

## Northern Territory Birds.

By H. G. BARNARD.

FOLLOWING is a list of birds observed during a collecting trip on the M'Arthur River, N.T., undertaken on behalf of Mr. H. L. White, of Belltrees, Scone, New South Wales.

The sub-specific name according to Mr. Gregory Mathews's new "List of the Birds of Australia" follows the name according to the R.A.O.U. Check-list:—

*Dromaius novæ-hollandiæ* (*Dromiceius novæhollandiæ woodwardi*).—A few birds were seen in scrubby localities. The blacks brought a pair of eggs to the police station at Borroloola in June, 1913.

*Synolagus australis* (*S. ypsilophorus cervinus*).—A common bird about swampy localities. A female containing a fully-developed egg was shot in May, 1913, and a set of seven eggs was taken in January, 1914.

*Turnix castanota* (*Austroturnix castanota castanota*).—These birds were fairly common on the spinifex ridges and about the sandstone bluffs.

*Myristicivora spilorrhoa* (*M. bicolor spilorrhoa*).—The first arrivals were seen on the M'Arthur on 10th October. They were afterwards fairly common, and bred on the tops of the bunches of mistletoe growing on the swamp gums along the river.

*Geopelia humeralis* (*Chrysauchena h. apseyi*).—A common bird, and one that bred freely in the shrubs and casuarinas growing along the river.

*Geopelia tranquillæ* (*G. placida placida*).—This bird was common in all localities, and bred in the scrubby timber.

*Geopelia cuneata* (*Stictopeleia c. mungi*).—Found in brush and among the sandstone and spinifex ridges, where they were breeding.

*Phaps chalcoptera* (*P. c. consobrina*).—They were common in the brush and among the tea-tree, where they were breeding.

*Histiophaps histrionica* (*H. h. alisteri*).—These birds were scarce, and only a few were seen coming to water late in the evening.

*Geophaps smithi* (*Terraphaps s. smithi*).—Great numbers watered at a spring close to the camp during the long, dry summer. Eggs were taken in May, 1913.

*Lophophaps plumifera* (*L. p. plumifera*).—Fairly common west of Borroloola, in the high sandstone country.

*Hypotaenidia philippensis* (*H. p. yorki*).—Only a single bird was seen; she was flushed from her nest and shot while on the wing.

*Pellolimnas leucophrys* (*P. cinereus leucophrys*).—These birds came with the rains in January, 1914, and commenced to build in the rushes in small swamps. No eggs had been laid, however, when we left the locality in February.

*Tribonyx ventralis* (*Microtribonyx v. territorii*).—A few birds were seen at some small water-holes filled by storms in December, 1913.

*Porphyrio melanotus* (*P. m. neomelanotus*).—Only a few birds were seen, in the rushes growing along the river.

*Podiceps gularis* (*Tachybaptus ruficollis parryi*).—Seen on the swamps filled by the rains in the end of December, 1913. A nest containing a pair of eggs was found in a swamp in January, 1914. The eggs were left for additions, but on visiting the spot a few days later the nest was empty.

*Lobivanellus personatus* (*Lobibyx miles personata*).—Only a few birds were seen on the M'Arthur, but they bred freely during February and March of 1913 on the Barclay Table-land.

*Ochthodromus veredus*.—These birds appeared in small flocks on the flats about Borroloola in November, 1913, and were still about when we left the locality in February, 1914.

*Egialitis nigritrons* (*Elseya melanops russata*).—A few birds were seen about the swamps.

*Himantopus leucosephalus* (*H. l. assimilis*).—Seen about the reaches of the river before the rains, but they disappeared afterwards.

*Glottis nebularius* (*G. n. glottoides*).—Only odd birds were seen about swamps.

*Parra gallinacea* (*Irediparra g. rothschildi*).—Seen on the lily leaves growing in fresh-water lagoons.

*Glareola grallaria* (*Stiltia isabella*).—A few birds seen on the flats about Borroloola.

*Oedinenus grallarius* (*Burhinus magnirostris rufescens*).—Generally seen about stony localities; their wailing cry was often heard at night.

*Choriotis* (*Eupodotis*) *australis* (*Ausirotis a. derbyi*).—A few birds were seen on the flats about Borroloola, but they were very plentiful at the head of the river towards the table-land.

*Antigone australasiana* (*Mathewsia rubicunda argentea*).—Generally seen in pairs about swamps and marshy localities.

*Ibis molucca* (*Threshiornis m. strictipennis*).—A few were seen along the river and about swamps.

*Carpodacus spinicollis*.—A few small flocks were seen on the flats;

*Platalea regia*.—Seen along the river and about swamps.

*Platibis flavipes*.—A few were seen along the river.

*Xenorhynchus asiaticus* (*X. a. australis*).—Seen singly and in pairs along the river and at swamps.

*Herodias syrmatorphus* (*timoriensis*) (*H. alba syrmatorphora*).—Seen along the river and about swampy localities.

*Notophox novae-hollandiae*.—Plentiful along the river and about swamps.

*Notophox pacifica*.—Only a few birds were seen at swamps.

*Notophox flavirostris* (*Tonophox aruensis flavirostris*).—Only one pair seen, at a swamp on the M'Arthur River.

*Nycticorax caledonicus* (*N. c. australasiae*).—Very plentiful, roosting in the timber along the river and creeks during the day.

*Dupetor gouldi* (*Dupetor flavicollis oliveri*) (?)—Seen along the rivers and creeks, and found breeding in tea-tree swamps in January, 1914. Skins were sent, but they have not yet been identified.

*Anseranas melanoleuca*.—Seen on fresh-water lagoons;

*Nettion pulchellus*.—Very common on lagoons and swamps.

*Dendrocygna eytoni*.—Seen about swamps.

*Anas superciliosa* (*A. s. rogersi*).—A few seen on swamps.

*Nettion gibberifrons*.—Fairly common on the lily lagoons.

*Spatula rhynchotis*.—Seen on a large lagoon south of the M'Arthur River.

*Nyroca australis*.—Fairly plentiful on the lagoons, though waterfowl of all kinds were scarce about the M'Arthur River.

*Phalacrocorax carbo* (*P. c. novahollandiae*).—A few birds seen along the river.

*Phalacrocorax melanoleucus*.—Seen along the river and about swamps.

*Plotus novae-hollandiae*.—Seen along the river.

*Pelecanus conspicillatus* (*Catoptropelicanus o. australis*).—Seen on lagoons; uncommon.

*Circus assimilis*.—A few birds seen flying low over the grassy flats. A nest was found in May, 1913, with three eggs just hatching.

*Astur approximans*. (*Urospiza fasciata didima*).—Fairly plentiful along the river, where they were found breeding.

*Accipiter torquatus* (*A. cirrocephalus broomei*).—They were breeding at Batten's Creek and the M'Arthur Station, but were not seen about Borroloola.

*Erythrotriorchis radiatus*.—Only a few of these fine birds were seen. A nest found early in September contained one hard-set egg. A second nest, with two fresh eggs, was found a few days later, and under this nest lay the remains of a Nankeen Night-Heron. On visiting the nest exactly four weeks later, two fine eggs, evidently laid by the same pair of birds, were taken. While I was taking the eggs the male bird brought a Naked-eyed Partridge-Pigeon (*Geophaps smithi*) with which to feed his mate.

*Uroaetus audax* (*U. a. carteri*).—Fairly common. A nest found in June, 1913, contained two eggs; another, found in August, contained two very young birds.

*Hieraetus morphnoides*.—A nest found on 6th June, 1913, contained a pair of fresh eggs; other nests were found in August and September.

*Haliaeetus leucogaster*.—Seen along the river from M'Arthur Station to the coast. A nest found early in May, 1913, contained two young birds.

*Haliastur leucosternus* (*Haliastur indus leucosternus*).—Seen along the river.

*Haliastur sphenurus*.—Very common; they were breeding all along the river.

*Milvus affinis* (*M. horschun affinis*).—Fairly common about the M'Arthur till July, when they left for the table-land, where they breed freely.

*Lopholatinia isura*.—A few birds were seen till July, but none was seen afterwards.

*Gypsetinia melanosternon* (*G. melanosterna decepta*).—A fair number of these fine birds was seen. Generally they were hawking over the tree-tops. When on the wing they are easily distinguished from other Hawks by the white patch on the wing and the black breast. They were breeding in September, 1913.

*Elanus axillaris* (*E. a. parryi*).—Only a few birds were seen. A nest containing three young birds was found in May, 1913.

*Falco hypoleucos*.—Only one pair of these beautiful Falcons was seen; one of these was shot.

*Falco subniger*.—Only a few of these birds were seen; they were always in pairs.

*Falco lunulatus* (*F. longipennis apsleyi*).—Fairly common; found breeding in the tall *Melaleuca* trees growing along the river. A set of three eggs was taken from a nest in September, and, a month later, a second set of three eggs was taken from the same nest.

*Hieracides berigora* (*Hieracides b. melvillensis*).—These birds were very numerous, and a number of nests was found. From skins of both old and young birds forwarded to Mr. H. L. White, and compared with skins in his collection obtained from various parts of Australia, together with my observations of these birds in Eastern and Western Queensland, I am of the opinion that we have only one Brown Hawk, and not two, as has always been stated. I know that in making this statement I am pitting my opinions against those of eminent men, but I venture to state that no one could separate the Eastern and Western forms without having localities to go on. My contentions are that the variations are merely those of changes of plumage.

*Cerchneis oenechroides* (*C. c. milligani*).—Rather uncommon on the M'Arthur River.

*Ninox boobook* (*Spiloglaux b. mixta*).—These birds were fairly numerous, and a number of nests was found; most of these contained young.

*Ninox occidentalis* (*Hieracoglaux connivens occidentalis*).—These birds were found roosting in the brush during the day. In the nesting season the female remains in the nesting hollow during the day, while the male roosts in the branches of a neighbouring tree. He often attracts attention by uttering a low growl as a person passes. The female can be flushed from the hollow by hitting the butt of the tree with a tomahawk.

*Ninox rufa*.—A pair of birds which I think were referable to this species was flushed from some brush near the river. One was shot, but fell in the river, which at this part was infested with crocodiles, so that it was unsafe to venture into the water.

*Strix delicatula* (*Tyto alba delicatula*).—These birds were fairly often flushed from hollows in trees, but only in one instance was a nest found.

*Strix novæ-hollandiæ* (*Tyto n. melvillensis*).—Uncommon. An immature bird shot contained the hind legs and tail of a large rat in its stomach.

*Ægotheles novæ-hollandiæ* (*A. cristata leucogaster*).—Frequently flushed from hollow spouts. Eggs were taken in October, 1913, and January, 1914.

**Eurystomus pacificus** (*E. orientalis bravi*).—First seen on 15th October. Evidently these were the first arrivals from New Guinea, but in a few days they were plentiful. They commenced breeding in December.

**Alcyon pulchra** (*A. azurea pulchra*).—Fairly common along the rivers and creeks.

**Dacelo cervina** (*D. leachii cervina*).—Common right to the tableland watershed; they bred freely in November and December.

**Halcyon pyrrhopygius** (*Cyanalcyon p. obscurus*).—Fairly common, and very noisy during the breeding season. The nest is a tunnel in the bank of a creek or a hollow spout of a tree.

**Halcyon sanctus** (*Sauropatis sancta ramsayi*).—Fairly common along the river-flats. They were breeding in tunnels in termites' nests in trees and in hollow spouts.

**Merops ornatus** (*Cosmorops o. shortridgei*).—Very plentiful. They remained all the winter, and do not appear to migrate.

**Eurostopodus guttatus** (*E. argus harterti*).—These birds were plentiful about the sandstone ranges, where they were found breeding.

**Chaetura caudata**.—Observed flying low over the trees after rain.

**Cuculus pallidus** (*Heteroscenes p. occidentalis*).—These birds were first seen on 14th November, and were never numerous.

**Cacomantis variolosus** (*C. pyrrhophanus dumetorum*).—Were very numerous, and their mournful whistle was often heard. Eggs of this species were taken from nests of the following birds:—*Amytornis woodwardi*, *Malurus coronatus* (*Rosina c. macgillivrayi*), *Glyciphila fasciata* (*Ramsayornis f. fasciatus*), *Conopophila rufogularis* (*C. r. queenslandica*), *Rhipidura albiscapa* (*R. flabellifera buehanani*), and *Rhipidura tricolor* (*Leucocirca t. picata*).

**Mesocallus osculans**.—Fairly common in the brush along the river.

**Chalcococcyx basalis** (*Neochalcites b. modesta*).—Only seen about low sandstone ridges. Eggs were taken from nests of *Malurus cruentatus* (*Ryania melanocephala cruentata*), and *Malurus dulcis* (*Leggeornis amabilis dulcis*).

**Chalcococcyx minutillus** (*Lamprococcyx m. minutillus*).—Only a few birds noticed. An egg was found in the nest of *Gerygone albigularis* (*G. olivacea flavigasta*?).

**Eudynamis cyanocephala** (*E. orientalis subcyanocephala*).—These birds first arrived on 28th October, 1913, and soon were very plentiful. Their loud whistling call was frequently heard, both day and night. Eggs were taken from nests of *Philemon sordidus* (*Microphilemon orientalis sordidus*) and *Grallina picata* (*G. cyanoleuca neglecta*).

**Seythrops novæ-hollandiæ** (*S. n. neglectus*).—A few birds were seen and heard after the rains in December and January.

**Centropus phasianus** (*Polophilus p. macrourus*).—Plentiful in the long grass and shrubs along the river and creeks. One nest, built in the top of a pandanus palm, about 20 feet from the ground, contained five eggs.

**Petrochelidon ariel** (*Lagenoplatas a. conigravi*).—Plentiful about the high sandstone ranges, and numbers of their nests were seen in

caves and under ledges on the cliffs. Eggs were taken in the latter end of December, 1913.

*Microeca pallida* (*M. fascians pallida*).—This little bird was common in the forest country, and many nests were seen. A set of four eggs was taken from one nest; these were evidently laid by one bird, as there was only one pair of birds at the nest.

*Microeca flavigaster* (*Kempia f. flavigaster*).—A few birds were seen along the river, and one nest, containing a single egg, heavily incubated, was found.

*Melanodryas plicata* (*M. cucullata subpicata*).—Met with in forest country, and nearly always in pairs. Their pretty nests were placed securely in the forks of the tea-tree. An unusual set of three eggs was taken from one nest.

*Smicrorornis flavescens* (*S. brevirostris flavescens*).—These little birds were plentiful in the brush, where they searched the leaves for insects. Many nests were found during the winter months. A *Smicrorornis* slightly larger and brighter in the colouring was obtained on the table-land, and is distinguished by Mr. Mathews as *S. b. subflavescens*; this bird was not seen off the table-land.

*Gerygone olivacea* (*G. olivacea flavigaster?*).—Found only along the river and creeks, but nowhere plentiful. They were noted as the foster-parent of the Little Bronze-Cuckoo (*Chalcococcyx minutillus*) (*Lamprococcyx m. minutillus*).

*Poecilodryas cerviniventris* (*P. superciliosa cerviniventris*).—Common along the water-courses and in the brush growing at the foot of the sandstone bluffs. Many nests were found, each containing a pair of eggs or young.

*Rhipidura albiscapa* (?) (*R. flabellifera buechanani*).—These birds were fairly common, and many of their curious tailed nests were found.

*Rhipidura dryas* (*Howeavis rufifrons dryas*).—Only odd birds were seen, in October; they appeared to be making their way south, and did not remain to breed on the M'Arthur River.

*Rhipidura motacilloides* (*Leucocirca tricolor picata*).—These well-known birds were common, but, unlike their southern representatives, they do not breed in company with the *Grallina*; they prefer the sheltering edges of the sandstone bluffs. They were noted as the foster-parent of *Cacomantis variolosus* (*C. pyrophanus dumetorum*).

*Setisura nana* (*S. inquieta nea*).—Uncommon; found breeding in the tea-tree country, generally at a good distance from water.

*Myiagra concinna* (*M. rubecula concinna*).—Uncommon; seen about tea-tree localities, where they breed.

*Graucalus melanops* (*Coracina novahollandiae subpallida*).—A common bird about the river-flats, where it breeds in the coolibah and bloodwood eucalypts.

*Graucalus hypoleucus* (*Coracina h. hypoleuca*).—Fairly plentiful; were breeding in December.

*Campephaga humeralis* (*Lalage tricolor indistincta*).—Common. These birds do not leave the M'Arthur during the winter, but the males assume the sombre plumage of the females and young, and do not regain their black and white coats before October, when they commence to breed.

**Pomatorhinus temporalis** (*Pomatostomus t. intermedius*).—Fairly common, and always in small flocks. Their bulky stick nests were often seen; two and three eggs composed a clutch.

**Cinclorhamphus cruralis** (*C. c. rogersi*).—Seen on the open flats along the river.

**Cinclorhamphus rufescens** (*Ptenocedus mathewsi horsfieldi*).—Fairly numerous on dry spinifex ridges.

**Ephthianura tricolor** (*Parephthianura t. distincta*).—A small flock was seen on an open flat near Borrooloola, and specimens were obtained for identification.

**Cisticola exilis** (*C. e. lineicapilla*).—Seen on the grassy flats. They were building in February, 1914, when we left the locality.

**Megalurus galactotes** (*Dulciornis alisteri melvillensis?*).—Seen in the reeds along the river and about grassy flats. A deep, cup-shaped nest of this species was found in a tussock of grass in February, 1914, and contained three reddish-speckled eggs.

(?) **Malurus duleis** (*Leggeornis amabilis dulcis*).—A *Malurus* which, I think, is referable to this species, but which has not yet been identified from the skins sent, was fairly common in the spinifex on the sandstone ridges, where it was found breeding. Eggs of the Narrow-billed Bronze-Cuckoo (*Chalcococcyx basalis*) (*Neochalcites b. modesta*) were found in some nests.

**Malurus coronatus** (*Rosina c. macgillivrayi*).—A purple-crowned *Malurus* was very plentiful in the cane-grass along the river from Borrooloola to the table-land divide. From a number of skins sent it was identified as above. This bird was recently discovered by Mr. W. M'Lennan while collecting for Dr. Macgillivray on the Leichhardt River. Eggs of this bird were taken by me and described by Mr. White, of Belltrees.\* This bird was noted as the foster-parent of *Cacomantis variolosus* (*C. pyrrophanus dumetorum*).

**Malurus cruentatus** (*Ryania melanocephala cruentata*).—Very common in the long grass and swampy localities, where they were breeding. They were noted as the foster-parents of *Chalcococcyx basalis* (*Neochalcites b. modesta*).

**Amytornis woodwardi**.—These birds are found in high sandstone country, and are very shy. They do not wander far from the rocks, into which they dart when disturbed. An account of the finding of this bird has already appeared in *The Emu*,† and a further long search revealed the nest and eggs. The nest is placed in the top of a bunch of spinifex, and much resembles that of the Masked Grass-Finch (*Poephila personata*) (*Neopoephila p. personata*). Noted as the foster-parent of *Cacomantis variolosus* (*C. pyrrophanus dumetorum*).

**Artamus leucogaster** (*A. leucorhynchus harterti*).—These birds were not common; a few were seen along the river and about swamps. One nest contained three young birds.

**Artamus superciliosus** (*Campbellornis s. phæus*).—Seen in flocks about the Lower M'Arthur. They were very busy feeding in the red-flowered *Grevillea*. The stomachs, when examined, contained a thick yellow coating, evidently honey. No insects were found in the stomachs.

\* *Emu*, Bulletin No. 4.

† *Emu*, vol. xiii., part 3, pp. 188-190.

**Artamus personatus** (*Campbellornis p. gracilis*).—Found in large flocks on the Barclay Table-land, where they were breeding, and also on the M'Arthur, where they were feeding, in company with *A. superciliosus*, on the flowers of the *Grevillea*. An examination of the stomachs revealed the same conditions as in *A. superciliosus*. The latter bird was not seen on the table-land.

**Artamus melanops** (*Australartamus m. florenciae*).—Common both on the table-land and the M'Arthur. They were breeding on the table-land in March and on the M'Arthur in November and December.

**Artamus minor** (*Micrartamus m. derbyi*).—These little birds were common, especially about the high sandstone bluffs. They nested in small holes in the sandstone.

**Trichoglossus rubriterques**.—Very common all along the M'Arthur, where they bred freely, from May to December, in the hollow spouts of the swamp gums. Two eggs form a clutch.

**Ptilosclera versicolor** (*Psittentulus v. mellori*).—Only a few were seen about Borroloola, but they were very plentiful further west, where they were busy feeding on the flowers of the bloodwood eucalypt. A nest examined in July, 1913, contained three young birds.

**Calyptrorhynchus macrorhynchus** (*C. banksii macrorhynchus*).—Large flocks of these birds, numbering from four to five hundred, were seen on the head of the M'Arthur and Kilgour Rivers, where they were feeding on the seeds of a creeping plant growing on the plains. They were common all the way to the coast, but only in small flocks. They do not appear to breed on the M'Arthur, as no nests were seen:

**Cacatua galerita** (*Cacatoes g. melvillensis*).—Very common all along the river. They bred freely during September in the hollow spouts of the gum and melaleuca trees growing along the river-flats.

**Cacatua roseicapilla** (*Eolophus r. kuhli*).—Very common birds on the M'Arthur. They appear to breed chiefly from March till June. This is probably from the fact that they depend largely on the seeds of small plants and grasses for their food.

**Calopsitta nova-hollandiae** (*Leptolophus auricomis obscurus*).—Seen in fairly large flocks, generally feeding on the ground.

**Ptilotes coccyneopterus** (*Aprosmictus erythropterus coccineopterus*).—Common. Nests with young were found in September.

**Platyserenus browni** (*P. venustus venustus*).—Though rather scarce, birds were generally to be found along the river, feeding on the seeds of the melaleuca trees. They were always seen in pairs.

**Psephotus dissimilis**.—Skins of these birds were first obtained by me at Pine Creek, N.T., in September, 1896. They were supposed to be *Psephotus chrysapterygus*. This, however, was wrong, and two years later the Pine Creek bird was named as above from further skins obtained from that place. I thus missed the honour of being the first to describe this bird, though I was the first to obtain the skins. *P. chrysapterygus* was obtained somewhere in the Normanton district, and does not appear to have been found since it was described by Gould. *P. dissimilis* was fairly plentiful on the dry spinifex and stringy-bark ridges of the lower M'Arthur. A series of skins was obtained.



**Melopsittacus undulatus** (*M. u. intermedius*).—Very plentiful about the head of the river, where they were breeding in the stunted timber. None was seen about Borrooloola.

**Podargus phalaenoides** (*Podargus strigoides phalaenoides*).—A number of nests was found during October and November, but they mostly had young. A second clutch of eggs was laid in January. In some instances eggs were laid in the same nests in which young were seen previously.

**Colluricincla brunnea** (*C. b. brunnea*).—Found mostly on the flat country, and occasionally on low sandstone hills. The nests were found generally in the tops of hollow stumps, and occasionally in the fork of a thick shrub. A set of eggs was taken in one instance from an old Babbler's nest. In several instances four eggs formed a clutch.

**Colluricincla woodwardi**.—These birds were first noticed in high sandstone country at the junction of the M'Arthur and Clyde Rivers, in September, but they were not breeding. Later we found them in the same belt of country, west of Borrooloola. An account of the taking of the first nest has already appeared in *The Emu*.<sup>\*</sup> Three weeks after taking this nest I again visited the same locality, and was successful in taking several sets, each containing three eggs. The nests were all placed in holes or on the ledges of the large overhanging sandstone rocks. All were composed of the fine reddish roots of the spinifex. The country inhabited by these birds has to be seen before an idea of its roughness can be formed.

**Grallina plicata** (*G. cyanoleuca neglecta*).—Common birds on all the Northern rivers and lagoons. They were noted as foster-parents of *Eudynamis cyanocephala* (*E. orientalis subcyanocephalus*).

**Gymnorhina tibicen** (*G. t. terrestris*).—This bird was plentiful on the Barclay Table-land during our visit in the beginning of 1913, but we did not obtain any eggs. Another bird which I think is slightly different from the table-land bird was found on the M'Arthur. As I wished to obtain the eggs of the table-land bird for Mr. White, I sent my assistant, V. White, back there in October. He was successful in getting a good series of their eggs during October and November, while I was successful in getting a series of eggs of the M'Arthur River bird in the same months. Skins of the M'Arthur bird await, in England, identification by Mr. G. M. Mathews.

**Craicticus nigrogularis** (*C. n. picatus*).—Fairly common on the M'Arthur, where they were breeding. They appear to inhabit any class of country.

**Falcunculus whitii** (*F. frontatus whitei*).—This bird was rare on the M'Arthur, and only a few pairs were seen. These were always on the dry stringybark ridges, where they were hunting among the dead leaves and dry tree-stems for insects. Two nests were found in the forks of the topmost branches of tall stringybark saplings. One nest contained a pair of fresh eggs; the other contained one egg from which the young bird was just emerging and one addled egg.

**Oreolea cristata** (*O. c. pallescens*).—These birds frequent the dry spinifex and stringybark ridges, where their bell-like notes were often heard. A nest found in the top of a dead stump 4 feet from the ground contained three fresh eggs. Several hairy caterpillars were placed on the edge of the nest.

<sup>\*</sup> *Emu*, vol. xiii., part 4, pp. 210-212.

***Pachycephala melanura* (*P. pectoralis violeta*).**—Were found in the brush and mangroves along the river banks; they did not appear to be common.

***Pachycephala pallida* (*Lewinornis rufiventris pallidus*).**—This bird was plentiful in all localities, and, after the rains, bred freely. Several nests contained the unusual number of four eggs.

***Neositta leucoptera* (*N. pileata subleucoptera*).**—Seen in small flocks both on the table-land and on the M'Arthur. Nests were found in coolibah and stringybark trees. Two or three eggs formed a clutch.

***Glimasteris melanura* (*Whitlockia m. alexandrae*).**—These birds were common on the coastal rivers, and were generally in pairs; at odd times three birds were seen together. A number of nests was found. A hollow spout formed the nesting site, and two eggs formed a clutch.

***Disceum hirundinaceum* (*Austrodicaeum h. tormenti*).**—A common bird in most localities about the M'Arthur. It was very often seen feeding in the mistletoe, which is very plentiful in that locality. Several nests suspended from twigs at the top of tall stringybark saplings were found.

***Pardalotus uropygialis* (*P. melanocephalus uropygialis*).**—Common birds in the sandy country, where they were busy drilling holes in sandy banks during the winter months.

***Melithreptus laticor* (*M. gularis laticor*).**—This handsome Honey-eater was frequently seen in the tall stringybark timber, and its cheerful ringing notes were often heard. A sharp look-out was kept for nests, but without success.

***Melithreptus albugularis* (*M. lunatus albugularis*).**—Common in the flowering mistletoes and *Grevilleas*.

***Myzomela pectoralis* (*Cissomela p. pectoralis*).**—These birds were often seen in the flowering trees, and their tiny nests were found in a patch of narrow-leaved tea-tree.

***Myzomela obscura* (*Melomyza o. obscura*).**—These little birds were uncommon, and were only seen about the flowering tea-tree.

***Glycyphila fasciata* (*Ramsayornis f. fasciatus*).**—A very common bird. The bulky nests, composed of strips of melaleuca bark, were frequently seen hanging from the end of a bough, very often over water. On some occasions, however, they were seen a considerable distance from water. The eggs of the Brush-Cuckoo (*Cacomantis variolosus*) (*C. pyrophanus dumetorum*) were often found in their nests.

***Entomophila picta* (*E. p. borealis*).**—A Honey-eater closely resembling the southern Painted Honey-eater was found at M'Arthur Station, on the M'Arthur River. It was feeding on the flowers of the bauhinia trees which grew on the black-soil flats. From skins forwarded to Mr. H. L. White, of Belltrees, it was found to be new, and the name of *Entomophila picta borealis* was suggested by that gentleman. The birds were found at M'Arthur Station, and were not seen elsewhere.

***Conopophila rufogularis* (*C. r. queenslandica*).**—Very common birds. They bred freely when the rains fell at the end of 1913 and the beginning of 1914. They were very pugnacious during the breeding season, and often attacked each other very savagely. They were

noted as the foster-parent of *Cacomantis variolosus* (*C. pyrrhophanus dumetorum*).

*Stigmatops ocellaris* (*S. indistincta rufescens*).—A very common bird, whose cheerful note could be heard all day among the flowering shrubs.

*Ptilotis sonora* (*Meliphaga s. forresti*).—A common bird in tea-tree localities. A number of nests was found; these contained two or three eggs. The bird was noted as the foster-parent of *Cuculus pallidus* (*Heteroscenes p. occidentalis*).

(?) *Ptilotis keartlandi* (*Lichenostomus k. alexandrensis* ?)—A Honey-eater very closely resembling this bird, but which has not yet been identified, was obtained in the high sandstone ranges along the M'Arthur River.

(?) *Ptilotis flavescens* (*Ptilotula f. melvillensis*).—A *Ptilotis* closely resembling *P. flavescens* was very common on the M'Arthur, and a number of nests was found. In no instance did the nests contain more than a single egg or young bird.

*Ptilotis unicolor* (*Stomiopera u. unicolor*).—Common in the brush along the river and near sandstone bluffs. Several of their pretty nests were found along the river; each contained a pair of eggs.

*Myzantha flavigula* (*M. f. alligator*).—Seen at the head of the M'Arthur and on the table-land.

*Entomyza albigularis* (*Entomyza cyanotis albigularis*).—Fairly common about Borroloola, on the M'Arthur. They were found breeding in old nests of the Babbler (*Pomatodromus temporalis*) (*Pomatodromus t. intermedius*).

*Tropidoderes argenteiceps* (*Philemon a. alexis*).—A common bird about the Lower M'Arthur, where it was found breeding.

*Philemon sordidus* (*Microphilemon orientalis sordidus*).—Fairly numerous, and generally in company with *T. argenteiceps* (*P. a. alexis*). A number of nests was found, several of which contained an egg of *Eudynamis cyanocephala* (*E. c. subcyanocephala*).

*Mirafra secunda* (*M. javanica rufescens*).—A very common bird on the table-land, and fairly common on the black-soil flats on the M'Arthur.

*Tenopygia castaneotis* (*T. c. alexandrae*).—A very common bird in the gidgee and brush on the table-land, and also plentiful on the head of the M'Arthur and Kilgour Rivers. It was not seen on the Lower M'Arthur.

*Stizoptera bichenovii* (*S. b. bandi*).—Very common in the brush along the M'Arthur River, where they bred freely.

*Munia pectoralis* (*Heteromunia p. incerta*).—A few of these birds appeared on the table-land in February and March, and bred in the grass on the plains. The nest is a bulky grass structure placed low in the grass. Five and six pure white eggs formed a clutch.

*Bathilda ruficauda* (*B. r. subclarescens*).—These birds frequent the cane-grass along the river; generally they were found in small flocks. They breed in the cane-grass in June.

*Poephila scuticarpa* (*P. a. heeki*).—Seen in all classes of country on the M'Arthur. Their bulky grass nests were placed in bushes and

trees, but never on the ground. During the breeding season the tail feathers of this bird are much longer than at other seasons.

*Poephila personata* (*Neopoephila p. personata*).—Often seen in small flocks of from eight to twelve. This bird builds its bulky grass nest in short grass, often almost, if not quite, on the ground. It resembles a bunch of dead grass. Small pieces of charcoal are built in with the layers of grass in forming the nest, and loose pieces are left in with the eggs. When first laid the eggs are pure white, but in a few days they take on a sooty appearance from coming in contact with the charcoal. This is intensified as the brooding is carried on, and when hard set the eggs are much the colour of the charcoal. The bill of this bird in life is a bright yellow, but fades after skinning.

*Poephila gouldiae* (*P. g. gouldiae*).—This handsome Finch was often seen on dry ridges at long distances from water. It resorts to small hollows in trees for nesting purposes, and several pairs nest in the same hollow. An instance of this came under my notice while collecting on the M'Arthur. In a swamp gum growing on the bank of the river, three nesting hollows were found at heights varying from 20 to 40 feet from the ground. One hollow contained five eggs, of two distinct types; a second contained no fewer than fourteen perfectly fresh eggs, of three distinct types; the third hollow was beyond reach. After taking the eggs, I watched the birds assemble about the different hollows; no fewer than six pairs gathered at one hollow and three at the other. At the hollow that was not disturbed several birds were busy carrying in bits of straw and dead coolibah leaves.

*Neoshamia phaeton* (*N. p. phaeton*).—Frequents the cane-grass and pandanus palms growing in marshy localities. The butts of the pandanus leaves often formed a nesting site. At other times a hollow spout or jutting piece of bark was chosen.

*Oriolus affinis* (*Mimeta sagittata affinis*).—A fairly common bird on the M'Arthur. It was often found feeding in fig trees and on wild berries growing along the river. Nests were found during December and January.

*Chlamydera nuchalis* (*Rogersornis nuchalis melvillensis*).—This is a very common bird all through the coastal fall, and many nests were found; each contained a single egg. These birds started to rebuild their play-grounds in September, but it was not till November that eggs were found.

*Corvus coronoides* (*Corvus cecilia cecilia*).—A common bird on the table-land, but rather uncommon on the coastal fall. It breeds freely in the gidgea timber along water-courses.

Birds of all kinds appear to be affected by the season in the Northern Territory, and, though a few breed during the dry seasons, the majority waits for the rains.

#### CONTENTS OF CROPS AND GIZZARDS OF BIRDS EXAMINED.

20/2/13.—Gizzard of ♀ *Podargus phalaenoides* (*P. strigoides phalaenoides*) contained remains of large grasshoppers and hard-shelled beetles.

22/2/13.—Gizzard of ♂ *Podargus phalaenoides* contained remains of beetles and the head of a large grasshopper.

22/2/13.—Stomach of ♂ *Neositta leucoptera* (*N. pileata* sub-

*leucoptera*) contained two small caterpillars and several minute beetles.

22/2/13.—Stomach of ♂ *Neositta leucoptera* (*N. pileata subleucoptera*) contained four very small beetles.

22/2/13.—Stomach of ♂ *Ægotheles novæ-hollandiæ* (*Æ. cristata leucogaster*) contained remains of small beetles.

25/2/13.—Stomachs of ♂ and ♀ *Artamus melanops* (*Australimimus melanops florenciæ*) contained remains of large green caterpillars.

25/2/13.—Stomach of ♂ *Pachycephala pallida* (*Lewinornis rufiventris pallida*) contained remains of small caterpillars.

26/2/13.—Stomachs of ♂ *Glareola grallaria* (*Stiltia isabella*) contained remains of small beetles and caterpillars.

27/2/13.—Stomachs of two ♂ *Melithreptus lætior* (*M. gularis lætior*) contained a number of white scale-insects, which the birds were gathering from the leaves of mistletoe.

1/3/13.—Stomachs of ♂ and ♀ *Pteropodocys phasianella* (*P. maxima pallida*) contained several green caterpillars, 1 inch in length, and remains of grasshoppers.

3/3/13.—Stomach of ♀ *Pardalotus uropygialis* (*P. melanocephalus uropygialis*) contained numerous small beetles and a small caterpillar.

4/3/13.—Stomachs of *Mirafra secunda* (*M. javanica rufescens*), two males, contained grass seeds and a small caterpillar.

4/3/13.—Stomach of ♀ *Pachycephala pallida* (*Lewinornis rufiventris pallida*) contained remains of two small caterpillars.

4/3/13.—Stomachs of ♂ and ♀ *Conopophila rufogularis* (*C. r. queenslandica*) contained respectively several small brown caterpillars and a large grasshopper.

5/3/13.—Stomach of ♀ *Ptilotis sonora* (*Meliphaga s. forresti*) contained remains of a large green caterpillar.

17/3/13.—Stomach of ♂ *Turnix pyrrhorrhox* (*Austrotornix p. pyrrhorrhox*) contained a number of grass seeds and a small cockroach.

17/3/13.—Stomachs of ♀ and ♂ *Ephithianura tricolor* (*Parephithianura t. distincta*) contained a few grass seeds, small bits of white gravel, and a few small beetles.

18/3/13.—Stomach of ♀ *Ptilotis sonora* (*Meliphaga s. forresti*) contained three large seeds of the mistletoe.

20/3/13.—Crops of *Munia pectoralis* (*Heteromunia p. incerta*), ♂ and ♀, contained a number of small white grass seeds.

20/3/13.—Stomach of ♂ *Chalcococcyx basalis* (*Neochalcites b. modesta*) contained a hairy caterpillar and an earwig.

20/3/13.—Stomach of *Cisticola exilis* (*C. s. lineocapilla*) contained a large brown caterpillar.

20/3/13.—Stomach of ♀ *Chalcococcyx basalis* (*Neochalcites b. modesta*) contained a number of soft red and black wingless beetles.

21/3/13.—Gizzard of ♀ *Nettion gibberifrons* contained nothing but gravel.

25/3/13.—Stomach of ♂ *Gymnorhina tibicen* (*G. t. terrestris*) contained several large grasshoppers.

26/3/13.—Crops of ♂ and ♀ *Melopsittacus undulatus* (*M. u. intermedius*) contained a quantity of small grass seeds.

28/3/13.—Stomach of ♂ *Strix delicatula* (*Tyto alba delicatula*) contained remains of two frogs.

29/3/13.—Stomach of ♂ *Chalcococcyx basalis* (*Neochalcites b. modesta*) contained remains of caterpillars.

29/3/13.—Stomach of ♂ *Malurus cruentatus* (*Ryania melanocephala cruentata*) contained a large green caterpillar.

- 31/3/13.—Stomach of ♂ *Smicrornis flavescens* (*S. brevirostris sub-flavescens*) contained a number of minute leaf-eating beetles.
- 31/3/13.—Crops of ♂ and ♀ *Taniopygia castanotis* (*T. c. alexandrae*) contained numbers of small grass seeds.
- 1/4/13.—Stomach of ♀ *Erythronyx cinctus* (*E. c. mixtus*) contained remains of small water-beetles.
- 3/4/13.—Stomach of *Cisticola exilis* (*C. e. lineocapilla*) contained a small grasshopper.
- 4/4/13.—Stomach of ♀ *Cerchneis cenchroides* (*C. c. milligani*) contained remains of grasshoppers.
- 4/4/13.—Stomach of ♀ *Myzantha flavigula* (*M. f. alligator*) contained remains of grasshoppers.
- 5/4/13.—Stomach of ♀ *Cerchneis cenchroides* (*C. c. milligani*) contained remains of large grasshoppers.
- 5/4/13.—Stomach of ♀ *Cinclorhamphus cruralis* (*C. c. rogersi*) contained remains of grasshoppers.
- 5/4/13.—Stomach of ♀ *Cinclorhamphus cruralis* (*C. c. rogersi*) contained remains of grasshoppers.
- 8/4/13.—Stomach of immature ♂ *Cisticola exilis* (*C. e. lineocapilla*) contained small caterpillars.
- 9/4/13.—Stomach of ♀ *Ægotheles novæ-hollandiæ* (*Æ. cristata leucogaster*) contained remains of beetles.
- 9/4/13.—Stomach of ♂ *Gymnorhina tibicen* (*G. t. terre-reginæ*) contained remains of large grasshoppers.
- 16/4/13.—Stomachs of ♂ and ♀ *Gymnorhina tibicen* (*G. t. terre-reginæ*) contained remains of large grasshoppers.
- 20/5/13.—Stomachs of ♂ and ♀ *Ptilotis unicolor* (*Stomiopera u. unicolor*) contained seeds of small black berries.
- 20/5/13.—Stomach of ♀ *Ninox boobook* (*Spiloglaux b. mixta*) contained remains of a small rat.
- 20/5/13.—Stomach of ♂ *Dacelo cervina* (*D. leachii cervina*) contained several large grasshoppers.
- 21/5/13.—Stomach of ♂ *Stigmatops ocularis* (*S. indistincta rufescens*) contained a few small honey-bees.
- 21/5/13.—Stomach of *Eurostopodus argus* (*E. a. harterti*) contained remains of hard-shelled beetles.
- 21/5/13.—Stomach of ♀ *Tropidorhynchus argenticeps* (*Philemon a. alexis*) contained a number of small beetles.
- 22/5/13.—Stomach of ♂ and ♀ *Poephila acuticauda* (*P. a. heeki*) contained a few grass seeds.
- 22/5/13.—Stomach of ♂ *Podargus phalaenoides* (*P. strigoides phalaenoides*) contained remains of large grasshoppers.
- 22/5/13.—Gizzard of ♀ *Nettapus pulchellus* contained a number of small seeds of a plant growing at the edge of fresh-water lagoons.
- 23/5/13.—Stomachs of ♂ and ♀ *Tropidorhynchus argenticeps* (*Philemon a. alexis*) contained several native bees. When shot, a quantity of honey ran out of their bills; they were feeding on the blossoms of the red *Grevillea*.
- 23/5/13.—Crop of ♀ *Synoisicus australis* (*S. ypsilophorus cervinus*) contained a number of grass seeds.
- 23/5/13.—Stomach of ♂ *Ptilotis sonora* (*Meliphaga s. forresti*) contained a number of small black ants.
- 23/5/13.—Stomach of ♀ *Melithreptus albogularis* (*M. lunatus albogularis*) contained a few native bees and other small insects.
- 23/5/13.—Stomach of ♂ *Myzomela pectoralis* (*Cissomela p. pectoralis*) contained two native bees.

23/5/13.—Crop of ♀ *Poephila gouldiae* (*P. g. gouldiae*) contained a few grass seeds.

24/5/13.—Crop of ♀ *Erythrorhynchus radiatus* contained remains of large grasshoppers.

26/5/13.—Crop of immature ♀ *Neochmia phaeton* (*N. p. phaeton*) contained a few grass seeds.

26/5/13.—Stomach of ♂ *Alcyon pulchra* (*A. azurea pulchra*) contained a small fish.

26/5/13.—Stomach of immature ♂ *Cacomantis variolosus* (*C. pyrrhophanus dumetorum*) contained remains of a large hairy caterpillar.

26/5/13.—Crop of ♂ *Calyptorhynchus macrorhynchus* (*C. banksii macrorhynchus*) contained a number of kernels of the seeds of the baubinia tree.

27/5/13.—Stomachs of two immature ♂ *Malurus coronatus* (*Rosina c. macgillivrayi*) contained small caterpillars.

27/5/13.—Stomach of adult ♂ *Malurus coronatus* (*Rosina c. macgillivrayi*) contained several small beetles.

27/5/13.—Stomach of ♂ *Poecilodryas cerviniventris* (*P. superciliosa cerviniventris*) contained a number of small hard-shelled beetles, which were found on damp ground.

27/5/13.—Stomach of ♀ *Poecilodryas cerviniventris* (*P. superciliosa cerviniventris*) contained a number of mud-frequenting beetles.

27/5/13.—Stomach of ♀ *Dacelo cervina* (*D. leachii cervina*) contained remains of large grasshoppers.

28/5/13.—Crops of ♂ and ♀ *Platycercus browni* (*P. venustus venustus*) contained a number of seeds of the wattle.

28/5/13.—Stomach of ♂ *Climacteris melanura* (*C. m. alexandrae*) contained a number of small black beetles.

28/5/13.—Gizzard of *Nettapus pulchellus* contained a number of small seeds of a plant growing in the water.

29/5/13.—Stomach of ♀ *Falco lunulatus* (*F. longipennis apseyi*) contained a large grasshopper.

29/5/13.—Stomach of ♀ *Butorides stagnatilis* (*B. striata stagnatilis*) contained seven whole grasshoppers.

30/5/13.—Stomach of *Cisticola exilis* (*C. e. lineocapilla*) contained a small grasshopper.

30/5/13.—Stomach of ♂ and ♀ *Pomatorhinus temporalis* (*Pomatorhinus temporalis intermedius*) contained a number of small insects of different kinds.

30/5/13.—Crops of two ♂ *Geophaps smithi* (*G. s. smithi*) contained a number of wattle and grass seeds.

2/6/13.—Stomach of ♀ *Mesocallus osculans* (*Owenavis o. osculans*) contained several large bugs.

3/6/13.—Stomach of ♂ *Podargus phalaenoides* (*P. strigoides phalaenoides*) contained remains of large grasshoppers.

3/6/13.—Crop of ♂ *Poephila personata* (*Neopoephila p. personata*) contained a few spinifex seeds.

4/6/13.—Crop of ♂ *Turnix castanota* (*Austroturnix c. castanota*) contained a number of spinifex seeds.

4/6/13.—Crop of ♀ *Poephila personata* (*Neopoephila p. personata*) contained a few grass seeds.

4/6/13.—Stomach of ♀ *Myzomela pectoralis* (*Cissomela p. pectoralis*) contained a few native bees.

5/6/13.—Crop of ♂ *Elanus axillaris* (*E. a. parryi*) contained remains of a mouse.



- 5/6/13.—Stomach of ♂ *Alcyon pulchra* (*A. azurea pulchra*) contained remains of a fish.
- 5/6/13.—Stomach of ♂ *Megalurus galactotes* (*Dulciornis alisteri melvillensis*) contained a small wood cockroach and small beetles.
- 5/6/13.—Stomach of ♂ *Megalurus galactotes* (*Dulciornis alisteri melvillensis*) contained a small caterpillar and some small beetles.
- 6/6/13.—Stomach of ♂ *Malurus cruentatus* (*Ryania melanocephala cruentata*) contained a small brown caterpillar.
- 6/6/13.—Stomach of ♀ *Malurus cruentatus* (*Ryania melanocephala cruentata*) contained a small grasshopper and some small beetles.
- 6/6/13.—Stomach of ♀ *Malurus cruentatus* (*Ryania melanocephala cruentata*) contained a number of small beetles.
- 6/6/13.—Stomach of ♂ *Climacteris melanura* (*Whitlockia m. alexandrae*) contained a small bark moth and several small insects.
- 10/6/13.—Stomach of ♂ *Mesocallius osculans* (*Owenavis o. osculans*) contained a number of small striped bugs.
- 10/6/13.—Stomachs of ♂ and ♀ *Pardalotus uropygialis* (*P. melanocephalus uropygialis*) contained a number of small beetles.
- 12/6/13.—Crops of three ♂ and three ♀ *Poephila gouldiae* (*P. g. gouldiae*) contained a number of cane-grass seeds.
- 13/6/13.—Stomach of ♀ *Ninox occidentalis* (*Hieracoglaux connivens occidentalis*) contained remains of large grasshoppers.
- 16/6/13.—Stomach of ♂ *Colluricincla brunnea* (*C. b. brunnea*) contained a number of small insects and some small purple berries.
- 16/6/13.—Stomach of ♀ *Colluricincla brunnea* (*C. b. brunnea*) contained a large brown spider and a grasshopper.
- 16/6/13.—Stomach of ♂ *Falcunculus whitii* (*F. frontatus whitii*) contained a large green bark cricket.
- 16/6/13.—Stomach of ♀ *Melithreptus lator* (*M. gularis lator*) contained several small beetles.
- 17/6/13.—Stomach of ♀ *Colluricincla brunnea* (*C. b. brunnea*) contained remains of a large grasshopper and a small black dung-beetle.
- 17/6/13.—Stomach of ♂ *Ptilotis sonora* (*Meliphaga s. forresti*) contained a number of small black ants.
- 17/6/13.—Stomachs of two ♂ *Ptilotis flavescens* (*Ptilotula f. melvillensis*) contained a number of native bees.
- 18/6/13.—Stomach of ♂ *Chalcococcyx basalis* (*Neochalcites b. modesta*) contained a number of small hairy caterpillars.
- 18/6/13.—Stomach of ♀ *Micræca flavigaster* (*Kempia f. flavigaster*) contained a number of black ants.
- 18/6/13.—Stomach of immature ♂ *Micræca flavigaster* (*Kempia f. flavigaster*) contained a number of black ants.
- 18/6/13.—Stomach of ♂ *Mesocallius osculans* (*Owenavis o. rogersi*) contained a number of red and black bugs and spotted ladybirds.
- 18/6/13.—Crops of ♂ and ♀ *Bathilda ruficauda* (*B. r. subclarescens*) contained a number of cane-grass seeds.
- 23/6/13.—Stomach of ♂ *Pachycephala melanura* (*P. pectoralis violacea*) contained the remains of golden-winged beetles.
- 23/6/13.—Stomach of ♀ *Pachycephala melanura* (*P. pectoralis violacea*) contained a small green caterpillar.
- 23/6/13.—Stomach of ♀ *Ninox occidentalis* (*Hieracoglaux connivens occidentalis*) contained remains of large grasshoppers.
- 24/6/13.—Stomach of ♂ *Smicrornis flavescens* (*Smicrornis brevirostris subflavescens*) contained a number of minute leaf-eating beetles.
- 24/6/13.—Stomach of ♀ *Micræca pallida* (*M. fascians pallida*) contained several round spotted ladybirds.



26/6/13.—Stomach of ♂ *Pachycephala pallida* (*Lewinornis rufiventris pallidus*) contained a large grasshopper.

26/6/13.—Stomach of ♀ *Pachycephala pallida* (*Lewinornis rufiventris pallidus*) contained the wings of a small green ladybird and the remains of other insects.

26/6/13.—Stomach of ♂ *Seisura nana* (*S. inquieta nea*) contained two small spotted ladybirds.

27/6/13.—Stomach of ♂ *Artamus melanops* (*Austrartamus m. florenciae*) contained honey from the *Grevillea* blossom.

27/6/13.—Stomach of ♀ *Neositta leucoptera* (*N. pileata subleucoptera*) contained remains of several wood-bugs.

27/6/13.—Stomach of ♀ *Melithreptus albogularis* (*M. lunatus albogularis*) contained a few small blossom insects.

27/6/13.—Stomach of ♀ *Edicnemus grallarius* (*Burhinus magnirostris rufescens*) contained several small land-shells.

27/6/13.—Stomach of ♂ *Edicnemus grallarius* (*Burhinus magnirostris rufescens*) contained remains of large grasshoppers.

11/8/13.—Stomach of ♂ and ♀ *Cinclorhamphus rufescens* (*Ptenocodus mathewsi horsfieldi*) contained numbers of small black bugs.

12/8/13.—Stomach of ♀ *Entomophila picta* (*E. p. borealis*) contained a number of large mistletoe berries.

12/8/13.—Stomach of ♂ *Halcyon sanctus* (*Sauropatis s. ramsayi*) contained remains of a small fish and wings of a hard-shelled carab.

14/8/13.—Stomach of ♂ *Graucalus melanops* (*Coracina novaehollandiae subpallida*) contained a number of mistletoe berries and a large brown longicorn beetle.

14/8/13.—Stomach of ♀ *Ægialitis nigrifrons* (*Elseya melanops russata*) contained a number of small black water-beetles.

14/8/13.—Stomach of ♂ *Artamus minor* (*Micrartamus minor derbyi*) contained a small leaf Buprestid beetle, a small black hornet, and several small winged ants.

17/8/13.—Stomach of immature ♀ *Strix novaehollandiae* (*Tyto n. melvillensis*) contained the hind legs and tail of a rat, swallowed in one piece. From the tip of the tail to where the fore-part had been severed was just 8 inches long.

18/8/13.—Stomachs of ♂ and ♀ *Entomophila picta* (*E. p. borealis*) contained a number of mistletoe berries.

18/8/13.—Stomach of ♂ *Oriolus affinis* (*Mimeta sagittata affinis*) contained the remains of a number of spotted ladybirds.

18/8/13.—Stomach of ♂ *Lophophaps plumifera* (*L. p. plumifera*) contained seeds of several kinds of small vines.

21/8/13.—Crop of ♂ *Calyptorhynchus macrorhynchus* (*C. banksii macrorhynchus*) contained seeds of the baubinia tree.

22/8/13.—Crop of ♂ *Lophophaps plumifera* (*L. p. plumifera*) contained a great number of seeds of a pea bush and a few seeds of a wild convovulus.

23/8/13.—Stomach of ♀ *Dupetor gouldi* (*D. flavicollis olivet*) (?) contained two small shrimps.

23/8/13.—Stomach of ♀ *Oriolus affinis* (*Mimeta sagittata affinis*) contained the remains of a number of red and black bugs.

24/8/13.—Stomach of ♂ *Corvus coronoides* (*C. cecile cecile*) contained remains of large grasshoppers and several cattle ticks.

27/8/13.—Stomach of ♀ *Graucalus melanops* (*Coracina novaehollandiae subpallida*) contained a number of mistletoe berries and the remains of a large black longicorn beetle.

27/8/13.—Stomach of ♂ and ♀ *Neositta leucoptera* (*N. pileata sub-leucoptera*) contained remains of small bark insects.

27/8/13.—Crops of ♂ and ♀ *Stizoptera bichenovii* (*S. b. bandi*) contained small grass seeds.

2/9/13.—Stomach of ♂ *Hieracidea berigora* (*Ieracidea b. melvillensis*) contained a lizard 10 inches long.

5/9/13.—Stomach of ♂ *Colluricincla woodwardi* contained the remains of small grasshoppers.

## MEASUREMENTS OF NESTS.

Date.	Name of Bird.	Across top.		Depth.		Height from ground.
		Outside.	Inside.	Outside.	Inside.	
24/2/13	<i>Milvus affinis</i> ( <i>M. korschun affinis</i> ) ..	mm. 677	mm. 229	mm. 356	mm. 51	ft. 15
27/2/13	<i>Pteropodocys phasianella</i> ( <i>P. maxima pallida</i> )	178	102	64	26	18
27/2/13	" " " " " "	178	89	51	26	20
27/2/13	<i>Milvus affinis</i> ( <i>M. korschun affinis</i> ) ..	755	255	382	77	17
28/2/13	<i>Pteropodocys phasianella</i> ( <i>P. maxima pallida</i> )	178	77	64	26	25
28/2/13	<i>Campephaga humeralis</i> ( <i>Lalage tricolor in-</i> <i>distincta</i> ) ..	63	39	26	14	8
1/3/13	<i>Milvus affinis</i> ( <i>M. korschun affinis</i> ) ..	610	230	305	52	23
1/3/13	<i>Pteropodocys phasianella</i> ( <i>P. maxima pallida</i> )	155	102	77	39	20
4/3/13	<i>Pachycephala pallida</i> ( <i>Lewinornis rufiventris</i> <i>pallidus</i> ) ..	89	58	53	39	9
4/3/13	<i>Conopophila rufogularis</i> ( <i>C. r. queenslandica</i> )	58	39	64	46	15
4/3/13	" " " " " "	78	39	52	45	7
4/3/13	" " " " " "	64	39	78	52	4
4/3/13	<i>Pachycephala pallida</i> ( <i>Lewinornis rufiventris</i> <i>pallida</i> ) ..	89	52	58	33	8
4/3/13	<i>Pachycephala pallida</i> ( <i>Lewinornis rufiventris</i> <i>pallida</i> ) ..	84	58	52	33	10
5/3/13	<i>Ptilotis sonora</i> ( <i>Meliphaga s. forresti</i> ) ..	76	58	58	45	25
17/3/13	<i>Cisticola exilis</i> ( <i>C. e. alexandri</i> ) ..	52	27	102	39	3
18/3/13	<i>Haliastur sphenurus</i> ..	840	255	509	78	15
25/3/13	" " " " " "	814	280	508	103	25
30/3/13	" " " " " "	814	357	407	128	19
6/6/13	<i>Hieraetus morphnoides</i> ..	660	230	407	50	58
19/6/13	" " " " " "	705	230	407	77	64
26/6/13	<i>Uroaetus audax</i> ( <i>U. a. carteri</i> ) ..	1063	535	760	130	59
3/7/13	<i>Haliastur leucogaster</i> ..	1704	610	2135	178	88
16/8/13	<i>Uroaetus audax</i> ( <i>U. a. carteri</i> ) ..	1065	510	1225	102	114
22/8/13	<i>Hieracidea berigora</i> ( <i>Ieracidea b. melvillensis</i> )	535	256	560	78	72
23/8/13	<i>Hieraetus morphnoides</i> ..	560	256	358	78	64
23/8/13	<i>Falco lunulatus</i> ( <i>F. longipennis apsleyi</i> ) ..	508	177	356	78	78
12/9/13	<i>Erythrorhynchus radiatus</i> ..	915	256	455	78	64
12/9/13	<i>Falco lunulatus</i> ( <i>F. longipennis apsleyi</i> ) ..	688	175	455	52	67
14/9/13	<i>Erythrorhynchus radiatus</i> ..	660	256	330	52	49
17/9/13	<i>Gypocictinia melanosternon</i> ( <i>G. m. decepta</i> ) ..	778	330	560	102	65
26/9/13	<i>Accipiter torquatus</i> ( <i>A. cirrocephalus</i> <i>broomei</i> ) ..	535	178	230	52	55
22/9/13	<i>Neositta leucoptera</i> ( <i>N. pileata subleucoptera</i> )	50	40	75	37	10
1/10/13	<i>Pacilodryas cerviniventris</i> ( <i>P. superciliosa</i> <i>cerviniventris</i> ) ..	75	42	50	30	5
11/11/13	<i>Melanodryas picata</i> ( <i>M. cucullata subpicata</i> )	70	50	65	30	9
1/11/13	<i>Micræca flavigaster</i> ( <i>Kempia f. flavigaster</i> ) ..	45	30	35	15	44

Date.	Name of Bird.	Across top.		Depth.		Height from ground.
		Outside.	Inside.	Outside.	Inside.	
		mm.	mm.	mm.	mm.	ft.
15/11/13	<i>Pacilodryas cerviniventris</i> ( <i>P. superciliosa cerviniventris</i> ) .. .. .	70	50	45	30	6
15/11/13	<i>Microeca pallida</i> ( <i>M. fascians pallida</i> ) .. .. .	55	37	30	15	19
18/11/13	<i>Pacilodryas cerviniventris</i> ( <i>P. superciliosa cerviniventris</i> ) .. .. .	80	50	40	20	3
18/11/13	<i>Pacilodryas cerviniventris</i> ( <i>P. superciliosa cerviniventris</i> ) .. .. .	81	52	50	30	9
24/11/13	<i>Rhipidura albiscapa</i> (?) .. .. .	45	37	40	20	25
				(tail 85)		
27/11/13	<i>Microeca pallida</i> ( <i>M. fascians pallida</i> ) .. .. .	52	34	25	15	7
3/12/13	<i>Pachycephala pallida</i> ( <i>Lewinornis rufiventris pallida</i> ) .. .. .	70	60	50	40	10
6/12/13	<i>Colluricincla brunnea</i> ( <i>C. b. brunnea</i> ) .. .. .	145	80	120	55	5
11/12/13	<i>Colluricincla woodwardi</i> .. .. .	180	90	60	50	*
27/12/13	<i>Malurus dulcis</i> (?) ( <i>Leggeornis amabilis dulcis</i> ) .. .. .	80	45	120	90	†
6/1/14	<i>Myzomela pectoralis</i> ( <i>Cissomela p. pectoralis</i> ) .. .. .	50	40	50	30	6
6/1/14	" .. .. .	53	40	43	35	9
7/1/14	<i>Ptilotis unicolor</i> ( <i>Stomiopora u. unicolor</i> ) .. .. .	80	55	75	50	12
12/1/14	<i>Malurus coronatus</i> ( <i>Ryania melanocephala cruentata</i> ) .. .. .	120	50	150	50	5
15/1/14	<i>Amytornis woodwardi</i> .. .. .	100	50	180	150	†
17/1/14	<i>Dicaeum hirundinaceum</i> ( <i>Austrodicaeum hirundinaceum tormenti</i> ) .. .. .	60	40	80	55	10
17/1/14	<i>Dicaeum hirundinaceum</i> ( <i>Austrodicaeum hirundinaceum tormenti</i> ) .. .. .	55	45	65	50	15

\* In clefts of rock. † In spinifex.

## Descriptions of New Australian Birds' Eggs.

BY HENRY L. WHITE, R.A.O.U., BELLTREES, SCONE (N.S.W.)

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***Colluricincla woodwardi* (Hartert). Brown-breasted Shrike-Thrush.**

Mr. D. Le Souëf, R.A.O.U., described (*The Emu*, vol. viii., page 61) eggs, which are now in my collection, supposed to be those of this bird, and which were taken by Mr. H. G. Barnard, R.A.O.U., near Pine Creek, Northern Territory.

An interview with the first-named gentleman, and correspondence with the latter, convince me that an error of identification was made, and that the eggs described were most probably those of *C. brunnea*.

From several clutches of eggs, accompanied by skins of some of the parent birds, and a nest, I select the undermentioned sets for description as types of *C. woodwardi*.

**Nest.**—A cup-shaped structure, composed entirely of the reddish-brown roots of spinifex (*Triodia*), and usually placed in cracks or