

flock had the plumage much like that of the English Blackbird when changing from the mottled blackish-brown to the fully adult glossy black of maturity. Dimensions in millimeters:—Length, 440; wing, 310; culmen, 50; tarsus, 53; iris brown. In another adult the iris was white with a tinge of blue around the pupil.

Sphenostoma cristatus. Wedgebill.—Fairly common near Denham, but absent from Dirk Hartog. In September young were on the wing.

Zosterops gouldi. Grey-backed White-eye.—Extremely common on Dirk Hartog, and only less so on Peron. It was nesting in a variety of situations. Young were on the wing in the middle of June, and the species was still breeding at the end of September.

Dicaeum hirundinaceum. Mistletoe-Bird.—On my first visit to Dirk Hartog Island I saw one or two birds near the homestead. Mr. Carter records it as well. I saw nothing of it on Peron Peninsula, though mistletoe there was plentiful enough.

Glyciphila albifrons. White-fronted Honey-eater.—Mr. Carter observed a few in the mangroves on Peron.

Stigmatops ocellaris. Brown Honey-eater.—A few singing in dwarf eucalypts in the ram paddock on Dirk Hartog, and a pair at the Eight-mile well. On Peron only seen near the Little Lagoon.

Ptilotis sonora. Singing Honey-eater.—One of the commonest and certainly the most obtrusive bird both on Dirk Hartog and Peron Peninsula. It was nesting in both localities, large *Acacia* bushes being the favourite haunt. It is stated that the type specimen was obtained by the *Uranie* expedition in 1818.

Acanthogenys flavacanthus. Western Spiny-cheeked Honey-eater.—Mr. Carter records two on Peron Peninsula.

Anthus australis. Pipit or Ground-Lark.—Distributed all over Dirk Hartog Island. Young were on the wing when I landed, middle of June. I found nests containing both young and eggs during the season. Two nests near my camp were swamped out by the heavy falls of rain in August (see also Campbell, *Emu*, xviii., p. 264).

Tæniopygia castanotis. Chestnut-cared Finch.—I did not see much of this species either on Dirk Hartog or Peron, perhaps owing to its being the breeding season, when the flocks break up. I found a typical nest, containing four eggs, near the West well.

DESCRIPTION OF NEW AUSTRALIAN EGGS COLLECTED BY F. LAWSON WHITLOCK, R.A.O.U., AT DIRK HARTOG ISLAND, WESTERN AUSTRALIA.

By H. L. WHITE, M.B.O.U., R.A.O.U.

Malurus leucopterus, Quoy and Gaimard. Black-and-White Wren-Warbler.

Nest.—Strongly constructed, of the usual *Malurus* shape, domed, with side entrance near top; length about 5 inches, breadth about $2\frac{3}{4}$ inches; entrance hole, $1\frac{1}{2}$ inches in diameter; depth inside, below entrance, $2\frac{1}{2}$ inches; constructed of very fine dried grass matted together with spiders' web, cocoons, and small



Nest of Black-and-White Wren Warbler (*Malurus leucopterus*).



Nest of the Emu-Wren (*Stipiturus malachurus hartogi*).

PHOTOS. BY F. L. WHITLOCK, R.A.O.U.

pieces of wool, lined with pieces of fine grass, cocoons, and wool. One nest contained, both outside and inside, several coarse pieces of spinifex (*Triodia*) flower-stems.

Eggs.—Usually three, sometimes four, to clutch; shell very fine, with little gloss; ground colour white. In the matter of coloured markings they present remarkable variation, and the selection of a type is difficult. Some clutches (the majority) are marked all over, but more particularly at the larger end, with small dots and splashes of pale reddish-brown; others have a well-defined zone of brighter-coloured markings; a third variety has a cap of markings which run into one another and give a blotched appearance; a fourth variety—and the most beautiful—is boldly marked all over with large spots of bright brownish-red.

The type is more difficult to select than was the case with *Malurus leucoplerus edouardi* (Campbell) from Barrow Island, described by me in *The Emu*, xviii., p. 127 (by the way, the page in question is wrongly marked "vol. xvii., 1917"). The Dirk Hartog eggs are more heavily marked, and I have seen no pure white specimens; they are also narrower ovals. I have selected as type a clutch of four eggs marked as first mentioned above—viz., with small dots and splashes.

Dimensions in inches—(a) .61 x .44, (b) .61 x .42, (c) .6 x .41, (d) .61 x .41. Taken by F. L. Whitlock, 27th August, 1920. Nest very hard to see and get at, in a prickly *Hakea* bush.

Comparison between Barrow Island and Dirk Hartog nests and eggs:—

Nest	6" x 3"	5" x 2½"
Eggs (type set average)57 x .45	.61 x .42

It will be noted that the Dirk Hartog Island bird builds a smaller nest, but lays a longer and narrower egg. Two of the Dirk Hartog nests contained each an egg of the Western Narrow-billed Bronze-Cuckoo (*Chalcococcyx basalis wyndhami*), one of them being the most heavily-marked specimen I have seen.

Stipiturus malachurus hartogi, Carter (*Bull. B.O.U.*, xxxvii., p. 6: *This*, 1917, plate II).

Nest.—Ill-made, dome-shaped, with side entrance near top, constructed of dead grass, shreds of grass, and bark, matted together with spider's web, cocoons, and sheep's wool, with slight lining of cocoons and wool; average size about 4 x 2½ inches; generally placed low down in a bush.

Eggs.—Usually three in number, stout oval in shape, shell slightly glossy; colour white, with light brownish-red splashes all over, but more plentiful at the larger end, where in some cases they form a well-defined cap.

Dimensions in inches of type clutch:—(a) .61 x .44, (b) .6 x .44, (c) .6 x .44: co-type—(a) .6 x .46, (b) .6 x .46, (c) .6 x .46. Taken 10th August, 1920.

There is considerable similarity between eggs of this bird and

some of those of *Malurus leucopterus*; but the smaller size of the nest and stouter shape of the Emu-Wren's eggs enable them to be readily separated by the collector.

Calamanthus campestris hartogi, Carter (*Bull. B.O.C.*, xxxvii., p. 6), or **Calamanthus campestris dorrei**, Mathews.

Nest.—Dome-shaped, with entrance very near the top, size 5 inches by 3 inches, substantially built of pieces of dried grass and herbage; lined with much finer shreds of the same materials; placed on the ground under shelter of a low bush.

Eggs.—Clutch three; shell smooth and glossy; ground colour pale chocolate-brown, with indistinct darker markings of the same colour all over the shell, but forming a cap at the larger end; they approach closely in shade to the eggs of *Calamanthus fuliginosus*. Taken 28th June, 1920.

Dimensions in inches:—(a) .78 x .58, (b) .76 x .55, (c) .77 x .58.

With the exception of those of *Calamanthus isabellinus*, these are the smallest eggs of the genus represented in my collection.

Corvus bennetti bonhoti, Mathews.

Nest.—A substantial structure of sticks lined with bark, and placed low down in a dwarf eucalypt.

Eggs.—Clutch six originally (one found broken in nest), of the light-coloured variety of *Corvus bennetti* eggs of Western New South Wales, the five specimens being fairly uniform in shade.

Dimensions in inches:—(a) 1.65 x 1.07, (b) 1.71 x 1.11, (c) 1.68 x 1.11, (d) 1.63 x 1.08, (e) 1.64 x 1.08. Taken 5th August, 1920.

Two other clutches of five and four eggs respectively, taken from a nest built on a windmill stand (see illustration), are slightly smaller than those described above, and are extremely irregular in colour, no two eggs resembling one another. Laid by the same bird and from the same nest; the clutches were taken 14th July and 6th August. A third clutch was allowed to hatch out.

The skins accompanying the eggs are evidently those of the Short-billed species. Mr. Carter calls the Dirk Hartog Crow *Corvus coronoides*, while Mr. Whitlock describes it simply as the "common Crow of the island."*

The two following may perhaps be considered doubtful sub-species:—

Oreoica cristata hoydi, Carter (*Ibis*, 1917, p. 608).

Nest. The usual substantial *Oreoica* type, placed low down in a large bush.

Eggs. Clutch four, taken 29th August, 1920: ground colour pale greenish-blue, thickly covered with small (almost circular) spots of brownish-black. Size in inches of an average specimen, 1.06 x .78.

* Recently (*Bull. B.O.C.*, xl., p. 76) Mr. G. M. Mathews has described this Crow as *C. cecilia hartogi*, comparing it with *C. c. maragli*. It would assist students better, perhaps, were new sub-species compared with typical birds, which are often more accessible than later named sub-species. —Eds.

Anthus australis hartogi, Carter (*Ibis*, 1917, p. 610).

Nest.—Found 11th August, 1920, well hidden under a spinifex (*Triodia*) bush.

Eggs. Clutch three, lighter in colour than others I have seen, and without gloss. Each measures in inches .84 x .61, and is smaller than typical eggs of the Pipit from Eastern Australia, though more pyriform in shape. They are slightly larger than eggs taken by Mr. Whitlock at Barrow Island, Western Australia.

OTHER SPECIES.

Other interesting eggs taken by Mr. Whitlock at Dirk Hartog Island are as follows:—

Demigretta sacra. Reef-Heron (dark grey variety).

Two eggs taken 7th August, 1920, from a nest composed of small sticks lined with a little soft material, placed in a cavernous hollow in a limestone cliff.

Burhinus grallarius (broomei), Mathews). Western Stone-Plover.

Two eggs taken 5th August, 1920, laid on bare sand between large stones of a limestone outcrop. The ground colour is light stone, with markings more distinct than usual.

Uroaetus audax (carteri). Western Wedge-tailed Eagle.

Pair of eggs taken 21st August, 1920, from a nest composed of sticks and lined with green leaves, placed on the spur of a precipitous cliff on the west side of the island, overlooking the Indian Ocean. This is probably the most western set of Australian Eagles' eggs on record; they are of average dimensions. One is heavily blotched with brownish-red at the smaller end; the other has a few markings of the same colour at the larger end only.

Cerchneis cenchroides (unicolor). Nankeen Kestrel.

Set of five very richly marked eggs taken 11th September, 1920, lying on bare sand in a cavity in a limestone headland on the west side of the island; probably a farthest west record for the Nankeen Kestrel.

Phalacrocorax hypoleucus, Brandt (*Hypoleucus varius perthi*).

Clutch of three eggs, which present no difference in shape or size from specimens obtained on other coasts of Australia. The birds were found breeding in a great colony on Quoin Bluff. The nests, made of small twigs, were placed on the remains of bushes growing on the slope of the cliffs. Thousands of young, in various stages of growth, were noted. Date, 19th August, 1920.

My collection contains a set of four eggs taken by Mr. Whitlock at Barrow Island, 25th August, 1918.

Sterna nereis, Gould (*Sternula nereis horni*, Mathews).

Clutch of two eggs taken 23rd September, 1920, on Peron Peninsula, laid in slight hollow in bare sand. Dimensions of an average-sized egg, 1.41 x .97.

In size, shape, and colour I notice no difference from typical eggs taken at Kangaroo Island, S.A.