2 ♂ ad., 2 ♂ juv., 1 ♀, South Alligator River, October—November 1902 (Nos. 925 to 928).

1 ♀ ad. (erroneously sexed "♂"), Carbarana Pool, Nullagine Road (No. R. 151).

78. *Sula cyanops* (Sund.).

2 ♂♂, 3 ♀♀, Bedont Island, West Australia, May 1901 (Nos. 51, 52, 56 to 66). "Iris yellow, legs blue."

79. *Sula sula* (L.).

6 ♂♂, 5 ♀♀, Bedout Island, West Australia, May 1901 (Nos. 42 to 50, 67 to 69).

80. *Fregata ariel* (Gould).

13 ♂ ♀ ad., Bedout Island, May 1901 (Nos. 70 to 82). "Iris brown, legs red."

Numerous eggs were found, measuring 59.7 × 41, 60 × 45, 62.7 × 47.7, 65 × 43.5, 66.7 × 42.7, and 70.6 × 47 mm.

81. *Pelecanus conspicillatus* Temm.

1 ♀, South Alligator River, 20. ix. 1903 (No. 1797).

82. *Astur novaehollandiae* (Gm.).

*Falco Novae Hollandiae* Gmelin, *Syst. Nat.* i. p. 264 (1781—ex Latham, "New-Hollaud White Eagle." New Holland).

2 ♂ ♂, 2 ♀ ♀, Alligator River, 6, 10, 27. x. 1903 (Nos. 1752—1755). "Iris red, legs yellow."

1 ♀, Gregory River, Northern Territory, 10. vii. 1902 (No. R. 554).

1 ♀, east of Mary River, Northern Territory, 16. ix. 1902 (No. 692).

83. *Astur fasciatus* Vig. & Horsf. (*approximans* anct.).

*Astur fasciatus* Vig. & Horsf., *Trans. Linn. Soc. Lond.* xv. p. 181. No. 4 (Australia).

*Astur approximans* Vig. & Horsf., *Trans. Linn. Soc. Lond.* xv. p. 181. No. 5 (Australia).

The underside of this species is barred with brown and white, the white bars being as wide or a little narrower than the brown ones, which are rufous-brown, with darker edges.

There is a great variation in size, the females alone varying in the wing from 268 to 291 mm. Males are strangely rare in collections, at least adult ones. They are sometimes exactly like the females, only smaller, sometimes, however, much more reddish, but the dark bars of the under-surface paler, more reddish, the white ones narrower. Such specimens are hardly distinguishable from females of *Astur torquatus torquatus* from Timor, except that the bill is smaller. If they really are males they can only be the males of *approximans*. The males are very much smaller, the wings measuring only 228 to 247 mm. Specimens from Queensland, North and North-West Australia, agree fairly well with each other, though somewhat variable.

A specimen shot in the "North of Victoria" is much darker brown above, and the brown bars below are very broad and dark. It is possible that a series shows similar differences, in which case we should distinguish a darker subspecies in Victoria.

Mr. Tunney sent the following specimens :

♀ juv., Eureka, Northern Territory, 10. i. 1903 (No. 982).

♂ ♀ ad., ♀ juv. (the adult ♂ sexed ♀, but doubtless erroneously) (South Alligator River, 12. v., 17. vi., 22. ix. 1903 (Nos. 1198, 1199, 1769).

"♂ ♀ ad. : Iris and legs yellow. Juv. : Iris and legs yellow."

84. *Astur cruentus* Gould.

*Astur cruentus* Gould, *P. Z. S.* 1842. p. 113 (W. Australia).

1 "♂" Mt. Anderson, W. Kimberley, 20. x. 1901 (No. R. 277).

I have named this specimen *cruentus*, as Sharpe, Robinson, and Australian

authorities have named similar specimens *cruentus*. They are underneath light rusty cinnamon with narrow white bars. The rufous band on the hind-neck is wide and uninterrupted. The wing of this bird (marked ♂) measures 270 mm., that of a female from Point Cloates 310 mm.

It is possible that these birds do not belong to *A. cruentus*, though it is by no means certain. Mr. Rothschild thinks they must be the same, since the variation of *A. fasciatus* (= *approximans*) and that of *torquatus* from Timor is considerable.

#### 85. *Accipiter cirrocephalus* (Vieill.).

*Sparceus cirrocephalus* Vieillot, *Nour. Dict. d'Hist. Nat.* x. p. 329 (1817—Australia).

1 ♀ ad., Brock's Creek, 6. viii. 1902 (No. R. 556. "Iris and feet yellow, bill black.")

1 ♀ ad., 2 ♀ ♀ juv., 1 ♂ juv., South Alligator River, 17. xi. 1902, 19. x. 1903 (Nos. 694, 1766, 1767, 1768).

It is truly strange how entirely similar this *Accipiter* is to *Astur fasciatus* (= *approximans*). In some cases absolutely nothing serves to distinguish a ♂ *Astur* from a ♀ *Accipiter* (adult and young), except the smaller bill of the latter and its long thin toes. While the inner toe (without claw) in the *Astur* reaches much beyond the first joint of the middle toe, often as far as the second one, it only reaches the first joint in the *Accipiter*.

#### 86. *Haliaetus leucogaster* (Gm.).

*Falco leucogaster*, Gmelin, *Syst. Nat.* i. p. 257 (1788—ex Latham. Locality unknown).

♂ ♀ ad., ♂ ♀ juv., South Alligator River, October and November 1902, June and October 1903 (Nos. 690, 691, 1192, 1193, 1774).

All these specimens are very large. Perhaps there is a larger race of the White-bellied Sea Eagle in Australia!

#### 87. *Haliastur indus girrenera* (Vieill.).

♀ ad., Derby, 6. iii. 1902 (No. 1756).

#### 88. *Haliastur sphenurus* (Vieill.).

*Melvus affinis* Gould, *P. Z. S.* 1837. p. 140 (Australia).

♀ juv., South Alligator River, 6. vi. 1903 (No. 1194).

#### 89. *Elanus axillaris* (Lath.).

*Falco axillaris* Latham, *Ind. Orn. Suppl.* i. p. ix. (1801; "habitat in Nova Hollandia").

5 ♂ ♀ ad., 3 jun., Alligator River, September and October 1903 (Nos. 1757 to 1763, 1770). "Iris red, legs yellow."

#### 90. *Ieracidea berigora* (Vig. & Horsf.).

*Falco berigora* Vig. & Horsf., *Trans. Linn. Soc. Lond.* xv. p. 184 (1827—Australia).

♀, Nullagine, 16. iv. 1901 (No. R. 155). Breast and abdomen cinnamon-rufous-brown. Patch in the middle of abdomen whitish with brown bars. "Iris brown, legs bluish."

♀, Argyle Station, East Kimberley, 31. v. 1902 (No. R. 410). Throat, breast, abdomen, and under tail-coverts white, some of the feathers with dark brown shafts, sides tinged with pale rufous and with more regular brown shafts. Thighs rufous-brown.

♂, Condon Rd., 15. v. 1901 (No. R. 1). Throat buff, breast and sides of body brown, with darker shafts, middle of abdomen buff, with dark shaft-lines.

These three specimens have the general colour above rufous and the thighs rufous, and belong thus to the form called *berigora* in *Cat. B. i.* p. 421 (*occidentalis* Gould). I doubt whether they are specifically or subspecifically different, but cannot prove the contrary yet.

#### 91. *Ieracidea orientalis* Sharpe.

*Falco berigora orientalis* Schlegel, *Naumannia* 1855 p. 254 (nomen nudum !).  
*Ieracidea orientalis* Sharpe (ex Schl. nom. nud.), *Cat. B. i.* p. 422.

1 ♂, 2 ♀♀, South Alligator River, April and June 1903 (Nos. 1195, 1196, 1197). "Iris brown, legs bluish."

These birds are above dark brown, and have brown thighs, and belong to the birds for which Dr. Sharpe adopted the name *orientalis*.

A specimen from the Fitzroy River, N.W. Australia, received from Mr. Robert Hall, is below like this dark bird, but above decidedly rufous! I appeal to the Australian field-naturalists to study these birds, and to collect series of paired adult birds and their young, in order to find out if they are mere aberrations (so-called "phases") or species. They do not seem to be geographical representatives (sub-species), and I doubt whether they are species.

#### 92. *Falco lunulatus* Lath.

*Falco lunulatus* Latham, *Ind. Orn. Suppl.* p. xiii (1801—Australia).

1 ♀, Brock's Creek, Northern Territory, 19. viii. 1902 (No. R. 555).

2 ♂♂, 1 ♀, Alligator River, 24. ix. 1902, 10, 29. ix. 1903 (Nos. 693, 1764, 1765).  
"Iris brown, feet yellow."

#### 93. *Cerchneis cenchroides* (Vig. & Horsf.).

*Falco cenchroides* Vigors & Horsfield, *Trans. Linn. Soc.* xv. p. 183 (1826—Australia).

1 ♀, Eureka River, Northern Territory, 6. ii. 1903 (No. 1056).

#### 94. *Pandion haliaetus leucocephalus* Gould.

♂♀, Lewis Island, N.W. Australia, 25, 26. vi. 1901 (Nos. R. 168, 169).

#### 95. *Ninox connivens occidentalis* Rams.

*Ninox connivens-occidentalis* Ramsay, *Proc. Linn. Soc. N.S. Wales* i. (2). p. 1086 (1886—N.W. Australia).

♂♀, Yeeda Creek, W. Kimberley, 23. xi. 1901 (Nos. 275, 276).

♂, Margaret Crossing, Hall's Creek Rd. 19. iv. 1902 (No. R. 411). "Iris and feet yellow, bill blackish, base and under-mandible yellow. Found on most of the rivers of this part of Australia, but not numerous."



5 ♂♂, 1 ♀ (South) Alligator River, June, August, September, November 1902, 1903 (Nos. 101, 1204, 1205, 1771 to 1773).

1 ♂, 1 pullus, near Mary River, Northern Territory, 14, 16. ix. 1902 (Nos. 700, 702).

The Western form is smaller, above paler, the stripes on the underside always much more rusty than in *N. c. connivens*, though the latter vary, being sometimes lighter, sometimes darker.

#### 96. *Ninox boobook ocellata* (Hombr. & Jacq.).

*Athene ocellata* Hombr. & Jacq., *Voy. Pole Sud, Zool.* iii. p. 51. pl. 3. fig. 2 ("Chili"—errore!)

1 ♀, Soda Springs, Hall's Creek Road, 24. iv. 1902 (No. R. 412). "Iris light brown, feet white, bill bluish at base, blackish at tip."

2 ♂♂, 2 ♀♀ (South) Alligator River, April, May, June, August 1903 (Nos. 1206, 1207, 1208, 1512).

1 ♀, Eureka, Northern Territory, 15. i. 1903 (No. R. 978).

These birds vary very much in colour, but are always distinguishable from *N. boobook boobook* by their much lighter and more reddish colour. *N. lurida* de Vis is most likely only an extremely reddish example of *ocellata*. Judging from the description, we have several like it. *N. b. ocellata* reaches to Northern Queensland, while Southern and Middle Queensland still have *N. b. boobook*. I do not know Salvadori's *peninsularis* from Cape York.

#### 97. *Ninox rufa rufa* (Gould).

*Athene rufa* Gould, *P.Z.S.* 1846. p. 18 (Port Essington).

2 ♂♂, 2 ♀♀, South Alligator River, 80 miles from the coast, August, October, November 1902 (Nos. 697, 698, 699, 1511). "Iris yellow, legs yellow."

Gould's *Ninox rufa* has evidently been erroneously united with *N. strenua* in the *Cat. B.* ii., and, unfortunately, this error is repeated in the *Hand-List*, vol. i. I have before me a series of adult *strenua* and of equally adult *rufa*.

*Ninox rufa rufa* inhabits N.W. Australia. Specimens from the Cape York Peninsula and North Queensland seem to be smaller, and should probably be separable subspecifically. I have, however, only seen two, and I hesitate to name this form from such a small material. These Cape York specimens have apparently been identified with *Ninox rufa humeralis* from New Guinea, but the latter is darker and still smaller than the North Queensland examples, which agree in colour with Western *rufa*.

#### 98. *Strix novaehollandiae* Steph.

*Strix novae hollandiae* Stephens, *Gen. Zool.* xiii. 2. p. 61 (ex Latham, *Gen. Hist. B.* i. p. 358. "Mouse Owl." "Inhabits New Holland").

♂♀, South Alligator River, 8. x. 1902, 29. vi. 1903 (Nos. 695, 1201). "Iris black, feet brown." The female is heavily marked with spots and triangular marks of blackish brown along the sides, while the male has the underside white with only a few small round brown spots.

99. *Strix flammea delicatula* Gould.

*Strix delicatula* Gould, *P.Z.S.* 1836. p. 140 (Australia).

2 ♂♂, Lewis Island, N.W. Australia, 6. vii. 1901 (Nos. R. 170, 171).

♂ ♀, South Alligator River, 24. 26. vi. 1903 (Nos. 1202, 1203).

1 ♀, near Gregory River, Northern Territory, 9. vii. 1902 (No. R. 557). "Iris black, legs brown."

100. *Trichoglossus haematodus rubritorquis* Vig. & Horsf.

*Trichoglossus rubritorquis* Vigors & Horsfield, *Trans. Linn. Soc.* xv. p. 291 (1826: Australia).  
(Cf. *Bull. B. O. Club* 1901. p. 68.)

2 ♂♂, 1 ♀, Derby, March 1902 (Nos. 1737, 1738, 1739).

2 ♀♀, South Alligator River, March 1903 (Nos. 1221, 1222).

1 ♂, 2 ♀♀, Eureka, Northern Territory, January, February 1903 (Nos. 1018, 1091, 1092). "Iris red, legs brownish, bill red."

Mr. Le Souëf sent us a specimen from the Katherine River in North Australia.

101. *Trichoglossus versicolor* Vigors.

*Trichoglossus versicolor* Vigors, in Lear's *Ill. Parr.* pl. 36 (1832: No locality).  
(Cf. *Bull. B. O. Club* xiv. p. 10, October 1903.)

2 ♂♂, Mt. Anderson, W. Kimberley, 21. xi. 1901 (Nos. R. 296, 297).

1 ♂, 4 ♀♀ imm. on the road to the Alligator River, 30. ix. 1902 (Nos. 777 to 781).

1 ♂, Nellie Creek, Northern Territory, 15. ii. 1903 (No. 1095).

5 ♂♂, 2 ♀♀, South Alligator River, October 1902, March and April 1903 (Nos. 780, 1224 to 1229). "Ad.: Iris reddish (reddish brown), feet bluish (blue-black). Juv.: Iris brown."

Mr. Robert Hall sent us specimens from Derby, W. Australia, and we have others from Somerset, Cape York (Jardine coll.) and Cooktown (Olive coll.)

102. *Cacatua galeritus* (Lath.).

*Psittacus galeritus* Latham, *Ind. Orn.* i. p. 109 (1790: N. S. Wales).

2 ♂♂, South Alligator River, November 1902 (Nos. 774, 775).

2 ♂♀, Behn River, E. Kimberley, W. Australia. 29. v. 1902 (Nos. 489, 490).

2 ♂♀, Eureka, Northern Territory, 6. ii., 6. iii. 1903 (Nos. 1130, 1131). "Iris red, legs black." "Found on most of the larger watercourses, but not numerous."

103. *Cacatua gymnopsis* Sel.

*Cacatua gymnopsis* Selater, *P.Z.S.* 1871. pp. 490, 493 (Locality unknown. As the typical locality we have to consider "Depot Creek, South Australia," Sturt coll.)

2 ♂♀, Flora Valley, May 1902 (Nos. 491, 492).

3 ♀♀, Alligator River, 60 miles from the coast, 26. x. 1903 (Nos. 1732, 1733, 1735).

1 ♂, 2 ♀♀, South Alligator River, March and October 1903 (Nos. 1734, 1742, one without number). "Iris brown, legs black."

1 ♂, 1 ♀, Eureka, Northern Territory, 24, 25. ii. 1903 (Nos. 1128, 1129).

104. **Cacatua roseicapilla** Vieill.

*Cacatua roseicapilla* Vieillot, *Nouv. Dict.* xvii. p. 12 (1817: "Je soupçonne qu'il a été trouvé dans les Indes").

6 ♂♀, Alligator River, November 1902, June, August, October 1903 (Nos. 773, 1215 to 1217, 1730, 1731). "Iris hazel, orbits grey, bill yellowish, legs and feet mealy grey" (T. Carter).

105. **Calyptorhynchus banksii macrorhynchus** Gould.

*Calyptorhynchus macrorhynchus* Gould, *P.Z.S.* 1842. p. 138 (Port Essington).

It seems, indeed, that the specimens from N. W. Australia have larger bills than those from Queensland and N. S. Wales, but the specimens from Rockingham Bay belong to the latter, smaller-billed race, and not to *macrorhynchus*.

10 ♂♀, Alligator River, November 1902, June, July, August, October 1903 (Nos. 772, 1209 to 1213, 1514, 1728, 1729). "Iris brown, legs black."

106. **Calopsitta novaehollandiae** (Gm.).

*Ptilinopus novaehollandiae* Gmelin, *Syst. Nat.* i. p. 328 (1788: Australia).

♂ ad. found dead at Derby 4. iii. 1902. "Feet and bill black." (No. 1740.)

107. **Ptistes erythropterus coccineopterus** Gould (?).

*Ptistes coccineopterus* Gould, *Handb. B. Austr.* ii. p. 39 (1865: typical locality Port Essington).

It seems to me that northern and western specimens are smaller than eastern ones, but the differences are very slight. None of our western birds have the wings longer than 196 mm., while eastern ones range to at least 201 mm. There is, however, much variation. The differences in colour suggested by Mr. Le Souëf (*Ibis*, 1899, p. 360) do not exist (cf. *Ibis*, 1900, p. 645).

♂♀, Fitzroy River (Derby), 4. xii. 1901 (Nos. R. 298, 299).

♀ Soda Spring, Hall's Creek Road, 23. iv. 1902 (No. R. 479).

♂, Margaret River, Hall's Creek Road, 19. iv. 1902 (No. R. 480).

2 ♂♂ ad., 1 ♂ juv. or ♀, Hall's Creek Road (Derby), 17, 18. iv. 1902 (Nos. R. 481, 482, 485).

2 ♀♀, Behn River, East Kimberley, 29. v. 1902 (Nos. R. 483, 484).

3 ♂♂, Eureka, Northern Territory, January 1903 (Nos. 1019, 1020, 1021).

♂♀, South Alligator River, 6. iv. 1903; 9. x. 1903 (Nos. 1223, 1736).

108. **Platycercus icterotis xanthogenys** Salvad. (?).

*Platycercus xanthogenys* Salvadori, *P.Z.S.* 1891. p. 129; *Cat. B. Brit. Mus.* xx. pl. xvi. (Habitat unknown!).

Count Salvadori described his *P. xanthogenys* from a single old skin (Gould collection) without locality. The adult males from Beaufort and Cranbrook have

the feathers of the upper back broadly edged with red, and the tail-feathers, even the central pair on their outer webs, are blue or bluish. They would therefore seem to belong to *P. xanthogenys*, which may be subspecifically different from *P. icterotis*. Unfortunately, however, the habitat of the type of *xanthogenys* is unknown, and so is the distribution of the true *icterotis*, if that is really distinct. We have specimens which must be true *icterotis*, but their locality is uncertain. The wings of the adult (supposed) *xanthogenys* measure 140 to 143 mm. The rump is dull pale green, not greyish.

More information about these yellow-cheeked parakeets is sadly wanted, and we hope that Mr. North or other Australian ornithologists will soon discuss them fully—not from vague observations, but with the help of properly collected series of skins from all parts of Australia where they occur.

### 109. *Platycercus brownii* (Temm.).

*Psittacus Brownii* Temminck, *Trans. Linn. Soc.* xiii. p. 119 (1821 : Arnhem Land).

2 ♂♂, 3 ♀♀, 150 miles from Wyndham, Ord River, W. Australia, May 1902 (Nos. R. 474 to R. 478).

1 ♂, Burundie, Northern Territory, 28. vii. 1902 (No. R. 558).

3 ♂♂, 1 ♀, South Alligator River, May, July and August 1903 (Nos. 1218 to 1220, 1561).

1 ♀, Alligator River, October 1903 (No. 1741).

2 ♂♂, Eureka, Northern Territory, February 1903 (Nos. 1086, 1088).

4 ♂♂, 1 ♀, Nellie Creek, Northern Territory, February 1903 (Nos. 1084, 1085, 1087, 1089, 1090).

The series of this rare Parrot is very interesting. Though these facts are not all absolutely proved by moulting specimens, I can only come to the following conclusions :—

The red-crowned examples, in which all the feathers of the crown have wide yellowish red or pure red margins, are immature. The specimens with the feathers of the under-surface quite yellow, with only a very narrow ashy grey margin and the utmost base pale grey, are more or less immature or females, which do not seem to get the black-based breast-feathers of the adult males. Younger birds have the feathers of the back pale yellow with a large round black spot in the middle, while adult birds have this spot so much extended that the feathers may be described as black with a yellow border. Females are considerably smaller than males. The young and females have often some red spots on the lower throat and in the middle of the abdomen.

### 110. *Barnardius zonarius occidentalis* North.

*Barnardius occidentalis* North, *Rec. Austr. Mus.* ii. p. 83 (1893 : N.W. Australia).

1 ♂, Nullagine River, 19. iv. 1901 (No. R. 103). "Iris brown, legs blackish."

*B. zonarius occidentalis* is a very distinct race of *B. zonarius*, replacing *B. zonarius zonarius* in North-Western Australia. Mr. Tom Carter sent us specimens of *occidentalis* from Point Cloates. "Iris dark hazel, bill bluish horn, legs and feet dark lead-grey" (Carter in litt.).

111. *Psephotus dissimilis* ? ?

*Psephotus dissimilis* Collett, *P.Z.S.* 1898, p. 356 (Mary River, Arnhem Land).

♂ ♀. Nellie Creek, Northern Territory, 9. ii. 1903 (Nos. 1093, 1094). " Iris brown, legs greyish. On granite hills, not numerous."

These two valuable specimens agree with Professor Collett's description, except that the crown of the *male* is dark brown, not at all chestnut, and that the verditer blue does not meet in a ring across the nape. The description of the *female* agrees perfectly. It is not *P. chrysopterygius* Gould, because it lacks the yellow band across the forehead.

112. *Melopsittacus undulatus* (Shaw).

*Psittacus undulatus* Shaw, *Nat. Misc.* xvi. pl. 673 (1789—1813).

♀ ad., Soda Spring, Kimberley, 24. iv. 1902. " Iris white ; feet and bill bluish " (No. R. 486).

113. *Eurystomus orientalis australis*.

♀ juv., Eureka, Northern Territory, 23. ii. 1903 (No. 1096).

♀, Fitzroy River, Kimberley, 11. xi. 1901 (No. R. 280).

♂, Derby, 8. iv. 1902 (No. R. 513).

3 ♂♂, 2 ♀♀, South Alligator River, September, October and November 1902 (Nos. 1702 to 1706).

114. *Alcyone azurea pulchra* (Gould).

*Alcyone pulchra* Gould, *P.Z.S.* 1846, p. 19 (Port Essington).

♀, Mary River, Northern Territory, 12. ix. 1902 (No. 771).

♀, "The Brook," fifteen miles from Ord Station, 19. v. 1902 (No. R. 451). " Iris brown, feet pink, bill black."

2 ♂♂, South Alligator River, October, November 1902 (Nos. 768, 769). One without label.

115. *Dacelo leachii cervina* Gould.

[*Dacelo leachii* Vigors & Horsfield, *Trans. Linn. Soc. Lond.* xv. p. 205 (1827: ex Latham MS. "East coast of Anstralia").]

*Dacelo cervina* Gould, *B. Australia*, ii. pl. 20 (1844: "Northern and North-western portions of Australia").

This form of *D. leachii*, though easily recognisable if a series is compared, cannot always be separated if single specimens are picked out. The distribution is by no means clear! It can only be a geographical representative (= subspecies), and probably replaces *D. l. leachii* in the more western portions of North Anstralia and in West Australia. Examples from the Gulf of Carpentaria and Cape York seem to be sometimes intermediate.

Mr. Tunney collected the following specimens:—

♀, Condon Road, 15. v. 1901 (No. R. 2).

♂, Ord River, W. Australia, 17. vi. 1902 (No. R. 566).

♂, Soda Springs, Hall's Creek Road, 23. iv. 1902 (No. R. 453).

♂, 240 miles post, Hall's Creek Road, 22. iv. 1902 (No. R. 452).

2 ♂♂, 2 ♀♀, Brock's Creek, Northern Territory, August 1902 (Nos. R. 364, 563, 565, 567). "Iris ♂♀ white, feet dull yellowish. Upper mandible dark brown, lower light."

♀, Nullagine, N.W. Australia, 23. iv. 1901 (No. R. 104).

♀, South Alligator River, 21. x. 1902 (No. 761).

All these are typical *cervina*!

### 116. *Halcyon pyrrhopygia* Gould.

*Halcyon pyrrhopygia* Gould, *P.Z.S.* 1840. p. 113 ("Interior of New South Wales").

♂♀ ad., Brock's Creek, Northern Territory, 2, 3. viii. 1902 (Nos. R. 574, 575).

♂ juv., Enreka, Northern Territory, 20. ii. 1903 (No. 1098).

The adult ♀ differs from the ♂ in being much duller above, not so blue, the crown of a brownish grey instead of ashy blue, with the white edges to the feathers more apparent. The young *male* is above as bluish as the adult *male*, but the lesser and median wing-coverts have brownish-buff tips; the greater series has white tips; the feathers of the chest have blackish fringes. "Iris brown, feet blackish."

### 117. *Halcyon sancta* Vig. & Horsf.

*Halcyon sancta* Vigors & Horsfield, *Trans. Linn. Soc. Lond.* xv. p. 206 (1826: Australia).

♂, Derby, 7. xii. 1901 (No. R. 284).

1 ♂, 2 ♀♀, Eureka, Northern Territory, January and February 1903 (Nos. R. 979, 1097, 1099).

♀, Alligator River, 27. x. 1903 (No. 1598).

### 118. *Halcyon macleayii* Jard. & Selby.

*Halcyon macleayii* Jardine & Selby, *Ill. Orn.* pl. 101 (1825-39: no locality stated!).

2 ♂♂, 1 ♀, Margaret River, August 1902 (Nos. R. 571, 572, 573).

1 ♂, 2 ♀♀, Brock's Creek, Northern Territory, July and August 1902 (Nos. R. 568, 569, 570).

♂♀, East of Mary River, Northern Territory, September 1902 (Nos. 762, 767).

♀, Koolwonga, Northern Territory, 7. ix. 1902 (No. 765).

3 ♂♂, 2 ♀♀, South Alligator River, October 1902—March 1903 (Nos. 763, 764, 766, 1239, 1240).

♂, Alligator River, 18. v. 1903 (No. 1238).

### 119. *Merops ornatus* Lath.

*Merops ornatus* Latham, *Ind. Orn. Suppl.* p. xxxv. (1811: Australia).

♀, Brock's Creek, Northern Territory, 4. viii. 1902 (No. R. 562).

♂, South Alligator River, 10. iii. 1903 (No. 1237).

### 120. *Podargus phalaenoides* Gould.

*Podargus phalaenoides* Gould, *P.Z.S.* 1839. p. 142 ("The North-west coast of Australia").

♂, Shaw River, N.W. Australia, 28. viii. 1901 (No. R. 226).

♂, Derby, 10. iii. 1902 (No. 1660).

♂♀, South Alligator River, August 1903 (No. 1537, 1538).

I do not at all consider the question of the various Australian forms of *Podargus* quite satisfactorily settled, but it seems to me that the *Podargus strigoides*, which inhabits the greater part of Queensland, New South Wales, Victoria, South Australia and Tasmania (from where I have no examples before me), is represented in Western and Northern Australia, eastwards to North Queensland, by a generally smaller and lighter, more delicately marked subspecies, *P. phalaenoides* of Gould, though sometimes individuals cannot easily be distinguished, and some are quite intermediate. Australian ornithologists should begin to investigate this question thoroughly! Gould himself appealed to field-ornithologists to investigate whether the differences in colour were due to the sex of the specimens. I, in 1892, said, "It must be left to Australian field-ornithologists to study these forms carefully," and I must repeat this once more. I believe, however, that if good series are collected by competent ornithologists, it will be found that the following forms occur in Australia:

*Podargus papuensis*: a New Guinea species, only extending to the Cape York Peninsula, rarely farther south.

*Podargus ocellatus marmoratus*: a subspecies of the Papuan *P. o. ocellatus*, found in Northern (and Eastern) Australia.

*Podargus strigoides strigoides*: roughly speaking, the Eastern portion of Australia. There is every possible intergradation between the various aberrations, only *phalaenoides* being more or less separated and having another distribution.

*Podargus strigoides phalaenoides*: a Western and Northern form of *strigoides*,

Here is an interesting piece of work for our Australian friends. Opinions cannot settle such questions. Such remarks as, "I am not yet prepared to admit that . . ." do not bring us any further. *Hic Rhodus, hic salta!*

### 121. *Aegotheles novaehollandiae* (? *leucogaster*).

[*Aegotheles leucogaster* Gould, *P.Z.S.* 1844, p. 106 (Port Essington).]

When I wrote the catalogue of the *Podargidae* in the British Museum (*Cat. B.* xvi., 1892) I could not make out that two subspecies could be distinguished in Australia, but the material available was absolutely inadequate. I am now of opinion, from what I have recently seen, that it is after all possible that two forms, a more southern and eastern, which I should call the true *novaehollandiae*, and a more northern and western one, which would be *leucogaster* of Gould, can be distinguished.

Recently Mr. Robert Hall has described as new a form from the Fitzroy River, first naming it *Ae. rufescens*; afterwards, having found out that the name *rufescens* was already used for another species, renaming it *Ae. rufa* (*Victorian Naturalist*, xviii. pp. 60, 89. 1902). Locality and description suggest *a priori* that Mr. Hall's supposed new form (if different from *Ae. novaehollandiae novaehollandiae*) is Gould's *leucogaster*. The series now before me—*i.e.* the specimens collected by Mr. Tunney, some from Point Cloates collected by Mr. Tom Carter, and some from Northern Queensland—show beyond doubt that the rufous-cinnamon examples are not specifically different from the grey ones, for we have all intermediates between both forms from the same districts. Thus Mr. Hall created two new synonyms at once. The question only remains whether there are two subspecies; and I believe that one should distinguish the north-western ones as *leucogaster*, because they are mostly lighter and larger, and cinnamon examples are more frequently found among

them. There is, however, no adequate series from S.E. Australia in England, and I must therefore again appeal to Australian ornithologists to settle the question. If they send me a good series from New South Wales, etc., I shall be glad to give my opinion. Mr. Hall has evidently most insufficiently studied the individual variation of the species, for several of his characters (as, for example, the number of bars on the tail!) are the most variable ones. A bird from Gracefield, Cranbrook (S.W. Australia) is a typical *novae-hollandiae*.

Mr. Tunney sent the following specimens:—

♀, Hall's Creek Road, E. Kimberley, 25. iv. 1902 (No. 454).

♂, ♀ ♀, 150 miles from Wyndham, Ord Station Road, 23, 26. v. 1902 (Nos. 455, 456). One of these specimens is almost entirely white underneath.

♂, Ord River, 16. vi. 1902 (No. R. 169).

♀, Avergne Station, Northern Territory, 26. vi. 1902 (No. R. 560).

2 ♂♂, 3 ♀♀, South Alligator River, 22. x. 1902, 31. iii. 1903, and May 1903 (Nos. 811, 1232 to 1236).

“Iris brown, legs creamy or brownish cream, claws dark brown or black. Bill fleshy at base, dark brown at tip.”

Mr. Tunney says: “Found in hollow trees during the day. Can be procured by striking tree with stone, when it flies out and is easily shot. Food found in stomachs consisted chiefly of red ants. Not numerous.”

The sexes do not seem to differ conspicuously.

## 122. *Eurostopus argus* Hart.

*Eurostopus argus* Hartert (ex Rosenberg, nomen nudum), *Cat. B. Brit. Mus.* xvi, p. 608 (Australia and Aru Islands).

♂, Newly River, Northern Territory, 23. vi. 1902 (No. R. 559).

♂, South Alligator River, 12. vi. 1903 (No. 1231).

♀, 20 miles west of Alligator River, 8. viii. 1903 (No. 1230).

The ♂ No. 1231 is strongly cinnamon-rufous on parts of the head, back, scapulars and wing-coverts. Evidently these reddish feathers are due to youth, being replaced in moult by the feathers of the well-known plumage of the adult.

## 123. *Caprimulgus macrurus* Horsf.

♀, Alligator River, 5. x. 1903 (No. 1613).

## 124. *Cuculus variegatus* Vieill.

*Cuculus variegatus* Vieillot, *Nour. Dict. d'Hist. Nat.* viii. (1817.—“Il se trouve dans l'Australasie.”

We learn from Pucheran (*Rev. & Mag. de Zool.* 1852, pp. 555, 556) that the types were brought home by Maugé, from the voyage to the Southern Lands (“terres australes”) under Péron et Lesueur, and that they are, like the majority of the specimens, presented by Maugé as coming from Timor. Most likely there is an error in the locality, and the types came from Australia).

I believe we can use Vieillot's name *variegatus* (though I admit that the description is not at all convincing), if we accept Pucheran's statements, *le.* How, on the other hand, Latham's name *Columba pallida* came to be accepted for this cuckoo, is incomprehensible. It would seem that Messrs. Cabanis & Heine



(*Mus. Hein.* iv. p. 26) have first been guilty of it. Their quotation, and also the one in the *Cat. B.* xix. p. 261, most likely copied without verification, is wrong, because the name *Columba pallida* is first given in the *Ind. Orn. Suppl.* p. lx (1801) and not in the *Syn. Suppl.* ii. p. 270, where it is only called the "Pale Pigeon." There is hardly anything in Latham's description that refers to the cuckoo in question; but what disagrees most is the description of the tail, which is said to be "very pale or whitish" with "the two middle tail-feathers dusky," and that of the wings.

Mr. Tinney sent two young specimens:—

♂, 10. iii. 1902, Derby (No. 1646).

♀, 27. iii. 1903, South Alligator River (No. 1241).

### 125. *Cacomantis variolosus* (Horsf.).

*Cuculus variolosus* Horsfield, *Trans. Linn. Soc. Lond.* xv. p. 300 (1826: Australia).

♂ ad., caught in jungle at Kaparegoo on the South Alligator River, 6. x. 1903 (No. 1644).

♂ ad., shot in the river bed, Alligator River, 19. x. 1903 (No. 1647).

1 juv., Nigri River, East Kimberley, 22. v. 1902 (No. R. 488).

"Iris light brown, feet dull yellow, bill black above, dull yellow below."

### 126. *Misocalius palliolatus* (Lath.).

*Cuculus palliolatus* Latham, *Ind. Orn. Suppl.* ii. p. xxx (1801: Australia).

♂ ad., Margaret River, Northern Territory, 14. viii. 1902 (No. R. 653).

♀ ad., Nigri River, East Kimberley, 22. v. 1902 (No. R. 487).

"Iris dark brown, feet and bill blackish."

♂, Alligator River, 30. ix. 1903 (No. 1604).

### 127. *Chrysococcyx basalis* (Horsf.).

*Cuculus basalis* Horsfield, *Trans. Linn. Soc. Lond.* xiii. p. 179 (1821: Australia).

♀, Nullagine Road, 13. iv. 1901 (No. R. 131).

♂ ad., Wynne, Derby, November 1901 (No. R. 295).

### 128. *Eudynamis orientalis cyanocephalus* (Lath.).

*Cuculus cyanocephalus* Latham, *Ind. Orn. Suppl.* ii. p. 30 (1801: Australia); cf. *Nov. Zool.* 1903, pp. 235-8.

1 ♂, Weeda Creek, W. Kimberley, 24. xi. 1901 (No. R. 278).

1 ♀, Derby, 15. iii. 1902 (No. 1645).

♂ ♀, South Alligator River, 25, 26. xi. 1902 (Nos. 754, 814).

7 ♂♂ ad., 4 ♀♀ ad., 1 ♂ juv., Eureka, January and February 1903 (Nos. 1006 to 1010, 1013 to 1015, 1057, 1058, 1122, 1123).

There is much variation in the colour of the adult *males*, these being sometimes more greenish, sometimes quite blue.

129. **Scythrops novaehollandiae** Lath.

*Scythrops novaehollandiae* Latham, *Ind. Orn.* i. p. 141 (1790).

♂ ad., Fitzroy River, Derby, 1. xii. 1901 (No. R. 365). Mr. Tunney says "Only found during rainy season."

130. **Centropus phasianus** (Lath.).

*Centropus phasianus* Latham, *Ind. Orn.* ii. *Suppl.* p. 30 (1801).

1 "♀," Nullagine River, 17. iv. 1901 (No. R. 102).

1 "♀," Shaw River, N.W. Australia, 27. viii. 1901 (No. R. 223).

1 "♂," 150 miles from Wyndham, 25. v. 1902 (No. R. 493).

1 "♀," McKinley River, Northern Territory, 26. ix. 1903 (No. 795).

4 "♀ ♀," 1 unsexed, South Alligator River, October 1902 (Nos. 796 to 800).

5 ♂ ♀ immat., Brock's Creek, Northern Territory, July and August 1902 (Nos. R. 576 to R. 580).

1 ♂ ad., 1 ♀ ad., 1 immat., Eureka, Northern Territory, February 1903 (Nos. 1124 to 1126). "Iris red, legs bluish."

131. **Pitta iris** Gould.

*Pitta iris* Gould, *P.Z.S.* 1842, p. 17 (Coburg Peninsula).

7 ♂ ad., 4 ♀ ♀, (South) Alligator River, 30. September, 5 to 28. October 1903 (Nos. 717 to 727).

"Iris and legs brown, bill black. Caught in the jungle; more plentiful in the jungles near the coast, scarcer up the river."

132. **Microeca flavigaster** Gould.

*Microeca flavigaster* Gould, *P.Z.S.* 1842, p. 132 (Port Essington).

2 ♂ ♂, South Alligator River, 15. x., 13. xi. 1902 (Nos. 741, 745).

♀, Alligator River, 29. ix. 1903 (No. 1584).

133. **Microeca fascians assimilis** Gould.

*Microeca assimilis* Gould, *P.Z.S.* 1840, p. 172 (Gulf of Carpentaria).

*Microeca pallida* De Vis, *Proc. Roy. Soc. Queensland*, i. p. 159 (1884: Norman River, Kimberley district).

I do not understand why North accepts the name *pallida* for this form, or why Campbell recognises both *assimilis* and *pallida*, both names evidently applying to the smaller and paler subspecies of *fascians*.

♀, Derby, 8. iii. 1902 (No. 1609). Tail and body-plumage in moult.

♀, Soda Springs, Kimberley, 24. iv. 1902 (No. R. 422). "Iris brown, bill and feet blackish." The base of the under mandible is pale. The tail and wings are beautiful, just being through the moult. - The upperside is in moult, some of the feathers still showing the white tips which we find in the young bird.

♀ ad., The Brook, 15 miles from Ord Station, 19. v. 1902 (No. R. 423).

♂ juv., Eureka, 9. i. 1903 (No. 1032). The feathers of the upperside have white triangular tips, those of the chest round dark brown patches at the tip.

♂ ♀, South Alligator River and 20 miles off South Alligator River, 30. iii. and 30. iv. 1903 (Nos. 1280, 1281).

### 134. *Melanodryas bicolor picata* Gould.

*Melanodryas picata* Gould, *Handb. B. Australia* i. p. 285 (N.W. Australia).

Mr. A. J. North, in his recent work "Nests and Eggs of Birds" of Australia, Part III. p. 171, comes to the conclusion that *M. bicolor* and *picata* should not be separated. This conclusion is erroneous. If we compare a series of north-western examples with a series of south-eastern specimens we find: 1. That the former are smaller, wings averaging 5 to 8 mm. shorter. 2. That generally the former have more white in the tail. I have not one specimen in which the black on the inner web of the outermost rectrix reaches as far as the base of the tail, while I have seen a number of *M. bicolor bicolor* that have this peculiarity. The amount of white in the tail varies considerably, but it is obvious that, as a rule, there is more in *picata*. 3. That the white on the underside is purer, more snowy. 4. That the *females* are a little lighter on the upperside. Intermediate examples occur in South-western Australia, and probably elsewhere, where the areas of the two forms meet, but specimens from the centres of distribution are easily distinguishable, and therefore we must separate the two forms as subspecies, trinomially. There is no other scientific proceeding. If we distinguish the various forms now existing in nature, we must distinguish all: it is purely arbitrary, and therefore not scientific, if we separate those which appear to us easily separable and "lump" those that are distinguished by "slight" differences only; or if we brush away the fact that two forms are different, because we find in the intermediate areas certain intermediate individuals.

Mr. Tunney sent the following specimens of *M. b. picata* :—

1 ♂ without label from Alligator River.

1 ♂ ad. 1 ♀ juv., Nullagine Road, 30. iv. 1901 (Nos. R. 110, 111).

1 ♂ ad., Soda Springs, Kimberley, 24. iv. 1902 (No. R. 416).

1 ♀ ad., 12 miles from Victoria Station, Northern Territory, 4. vii. 1902 (No. R. 650).

1 ♂, 1 ♀ juv., Eureka, Northern Territory, 24. i., 7. ii. 1903 (Nos. 990, 1114).

5 ♂♂, 1 ♀, South Alligator River, March, April, May 1903 (Nos. 1241 to 1246). "Iris, bill and feet black."

### 135. *Smicrornis flavescens* Gould.

*Smicrornis flavescens* Gould, *P.Z.S.* 1842. p. 134 (Port Essington).

♀, Crawford's Springs, Northern Territory, 4. vii. 1902 (No. R. 586). "Iris white, bill and feet brown."

♂ ♀, Eureka, 9. 13. i. 1903 (Nos. 1002, 1003). "Mostly found in hilly country."

### 136. *Gerygone culicivorus* (Gould).

*Psilopus culicivorus* Gould, *P.Z.S.* 1840. p. 176 ("Western Australia").

♀ ad., Derby, 2. iii. 1901 (No. 1611). "Shot in mangroves."

♀, Derby, 8. i. 1902 (No. R. 371). "Caught in mangroves near seashore."

Mr. Hall sent us two specimens from the Fitzroy River, Derby.

137. *Gerygone albigularis cinerascens* Sharpe.

*Gerygone cinerascens* Sharpe, *Journ. Linn. Soc. Lond.* xiii. p. 494 (S.E. New Guinea, probably Port Moresby).

Dr. Sharpe described *G. cinerascens* from a specimen collected by Mr. O. C. Stone in S.E. New Guinea, and afterwards (*Cat. B. Brit. Mus.* iv. p. 213) identified with it a very bad skin from the Victoria River, N.W. Australia.

Mr. Tunney sent a male from Brock's Creek, Northern Territory, shot 5. viii. 1902 (No. R. 643). "Iris reddish brown, bill and feet black." This specimen is probably immature, as the throat is not quite white, but mixed with yellow feathers. Mr. Robert Hall sent us a male and an unsexed specimen from Derby, obtained in August 1900, and we have also a male collected by Captain Bowyer Bower in N.W. Australia. These birds are all identical with Sharpe's *cinerascens*. They differ from *G. albigularis albigularis* in being considerably smaller (wing 57 to 58 against 62 to 64 in *albigularis*), and in the paler, less brownish upper surface. There is a very distinct greenish olive tinge on the upper surface in the freshly moulted, but in the worn plumage this disappears more or less, though even in the type it is traceable.

138. *Poecilodryas cerviniventris* (Gould).

*Poecilodryas cerviniventris* Gould, *P.Z.S.* 1857. p. 221 (N.W. Australia).

♂, The Brook, 15 miles from Ord Station, W. Australia, 19. v. 1902 (No. R. 420).

♂, Negri River, E. Kimberley, 22. v. 1902 (No. R. 421).

♀, Carlton Reach, E. Kimberley, 18. vi. 1902 (No. R. 640).

♂ ♀, Margaret River, Northern Territory, 13, 14. viii. 1902 (Nos. R. 641, 642).

3 ♂♂, 2 ♀♀, Alligator River, September, October 1903 (Nos. 1619, 1620, 1623, 1624, 1625). "Iris dark brown, bill and feet black. Found in watercourses and in river-beds.

139. *Rhipidura tricolor motacilloides* Vig. & Horsf.

[*Muscicapu tricolor* Vieillot, *Nouv. Dict. d'Hist. Nat.* xxi. p. 490 ("Timor"—errone. I have accepted Amboina as the original locality).]

*Rhipidura motacilloides* Vigors & Horsfield, *Trans. Linn. Soc. Lond.* xv. p. 248 (Australia).

I have examined a good series of Australian skins, and find that they all differ at a glance—one can even feel the difference in the dark, as for example on a foggy November day in London—in having **very** much smaller bills, and also a little smaller size generally. It is strange that this striking difference has not been more emphasised. On the other hand, I cannot find any constant differences to separate a supposed western smaller race in Australia (*picata*). I must therefore unite all Australian birds under the name *Rhipidura tricolor motacilloides*.

♀ ad., Flora Valley, E. Kimberley, W. Australia, 9. v. 1902 (No. R. 417). "Iris brown, bill and feet black."

♀ ad., Soda Springs, Kimberley, 24. iv. 1902 (No. R. 418).

♂, Eureka, Northern Territory, 3. ii. 1903 (No. 1118).

♀, South Alligator River, 1. iv. 1903 (No. 1249).

♂, 20 miles west of South Alligator River, 30. iv. 1903 (No. 1248).

♀, Alligator River, 9. ix. 1903 (No. 1595).

140. *Rhipidura preissi* Cab.

*Rhipidura preissi* Cabanis, *Mus. Hein.* i. p. 57 (W. Australia).

"♂," Derby, 4. iii. 1902 (No. 1594).

"♀," Derby, 20. xii. 1901 (No. R. 370).

I am much puzzled about these birds. They are similar to specimens received from Messrs. Robert Hall and Tom Carter from Western Australia as *R. preissi*, and differ from *Rh. albiscapa* in having no black but only a grey patch on the lower throat, thus also agreeing with the description of *R. preissi*. From the same district (Derby), however, we have also received specimens with the black throat-patch, which shows that *preissi* and *albiscapa* do not represent each other geographically. Or does *R. preissi* ever get a black throat-patch? If so, how do these specimens differ from *albiscapa*? I find *albiscapa* so far not mentioned as occurring in Western Australia.

141. *Rhipidura rufifrons dryas* Gould.

*Rhipidura dryas* Gould, *B. Australia* i. Introd. p. xxxix (Port Essington).

♂ ad. (wings moulting), South Alligator River, 9. vi. 1903 (No. 1287).

"♂," Margaret River, Northern Territory, 13. viii. 1902 (No. R. 662).

142. *Rhipidura setosa isura* Gould.

*Rhipidura isura* Gould, *P.Z.S.* 1840. p. 174 ("North-west coast of Australia").  
(Cf. *Nov. Zool.* 1898, pp. 525, 526).

2 ♂♂, Brock's Creek, Northern Territory, August 1902 (Nos. R. 651, 655).

2 ♂♂, 1 ♀, South Alligator River, October and November 1902, 4. iv. 1903  
(Nos. 751, 752, 1274).

143. *Myiagra rubecula concinna* Gould. (?)

*Myiagra concinna* Gould, *B. Austral.* ii. pl. 90 (N.W. Australia).

It seems that male specimens from N.W. Australia, as well as those from Cape York, have always a blackish loreal line, while this is not pronounced in those from Queensland, N. S. Wales, Victoria, nor in those from the Louisiades. But this form is not easily, and perhaps not always, distinguishable; moreover the females appear to be quite alike.

♂ ad., Cullen River, Northern Territory, 24. vii. 1902 (No. R. 647).

♂ ad., Brock's Creek, Northern Territory, 31. vii. 1902 (No. R. 648).

♀ ad., Margaret River, Northern Territory, 16. viii. 1902 (No. R. 656).

♂ ad., Mary River, Northern Territory, 14. ix. 1902 (No. 748).

2 ♂♂ ad., 1 ♀ ad., South Alligator River, October 1902, June and August 1903 (Nos. 749, 1250, 1565).

♂ ad., Alligator River, 60 miles from coast, 28. x. 1903 (No. 1602).

144. **Monarcha chalybeocephalus nitidus** (Gould).

*Piezorhynchus nitidus* Gould, *P.Z.S.* 1840. p. 171 ("North-west coast of Australia").

♀, Coolabing Station, Elvira River, E. Kimberley, 14. v. 1902 (No. R. 419).

♂, Burundie, Northern Territory, 28. vii. 1902 (No. R. 647).

"Bill dull blue, tip black."

1 ♂, 2 ♀♀, Margaret River, Northern Territory, 14. viii. 1902 (Nos. R. 638, 639, 646).

♂, East of Mary River, Northern Territory, 16. ix. 1902 (No. 747).

3 ♂♂, (South) Alligator River, 5. vii., 30. ix., 12. x. 1903 (Nos. 1615, 1616, 1251).

145. **Seisura nana** Gould.

*Seisura nana* Gould, *Ann. N. Hist.* (4) vi. p. 224 (N. Australia).

♂ ad., South Alligator River, 17. xi. 1902 (No. 750).

146. **Malurus dorsalis** (Lewin).

*Sylvia dorsalis* Lewin, *B. New Holland*, pl. 14.

3 ♀♀, Derby, March 1902 (Nos. 1585, 1591, 1612).

3 ♂ ad., 2 ♀ juv., Meda Station, Derby, January and February 1902 (Nos. 394 to 397, 399).

♂♀, Brock's Creek, 4, 6. viii. 1902 (Nos. R. 657, 660).

♂, Mt. Anderson, 31. x. 1901 (No. R. 281).

3 ♂♂, 4 ♀♀, Enreka, January, February 1903 (Nos. 984, 985, 986, 1101, 1102, 1103, 1104).

2 ♀♀, 20 miles west of South Alligator River, 30. iv., 1. v. 1903 (Nos. 1275, 1276).

147. **Malurus leucopterus** Quoy & Gaimard.

*Malurus leucopterus* Quoy & Gaimard, *Voy. autour du Monde Zool.* p. 108, pl. 23. fig. 2 (1824: "sur l'île Dirk-Hatichs").

♂ ad., Poondand, N.W. Australia, 12. ix. 1901 (No. R. 216).

♂ ad., ♂ juv., Marble Bar, N.W. Australia (Nos. R. 146, 147).

"♂ juv.," Derby, 8. iii. 1902 (No. 1610).

"♂ juv.," East of South Alligator River, 5. viii. 1903 (No. wanting).

♀, Nullagine, 14. iv. 1901 (No. R. 148).

"♂ immat.," Meda Station, Derby, 27. ii. 1902 (No. 398).

148. **Malurus pulcherrimus** Gould.

*Malurus pulcherrimus* Gould, *P.Z.S.* 1844. p. 106 ("Western Australia").

6 ♂♂, 4 ♀♀, shot in the granite ranges ten miles east of South Alligator River, July and August 1903 (Nos. 1282 to 1286, 1288, 1289, 1292, 1563, 1564).

I suppose these are all *M. pulcherrimus*, though I cannot call the throat and chest deep blue, but consider it, like Dr. Sharpe, to be black. The males

differ at a glance from their allies *M. elegans*, *lamberti* and *amabilis* by having a different blue on the back and sides of the head. They differ from those of *M. assimilis* in having the forehead, ear-coverts and feathers round the eye lighter and more greenish blue. The females, however, are much more distinct: they are above dull bluish grey or greyish blue, the tail is blue, bill brownish red, lores creamy white. I may mention that also the females of *M. amabilis* are widely different from those of *M. lamberti*, but we have still to expect a full explanation of all the *Maluri* up to date. I am not sufficiently acquainted with them to decide how many are species and how many subspecies.

#### 149. *Graucalus melanops* (Lath.).

*Corvus melanops* Latham, *Ind. Orn. Suppl.* p. xxiv (1801: Australia).

2 ♂ ad., South Alligator River, 7, 30. iv. 1903 (Nos. 1321, 1322).

1 ♂ ad., 2 ♂ juv., 1 ♀, Nullagine, N.W. Australia, 15, 16, 30. iv. 1901 (Nos. R. 98, 99, 100, 101).

These specimens from near Nullagine are above much paler than the two from the South Alligator River, and than all other specimens from Australia I have seen—being, in fact, whitish grey above. The one ♂ is apparently as fully adult as those from the South Alligator, and they are shot in the same month. Australian collectors must collect series and inform us, whether these light birds are individual aberrations or a different race?

#### 150. *Graucalus papuensis hypoleucus* Gould.

*Graucalus hypoleucus* Gould, *P.Z.S.* 1848, p. 38 (Port Essington).

(Cf. *Nov. Zool.* 1903, p. 205.)

♂, Cockatoo Springs, E. Kimberley, 3. vi. 1902 (No. R. 413).

♀, Cullen River, Northern Territory, 24. vii. 1902 (No. R. 599).

2 ♂♂, Margaret River, Northern Territory, 13, 14. viii. 1902 (Nos. 598, 600).

2 ♂♂, 2 ♀♀, Brock's Creek, Northern Territory, August 1902 (Nos. 595, 596, 597, 601).

2 ♂♂, Eureka, Northern Territory, 12. i., 5. ii. 1903 (Nos. 1017, 1060).

3 ♂♂, 3 ♀♀, South Alligator River, October and November, 1902, April 1903 (Nos. 728, 729, 730, 1318, 1319, 1320).

#### 151. *Lalage karu leucomela* (Vig. & Horsf.).

*Campylaga leucomela*, Vigors & Horsfield, *Trans. Linn. Soc.* xv. p. 215 (1826: Broad Sound, Queensland).

2 "♂♂," (South) Alligator River, 30. ix., 7. x. 1903 (Nos. 1597, 1618). These two specimens have bars on the chest and sides, leaving only the middle of the abdomen, which is buff, unbarred.

I have no doubt that the Australian form is different from *L. k. karu* and must be called *L. k. leucomela*. The bases of the rump feathers are much purer white in *L. k. karu* and the allied races from the islands (cf. *Nov. Zool.* 1903, p. 210). The question is, whether the adult ♂ of *leucomela* is always unbarred below or not? If it has no bars, then the above-mentioned two specimens are

not fully adult, but they do not show this otherwise. Mr. North, in his work "*Nests and Eggs of Birds, etc.*" pt. 2, p. 116, does not describe the young and immature stages.

152. **Lalage tricolor** (Swains.).

*Chelepyris tricolor* Swainson, *Zool. Journ.* i. p. 467 (1825).

♂ juv., Condon Road, 15. v. 1901 (No. R. 3).

2 ♂ juv., 2 ♀ juv., Brock's Creek, Northern Territory, August 1902 (Nos. R. 644, 645, 652, 654).

1 ♂ juv., 1 ♀ juv., South Alligator River, June 1903 (Nos. 1264, 1265).

153. **Pomatorhinus rubeculus** Gould.

*Pomatorhinus rubeculus* Gould, *P. Z. S.* 1839, p. 144 ("North-west coast of Australia").

1 ♀, Coongan River, N.W. Australia, 5. iv. 1901 (No. R. 119).

2 ♂♂, 3 ♀♀, Nullagine Road, April, May 1901 (Nos. R. 118, 120, 121, 122, 123).

1 ♂, Enreka, 20. ii. 1903 (No. 1074).

2 ♂♂, 1 ♀, 1 ♂ juv., South Alligator River, April and June 1903 (Nos. 1326, 1327, 1334, 1341).

154. **Cinclorhamphus cruralis** (Vig. & Horsf.).

*Megalurus cruralis* Vigors & Horsf., *Trans. Linn. Soc. London*, xv. p. 228 (1826 : Australia).

♂, Hall Creek Road, 28. iv. 1902 (No. R. 462). "Iris, feet and bill brown."

155. **Cinclorhamphus rufescens** (Vig. & Horsf.)

*Anthus rufescens* Vig. & Horsf. *Trans. Linn. Soc.* xv. p. 230 (1826: Australia).

♀, Behn River, East Kimberley, 28. v. 1902 (No. R. 458).

♂, Nullagine Road, 3. v. 1901 (No. R. 109).

♂, Glencoe Station, Northern Territory, 6. ix. 1902 (No. 739).

♂, Argyle Station, East Kimberley, 31. v. 1902 (No. R. 461).

♀, Ord River, 150 miles from Windham, W. Australia, 23. v. 1902 (No. R. 460).

"Iris brown (light brown), feet fleshy brown (dull whitish brown), bill dark brown."

156. **Amytornis housei** (Milligan).

*Amytornis housei* Milligan, *Rep. Kimberley Expl. Exp.*, App. B. (1902 : Kimberley).

16 specimens from 10 miles east of South Alligator River, July and August 1903 (Nos. 1303, 1305, 1306, 1307, 1549 to 1560). "Iris brown, legs brown."

Of these 15 birds 7 are marked as males, which have all lighter, more cinnamon-chestnut abdomina, 7 as females, which all have the abdomen darker, of a deep chestnut, while one with a light abdomen is marked "female" and one with a dark chestnut abdomen "male." I have therefore no hesitation in assuming that these last two birds are erroneously sexed, and that the male has a lighter, more cinnamon, the female a darker, chestnut abdomen.



"♀," but abdomen pale and therefore a male, shot in the granite ranges near the head of the South Alligator River, 20. v. 1903 (No. 1304). "Runs very fast and hides under rocks."

Although I have not been able to compare the type specimen, I believe this fine bird to be *A. housri*. The head, neck, and upper back are black, each feather with a shaft-line in the shape of a row of successive sagittate white markings, middle of back and rump chestnut with buff shaft-lines, upper tail-coverts blackish brown, with buff shaft lines and chestnut edges. Remiges brownish black with narrow dark brown outer edges, tail brownish black. Throat and foreneck white, sides of same black with broad white shaft-stripes. Abdomen in the male cinnamon-rufous, in the female deep chestnut, under tail-coverts blackish with buff shaft-stripes and buff or chestnut edges. Wing (sexes equally large) 74 to 77, tail about 106 to 114, bill 13.5 to 15.5, and arms 28 to 30 mm.

### 157. *Amytornis striatus* Gould (?).

*Dasynoris striatus* Gould, *P.Z.S.* 1839. p. 143 ("Liverpool Plains, N. S. Wales").

A badly damaged "♀" obtained at Marble Bar, 5. v. 1901, closely resembles specimens called *A. striatus* and collected near Point Cloates, W. Australia, by Mr. Tom Carter; but the bill is very much larger, measuring 15 mm. ! The dimensions also are generally a little larger, but not much. It would be interesting to know if such differences in size exist in this species, or whether there are different races?

### 158. *Eremiornis carteri* North.

*Eremiornis carteri* North, *Victorian Naturalist* xvii. p. 78 (1900: N.W. Cape, N.W. Australia).

The young is above more olive and uniform, lacking the rufous forehead and rufous tinge on the lower back and rump.

3 ♂♂, Marble Bar, April and May 1901 (Nos. R. 112, 114, 116).

1 ♀, Condon Road, 10. v. 1901 (No. R. 5).

3 ♂♂, 1 ♀, Nullagine, N.W. Australia, April 1901 (Nos. R. 113, 115, 117, 161).

2 ♂♀, Fitzroy River (200 miles up), April 1902 (Nos. R. 428, 432).

1 ♀, Negri River, W. Australia, 23. v. 1902 (No. R. 429).

1 ♀, Hardman Range, E. Kimberley, 17. v. 1902 (No. R. 430).

2 ♂♀, Mt. Huxley, Hall's Creek Road, 16. iv. 1902 (Nos. R. 431, 433). "Iris brown (dark brown), feet leaden grey (dark brown), bill, upper mandible black, under grey." "Found in the spinifex country from Onslow to East Kimberley and from Ashburton River to Hall's Creek Road."

These specimens agree perfectly with 4 from Point Cloates and Derby, collected by Mr. Tom Carter.

### 159. *Megalurus galactotes* (Temm.).

*Malurus galactotes* Temminck, *Pl. Col.* 65. fig. 1 (1823: Australia—which part unknown).

♂♀, South Alligator River, 15. x. 1902 (Nos. 742, 743).

6 ♂♂, Eureka, January and February 1903 (Nos. 998 to 1001, 1120, 1121). "Found in long grass on most of the watercourses."

160. *Cisticola exilis* (Vig. & Horsf.).

*Mulurus exilis* Vigors & Horsf., *Trans. Linn. Soc.* xv. p. 223 (1827—ex Latham : Australia).

♂, Ord River Station, E. Kimberley, 21. v. 1902 (No. R. 415).

♀, Derby, 19. xii. 1901 (No. R. 372).

♀, South Alligator River, 15. xi. 1902 (No. 744).

3 ♂♂, Eureka, January 1903 (Nos. 987, 988, 989).

161. *Ephthianura tricolor* Gould.

*Ephthianura tricolor* Gould, *P.Z.S.* 1840. p. 159 ("11ab. ?")

♂ immat., Soda Spring, Kimberley, 24. iv. 1902 (No. R. 437) "Iris white, bill and feet brown."

162. *Ephthianura crocea* Cast. & Rams.

*Ephthianura crocea* Casteln. & Ramsay, *Proc. Linn. Soc. N. S. Wales* i. p. 380 (1877—Norman River, Gulf of Carpentaria).

5 ♂♂, 2 ♀♀, Alligator River, September 1903 (Nos. 1637 to 1643). "Iris white, legs brown." "Caught on the open flats and plains near mangrove swamps."

163. *Grallina picata* (Lath.).

*Gracula picata* Latham, *Ind. Orn. Suppl.* p. xxix (1801—Australia).

♂, Nullagine, N.W. Australia, 20. iv. 1901 (No. R. 96).

♀ juv., Taylor's Creek, Nullagine, 15. iv. 1901 (No. R. 97).

♂, Hall's Creek Road, 27. iv. 1902 (No. R. 425).

1 ♂, 3 ♀♀, Eureka, Northern Territory, January and February 1903 (Nos. R. 980, 981, 1080, 1081).

3 ♀♀, Alligator River, June and September 1903 (Nos. 1263, 1648, 1649).

♀, Mary River, Northern Territory, 3. x. 1902 (No. 746).

164. *Colluricincla brunnea* Gould.

*Colluricincla brunnea* Gould, *P.Z.S.* 1840. p. 164 (N.W. Australia).

♂, George's Creek, Northern Territory, 8. vii. 1902 (No. R. 626).

♂, Cullen River, Northern Territory, 24. vii. 1902 (No. R. 627).

♀, Mary River, Northern Territory, 6. x. 1902 (No. 727).

♂♀, Eureka, Northern Territory, 9. i., 7. ii. 1903 (Nos. 1071, 1076).

2 ♂♂, 2 ♀♀, South Alligator River, April, May, June 1903 (Nos. 1313, 1314, 1315, 1317).

Dr. Sharpe's *pallidirostris* was doubtless described in error, as he did not know the sexes of *C. brunnea*, the male of which has a black bill, the female a whitish one.\*

\* In *Noë. Zool.* 1903, p. 99, Dr. Rothschild and I united the specimens from New Guinea with *brunnea*. From Mr. North's notes it appears that *C. superciliosa* is the same as the Papuan form, which is spread over parts of New Guinea and the Cape York Peninsula. Unfortunately we have no material from Cape York for comparison, but the Papuan birds differ from our *brunnea* from N.W. Australia in having a longer and less high bill.

I may here add, that "*Collyriocichla sibilis*" and "*Pinarolestes boweri*," in Sharpe's *Hand-list*, iv. pp. 269, 270, are the same, and that in my opinion this species is a *Pinarolestes* and not a *Colluricincla*. The generic name was originally spelt *Colluricincla*, and Dr. Sharpe's recent spelling is an error.

#### 165. *Colluricincla woodwardi* spec. nov.

*Colluricincla* supra cinerascens-brunnea, pileo capitisque lateribus grisescentioribus. Remigibus fuscis, pogniis internis basin versus cinnamomeo marginatis. Cauda fusca. Gutturum pectoreque summo pallide-griseis, paullo cervineo tinctis, scapis plumarum nigricantibus. Abdomine ochraceo-luteo, parte superiore griseo tincto, subcaudalibus subalaribusque ochraceo-luteis. Rostrum pedibusque nigricantibus.

This fine new Shrike-Thrush is above greyish brown, more greyish on the crown and sides of the head. The quills are dark brown, the outer ones darkest, the latter very narrowly, the inner secondaries more widely edged with the colour of the back, inner webs edged with cinnamon, except towards the tip. Tail dark brown. Throat and chest pale grey with a faint buff tinge, the shafts of the feathers blackish. Abdomen ochraceous buff, slightly washed with grey, vent, under tail- and under wing-coverts ochraceous buff. Bill and feet blackish, iris brown. ♂ ad., wing 130 to 133, tail about 125, culmen about 26 to 28, metatarsus about 30 mm.

*Type*: ♂ ad., 10 miles east of South Alligator River, 15. viii. 1903 (No. 1545).

*Hab.*: Granite hills near South Alligator River.

Mr. Tunney sent the following specimens :

2 ♀ ad., granite hills 10 miles east of South Alligator River, 13, 15. viii. 1903.

1 ♀ ad., hills near South Alligator River, 11. viii. 1903 (Nos. 1544, 1545, 1546).

Named in honour of Dr. Bernard Woodward, Curator of the Perth Museum, who arranged Mr. Tunney's expeditions.

#### 166. *Colluricincla parvula* Gould.

*Colluricincla parvula* Gould, *P.Z.S.* 1845 (Port Essington).

5 ♂♂, 3 ♀♀, Alligator River, October 1902, July, September, October 1903 (Nos. 726, 1290, 1291, 1575, 1576, 1578, 1599, 1603).

I cannot see the reason why this species and *C. rufigaster* are separated generically and placed with *Pinarolestes*. *C. parvula* stands between the group of large species (*harmonica*, *brunnea*, etc.) and the small ones (*rufigaster*, *parvissima*, etc.). The eggs of the former and latter groups are quite alike, except in size.

#### 167. *Cracticus quoyi tunneyi* subsp. nov.

The black *Cracticus* from the Alligator River are clearly distinct from both *C. quoyi quoyi* and *C. quoyi rufescens*. Their bills are long and slender, as thin as those of *C. q. rufescens*, but much thinner and longer than those of *C. quoyi quoyi*. The wing is also much longer than in either of the two other known forms. There appear to be four forms of black *Cracticus* :—

1. *Cracticus quoyi quoyi* (Less.). Typical locality: Dorey in Dutch New

Guinea. Differs from all the other forms by its much thicker and more swollen bills. Young apparently always black! *Hab.*: New Guinea, Salwatti, Waigiu, Mysol.

2. *Cracticus quoyi rufescens* De Vis, *Proc. Linn. Soc. N. S. Wales* vii. p. 562. Typical locality: Queensland. Differs at a glance from *C. q. quoyi* by its thinner, less swollen bill. Young evidently dimorphic: sometimes black, more often brown above with rusty buff stripes, underside rusty buff. Females (? when fully adult) also sometimes brown, but generally black. That the brown birds moult into the black ones is shown by two specimens in the Tring collection. Cf. W. Rothschild, *Bull. B. O. C.* x. p. xl. 1900, and Campbell, *Nests and Eggs Austr. B.* p. 307. *Hab.*: Queensland.

3. *Cracticus quoyi* subsp. nov.? It is surprising to find that the Aru birds do not at all agree with the New Guinea form, but are very closely allied to *C. q. tunneyi*. Their bills seem, however, to be slightly shorter, and the wings shorter. As we have only two unsexed birds from Capt. Webster, apparently ♂ and ♀, and a female collected by Mr. Heinrich Kühn, I am not naming this form, which is intermediate between *C. q. quoyi* and *C. quoyi tunneyi*, but hope to discuss it later, when more skins from the Aru Islands are available.

4. *Cracticus quoyi tunneyi* subsp. nov. *Type*: ♂ ad., Alligator River, 25. ix. 1903 (No. 1603 Tunney coll.). Named in honour of the collector, Mr. J. T. Tunney. Differs from *C. q. rufescens* in its much larger size: bill ♂ 65.5, ♀ 53 to 55; wing, ♂ 205, ♀ 185 to 188 mm.—*i.e.* fully an inch longer than in *C. q. rufescens*. I am unable to say whether the young are black, rufous, or black and rufous.

Mr. Tunney sent the following specimens only:

♂ ad., Alligator River, Northern Territory, 25. ix. 1903 (No. 1603).

2 ♀ ♀, Alligator River, about 16 and 35 miles from the coast, 25. ix. and 10. x. 1903 (Nos. 1601, 1602).

Mr. Tunney says he shot these birds in mangrove swamps on tidal waters near the coast, where he only saw this *Cracticus*. "Iris dark brown, feet black."

### 168. *Cracticus nigrogularis nigrogularis* (Gould).

*Fanga nigrogularis* Gould, *P.Z.S.* 1836. p. 143 ("In Novâ Cambriâ Australi").

♀, Nullagine, N.W. Australia, 17. iv. 1901 (No. R. 94).

♀, Coongan River, N.W. Australia, 5. iv. 1901 (No. R. 95).

These specimens belong to the larger form, *C. n. nigrogularis*, the distribution of which is peculiar, as it seems to occur in New South Wales and throughout West Australia, and is only replaced by the smaller *C. n. picatus* in the Northern Territory and in the northern portions of Queensland. Birds collected by Mr. Tom Carter at Point Cloates are distinctly of the large form, while I consider all the North Queensland examples, from Cedar Bay, Cooktown, etc., to be typical *picatus*.

### 169. *Cracticus nigrogularis picatus* Gould.

*Cracticus picatus* Gould, *P.Z.S.* 1848. p. 40 ("Northern Australia").

5 ♂ ♂, 3 ♀ ♀, Brock's Creek, Northern Territory, end of July and August 1902 (Nos. 587 to 594).

- ♂, South Alligator River, 15. viii. 1903 (No. 1541).  
♂, Eureka, Northern Territory, 15. ii. 1903 (No. 1059).  
♀ juv., Nellie Creek, Northern Territory, 15. ii. 1903 (No. 1075).

170. **Cracticus argenteus** Gould.

*Cracticus argenteus* Gould, *P.Z.S.* 1840. p. 126 (N.W. Australia).

- ♂ ♀ ad., Granite hills, 10 miles east of South Alligator River, 12, 13. viii. 1903 (Nos. 1542, 1543).  
♀ jun., Red sandstone hills near South Alligator River, 11. v. 1903 (Nos. 1316).

171. **Gymnorhina tibicen longirostris** subsp. nov.

Differs from *G. tibicen tibicen* in its larger size and especially in its much longer bill. ♂ ad.: wing, 251 to 257; bill, 72.5 to 73.5 mm. *Type*: ♂ ad., Nullagine, N.W. Australia, 16. iv. 1901 (No. R. 92).

*G. tibicen tibicen* was originally described from New South Wales, and the birds from there have the bill about a centimetre shorter.

Mr. Tunney sent only:

- 2 ♂ ad., Nullagine, N.W. Australia, 16. iv. 1901 (Nos. R. 92 and 93).

172. **Pachycephala lanoides** Gould.

*Pachycephala lanoides* Gould, *P.Z.S.* 1839. p. 142 (N.W. coast of Australia).

- 2 ♂ ad., 4 ♀ ♀, Derby, in mangroves near the sea-shore, 20. xii. 1901 and March 1902 (Nos. 366, 1579, 1586, 1587, 1605, 1607). "Iris reddish-brown in both sexes, feet leaden grey, bill black."

173. **Pachycephala rufiventris falcata** Gould.

*Pachycephala falcata* Gould, *P.Z.S.* 1842. p. 134 (Port Essington).

*P. ruf. falcata* evidently represents *P. ruf. rufiventris* in N.W. Australia, but the North Queensland birds before me are not *P. r. falcata*!

- 1 ♂ juv., 1 ♀, Derby (Nobby Wall), 7. xii. 1901 (Nos. R. 282, 283).

- 3 ♀ juv., Eureka, February 1903 (Nos. 1115, 1116, 1117).

- ♂, Fish-hole, Elvira River, West Australia, 12. v. 1902 (No. R. 466).

- 3 ♂ ♂, 1 ♀, South Alligator River, March and April 1903, October 1902 and 1903 (Nos. 731, 1273, 1479, 1621). "♂ ad.: Iris hazel-brown (red), feet black, bill black."

174. **Poecilodryas pulverulentus** (Bp.).

*Mgiolestes pulverulentus* Bp., *Consp. Ar.* i, p. 358 (1850: ex S. Müll. MS., New Guinea).

Unfortunately we have no specimens from New Guinea, which are said to be indistinguishable from Australian ones. If they should be separable, the Australian form would have to be called *Poecilodryas pulverulentus leucura* Gould.

In my opinion both *Poecilodryas* and *Eopsaltria* are genera of the *Muscicapidae* and not of the *Laniidae*; but a careful revision of these and allied genera, with the help of all known species, is desirable.

2 ♂♂, 2 ♀♀, Alligator River, September 1903 (Nos. 1580, 1588, 1596, 1622).

We also received a pair from Cape York, collected by Mr. R. Jardine, which are in every way similar to those from the Alligator River.

#### 175. *Poecilodryas cinereiceps* spec. nov.

Speciei *Poecilodryas pulverulentus* dictae hand dissimilis, sed minor, notaeo cinerascens, unicolore, capite minime nigrescente.

This new species differs at a glance from *P. pulverulentus*; the upper surface is much paler, not so bluish-grey, but lighter and more ashy, and the crown is not in the least blackish, but of the same ashy-grey colour as the back. The lores only are blackish. Underside as in *P. pulverulentus*, also the tail black, with a wide band in the basal half (except on the two central rectrices) white, upper tail-coverts black, under tail-coverts white. Bill (♂) about 14.5 mm.: wing, ♂ 83 to 84, ♀ 78 mm. (In *P. pulverulentus* the ♂ has the wing about 87 to 91 mm., the ♀ 81 to 82.5 mm. long.) *Type*: ♂ ad., obtained on island near Hampton Harbour, 13. vii. 1901. No. 193, Tunney coll.

Mr. Tunney sent only three examples:—

2 ♂ ad. from island near Hampton Harbour, 13. vii. 1901 (Nos. R. 192, 193).

1 "♂" (but probably a ♀), apparently less adult, Derby, 9. i. 1902 (No. R. 373).

This, as well as the two from the island, were obtained among the mangroves.

Besides these, we have in the collection 2 ♂ ad. and 1 ♀ ad., collected near Derby in March 1901, and sent to us by Mr. Robert Hall; and 1 ♀ from the N.W. Cape, 23. ii. 1902, collected by Mr. Tom Carter.

Mr. Carter describes the iris as reddish hazel, the bill as black, legs and feet as purplish horn-colour. Mr. Tunney calls the iris brown, the "legs black."

This is a very interesting addition to the Australian ornithology, evidently hitherto overlooked.

#### 176. *Sphenostoma cristatum* Gould.

*Sphenostoma cristatum* Gould, *P.Z.S.* 1837. p. 150 ("In Novâ Cambriâ Australi, apud oram orientalem").

♂ ♀, Nullagine, N.W. Australia, 19. iv. 1901 (Nos. R. 105, 106).

#### 177. *Neositta leucoptera* (Gould).

*Sittella leucoptera* Gould, *P.Z.S.* 1839. p. 144 ("North-west coast of Australia").

2 ♀♀, Meda Station, Kimberley, 8. ii. 1902 (Nos. 385, 386).

♂ ♀, Derby, 6, 7. iii. 1902 (Nos. 1608, 1609).

♀, Eureka, Northern Territory, 2. ii. 1903 (No. 1100).

2 ♂♂, South Alligator River, end of March and April 1903 (Nos. 1277, 1278).

The ♀ from Eureka has the black extended over the chin; in the ♂ (No. 1277) from the South Alligator River, the black reaches over the forehead to the base of the bill.

178. *Climacteris melanura* Gould.

*Climacteris melanura* Gould, *P.Z.S.* 1842, p. 138 ("North-west coast of Australia").

♂ ♀ ad. Liveringa, Derby, 17. xi. 1901 (Nos. R. 285, 286).

♀, South Alligator River, 9. iv. 1903 (No. 1279).

♀, Eureka, 21. ii. 1903 (No. 1119).

179. *Philemon argenticeps* (Gould).

*Tropidorhynchus argenticeps* Gould, *P.Z.S.* 1839, p. 144 ("North-west coast of Australia").

♂, Victoria River, Northern Territory, 30. vi. 1902 (No. R. 620).

♂, Pine Creek, Northern Territory, 25. vii. 1902 (No. R. 618).

3 ♂♂, 3 ♀♀, Brock's Creek, Northern Territory, July and August 1902 (Nos. R. 613 to 616, 619).

♂, Eureka, Northern Territory, 7. ii. 1903 (No. 1076).

2 ♂♂, 2 ♀♀, South Alligator River, October and November 1902 (Nos. 782, 785, 788, 789).

180. *Philemon citreogularis sordidus* (Gould).

*Tropidorhynchus sordidus* Gould, *B. Austr.* i. Introd. p. 58 (Coburg Peninsula).

1 ♂, 2 ♀♀, Meda Station, Kimberley, February 1902 (Nos. 379, 380, 381).

♀, Derby, 5. iii. 1902 (No. 1600).

2 ♂♂, Glencoe Station, Northern Territory, 6. ix. 1902 (Nos. 783, 790).

1 ♂, 2 ♀♀, Brock's Creek, Northern Territory, August 1902 (Nos. 621, 622, 623).

1 ♂, 3 ♀♀, South Alligator River, November 1902, March and April 1903 (Nos. 784, 786, 1335, 1336).

2 ♂♂, 1 ♀. Eureka, Northern Territory, January and February 1903 (Nos. 1004, 1067, 1068).

The typical *citreogularis* is evidently **not** found in North-western Australia, but the two subspecies are so closely allied that they are not to be named, except if a series of both is compared.

181. *Entomyza cyanotis albipennis* Gould.

*Entomyza albipennis* Gould, *P.Z.S.* 1840, p. 169 (Port Essington).

It is very interesting to see that the very young birds have the base of the primaries buff, a little paler than in *E. c. cyanotis*. There are thus three subspecies of *E. cyanotis* :—

*E. cyanotis cyanotis* Lath. : base of primaries buff, larger : New South Wales, Victoria, South Australia and Southern Queensland.

*E. cyanotis harterti* Rob. & Lav. (*Ibis* 1900, p. 635) : base of primaries paler buff, smaller : Northern Queensland.

*E. cyanotis albipennis* Gould : base of primaries white : N.-Western Australia.

Mr. Tunney sent :

5 ♂♂, 2 ♀♀, 1 ♂ juv., Cockatoo Springs, E. Kimberley, June 1902 (Nos. 444 to 449, R. 610, 611).

1 ♂, Burundie, Northern Territory, 28. vii. 1902 (No. R. 606).

1 ♂, 3 ♀♀, Brock's Creek, Northern Territory, end of July and August 1902 (Nos. R. 605, 607, 608, 609).

"Iris straw-colour (yellow, dull yellow), feet brown (dirty brown, blackish), bill black, bluish at base (in young birds yellowish at base), bare space above the eye pale blue, below the eye bright blue (in young birds bare space just round the eye blue, rest greenish yellow)."

### 182. *Myzantha flavigula lutea* Gould.

*Myzantha lutea* Gould, *P.Z.S.* 1839. p. 144 ("N.W. coast of Australia").

1 ♀, Nullagine Road, 14, 15. iv. 1901 (Nos. R. 107, 108).

1 ♂, 1 ♀, Nellie Creek, Northern Territory, 11. ii. 1903 (Nos. 1069, 1070).

3 ♂♂, 1 ♀, near the head waters of South Alligator River, May 1903 (Nos. 1322 to 1325).

### 183. *Ptilotis unicolor* Gould.

*Ptilotis unicolor* Gould, *P.Z.S.* 1842. p. 136 (Port Essington).

1 ♂, Elvira River, W. Australia, 12. v. 1902 (No. R. 443).

1 ♂, 2 ♀♀, Brock's Creek, Northern Territory, August 1902 (Nos. 628, 629, 630).

1 ♂, Enreka, Northern Territory, 2. ii. 1903 (No. 1077).

1 ♀, Alligator River, 7. ix. 1903 (No. 1577).

1 ♂, 2 ♀♀, South Alligator River, April and June 1903 (Nos. 1337, 1338, 1339).

### 184. *Ptilotis sonorus* Gould.

*Ptilotis sonorus* Gould, *P.Z.S.* 1840. p. 160 ("South and Western Australia").

♀, Marble Bar, 3. iv. 1901 (No. R. 145).

2 ♀♀, Lewis Islands, N.W. Australia, 27. vi. 1901 (Nos. R. 176, 177).

1 ♀, Soda Springs, Kimberley, 23. iv. 1902 (No. R. 442).

1 ♂, east of Mary River, Northern Territory, 16. ix. 1902 (No. 732).

### 185. *Ptilotis keartlandi* North.

*Ptilotis keartlandi* North, *Report Horn Scient. Exp.* p. 94, pl. 6 (1896).

1 ♂, Marble Bar, 5. v. 1901 (No. R. 141).

1 ♂, Carbarua Pool, Nullagine Road, 3. v. 1901 (No. R. 139).

1 ♂, 3 ♀♀, Taylor's Creek, Nullagine, N.W. Australia, April 1901 (Nos. R. 137, 138, R. 140, 144).

The ♀ R. 144 is very young. The upper surface is sandy or brownish buff, the crown like the back, ear-coverts pale grey, under-surface uniform yellowish buff.



186. *Ptilotis flavescens* Gould.

*Ptilotis flavescens* Gould, *P.Z.S.* 1839. p. 144 ("North-west coast of Australia").

- 1 ♂, Derby, 31. xii. 1901 (No. R. 369).
- 1 ♂, Fitzroy River, Derby, 3. xii. 1901 (No. R. 287).
- 1 ♀, Behn River, 29. v. 1902 (No. R. 436).
- 1 ♂, George's Creek, Northern Territory, 8. vii. 1902 (No. R. 661).
- 2 ♂♂, Margaret River, 20. iv. 1902 (Nos. R. 434, 435).

187. *Ptilotis leilavalensis* North.

*Ptilotis leilavalensis* North, *Rec. Austr. Mus.* iii. p. 106 (1899: Fullarton River, near Leilavale Station, Queensland).

*Ptilotis carteri* Campbell, *Victorian Naturalist*, 1899 (N.W. Cape, Carter coll.)

- 1 ♂, Marble Bar, 4. iv. 1901 (No. R. 143).
- 3 ♂♂, Nullagine Road, April 1901 (Nos. R. 132, 133, 136).

188. *Glyciphila fasciata* Gould.

*Glyciphila fasciata* Gould, *P.Z.S.* 1842. p. 137 (Port Essington).

2 ♂♂, 2 ♀♀, Alligator River, 60 miles from the coast, October 1903 (Nos. 1571 to 1574).

"Caught on river bank in paper-bark trees. Iris dull red (reddish), legs light brown."

189. *Stigmatops ocellaris* (Gould).

*Glyciphila? ocellaris* Gould, *P.Z.S.* 1837. p. 154 (Van Diemen's Land—? errore!).

- 2 ♂♂, Taylor's Creek, Nullagine, 15. iv. 1901 (Nos. R. 142, 143).
- 2 ♂♀ juv., Lewis Island, N.W. Australia, 25. vi. 1901 (Nos. R. 197, 198).
- 1 ♀, Crawford's Spring, Northern Territory, 4. vii. 1902 (No. R. 664).
- 1 ♀, Meda Station, Derby, I. ii. 1902 (No. R. 387).
- 2 ♂♀, Soda Springs, Hall's Creek Road, 23, 24. iv. 1902 (Nos. R. 438, 439).
- 5 ♂♂, Alligator River, March, September, October 1903 (Nos. 733, 734, 1333, 1590, 1635).

I am perfectly convinced that "*subocellaris*," about which Gould himself was always uncertain, is based on young *ocellaris*, while on the other hand the birds from the Lesser Sunda Islands have apparently stronger bills and might be separated as a new subspecies.

190. *Entomophila albigularis* Gould.

*Entomophila albigularis* Gould, *P.Z.S.* 1842. p. 137 (Type from Mayday Island in Van Diemen's Gulf, N.W. Australia).

- ♂♀, Alligator River, 8, 22. ix. 1903 (Nos. 1581, 1592).

191. *Entomophila rufogularis* Gould.

*Entomophila rufogularis* Gould, *P.Z.S.* 1842. p. 137.

- 3 ♂♂, Derby, 24. xi. 1901, 7. iii. 1902 (Nos. R. 292, 293, 1583).  
1 ♂ juv., Brock's Creek, 7. viii. 1902 (No. R. 659).  
2 ♀♀, South Alligator River (100 miles from the coast), 4. x. 1902, 7. iv. 1903 (Nos. 738, 1332).

192. *Melithreptus lunulata albogularis* Gould.

*Melithreptus albogularis* Gould, *P.Z.S.* 1847. p. 220 ("Northern and Eastern Australia").

- 1 ♂, Fitzroy River, Derby, 3. xii. 1901 (No. 294).  
1 ♂, 2 ♀♀, Brock's Creek, Northern Territory, August 1902 (Nos. R. 631, 658, 663).  
6 ♂♂, 1 ♀, Alligator River, October 1902, March, April, May, September 1903 (Nos. 737, 1328, 1329, 1330, 1331, 1593, 1617).  
3 ♂♂, 1 ♀, Enreka, January, February 1903 (Nos. 996, 997, 1078, 1079).

193. *Myzomela obscura grisescens* subsp. nov.

[*Myzomela obscura* Gould, *P.Z.S.* 1842. p. 136 (Port Essington).]

Subspeciei *Myzomela obscura obscura* dictae similis, sed omnino grisescentior.

This new form differs at a glance from *M. o. obscura* by its greyish, instead of dark brownish upper- and under-surface. This is most evident on the throat and breast. I have compared a fine series from Cape York, Bowen, Cooktown and other parts of Queensland, as well as from Port Essington.

*Type*: ♂ ad., Brock's Creek, 9. viii. 1902 (No. 635, Tunney coll.).

Mr. Tunney sent the following specimens in addition to the type specimen:

- 3 ♂♂, 1 ♀, Brock's Creek, Northern Territory, August 1902 (Nos. R. 633, 634, 636, 637).  
1 ♂, east of Mary River, Northern Territory, 16. ix. 1902 (No. 736).  
1 ♂, South Alligator River, 17. x. 1902 (No. 735).  
"Iris brown, bill black, feet dull blue (bluish black)."

194. *Myzomela pectoralis* Gould

*Myzomela pectoralis* Gould, *P.Z.S.* 1840. p. 170 (N.W. coast of Australia).

- 2 ♂♂, 1 ♀ juv., Derby, December 1901 (Nos. R. 289, 367, 368).  
1 ♂, 2 ♀♀, Mount Wynne, Derby, November 1901 (Nos. R. 288, 290, 291).  
2 ♂♂, 2 ♀♀, Meda Station, Derby, February 1902 (Nos. R. 388 to 391).  
1 ♂, Brock's Creek, Northern Territory, 6. viii. 1902 (No. R. 632).  
2 ♂♂, Alligator River, 80 miles from the coast, April and October 1903 (Nos. 1293, 1582).

195. **Myzomela nigra** Gould.

*Myzomela nigra* Gould, *B. of Australia* iv. pl. 66 (Western Australia and Namoi).

- 1 ♂, from 240-mile post, Hall's Creek Road, 22. iv. 1902 (No. R. 440).
- 1 ♂ juv., Soda Spring, 23. iv. 1902 (No. R. 441).

196. **Dicaeum hirundinacea** (Shaw).

*Motacilla hirundinacea* Shaw, in Shaw & Nodder's *Nat. Misc.* iv. pl. 114 (1792).

- 1 ♂, Nullagine River, 17. iv. 1901 (No. R. 130).
- 1 ♂, Ord River, 21. v. 1902 (No. R. 424).

197. **Pardalotus melanocephalus uropygialis** Gould.

*Pardalotus uropygialis* Gould, *P.Z.S.* 1839. p. 143 (N.W. coast of Australia).

- 1 ♂, Brock's Creek, 19. viii. 1902 (No. R. 585).
- 3 ♂♂, South Alligator River, April, June, August 1903 (Nos. 1294, 1295, 1562).

198. **Anthus australis** Vig. & Horsf.

*Anthus Australis* Vig & Horsf., *Trans. Linn. Soc. Lond.*, xv. p. 229 (Australia).

- 1 ♂, 1 ♀ ad., Lewis Islands, N.W. Australia, June, July 1901 (No. R. 195, 196).
  - 1 ♂ juv. Enreka, Northern Territory, 25. ii. 1903 (No. 1113). In moult.
  - 1 ♀ juv., Alligator River, 26. ix. 1903 (No. 1569).
- These specimens (*i.e.* the adult ones) are rather pale and sandy.

199. **Mirafrja javanica horsfieldi** Gould.

- 1 ♂, 2 ♀♀, Gleucoe, Northern Territory, September 1903 (Nos. 792, 793, 794).
- 5 ♂♂, 1 ♀, Eureka, Northern Territory, January, February 1903 (Nos. 992 to 925, 1005, 1112).
- 3 ♀♀, South Alligator River, November 1902, September 1903 (Nos. 809, 1567, 1570).

200. **Mirafrja javanica secunda** Sharpe.

- 2 ♂♀, Tabba Tabba, N.W. Australia, September 1901 (Nos. R. 220, 222).
  - 2 ♂♀, Box Soak, N.W. Australia, August 1901 (Nos. R. 217, 221).
  - 4 ♂♂, 2 ♀♀, Liveringa (Kimberley), N.W. Australia (Nos. R. 300 to 305).
  - 2 ♂♀, Meda Station, 28. i. 1902 (Nos. R. 383, 384).
  - 1 ♀, Flora Valley, East Kimberley, 8. v. 1902 (No. R. 459). An aberration of a pale cream-colour above and creamy white below.
- “Iris dark brown, feet and bill fleshy brown.” Not an “albino,” as the iris is not pink.

THE FORMS OF *MIRAFRA JAVANICA*.

A most interesting—because of its various subspecies—species of *Mirafra* is spread over the Eastern Archipelago, from Java to the Philippines and Australia. I am acquainted with the following forms :

1. *Mirafra javanica javanica* Horsf. 1820. *Hab.* : Java, Bali.

2. *Mirafra javanica parva* Swinh. 1871. *Hab.* : Flores, Sumbawa, Lombok, Savu, Sumba.

3. *Mirafra javanica philippinensis* Wardl. Rams. 1885. *Hab.* : Philippines. Apparently only Luzon.

4. *Mirafra javanica horsfieldi* Gould 1847. *Hab.* : Probably only northern and eastern portions of Australia. We have specimens from the following localities : Moreton Bay, Eureka, Glencoe, South Alligator River. The upper surface of this form is very deep brown, the feathers of the back and scapulars almost black with pale rufous edges.

5. *Mirafra javanica pallida* Hall, "Emu" 1904. Differs at a glance from the true *M. j. horsfieldi* by its greyish upper surface. The edges to the feathers are not dark brown or rufous, but ashy grey, the rump and upper tail-coverts greyish, the under surface cream instead of rufous-buff, the edges to the quills paler. We have two examples from Mr. Hall, one without indication of locality (25. x. 1902), the other said to be from "N.W. Australia," from Rogers, taken 13. xii. 1902. "Iris brown ; bill : upper and tip of lower brown, base of lower yellowish white ; corner of mouth pale yellow ; feet and legs very pale brown." These two specimens are alike. One bears the name '*pallida*' in Mr. Hall's handwriting, and may have served for the original description just published. It will be the duty of our Australian brother-ornithologists to find out the exact distribution of this new subspecies, and to tell us on what soil and in what sort of country it lives.

We have also a male from Swan Hill, Victoria, 8. iv. 1899, also from Mr. Robert Hall, which is paler and greyer than typical *horsfieldi*, very near to *griseus*, but not quite like it. Is this merely an exceptionally pale and grey *horsfieldi*, or another new race ?

6. *Mirafra javanica secunda* Sharpe 1890. Distinctly more sandy and paler, not so blackish above, as *M. j. horsfieldi*. *Hab.* : Southern and western portions of Australia (Kimberley, Port Headland, Derby).

7. *Mirafra javanica woodwardi* Milligan, 1901. Above not at all blackish, brown, or greyish, but bright cinnamon, abdomen pale cinnamon buff, throat paler, upper and under wing-coverts bright cinnamon. Chest-markings not blackish-brown, but ferruginous. *Hab.* : Sandy portions of Onslow and Point Cloates (Tom Carter coll.).

201. *Poëphila personata* Gould.

*Poëphila personata* Gould, *P.Z.S.* 1842, p. 18 ("Northern parts of Australia").

According to what I can find about the distribution of these birds, this form and *leucotis* would occur in the same districts. This is not probable. *P. personata* and *P. leucotis* are most likely subspecies representing each other. The latter

only we have received from Cape York, the former only from Eureka, Behn, and Alligator Rivers.

♂ ♀, Behn River, E. Kimberley, 30. v. 1902 (No. R. 471, 472).

2 ♂♂, South Alligator River, April, May 1903 (Nos. 1298, 1299).

2 ♂♂, 1 ♀, Eureka, Northern Territory, February 1903 (Nos. 1105, 1106, 1108).

### 202. *Poëphila acuticauda* (Gould).

*Amadina acuticauda* Gould, *P.Z.S.* 1839. p. 143 (N.W. coast of Australia).

♂ ♀, Thompson's Springs, E. Kimberley, May and June 1902 (Nos. R. 468, 470).

♂ ♀, Lennard River, Derby, January 1902 (Nos. 392, 393).

♀, Margaret River (crossing Hall's Creek Road), 20. iv. 1902 (No. R. 469).

2 ♂♂, Eureka, February 1903 (Nos. 1107, 1109).

♂, 20 miles west of South Alligator River, 2. v. 1903 (No. 1297).

### 203. *Poëphila gouldiae* (Gould).

*Amadina gouldiae* Gould, *P.Z.S.* 1844. p. 5 (N.W. Australia).

*Poëphila mirabilis* Des Murs, *Iconogr. Orn.* pl. iii. (1845).

It has now been proved beyond doubt that the red-headed and black-headed "Gouldian Finches," as well as the yellow-headed "*P. armitiana*," are merely aberrations of one species. One might call it "dimorphic," for, in fact, in most cases the same individual retains its red or black head throughout life, and cases in which the black head moults into a red one, or *vice versa*, are apparently rare. The name of the species is *Poëphila gouldiae*! This name was published in 1844. When Messrs. Hombron & Jacquinot first figured this bird in their *Voyage au Pôle Sud* they did not bestow a specific name on it, but merely called it "Poephile admirable." It was not before 1845 that Des Murs printed the name *P. mirabilis* and figured both the black and the red-headed varieties. The name of the species is therefore clearly *P. gouldiae*.

♂ ad., Eureka, Northern Territory, 10. i. 1903 (No. 1023). Red-headed!

♂ ad., Thompson's Springs, E. Kimberley, 2. vi. 1902 (No. R. 467). Black-headed!

♀, 20 miles west of South Alligator River, Northern Territory 2. v. 1903 (No. 1296).

♀ juv., Thompson's Springs, E. Kimberley, 2. vi. 1902 (No. R. 473).

### 204. *Bathilda ruficauda clarescens* Hart.

*Bathilda ruficauda clarescens* Hart., *Nor. Zool.* 1899. p. 427 (Cape York).

The typical larger and darker *ruficauda* is from N. S. Wales and South Queensland. *B. r. clarescens* is a much paler subspecies.

3 ♂♂, 4 ♀♀, 2 juv., Alligator River, November 1902, September 1903 (Nos. 812, 1626 to 1629, 1632, 1633, 1634, 1636).

### 205. *Munia pectoralis* (Gould).

*Domucola pectoralis* Gould, *B. Austr.* iii. pl. 95 (1848).

♂ ad., Eureka, 7. i. 1903 (No. 1022).

206. **Munia flaviprymna** (Gould).

*Donacola flaviprymna* Gould, *P.Z.S.* 1845, p. 80 (the type came from the Victoria River!).

♂, evidently adult, Victoria River, Northern Territory, 30. vi. 1902 (No. R. 582). "Iris black. Feet and bill dull blue." Exactly like the type and the one in the British Museum.

"♀." Victoria River, 30. vi. 1902 (No. R. 581). "Iris black. Feet and bill dull blue."

This specimen differs from the male as follows: the crown and hind-neck are not pale grey-buff, but buffy grey with hoary grey-brown edges to the feathers; the throat, instead of being creamy buff, is creamy buff with dark chestnut edges to the feathers! Can that be the regular female of *M. flaviprymna*? Or can *M. flaviprymna* be a stage of *M. castaneothorax*? It seems hardly possible, but the similarity of the upperside is suggestive.

Here again is a case of research for Australian scientific collectors. A series must be collected; egg-hunting alone cannot settle the point.

207. **Munia castaneothorax** (Gould).

*Amadina castaneothorax* Gould, *Syn. B. Austr.* pt. ii. (1837).

♂, Victoria River, Northern Territory, 30. vi. 1902 (No. R. 583).

7 ♂♂, Eureka, Northern Territory, January 1903 (Nos. 1025 to 1031).

2 ♀♀, Alligator River, September 1903 (Nos. 1630, 1631).

208. **Emblema picta** Gould.

*Emblema picta* Gould, *P.Z.S.* 1842, p. 17 (N.W. coast of Australia).

♂ ad., Coongan River, 5. iv. 1901 (No. R. 125).

209. **Taeniopygia castanotis** (Gould).

*Amadina castanotis* Gould, *P.Z.S.* 1836, p. 105 (Australia).

♀ imm., Condon Road, 15. v. 1901 (No. R. 4).

210. **Stictoptera annulosa** (Gould).

*Amadina annulosa* Gould, *P.Z.S.* 1839, p. 143 (N.W. coast of Australia).

♀ ad., Crawford Springs, Northern Territory, 4. vii. 1902 (No. R. 584). (Perhaps subspecies of *bichenowi*.)

211. **Neochmia phaeton** (Hombr. & Jacq.).

*Fringilla phaeton* Hombr. & Jacq., *Ann. Soc. Nat.* (2) xvi. p. 314 (1841: Australia).

1 ♂, Eureka, Northern Territory, 24. i. 1903 (No. 1024).

1 ♂, Alligator River, 60 miles from coast, 26. x. 1903 (No. 1715).

212. *Artamus minor* Vieill.

*Artamus minor* Vieillot, *Nouv. Dict. d'Hist. Nat.* xvii. p. 298 (1817 : Australia).

♂ ♀, Hall's Creek, 29. iv. 1902 (Nos. R. 464, 465).

♂ ad., Eureka, Northern Territory, 5. ii. 1903 (No. 1110).

♀ juv., Nellie Creek, Northern Territory, 18. ii. 1903 (No. 1111). "Iris dark brown, feet black, bill blue with black tip."

213. *Artamus cinereus* Vieill.

*Artamus cinereus* Vieillot, *Nouv. Dict. d'Hist. Nat.* xvii. p. 297 (1817 : Timor!).

5 ♂♂, Eureka, Northern Territory, January, February 1903 (Nos. 983, 1061, 1062, 1063, 1063A).

2 ♂♂, South Alligator River, April 1903 (Nos. 1252, 1253).

214. *Artamus personatus* (Gould).

*Ocypterus personatus* Gould, *P.Z.S.* 1840. p. 149 ("Southern and Western Australia").

1 ♂, Margaret River Crossing, 20. iv. 1902 (No. 463).

"Iris black, feet black, bill blue with black point."

215. *Artamus leucorhynchus leucopygialis* Gould.

*Artamus leucopygialis* Gould, *P.Z.S.* 1842. p. 17 (Australia).

*Artamus leucorhynchus parvirostris* Hartert, *Nov. Zool.* 1899. p. 424 (Cape York); cf. *Nov. Zool.* 1901. p. 170.

4 ♂♂, Lewis Island, N.W. Australia, June, July 1901 (Nos. R. 172 to R. 175).

1 ♂, Woolwonga, Northern Territory, 7. ix. 1902 (No. 753).

4 ♂♂, 4 ♀♀, South Alligator River, March, April, May 1903 (Nos. 771, 1254, 1255, 1256, 1258 to 1261).

216. *Dicrurus bracteatus* Gould.

*Dicrurus bracteatus* Gould, *P.Z.S.* 1842. p. 132 ("the Eastern and Northern coasts of Australia").

♂ ♀, Burundie, Northern Territory, 28. vii. 1902 (Nos. R. 624, R. 625).  
"Iris red."

2 ♂♂ ad., Mary River, Northern Territory, September 1902 (Nos. 755, 759).

♂, McKinley River, Northern Territory, 23. ix. 1902 (No. 760).

10 ♂♂, 3 ♀♀, On, and near, Alligator River, October, November 1902, June, July, August, September 1903 (Nos. 756, 757, 758, 1266 to 1271, 1548, 1712, 1713, 1714).

217. *Oriolus flavocinctus flavocinctus* (King).

*Mimetus flavocinctus* King, *Survey Intertrap. Coasts Australia*, ii, p. 419 (182-? : N. Australia).

♂ ad., Burandie, Northern Territory, 28. vii. 1902 (No. R. 612).

♂ ad., Mary River, Northern Territory, 14. ix. 1902 (No. 723).

6 ♂♂, 4 ♀♀, On, and near, Alligator River, October 1902, May, June, September 1903 (Nos. 722, 724, 1308 to 1312, 1654, 1658, 1659).

218. *Oriolus viridis affinis* Gould.

*Oriolus affinis* Gould, *B. Austr.* i. Intro. p. liii.

♂, Behu River, East Kimberley, 30. v. 1902 (No. R. 414). "Iris pink, feet dull leaden blue, bill reddish brown."

♂, Eureka, Northern Territory, 12. i. 1903 (No. 1011).

♂♀, 25 miles east of South Alligator River, June, August 1903 (Nos. 1272, 1547).

219. *Sphcotheres flaviventris* Gould.

*Sphcotheres flaviventris* Gould, *P.Z.S.* 1849. p. 111 (Cape York).

♂ ad., McKinley River, Northern Territory, 20. ix. 1902 (No. 725).

♂ juv., ♀, Mary River, Northern Territory, 2. x. 1902 (Nos. 719, 720).

2 ♂ ad., 2 ♂ juv., Eureka, Northern Territory, February, March 1903 (Nos. 1064, 1065, 1072, 1073).

2 ♂ ad., 1 ♂ juv., 2 ♀♀, Alligator River, October 1902, September, October 1903 (Nos. 718, 722, 1655, 1656, 1657).

220. *Corvus coronoides* Vig. & Horsf.

*Corvus coronoides* Vig. & Horsf. *Trans. Linn. Soc. Lond.* xv. 1827, p. 261 (Australia).

2 ♂♂, 2 ♀♀, South Alligator River, April, May, June 1903 (Nos. 1340, 1342, 1343, 1344).

Mr. Tunney marked the iris as being white in three of these specimens. In the fourth (No. 1343), which is evidently a young bird, the iris is marked as being brown. These statements do not agree with Mr. North's theory. Mr. North recognises three Australian species of *Corvus* :—

1. *Corvus coronoides* : with white bases to the feathers, and brown iris.

2. *Corvus bennetti* : of much smaller size than *C. coronoides*, with white bases to the feathers, and white iris.

3. *Corvus australis* : of large size, with dusky grey bases to the feathers, and white iris.

Our birds from the Alligator River are certainly not *C. australis*, nor are they *C. bennetti*. They agree with the birds called *C. coronoides*, but the iris of the adult ones is, according to Mr. Tunney, white. The same statements of the iris, in adult birds, being white, occurs on labels of crows, collected by Mr. Tom Carter at Point Cloates. Our Australian friends must find out whether *C. coronoides*, when fully adult, has a white iris, or whether the N.W. Australian birds differ in that respect from typical *C. coronoides*.



221. *Chlamydera nuchalis* (Jard. & Selby).

*Ptilonorhynchus nuchalis* Jard. & Selby, *Ill. Orn.* t. 103 (1838: no locality).

*C. nuchalis orientalis* is a very closely allied, though recognisable subspecies. It is smaller, and has whitish tips to the feathers of the crown, but the more spotted back is not a character to distinguish it by.

♀ (?), Mt. Anderson, 31. x. 1901 (No. R. 279).

♂ ♀, Negri River, East Kimberley, 22, 23. v. 1902 (Nos. R. 426, R. 427).

♂ ♀, Burundic, Northern Territory, 28. vii. 1902 (Nos. R. 602, R. 604).

♂, Brock's Creek, Northern Territory, 2. viii. 1903 (No. R. 603).

♂ ♀, Eureka, Northern Territory, January, February 1903 (Nos. 1012, 1066).

1 ♂, 2 ♀ ♀, South Alligator River, November 1902, May, June 1903 (Nos. 813, 1262, 1302).

DESCRIPTION OF A NEW LORICARIID FISH OF THE  
GENUS *XENOCARA* FROM VENEZUELA.

BY C. TATE REGAN, B.A.

*Xenocara rothschildi* spec. nov.

Depth of body  $5-5\frac{3}{5}$  in the length, length of head  $2\frac{3}{4}$  (males) or 3 (females). Head about  $1\frac{1}{2}$  as long as broad and twice as long as deep. Diameter of eye  $6\frac{1}{3}-8\frac{2}{3}$  in the length of head, interorbital width  $2-2\frac{1}{4}$ , length of snout  $1\frac{2}{3}-1\frac{5}{8}$ . Length of mandibular ramus  $2\frac{2}{3}-2\frac{2}{5}$  in the interorbital width. Snout with tentacles. Interoperculum with 9-13 spines, the longest  $\frac{1}{4}-\frac{2}{5}$  the length of head. 23 or 24 scutes in a longitudinal series, 6 or 7 between dorsal and adipose fins, 10 or 11 between anal and caudal. Dorsal 17, the first ray  $\frac{4}{5}-\frac{7}{8}$  the length of head, the last, when laid back, separated by 1 or 2 scutes from the spine of the adipose fin; length of base of dorsal a little less than its distance from the spine of the adipose fin, which is preceded by a keel formed by 1 or 2 scutes. Anal 14. Pectoral spine extending to anterior third or middle of ventral. Caudal obliquely truncate, the lowest ray nearly as long as the head. Caudal peduncle  $2\frac{2}{3}-2\frac{3}{4}$  as long as deep. Uniform dull greyish, the fins dusky; a dark spot at the base of the first interradial membrane of the dorsal.

San Esteban, near Porto Cabello, Venezuela.

Five specimens, 113 to 175 mm. in total length, collected by A. Mocquerys.

This very distinct species has a shorter dorsal fin than any other of the genus; it is allied to *X. occidentalis* Regan, from E. Ecuador, and to *X. chagresi* Eigenmann, from Panama.