

Two PhD positions 'Heat stress in cooperative breeding fairy-wrens'

In the Behavioural and Evolutionary Ecology of Birds Group

(<https://sites.google.com/site/petersresearchgroup/>) @ Monash University, Melbourne, Australia, two PhD positions (start date negotiable) are available to study how ambient temperatures affect physiology and behaviour of superb fairy-wrens *Malurus cyaneus*, and purple-crowned fairy-wren, *Malurus coronatus*, both very well studied model species. Superb fairy-wrens are common in SE Australia, purple-crowned fairy-wrens inhabit the tropical savannah.

The proposed projects will investigate effects of high temperatures on metabolism, condition, heat stress, behaviour, and molecular aging (telomere length) and how these might be mitigated by cooperative breeding. The projects will focus on immediate responses by nestlings, delayed effects into adulthood, and include experimental approaches (superb fairy-wrens only). The project on purple-crowned fairy-wrens will also look at genetic effects, using the 7 generation pedigree. The students will also have freedom to develop own research directions within the broad topic.

Field work on superb fairy-wrens will take place at Lysterfield Park, an open woodland near the university, where we study a large partly-colourbanded population. Field work for purple-crowned fairy-wrens will be taking place at AWC Mornington Wildlife Sanctuary in the Kimberley, the tropical monsoonal region of NW-Australia. The research is well-funded through a Discovery Project grant (DP18) to Assoc Prof Anne Peters.



Requirements and further information

Open to international applicants. Applicants must have excellent grades, a passion for studying wild animals in their natural environment, a strong work ethic, experience with fieldwork and/or bird handling and/or relevant quantitative skills are highly desirable, a full driver's licence is needed. Successful students will be accepted into the world class Monash Doctoral Program. They will be offered a scholarship (\$27,872 p.a. tax free) for three years, with a six-month extension; tuition fees are covered for the duration of candidature. Highly competitive Australian or New Zealand students will be offered an additional \$10k p.a. Monash Excellence top-up scholarship. Research costs and conference attendance are covered. Details see here: <https://www.monash.edu/science/schools/biological-sciences/postgrad/how-to-apply>

See <https://sites.google.com/site/petersresearchgroup/opportunities> for further details. Contact Anne (anne.peters@monash.edu) if you would like further information on the project or the application process. Deadline is 15 March 2019, but earlier application welcome.