

## MSc projects on 'cooperation in Australian fairy-wrens'



The fairy-wren genus is very well studied and known for their extremely high levels of promiscuity. All 9 Australian fairy-wren species are cooperative breeders with males staying with their parents to help rear the next brood. In the red-winged fairy-wren females also stay at home. The extreme philopatry of both sexes make this species ideally suitable to study both the costs and benefits of living in close proximity with kin. Using approaches from the fields of population genetics, behaviour, and population modelling we investigate aspects of inbreeding avoidance, dispersal and mate choice. There are several options for projects, for example, as part of your MSc. Projects can involve use of the long-term dataset in combination with experiments in the field (field period October to January). Possible research questions are:

How does mate choice affect inbreeding avoidance & kin competition?

Are there genetic benefits of extra-pair paternity?

Is there evidence for a sex-ratio bias in offspring production?

Does helping behaviour depend on relatedness to the brood?

**Field work is in south-western Australia, a biodiversity hotspot. Experience with using binoculars to observe bird behaviour and read colour bands is desirable.**

If you are interested in doing a project, please contact Lyanne Brouwer [lyanne.brouwer@anu.edu.au](mailto:lyanne.brouwer@anu.edu.au) website: [www.myscience.eu/lyanne](http://www.myscience.eu/lyanne)