

NOTES ON BANDING WONGA PIGEONS *Leucosarcia melanoleuca* AT MOONEE, NEW SOUTH WALES

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The following is a summary of banding details collected on Wonga Pigeons *Leucosarcia melanoleuca* at Moonee, near Coffs Harbour, New South Wales, from 4 November 1991 to 31 December 1998. Fifty-nine birds were banded and 226 recaptures were made in just over seven years.

INTRODUCTION

Wonga Pigeons were heard calling frequently around our property from the date of our arrival on 23 February 1983. At that time the vegetation was basically sclerophyll forest to 45 metres in height with an underlying cover of Blady Grass *Imperata cylindrica*, Whisky Grass *Andropogon virginicus* and Lantana *Lantana camera*. Remnant rainforest species including Bangalow Palms *Archontophoenix cunninghamiana* and Blackwoods *Acacia melanoylon*, occurred along the creek line at the bottom of the property, with the latter species, as regrowth trees, scattered among the eucalypts. The grasses mentioned and the Lantana were cleared and rain forest species planted; in all about 2 000 trees and plants of some 150 species. These are now flourishing, beginning to form a second canopy below the tall eucalypts and bigger trees to about 45 metres, and now resembling a young rainforest. The major species of large trees include Blackbutt *Eucalyptus pilularis*, Grey Gum *E. prapinquua*, Tallowood *E. microcorys*, and Brush Box *Lophostoman conferta*.

Once some of the understorey vegetation began to grow, these attracted birds; many rainforest seedlings appeared and are now increasing in size rapidly. Seedlings of pest species such as Campor Laurels *Cinnamomum camphora*, and more recently Asparagus Vine *Protasparagus aethiopicus* and Umbrella Trees *Schefflera actinophylla* are continually weeded out.

The Wongas were recorded in most months of each year to 1991. However, it was not until October 1991 that a single bird was seen feeding in the back garden beneath a Blackwood.

A circular ground funnel trap had been made, suitable for catching passerines, including Satin Bowerbirds *Ptilonorhynchus violaceus* Australian Magpies *Gymnorhina tibicen* and Pied Currawongs *Strepera graculina*. This trap was promptly baited with grain and on 4 November 1991, the first Wonga Pigeon was caught and banded.

The following information is presented for the benefit of other banders.

TRAPPING

Apart from the circular ground funnel trap, a Potter Trap (Davis 1981), with a self-catching treadle, was built. A third 'stick and string' or 'drop-door' trap was in use,

operated from the dining room. These three traps caught all the pigeons, including recaptures. The figures for each trap are shown in Table 1.

TABLE 1

Number of birds trapped using three different kinds of traps.

Kind of trap	Number of birds trapped
'Stick and string trap'	11
'Potter Trap'	94
Circular ground-funnel trap	176
Total	281

The birds caught in the 'stick and string' trap were feeding on seeds falling through the wire-netting roof of the trap from an overhanging Bleeding Heart Tree *Omalanthus populifolius*. When the fruit of the Bleeding Heart Tree is coloured green, it is eaten by Satin Bowerbirds, Brown Cuckoo-doves *Macropygia amboinensis*, and Olive-backed Orioles *Oriolus sagittatus*. As the fruit ripens, the case turns a purplish-brown colour and hardens. The birds mentioned do not appear to eat the fruit when the case has hardened. When the fruit is fully ripe, it opens explosively and the black seed with some yellowish flesh attached, drops out of the now hard case and falls to the ground. It is this black seed which attracts the Wongas. The number of Wongas banded each year is set out in Table 2.

TABLE 2

Number of Wonga Pigeons *Leucosarcia melanoleuca* banded each year.

Year	Number	Year	Number
1991*	1	1995	10
1992	3	1996	9
1993	10	1997	11
1994	9	1998	6
		1999	3
		Total	62

*On 4 November 1991. The total is for the number of birds banded to 28 February 1999.

RECOVERIES

Only five birds have been reported recovered away from the banding place. All were recovered dead. The details are set out in Table 3.

TABLE 3
Reported recoveries of Wonga Pigeons *Leucosarcia melanoleuca*.

Band number (100-)*	Date banded	Date recaptured	Date recovered	Distance and direction	Details reported
70583	12.2.96	nil	16.9.96	500 m 270°	Flew into window
70584	10.3.96	3 times to 9.10.97	21.10.98	300 m 90°	Killed by Australian Magpie
70803	1.6.93	nil	10.9.93	2 km 73°	Killed by cat
70805	6.11.93	nil	18.4.94	2 km 139°	Hit window
70829	14.8.95	nil	10.6.96	1 km 180°	Found dead

*Prefix 100.

WEIGHTS

The weights of individual birds varied considerably.

HANZAB Volume 3, (Higgins and Davies 1996, page 969) from museum specimens states weights (in grams): 'Weights — males, as 410 (97.77; 220–500; 6); Females, 448.3 (52.79; 360–500; 6) not significantly different.'

The mean weights when recaptured here ranged between 313 g and 626 g. There does not appear to be any 'clear-cut' difference between sexes, and sexes were not determined during the study.

There is a big range difference in the weights of individuals here, from 308 g to 626 g. Individual ranges of two birds were 313 to 395 g (range 82 g) and 308 to 425 g (range 117g).

The heaviest bird (No. 100-70823), with a range from 477 to 557 g, was 534.7 g, a mean of 16 measurements.

RECAPTURES

Thirty-five individuals (56.45% of those banded) have been subsequently recaptured. Details are set out in Table 3.

The last mentioned in Table 3 (band number 100-70815) was caught and banded on 9 July 1994. It was recaptured 115 times to 4 January 1995, in almost six months! It was caught five times in one day once, and twice the same day on 12 occasions. No other Wonga has been recaptured on the same day. Only two other Wongas have been captured 15 times.

In addition, this bird seemed to need seed by the frequency of recaptures. Its behaviour when approached to remove it from the trap was also unlike other Wongas which invariably flapped strongly, apparently to avoid handling. This bird simply stood quietly and permitted itself to be picked up without fuss. Eventually it just did not return and probably died.

INDIVIDUAL RECAPTURES

An investigation of individuals caught during each calendar month revealed little. Between 8 and 15 individuals were caught in all months except April, when only two birds were caught, both in April 1996. Double figures occurred in February (15), June (10), July (12), August (12), November (13), and December (11). Nine were recaptured in March, eight in January, May, September and October. (Table 4).

The 'oldest' (Number 100-70765) was recaptured 15 times, the latest occasion being over seven years and five

TABLE 4

Details of the number of individuals recaptured and the number of times for each.

Number of times	Number of individuals
Once	15
Twice	9
Three times	3
11 times	2
15 times	1
115 times	1

months after banding. This is currently the 'oldest' recorded in the Banding Scheme. Numerous birds were recaptured within a week of banding and a number of others up to a year later. Only nine birds (14.5%) have been recaptured more than twelve months later.

MORPHOMETRICS

Because of the large size of these birds and to avoid undue stress to them, few measurements were taken. These were: weights (see previous section), wing length, tail length and total head lengths. These measurements were taken in accordance with the methods given in the Australian Bird Banders Manual.

TABLE 5

Morphometrics of some of the birds banded.

	Measurement (mm)
Wing length	199.7
Tail length	154.1
Total Head Length	60.1

Measurements were made following the method shown in Lowe (1989).

The mean of 30 measurements for wing, tail and total head lengths are shown in Table 5.

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