

Banding the Chestnut Quail-Thrush

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Chestnut Quail-thrushes *Cinclosoma castanotum* have been banded* and retrapped over a period of 16 years in the course of an Area Survey on the Mount Mary Plains, 110 km north-east of Adelaide, South Australia. Habitat degradation has caused a decline in the numbers of the species. Results are presented showing some disparity in the sexes of the sample studies, and provide information on longevity and average weights. None of the quail-thrush species has been the subject of a published intensive study involving the marking, or banding, of a sample of a population.

During the period 1963-75, Chestnut Quail-thrushes were banded in the Sutherlands-Bower area as part of the Mount Mary Plains Area Survey in South Australia. In this region the species inhabits chiefly impoverished habitat comprising of remnant patches of regrowth Mallee with some undergrowth providing cover and food such as *Lepidium* and *Zygophyllum* shrubs; or *Geijera* shrubland with regrowth Mallee and associated Chenopodiaceous shrubs such as Bluebush and Saltbush (*Rhagodia* spp.).

The rainfall is low and irregular, ranging from 130-300 mm per annum, and averages about 250 mm. Clearing of scrub for agricultural and pastoral purposes, thinning of scrub by timber-cutting, and destruction of undergrowth by browsing domestic livestock has rendered, and continues to render, much of the region unsuitable for quail-thrushes.

Methods

In the course of the present study quail-thrushes have been caught in standard (32 mm) mist nets set in groups in close formation among dense patches of shrubs or clumps of regrowth Mallee bushes during routine operations in connection with the area survey.

Quail-Thrushes often escaped from standard mist nets by fluttering from the net-folds or pockets through failure to tangle in the small meshes. Catches of quail-thrushes were occasionally made with the help of several people acting as beaters and slowly moving birds into an area

in which a group of 3-5 nets was set in the form of a maze among shrubs or bushes. Most success was obtained in a strip of regrowth in a specially cleared line in otherwise unsuitable scrub for the purpose.

The furtive habits and wariness of the Chestnut Quail-thrush make it an extremely difficult subject for study by means of normal mist netting methods in conjunction with a general area survey. It may be mentioned here that on the Regrowth Mallee Block, where most of the study was carried out, the estimated number of birds of the species in the patch of about 62 hectares of regrowth Mallee scrub at the commencement of the work was put at five. Banding over 12 years resulted in a total of 26 quail-thrushes being netted and banded at this station.

Results

During the period 1963-1975 a total of 38 birds were banded at the three banding stations where quail-thrushes occurred. The first bird, an adult female, was netted and banded in the Geijera Scrub, south-west of Bower, in August, 1963, by Mr M. H. Waterman. Bandings and recoveries from individual stations are of interest; in the Geijera Scrub, 4 birds were banded and there were no recoveries. Six birds were banded and none recovered on the Black Oak Block, Bower. On the Regrowth Mallee Block, 5 km north-east of Sutherlands, a total of 28 quail-thrushes, including two nestlings, was banded, and there have been 19 retraps, involving 13 separate birds. Table 1 sets out survival data for banding in various years. One male, 050-68129, was retrapped on 28 April, 1974, 8 years, 1 month after banding (Anon. 1974).

* Bands used were provided by the Australian Bird-banding Scheme, Division of Wildlife Research, CSIRO.

TABLE 1

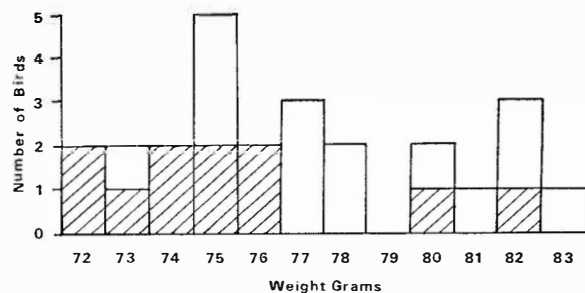
Recoveries of Chestnut Quail-thrushes in relation to number banded.

Year	Number Banded	Recoveries in years after banding									Total
		0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	
1963	1										
1964	1										
1965	7			1					1		2
1966	4			1				1		1	3
1967	5	1		2							3
1968	0										
1969	2			1							1
1970	6										
1971	1										
1972	1										
1973	2										
1974	3	3	2								5
1975	2	1									1
Total	38	5	2	5				1	1	1	13

Of 36 sexed quail-thrushes, 22 (61%) were males, and of these males 17 (77%) were adult when banded. In the case of females, 9 (64%) were adult out of the 14 females banded.

Weight

Weights of adults were taken with a beam balance to the nearest full gram, and these ranged from 72 g to 83 g; most birds (12) ranging from 75 g to 82 g. The lightest weight adult birds, both females, were 72 g, and the heaviest individual, a male, weighed 83 g. There was an



• Figure 1. Histogram of weights of 25 Chestnut Quail-thrushes in the Sutherlands-Bower area. Hatched area females, Non-hatched males.

overlap of weights in the two sexes from 72 g to 82 g.

Conclusions

The Chestnut Quail-thrush is a declining species over a large area of the Mount Mary Plains because of reduction and impoverishment of habitat and the progressive isolation and reduction in size of remaining colonies of the birds. An excess of males over females was found in the sample studies, and this agrees with the impression gained while doing field work in the area during the course of the project.

References

- Anon. (1974), *Aust. Bird Bander*, 12 (4): 83.
 Boehm, E. F. (1975), 'Perching Birds (Passeriformes) of the Mount Mary Plains, South Australia', *Emu* 57(5): 311-324.

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