



Australian
National
University

Position Description

College/Division:	ANU College of Medicine, Biology and Environment
Faculty/School/Centre:	Fenner School of Environment and Society
Department/Unit:	
Position Title:	Postdoctoral Fellow
Classification:	Academic Level A
Position No:	TBC
Responsible to:	Professor David Lindenmayer
Number of positions that report to this role:	0
Delegation(s) Assigned:	

PURPOSE STATEMENT:

The Fenner School of Environment and Society (FSES) conducts world-class, interdisciplinary research and education on complex environment-society systems. The Postdoctoral Fellow position contributes to an ARC Laureate Fellowship research program entitled "Surrogate ecology: When and where can it work to improve environmental management?" under the direction of ARC Laureate Fellow Professor David Lindenmayer.

KEY ACCOUNTABILITY AREAS:

Position Dimension & Relationships:

The three major themes explored in the research program are:

- Theme #1 Empirical testing;
- Theme #2 Statistical analysis and ecology of empirical datasets, and;
- Theme #3 Development of new theory, principles, frameworks and practical application in policy and management.

The Postdoctoral Fellow will undertake either theme #1 or theme #3 of the major themes of the research program, and will work closely with other members of the research team to produce general principles and frameworks for the application of surrogates.

The Postdoctoral Fellow position requires skills as either an:

Empirical ecologist: will work on empirical analyses of biodiversity, environmental and habitat surrogates, applying analytical and statistical skills to large datasets of a range of different taxa to quantify an array of taxonomic and functional surrogacy relationships within and between systems.

Theoretical ecologist: will use conceptual and analytical skills to develop a robust body of theory to underpin Surrogate Ecology. Using empirical data and theory, the appointee will link work on surrogates with other areas of ecology including disturbance theory, community theory, niche theory, and theories of organism distribution and abundance.

The Postdoctoral Fellow also collaborates with researchers in the Conservation and Landscape Ecology research group at the Fenner School of Environment and Society. The group comprises over 30 academic staff, research officers and post-graduate students. Opportunities will be provided for personal career development through participation in field work, wildlife surveys, and other field-based ecological and conservation research.

Role Statement:

Under broad supervision the Postdoctoral Fellow will:

1. Conduct research either as a member of a team or independently, and contribute to conference papers and publications from that research.

2. Conduct analysis of a suite of large datasets, including empirical analyses of morphospecies, genera and families; analyses within and between groups at different scales; and use of time series data to test the stability of surrogacy relationships over time.
3. Collaborate with members of the Long-Term Ecological Research Network to assist in expanding the scope of analyses on surrogates.
4. Assist with the supervision of research and administrative support staff, and where appropriate provide advice within the field of research expertise to postgraduate students.
5. Participate in professional activities including, subject to availability of funds, attendance at conferences in the field of expertise.
6. Comply with all ANU policies and procedures, and in particular those relating to work health and safety and equal opportunity.
7. Perform other duties as required consistent with the classification of the position.

Skill Base

A **Level A Academic** will normally have completed four years of tertiary study in the relevant discipline and/or have equivalent qualifications and/or research experience.

Research experience may have contributed to or resulted in publications, conference papers, reports or professional or technical contributions that give evidence of research potential

SELECTION CRITERIA:

1. A PhD or equivalent combination of qualifications and training in wildlife ecology, particularly in fields related to population ecology and/or surrogate ecology and/or decision analysis and theory.
2. Ability to write high quality scientific articles, and willingness to co-author research papers.
3. Ability and willingness to supervise research students.
4. Well-developed verbal and written communication skills with the ability to work effectively in an independent role and collaboratively with others in a research environment with people from diverse backgrounds.
5. Demonstrated understanding of equal opportunity principles and policies and a commitment to their application in a university context.

Specific to the empirical ecologist:

1. Ability to analyse extensive empirical datasets related to applied wildlife ecology.
2. Experience in working on surrogacy issues in biodiversity conservation.

Specific to the theoretical ecologist:

1. Ability to develop ecological theories and test them against empirical data.

Supervisor/Delegate Signature:	David Lindenmayer	Date:	30.9.16
Printed Name:		Uni ID:	

References:

General Staff Classification Descriptors

Academic Minimum Standards