

Dr James Pryke



My academic career began with an MSc in applied entomology looking for a way to minimise the pest loads on export table grapes by using the surrounding landscape. For my PhD I worked on the conservation of arthropods across the Cape Peninsula. This project was more conservation and biodiversity driven, but also allowed me to continue to work on landscape ecology issues. After receiving my PhD, I undertook a two month fellowship at the Universiti Brunei Darassalum working on insect behaviour and biodiversity within the tropical forests of Borneo. This project involved work on the behaviour of butterflies and dragonflies within tropical forests.

In 2008, I was employed as a Researcher in sustainable landscapes for agro-forestry at Stellenbosch University. This position primarily involved conducting research into improving the design and management of ecological networks within commercial forestry. In my research, I used conservation and landscape ecology principles to research ways to mitigate the negative effects of forestry on biodiversity and to help plot a more sustainable way forward. This position and research was funded by Mondi Global Funding. As of August 2013, I am now employed as a Lecturer in Conservation Ecology and Entomology at Stellenbosch University. I am looking to expand the concept of sustainability using landscape ecology principles. I have developed my ideas and principles in the forestry sector and I am currently trying to advance these concepts into other agricultural landscapes.

Much of my past research has fed directly into actual management plans and conservation practice. Although working in the applied fields requires much extra work (meeting landowners, conservation organisations, etc.), I feel this technology transfer is vital for conservation and would like to continue to remain very applied in my scientific endeavours. In the past I have built my career in landscape ecology and compositional biodiversity, particularly trying to help the timber industry become more sustainable. In the future I wish to continue to look at using biodiversity to build sustainable agro-ecosystems, although this emphasis will most likely shift to the production landscapes of the Western Cape. I have also started my first projects where the functional biodiversity is measured alongside baseline of compositional diversity.

Within the Department of Conservation Ecology and Entomology, I Lecture landscape ecology, conservation management and meta-population dynamics. I also co-ordinate the 4th year projects as well as been the Postgraduate and Postdoc coordinator. I am also managing the: Stellenbosch University ecological network research ([Mondi Ecological Network Programme](#) (MENP))

Publications

1. Pryke, J.S., Roets, F. and Samways, M. J. 2013. Importance of habitat heterogeneity in remnant patches for conserving dung beetles. *Biodiversity Conservation* 22:2857–2873
2. Crous, C.J., Samways, M.J. and Pryke, J.S. 2013. Associations between plant growth forms and surface rockiness explain plant diversity patterns across an Afro-montane grassland landscape. *South African Journal of Botany* 88:90–95

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3. Gerlach, J., Samways, M.J. and Pryke, J.S. 2013. Terrestrial invertebrates as bioindicators: an overview of available taxonomic groups. *Journal of Insect Conservation* 17:831–850
4. Roets, F., Pryke, J.S. and McGeoch, M.A. 2013. Abiotic variables dictate the best monitoring times for the endangered Table Mountain stag beetle (*Colophon westwoodi* Gray 1832, Coleoptera: Lucanidae). *Journal of Insect Conservation* 17:279–285
5. Crous, C.J., Samways, M.J. and Pryke, J.S. 2013. Exploring the mesofilter as a novel operational scale in conservation planning *Journal of Applied Ecology* 50:205–214
6. Roets, F. and Pryke, J.S. 2013. The rehabilitation value of a small culturally significant island based on the arthropod natural capital. *Journal of Insect Conservation* 17:53–65.
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10. Pryke, J.S. and Samways, M.J. 2012. Conservation management of complex natural forest and plantation edge effects. *Landscape Ecology* 27: 73–85
11. Pryke, J.S., Vrdoljak, S.M. Grant, P.B.C. and Samways, M.J. 2012. Butterfly responses to natural Bornean tropical rain-forest canopy gaps. *Journal of Tropical Ecology* 28: 45–54
12. Pryke, J.S. and Samways, M.J. 2012. Differential resilience of invertebrates to fire. *Austral Ecology* 37: 460-469
13. Pryke, J.S. and Samways, M.J. 2012. Importance of using many taxa and having adequate controls for monitoring impacts of fire for arthropod conservation. *Journal of Insect Conservation* 16: 177–185
14. McGeoch, M.A., Sithole, H., Samways, M.J., Simaika, J.P., Pryke, J.S., Picker, M., Uys, C., Armstrong, A.J., Dippenaar-Schoeman, A., Engelbrecht, I.A., Braschler, B. and Hamer, M. (2011) Monitoring terrestrial and freshwater invertebrates in protected areas. *Koedoe*, 53(2), Art. #1000, 13 pages. doi:10.4102/koedoe.v53i2.1000
15. Samways, M.J. Pryke, J.S. and Simaika, J.P. (2011) Are oceanic islands really under more threat than land islands? Dragonflies in the western Indian Ocean and southern Africa. *Biological Conservation* 144: 1145-1151
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21. Pryke, J.S. and Samways, M. J. (2008) Conservation of invertebrate biodiversity on a mountain in a global biodiversity hotspot, Cape Floral Region. *Biodiversity and Conservation* 17: 3027-3043.
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