

A REPORT ON THE BANDING OF BLUE-FACED HONEYEATERS *Entomyzon cyanotis* ON THE NEW SOUTH WALES NORTH COAST

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METHODS

Blue-faced Honeyeaters *Entomyzon cyanotis* were banded at two locations on the New South Wales North Coast, being Coutts Crossing (29°50'S, 152°53'E) and Moonee (30°13'S, 153°08'E) during the period September 1985 to January 1991. Birds were banded by G. P. Clancy, D. Geering and others at the first site and by S. G. Lane at the second site.

The birds at Coutts Crossing were caught in mist nets, especially in the vicinity of a grove of Bank's Grevillea *Grevillea banksii*, a species not native to the local area. The birds at Moonee were caught in a drop trap which was baited with bread soaked in sugared water.

Measurements of the wing length, wing span and tail length were taken for all birds handled with the weight and head to bill length being taken for the Moonee birds. The colour of the facial patch (skin), gape, bill and iris were noted for most birds. To enable an assessment of ageing and sexing characteristics of the species the above data were supplemented with information from museum specimens and data held by the Australian Bird Banding Scheme. Data from three birds banded by GPC at Lawrence were also included.

RESULTS

A total of 66 birds was banded during the study, 36 at Coutts Crossing and 30 at Moonee (Table 1). Twenty birds were retrapped a total of 45 times at the first site, and 18 were retrapped a total of 33 times at the latter site.

TABLE 1

Numbers of birds banded and recovered at each site.

	Coutts Crossing	Moonee
Banded	36	30
Retrapped once	7	10
Retrapped twice	6	2
Retrapped three times	3	5
Retrapped four times	3	1
Retrapped five times	1	—

All birds could be placed into four categories based on soft part colours, see Table 2. These categories conformed generally with age criteria representing juvenile (J), first year (1), first to second year (2-) and second year or older (2+) birds.

Two juveniles had a yellow facial patch, a yellow gape, a yellow base to the bill and a grey-brown iris.

First year birds were similar to juveniles; however, the iris changed to creamy-brown. First to second year soft-part colouring was attained by about six months of age. The facial patch was yellow above the eye and dark blue below the eye (the overlap area usually showing green), the gape and the bill base were still yellow and the iris was cream. Adult soft-part colours (second year or older) consisted of a facial patch with light blue above the eye and dark blue below the eye, a light blue bill base, dark grey gape and cream iris.

No birds encountered during this study possessed the 'dark grey' or 'yellow-grey' facial patches as defined by Alexander (1976). There were, however, birds that were progressing from one

TABLE 2

Soft part colouration for age categories.

Character	Age Category			
	Juvenile (J)	First Year (1)	First-Second Year (2-)	Adult (2+)
Facial patch	yellow	yellow	yellow, green/ dark blue	light blue/dark blue
Iris	grey/brown	pale brown to creamy brown	cream	cream
Gape	yellow	yellow	yellow, later turning grey	dark grey
Base of bill	yellow	yellow	yellow, later turning light blue	light blue

TABLE 3

Dates of banding and recovery and facial patch colour.

Band No.	Facial Patch Colour		
	yellow (Age J or 1)	yellow/blue (Age 1-2)	light blue/dark blue (Age 2+)
070-55895		25.9.85-8.5.86	8.8.86
070-87987	6.2.87-6.3.87*		20.5.88*
070-87988	6.2.87-9.4.87		8.9.88 [†]
071-45713	8.5.86		20.5.88
071-45763	15.1.86		4.9.87 [‡]
071-69703	12.2.86	6.2.87-6.3.87	
071-45713		8.5.86	20.5.88
071-69706	1.6.86	7.12.86-6.2.87	4.9.87
071-69753		20.4.88*	19.7.88*
071-69754	20.4.88-25.5.88		30.6.90
071-69756		18.5.88-31.5.88	
071-57849	27.6.90	1.1.91	
071-45707	16.4.86	21.11.86	

*Progressing from one category to the next.

stage to the next (Table 3) and some possessed small areas of blue-grey, apparently formed by the combination of yellow and blue. Alexander's (1976) three distinct facial skin categories are defined as fledgling (yellow-grey), juvenile (olive-green) and adult (blue). It appears that his fledgling category refers to our juvenile (yellow) and his juvenile category to our first year category (yellow).

Figures 1 and 2 are histograms showing the distribution of wing-span measurements for adult birds (2+) determined by adult soft-part colouration — Figure 1; and all birds combined — Figure

2. These figures include birds handled in this study as well as data from the Australian Bird Banding Scheme and from museum specimens. The only reliably sexed birds were museum specimens and only six of these had wing-span information. Measurements of males ($n = 2$) were 475 mm and 485 mm while females ($n = 4$) ranged from 435 to 456 mm. Two peaks are apparent in the Figures, being around 455 and 485 mm, respectively, presumably representing clusters around the female and male modes. An increase in wing span of up to 20 mm was recorded for birds originally banded in their first year and subsequently recaptured as second year birds or older.

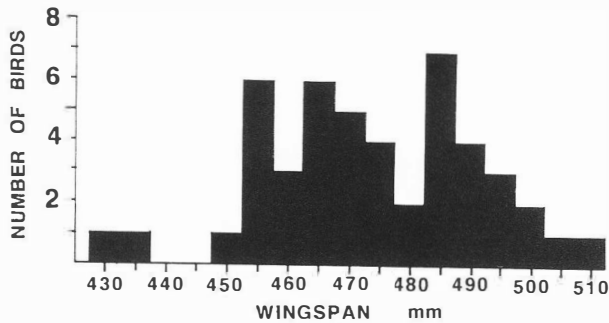


Figure 1. Wing span measurement of 47 adult (2+) Blue-faced Honeyeaters.

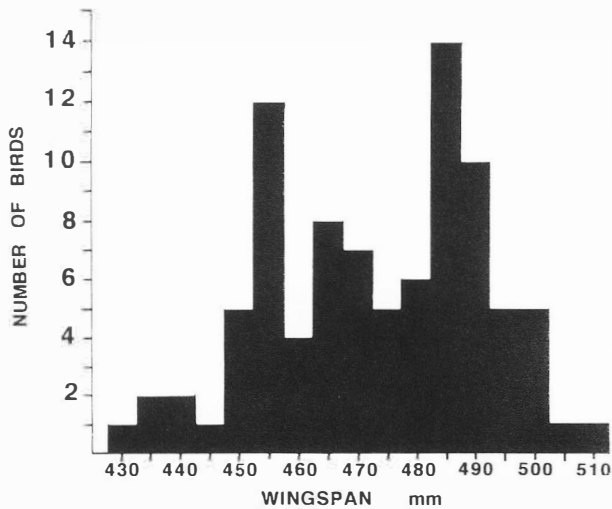


Figure 2. Wing span measurements of 89 Blue-faced Honeyeaters older than juveniles.

DISCUSSION

It is generally acknowledged that the plumage and soft part colouration of the Blue-faced Honeyeater varies and that this variation is age related. What had not been identified was the exact nature of these variations and at what age changes occur. Alexander (1976) summarized the results of a three year study of the species at two Queensland locations. He identified three colour types on the facial skin being yellow-grey (fledgling), olive-green (juvenile) and blue (adult). The four categories given in this paper are in the main a refinement of Alexander's categories.

Male honeyeaters of most species are larger than females (as illustrated by wing-span measurements), although there is often an overlap (Lane 1983; Smedley 1977; Boles and Longmore 1984) with small males sometimes being of a similar size to large females. The few sexed museum specimens with wing-span data and the two peaks on the histogram shown in Figures 1 and 2 indicate that the Blue-faced Honeyeater conforms to this pattern. It is reasonable to assume that birds (other than birds in their first year) with a wing span of 485 mm or greater are males and birds with a wing span of 460 mm or less are females. With further data, particularly if museum specimens are sexed and have the wing span measured, the demarcation between males and females based on wing span could be further refined.

The percentage of banded birds that were retrapped during the survey was high, 55.5 per cent and 60 per cent at Coutts Crossing and Moonce respectively; several were recaptured several times and one was retrapped five times (Table 1). The retrapping of birds, particularly those of a known age (juveniles) and the recording of their soft part colours at each subsequent capture has enabled the progression of the various facial colours to be described in a 'Bird in the Hand' on this species (Clancy 1994).

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