# Descriptions of Birds' eggs from the Port Darwin District, Northern Australia.

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# UROAETUS AUDAX (Wedge-tailed Eagle).

Cat. B. Brit. Mus., vol. i., p. 231; Gould's Handbook, vol. i. p. 8, sp. 1.

Only one egg of this bird was found, in a large stick nest, built in a eucalyptus tree; it is marked all over with lightcoloured blotches of a purplish hue, is lustreless, and measures  $2.75 \times 2.28$  inches. Date, 25th January.

ASTUR APPROXIMANS (Australian Goshawk).

Cat. B. Brit. Mus., vol. i., p. 126; Gould's Handbook, vol. i., p. 41, sp. 17.

This bird was found nesting on 28th September, and its three fresh eggs secured after a difficult climb. Two of them are bluish-white, without any markings, but the third specimen has a few brown, irregular blotches distributed over it, especially on the smaller end. The eggs are without gloss, and measure— A, 2.03 x 1.36; B, 1.87 x 1.48; C, 1.84 x 1.46 inches.

NISAETUS MORPHNOIDES (Little Eagle).

Cat. B. Brit. Mus., vol. i., p. 254; Gould's Handbook, vol. i., p. 11, sp. 2.

Nine nests of these Eagles were found, on the following dates:—14th (2), 19th, and 25th May; 1st (2), 3rd, 6th, and 9th June; and in each case there was only one egg in the nest, showing that they more often lay one than two. The eggs have no gloss, and are dull white in colour, two of them having a few markings of light reddish-brown spots; in three a few light buff longitudinal markings are present; while the rest are plain dirty white. All are more or less stained by the parent bird when being laid, as is common with most Hawks' eggs. They measure—A, 2.20 x 1.70; B, 2.22 x 1.80; C, 2.36 x 1.72; D, 2.24 x 1.71; E, 2.25 x 1.70; F, 2.26 x 1.76; G, 2.35 x 1.74; H, 2.21 x 1.72; I, 2.21 x 1.70 inches.

HALIAETUS LEUCOGASTER (White-bellied Sea-Eagle).

Cat. B. Brit. Mus., vol. i., p. 307; Gould's Handbook, vol. i., p. 13, sp. 3.

17th June was the date on which the stick nest of this bird was found; it contained two eggs, dull white in colour, slightly glossed, and coarse in texture. The nest was a very large one, situated on a good-sized eucalyptus tree, and not far from the coast line. The eggs measure—A, 2.80 x 2; B, 2.82 x 2.02 inches.

HALIASTUR INDUS, sub-species GIRRENERA (White-headed Sea-Eagle).

Cat. B. Brit. Mus., vol. i., p. 315; Gould's Handbook, vol. i., p. 17, sp. 4.

The ground colour of these eggs is dull white, without gloss. and the markings vary considerably, no two being alike, those from one nest being most similar. Some have large dark brown blotches forming an irregular zone round the larger end; others are plentifully marked with brown spots on the smaller end : some have very light brown or buff blotches on the larger end. decreasing in number towards the smaller end; another egg has only markings on the small end, which are very numerous right over the apex; others, again, have only a few small brown markings, mostly on the larger end. Eight nests with fresh eggs in were found, on the following dates:-17th, 30th April (2): 1st, 2nd, 7th, 17th May, and 1st June. Two of the nests had two eggs in, the rest one cach. The eggs measure-A, (1) 2.18 x 1.66, (2) 2.18 x 1.70; B, 2.12 x 1.68; C, 2.24 x 1.67; D, 2.28 x 1.72; E, 2.16 x 1.74; F, 2.46 x 1.69; G, 2.18 x 1.72; H, 2.10 x 1.84 inches.

HALIASTUR SPHENURUS (Whistling Eagle).

Cat. B. Brit, Mus., vol. i., p. 316; Gould's Handbook, vol. i., p. 20, sp. 5.

The eggs of these birds are of a dull white, with very few markings. Some have practically none; others, again, a few faint small ones on the larger end, on the apex, or forming an irregular zone, while some have a few irregular spots or lines of reddish-brown scattered over the surface. The clutch is generally two, but occasionally only one, and rarely three. The dates on which these eggs were taken are—26th April; 9th, 22nd, and 28th May. They measure—A, (1) 2.20 x 1.68; B, (1) 2.18 x 1.66, (2) 2.28 x 1.70; C, 2.23 x 1.80; D, 2.27 x 1.77; E, 2.20 x 1.70; F, 2.31 x 1.76 inches.

# MILVUS AFFINIS (Kite).

Cat. B. Brit. Mus., vol. i., p. 323; Gould's Handbook, vol. i., p. 219, sp. 21.

Kites seem very plentiful in the northern districts of Australia. Their eggs vary in size and markings, and are a swollen oval in shape, like that of a Great Kingfisher, which easily distinguishes

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# PLATE VII.



Nest of the Rose-breasted Robin (Petrava rassa), showing egg of Square-tailed Cuckoo (Cacomantis varioiosus), in a musk-tree (Aster argophyllus), with the epiphytal orchid (Sarcochilus parviflorus).

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them from other Australian Hawks' eggs. One curious point about Kites' eggs is that the larger majority of them have the apex of the smaller end covered more or less with markings, instead of the larger end, as is the case with nearly all other birds' eggs. The ground colour is dull white, some having cloudy reddish-brown markings, which coalesce, on the apex of the smaller end, and very few, if any, on the other ; others, again, have small light brown spots on the apex of the same end, and some have light brown or buff spots scattered fairly evenly over the egg. Occasionally some are seen with a few dark brown blotches on the larger end. The inside lining is greenish.

The full clutch is four, but many nests have only one, two, or three in. The dates on which nine nests and fresh eggs were found are as follows :—3rd, 4th, 6th, 20th, 21st, and 28th May (2), 1st and 3rd June. The eggs measure—A, (1) 2.14 x 1.65 (2) 2.11 x 1.68; B, 2.04 x 1.57; C, 1.98 x 1.69; D, 2.09 x 1.70; E, 2 x 1.62; F, 2.15 x 1.67; G, 2.04 x 1.71; H, 1.96 x 1.58 inches.

LOPHOICTINIA ISURA (Square-tailed Kite).

Cat. B. Brit. Mus., vol. i., p. 326; Gould's Handbook, vol. i., p. 51, sp. 22.

The eggs of these birds are very similar in appearance to those of the other Kite, and one has to see the parent bird fly off to make sure of their identity. As a whole they are slightly larger, and are of a dull white, with a few brown spots, either clustering on the smaller end or scattered over the egg; but some have no spots on, and in others there are cloudy markings of light buff. The dates on which three nests with fresh eggs were found are 2nd (2) and 3rd July. The eggs measure—A, (1) 2.14 x 1.74, (2) 2.17 x 1.74; B, (1) 2.7 x 1.84, (2) 2.6 x 1.73; C, 2.10 x 1.65 inches.

### HIERACIDEA ORIENTALIS (Brown Hawk).

Cat. B. Brit. Mus., vol. i., p. 422; Gould's Handbook, vol. i., p. 31, sp. 11.

Only one nest of this bird was found, and it contained two fresh eggs, but they differed considerably in markings, one having the larger end covered with confluent reddish-brown blotches of varying shades. The other egg is smaller, and is thickly speckled all over with light reddish-brown spots, which at both ends are confluent, those at the larger end being darker than those at the smaller end. They measure—(1) 2.22 x 1.58; (2) 2.10 x 1.54 inches.

CERCIINEIS CENCHROIDES (Nankeen Kestrel.)

Cat. B. Brit. Mus., vol. i., p. 431 ; Gould's Handbook, vol. 1., p. 35, sp. 13.

8th July was the date on which the nest, containing three fresh eggs, of this graceful bird was found. They were deposited on

the decayed wood at the bottom of a hollow in a eucalyptus tree, and are unusually light in colour. They are dull white, with a very slight gloss, two being marked all over with irregular dots and a few larger spots of reddish-brown; but the third has a few small spots as well as a zone of large light reddish-brown markings, more or less confluent, near the centre of the egg, but slightly towards the smaller end. They measure -(1) 1.47 x 1.15; (2) 1.50 x 1.12; (3) 1.55 x 1.15 inches.

# PANDION HALIAETUS, sub-species LEUCOCEPHALUS (Whiteheaded Osprey).

Cat. B. Brit. Mus., vol. i., p. 451 ; Gould's Handbook, vol. i., p. 22, sp. 6.

The eggs of these birds are very handsome, and vary much, some being dull white and richly marked with large dark brown blotches, in some places appearing almost black, and lighter markings of a purplish hue beneath the surface; others, again, are a light buff and thickly marked with dark reddish-brown, especially at the larger end, while occasionally you find eggs of a dull white, with a few bold dark brown markings.

These eggs also vary much in size. A clutch I received from the West Australian coast measures—(1) 2.58 x 1.87, (2) 2.57 x 1.84, (3) 2.59 x 1.87. Another clutch, from the North-eastern coast, measures—(1) 2.52 x 1.72, (2) 2.54 x 1.71; while those received from the Port Darwin district measure—A, (1) 2.58 x 1.86, (2) 2.23 x 1.75; B, 2.28 x 1.64; C, 2.20 x 1.67; D, 2.20 x 1.68 inches. The last three are unusually small.

### GRAUCALUS HYPOLEUCUS (White-bellied Cuckoo-Shrike).

Cat. B. Brit. Mus., vol. iv., p. 36; Gould's Handbook, vol. i., p. 196, sp. 196.

Two nests of these birds were found, on 24th and 29th November, each with two fresh eggs in. The clutches measure—A, (1) 1.05 x .76, (2) 1.08 x .76; B, (1) 1.13 x .76, (2) 1.14 x .78 inches. The nests were the usual shallow structures, almost flat, and built on the horizontal fork of a branch, and were composed of fine twigs, well matted together with cobweb. The eggs are pale green, well marked with blotches of brown and greenish-brown markings, these generally being most numerous at the larger end. The markings are much more plentiful on some eggs than others.

# GRAUCALUS MELANOPS (Black-faced Cuckoo-Shrike).

Cat. B. Brit. Mus., vol. iv., p. 30 ; Gould's Handbook, vol. i., p. 192, sp. 103.

These birds have a wide range, being found all over Australia, as well as on the islands to the north. Two of their nests were discovered, on 10th October and 12th December, one containing three and the other one egg. The structures were composed of short pieces of twig and cobwes, were very shallow, and situated at a horizontal fork. The colour of the eggs is green, well marked with olive-brown blotches, most plentiful at the larger end; the ground colour is slightly darker in some eggs than others. Measurements—A, 1.33 x .93; B, (1) 1.30 x .89, (2) 1.28 x .85, (3) 1.28 x .86 inches.

# LALAGE LEUCOMELÆNA (Pied Caterpillar-catcher).

Cat. B. Brit. Mus., vol. iv., p. 106; Gould's Handbook, vol. i., pp. 202, 203, sp. 110, 111.

These birds are fairly plentiful about Port Darwin, but their nests, being small, inconspicuous structures, are not often seen. They are open, cup-shaped, and rather shallow, and are composed of fine twigs well fastened together with cobwebs, generally at a fork of a branch. The colour of the single egg laid is very pale green, with purplish-brown markings scattered fairly evenly over it; it measures .98 x .66 inch, and was found on 3rd December.

### RHIPIDURA TRICOLOR (Black and White Fantail).

Cat. B. Brit. Mus., vol. iv., p. 339; Gould's Handbook, vol. i., pp. 244, 245, sp. 139, 140.

This is probably the best known Fantail in Australia, and is always a favourite. In choosing a nesting site it generally prefers to have a leafy bough just above to screen its home from observation. The nest is a beautiful structure, made of fine grass, shreds of bark, &c., and well covered with cobwebs. This Fantail builds from September to December. The eggs are a very pale cream, marked with purplish-grey or purplish-brown fine spots, which form a zone on the larger end. One clutch of three measures—(1).63 x .53; (2).67 x .53; (3).65 x .53 inch. These birds are S. picata of Gould.

# SISURA INQUIETA (Restless Flycatcher).

Cat. B. Brit. Mus., vol. iv., p. 407; Gould's Handbook, vol. i., p. 246, sp. 141.

These birds are plentiful in the scrub-covered country, and build their open nests in varying situations, sometimes low down and at others high up. The nests are composed outwardly of shreds of bark and grass, with pieces of bark fastened on with a small amount of cobweb, and are lined with darkcoloured vine tendrils and a few fine rootlets. The eggs are white, occasionally pale cream, with purplish-brown markings, mostly forming a zone round the larger end, in some cases confluent, but not always. They measure—A, (I) .74 x .58, (2) .75 x .60, (3) .76 x .58; B, (I) .73 x 58, (2) .73 x .57, (3) .74 x .57; C, (I) .74 x .56, (2) .75 x .57 inch. All the nests (about ten) were found in December and January. PIEZORITYNCHUS NITIDUS (Shining Flycatcher).

Cat. B. Brit. Mus., vol. iv., p. 416 ; Gould's Handbook, vol. i., p. 249, sp. 142.

The eggs of these birds are slightly larger than those of the preceding species, and the markings more diffused. The large majority of their open nests were found in January, but a few in February. They are made of shreds of melaleuca bark, with a small quantity of cobweb on the outside, and are lined with fine grass-stalks. The structures are somewhat loosely built. The eggs are white, slightly lustrous, with grey and greyishbrown markings, more plentiful on the larger end, where they usually form a zone, and are more or less confluent. They measure—A, (I) .83 x .58, (2) .84 x .58; B, (I) .81 x .59, (2) .83 x .62; C, (1) .76 x .56, (2) .75 x .58 inch.

PETRIECA RAMSAVI (Red-throated Robin).

Cat. B. Brit. Mus., vol. iv., p. 172.

These pretty little birds are met with in the Port Darwin district, but are not plentiful. Only one of their nests was found, on 8th December, and this contained one fresh egg. The nest was the usual open structure, and compactly built of fine shreds of bark and grass, ornamented outwardly with a few pieces of lichen and bark, fastened on with cobweb. It is lined with fine shreds of grass and a little fur, and measures—internal depth,  $1\frac{1}{2}$  inches; internal breadth,  $1\frac{1}{2}$  inches; external depth,  $2\frac{3}{4}$ inches; external breadth,  $2\frac{1}{2}$  inches. It was situated about 8 feet from the ground in a nearly upright fork of a cucalyptus tree. The egg is very pale bluish-green, with delicate greyishbrown markings, those beneath the surface being very pale purplish-grey. These markings are more plentiful on the larger end. The egg is fine and glossy, and measures .63 x .48 inch. PSEUDOGERVGONE BRUNNELPECTUS (Brown-breasted Fly-eater).

Cat. B. Brit. Mus., vol. iv., p. 221.

One nest of this bird was found, on 26th March, suspended from near the end of a thin branch overhanging the river. It is a bulky structure for such small birds; it is loosely built of very fine dark-coloured rootlets, vine tendrils, and frayed grass, its length being  $10\frac{1}{2}$  inches and breadth 4 inches. The nesting chamber is  $3\frac{1}{2}$  inches high by 2 inches broad, and the opening into the nest about  $1\frac{1}{4}$  inches. The eggs are pinkish-white, and thickly freekled with reddish-brown, especially on the larger end. In one egg the markings are confluent on the larger end. They measure -(1). 66 x .44; (2) .64 x .42 inch. The eggs of this bird have not been described before.

PSEUDOGERYGONE LÆVIGASTRA (Buff-breasted Fly-eater).

Cat. B. Brit. Mus., vol. iv., p. 223; Gould's Handbook, vol. i., p. 270, sp. 159.

This little bird is found in scrubby country, and builds a

dome-shaped hanging nest, very similar to that of *P. personata* : it is generally suspended from near the end of a branch of a shrub, and from about 10 to 15 feet from the ground, and is composed of fine long grass-stalks and coarser shreds, and on the outside are fastened on with cobweb, numerous round white scale larvæ, cocoons, pieces of lichen, and excreta of caterpillars. and it is lined with very fine grass and a soft white material which looks like thistle down, and measures-exterior length 81/2 inches, width 21/2 inches; nesting chamber, 2 inches deep by 11/2 inches wide. The covering or porch over the entrance is large, being 2 inches square, and the opening into the nest is about 1 inch square. The eggs are white, speckled over with small reddish-brown markings, most numerous on the larger end. where they generally form a zone. They measure—A. (1) .68 x .46, (2) .64 x .46; B, (1) .63 x .46, (2) .64 x. 46 inch. These eggs have not been described before, as far as I am aware, and one clutch was found on 9th January and the other on 17th March.

PSEUDOGERYGONE CHLORONOTA (Green-backed Fly-eater).

Cat. B. Brit. Mus., vol. iv., p. 229 ; Gould's Handbook, vol. i., p. 271, sp. 160.

This little bird also keeps in the dense scrub-covered country, especially among the mangroves, and, being of an inconspicuous colour, is difficult to catch sight of. Its dome-shaped nest is generally suspended from a thin branch, and is composed of soft shreds of grass and fine rootlets, and plentifully lined with thistle down. It measures—external length,  $4\frac{1}{2}$  inches; external breadth,  $3\frac{1}{2}$  inches; and the nesting chamber is 2 x  $2\frac{1}{2}$  inches. The eggs are white, plentifully marked with fine, elongated reddish-brown dots, which predominate at the larger end, sometimes forming a zone. They measure—A, (1) .68 x .48, (2) .68 x .47, (3) .69 x .48; B, (1) .69 x .46, (2) .65 x .46; C, (1) .67 x .47, (2) .66 x .48 inch. They were all found in December. This is another species whose eggs I do not think have been described before.

#### MALURUS DORSALIS (Red-backed Wren).

Cat. B. Brit. Mus., voi. iv., p. 296; Gould's Handbook, vol. i., p. 334, sp. 179.

These Wrens are the smallest of the Maluri, and are plentiful in suitable localities in Northern Australia. Several of their nests were found; they were the usual dome-shaped structure, and were composed of shreds of grass, and lined with fine grass. Some of the nests have leaves and thistle down worked in, others grass only. The eggs are white, with dark reddish markings on, which are more numerous at the larger end, frequently forming a zone. Two clutches, which were found on 1st February and 23rd January, measure—A, (1) .56 x 43, (2)  $.56 \times .43$ , (3)  $.55 \times .43$ ; B, (1)  $.55 \times .40$ , (2)  $.52 \times .41$ , (3)  $.53 \times .42$  inch.

#### CISTICOLA EXILIS (Grass-Warbler).

Cat. B. Brit. Mus., vol. vii., p. 269 ; Gould's Handbook, vol. i., p. 350, sp. 208-212.

Many nests of these little birds were found during January and February, the larger number in the former month. They were largely composed of the down off the seeds of thistles and similar plants and cobweb, and in most cases the birds had sewn some of the leaves of the bush in which the nest was built round the structure, the thread being made of cobweb, somewhat similar to the nest of the Tailor-Bird. This was a great protection to the exceedingly light and delicate structure. The eggs are of a beautiful glossy bluish-green colour, with reddish-brown markings, which are larger in some clutches than in others, and most numerous on the larger end. They measure—A, (I) .56 x .42; (2) .54 x .42; (3) .58 x .44; (4) .56 x .44 inch.

### PACHYCEPHALA FALCATA (Northern Thickhead).

Cat. B. Brit. Mus., vol. viii., p. 205 ; Gould's Handbook, vol. i., p. 213, sp. 117.

Two nests of this bird were found, one containing three fresh eggs and the other one; dates, 10th October and 26th January. They were the usual cup-shaped structures, and made of fine twigs and grass. The eggs are olive, one clutch darker than the other, and have olive-brown markings, those beneath the surface being purplish-grey. The spots are most numerous on the larger end. They measure—A,  $.82 \times .6^{+}$ ; B, (1).83  $\times .64$ , (2) .82  $\times .63$ , (3) .83  $\times .64$  inch.

#### ZOSTEROPS GULLIVERI (Gulliver White-eye).

Cat. B. Brit. Mus., vol. ix., p. 188.

This little bird's nest was found on 17th January, suspended from a thin fork near the end of a branch; it is composed outwardly of fine shreds of bark, with a little cobweb, and lined with fine rootlets. It measures—external depth, 2 inches; external breadth, 2 inches; internal depth, 1 inch; internal breadth,  $1\frac{1}{2}$  inches. The eggs are a delicate bluish-green, slightly darker than those of *carulescens*, and glossy. They measure—(1).58 x.42; (2).58 x.40; (3).58 x.40 inch. The eggs of this bird have not hitherto been described.

# GLYCYPHILA FASCIATA (White-breasted Honey-cater).

Cat. B. Brit. Mus., vol. ix., p. 212 ; Gould's Handbook, vol. i., p. 499, sp. 303.

This bird seems fairly plentiful, and several nests were found. The latter are usually suspended near the end of some branch on a shrub growing in or near a watercourse, and are com٠

posed of the light paper-bark of the melaleuca tree. They are domed and rather bulky structures, loosely built. The eggs are white, with a few reddish markings, most numerous at the larger end, more plentiful on some eggs than others. The clutch is generally two, and they measure—A, (1) .78 x .51, (2) .72 x .52; B, (1) .74 x .53, (2) .74 x .53 inch. They were all found in January.

# PTILOTIS KEARTLANDI (Keartland Honey-eater).

# Report Horn Expedition.

A nest of this Honey-eater was found in January, containing one fresh egg; it is a light pinkish-buff, with a few pale spots on the larger end, and measures  $.88 \times .68$  inch. The open nest was suspended from a fork on a thin branch, and composed of grass, lined inside with fine rootlets.

## PTILOTIS NOTATA (Yellow-spotted Honey-eater).

Cat. B. Brit. Mus., vol. ix., p. 227.

This lively bird generally prefers the thick scrub, and one of its nests was found on 16th January, containing one fresh egg. It was suspended from a fork of a bush, and not far from the ground. The nest was lined with white down. The egg is white, with a few brown spots scattered over it, and measures .91 x .67 inch.

#### GLYCYPHILA OCULARIS (Brown Honey-eater).

Cat. B. Brit. Mus., vol. ix., p. 213 ; Gould's Handbook, vol. i., p. 500, sp. 304.

These birds are generally found near watercourses—at least such has been my experience, both in Western Australia and Queeensland, and their presence is soon known by the clear note. Their nest is open, and suspended from a fork near the end of a branch. The eggs vary, being in some cases pure white; others, again, of a delicate pink, some with a few faint reddish-brown markings on the larger end; others, again, are quite plain. They measure—A, (1) .68 x .49, (2) .64 x .53; B, (1) .63 x .48, (2) .61 x .48 inch.

# ENTOMOPHILA LEUCOMELAS (Pied Honey-eater).

Cat. B. Brit. Mus., vol. ix., p. 220 ; Gould's Handbook, vol. i., p. 529, sp. 325.

This interesting bird has a wide range over Australia. One of its open, suspended nests was found on 2nd February; it contained three fresh eggs. These are white, well marked with blackish spots, those under the surface being lilac. The eggs measure—(1) .73 x .53; (2) .76 x .52; (3) .75 x .51 inch. The nest is composed of grass, lined with the same material, and measures—external breadth, 3 inches; internal, 134 inches; external depth, 214 inches; internal, 2 inches.

### PHILEMON BUCEROIDES (Helmeted Friar-Bird).

Cat. B. Brit, Mus., vol. ix., p. 272 ; Gould's Handbook, vol. i., p. 547. sp. 335.

These noisy birds are more plentiful in northern Oueensland than about Port Darwin. One of their open, suspended nests was found on 10th September, and it contained four fresh eggs. although the usual clutch is three. They are a pinkish-white, boldly marked with reddish and reddish-brown blotches, slightly more numerous at the larger end. The eggs of this bird vary considerably in their markings, some having a few fine ones; others, again, are finely speckled, as well as having bold blotches ; another type is thickly marked all over with red, the markings being more or less confluent, and the ground colour is pink. A clutch of four measures -(1) 1.23 x .87; (2) 1.26 x .88; (3) 1.19 x .85; (4) 1.23 x .87 inches.

PHILEMON CITREOGULARIS, sub-species SORDIDUS (Little Friar-Bird).

Cat. B. Brit. Mus., vol. ix., p. 277; Gould's Handbook, vol. i., p. 550, sp. 338.

The Little Friar-Bird builds an open, suspended nest, generally of shreds of bark and fine grass, but occasionally of leaves of the casuarina tree; as in the case of the beforementioned bird, the eggs of the Little Friar-Bird vary much in markings. The ground colour is pale pink, well marked with reddish-brown blotches, which in some cases form a confluent zone round the larger end, those beneath the surface being grey; some eggs are pink and well covered with reddish markings. A clutch of three measures—(1)  $1.12 \times .76$ ; (2)  $1.8 \times .78$ ; (3) 1.02 x .74 inches.

#### PETROCHELIDON ARIEL (Fairy Martin).

Cat. B. Brit. Mus., vol. x., p. 199; Gould's Handbook, vol. i., p. 114, sp. 56.

These little birds are found all over Australia, and also in Tasmania. They generally build their retort-shaped mud nests in colonies and under cover, such as the excrescences on trees, also under bridges, &c., and almost invariably near water. The cggs are white, with fine speckles of reddish-brown, sometimes forming a zone round the larger end ; occasionally there are no markings. A full clutch of five measures—(1) .66 x .46; (2) .67 x .47; (3) .68 x .48; (4) .64 x .48; (5) .62 x .45 inch. Date, 5th October.

ARTAMUS LEUCOGASTER (White-rumped Wood-Swallow).

Cat. B. Brit. Mus., vol. xiii., p. 3; Gould's Handbook, vol. i., p. 155, sp. 80.

Only one nest of this bird was found, and it was the usual open structure, composed of coarse grass, and lined with finer

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pieces of the same material. It was situated in a shallow open hollow in a dead branch, and contained four eggs, which are white, with fairly large markings of brownish-buff, especially on the larger end. They measure—(1) .91 x .66; (2) .93 x .67; (3) .89 x .64; (4) .89 x .65 inch. Date, 17th November.

ARTAMUS MELANOPS (Black-faced Wood-Swallow).

Cat. B. Brit. Mus., vol. xiii., p. 17; Gould's Handbook, vol. i., p. 149, sp. 77.

Several nests of these birds were found from 11th November to 3rd December. They were usually built in thick shrubs, but sometimes in a hollow on the top of a stump or similar place, and were made up of rootlets and fine tendrils, lined with grass. The eggs are pinkish-white, marked with reddish-brown spots, especially on the larger end, where they sometimes form a zone, which is occasionally confluent, but the markings.vary a good deal in different clutches. Two clutches measure—A, (1) .88 x .60, (2) .86 x .62, (3) .85 x .63 ; B, (1) .81 x .63, (2) .78 x .68, (3) .83 x .66 inch.

ARTAMUS MINOR (Little Wood-Swallow).

Cat. B. Brit. Mus., vol. xiii., p. 20; Gould's Handbook, vol. i., p. 146, sp. 74.

3rd January was the date on which a nest containing three fresh eggs of this bird was found. It was built of fine rootlets, lined with grass, and placed in a slight hollow, near the top of a stump. The eggs are white, marked, especially on the larger end, with brown spots, which are of a darker hue where they apparently overlap one another; sometimes they have a few odd markings which are nearly black. My specimens measure -(1).73 x .59; (2).75 x .60; (3).74 x .58 inch.

STICTOPTERA ANNULOSA (Ringed Finch).

Cat. B. Brit. Mus., vol. xiii., p. 314; Gould's Handbook, vol. i., p. 410, sp. 252.

These birds build nests loosely constructed of coarse grass, and lined with the fine tops of some grass in seed. The delicate little eggs are pure white, generally somewhat elongated in form, and measure—(1).54 x.40; (2).54 x.38; (3).55 x.38; (4).52 x.38 inch. The dates on which the several clutches were found are 13th, 21st, and 26th January. The nests measure 5 inches high by .4 inches broad externally, the nesting chamber being  $2\frac{1}{2}$  inches high by  $1\frac{1}{2}$  inches broad, and were built in shrubs, about 10 feet from the ground.

POEPHILA ACUTICAUDA (Long-tailed Grass-Finch).

Cat. B. Brit. Mus., vol. xiii., p. 375; Gould's Handbook, vol. i., p. 422, sp. 261.

One nest of this pretty bird was found, situated in a thick bush, close to the ground. It was loosely built of coarse grass,

Emu

and lined with fine grass and a few feathers. The eggs are pure white, and measure—(1) .62 x .44; (2) .64 x .45; (3) .65 x .45; (4) .64 x .46 inch.

POEPHILA PERSONATA (Masked Grass-Finch).

Cat. B. Brit. Mus., vol. xiii., p. 377; Gould's Handbook, vol. i., p. 423, sp. 262.

Three nests of this bird were obtained, on 24th January, 3rd and 5th February. They are bulky, and loosely constructed of coarse grass, lined principally with feathers of cockatoos, parrots, emus, &c., and measure externally 6 inches high by 4 inches wide; nesting chamber  $2\frac{1}{2}$  inches high by  $1\frac{1}{2}$  inches wide. Two were built in low-growing shrubs and one in long grass. The eggs are white, and elongated in form, the dimensions being-(1).61 x .43, (2).63 x .42, (3).61 x .43, (4) .66 x .43, (5).62 x .43, (6).61 x .43 inch.

POEPHILA MIRABILIS (Gouldian Grass-Finch).

Cat. B. Brit. Mus., vol. xiii., p. 378; Gould's Handbook, vol. i., p. 420, 421, sp. 259 and 260.

This most beautiful of all Finches is found in Northern Australia, and one of its nests was found on 17th December, containing five eggs. It was built of coarse grass and situated in a hollow at the end of a spout of a eucalyptus tree. The eggs were white, and measure—(1).66 x .46; (2).68 x .48; (3).67 x .46; (4).67 x .45; (5).68 x .47 inch.

NEOCHMIA PHAETON (Crimson Finch).

Cat. B. Brit. Mus., vol. xiii., p. 389; Gould's Handbook, vol. i., p. 415, sp. 256.

The nest of this beautiful bird is built of coarse grass, and lined with the white downy seed-stem of some grass and a few feathers, making a very soft nesting chamber. Measurements, externally, 6 inches by 4 inches. The pure white eggs measure  $-(1).60 \times .41$ ; (2).62  $\times .44$ ; (3).62  $\times .43$ ; (4).60  $\times .43$  inch.

ÆGOTHELES NOVÆ-HOLLANDLÆ (Little Nightjar).

Cat. B. Brit. Mus., vol. xvi., p. 657 ; Gould's Handbook, vol. i., p. 79, 80, sp. 38 and 39.

Two nests of Little Nightjars were found in hollows in branches of eucalyptus trees; in one case there were a few leaves at the bottom of the hole, and in the other a few shreds of grass. The eggs are pure white, and when. rubbed together produce a sound like china, similar to Quails' eggs. The dimensions are—(1)  $1.17 \times .88$ ; (2)  $1.16 \times .89$ ; (3)  $1.15 \times .90$  inches. The dates were 20th September and 15th October.

# EURYSTOMUS AUSTRALIS (Roller or Dollar-Bird).

Cat. B. Brit. Mus., vol. xvii., p. 36; Gould's Handbook, vol. i., p. 119, sp. 59.

These birds soon attract one's attention when in their neigh-

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bourhood, not only by their notes, but also by their curious antics when on the wing, and their habit, if disturbed when nesting, of darting into holes in trees, apparently to mislead the intruder as to the hollow in which their eggs really are. They make no nest, the eggs being placed on the decayed wood at the bottom of the hollow. Two sets of four eggs were found one on 25th October, and the other on 9th December. They are pure white, somewhat rounded, and measure—(1) 1.26 x .99; (2) 1.32 x 1.1; (3) 1.36 x 1.6; (4) 1.29 x 1 inches.

# MEROPS ORNATUS (Bee-eater).

Cat. B. Brit. Mus., vol. xvii., p. 74; Gould's Handbook, vol. i., p. 117, sp. 58.

These beautiful birds are very plentiful in the nesting season, and have a habit of sitting on a post or stump, and darting out to catch any unwary insect that may pass by. They make their nesting chamber at the end of a burrow, which they drill in the ground, usually in sandy soil, and lay four white eggs, which measure—(1) .81 x .70; (2) .79 x .67; (3) .80 x .67; (4) .79 x .69 inch. Date, 3rd November.

DACELO LEACHHI (Leach Kingfisher).

Cat. B. Brit. Mus., vol. xvii., p. 206; Gould's Handbook, vol. i., p. 124, sp. 61.

The various nests I have personally found of these birds have all been holes drilled in the earthen nests of termites, situated at the fork of a eucalyptus tree, generally at a considerable height from the ground. The eggs are rounded and pure white, and vary considerably in size, as one clutch from Rockhampton measures—(I)  $1.78 \times 1.50$ ; (2)  $1.84 \times 1.52$ ; and a clutch from Port Darwin—(I)  $1.72 \times 1.36$ ; (2)  $1.81 \times 1.35$ ; (3)  $1.81 \times 1.32$ inches. Several clutches from the Northern Territory are in the collection, but their dimensions are practically the same as those last given.

DACELO LEACHII, sub-species CERVINA (Fawn-breasted Kingfisher).

Cat. B. Brit. Mus., vol. xvii., p. 207; Gould's Handbook, vol. i., p. 125, sp. 62.

Two clutches of this bird's eggs were found, both consisting of three. Dates, 25th October and 7th December. They were laid in the decomposed wood at the bottom of a hollow in a eucalyptus tree, and are pure white, rounded in shape, and measure—(1) 1.56 x 1.38; (2) 1.52 x 1.29; (3) 1.61 x 1.36 inches.

HALCYON FYRRHOPYGIUS (Red-backed Kingfisher).

Cat. B. Brit. Mus., vol. xvii., p. 258; Gould's Handbook, vol. i., p. 130, sp. 64.

A nest of a pair of these birds was found at the end of a tunnel drilled in the bank of a river; the other was secured in a

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hollow in a tree, and on the floor of the nest were a few fish bones, &c., lying about. The eggs are rounded, pure white, and slightly glossy, and measure—(1) 1.01 x .85; (2) .97 x .87; (3) .94 x .86; (4) .92 x .87; (5) 1.01 x .84 inches. Dates, 2nd October and 3rd December.

# HALCYON SANCTUS (Sacred Kingfisher).

Cat. B. Brit. Mus., vol. xvii., p. 267; Gould's Handbook, vol. i., p. 128, sp. 63.

Two clutches of the eggs of this bird were found in burrows drilled in termites' earthen nests, situated on forks of eucalyptus trees, on 17th December and 25th January. One contained five and the other three eggs. They are white, rounded, and slightly glossy, and measure—(1) .98 x .82; (2) .98 x .86; (3) .99 x .85; (4) 1.0 x .82, (5) .98 x .80 inch.

### CENTROPUS PHASIANUS (Coucal).

Cat. B. Brit. Mus., vol. xix., p. 340; Gould's Handbook, vol. i., p. 634, sp. 388-390.

This curious Cuckoo has a wide range over Northern Australia, and is plentiful in suitable localities, and from its habit of generally making its nest in a tussock of grass its eggs are easily found. Several clutches are in the collection, mostly found in nests placed in the grass, and with that vegetation drawn together and so forming a covering over the nest; but two clutches were laid in shallow, open stick nests in a pandanus palm, about 8 feet from the ground. The eggs are creamy-white, and slightly glossy, and the general clutch is four. A typical set measures—(1)  $1.53 \times 1.8$ ; (2)  $1.47 \times 1.6$ ; (3)  $1.52 \times 1.10$ ; (4)  $1.51 \times 1.9$  inches. The dates were in December, January, and February.

# CALYPTORHYNCHUS MACRORYNCHUS (Great-billed Cockatoo).

Cat. B. Brit. Mus., vol. xx., p. 110; Gould's Handbook, vol. ii, p. 15, sp. 398.

This bird breeds in the hollow branches of the eucalyptus trees, in the neighbourhood of Port Darwin, generally in the month of July. Apparently one egg is usually laid, but occasionally two. They are elongated, white in colour, finely pitted, and measure—A,  $1.88 \times 1.20$ ; B,  $1.90 \times 1.20$ ; C,  $1.88 \times 1.36$  inches.

# CACATUA GYMNOPIS (Bare-eyed Cockatoo).

Cat. B. Brit. Mus., vol. xx., p. 127.

These birds often assemble in large flocks, and the trees on which they congregate look white with them and exceedingly picturesque. They nest in hollow spouts, generally laying from two to three eggs, occasionally four. The eggs are white and finely pitted, and measure—(1) 1.58 x 1.24; (2) 1.64 x 1.22; (3) 1.60 x 1.20 inches. They were taken in June and July. LICMETIS NASICA (Long-billed Cockatoo, Corella).

Cat. B. Brit. Mus., vol. xx., p. 133 ; Gould's Handbook, vol. ii., p. 11, sp. 95.

Hollows in eucalyptus trees are the nesting-places of these birds, and they frequently nest in company, two or three being in one tree. The eggs are small, compared with the size of the bird, and are white and finely pitted. Two clutches of two each measure—A, (1) 1.52 x 1.12, (2) 1.58 x 1.14; B, (1) 1.52 x 1.06. (2) 1.49 x 1.11 inches. They were taken in April and May.

# PTISTES ERYTHROPTERUS, sub-species COCCINEOPTERUS (Crimson-winged Lory).

Cat. B. Brit. Mus., vol. xx., p. 481; Gould's Handbook, vol. ii., p. 39, sp. 411.

This bird is one of our most beautiful Parrots. It nests in the hollow spouts in eucalyptus trees, laying its white eggs on the decomposed wood. Several nests were found, all in January. The eggs are oval in form, and measure -A, (1) 1.17 x 1.01, (2) 1.20 x 1.0; B, (1) 1.15 x .98, (2) 1.12 x .99 inches.

PSEPHOTUS PULCHERRIMUS (Beautiful Parrakeet).

Cat. B. Brit. Mus., vol. xx., p. 564; Gould's Handbook, vol. ii., p. 67, sp. 429.

This lovely bird generally pierces a tunnel in the termites' mounds on the ground, in open forest country, and makes a chamber of considerable size, the honeycombed structure being easily hollowed out. The eggs are pure white, slightly glossy, somewhat oval, and measure—(1).85 x .70; (2).78 x .66; (3) .72 x .67; (4) .72 x .68; (5) .80 x .68 inch. This clutch was found on 10th December.

PTILOPUS EWINGI (Rose-crowned Fruit-Pigeon).

Cat. B. Brit. Mus., vol. xxi., p. 96; Gould's Handbook, vol. ii., p. 107, sp. 452.

This bird was found breeding in the mangroves alongside tidal rivers. The nests are very fragile, the single egg easily displaced. The birds, being green in colour, when sitting on their nest, almost at the end of a branch, among the green leaves, are very difficult to detect. The egg is pure white, slightly glossy, the smaller end being often more pointed than usual. Three nests were found, one in January and two in February. The eggs measure—A, 1.25 x .84; B, 1.21 x .80; C, 1.19 x .80 inches.

MYRISTICIVORA SPILORRHOA (Nutmeg Pigeon).

\*Cat. B. Brit. Mus., vol. xxi., p. 231; Gould's Handbook, vol. ii., p. 114, sp. 457.

These birds as a rule nest in large companies in the small islands off the north coast of Queensland, but occasionally they may be found breeding in pairs on the mainland. Their nest is a fairly large structure, often being lined with leaves. A single white egg is deposited, the smaller end of which is occasionally pointed. The eggs measure—A,  $1.72 \times 1.22$ ; B,  $1.68 \times 1.19$ ; C,  $1.69 \times 1.18$  inches. The three eggs measured were found in December and January, in nests situated in the mangroves, by a tidal river, near Port Darwin. November is the month in which these birds commence nesting in Queensland.

GEOPELIA HUMERALIS (Barred-shouldered Dove).

Cat. B. Brit. Mus., vol. xxi., p. 455; Gould's Handbook, vol. ii., p. 142, sp. 471.

These birds have a wide range over Northern Australia, and, if protected, will occasionally build their light stick nests in shrubs of gardens near houses. The clutch of eggs is two; they are white, slightly glossy, and measure—A, (1) 1.06 x .78, (2) 1.08 x .80; B, (1) 1.10 x .83, (2) 1.10 x .80 inches. January.

# GEOPELIA TRANQUILLA (Ground Dove).

Cat. B. Brit. Mus., vol. xxi., p. 456; Gould's Handbook, vol. ii., pp. 144, 145, sp. 472 and 473.

These delicately coloured birds range over all Australia. Their small, fragile nests are sometimes built of fine twigs, sometimes of grass, and are usually situated in a low bush, but occasionally on the rough bark of a horizontal bough of a encalyptus tree. The clutch is two, and the eggs are white and slightly glossy. One clutch measures—(1).96 x .73; (2).96 x .72 inch. Dates also all in January.

GEOPELIA CUNEATA (Little Dove).

Cat. B. Brit. Mus., vol. xxi., p. 462; Gould's Handbook, vol. ii., p. 146, sp. 474.

The nest of this dear little bird is a very fragile structure, and one often wonders how the eggs remain on when the parents leave and alight on it. Several sets are in the collection, all taken in January. The clutch is two, the eggs white, with very little gloss, and they measure—A, (1) .81 x .63, (2) .82 x .61; B, (1) .80 x .62, (2) .79 x .61 inch.

HISTRIOPHAPS HISTRIONICA (Flock Pigeon).

Cat. B. Brit. Mus., vol. xxi., p. 529; Gould's Handbook, vol. ii., p. 127, sp. 464.

Only one cgg of this bird was sent, found on 14th November, on the bare ground, alongside a tussock of grass. It is white, slightly glossy, and measures  $1.36 \times 1.01$  inches.

LOPHOPHAPS LEUCOGASTER (White-bellied Plumed-Pigeon).

Cat. B. Brit. Mus., vol. xxi., p. 535.

A single egg of this bird was found on the ground by a tussock of grass, in a very shallow depression, on 2nd January. It is creamy-white in colour, nearly oval in shape, and measures  $1.06 \times .86$  inches.

MEGAPODIUS DUPERREYI (Scrub Fowl).

Cat. B. Brit. Mus., vol. xxii., p. 454; Gould's Handbook, vol. ii., p. 167, sp. 478.

This bird is found right across Northern Australia, near the coast, in suitable country, and its large mound, composed of leaves, sticks, and soil, is built in the dense scrub. The usual clutch is ten, but the numbers vary. They are pink, which if scraped off (easily done), shows a white surface. Three found in one mound on 13th November measure—(1)  $3.50 \times 2.16$ ; (2)  $3.30 \times 2.20$ ; (3)  $3.52 \times 2.19$  inches. The shells occasionally have small limy concretions on them.

SYNCECUS AUSTRALIS (Brown Quail).

Cat. B. Brit. Mus., vol. xxii., p. 247; Gould's Handbook, vol. ii., p. 195, sp. 487-489, and 490.

These birds are plentiful in the Northern Territory, and many of their nests were found, but all in January, and the full clutch seems to be eleven eggs. They have a strong shell, when rubbed together sound like rough china, and are sharply compressed at the small end. Some are white, others greyish-white with very faint, fine markings of light brown, and others with the numerous freckles of a darker brown shade. The eggs of a clutch vary very little in size. The measurements given are of five eggs from five different clutches—A, 1.15 x .92; B, 1.08 x .88; C, 1.14 x .90; D, 1.16 x .91; E, 1.13 x .86 inches.

EXCALFACTORIA CHINENSIS, sub-species LINEATA (Chestnutbellied Quail).

Cat B. Brit. Mus., vol. xxii., p. 253; Gould's Handbook, vol. ii., p. 197, sp. 491.

Two nests of this bird, containing three eggs each, were found on 20th February and 7th May. The eggs are light olive-brown, thickly speckled with very dark olive-brown markings and lightcoloured lines on, which look like scratches. The nest was a shallow hollow, lined with a small quantity of grass, alongside a tussock of grass. The eggs measure—(1) .93 x .76; (2) .95 x .75; (3) .93 x .76 inch.

TURNIX VELOX (Little Quail).

Cat. B. Brit. Mus., vol. xxii., p. 553; Gould's Handbook, vol. ii., p. 184, sp. 483.

These little birds seem very plentiful near Port Darwin, and many of their nests were discovered. Four eggs are the full clutch. They are slightly glossy, creamy-white in colour, and very thickly freckled with markings of olive-brown. Most of the eggs have larger markings also of very dark brown, almost black, most plentiful on the larger end. Four eggs out of four clutches measure—A, .88 x .76; B, .89 x .76; C, .88 x .74; D, .86 x .70 inch. Four clutches were found in January, one in April, and one in May.

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## POLIOLIMNAS CINEREUS (White-browed Crake).

Cat. B. Brit. Mus., vol. xxiii., p. 130; Gould's Handbook, vol. ii., p. 343, sp. 576.

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These somewhat noisy birds are plentiful in parts of northern Australia, their nests being generally made of rushes or coarse herbage, lined with grass, and situated among swampy vegetation. The general clutch of eggs is four, but five are occasionally found. One clutch was taken in February, one in March, and four in May. They are greyish-white in colour, thickly freckled over with reddish-brown markings, slightly more plentiful at the larger end. A clutch of five measures—(1) 1.06 x .85; (2) 1.14 x .87; (3) 1.07 x .85; (4) 1.18 x .87; (5) 1.16 x .86 inches.

# PORPHYRIO MELANONOTUS (Bald-Coot).

Cat. B. Brit. Mus., vol. xxiii., p. 205; Gould's Handbook, vol. ii., p. 321, sp. 563.

Many clutches of the eggs of this bird were found. The dates were in February, March, April, May, June, and July; but the nesting of these birds, as with other waterfowl in Australia, largely depends on a wet season. None of the nests contained more than four eggs, although they sometimes lay up to seven. The nests were built on the broken down reeds in swamps. The eggs are stone colour, boldly marked with blotches of reddishbrown, which are generally more or less longitudinal, from the larger to the smaller end, and a clutch of four measures—(1)  $2.02 \times 1.42$ ; (2)  $2.02 \times 1.42$ ; (3)  $2.0 \times 1.41$ ; (4)  $2.02 \times 1.38$ inches.

### ANTIGONE AUTRALASIANA (Crane or Native Companion).

Cat. B. Brit. Mus., vol. xxiii., p. 265; Gould's Handbook, vol. ii., p. 290, sp. 543.

The nests of these birds were found on raised knolls in shallow swamps, and were composed of coarse grass, sticks, and leaves, but sometimes hardly any nest is made. The shell of the eggs is much pitted, and dirty-white in colour, sparsely blotched with reddish or purplish-brown, most plentiful on the larger end; but several of them have no markings. The shells often have small limy nodules on their surface. The eggs measure—A, (1) 3.64 x 2.44, (2)  $3.51 \times 2.30$ ; B, (1)  $3.62 \times 2.46$ , (2)  $3.52 \times 2.38$  inches. The dates were—four clutches in March and one in June,

#### EUPODOTIS AUSTRALIS (Bustard or Wild Turkey).

Cat. B. Brit. Mus., vol. xxiii., p. 328; Gould's Handbook, vol. ii., p. 208, sp. 495.

It is seldom that these birds lay more than one egg; two are only occasionally found. They, as a rule, lay on the bare ground, without any nest, out on the plain. The shell is smooth in texture, but occasionally with limy nodules, and in colour olive, faintly marked longitudinally with olive-brown. Some Vol. II.] LE SOUEF, Birds'-eggs from Northern Australia.

eggs are much lighter in colour than others. Two in the collection were found on the 7th and 29th of December respectively, and measure—A,  $3.02 \times 2.24$ ; B,  $3.02 \times 2.08$  inches.

HYDRALECTOR GALLINACEUS (Comb-crested Jacana, Parra).

Cat. B. Brit. Mus., vol. xxiv., p. 79; Gould's Handbook, vol. ii., p. 330, sp. 569.

This graceful bird seems very plentiful on the swamps of the Northern Territory, and many of their floating nests were found, being generally made of water plants. They are often placed on the broad leaves of a water lily, and are then exceedingly picturesque, with their handsome eggs. The dates on which eight clutches were found are—two in September and the rest in January. The eggs are very glossy, in colour yellowish-brown, curiously marked with black lines running thickly in all directions. The lines on some eggs are finer than on others. Two clutches of four measure—A, (1) 1.24 x .89, (2) 1.18 x .87, (3) 1.15 x .86, (4) 1.19 x .85; B, (1) 1.12 x .86, (2) 1.14 x .88, (3) 1.14 x .89, (4) 1.11 x .86 inches.

# IBIS MOLUCCA (White Ibis).

Cat. B. Brit. Mus., vol. xxvi., p. 9; Gould's Handbook, vol. ii., p. 284, sp. 539.

These birds are exceedingly useful as insect-destroyers, and are found all over Australia. They live in flocks of various sizes, but when nesting many separate flocks congregate together in one place, sometimes to the number of many thousands. The nests are generally built on the broken-down rushes and bushes, which form a kind of platform over the water in a swamp. The clutch numbers either three or four; occasionally five or six are laid, but very rarely. The eggs are white, with the shell finely pitted and coarse in texture, and measure—(1)  $2.44 \times 1.82$ ; (2)  $2.31 \times 1.74$ ; (3)  $2.60 \times 1.72$ ; (4)  $2.42 \times 1.74$ ; (5)  $2.51 \times 1.80$  inches. The majority of the nests were found in April, and a few in June; but the nesting of these birds depends almost entirely on the rains.

PLATIBIS FLAVIPES (Yellow-legged Spoonbill).

Cat. B. Brit. Mus., vol. xxvi., p. 51; Gould's Handbook, vol. ii., p. 288, sp. 542.

These birds build rather flat stick nests, generally high up in eucalyptus trees growing in swamps, and four eggs is the full clutch. The eggs are white and the shell pitted, and measure—(1)  $2.62 \times 1.78$ ; (2)  $2.54 \times 1.78$ ; (3)  $2.60 \times 1.68$ ; (4)  $2.68 \times 1.79$  inches. One clutch only was found, and that in May.

NOTOPHOYX PACIFICA (White-necked Heron).

Cat. B. Brit. Mus., vol. xxvi., p. 111; Gould's Handbook, vol. ii., p. 297, sp. 547.

These birds also generally build their stick nests in trees growing in swamps, and prefer to nest in company, several nests

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being often found on one tree. The clutch consists of four delicately coloured bluish-green eggs. The shell is slightly glossy and pitted. They measure—(1)  $2.17 \times 1.50$ ; (2)  $2.09 \times 1.49$ ; (3)  $2.05 \times 1.45$ ; (4)  $2.09 \times 1.48$  inches. January.

DUPETOR GOULDI (Black Mangrove-Bittern).

Cat. B. Brit. Mus., vol. xxvi., p. 249; Gould's Handbook, vol. ii., p. 315, sp. 559.

Many of the flat stick nests of these birds were found among the mangroves growing on the banks of the tidal rivers, but none of the nests contained more than three eggs, although frequently four, or even five, are laid. They were found in January and February. The eggs are white, and measure—A, (1)  $1.57 \times 1.26$ , (2)  $1.74 \times 1.27$ , (3)  $1.63 \times 1.28$ ; B, (1)  $1.76 \times 1.32$ , (2)  $1.78 \times 1.33$  inches.

PHALACROCORAX SULCIROSTRIS (Little Black Cormorant).

Cat. B. Brit. Mus., vol. xxvi., p. 376; Gould's Handbook, vol. ii., p. 495, sp. 656.

These birds generally build in company, and frequently with the Little Cormorant (*P. melanoleucus*). Their somewhat bulky stick nests are frequently placed in comparatively low trees, growing in or near swamps, although occasionally they are over 60 feet from the ground; and I have seen as many as ten in one small tree. Several nests were found, all in May and June, and some contained four eggs, others three. The eggs are greenish-white, coated with lime somewhat irregularly, and measure—(1) 1.96 x 1.28; (2) 2.0 x 1.32; (5) 1.88 x 1.27; (4) 1.92 x 1.28 inches.

PHALACROCORAX MELANOLEUCUS (Little Cormorant).

Cat. B. Brit. Mus., vol. xxvi., p. 398; Gould's Handbook, vol. ii., p. 493, sp. 655.

Many of the nests of this species were found, all in May. The birds were breeding in company with the former species, and their nests are identical, as are practically the eggs, which are greenish-white, irregularly coated with lime. They measure— (1)  $1.85 \times 1.21$ ; (2)  $1.84 \times 1.24$ ; (3)  $1.82 \times 1.22$ ; (4)  $1.78 \times 1.21$ inches. The large majority of the nests contained four eggs, and only one five.

PLOTUS NOVÆ-HOLLANDIÆ (Darter).

Cat. B. Brit. Mus., vol. xxvi., p. 417; Gould's Handbook, vol. ii., p. 496, sp. 657.

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These handsome birds construct their stick nests either over water or close to it. Eight of them were found with fresh eggs in May and June. The eggs are white, and covered irregularly with a limy coating, the shell underneath being greenish-white, and they measure—(1)  $2.22 \times 1.50$ ; (2)  $2.32 \times 1.44$ ; (3)  $2.23 \times 1.50$ ; (4)  $2.19 \times 1.47$  inches. The nests contained either three or four eggs each.

# PODICEPS NOVÆ-HOLLANDIÆ (Black-throated Grebe).

Cat. B. Brit. Mus., vol. xxvi., p. 519; Gould's Handbook, vol. ii., p. 513, sp. 667.

Two floating nests of these birds were found, one on 24th March, and the other on 8th April, containing three and two eggs respectively. The nests were, as usual, built of green water weeds in a swamp, very little above the level of the water. The eggs are white when first laid, but soon become a kind of stone colour, being stained by the wet weed of which the nest is composed. They are elongated, and measure—(1) 1.50 x .91; (2) 1.38 x .92; (3) 1.39 x .95 inches.

# ANSERANAS SEMIPALMATA (Pied Goose).

Cat. B. Brit. Mus., vol. xxvii., p. 44; Gould's Handbook, vol. ii., p. 352, sp. 579.

These birds are plentiful in the Northern Territory, where they have not been much disturbed by man, and many of their nests were found, generally situated on the masses of bulrushes that lie over and form a kind of platform above the water, the nests themselves being made of rushes and reeds. All the nests were found in March, and the average clutch numbered ten eggs. They are a light cream colour, slightly glossy and the shell pitted. The older birds seem to lay larger eggs than those breeding for the first time, and I now give the measurements of half a clutch of the older birds and also half a clutch of the younger ones:—Old—A, (I) 2.90 x 2.08, (2) 2.78 x 2.14, (3) 2.99 x 2.10, (4) 2.94 x 2.08, (5) 2.84 x 2.11 inches. Young—B, (I) 2.48 x 1.90, (2) 2.73 x 1.93, (3) 2.76 x 2.0, (4) 2.80 x 1.94, (5) 2.72 x 1.95 inches.

# ANAS SUPERCILIOSA (Black Duck).

Cat. B. Brit. Mus., vol. xxvii., p. 206; Gould's Handbook, vol. ii., p. 363, sp. 585.

These well-known birds are also plentiful, and seem to build in various places—on the ground under shrubs, in hollows in trees, or in old Crows' nests. The number of the clutch varies from nine to twelve. The eggs are smooth, and of a greenish-cream colour, and a clutch of five measures—(1)  $2.13 \times 1.60$ ; (2)  $2.16 \times 1.63$ ; (3)  $2.30 \times 1.61$ ; (4)  $2.22 \times 1.61$ ; (5)  $2.22 \times 1.70$  inches. By far the larger number of clutches were found in May, but a few in March and April.

A CORRESPONDENT, writing from Donnybrook, states that the Laughing Jackasses which were liberated there some time back have nested and have two young ones flying about with them. It is the same case a few miles further off, where a small colony of liberated Jackasses have established themselves, and are now surrounded by their small ones.—*West Australian*, 10/12/02,