Appendix 1. Details of the professional expertise of the Wild Deserts team members who prepared this Review of Environmental Factors

Project Staff

Name: Rebecca West

Role: Ecologist, Wild Deserts

Qualification: 2013: PhD, University of Adelaide

Representations

Warru (black-footed rock-wallaby) Recovery Team Consultant Ecologist Scientific Advisory Team member for Arid Recovery

Relevant experience

I am a reintroduction ecologist. I have spent the past 7 years working in arid zone environments of Central Australia. My PhD research focussed on assessing reintroduction as a tool for recovering populations of the endangered black-footed rock-wallaby in South Australia. I continue to work as a research consultant on the recovery team which began reintroductions to wild sites this year. Following my PhD, I worked in a postdoctoral research position at UNSW, researching the role of *in situ* predation in improving predator avoidance behaviours of the burrowing bettong, greater bilby and greater stick-nest rat. The research project also examined the relationship between individual characteristics and survival following reintroduction to test whether selective breeding may be used to improve the outcomes of threatened species reintroductions. I took up the position as Ecologist, Wild Deserts in October 2016.

Relevant Publications

- West R, Letnic M, Blumstein DT, Moseby KE. (2017) Predator exposure improves anti-predator responses in a threatened mammal. Journal of Applied Ecology. https://doi.org/10.1111/1365-2664.12947
- West R, Ward MJ., Foster WK., Taggart DA. (2017) Testing the potential for supplementary water to support the recovery and reintroduction of the black-footed rock-wallaby. *Wildlife Research*, https://doi.org/10.1071/WR16181
- West, R., Read, J., Ward, M., Foster, W., & Taggart, D. (2017). Monitoring for adaptive management in a trial reintroduction of the black-footed rock-wallaby *Petrogale lateralis*. Oryx, 51(3), 554-563.
- West, R., Potter, S., Eldridge, M.D.B. (in press) Looking back to go forward: genetics informs future management of captive and reintroduced populations of the black-footed rock-wallaby *Petrogale lateralis, Conservation Genetics.*
- West, R (2013) Reintroduction as a tool for the recovery of warru (*Petrogale lateralis* MacDonnell Ranges race) on the Anangu Pitjantjatjara Yankunytjatjara Lands of South Australia, PhD Thesis, University of Adelaide

Training/Supervision:

Current: Co-supervision of 1 PhD Student Completed: 3 Honours

Name: Reece Pedler

Role: Project Co-ordinator, Wild Deserts

Qualifications: 2005: Honours, University of Adelaide PhD, Deakin University (in press)

Representations

Scientific Advisory Team member of Arid Recovery;

Relevant experience

I am an arid zone ecologist with over a decade of experience working on threatened fauna species. Over the last 9 years I worked as a threatened fauna ecologist and project officer for the SA Department for Environment, Water and Natural Resources. This role aimed to determine basic knowledge on the distribution, threats and recovery actions for a range of poorly known mammals, birds and reptiles, through which I gained significant field experience in the identification and monitoring techniques for arid zone vertebrates, particularly mammals and birds. A major focus included community participation and engagement in achieving these aims; closely working with pastoralists, aboriginal traditional owners, mining and petroleum workers and other specialists. My PhD project, through Deakin University (in the final stages of completion) focusses on a threatened nomadic shorebird, the Banded Stilt, which breeds *en masse* on remote desert salt lakes following episodic flooding rains. Satellite tracking of 60 individuals across the continent and aerial surveys to detect nesting events across inland SA and WA, have led to major new understanding of the spatial scales the species operates over and the species' breeding ecology and conservation needs. My volunteer work has seen me devote thousands of hours to leadership of local conservation causes such as the Friends of Arid Recovery at Roxby Downs, the Outback Field Naturalists and the Roxby Buffel Busters weed eradication campaign.

- Pedler, R.D., Brandle, R., Read, J.L., Southgate, R., Bird, P., and Moseby, K.E., (2016) Rabbit biocontrol and landscape-scale recovery of threatened desert mammals. *Conservation Biology*, 30 (4): 774–782.
- **Pedler, R.D.** & Lynch, C.E. (2016), An unprecedented irruption and breeding of Flock Bronzewings, *Phaps histrionica,* in central South Australia, *Australian Field Ornithology*, 33: 1-13.
- Pedler, R. D., M. A. Weston, and A. T. D. Bennett (2015) Long incubation bouts and biparental incubation in the nomadic Banded Stilt. *Emu*.
- Pedler, R. D., A. T. D. Bennett, and R. Ribot (2014) Extreme nomadism in desert waterbirds: flights of the banded stilt. *Biology Letters*, 10.
- Pedler, R. D., R. Brandle, A. Fenner, and S. Lennon (2014) Limbless geckoes hanging on? Lessons in exploiting arid zone unpredictability from an elusive habitat specialist pygopod. *Wildlife Research*, 41: 266-274.
- Black, A., G. Carpenter, R. Jaensch, L. Pedler, and **R. D. Pedler** (2015) A survey of outlying populations of the Grey Grasswren, *Amytornis barbatus*. *Corella*, 39:25-37.
- **Pedler, R. D.**, and K.-J. Kovac (2013) Waterbirds on the Arcoona Lakes in arid South Australia, 2007–2010. *Australian Field Ornithology*, 30:79-96.
- **Pedler, R. D.** (2011) Recent records of the Woma Python (*Aspedites ramsayi*) in South Australia, with an evaluation of distribution, habitat and status. *Herpetofauna*, 41:31-50.
- Pedler, R. D. (2010) The impacts of abandoned mining shafts: Fauna entrapment in opal prospecting shafts at Coober Pedy, South Australia. *Ecologial Management and Restoration*, 11:36-42.

Leadership team

Name: Richard Kingsford

Role: Project Leader, wildlife manager, ecosystem ecologist, adaptive management specialist

Qualification: 1986: PhD, Sydney

Current Employment and positions

Professor, University of New South Wales, Sydney, NSW, 2052 Director of the Centre for Ecosystem Science

Major Prizes, Medals and Honours

President of the Society for Conservation Biology (Oceania) International Union for the Conservation (IUCN) of Nature's World Commission on Protected Areas Ecological Society of Australia Lake Eyre Basin Community Advisory Committee 2014 Lake Eyre Basin Partnership for the National River Prize 2012, Serventy Prize for contributions to publication in the science of ornithology 2008, Eureka Prize for Promoting Public Understanding of Science 2007, Luc Hoffmann International Medal for Contribution to Wetland Science 2004, National Banksia Award in Community 2004, National Banksia Award in Protecting Bush, Land and Waterways 2002, Winner National Trust Heritage 2001, Pol Eurkea Prize for Environment Research 2000, Premier's Gold Award for Public Service 1998, National Banksia Award

Relevant experience

The main focus of Professor Kingsford's research is conservation biology and the adaptive management of reserve areas; effects of water resource development and catchment management. He has assisted OEH in the development of an adaptive management framework, based on his experience with IUCN. He is on the expert advisory committee for OEH for Greenlisting of Protected Areas at the World Parks Congress, using the information available for good management of protected areas across the world. As well, the results of research and management have been publicised in more than 100 interviews in print, on radio and television. Professor Richard Kingsford is a world-renowned leader in the field of wetland ecology. His research and its practical applications, have significantly benefited NSW, and also more broadly Australia and regions of Oceania. Professor Kingsford has nearly 30 years of experience in arid zone research, running a number of major programs for decades across NSW. He regularly engages with government and decision makers, while continuing to communicate science to the public. His most significant work spans three areas: (i) impacts of water resource variations, (ii) waterbird ecology, and (iii) conservation challenges in Oceania (including Australia). He also leads the Centre for Ecosystem Science with more about 50 researchers or associates, including 10 academic staff and 23 postgraduate students. He is also the current President of the Society for Conservation Biology in Oceania.

- Bino, G., Ramp, D. & **Kingsford, R.** (2012) Improving bioregional frameworks for conservation by including mammal distributions. *Austral Ecology* 38: 393-404.
- **Kingsford, R.** & Watson, J. (2011) Climate change in Oceania a synthesis of biodiversity impacts and adaptations. Pacific Conservation Biology 17: 270-284.
- **Kingsford, R.T.**, Biggs, H.C. & Pollard, S.R. (2011) Strategic adaptive management in freshwater protected areas and their rivers. *Biological Conservation* 144: 1194-1203.

- Kingsford, R.T., Watson, J.E.M., Lundquist, C.J., Venter, O., Hughes, L., Johnston, E.L., Atherton, J., Gawel, M., Keith, D.A., Mackey, B.G., Morley, C., Possingham, H.P., Raynor, B., Recher, H.F. & Wilson, K.A. (2009) Major conservation policy issues in Oceania. *Conservation Biology* 23: 834-840.
- Nebel, S., Porter, J.L. & **Kingsford**, **R.T.** (2008) Long-term trends of shorebird populations in eastern Australia and impacts of freshwater extraction. *Biological Conservation* 141: 971-980.
- **Kingsford, R.T.** & Auld, K.M. (2005) Waterbird breeding and environmental flow management in the Macquarie Marshes, arid Australia. *Rivers Research and Applications* 21: 187-200.
- Kingsford, R.T. (2000) Review: Ecological impacts of dams, water diversions and river management on floodplain wetlands in Australia. *Austral Ecology* 25: 109-127.
- Kingsford, R.T., Curtin, A.L. & Porter, J.L. (1999) Water flows on Cooper Creek determine 'boom' and 'bust' periods for waterbirds. *Biological Conservation* 88: 231-248.
- **Kingsford, R.T.** & Thomas, R.F. (1995) The Macquarie Marshes and its waterbirds in arid Australia: A 50-year history of decline. *Environmental Management* 19: 867-878.

Training/Supervision: 8 Phd student, 4 Academic Staff

Name: Mike Letnic

Role: Mammal ecologist, wildlife manager, ecosystem ecologist, Project Leadership team

Qualification: 2004: PhD, Sydney

Current Employment and positions

ARC Future Fellow, 2012-2015 Associate Professor, University of New South Wales, Sydney, NSW, 2052

Major Prizes, Medals and Honours

2013, Eureka Prize for Environmental Research

Relevant experience

I am an ecologist focused on improving the conservation status of Australian ecosystems and understanding the effects that introduced species, the loss of native species and disturbances such as fire and grazing have on ecosystems. Prior to taking on a research role I was employed as a wildlife manager with NSW NPWS and Northern Territory Parks and Wildlife Service where I was responsible for policy and science relating to management of wild herbivores and crocodiles, respectively.

My current research projects relating to reintroduced endangered mammals include:

- Investigating ways to improve the reintroduction success of endangered mammals by improving their anti-predator responses.
- The effects that the loss of native mammals, specifically bettongs and native rodents has had on vegetation in semi-arid and arid ecosystems.

Relevant Publications

- Letnic M., Laffan S., Greenville A., Mitchell B., Russell B., Fleming P. (2014) Artificial watering points are focal points for activity by an invasive herbivore but not native herbivores in conservation reserves in arid Australia *Biodiversity and Conservation*
- Ritchie E. G., Elmhagen B., Glen A. S., Letnic M., Ludwig, G. & McDonald R. A. (2012) Ecosystem restoration with teeth: what role for predators? *Trends in Ecology and Evolution*27, 265-271.
- Russell B., Letnic M. & Fleming P. (2011) Manipulating feral goat access to water in the rangelands. *Rangeland Journal* 33, 143-152.
- Letnic M., Koch F., Gordon C., Crowther, M. S. & Dickman, C. R. (2009) Keystone effects of an alien top predator stem extinctions of native mammals. *Proceedings of the Royal Society of London B* 276, 3249-3256.
- Letnic M., Dickman C. R. & Tamayo B. (2005) The responses of mammals to La Nina (El Nino Southern Oscillation) - associated rainfall, predation and wildlfire in central Australia. *Journal of Mammalogy* 86, 689-703.

Training/Supervision:

Current: 6 PhD Students, 3 Honours & 1 post docs; Completed: 2 PhD, 7 Honours

Name: David Keith

Role: Adaptive management, monitoring, risk assessment, fire ecology and plant specialist, Project Leadership team

Qualification: YEAR: *PhD in plant ecology, University of Sydney*

Current Employment and positions

Professor of Botany & Deputy Director Centre for Ecosystem Science, University of NSW, 2012-2014 Senior Principal Research Scientist, NSW Office of Environment & Heritage, 1986-2012 (currently on leave without pay) Research Scientist, Tasmanian Parks & Wildlife Service, 1995-1996

Technical Officer, Plant Ecology, National Herbarium of NSW 1982-1986

Major Prizes, Medals and Honours

Finalist, OEH Eureka Prize for Environmental Research 2013, Australian Ecology Research Award, Ecological Society of Australia 2005, Ecological Society of Australia Membership Service Award 2005, Australia Award for Excellence in Educational Publishing for Tertiary Education Scholarly Reference 2005, National Trust Heritage Award (Education publication, corporate/government) 1992, Jabez King Heydon Prize for most meritorious postgraduate thesis in biology, University of Sydney 1982, CS Caird Scholarship for dux of Honours year in biology, University of Sydney

Relevant experience

I am a conservation biologist with 30 years' experience in producing scientific information critical to support national park management and conservation policy. I played a key role with colleagues Bradstock and Auld in developing the fire management strategy adopted by the NSW National Parks and Wildlife and embodied in the NSW Bushfire Code. My book on native vegetation of NSW is a key resource for assessment of bushfire risk for National Parks and Wildlife, Rural Fire Service and local governments. I apply adaptive management to resolve conservation problems. I led development of adaptive management strategies for River Red Gum national parks and Tarawi Nature Reserve and have edited a special addition of an international scientific journal (Biological Conservation) on the subject. I am extensively experienced in design and implementation of long term (10->30 years) monitoring projects in selected ecosystems throughout NSW, including, semi-arid mallee, coastal heath, river red gum forests, grassy woodlands and alpine bogs. I apply population viability analyses and other risk assessments to evaluate management options for threatened mammals, amphibians and plants. I developed a new protocol for assessing risks to ecosystems, adopted as a global standard by the IUCN. I work closely with park management staff in NSW and other states, including more than 15 years experience in western NSW researching interactions between vegetation, fire regimes, and native and introduced mammals under varied climatic conditions.

- Keith, D. A., Lindenmayer, D. B., Lowe, A., et al. (2014). Heathlands. In: Biodiversity and Environmental Change: Monitoring, Challenges and Direction. Lindenmayer, D., Burns, E., Thurgate, N., and Lowe, A. Editors, pp215-285. CSIRO, Melbourne.
- Keith D. A., Rodríguez, J. P., Rodríguez-Clark, K. M., Nicholson E., et al. (2013) Scientific foundations for an IUCN Red List of Ecosystems. *PLoS ONE* 8(5), e62111.
- Lindenmayer D. B., Likens G. E., ... Keith D. A., et al. (2012). The importance of long-term studies in ecology. Austral Ecology 37, 745-757.
- Keith, D. A. and Tozer, M. G. (2012). The influence of fire, herbivores and rainfall on vegetation dynamics in the mallee: a long-term experiment. Proceedings of the Linnean Society of New South Wales 134, A39 - A54.
- Keith D. A. (2012). Functional traits: their roles in understanding and predicting biotic responses to fire regimes. In: 'Flammable Australia: fire regimes, biodiversity and ecosystems in a changing world.' second edition (Eds. R. A. Bradstock, R. J. Williams and A. M. Gill), pp97-125. CSIRO, Melbourne.

- Keith, D. A., Martin, T. G., McDonald-Madden, E. and Walters, C. (2011). Uncertainty and adaptive management for biodiversity conservation, *Biological Conservation* 144, 1175–1178.
- Rumpff L., Duncan, D. H., Vesk, P. A., Keith, D. A., Wintle, B. A. (2011). State-and-transition modelling for Adaptive Management of native woodlands. *Biological Conservation* 144, 1224–1236.
- Mackenzie, B. D. E. and Keith, D. A. (2009). Adaptive management for conservation of an endangered population of Black Cypress Pine, *Callitris endlicheri. Ecological Management and Restoration* 10, S129-S135.
- Keith, D. A., Holman, L., Rodoreda, S., Lemmon, J. and Bedward, M. (2007). Plant Functional Types can predict decade-scale changes in fire-prone vegetation. *Journal of Ecology* 95, 1324-1337.
- **Keith, D. A.** (2004). Ocean shores to desert dunes: the native vegetation of New South Wales and the ACT. NSW Department of Environment and Conservation, Sydney.
- Keith, D. A., Williams, J. E., Woinarski, J. C. W. (2002b). Biodiversity conservation principles and approaches for fire management. Pp401-425 in R. A. Bradstock, A. M. Gill and J. E. Williams (eds.) 'Flammable Australia: the fire regimes and biodiversity of a continent.' Cambridge University Press, Cambridge.

Name: Katherine Moseby

Role: Reintroduction Specialist, Project Leadership team

Qualification: PhD in reintroduction biology, University of Adelaide (UoA)

Current Employment and positions

Ecological Horizons Environmental Consultancy, Director, 1999-2014 Arid Recovery, Research Scientist/co-founder, 1997-2014 The University of Adelaide, Adjunct Lecturer

Major Prizes, Medals and Honours

Dean's Commendation for Thesis Excellence (UoA) John Bagot Scholarship (UoA) John Smythe Memorial Prize (UoA)

Relevant experience

I am an ecologist who is focused on improving reintroduction success of Australia's threatened species and implementing effective control of pest species. I have over 20 years experience in designing and implementing on ground mammal reintroduction projects and broadscale feral animal control programs. My research focuses on understanding the effects and impacts of native and introduced species, in particular in arid and semi-arid areas. At present I am managing the western quoll reintroduction from Western Australia to South Australia and conducting research into effective cat control methods. I have previously coordinated more than 12 reintroduction programs for species such as bilbies, bettongs, bandicoots, woma pythons, numbats, stick-nest rats and quolls.

- **Moseby, K.E.**, Hill, B.M. and Lavery, T. H. (2014). Tailoring release protocols to individual species and sites: one size does not fit all. **PIoS One** 9(6): e99753. doi: 10.1371/journal.pone.0099753
- Moseby, K.E. and Read, J.L. (2014). The use of camera traps to monitor poison bait uptake. In Camera Trapping in Wildlife Research and Management (Meek, P. D., Ballard, A. G., Banks, P. B., Claridge, A. W., Fleming, P. J. S., Sanderson, J. G., and Swann, D. E., Eds.), CSIRO Publishing, Melbourne, Australia.
- Moseby, K.E., Cameron, A. and Crisp, H.A. (2012). Can predator avoidance training improve reintroduction outcomes for the Bilby (*Macrotis lagotis*) in arid Australia? Animal Behaviour 83: 1011.
- Moseby, K.E., Neilly, H., Read, J.L. and Crisp, H.A. (2012) Interactions between a top order predator and exotic mesopredators. *International Journal of Ecology* Article ID 250352, doi:10.1155/2012/250352.
- Moseby, K.E., Read, J.L., Galbraith, B., Munro, N., Newport, J and Hill, B.M. (2011). The use of poison baits to control feral cats and red foxes in arid South Australia II. Bait type, placement, lures and non-target uptake. *Wildlife Research* 38, 350-358
- Moseby, K.E., Read, J.L., Paton, D.C., Copley, P., Hill, B.M. and Crisp, H.M. (2011). Predation determines the outcome of 11 reintroduction attempts in arid Australia. Biological Conservation 144: 2863-2872
- Moseby, K.E. and Hill, B.M (2011). The use of poison baits to control feral cats and red foxes in arid South Australia 1. Aerial Baiting Trials. Wildlife Research 38: 338-349.
- Crisp, H. and **Moseby, K.E.** (2010). One-way gates: Initial trial of a potential tool for preventing overpopulation within fenced reserves. **Ecological Management and Restoration 11**, 139.
- Moseby, K.E., Stott, J. & Crisp, H. (2009). Improving the effectiveness of poison baiting for the feral cat and European fox in northern South Australia: The influence of movement, habitat use and activity. Wildlife Research 36: 1-14.
- Moseby, K.E, Hill, B.M. and Read, J.L. (2009) Arid Recovery- A comparison of reptile and small mammal populations inside and outside a large rabbit, cat and fox-proof exclosure in arid South Australia. Austral Ecology 34:156-169

- Bice, J.K. and Moseby, K.E. (2008). Diet of the re-introduced Greater Bilby (*Macrotis lagotis;* Peramelidae) and Burrowing Bettong (*Bettongia lesueur;* Potoroidae) in the Arid Recovery Reserve, Northern South Australia. Australian Mammalogy 30: 1-12.
- Moseby, K.E. and Read, J.L. (2006). The efficacy of feral cat, fox and rabbit exclusion fence designs for threatened species protection. Biological Conservation 127: 429-437.
- Moseby, K.E., De Jong, S., Munro, N. and Pieck, A. (2005). Improving control methods of European rabbits (*Oryctolagus cuniculus*) in arid South Australia. Wildlife Research 32: 305-311.
- **Moseby K.E.** and Bice (2004). A trial reintroduction of the Greater Stick-nest Rat (*Leporillus conditor*) in arid South Australia. **Ecological Management and Restoration** 5: 118-124.
- Bolton, J. and Moseby, K.E. (2004). The activity of Sand Goannas Varanus gouldii and their interaction with reintroduced Greater Stick-nest Rats Leporillus conditor. Pacific Conservation Biology 10: 193-201.
- Finlayson, G.R. and Moseby, K.E. (2004) Managing confined populations: The influence of density on the home range and habitat use of re-introduced burrowing bettongs (*Bettongia lesueur*).
 Wildlife Research 31: 457-463.
- Moseby, K.E. and O'Donnell, E. (2003). Reintroduction of the greater bilby, *Macrotis lagotis* (Reid) (Marsupialia:Thylacomyidae), to northern South Australia: survival, ecology and notes on reintroduction protocol. Wildlife Research 30:15-27.
- Moseby, K.E. and O'Donnell, E. (2003). Reintroduction of the greater bilby, *Macrotis lagotis* (Reid) (Marsupialia:Thylacomyidae), to northern South Australia: survival, ecology and notes on reintroduction protocol. Wildlife Research 30:15-27.

Name: John Read

Role: Innovative feral cat management and research, applied on-ground environmental management and ecological monitoring, Leadership team

Qualification: 1999: PhD Ecosystem Management, University of New England

Current Employment and positions

Director, Ecological Horizons, Kimba, SA, 5641 Adjunct Lecturer, University of Adelaide, Adelaide, SA, 5000

Representations

Co-founder and co-chair of Warru Recovery Team; Co-founder and Scientific Advisory Team member of Arid Recovery; Scientific advisor for SA Dingo Management Research Project

Relevant experience

I am an applied, field-based ecologist focused on improving the conservation status of Australian arid and semi-arid ecosystems through collaborations with landholders (indigenous and non-indigenous), conservation agencies, industry and researchers. I principally work on long-term monitoring, management and research projects with multiple stakeholders that deliver sustainable results by integrating local knowledge and passion for environmental management with scientific rigour and innovation. My main areas of expertise include understanding the effects of feral and domestic animals, climate, and land management activities on threatened species and wildlife assemblages and developing novel approaches to addressing key threatening processes. I am currently developing novel methods for managing feral cats, which are the key threat to most small mammal reintroduction and conservation projects.

- Read, J.L. and Kearney, M.R. (2016). Too hot to handle? Balancing increased trapability with capture mortality in hot weather pitfall trapping. *Austral Ecology*: 41: 382-395
- Pedler, R.D., Brandle, R., Read, J.L., Southgate, R., Bird, P. & Moseby, K.E. (2016). Bio-control triggers landscape-scale recovery of threatened desert mammals *Conservation Biology* 30: 774-782
- Read, J.L., Peacock, D., Wayne, A.F. and Moseby, K.E. (2015). Toxic Trojans: Can feral cat predation be mitigated by making their prey poisonous? *Wildlife Research* 42: 689-696
- Moseby, K.E., Peacock D.E., Read, J.L. (2015). Catastrophic cat predation: A call for predator profiling in wildlife protection programs. *Biological Conservation* 191: 331-340
- **Read, J.L**, Gigliotti, F., Darby, S. and Lapidge, S. (2014). Dying to be clean: Pen trials of novel cat and fox control devices. *Int. J. Pest Management*.
- Hayward, M.W., Moseby, K. and Read, J.L. (2014). The role of predator exclosures in the conservation of Australian fauna. Chapter 15 in A. S. Glen and C. R. Dickman (eds) *Carnivores of Australia* CSIRO Publishing, Collingwood, Australia.
- Read, J.L., Moseby, K.E, Briffa, J., Kilpatrick, A.D. and Freeman, A (2011) Eradication of rabbits from landscape scale exclosures: pipedream or possibility? *Ecological Management and Restoration* 12: 46-53.
- **Read , J.L**. and Ward, M.J. (2011). Bringing back warru: initiation & implementation of the South Australian Warru Recovery Plan. *Australian Mammalogy* 33: 1-7.
- **Read, J.L.** and Cunningham, R. (2010) Relative impacts of cattle grazing and feral animals on an Australian arid zone reptile and small mammal assemblage. *Austral Ecology* 35: 314-324.
- **Read, J.L.**, Carter, J., Moseby, K.M. and Greenville, A. (2008) Ecological roles of rabbit, bettong and bilby warrens in arid Australia. *J. Arid Environments* 72: 2124-2130
- Read, J.L., Kovac, K, Brook, B.W. and Fordham, D.A. (2012). Booming during a bust: Asynchronous population responses of arid zone lizards to climatic variables. *Acta Oecologica* 2012: 51-61.

Name: Keith Leggett

Role: Mammal and feral animal specialist, wildlife management specialist, land management experience, Leadership team

Qualification: 1989: PhD, Sydney University

Current Employment and positions Director Fowlers Gap Arid Zone Research Station, University of New South Wales, Sydney, NSW, 2052

Major Prizes, Medals and Honours

2004-2010 – Member IUCN African Elephant Specialist Group 2000-2007 – Member IUCN Southern African Sustainable Use Group 1997-2001 – Member IUCN Wetlands Group (Southern Africa)

Relevant experience

I am an ecologist with diverse experience from studying elephants and giraffe in Africa to small mammals in Australia. My current research is looking at a landscape approach to small mammal population distribution and abundance. In addition, this project examines the effects of introduced mesopredators (cats and foxes) and large herbivores on small mammal populations. Prior to taking on the roles of Director of Fowlers Gap Arid Zone Research Station I spent 20 years in Africa as a researcher mainly involved with elephant ecology, but also the sustainable use of wildlife in an African context.

My current research projects relating to reintroduced endangered mammals include:

- Seasonal fluctuations in small mammals in response to environmental conditions.
- The home range and movements of feral foxes and cats in an arid zone (Fowlers Gap).

Relevant Publications

- Leggett, K.E.A., J. Fennessy and S. Schneider, (2002). "Does land use matter in an arid environment? A case study from the Hoanib River Catchment, Northwestern Namibia", *Journal of Arid Environments*, 53: 529-543.
- Leggett, K.E.A., J. Fennessy and S. Schneider, (2003). "Seasonal vegetation changes in the Hoanib River Catchment, Northwestern Namibia: A study of a non-equilibrium system", *Journal of Arid Environments*, 53: 99-113.
- Leggett, K.E.A. (2006). Home range and seasonal movement of elephants in the Kunene Region, Northwest Namibia. *Journal of African Zoology*, 41:17-36.
- Leggett, K.E.A. (2006). The effect of artificial water points on the movement and behaviour of desert-dwelling elephants of northwestern Namibia. *Pachyderm*, 40:24-34.
- Roever, C.L., van Aarde, R.J., **Leggett, K.** (2013). Functional connectivity within conservation networks: Delineating corridors for African elephants. *Biological Conservation*, 157: 128-135.

Training/Supervision:

Current: 4 PhD Students, 2 Honours; Completed (Africa): 1 PhD, 9 Masters, 7 Honours, (Australia): 2 Honours, 1 Post-Doc

Name: Sharon Ryall

Role: Risk Management and Health and Safety compliance, financial management

Qualification: BSc, Colorado State University, USA

Current Employment and positions

Manager - Centre for Ecosystem Science, February 2008 - present

Relevant experience

I have 30 years experience working in survey and monitoring of flora and fauna in large river systems and across landscapes and management of scientific projects. Current projects and activities include compliance and implementation of Health and Safety systems for remote field work by staff and students of the Centre for Ecosystem Science. Compliance includes roll out and implementation of both health and safety database and chemical and materials inventory for all Centre activities. I have been responsible for testing and local implementation of long term and local data storage, archiving and data security for Centre projects in University systems and bringing Centre into compliance with Commonwealth requirements for data security. I worked on aerial survey of waterbirds for over 25 years, primarily with data processes and risk management. I worked since inception on the WISE series of databases including the current consolidated website. Activities in ecological monitoring in the United states includes working for over 5 years throughout the Colorado River Basin on recovery programs for endangered native fishes including assessment of variable reservoir releases on habitat availability and quality and assessment of native populations, breeding and recruitment. Recent emphasis is communication of science to a broad audience.

Training/Supervision:

OHS for Supervisors OHS Awareness SciQuest Management System SafeSys Risk Management System Finance Systems and Risk Management Lab Supervisor Training