Sexing of Lewin's Honeyeaters

D. I. SMEDLEY

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 retrapped show the expected increase. Two such examples are 040-28086, which measured 287 mm when banded on 11 December 1966 and 298 mm when retrapped on 2 September 1969, an increase of 11 mm, and 040-42629, which measured 309 mm on 9 December 1966 and 325 mm when retrapped 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 honeycaters, the majority of Lewin's Honeycaters 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 Birdbanding Scheme, Division of Wildlife Research, CSIRO.