

Sexing Passerines By Cloaca Examination

H. J. de S. DISNEY

It has long been known that during the breeding season many male passerines show a cloaca protuberance (Wolfson 1952) and this has been used by collectors and overseas banders for sexing birds.

This method was tried out successfully by the writer and Mr S. G. Lane on a field trip in December 1964. As it may not be known to many Australian banders, details of the method as it is used by the writer are given below with observations on some of the birds on which it has been used.

Experience is best gained by examining birds which can be positively sexed by plumage.

MALES:

In the non-breeding season the testes of male birds become very small and enlarge greatly during the season. At the same time the seminal vesicles in which the sperms are stored, situated by the cloaca, behave in a similar way. In the breeding season they enlarge and become a mass of convoluted tubules which may become so great that a protuberance or bulge appears at the rear side of the cloaca. The cloaca is pushed forward and stands away from the body wall, its lips forming a rounded orifice.

Male Wrens (*Malurus spp.*) have very large pronounced protuberances, but as their skin is black the tubules cannot be seen.

In other birds such as silvereyes (*Zosterops spp.*) and honeyeaters (*Meliphagidae*) when the tubules are fully enlarged they form two well marked protuberances on each side of the ventral wall of the cloaca. Even when no bulge is visible, if the ventral wall is wetted to make the skin more transparent, and then pressed, the tubules of the vesicles can be seen through the skin.

So far this character of cloaca protuberance has not been found in any non-passerine bird.

FEMALES:

When females are breeding or have recently laid, the lips of the cloaca are swollen, the opening is in the form of a transverse slit, and a brood patch may be present. The cloaca does not stand up away from the body wall as in the male, and the body wall seems to merge with no marked angle into the front wall of the cloaca.



- Male Silvereye cloaca (breeding bird).

Photo: Howard Hughes,
Australian Museum

During breeding most female passerines can be determined by the character of swollen lips and slit like opening of the cloaca. This probably applies also to females of all orders. Mutton birds are an example (Serventy 1956).

References

- Serventy, D. L. (1956) "A Method of Sexing Petrels in Field Observation", *Emu*, 56: 213-214.
- Wolfson A. (1952) "The Cloaca Protuberance—A means for determining Breeding Condition in Live Male Passerines", *Bird Banding*, 23: 159-165.

H. J. de S. Disney,
Australian Museum,
Sydney, N.S.W.

SILVEREYE

Male



Side view



Rear view



Side view

Large seminal vesicles

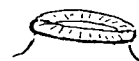
Small seminal vesicles visible after wetting skin

FEMALE

Most species



Side view



Rear view

NEW MEMBERS

Associate Members:

- DOW, Dr Douglas D., Dept of Zoology, University of Western Ontario, London, Ontario, Canada.
- FINCH, R. W., 57 Anzac Ave., West Ryde, N.S.W.
- GEE, J. P., "Miala" Jesmond Rd., Figtree Pocket, Indooroopilly, Qld.
- JONES, B., 716 Henry Lawson Drive, East Hills, N.S.W.
- KAVENEY, M. T., Public School, Albert, N.S.W.
- LAYBOURNE-SMITH, Mrs H. N., Willowdene, Stirling West, W.A.
- WHAYMAN, Mrs O., 82 Harcourt St., New Farm, Qld.
- WHAYMAN, W. R. 82 Harcourt St., New Farm, Qld.

Junior Members:

- HAYDEN, M. A., St Paul's Boys, Home, New Haven, Phillip Island, Vic.
- MARSHALL, L. B., St Paul's Boys Home, New Haven, Phillip Island, Vic.
- MELLIS, A. F., 42 Rickston St., Manly, Qld.
- PAYTON, G., "Sunshine" Wybong Rd., via Muswellbrook, N.S.W.
- WREN, C. I., 52 Rolleston Ave., Salisbury North, S.A.
- WREN, J. S., 52 Rolleston Ave., Salisbury North, S.A.

Co-operative Projects

The assistance of banders in any of the following co-operative projects would be welcomed. If you feel you could help, please contact the project leader or the Secretary, Australian Bird-Banding Scheme for further details.

- 10 MIGRATORY WADERS; Movements to and from Eastern Asia.
Australia and Territory of Papua and New Guinea.
Australian Bird-Banding Scheme, Division of Wildlife Research, CSIRO, P.O. Box 109, Canberra City, A.C.T.
- 21 FLAME ROBIN; Movements.
South-eastern Australia (including Tasmania).
Mrs P. N. Reilly, 1 Exon Street, Hampton, Vic.
- 66 EASTERN SILVEREYE; To obtain information on dispersal of various breeding populations, life histories.
Eastern Australia (including Tasmania and South Australia).
Mr S. G. Lane, 65 Wood Street, Lane Cove, N.S.W.

It is not necessary to submit a separate project application in order to participate in a co-operative project. However, the project leader and the Secretary should be informed of your intention to assist.