

Curriculum Vitae for Daniel James Rogers

Professional Experience

Principal Ecologist (2014-present) - Department for Environment & Water, SA Government

Ecologist, Ecological Restoration (2009-2014) – Department of Environment & Natural Resources, SA Government

Research Fellow (2002-5, 2008-present) – School of Biological Sciences, University of Adelaide

CLLAMMEcology Postdoctoral Fellow (2006-2008) – School of Earth & Environmental Sciences, University of Adelaide

Postdoctoral Researcher (2005-2006) – Department of Animal Ecology, Lund University (Sweden)

Education

Doctor of Philosophy (1998-2002) – Department of Environmental Biology, University of Adelaide

Bachelor of Science with First Class Honours (1997) – Department of Zoology, University of Adelaide

Bachelor of Science (1992-1996) – Flinders University of South Australia

High level Committee representation

National Native Vegetation Working Group (2017-present)

Australian Ecosystem Models Framework Scientific Consultative Committee (2017-present)

Coorong, Lower Lakes & Murray Mouth Scientific Advisory Group (2004-present)

Centre for Applied Conservation Science, University of Adelaide (2016-present)

National Environmental Science Program Threatened Species Recovery Hub Stakeholder Reference Group (2016-present)

Select Publications

Rogers, D.J., Broadhurst, L.J.W., Skinner, A., Brunt, K., Baker, T., Dwyer, S. & Doerr, V. (2016). Climate-ready Restoration: Some practical guidelines for plant restoration in an uncertain future. CSIRO Australia

Moseby, K., Read, J., McLean, A., Ward, M. & Rogers, D.J. (2016). How high is your hummock? The importance of *Triodia* height as a habitat predictor for an endangered marsupial in a fire-prone environment. *Austral Ecology* **41**, 376-389

McIlwee, A.P., Rogers, D.J., Pisanu, P., Brandle, R. and McDonald, J. (2013). Understanding ecosystem dynamics in South Australia's arid lands: a framework to assist biodiversity conservation. *The Rangeland Journal* **35**, 211-224

Paton D.C., Willoughby N., Rogers D.J., Ward M.J., Allan J.R., West A. (2010) Managing the woodlands of the Mt Lofty Region, South Australia. In 'Temperate Woodland Conservation and Management'. (Eds D Lindenmayer, A Bennett and R Hobbs) pp. 83-91. (CSIRO Publishing: Collingwood)

Paton, D.C., Rogers, D.J., Hill, B.M., Bailey, C.P. and Ziembicki, M. (2009). Temporal changes to spatially stratified waterbird communities of the Coorong, South Australia: implications for the management of heterogeneous wetlands. *Animal Conservation* **12**, 408-417

Olsson, O. and Rogers, D.J. (2009). Predicting the distribution of a suitable habitat for the white stork in Southern Sweden: identifying priority areas for reintroduction and habitat restoration. *Animal Conservation* **12**, 62-70

Motivation and capacity to serve on the Ecosystem Science Council

An Integrated Community of Ecosystem Scientists and Decision Makers

A key motivation for me to serve on the Ecosystem Science Council focuses on improving how ecosystem science informs, and is informed by, the evidentiary needs of policy makers and environmental managers. In both academia and government, a central theme of my career has been understanding the nature of biodiversity conservation issues, and how my skills in applied ecology can best be applied to address these issues. More recently this has broadened to not only understanding how my skills can be brought to bear, but (and far more often) also where we are able to access these skills among the broader research community, and forming strong collaborations between the research sector and the environmental management sector.

Since joining the South Australian Government I have increasingly focused on this interaction between environmental science and decision making. From a practical sense, my central role in government is to act as a conduit between environmental decision makers and environmental researchers, both within South Australia and nationally. I have also become increasingly interested in different models of the science-policy interface, and recently undertook a study tour of the UK and Europe to meet with the UK Government Office of Science, and the European Commission's Joint Research Centre. My experience has found that effective integration between science and policy requires the development and maintenance of long-term relationships and trust between scientists and policy-makers, and collaboration from the very beginning of a science-policy issue. We also need to collectively recognise the skills and experience that everyone brings to that partnership, and that environmental decisions are always made in a highly complex social, economic and political arena that can be difficult to navigate.

While there are many examples of this interaction working well, there is also a clear and almost universal need for organisations that are specifically designed to act at this interface space (variously called boundary organisations, knowledge brokers, and knowledge exchange organisations). I believe that the Ecosystem Science Council has the potential to play an important role in bridging the gap between the ecosystem science community and those that require better evidence to inform environmental decisions, and act as a space for environmental scientists and decision makers to form a community around how ecosystems function, and improving the use of evidence in how they are managed.

Collaboration and Coordination to progress Australian ecosystem science

I am also motivated to serve on the Ecosystem Science Council, as I see the Council as an excellent opportunity to further develop national collaborative opportunities across Australian ecosystem scientists, and improve how ecosystem sciences in Australia are coordinated. This partly relates to my interest in how science informs policy (as expressed above), but I am also interested in how the Council may help improve the integration of knowledge with respect to ecosystem science *per se*. Australia already has exceptional capability in the ecological sciences that relate to how ecosystems function, and how this knowledge can be used to improve the ecosystem management and restoration. There remain significant opportunities for the Council to help develop integrated frameworks of ecosystem ecology and to develop integrated approaches to the way we collaborate when undertaking ecosystem research.

Ecosystem Management and Restoration is central to biodiversity conservation and human well being

Most fundamentally, my motivation for serving on the Ecosystem Science Council is that I see the Council playing a critical role in improving how we manage and restore Australia's ecosystem into the future, so that our ecosystems can continue to support the conservation of our unique biodiversity, and so that future generations can continue to benefit from healthy and resilient ecosystems. Australia's ecosystems have been transformed over the past 200 years, resulting in a loss of native biodiversity, and degradation of ecological functions. Given the trajectory of global

change, the future for these ecosystems is likely to be very different from the past. Understanding how ecosystems function now and in the future, how our interventions impact on these systems, and how we can best manage them to ensure they retain their value, are fundamental and significant challenges to the Australian ecological science community. The Ecosystem Science Council could play a central role in coordinating and leading Australian ecosystem science to meet this challenge.

Signed Statement

I, Daniel Rogers, subscribe to the principles and ideals outlined for the Council, and that you are willing to commit the required time and energy to undertake the Council's work.

A handwritten signature in black ink, appearing to read 'D. J. Rogers', written over a large, faint, oval-shaped watermark or background mark.

Daniel J Rogers

Principal Ecologist, Department for Environment and Water, South Australian Government