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BEHAVIOUR

OBSERVATIONS OF A NUPTIAL DISPLAY BY MALACHITE SUNBIRDS

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Tuesday, 1st August, 2017, at around 5.30pm, a male Malachite Sunbird *Nectarinia famosa* in breeding plumage, with yellow shoulder tufts displayed, and a female, were observed performing a nuptial display on a smooth, horizontal fence pole, approximately 75 centimetres above ground level. The post and pole fence runs along the edge of the wetlands bordering the Berg River estuary, at Velddrif, South Africa (Figure 1).



Figure 1 Pole fence along the Berg River estuary.

A video clip, 31 seconds in duration, was taken through the open window of our vehicle, recording the latter stages of the display. The initial part of the display had elapsed before it was possible to start recording the event.

The recorded part of the display consists of the male stalking the female, shuffling towards her, sometimes moving along the top surface of the pole, sometimes clinging to the sides of the pole as he moves. With head and bill always pointing towards the female, he lowers his chest, neck and head low to the pole, but raising them skyward and at intervals, swinging them from one side of the pole to the other. The tail plays a major part, as it too is swung from side to side, and a couple of times swung in arched fashion high up, and over the pole. The advance is interrupted momentarily on several occasions, as each antic is performed. The female, in her fixed position responds, almost imitating the male as he 'bows and scrapes.' A major part of her performance is the way she tilts her head and bill sideways in near pleading fashion, and raising her tail, sometimes vertically, in response to his tail raising.

As he gets to within about twenty centimetres of her position, she sets off to the left, clinging to the near side of the pole and fluttering to prevent herself falling, as she moves past him, and at about fifteen centimetres to his left, she pauses, facing away from the camera, and rotates her tail once, in a clockwise direction, before she sets off back to her original position.

From this position, and for the next ten seconds, they face each other, and she bows on six occasions, twisting her head sideways in pleading fashion, but always with bill pointed upwards. The tail plays a major part in the way she raises and swings it, sometimes in arched fashion, and usually pulled to the left in the direction of the male. She then appears to be distracted, looks away, runs along the pole and flies off. The male continues to perform for a further seven seconds before he flies off after her in a Westerly direction.

During this final stage, the male has remained in a fixed position, raising his abdomen and chest from the pole surface, and then lowering them flat to the pole, but all the time with head and bill skyward. The tail again plays a major role, as it is swung from one side of the pole to the other, sometimes holding it vertically, sometimes straight down, or pulled in the direction of the female, and at times, rotating it in a circular manner. The shoulders are held apart throughout the display, with the yellow tufts boldly displayed. The rotation, raising and lowering of heads and bills by both birds and the upward and often vertical pointing of the bill skyward are important features of the nuptial display.

Selected stills have been captured from the recording in order to illustrate some of the highlights of the display as follows:



Figure 2 Male: moving along the pole towards the female +/- 50 centimetres to his right. Head and bill are held low, just above and parallel to the top surface of the pole. The neck and throat bulge downwards, lower than the level of the abdomen. The bill points menacingly towards the female. The shoulders are held above the head with a yellow tuft boldly displayed on each shoulder.

Female: stationary, with tail held high and tilted left towards male. Her shoulders are spread apart with wings drooping.



Figure 3 Male: head raised and bill pointing towards female. Tail has been swung well down and to the right. Shoulders are spread with wings drooping.

Female: body facing away from camera, shoulders spread and wings drooping. Head and bill raised and tilted left, facing advancing male.



Figure 4 Male: chest lowered to pole surface, shoulders spread, tufts displayed, head with bill open, pointing skywards, tail almost vertically upwards.

Female: body facing away from camera, shoulders spread, head and bill pointing upwards, but twisted towards male.



Figure 5 Male: tail down, shoulders spread, tufts displayed. Head and bill pointing upwards and towards female.

Female: tail vertical, shoulders spread, head and bill pointed at male.



Figure 7 Male: body low to the pole, head and bill raised but facing female. Chest, body and tail in line with pole facing left towards female.

Female: facing away from camera, tail almost vertical, bill raised and facing male to right.



Figure 6 Male: clinging to far side of pole, almost vertically upright, facing camera. Shoulders spread, tufts displayed, head and bill pointing upwards.

Female: moving right to left, about to cross past male position, clinging to near side of pole. Body horizontal, tail raised slightly, head twisted with right cheek upwards, bill pointing skywards.



Figure 8 Male: tail almost vertical, chest and tufts held down almost to pole surface. Bill and head pointed upwards and facing female.

Female: head and bill twisted left towards male, shoulders apart, tail fanned and down, and tilted left. Wings drooping.



Figure 9 Male: chest and abdomen flat on pole surface. Tail raised almost vertical, bill upwards and slightly open. Facing female, shoulders apart and wings drooping.

Female: sitting on pole surface, body facing away from camera, but leaning towards male. Head and bill skyward, twisted left towards male. Tail slightly fanned and pulled left towards male.



Figure 11 Male: sitting on top surface, abdomen clear of pole, chest down, shoulders apart, tufts displayed. Throat, head and bill vertically skyward, head twisted slightly right facing female.

Female: abdomen on pole surface, tail up 45 degrees, head and bill twisted to right, with right cheek skyward. Shoulders apart.



Figure 10 Male: sitting on pole surface Abdomen, chest, head and bill skyward. Tail slightly downward. Tufts displayed.

Female: on top surface of pole facing male. Bill up and shoulders apart. Wings drooping.



Figure 12 Male: sitting on top surface, abdomen raised above pole. Wings drooping, head and bill skyward and facing female on right. Tail 45 degrees upwards.

Female: sitting on surface, facing away from camera. Head and bill twisted to left, facing male. Tail down, shoulders apart, wings drooping.



Figure 13 Male: as in Figure 12, but abdomen lowered and in contact with pole surface.

Female: as in Figure 12 but with tail slightly raised.

It seems that the smooth, horizontal pole, ten centimetres in diameter, was the perfect 'stage' for this dramatic nuptial display.

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View the video on Youtube:

https://www.youtube.com/watch?v=pzYqLr2_zBc