

fulvifrons), and the White-bearded Honey-cater (*Meliornis novæ-hollandiæ*).

In conclusion, I would refer readers to Mr. F. E. Howe's extremely interesting article on the genus *Hylacola* appearing in *The Emu*, vol. xvii., part 2, page 87, which deals exhaustively with the descriptive and taxonomic aspects, and also vol. xviii., part 1, page 59, for a description of a new sub-species.

Bell-Birds and Caterpillars.

BY A. H. CHISHOLM, R.A.O.U.

IN a recent number of *The Emu* * I recorded some observations on the strangely persistent habit displayed by the Crested Bell-Bird (*Oreoica cristata*) of stocking its nest with hairy caterpillars. I am rather sorry now, in view of the puzzling nature of this practice, that I did not devote more attention to the matter when the opportunity offered during my residence in Victoria. There are no Bell-Birds at all near Brisbane, and I doubt whether there ever have been.

However, when visiting my old district of Maryborough (Vic.) in November last, I made a point of looking for nests of *Oreoica*, and was fortunate enough to find a fine example built into the top of a stump, right alongside a bush road, at a height of about 3 feet. Incidentally, a pair of Shrike-Tits (*Falcunculus frontatus*), which species appears to me to be an arboreal edition of *Oreoica*, and a pair of Shrike-Robins (*Eopsaltria australis*), were weaving their respective dainty homes close by, and in a favourite old orchard a few hundred yards away half a dozen other species were nesting. The Bell-Birds' nest contained four eggs—one more to the clutch than I have usually found—and, sure enough, there was the customary weird assortment of caterpillars. The positions and condition of these larvæ tallied with what has been recorded in previous cases. Some were on the rim of the nest, and others were among the eggs; some were dead, and the rest appeared to be either torpid or very sluggish. As it was too late to do any photographic work that day, I contented myself with the mild experiment of removing practically the whole of the caterpillars. Two days later the nest contained approximately the same number of larvæ, all of which were apparently alive. An attempt made then to photograph either of the wary birds at the nest was unsuccessful; they stayed away too long, and I had to be satisfied with the accompanying picture of the nest and eggs.

The caterpillars thus collected I brought back to Brisbane and submitted to the Government Entomologist (Mr. Henry Tryon), who has favoured me with the following report thereon:—"The caterpillars submitted by you, as obtained from a nest of *Oreoica*

* Vol. xviii., p. 75.

cristata, are examples of three distinct kinds—viz., (1) Kershaw's Painted Lady (*Pyrameis kershawi*), three specimens; (2) *Teara*, sp. (related to *Teara tetropis*, the white cedar moth), three specimens; (3) *Agalosoma*, sp. (related to *A. lauta*, Scott), three specimens. The two last-mentioned kinds of caterpillars evidently are members of the family *Lymantriidæ*. No. 3 is separated from No. 2 in having the head glabrous. The butterfly caterpillars (1) were evidently transferred to the nest by one of the birds, the specimens being flattened throughout their entire



Nest and Eggs *in situ* of the Crested Bell-Bird (*Oreoica cristata*).

FROM A PHOTO. BY A. H. CHISHOLM, R.A.O.U., BRISBANE.

length, suggestive of compression by a bird's beak. The hairy caterpillars (2 and 3) may have been similarly conveyed, but exhibit no marks of injury. Both insects are nocturnal in their habits, and during the day remain congregated in some place of concealment. A bird's nest occurring in a tree where these caterpillars fed would afford the necessary shelter, but arguments might be available to dispose of this possible explanation of their occurrence where met with. I merely mention this point, and do not advance it as an adequate explanation of the presence of the larvæ in the Bell-Birds' nest."

Of course, the fact that caterpillars always occur in Bell-Birds' nests, and not in kindred nests, such as that of the Grey Thrush (*Colluricincla harmonica*), disposes of the suggestion that the birds are not responsible for their presence. Moreover, I have seen a male Bell-Bird carrying a hairy caterpillar both to and from a nest. Mr. Tryon's remarks on the compressed state of some of the specimens submitted lead one to wonder whether the bird squeezes the juices out of the soft body. If so, however, why are the remains not discarded? All points considered, it seems to me that we need much more definite evidence than has so far been adduced before we can accept the rather superficial theory that the Bell-Birds collect these caterpillars for food.

The Singing Honey-eater (*Ptilotis sonora*).

BY JOHN G. MANN, FRANKSTON (VIC.)

SOME remarks in Mr. F. C. Morse's "Nesting Notes from Moree" in last July number of *The Emu* relative to *Ptilotis sonora* lead me to think that possibly he, and others, may be interested to hear my experience of a pair of these birds, indicative of their intelligence and power of memory.

Surrounding my house near Frankston, Victoria, are a few acres of tea-tree and heath scrub, which I maintain as a bird sanctuary, and where I have succeeded in taming many members of several species of the numerous birds which frequent it, until they will come from the bush at call and take food from my hand.

Although there are always considerable numbers of Honey-eaters, such as White-eared, Lunulated, New Holland, Spinebills, and occasionally Wattle-Birds, I have never seen here but the one pair of Singing Honey-eaters. These were first noticed in the spring of 1916, when they built close to the house, and before long became sufficiently tame to come to the verandah for crumbs. By the middle of November, 1916, their two young ones were brought there also, and were fed by the mother bird with crumbs and sugar from my hand. When the young ones, however, were in full plumage, and able to care for themselves, the mother changed her tactics and began persistently to drive them away, until at length they left the neighbourhood for good. Then (in January, 1917) she built another nest in a *Leptospermum* tree adjoining that in which the first nest was made, and in due course reared another pair of young. All this time not a day passed but she came to me whenever I was near by, settled on my arm or hand, and even allowed me to stroke her. The male bird, though fairly tame, never showed quite the same confidence. When their second family was of mature growth it was driven out of bounds, like the first, and disappeared. During the second week in April, 1917, the old birds also disappeared, and nothing more was seen of them for months. On 14th September, how-