

Sexing of Lewin's Honeyeaters

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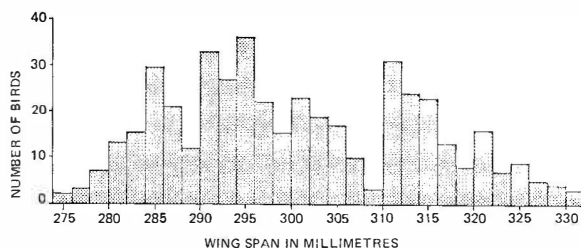
Data are presented which show that the sexes of the Lewin's Honeyeater *Meliphaga lewinii* may be differentiated on the basis of wing-span measurement.

To December 1976 a total of 588 Lewin's Honeyeaters have been banded at Iluka on the north coast of New South Wales by a number of banders who have visited the area irregularly since 1960. Wing-span measurements have been recorded for 450 birds using the method described by Disney (1966). The species is not sexually dimorphic and the following data demonstrate that the sexes may be separated on the basis of wing-span measurement. The sample is considered large enough to negate the slight differences in measurements taken by individual banders.

Measurements

Wing-span measurements taken ranged from 274 mm to 330 mm. The accompanying histogram of the measurements (Fig. 1) shows two clear groups, a lower from 274 mm to 299 mm and a higher from 310 mm to 330 mm. The wing-spans of the 235 birds in the lower group averaged 290 mm and that of the 143 in the higher, 317 mm.

However, a number of other studies, Disney (1966), Lane (1973, 1974, 1976), and Morris (1975), has shown that birds of the year can be expected to increase their wing-span measurement after the moult of their first primaries. A wing-span increase of between 6 mm and 16 mm has been recorded with immature Lewin's Honeyeaters at Iluka. Because of the irregularity of banding visits to the area, regular measurements are not available. A few birds that have been re-trapped show the expected increase. Two such examples are 040-28086, which measured 287 mm when banded on 11 December 1966 and 298 mm when re-trapped on 2 September 1969, an increase of 11 mm, and 040-42629, which measured 309 mm on 9 December 1966 and 325 mm when re-trapped on 30 March 1975, an increase of 16 mm.



• Figure 1. Histogram of wing-span measurements of Lewin's Honeyeater at Iluka, N.S.W. (450 measured).

At Iluka, 48 birds have been sexed by cloaca examination, as described by Disney (1967). Thirty-one males had wing-spans from 308 mm to 330 mm, with an average of 318 mm. Seventeen females had wing-spans from 280 mm to 305 mm, with an average of 293 mm. These figures agree closely with those for the two ranges in the histogram.

As an extension to the banding data available the collection of The Australian Museum was consulted to obtain information on specimens lodged there. Wing-span measurements of nine males ranged from 295 mm to 326 mm and that of seventeen females from 285 mm to 300 mm. In view of the measurements of the two smallest males, 295 mm and 299 mm, both recorded as immatures, the overlap range of wing-spans of large females and small males must be greater than that apparent from Figure 1.

Conclusion

As with some other species of honeyeaters, the majority of Lewin's Honeyeaters may be sexually differentiated on the basis of wing-span measurement. There is an overlap, but birds with a wing-span above 308 mm can be accepted as males and those with a wing-span below 295 mm can be accepted as females.

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

White-faced Storm-petrels on Belowla Island, N.S.W.

S. G. LANE

On the night of 16/17 December 1976, Mr H. Battam and I made a second visit to Belowla Island, off Kioloa on the south coast of N.S.W. The first visit occurred during daylight on 17 December 1972. However, the recent visit was specifically for the purpose of mist-netting White-faced Storm-petrels *Pelagodroma marina* at night.

A landing was effected on the high tide about 16:30 hours on 16 December, but not without some problems considering the amount of equipment needed for the job. Five 20 m by 3 m wader nets (50 mm mesh) were set in the shape of an "L", covering only a small part of the four hectares.

The first arrivals were caught about 22:30 hours (summertime) and the catching continued until the nets were pulled down about 02:00 hours on 17 December. The cessation of catching was necessary to enable us to cope with the boat and equipment; an unpredicted southerly wind arose during the night and was expected to make our departure difficult or impossible on the dawn high tide. In the catching period 210 Storm-petrels,

one Wedge-tailed Shearwater *Puffinus pacificus* and three Short-tailed Shearwaters *P. tenuirostris* were caught and banded*.

Undoubtedly most, if not all, of the Storm-petrels caught were incoming birds, as the exodus usually occurs after 03:00 hours. In netting activities of this type only a small proportion of the birds is caught, and in this case only part of the area was netted. Accordingly, the number of Storm-petrels caught during this visit rather indicates that the breeding population is probably much greater than the "over 1 000" breeding pairs estimated from the previous visit (Lane 1973), which occurred during daylight.

Other birds seen on the island during the visit follow:

Little Penguin *Eudyptula minor*—A few were found; some adults were with chicks, but no specific attempt was made to search for these birds.

Black Cormorant *Phalacrocorax carbo*—About 25 were roosting on the rocks.

Sooty Oystercatcher *Haematopus fuliginosus*—12.

Masked Plover *Vanellus miles*—two.

Silver Gull *Larus novaehollandiae*—three.

Little Grassbird *Megalurus grammurus*—four, but more may have been present.

Skinks were numerous; these were probably *Sphenomorphus quoyi* and not *Ergernia* sp. as previously reported.

The departure from the island at 05:30 hours on 17 December 1976 was difficult; its success was due to patience, good judgment and the considerable experience of Harry Battam in similar circumstances.

Reference

Lane, S. G. (1973), 'Seabird Islands No. 3, Belowla Island, New South Wales', *Aust. Bird Bander* 11: 61.

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

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References

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