

Cuckoo Eggs.

—By J. Neil McGilp.—

Sericornis maculata (Spotted Scrub-Wren), with eggs of *Cacomantis flabelliformis* (Fantailed Cuckoo) and *Chalcococcyx basalis* (Narrow-billed Bronze Cuckoo).

Until Mr. J. W. Mellor recorded finding the egg of the Fantailed Cuckoo with *Acanthiza pusilla* on October 10th, 1913, some doubt existed amongst ornithologists as to whether it bred here or merely passed through South Australia on its way to the eastern States, where it is known to breed freely. Mr. Mellor's observation was not followed up by other similar records until, on August 13th, 1921, the writer found an egg of this Cuckoo in a nest of *Sericornis maculata* at the Grange, a few miles west of Adelaide.

With a view of following up this observation, the writer paid several visits to the Grange in August, 1922. On August 31st three nests containing eggs of the Fantailed Cuckoo and one nest containing an egg of the Narrow-billed Bronze Cuckoo, one egg of Fantailed Cuckoo, together with one egg of *Sericornis maculata* were found. From this date until

September 30th other visits were paid to the locality, and a further twelve nests of *Sericornis maculata* were found; eight of these nests contained either Fantailed or Narrow-billed Bronze Cuckoo eggs. So that practically during September, 1922, sixteen nests of this *Sericornis* were inspected, and twelve of these nests contained Cuckoo eggs! During the same period five nests containing young were found, in each instance the occupants being Cuckoos, three young Fantailed Cuckoos, and two young of the Narrow-billed Cuckoo. Not any young of *Sericornis* were noted. Under the nests containing young Cuckoos the eggs, almost hatching, of the foster-parents were found—two eggs under two of the nests and but a single egg under the other three nests. In no instance could any trace of an egg or eggs of the foster-parents be found under a nest containing the eggs of foster-parents together with the Cuckoo's egg. The writer is therefore unable to state that the ejection of foster-parents' egg or eggs took place, more especially as the *Sericornis* lays two eggs to the set as often as the full complement of three eggs. Mr. F. E. Parsons, however, took an egg of each Cuckoo from a *Sericornis* nest without any foster-parents' eggs, and both were incubating. This rather indicates that the foster-parents' eggs were ejected.

Close examination is well-nigh impossible with *Sericornis maculata*, for it deserted every nest that the writer touched when examining the contents. Its nest is a compact dome-shaped structure, outwardly composed of strips of bark and skeleton leaves, and it is often decorated on the outside with spiders' cocoons; the inner walls are composed of a dried greenish scum from the ground from which water has dried back, and the nest is finally snugly lined with soft feathers, chiefly of the species which are numerous in this restricted locality. A slight hood projects over the nicely-rounded entrance. The measurements of an average nest are—Height over all, $5\frac{1}{2}$ in.; width over all, $3\frac{3}{4}$ in.; entrance, 1 in. diameter, but varies considerably according to situations chosen as nesting sites.

Several nests containing Cuckoo eggs had the appearance of having the hood well pushed back, and one nest had the entrance much enlarged and disorderly, as if the Cuckoo had interfered with the structure when depositing its egg. In one particular nest the entrance was so protected by a crossed fork of the Titree branch that a Fantailed Cuckoo could not possibly reach the entrance except with its head and neck—

further evidence that the Cuckoo egg in the nest was deposited with the aid of the Fantailed Cuckoo's bill.

The incubation of the Cuckoo's egg is puzzling. With one exception, when the foster-parents' eggs showed signs of incubating the egg of the Cuckoo was of a greater incubation, the exception being the fresh egg of a Fantailed Cuckoo with the foster-parents, about one-third of the incubation stage. Several nests contained fresh eggs of both Cuckoo and foster-parent. In the nest containing an egg of each mentioned Cuckoo and an egg of foster-parent, the incubation of the Fantailed Cuckoo was well defined, that of the Narrow-billed Cuckoo slightly bloodstained internally, while the *Sericornis* showed no signs of incubation. No instance was noted where the *Sericornis* had covered the foreign egg with nesting or lining material, as is, of course, often noted with *Malurus cyaneus*. Nests of *Sericornis* were found as high as 12 feet from the ground, placed in fork of Titree, and so low as to almost touch the ground. A Cuckoo egg was found in a nest as high up as 7 feet from the ground, but generally the Cuckoo deposited its egg in the lower nests in the fallen branches of Titree, or in the Samphire which grows thickly on the flooded ground.

The writer, from observations made, is almost positive that the period of incubation of the egg of the Cuckoo is of shorter duration than the time necessary for the hatching out of the egg of the *Sericornis*. This, of course, is not surprising in the smaller egg of the Narrow-billed Bronze Cuckoo, but hard to understand when the larger egg of the Fantailed Cuckoo is considered.

It is to be hoped that many of the interesting problems in connection with the Cuckoo will be studied by our ornithologists, for very little has yet been done.
