

A PIED STARLING STUDY

A. Craig

After some years of ringing bishop birds *Euplectes* sp. and other weavers at reed beds in the western Cape and Natal, a move to Grahamstown seemed a good time to change birds. I decided to look at the Pied Starling *Spreo bicolor*, one of those common birds about which we know almost nothing.

At Table Farm a flock of Pied Starlings is always to be found around the kraals and adjoining fields, and the birds nest under the eaves of a shed. The nests themselves are inaccessible without removing the roof, but I planned to concentrate on social behaviour within the flock. The White family, who own the farm, were happy to allow me free rein to roam the area and set up mist nets, though of course dipping stock does take precedence over mistnetting.

It soon became clear that Pied Starlings are not stupid. Red Bishops *Euplectes orix* are very good at last-minute evasive action, whereas the heavier weavers tend to plunge straight into a net. However, I have watched a Pied Starling approaching its nest hole drop to the ground in front of the net and walk under it before flying up to the nest. On emerging from the nest it dropped directly to the ground and walked under the net again. Birds leaving the nest in a hurry do, however, miscalculate. On one memorable occasion a juvenile was caught and its anguished squawks attracted a mobbing party, seven of which got caught themselves.

From November 1980 to March 1982, 42 birds were ringed. Each one was colour-ringed and by March 1983 all these birds could potentially have survived for at least one year. 17 Pied Starlings have been recaptured, seven of them twice. The maximum elapsed times for these recaptures are shown in Table 1.

TABLE 1

Months since Ringing	1	3	4	9	10	11	12	13	14	16
Number of birds	3	2	2	3	1	1	2	1	1	1

By contrast, 40 birds have been resighted at least once since ringing, and Table 2 shows the maximum times elapsed for these records.

TABLE 2

Months Since Ringing	Number of Birds
1	2
2	1
3	4
4	3
7	1
9	2
12	5
13	5
14	1
15	1
16	3
19	1
20	1
21	1
23	1
24	4
25	1
26	1
27	2

The two birds not retrapped or resighted were both ringed as newly-fledged juveniles. Of the 13 birds last seen less than a year after ringing, 2 were adults, 1 a subadult, and 10 juveniles. This suggests that most mortality or emigration occurs amongst juveniles, as one would expect.

Four age-classes can be distinguished in the field. Recently-fledged "birds of the year" have a white gape and a dark brown eye. Their body plumage is a dull charcoal colour, lacking the brownish sheen of older birds. However, within a few months of fledging the birds undergo a moult of the body feathers, losing this juvenile plumage. During the first year the eye remains dark brown, while the gape gradually changes colour from white to yellow. Subadult birds in the second year have a yellow gape, and the iris is partly brown and partly cream. Adult birds have a completely creamy-white iris, as shown in the accompanying photograph. This change in colour of the iris from subadult to adult condition may take more than a year, but birds do start breeding before attaining adult eye colour.



Colour-ringed adult Pied Starling at Table Farm
(A. Craig)

Two interesting features of the biology of the Pied Starling have emerged during this study. It is a co-operative breeder, with up to seven other birds, primarily juveniles and subadults, helping the pair to feed the chicks. In the eastern Cape wing-moult starts while the birds are still breeding and it appears that the time of moulting is constant for all populations, while the breeding season may vary in different parts of the country.

A few other starlings have been colour-ringed at Table Farm. A female Redwinged Starling *Onychognathus morio* is still present after 27 months. Five of her chicks have been ringed, and one was shot 18 months later on a farm 30 km away; the only recovery to date. None of the five Cape Glossy Starlings *Lamprotornis nitens* ringed have been recaptured, but four of them have been resighted 11, 20, 21 and 23 months after ringing. The one bird which has disappeared was again a juvenile.

Clearly for all these species observations of colour-ringed birds are yielding much more information than a simple mark-recapture study. My wife complains that Pied Starlings are not nearly as attractive as Red Bishops. They are, nevertheless, engaging birds, and it is a lot easier to see their colour-ring combinations. There are many advantages in working on conspicuous resident birds, even if they are too common to excite most birdwatchers.

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ABERRANT WOODLAND KINGFISHERS

D.B. Hanmer

At Nchalo, Malaŵi (16 16S; 34 55E), four Woodland Kingfishers *Halcyon senegalensis* have been caught which had red areas on the lower mandible (normally uniformly black in this species). In April 1979 an immature bird, whose upper mandible was still in