

HONOURS PROJECT

Project Title: Patterns of activity of echidnas in the West Australian wheatbelt.

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Project

Echidnas are unusual amongst Australian mammals as they are often diurnally active, especially during the winter months. Preliminary work on echidnas at Dryandra Woodland suggests that the population of echidnas there have remarkably synchronous activity patterns. This study will use camera traps to examine the times that echidnas leave and return to known retreat sites (caves and logs) to determine the degree of synchrony between individuals, the impact of weather, season and environmental variables such as moon phase on activity times, and if animals sheltering in logs and caves have similar activity patterns.

Funding: Most equipment and materials are already available. The student will need to contribute to the cost of regular travel to the study site (170 km south-west of Perth).

References:

- Abensperg-Traun, M., & Boer, E. D. (1992). The foraging ecology of a termite-and ant-eating specialist, the echidna *Tachyglossus aculeatus* (Monotremata: Tachyglossidae). *J Zool*, 226: 243-257.
- Brice, P. H., Grigg, G. C., Beard, L. A., & Donovan, J. A. (2002). Patterns of activity and inactivity in echidnas (*Tachyglossus aculeatus*) free-ranging in a hot dry climate: correlates with ambient temperature, time of day and season. *Aust J Zool*, 50: 461-475.
- Clemente, C. J., Cooper, C. E., Withers, P. C., Freakley, C., Singh, S., & Terrill, P. (2016). The private life of echidnas: using accelerometry and GPS to examine field biomechanics and assess the ecological impact of a widespread, semi-fossorial monotreme. *J Exp Biol*, 219: 3271-3283.