The Eggs of Gymnorhina, spp.

By A. F. Basset Hull, R.A.O.U., Sydney.

The eggs of the Australian Magpie (*Gymnorhina*, spp.) exhibit a greater variation in colour and markings than those of any other bird. Although amongst the eggs of the Guillemots, Terns, and Gulls great variation is found in ground colour and markings, there is a general similarity in the type, the variation consisting largely in degree of intensity of ground colour or quantity and disposition of the markings. The eggs of the Magpie differ in actual colour, class and disposition of the markings, shape, and size. At the same time these differences are not local, or the result of food or environment, nor are they, except as to size, known to exist in the units of a clutch or the successive layings of an individual bird. In the case of the sea-birds marked differences often exist between the separate units of a clutch, or, where the bird usually lays only one egg for a sitting (*e.g.*, *Onychoprion fuliginosa*), and that egg is taken, the next laid varies markedly from the first. The Magpie, on the other hand, is consistent in that the units of a clutch are all of the same colour scheme, varying slightly only in the disposition of the markings and dimensions of the eggs, and the successive layings are of the same type. Further, the known extreme departures from the normal in the case of the sea-birds, such as the blue or red mutations of *Larus novæ-hollandiæ*, are very rare.

Taking No. 5 on the accompanying plate as a typical Magpie's egg, perhaps 50 per cent. are in this colour. The actual departures, not mere divergences from the type, are in overwhelmingly greater proportion than in the case of any other species.

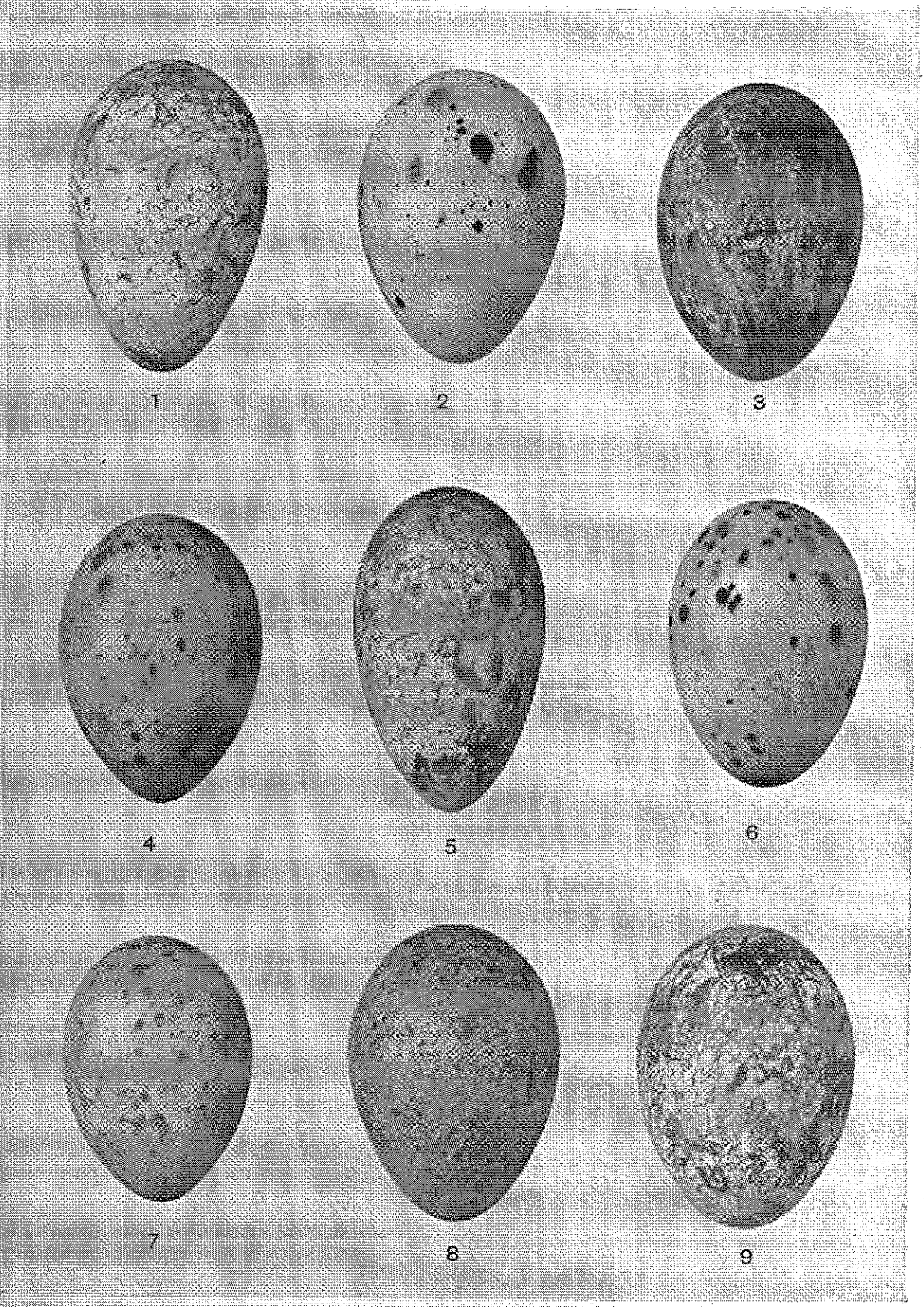
The plate, produced from the originals by the three-colour process, illustrates a unit from each of nine separate clutches of the Black-backed Magpie's eggs (*Gymnorhina tibicen*, Latham). While a much greater number of specimens showing marked variations from type could be illustrated, these nine very fairly represent the chief variations ordinarily found. Similar variations are common to the other species of the genus—*G. leuconota* (Gray), *G. organicum* (Gould), *G. dorsalis* (Campbell), and *G. longirostris* (Milligan).

Is the remarkable variation in these eggs evidence of the gradual evolution of a fixed type ?

I would invite observers to favour me, through this journal, with any interesting particulars relative to the eggs of this genus coming under their notice, and especially evidences of the persistence of a type in the successive layings of the one pair of birds.

The eggs shown on the accompanying plate, presented to the readers of *The Emu* by Mr. H. L. White, of Belltrees, form units of the following clutches :—

1, +4, laid in captivity at Manly, N.S.W.
2, +3, taken at Burrenbilla, Q.



Eggs of *Gymnorhina tibicen* (Latham).

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3, +3, taken at Barnato station, near Cobar, N.S.W.
4, +4, taken at Cobbora, N.S.W.
5, +3, taken at Orange, N.S.W.
6, +4, taken at Cobbora, N.S.W.
7, +4, taken at Barnato station, near Cobar, N.S.W.
8, +4, taken at Orange, N.S.W.
9, +4, taken at Cobbora, N.S.W.

Field Ornithology in South Australia.

BY (CAPT.) S. A. WHITE, M.B.O.U., R.A.O.U., ADELAIDE.

THE GAWLER RANGES.

FOR many years the Gawler Range, with its strangely-formed hills, which start immediately to the west of Port Augusta and extend in a westerly direction for about 200 miles, has been a district of great interest to the ornithologist.

The late Mr. Stephen Hack was the first to explore this country, and after him Mr. Josiah Bonnin, at the head of a small party, traversed these ranges, and rode out beyond them to the west in 1862. The journal written by this gentleman was published in the "Proceedings of the Royal Geographical Society of Australasia (S.A. Branch)," vol. x., 1907–8. The account is very interesting, for Mr. Bonnin, being a very observant man, mentions the birds seen by his party. The first ornithologist, as far as I am aware, to work this country was, however, the late Mr. J. F. Andrews, who was one of my late father's collectors during his memorable voyage to New Guinea in 1880. Andrews made his headquarters at Nonning, and worked out from there into the spinifex-clad ranges. Seeing that he had to tramp nearly 200 miles from Port Augusta, carrying a pack, before reaching his headquarters, it can be understood that his work must have been sorely handicapped. Through the courtesy of Mr. Robert Zietz, Ornithologist to the Adelaide Museum, I have been able to read letters written by Andrews to the late Mr. Waterhouse (first Curator of the South Australian Institute). Andrews addressed his letters from Port Augusta, and states having sent on, amongst other birds, the skins of the Night-Parrot (*Geopsittacus occidentalis*), and for a trifling sum per skin. Evidently these birds were much more numerous then than they are now. In 1902 Drs. A. M. Morgan and A. Chenery, M.'s R.A.O.U., made an expedition into these ranges, but were retarded much in their collecting work by a severe drought then existing, which eventually drove them back.*

Eventually, on the morning of 22nd August, 1912, my wife and I started out from Port Augusta with high hopes. Our four-horse team, with driver and black boy, crossed the head of Spencer Gulf in the punt, and we were soon on the track, taking a southerly

* A small but very interesting collection of bird-skins was made by Dr. Morgan, and is now to be seen in the Adelaide Museum.