

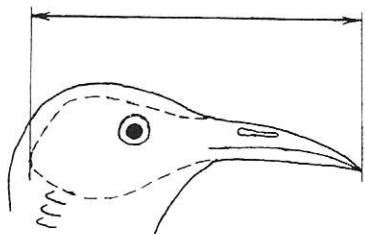
## A Measurement for Sexing New Holland Honeyeaters

Many Australian passerines are sexually indistinguishable and a reliably objective and quick method of sexing would be a great advantage in field studies of these birds.

In April 1973, at the beginning of a study of the behaviour of the New Holland Honeyeater *Meliornis novaehollandiae*, I sexed individuals by laparotomy as described by Bailey (1953). Conventional body measurements overlap between sexes and the stretched wing span method described by Disney (1966) was found to be too subjective as well as being inapplicable where wing tips are worn. Sexing by cloacal examination (Disney, 1967) is quite accurate but is unfortunately confined to birds in breeding condition.

Since that time I have found an objective body measurement that is readily made on live birds and clearly separates adult males and females. The measurement is made from the back of the skull to the tip of the beak (see Figure 1) and I have been consistent in successive measures of the same individuals to an accuracy better than 2 per cent. The measure is most easily made with a vernier caliper square operated from above the bird's head. Care should be exercised to consistently measure to the extremity of the protuberance at the back of the skull.

The measure has been made on 15 females and 20 males positively sexed by laparotomy or



• Figure 1. — Measurement from the back of the skull to the tip of the beak (skull outline shown dotted).

known nesting behaviour. The mean and range for females was 40.8 mm and 39.4 to 41.9 mm, and that for males 44.2 mm and 42.7 to 46.2 mm.

Dr David Keast, Microbiology Department, University of Western Australia, while collecting and dissecting specimens in nearby localities, has made the same measure on six females and four males. The method worked well for all but one aberrant male that measured 40.2 mm, i.e. in the female range. The weight and other body measurements of this bird were also low, resembling a female, although the testes were of average size for that time of the year (April) of 5 and 5.5 mm. This is the only bird to date that would have been sexed incorrectly by this method.

The measurement cannot be made on most museum specimens because the back of the skull has been removed during preparation.

Until larger samples are taken the degree of accuracy will not be known for certain, but at the present time the method is reliable enough to warrant its continued use on this species and is worthy of investigation for other species.

### References

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I. J. Rooke,  
 Department of Zoology,  
 University of Western Australia,  
 Nedlands, W.A.