

could perceive no pleasanter sight than a clutch of these Geese with their goslings. I feed my birds on hot bran and pollard-mash in the morning and wheat in the afternoon. They also get, of course, as much green stuff as they like, this being their natural food. It is a pity that the public cannot see a family of this species at the zoo, when they are so easy to breed.

The Belltrees Oological Collection.

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TAKING advantage of the R.A.O.U. holding its Annual Meeting in New South Wales, and by the kind permission of Mr. H. L. White, I had an opportunity of viewing the progress of this celebrated collection.

The collection is enclosed in one large cabinet, $8\frac{1}{4}$ feet in length, 4 feet in breadth, and $4\frac{1}{2}$ feet in height, and is built of Queensland maple (*Flindersia oxleyana*), which under the polishers' art is yellow ochre in colour, beautifully mottled and striped mahogany red. There are eight divisions (four on each side back to back) which in all contain 137 drawers, $22\frac{1}{2} \times 19$ inches in dimensions, graduated from $1\frac{1}{2}$ inches to $5\frac{1}{2}$ inches in depth. The knobs of the drawers are made of yarrem wattle (*Acacia homalophylla*, native to the Belltrees estate), and when polished are nearly as hard and black as ebony.

Time and space utterly fail to explain all the unique and valuable specimens among the thousands of clutches, but a general and brief sketch may be given of the Cuckoos. There are about 600 "combined clutches"; i.e., sets containing both eggs of the foster-parent and of the Cuckoos, which are among the most interesting of wonderful exhibits.

All Australian Cuckoos have not been observed methodically hatched from the fosterer's nest; therefore there is necessarily some uncertainty about the parentage of the strange egg in many cases, although from circumstantial evidence, or by analogy, it is possible that the proper parent has been correctly named.

Both Mr. White and his painstaking assistant, Mr. S. W. Jackson, are to be commended for the excellent and artistic arrangement of the specimens. Each clutch has its own history, more or less elaborate, written in a special reference book. The following is an example:—"The only Bronze Cuckoo I have seen here (Cardwell) is *L. russatus*. One was clinging to the nest of *Gerygone magnirostris* in which was a freshly deposited egg of a Cuckoo, and later I obtained a young bird being fed by a *Gerygone*. I consider there is not a shadow of a doubt that *russatus* lays a green (bronze or olive) egg, and that the egg already sent in the set of *Gerygone magnirostris* belongs to that bird (Cuckoo)—H. GREENSILL BARNARD, 4/12/25."

It would appear that four of the small Bronze Cuckoos all lay uniform olive, or bronze-coloured, eggs. Some degree of certainty may be narrowed to *L. plagosus*. Two others (*L. russatus* and *L.*

minutillus) are northern species and not so well known, while it is probable that the New Zealand migrant (*L. lucidus*) does not lay in Australia.

The Narrow-billed Bronze Cuckoo (*Chalcites basalis*), which is of a different genus to the others, lays a white egg, red-speckled. Considering the numerous fosterers it is, in general resemblance to most of those of the fosterers, noticeably so in the *Acanthizæ* and *Maluri*. However, this light-coloured egg is a striking contrast with the dark olive egg, say, of *L. plagosus*, which egg is often found in the same nest with the speckled egg of *basalis*.

Among the 10 or 12 species of Australian parasitical Cuckoos it is difficult to propound any scheme of "natural selection." In many cases (14 in the collection) the same species of fosterer has been imposed upon by no less than five different species of Cuckoos. However, the field can be narrowed in the case of the Black-eared Cuckoo (*Mesocallius* (= *Owenavis*) *osculans*). In every case of the four "selections" its egg is almost identical with that of the fosterer.

With the Koel (*Eudynamis orientalis*) the assimilation is especially good, particularly with the Friar-Birds (*Philemon*). With a clutch (3) of Orioles (*O. sagittatus*) eggs, the Koel's egg is darker like the fosterers, while in a clutch (2) of Victoria Rifle-Bird's eggs, the Koel's egg has large blotches and the same tone as on the fosterer's.

The egg of the great Channel-billed Cuckoo (*Scythrops*) in a remarkable degree resembles that of a favoured fosterer, the Pied Currawong (*Strepera graculina*).

In the Pallid Cuckoo (*C. pallidus*) assimilation in general is good, particularly as regards the Honey-eaters, but is strongly opposed, both in colour and size, in such cases as the Shrike-Thrush (*Colluricincla*), Cuckoo-Shrike (*Coracina*), and Oriole. In 120 sets in the Belltrees Collection 35% of the strange pinkish eggs are more or less slightly spotted here and there over the surface.

Both as regards colouration and size the most striking exceptions of the Fantailed Cuckoo (*C. flabelliformis*) are in the cases with dark eggs, notably the Pilot-Bird (*Pycnoptilus*), Shy Ground-Wren (*Hylacola cauta*), Field-Wren (*Calamanthus fuliginosus*), Redthroat (*Pyrholaemus*), &c. But it will be noted that all these nests are domed or covered in.

If there be a semblance of "clans" in the "selection" of fosterers, by the Cuckoo (or *vice versa*), it is more strongly suggested in the ample series of different fosterer clutches containing the egg of the Brush, or Square-tailed, Cuckoo (*C. pyrrhophanus*). This Cuckoo lays in a wide range of habitat. Excepting "accidentals" the clans may be divided into three:—

(1) Fosterers, Robins the most numerous, with the ordinary type of the Cuckoo.

(2) Fosterers with Flycatcher type (toned like *Rhipidura*) of the Cuckoo. These are chiefly seen in the north-western habitat.

(3) Fosterers with the lightest type (white with few spots) of Cuckoo and often indistinguishable from those eggs of a Honey-eater (*Gliciphila modesta*), one of the fosterers.