

I am grateful to Clifford D. Frith for examining this paper and suggesting improvements to its presentation.

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(Ubaigubi Lodge is not currently open to the public. Ed.)

## DISPLAY OF THE GLOSSY-MANTLED MANUCODE *MANUCODIA ATRA*

NIKLAS WAHLBERG

At 08:00 on 3 January 1989 I briefly observed a displaying Glossy-mantled Manucode *Manucodia atra* near Tufi, Northern Province. The bird was in the crown of a tall tree, in a clump of forest amidst wet savanna. The characteristic call of the Glossy-mantled Manucode had been heard earlier and was used to locate the bird. The view of the bird in display was partly obscured by foliage but the following was noted. The presumed male threw its wings forward, so that the wings were level with its head, and then produced its long monotonous whistle. A higher pitched whistle was then heard and I realised another bird (presumed to be female) had answered the displaying male. This all happened in about 15 seconds. The performance was repeated and then the birds flew off, with a third previously unnoticed bird.

This display has apparently not been described before (Cooper & Forshaw 1977; Gilliard 1969). Descriptions of the Glossy-mantled Manucode display say the wings are only partially spread and shaken along with the tail. Perhaps this is only part of the display, continuing with what I observed.

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## VARIATION IN THE DISPLAY OF THE MAGNIFICENT RIFLEBIRD *PTILORIS MAGNIFICUS*

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The basic courting display and some variations of the display of Magnificent Riflebird have been described several times (Selous 1927; Crandall & Leister 1937; Crandall 1938; Gilliard 1969; Diamond 1972; Coates 1973; Cooper & Forshaw 1977). The known displays of the Magnificent Riflebird are summarised in Cooper & Forshaw (1977), Gilliard (1969) and Coates (1973). The displays described by Selous, Crandall & Leister and Crandall were given by solitary caged males. This is important as the following descriptions show that contact with the female may be a necessary part of the displays.

Over a period of four years, 1978 - 1982, I observed a male Magnificent Riflebird perform the basic display many times in the aviaries of the Baiyer River Sanctuary, Western Highlands Province, PNG. However, on a few occasions I noted additional features of the display apparently not described before.

In the basic display (as I term it) the male perches on a horizontal or sloping branch, spreads his wings to the fullest extent, with the underside of the wing facing forward and with the neck extended upward to show off the brilliantly coloured throat-shield. Then, while the bird raises and lowers himself on his legs and opens and closes his wings a little, to give a rustling sound, he leans his head and neck alternately along the top edge of each wing. This display usually goes on for at least 10 seconds, but sometimes nearly double that time. Sometimes, with the wings spread he will sway his whole body at right angles to the perch, to right and left.

The two variations I noted appear to me to be a pre-basic display and a post-basic display.

In the pre-basic display the male, on his display perch, preened his feathers, fluffed them out and uttered short chirrups and chuckles. Occasionally the wings were flicked half open and closed which usually denoted an imminent full basic display.

On two occasions a female advanced onto the display perch and as the male and female approached each other, without sound, both went into a "trance-like" condition. The female crouched low to the perch, very slowly stretched her head up until her throat and breast were displayed to the male. She stayed in this position for about eight seconds, while the male, in similar "trance-like" movements, stretched his head out to the female and tapped her gently on the breast; four times on the first occasion and three