

Notes on the Birds of Central Australia.

By Professor J. B. Cleland.

In August, 1929, a short expedition was organized by the Board of Anthropological Research of the University of Adelaide to visit Hermannsburg Mission Station, in Central Australia, with the object of studying various aspects of the aboriginal natives. In these inquiries our time was fully occupied, so that for the most part only casual observations could be made on the birds. Mr. H. M. Hale, however, who was attached to the expedition in the interests of the South Australian Museum, was freer than the other members, and secured some additional skins, references to which are included.

The party left Adelaide on 4th August, and reached Stuart (Alice Springs) on 6th August by the first through passenger train on the newly-opened line from Oodnadatta. Next day we left for Hermannsburg, which lies well west of south from Alice Springs, travelling first through and parallel with the MacDonnell Ranges, and then following down the Jay Creek on to the Missionaries Plains. Hermannsburg, by this route, was a little over 90 miles distant. The Mission Station is situated on the bank of the (dry) Finke River, near the foot of the Krichauff Range, which is really part of the James Range; that runs parallel with the MacDonnell Ranges, but some ten miles or more to the south. The Finke cuts its way south through this range by a rugged gorge, winding round the foot of a mountain, Hermannsburg. This gorge is a long one, and some ten miles down it a subsidiary valley, Palm Valley, joins the Finke from the west. A few miles further on is the Glen of Palms. Twenty miles to the northward, the Finke cuts its way through two high ridges of the MacDonnell Ranges, which

are separated by the narrow Horn Valley. The channel through the northernmost of these two ridges is blocked by a large sheet of deep cold water. This passage is Glen Helen, and here were disporting themselves a few Ducks and Cormorants. At the end of our stay short visits were paid to Palm Valley and Glen Helen.

The birds of Central Australia have been dealt with in some detail by three previous collecting expeditions, though doubtless in the near future much additional information will be added from the more inaccessible portions. The present notes add no new species to the lists. Only 40 species were observed altogether. This is hardly to be wondered at when we consider the phenomenally long drought of nearly five years that has afflicted this portion of Australia and has reduced the herds of cattle to almost negligible proportions.

In May, 1894, the Horn Scientific Expedition to Central Australia left Adelaide, and included in its travels Palm Valley, Hermannsburg, and Glen Helen. A. J. North contributed the article on Aves to the account of the expedition, dealing with 78 species of which skins were obtained and referring to 22 others observed by Mr. G. A. Keartland. In 1913 Captain S. A. White visited the same district and recorded 118 species (Trans. and Proc. Roy. Soc. of S.A., XXXVIII, 1914). In 1923, F. L. Whitlock spent some time in the same locality, more particularly in a search for the Night Parrot, and contributed a full account to the "Emu" (XXIII, 1923-4, p. 248) of the 135 species of birds observed by him. The result of these various expeditions is that about 160 species of birds are known for Central Australia.

Inquiries were naturally made by us as to whether the Night Parrot had recently been seen or heard. Some natives, it appeared, had heard its call a few years back before the onset of the drought. The lack of rain had evidently greatly reduced the number of birds, as is well seen in the small numbers of individuals observed during our motor journeys. The most interesting finds were a small flock of *Aphelocephala nigricincta* in the MacDonnell Ranges not far west of Alice Springs, *Lophophaps plumifera* near Hermannsburg, and Keartland's Honeyeater at Kaporilya Springs, five miles from the last-named place.

It is of interest to note that the birds of Central Australia have distinct Western Australian and Eyre's Peninsula affinities. Thus the Port Lincoln Parrot (*Barnardius zonarius*) is common to all these areas, as well as the Western Shrike-Thrush

(*Colluricincla rufiventris*), neither of which species is found east of Spencer's Gulf and Lake Torrens. All four species of *Aphelocephala* are to be found in Central Australia.

Whilst sitting on the rocks by the waterside at Glen Helen in a retired situation, a Dabchick, disturbed from the far side of the pool of deep water, suddenly emerged from the surface below us, and was so startled that, instead of reacting in this emergency by the more effective method of diving, it escaped from our near presence by flapping its wings and flying along the surface to a safe distance in the centre of the waterhole, where it then disappeared by diving. It may be suggested that the impulse to escape by flying is more archaic than escape by diving, being a survival of the ancestral days when the wings were more often used. As a reaction to very sudden fright, one might therefore expect the phylogenetically oldest type of escape to assert itself, escape by diving being a more recent acquisition, necessitating more thought and so a longer lag before it is employed. In times of stress the most ancient and consequently the most ingrained reactions are those most likely to present themselves first.

Relatively few birds were seen on the various motor journeys. The small numbers emphasize, however, the dry conditions. These journeys were as follows:—

(1) Alice Springs to Hermannsburg, via MacDonnell Ranges and Jay Creek (90 miles), August 7.

(2) Hermannsburg, via Missionaries Plains to Alice Springs (85 miles), August 20.

(3) Hermannsburg to Palm Valley (14½ miles), August 17.

(4) Return journey (3).

(5) Hermannsburg to Glen Helen (20 miles), August 18.

The following species were noted on these journeys, the number in parentheses referring to the number of the journey. When such numbers in parentheses do not appear, the figures indicating the numbers of individuals seen follow the above order of the five journeys:—

Ocyphaps lophotes (4), 2. Total, 2.

Whistling Eagle (?), (1), 1. Total, 1.

Falco berigora (5), 2. Total, 2.

Falco cenchroides (1), 1. Total, 1.

Hawks, unidentified, 3, 5, 0, 0, 0. Total, 8.

Calyptrorhynchus banksi, 73, 40, 0, 0, 0. Total, 113.

Barnardius zonarius, 0, 2, 2, 3, 0. Total, 7.

- Psephotus varius*, probably (1), 2. Total, 2.
Melopsittacus undulatus (1), 6; (2), 7. Total, 13.
Rhipidura leucophrys (2), 2. Total, 2.
Melanodryas cucullata (3), 2. Total, 2.
Grallina cyanoleuca (1), 1; (2), 5. Total, 6.
Pomatostomus, probably *P. rubeculus* (1), 7; (2), 9. Total,
 16.
Epthianura tricolor (1), 18. Total, 18.
Aphelocephala nigricincta (1), 5; (2), 6. Total, 11.
Artamus, probably *A. melanops* (1), 5; (2), 6. Total, 11.
Myzantha flavigula (1), 1; (2), 2. Total, 3.
Meliphaga sp. (2), 1. Total, 1.
Anthus australis, 4, 4, 0, 1, 2. Total, 11.
Corvus ceciliae, 68, 7, 8, 4, 6. Total, 93.
 Magpies (2), 4. Total, 4.
 Unidentified, 10, 5, 6, 4, 2. Total, 27.
 Total mileage, 224. Number of species seen, 20. Number
 of individuals seen, 354. No introduced species seen.

Dromaius novae-hollandiae (Emu).—A bird with young was seen by members of the party from the train between Alice Springs and Rumbalara.

Lophophaps plumifera (Plumed Pigeon).—Several of these beautiful pigeons inhabited the plain between the Finke and the foothills of the Krichauff Range at Hermannsburg. When disturbed, they settled again on the ground. One was secured, ♂ (testes medium large), iris chrome yellow, lower eyelid semi-translucent, skin in front of eye reddish coral, bill black, pharynx blackish, legs brownish black; total length, 8 $\frac{3}{8}$ in.; span of wings, 14 $\frac{1}{8}$ in.

Ocyphaps lophotes (Crested Pigeon).—A few were present round Hermannsburg, settling on the trees. Mr. Hale secured a specimen—♂, iris orange, legs and feet red, bill black, pharynx flesh colour; total length, 310 mm.; span of wings, 500 mm.

Podiceps, probably *P. ruficollis* (Little Grebe).—Glen Helen.

Large Black-and-White Shags.—Several, the species not identified, were at the waterhole at Glen Helen.

Charadrius melanops (Black-fronted Dotterel).—Glen Helen.

Notophoxyx novae-hollandiae (White-faced Heron).—Glen Helen.

Anas superciliosa (Black Duck).—Glen Helen, ♂, bill black, legs ochraceous brown; total length, 22 $\frac{1}{4}$ in.; span of wings, 37 in.

Querquedula gibberifrons (Grey Teal).—Glen Helen, ♀, bill black above, paler below with a pale orange-horn bar; legs dark grey; total length, $17\frac{1}{2}$ in.; span of wings, 26 in.

Nyroca australis (Australian White-eyed Duck).—Glen Helen, ♀, iris brown like the head; bill blackish above, with pale greyish-blue bar, underside mottled blackish and dark greyish blue; legs lead-coloured, the webs darker; total length, $19\frac{1}{8}$ in.; span of wings, $28\frac{1}{4}$ in.

Astur fasciatus (Australian Goshawk).—Whitlock considers that there are two species of Goshawk in this district, recording *A. fasciatus* and *A. cruentus*. The editors of the "Emu," in commenting on his opinion, state that it is interesting to note that there are two varieties of Goshawk in Central Australia, but a careful examination of Australian skins does not show that there is more than the one species, *A. fasciatus*. A bird observed at Hermannsburg had a yellow eye, greenish-yellow bill (cere (?)), grey back, and barred under-surface, with pale fawn between the bars. It was presumably *A. fasciatus*.

Milvus migrans (Black (Fork-tailed) Kite).—Only one seen at the Mission. They are common at certain times of the year.

Falco berigora (Brown Hawk).—Hermannsburg, ♂, iris brown, edges of eyelid sulphur yellow, lower eyelid greyish, bill horn grey, cere greenish-yellow, pharynx greyish flesh, legs whitish horn; total length, $15\frac{5}{8}$ in.; span of wings, $38\frac{1}{4}$ in. The bird uttered a whistling cry.

Falco cenchroides (Nankeen Kestrel).

Calyptorhynchus banksi (Red-tailed Black Cockatoo).—Large flocks, one numbering about 60 individuals, were seen at Alice Springs, near Emily Gap, and on the Hugh.

Barnardius zonarius (Port Lincoln Parrot).—These were quite common birds. Mr. Hale shot two specimens at Hermannsburg—♂, iris dark brown, legs and feet greyish black, bill pale grey; total length, 370 mm.; span of wings, 500 mm. ♀, iris dark brown, legs and feet greyish black, bill pale blue (not as in ♂); total length, 350 mm.; span of wings, 460 mm.

Psephotus, probably *P. varius* (Mulga-Parrot).—Two were seen in the Jay.

Melopsittacus undulatus (Budgerygah).—A few seen.

Merops ornatus (Australian Bee-eater).—Glen Helen.

Hirundo neoxena (Welcome Swallow).—Glen Helen.

Cheramoeca leucosterna (White-backed Swallow).—Numbers of these birds were occupying tunnels in a sandy bank on the Finke at Hermannsburg. Several were unfortunately

caught, probably in these tunnels, by the native children, and brought in to us—♂ (?), bill black, pharynx flesh-coloured, legs brown; total length, $5\frac{1}{2}$ in.; span of wings, $7\frac{1}{2}$ in. No ectozoa detected.

Hylochelidon ariel (Fairy Martin).—Old nests at Glen Helen.

Rhipidura leucophrys (Willie Wagtail).—Hermannsburg and elsewhere.

Melanodryas cucullata (Hooded Robin):—Hermannsburg. Mr. Hale's specimen—♂, iris dark brown; bill, legs, and feet black; pharynx flesh colour; total length, 150 mm.; span of wings, 270 mm.

Pachycephala, probably *P. rufiventris* (Rufous Whistler).—Whitlock records this species. A Whistler with the abdomen brownish was seen at Kaporilya Springs five miles from Hermannsburg, and another was heard at Palm Valley.

Colluricincla,—probably *C. rufiventris*—(Western Shrike-Thrush).—Both Captain White and Whitlock report this species. In the bushes by the side of the Finke at Glen Helen a Thrush was heard singing, the note resembling that of *C. harmonica* of the Adelaide Hills.

Grallina cyanoleuca (Magpie-Lark).—Widely distributed.

Oreoica gutturalis (Crested Bellbird).—Hermannsburg—♂, iris yellowish orange; bill, pharynx, and legs black; total length, 8 in.; span of wings, $12\frac{1}{2}$ in. No ectozoa detected.

Lalage tricolor (White-winged Triller).—Hermannsburg—♂, iris brownish black; bill blackish above, yellowish horn at base below; pharynx flesh-coloured; legs blackish with grey bloom; total length, $6\frac{3}{4}$ in.; span of wings, $12\frac{1}{2}$ in. No ectozoa detected.

Pomatostomus rubeculus (Red-breasted Babbler).—Hermannsburg. Mr. Hale's specimen—♀, iris pale yellow; bill, legs, and feet black; total length, 248 mm.; span of wings, 340 mm.

Epthianura tricolor (Crimson Chat).—Ten miles west of Alice Springs.

Smicrornis flavescens (Yellow Weebill).—Hermannsburg. Mr. Hale's specimen—♀, iris (?); bill, legs, and feet pale brown; total length, 90 mm.

Aphelocephala leucopsis (Eastern Whiteface).—Hermannsburg. Mr. Hale's specimen—♀, iris whitish; bill, legs, and feet black; pharynx sooty; total length, 112 mm.; span of wings, 180 mm.

A. nigricincta (Banded Whiteface).—A small company of these birds was met with feeding on the ground on the plain

between the ranges about ten miles west of Alice Springs—♀, iris white, bill and pharynx blackish, legs dark grey; total length, 3½ in.; span of wings, 6⅞ in.

Acanthiza hamiltoni (Red-tailed Thornbill).—Hermannsburg. Mr. Hale's specimen—♂, iris reddish brown; bill, legs, and feet black; total length, 110 mm.; span of wings, 150 mm.

Artamus melanops (Black-faced Wood-Swallow).

Meliphaga virescens (Singing Honeyeater).—One seen in the foot of the ranges at Hermannsburg.

M. keartlandi (Grey-headed Honeyeater).—In the redgums at Kaporilya Springs near Hermannsburg. Mr. Hale secured specimens—♂, ♂, iris dark brown, legs and feet pale brown, bill black, pharynx orange.

M. penicillata leilavalensis.—With the preceding at Kaporilya Springs. Mr. Hale's specimens—♂, iris dark brown, legs and feet brown, bill black, pharynx orange; total length, 160 mm.; span of wings, 260 mm. ♀, soft parts similar, but total length, 150 mm.; span of wings, 215 mm.

Myzantha flavigula (Yellow-throated Miner).—Hermannsburg. Mr. Hale's specimen—♂, iris very dark brown, skin round eyes bright orange; legs and feet ochraceous, bill bright orange, pharynx bright orange.

Anthus australis (Groundlark).—Common.

Chlamydera guttata (Western Bower-bird).—A bower, in good condition, was shown to us at the entrance to Palm Valley,

Corvus ceciliae (Crow) (*Karnka* in Loritja, *Ngupa* in Arunta).—Numerous, especially at Hermannsburg and Alice Springs. Mr. Hale obtained specimens—♂, iris pure white (blue round pupil); legs, feet, and bill black; total length, 530 mm.; span of wings, 1,060 mm. ♀, iris white; legs, feet, and bill black; pharynx black; total length, 19 in.; span of wings, 39 in.

Gymnorhina tibicen (Black-backed Magpie) and *G. hypoleuca* (White-backed Magpie).—Both species are recorded by Captain White, only the former by Whitlock. We saw apparently both species.