ARTICLES & REPORTS

BACKYARD BANDING IN WESTERN AUSTRALIA

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From time to time comments (assorted) in Safring News have prompted us to look again at our backyard banding.

Over a period of seven years we have banded 43 species, some regular visitors, some unexpected vagrant individuals, and 12 315 Silvereyes *Zosterops lateralis*. This species has yielded 9 recoveries - unsophisticated stuff, *vide* Ed. Safring News 10. Among the birds mistnetted were a few Yellow-rumped Thornbills *Acanthiza chrysorrhoa*, so in 1978 when a pair came to nest in an olive tree just 2 m from the back verandah, aspirations towards greater sophistication crept in - the thornbills were caught and colour-banded.

Yellow-rumped Thornbills, sexually non-dimorphic, small passerines (mass 10 g), build large nests with an egg chamber at the bottom, succinctly described by an American visitor as aerial compost heaps. Usually the female lays her first clutch in a nest the size of a grapefruit while the male, a remorseless builder, continues adding and renovating throughout this and successive incubations until, at the end of the breeding season, the nest achieves the proportions of a rugby football. They are multi-brooded and the breeding season extends from July to January.

This colour-banded pair in the olive tree fledged three young in October and re-nested in November, but 14 days after the eggs hatched the male disappeared. The female YGX alone continued feeding the nestlings to fledging five days later. There was a new male in attendance on all her foraging trips, so he was caught and colour-banded OYX. This pair returned the following season to nest successfully once and start a second brood, but before the eggs hatched, female YGX disappeared. The widower was not alone long and, with a new mate female WRX, raised two young.

All very interesting but a partner turnover on this scale was no basis for study continuity, besides being expensive in colour-bands. Fortunately, from then on we had stability. The pair male OYX and female WRX came back in the spring bringing one of

their young with them (VVX sex unknown) to 'help at the nest'. Watching the young VVX gain experience in building was fascinating (Brown & Brown 1982) and, on a basis of proficiency acquired, we judged VVX to be male. (A reliable measurement for sexing has not been found in a sample of 218 Yellow-rumped Thornbills banded by us in this area). With VVX's help the pair nested three times in the season and one of the young YBX survived to the succeeding year.

In 1981/1982 there was the old breeding pair male OYX and female WRX with two helpers VVX and YBX. There were four clutches of three eggs, all successful excepting the one parasitised by a Shining Bronze-cuckoo *Chrysococcyx lucidus*. Nest building began on 8 April and the last young fledged on 25 February, a marathon breeding season for the birds and only backyard proximity enabled the watchers to maintain their post.

As far as we knew, no young survived to 1982/1983, but VVX and YBX were both back assiduously helping their parents through their first two successful nests. Female WRX laid a third clutch of two eggs and began incubating: five days later the olive tree seemed unnaturally quiet. Thornbills are normally very vocal and a change in pitch or volume of their tweedling song demands our attention. Investigation found female WRX on her eggs but a long watch showed no appearance of male OYX or either of the two helpers, only a strange thornbill wearing a metal CSIRO band but no colour-bands. This indicated a bird banded by us prior to 1978 and further particulars could only be gained in the hand. Nets were put up without success, positioning was changed but no thornbill, only 350 Silvereyes to add to the tally. The newcomer was a pusillanimous bird, frightened of a Silvereye. It was inconceivable he could have ousted brave OYX who must be presumed deceased. Within a few days a holed egg was found below the nest but female WRX sat on the remaining one up until hatching. She alone fed the nestling, with the new male escorting her on foraging trips for three days, then the nest was empty and the pair busy building a new nest. Was infanticide an unreasonable assumption or did chagrin at our netting failure put bias on observational interpretations?

This season, 1983/1984, female WRX with her non-colour-banded partner began nest-building in June. Progress was slow and almost imperceptible until one day the olive tree was alive with sound and activity. Curious, we watched. Had female WRX succeeded in galvanising her mate? Not so. To our stupefaction the singing, building bird was male OYX! In an event of this magnitude observation was insufficient; we caught him. In the hand he appeared in such splendid condition, renewal of his colour-bands was obligatory. The yellow was a bit faded but the orange was still good, but at the prodigal's return who thinks of economy? The old partnership had three successful nests and YBX came home to help, but not VVX.

In the five seasons 1979/1980 to 1983/1984, male OYX and female WRX have fledged 30 young and 2 cuckoos. Two, VVX and YBX, survived to adulthood, two were picked up dead on the road, four juveniles from this year's broods are surviving at the time of writing, and the remaining 22 have disappeared, fate unknown.

In January a neighbour came to say there was 'a nest like ours' behind their house. We went to look and there VVX was found again, 500 m from his birthplace and not alone. He had a nest of his own with a mate, female VRXB, sitting on three eggs. In addition to the pleasure of recognition of an old friend, confirmation of correct sexing on behavioural grounds was gratifying. The outcome of this breeding attempt must be followed through, those eggs could produce OYX's and WRX's grand children - a further instalment in the Yellow-rumped Thornbill saga. BUT if we band in someone else's backyard, will it still be backyard banding or shall we, and the thornbills, be elevated to serious, project-orientated banding?

REFERENCE:

Brown R.J.& M.N. 1982. Learning behaviour at the nest of the cooperatively breeding Yellow-rumped Thornbill *Acanthiza chrysorrhoa*. Emu 82:2.

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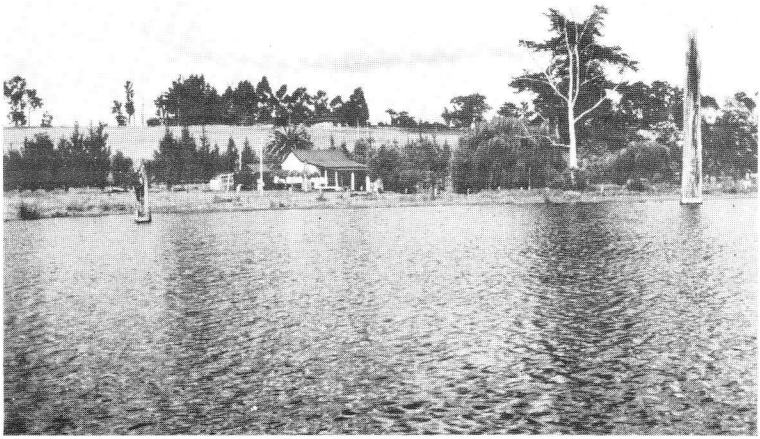

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