

Using sexual dimorphism in morphometric traits to sex Eastern Yellow Robins *Eopsaltria australis*

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The identification of the sex of individuals is important for the investigation of gender roles in the behavioural ecology of species and sex-specific differences in demography. We investigated the extent of sexual size dimorphism in the Eastern Yellow Robin (*Eopsaltria australis*), a species with no sex differences in plumage, and the utility of morphometric traits to sex adult and juvenile birds. Using a sample of adult birds sexed on the basis of sex-specific breeding behaviour, we found strong sexual dimorphism in all morphometric traits measured, namely total head length, wing chord, body mass, tarsus length and tail length, with males being larger than females. Total head length was the most reliable measure to use to sex adult Eastern Yellow Robins, showing the greatest repeatability and no overlap in the measurements of males and females. Total head length averaged (± 1 s.d.) 40.1 ± 1.0 mm among adult males and 36.7 ± 0.4 mm among adult females. Juvenile birds captured within the first month of fledging showed no subsequent change in body mass and tarsus length between juvenile and older ages, and a two-way plot of body mass and tarsus length provides a reliable method for sexing juvenile birds.