



***ARC Research Network for understanding and managing  
Australian biodiversity (Environmental Futures Network)***

**Species' Distribution Modelling Methods for Biologists  
University of Queensland 15-16<sup>th</sup> November 2007**

This two-day teaching workshop will take advantage of the visit of international experts to Australia to teach a training workshop for early career researchers on species' distribution modelling. This course will be useful to early career researchers from a range of disciplines such as marine and freshwater ecology, plant ecologists and animal conservation

Models that predict species' potential distributions by combining observed occurrence records with digital data layers of environmental variables have great potential for application across a range of biogeographical analyses. Applications include guiding field surveys to detect unknown populations, projecting potential impacts of climate change, predicting species' invasions, and supporting reserve planning. This course will focus on the theoretical and practical aspects of this approach, which is sometimes termed 'ecological niche' or 'bioclimatic envelope' modelling. Using a mixture of lectures, hands-on computer lab applications, discussions, and case studies, course participants will learn to:

- Obtain and process data necessary for species distribution modelling
- Run distribution models using a variety of approaches
- Validate and interpret model results
- Apply these techniques to a range of applications

The course will be taught by Dr Richard Pearson (American Museum of Natural History, USA), and Dr Miguel Araújo (National Museum of Natural Sciences, Spain).

**Course Fee:** The course is free to early career researchers from EFN contributing organisations (see attached list). An Early Career Researcher is defined as someone who is enrolled for a research higher degree, or is less than 5 years post PhD, i.e. they were awarded their PhD in 2002 or later. In addition, a number of attendance grants of \$500 are available to applicants from EFN contributing organisations to assist with travel and accommodation. The fee for non-EFN participants is \$400 (to be paid by 31<sup>st</sup> October). Places are limited to 25 (each participant is assigned a desktop computer).

**Application:** Please email application form to [elvira.poloczanska@csiro.au](mailto:elvira.poloczanska@csiro.au) by 10<sup>th</sup> October 2007. Applications will be acknowledged on receipt. You will be notified if you have been allocated a place and attendance grant (if applied for) by 17<sup>th</sup> October. Participants will be selected by relevance to their research and priority will be given to those who are from EFN contributing organisations.

## Participating Organisations in the ARC Environmental Futures Network

<b>Queensland</b>	<b>Northern Territory</b>
James Cook University	Charles Darwin University
The University of Queensland	
	<b>Federal Government</b>
	CSIRO Entomology
<b>New South Wales/ACT</b>	CSIRO Marine and Atmospheric Research
Southern Cross University	CSIRO Plant Industries
The Australian National University	Bureau of Meteorology Research Centre
Australian Museum	ABRS, Department of the Environment and Heritage
University of Canberra	
University of Wollongong	
The University of Sydney	
Macquarie University	
	<b>Overseas</b>
<b>Victoria</b>	Massey University
The University of Melbourne	University of Colorado
La Trobe University	University of California Berkeley
Monash University	Queens University
	University of Oxford
<b>Tasmania</b>	
University of Tasmania	
<b>South Australia</b>	
The University of Adelaide	
South Australian Museum	
Flinders University	
<b>Western Australia</b>	
Kings Park & Botanic Gardens; West Australian Herbarium	