

TECHNIQUES

NEST-TRAPPING MASKED WEAVERS

H.D. Oschadleus

The Masked Weaver *Ploceus velatus* and the Spottedbacked Weaver *P. cucullatus* are polygynous weavers that lay variably coloured and marked eggs. Collias (1984) kept Spottedbacked Weavers in captivity to study the variations in size (length and width), ground colour, and markings of their eggs. He found that the size, shape, spotting and colour of the eggs of a given female is constant throughout the bird's life, and can be distinctive from the eggs of other females.

During the 1989-1990 breeding season I endeavoured (not very successfully) to obtain similar data for the Masked Weaver by trapping breeding females at the nest, ringing them, and observing successive broods of the same females. I decided that nest-trapping would be more effective, and cause less disturbance, than mistnetting.

STUDY AREA, MATERIALS AND METHODS

The Moreletaspruit in eastern Pretoria was chosen as my study area. Many small Masked Weaver colonies are found in the trees near or overhanging the stream.

A very simple hand-held trapping net was made by attaching a wire loop to the end of a 90 cm long dowel. The wire loop has a diameter of 10 cm, only slightly larger than the diameter of a Masked Weaver's nest entrance. A net-bag was attached to the wire loop and a string was threaded through. To trap breeding females, the net-bag was placed over the nest entrance at night, usually between 21h00 and 22h00. The nests always had to be approached silently as the females are easily disturbed from the nest, even on a dark night.

Twice I rustled the vegetation below the nest sufficiently for the female to fly out before I could put the net in place. On two other occasions I did not place the net precisely over the nest entrance, again resulting in the female escaping from making a contribution to science. On the other occasions the birds flew into the net-bag which was closed by pulling the string.

The birds were processed immediately and either released or else kept overnight and released early in the morning, just after replacing the nest contents. The females were colour-ringed in the unrealised hope of observing them at subsequent nests. Eggs were measured and marked, and their colouration recorded.

RESULTS

Individual nests

Six nests were monitored and four breeding females were caught. The method of trapping the birds at night, usually shortly after egg laying, did not seem to cause immediate desertion. In nests 3 and 6 this may have occurred, but probably breeding continued until the nests were stolen. In the other nests breeding continued as is shown here (and summarised in Table 1).

- Nest 1: The bird continued to incubate the clutch of 3 eggs, which hatched a week later. Another week later the nest was found to have been deserted (chicks gone), for unknown reasons.
- Nest 3: It is not known if the female weaver continued breeding or not, since the nest twig was found broken off when I checked the nest a week later (white school children are my prime suspects).
- Nest 5: The egg had hatched a week later and the chick probably fledged (present at 2 weeks old).
- Nest 6: Female probably relaid. See below.
- Nest 7: A week and a half later the chick flew out of the nest upon my inspection - thus the female adult had continued feeding it. The egg in the nest was addled.
- Nest 9: A week later the two chicks had grown and were nearly ready to fly.

Relaying in Nest 6

The nest record is summarised in Table 2 (page 30).

This female was caught after laying her first egg. I released her early the next morning and by that afternoon she had laid a second egg. The expected date of hatching was 22 or 23 Nov. (incubation period of the Masked Weaver is 12-13 days, Oschadleus 1988). When I checked the nest on 22 Nov. the eggs were still present and my pen marks visible. I only checked the nest again on 29 Nov., and discovered two new eggs in place of the others.

The first clutch was probably addled. The new eggs had similar colouration and markings to the old ones:

Clutch 1 - white, with a few medium-sized brownish spots evenly spread over the egg. Egg 1 - 21,4 x 14,4; egg 2 - 21,9 x 14,8.

Clutch 2 - white, with many small-sized brown spots evenly spread. (Not measured to reduce disturbance).

I am convinced that it was the same female that relaid and twice I tried to retrap her unsuccessfully. In an observation about the bird was observed feeding the chicks at the nest but the colour rings could not be seen.

Sightings of colour-ringed birds

Although I spent time trying to find my colour-ringed birds at new nests, this was unsuccessful. Only one female, W/W(R), was resighted regularly. This bird was trapped in a mistnet (30 Sep., no known nest). I resighted her twice in October and twice in November, always in the same area. By the time that I had pinpointed her nest, chicks were present. No second brood was found.

TABLE 1
DETAILS OF NESTS AND TRAPPING FEMALES

DATE 1989	NEST NO.	FEMALE CAUGHT	NEST CONT.	KEPT BIRD	OVERNIGHT CONTENTS	BREEDING CONTINUED?
30/09	1	Yes	3 E	Yes	Yes	Yes, eggs hatched
10/11	3	Yes	2 E	Yes	Yes	Nest disappeared
10/11	5	No	1 E	-	Yes	Yes, egg hatched
10/11	7	No	1E,1C	-	No	Yes, chick fledged
10/11	6	Yes	1 E	Yes	Yes	Yes, 2nd egg laid
29/11	6	No	2 E	-	No	Yes, new eggs laid
15/12	6	No	2 C	-	No	Yes, chicks grew
15/12	9	Yes	2 C	No	No	Yes, chicks grew

E = eggs, C = chicks

CONCLUSION

The method of trapping breeding female weavers at the nest at night has potential for obtaining basic breeding data. Observing colour-ringed birds in the field to find subsequent broods, however, is no easy task (studying captive birds as Collias did, has some advantages). My success in trapping females was 50% (8 attempts of trapping 6 individuals) but this can be improved with experience and with a better net. This disturbance did not appear to affect breeding.

I learned little of the breeding biology of the Masked Weaver in this preliminary study. Although conspecific parasitism is known in this species (Freeman 1988), nest 6 involved a case of relaying and not of another female adding an egg to the existing clutch. The second clutch was laid within a few days and the eggs in each clutch were similar in colouration and markings. This indicates that individual Masked Weavers probably lay similarly coloured eggs in successive broods, as is the case in Spottedbacked Weavers.

TABLE 2
DETAILED RECORD OF NEST 6

DATE	TIME	CONTENTS	NOTES
10/11	21h00	1 E	Female caught, bird & egg kept overnight
11/11	05h20	1 E	Egg replaced, bird released
11/11	14h40	2 E	New egg laid
22/11	15h00	2 E	Marked numbers on eggs still visible
29/11	12h30	2 E	New eggs in nest
09/11	19h45	2 E	Unsuccessful attempt to trap female
09/12	12h05	2 E	
15/12	21h00	2 C	Unsuccessful attempt to trap female
20/12	17h00	2 C	Chicks with feathers sprouting
03/01	17h00	-	Nest disappeared

ACKNOWLEDGEMENTS

I am grateful to Walter Nesor for his assistance in this project.

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H.D. Oschadleus, P O Box 14174, SINOVILLE, 0129

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