## The Call-notes of the Mallee-Fowl

By Roy P. Cooper

Although there have been many observations published on the call-notes of the Mallee-Fowl, Leipoa ocellata, it would appear that the reason for these calls is still not fully understood.

The third edition of Cayley (1963) states "The call-notes are a throaty gurgling and a deep booming", but makes no mention of

a third type of call.

Frith (1962) quotes three distinct types of notes. "When working or feeding together the birds have a low pitched, quavering note; it is audible for only a few feet, and few people have been so close to an undisturbed mallee-fowl. It can only be described as conversation, and presumably the birds do it to reassure one another" (p. 72). "The alarm note is a grunt, which varies in volume according to the degree of alarm. If a bird has had only a minor fright from the sudden thump of a Kangaroo or the sound of a falling branch, it raises its head and gives a soft and enquiring grunt. If suddenly and seriously alarmed the bird grunts loudly and sharply" (p. 64).

The third type of call quoted by Frith is the "territorial" call. This "call consists of three very loud booming notes, which together are reminiscent of the bellow of a bull. . . . He breaks off and performs his booming parade without warning and with no

apparent cause, ignored by the female" (p. 78).

Tarr (1965) describes the grunting noise and the loud booming call. However, he indicates by his further observations that the latter call is not confined to expressing territorial claims only, but that it is a part of the mating ceremony. He states: "The call was uttered as the male met the female about 15 yards from the mound. Shortly afterwards... the male bird again gave this call... and then ran to the female and mating occurred".

On another occasion a description is given of the performance of the male when he is uttering the booming call, which was fol-

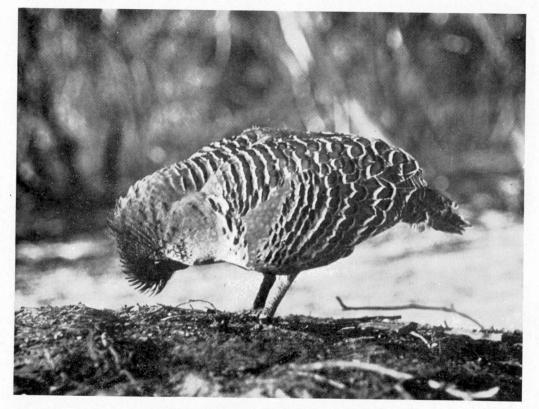
lowed by mating with the female.

Several years ago I spent much time in a hide that was placed within a few feet of the mound of a Mallee-Fowl.

The birds performed the duties of opening up and closing the mound, depending on the weather conditions; the testing of the temperature in the mound by the insertion of the bill; the raising or lowering of the overburden above the egg-chamber; and all the duties associated with the incubation of the eggs.

Throughout this period the birds were heard to utter a number of notes. The low pitched, quavering notes, although very soft, were clearly heard in the hide, and it appeared that the purpose of these notes was to converse with each other, or "to reassure one another".

The second call was the "grunting" note, which certainly varied in volume, depending on the need for the call. However, from my



Male Mallee-fowl in "booming" position.

position within the small hide it was not possible for me to ascertain the cause for the call being uttered. As far as could be ascertained this type of call had no connection with the female, and it was confined to matters of disturbance or alarm.

The loud, booming call was heard once only. The egg-chamber had been opened up, the female had tested the temperature with her bill and tongue, and had finally laid an egg. While these activities were taking place the male had stood quietly on the edge of the mound, watching the proceedings closely.

Resting for a few moments after the laying of the egg, the female then sprang to the lip of the mound and quietly walked for

a few yards to the edge of the trees.

The male watched the female, without making any sound, until she commenced to leave the mound and then he begun to raise himself slowly upright, fluffing out the feathers around the neck, and faced towards the female. With slow deliberation he bent his head downward and backwards towards his legs, and finally rested it against his body, near the breastbone. At the same time the neck was greatly inflated, with all the feathers on it raised.

With an outward expulsion of the breath he uttered a single loud booming note, which Frith vividly describes as "reminiscent of the bellow of a bull". He then raised his head towards the horizontal and refilled his lungs and neck with air. Placing his head under his body again he uttered a second boom, and then repeated the procedure until he had given four booms.

Assuming the ordinary stance the male bird showed no further interest in the display or the call, but proceeded to fill in the eggchamber and the mound. Before he had progressed very far he was joined by the female, who stood on the side of the mound and

gently scratched some sand into the mound.

Before the booming notes were uttered the male appeared to devote his full attention to the female. He was not seen to move his head in any direction that would indicate that he had heard something that would cause him, subsequently, to defend his territory by the uttering of the call.

His entire manner, both before and after the display, indicated that his action was connected with the laying of the egg and was

part of the mating display.

It would appear that the loud booming call, and the associated display stance, is used in the overall mating ceremony, as well as in territorial defence.

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