

Nesting of the Brown Weebill (*Smicrornis brevirostris*)

By J. NEIL McGILP, King's Park, South Australia

Having a considerable experience with this very small bird and its nesting habits I wish to support Mr. F. L. Whitlock in his contention that the Weebill does not always commence building operations by constructing a cup-shaped structure and then adding the top or dome to the home as it is reported to do in the eastern states by several writers. Mr. J. A. Ross, in his Presidential Address (*The Emu*, Vol. xxv), first directed my attention to this, to me, very unusual characteristic, and I have since paid close attention to every Weebill's nest observed in several parts of South Australia.

From observations it appears that the species begins laying the foundation of its home in "any old way," being greatly influenced by the position in which it has been decided to build. I have on two occasions seen the nest started by the formation of a cup at the bottom—both nests were being built amid a cluster of upright eucalypt twigs. The cup was unusually deep, being carried well up so that the dome or hood over the nest was made by stretching the material from one side of the cup to the other side. The dome was not supported in any way.

All manner of "starts" of a nest have been noted. One nest was at first taken to be that of *Acanthiza lineata* in that only a few very fine, long shreds of bark were seen to hang from a single fine twig. Three or four of the shreds had been carried up over the twig a second time, thus forming loops. A few days later the birds were at work and the top or dome of the nest was nearing completion, but there was only the skeleton of the bottom of the nest. When completed the nest did not have any other support but the single twig on top. Another nest was constructed entirely of green plant stems and cocoons, and lined with feathers. This nest was supported by several green gum leaves which were woven into the nest. Still another nest was constructed well down in a substantial fork and four or five supporting twigs were worked in with the nesting material. Once I found a few small strands of grass woven inside of a four-pronged twig of a wattle tree: this "start" turned out to be the back of the nest. Some nests have a single or, at most, two supports, and simply hang more or less in the open, others are seen amidst a clump of pendent leaves and are usually supported at many angles. I have had literally to tear half a dozen leaves apart to examine a nest, the only portion visible being the entrance hole.

The little birds are good weavers, for the nest is often surprisingly strong, more especially around the entrance

which is invariably nearly at the top of the nest. Much decoration is frequently resorted to—spiders' cocoons and small flower-heads being principally used for such purpose, as well as used in actual construction of the frame of the nest. A great quantity of feathers and flower-pods is used to line the nest. I have in mind a beautiful nest hanging in a drooping branchlet of a gum tree. Outwardly the nest was practically covered with spiders' cocoons, and it was lined entirely with the small, soft, pink feathers from a Galah. The nest looked like a pink-lined jewel case. Truly the owners were born artists. I have on many occasions found that the Weebill will continue to take lining material into its nest after eggs have been laid. I have a record of a pair of birds completing a nest eleven days after I noticed one of them carrying almost the first fine tendril for its nest and sixteen days later there were three tiny babies in the home.

The nests vary in size according to situation. The smallest I have seen was $2\frac{3}{8}$ inches diameter across the egg cavity externally, $3\frac{1}{4}$ inches in height, with a well-formed entrance of exactly 1 inch in diameter. The largest I have measured was 3 inches across and nearly 4 inches high. In every instance the diameter of the entrance was practically 1 inch. Feathers are sometimes worked into the weaving of the shell of the nest, but that is not usual here. Lichen is frequently attached, but only in small quantities, to the outside of the nest.

The Weebill lays two or three, occasionally four, eggs in a sitting. The eggs vary a great deal, ranging from light stone to a dark stone colour, the markings of dark umber or slate colour usually being finely distributed all over the shell. Other eggs have the markings more definite towards the larger end, often forming a distinct band or zone. Odd eggs have a well-defined cap of darker colour at the larger end. I have seen rare sets where the ground colour was light cream, which was but very faintly dappled here and there with darker shades of cream. The eggs vary also in size, some being of a very rounded appearance, others having well-pointed small ends. The largest eggs I have measured were just over 0.60 inch in length and 0.45 inch through the shorter axis: the smallest egg was as near as possible 0.50 inch by 0.40 inch across. The eggs are unusually strong in relation to their size, probably because the nest is often so situated that it swings a good deal in high winds and very fragile eggs would very likely come to grief. There is little if any lustre on the shell.

I have twice taken an egg of the Narrow-billed Bronze Cuckoo from the nest of the Brown Weebill and wondered how the egg was placed there. Two foster-parents' eggs formed the clutch in both instances.

At nesting time the birds have a very pretty song, very different from the loud, almost harsh note usually heard from them.

The Weebill is a very close sitter after the incubation of the eggs has proceeded a few days and the nest has often to be shaken to disturb the sitting bird which, after a few seconds, quickly returns to its home duties.

Care is necessary when inspecting the nest as the little birds do not like close inspection when the nest is in the initial stages. After the eggs have been laid, however, the birds rarely desert their home unless it is roughly interfered with.

Last year near the Happy Valley Reservoir in the Mt. Lofty foothills I found my lowest nest. It was built in a small sapling stringybark gum at a height of 2 feet 8 inches from the ground. It contained three eggs, which were hatched out a week later. Nests are to be found at almost any height. I remember seeing birds attending a nest that must have been 40 feet up, but usually they nest fairly close to the ground.

I have noted the eggs of the Weebill in every month of the year either in the interior of the state or in the Mt. Lofty Ranges and the Mallee, but in the certain rainfall areas breeding extends from August to December. The young birds leave the nest in the adult plumage plus a few downy feathers; they return to roost in their cradle for several days after taking to the wing.

While the Weebill appears to prefer the eucalypts as a nesting site I have seen nests in *Acacia*, pine, tea-tree, and a furze bush.

Lagoons and Bird Protection

By SPENCER ROBERTS, Toowoomba, Queensland

After leaving the high country of the Great Dividing Range the streams which eventually form the Darling-Murray meander through the flat country of our great pastoral areas. Often they are sleepy creeks and small rivers, required at times suddenly to carry so much water that they quickly spread to great widths, rapidly receding later. As characteristic as the streams are the lagoons and billabongs found alongside their courses. These are in normal times sparkling sheets of open water, still, without current, and practically permanent. They are not swamps with tangled masses of reeds and rushes hiding the water and quickly drying into a hard clay pitted by hoof-marks of stock; nor rushing streams at one time and boggy water-holes at another. Although subject to flooding and a natural