

but breeding males were again somewhat lighter on the underparts than females. Adults of both phases were similar on the upperwings and mantle (not different as is sometimes stated).

Six light phase juveniles (progeny of light x light parents) were all a rich rufous on the head and underparts and less streaked than the adults. They were also darker brown on the wings and mantle, with deeper fawn (rather than greyish), less contrasting upperwing coverts. No dark phase juveniles were seen, but from museum specimens it appears that they are a darker, less streaked chestnut brown on the head and underparts than adults, with similarly darker wings and mantle and less contrasting wing coverts. A post-moult light phase bird with a rufous, unstreaked head and otherwise adult appearance may have been in an intermediate plumage stage.

Nestlings had pale yellow cere and toes, which faded to whitish at or soon after fledging. Museum specimens indicate that some juveniles retain a yellow gape into at least their first autumn.

The above data suggest that: 1) Little Eagles of either phase become lighter in colour with age; 2) adult males are lighter on the underparts than adult females of the same phase; 3) first year birds should be identifiable by their rufous (light phase) or chestnut (dark phase) head and underparts, lack of heavy streaking about the head, dark wings and mantle, and any yellow remaining in the soft parts. Further work is required on age differences in plumage, particularly on the time taken to reach adult plumage, and details of any intermediate plumage stages. Thanks are due to staff of The Australian Museum for access to specimens.

S.J.S.D.

## WEIGHTS AND MEASUREMENTS

### Little Eagle *Hieraetus morphnoides*

Adults and juveniles combined

		Range	Mean	SD	n
Wingspan (mm)	♂	1 142-1 170	1 151	13.0	4
	♀	1 248-1 322	1 282	32.2	6
Weight (g)	♂	578-655	608	29.1	5
	♀	880-1250	1 070	152.1	5

Wingspans were obtained from The Australian Museum (3♂, 2♀) and the Australian Bird-Banding Scheme (1♂, 4♀). Weights were obtained from the Armidale Region, N.S.W. (3♀ : 880g, 1 020g, 1 250g), The Australian Museum (1♂ : 594g, 2♀ : 1 000g, 1 199g), Queensland Museum (1♂ : 578g), and the Australian Bird-Banding Scheme (3♂ : 600g, 613g, 655g). These data suggest that the sexes should be separable in the hand on wingspan and weight, because of the apparent lack of overlap in these dimensions. Comparison with the unpublished data of others indicates that the Armidale weights represent the extremes of variation yet recorded for females. Thanks are due to W. Boles and W. Longmore (Aust. Mus.), G. Czechura (Qld. Mus.) and D. Purchase (ABBS) for access to specimens and supplying data.

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## What are Your Preferred Numbers?

A source of error in measurement can be due to the bander having preferred numbers. This may be particularly relevant to measurements such as wing span which depend to a large extent on the cooperation of the bird.

To illustrate this, the final digit recorded for 300 wing span measurements from White-plumed Honey-eaters *Leichenostomus penicillatus*, made by a single bander have been examined. For the 300 wing span measurements, range 227-272 mm, the final digit of each measurement was put into one of ten cells from 0 to 9. On this scheme 227 would have been a 7 and 272 would have been a 2. The results for the 10 cells are shown in Table 1.

TABLE 1

0	1	2	3	4	5	6	7	8	9
30	30	50	17	20	43	23	32	31	24

It would be expected that there should be approximately an equal number of measurements in each cell, in this case 30. The results show otherwise. A chi-square test was carried to see if the observed value of each cell differed significantly from the expected value of 30.

The chi-square value obtained from this test (30.93) is very much greater than the critical value at  $P = 05$  with 9 degrees of freedom (16.92) indicating that the observed values are significantly different from the expected numbers. Unfortunately, there are no statistical tests to determine exactly which digits are the culprits, i.e. which are preferred and which are avoided.

An examination of Table 1 indicates that this bander may prefer to end his wing span measurements with 2 or 5 at the expense of 3 or 4. This could be due to several factors associated with this measurement, such as the "little bit more" syndrome.

Banders should be aware of this possible source of error and check their own results.

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## New Members

ANTRAM, F. B. S., Manly, N.S.W.  
BARKER, K., Casterton, Vic.  
BURKING, R. C., Rossmoyne, W.A.  
BYWATER, J., Jabiru, N.T.  
FORDE, N., Valley View, S.A.  
HARMER, R. F., Port Macquarie, N.S.W.  
HILL, J. W. A., West Germany.  
McINTOSH, D., Petrie, Qld.  
MARTIN, J., Ingleburn, N.S.W.  
PASTORELLI, J., Punchbowl, N.S.W.  
RISTOW, G., Richardson, A.C.T.  
SHIELDS, J. M., Beecroft, N.S.W.  
SMITH, M., Aitkenvale, Qld.