

WHAT'S THE DIFFERENCE BETWEEN ROBINS AND THRUSHES?

Adrian Craig & Pat Hulley

Department of Zoology & Entomology, Rhodes University, Grahamstown 6140

Cape Robins *Cossypha caffra* and Olive Thrushes *Turdus olivaceus* are an incidental catch in our Eastern Cape mistnetting activities. The first Cape Robin was ringed in January 1984 and the first Olive Thrush in May 1986; to date we have ringed 99 birds of each species. Looking back over our records, we noticed a striking discrepancy in the frequency of recaptures of these two species, as was highlighted earlier by Terry Oatley (1992 *Safring News* 21:61-70).

Olive Thrush: six birds have been recaptured, one of them twice. Of these, four were caught within one month of ringing, and the other birds five and seven months later. Mean interval between ringing and recapture is 2,7 months.

Cape Robin: 18 birds recaptured, seven more than once (up to five times). Intervals between ringing and last recapture range from 1-31 months (0-6 = 8; 7-12 = 3; 13-18 = 2; 19-24 = 2; 25-30 = 2; 31 = 1), with the mean interval being 12,1 months.

In our gardens there appears to be at least one robin and one thrush present every day, but ringing at 3 Florence Street (Adrian's home) in one month produced two Cape Robins (one a recapture) and seven different Olive Thrushes. A reminder that one should not assume that garden birds are the same individuals from day to day!

There are several possible explanations for the pattern that we have observed:

1. Olive Thrushes have a much shorter life-span than Cape Robins.

2. There is a much larger population of Olive Thrushes than Cape Robins in our area.

3. Olive Thrushes are "trap-shy" and after a first encounter successfully avoid mist nets; Cape Robins do not learn.

4. Ringed Olive Thrushes have a higher mortality rate than Cape Robins.

5. Cape Robins are largely resident, whereas Olive Thrushes are nomadic, and move out of our ringing area after a short stay.

These explanations are not mutually exclusive. In his discussion of these two species, Terry Oatley (1992) reported that over the period 1981-1992 there were more recoveries of Olive Thrushes than Cape Robins (44 vs 26), yet Cape Robins were recaptured much more often (120 vs 32). He noted that the maximum intervals were 77 months for the Olive Thrush and 142 months for a Cape Robin. There is an earlier record of 130 months for an Olive Thrush (1978 *Safring News* 7(1):7) [and a recently-reported one of 136 months. *Ed.*]. The oldest Cape Robin is now 199 months (1995 *Safring News* 24:35). Perhaps Cape Robins are longer-lived, but many Olive Thrushes do survive for several years. Roy Earlé (1993 *Safring News* 22:5-9) reported that Olive Thrushes appeared to be hosts to blood parasites much more often than Cape Robins. However, at this stage our knowledge of the biology of these parasites is poor, and we have no grounds for assuming that bird species which are parasitized more often necessarily suffer a higher mortality rate. Comparing other published records from ringing reports published in *Ostrich* prior to

1981, and recent records in *Safring News* 1993-1996, the mean interval for Olive Thrushes was 28,7 months (n = 39) and for Cape Robins 33,7 months (n = 20). So longevity cannot be the whole story.

There are no data on population sizes for these birds, nor have we any information on trap-shyness, so these two hypotheses must remain untested for the present. Comparing the relative number of captures from mistnet data is not a simple matter, unless the various factors which affect capture efficiency have been considered. Recent papers on this issue which should give all ringers food for thought include those by Remsen & Good (1996 *Auk* 113:381-398) and L. Jenni *et al.* (1996 *J. Field Ornithol.* 67:263-274).

All our deductions from ringing data rest on the assumption that ringed birds do not differ from unringed ones with respect to mortality rate. In many animals, including ourselves, individuals under stress are more likely to develop serious symptoms from latent infec-

tions. So, if Olive Thrushes do have high levels of infection by blood parasites, perhaps the stress of being handled increases their chances of becoming seriously ill and dying. This is certainly a worrying thought, and one would like to be able to exclude this hypothesis with confidence; some veterinary work is called for here!

What about dispersal? Here the recapture and recovery data do provide some clues. Of the 20 Cape Robins mentioned above, none were recovered or recaptured > 10 km from the ringing site, and 15 were reported from the original locality. However, two Olive Thrushes were more than 100 km from the ringing locality, four > 50 km and six > 10 km away, although 19 of 39 birds were reported from the original site. This suggests that Olive Thrushes may move about more extensively than Cape Robins. Perhaps some populations are more nomadic than others? We would be most interested in the views of other ringers who handle these two species on a regular basis.