

Symposium 2

Our Changing Landscapes: Acting on Climate Impacts

How, when and where should we intervene in landscapes being transformed under climate change?



VICNATURE 2050

People helping nature adapt to a new climate

2016 June 7: La Trobe University, Bundoora.
Hoogenraad Lecture Theatre, Institute for Molecular
Sciences Building 1

Organised by



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SYMPOSIUM PROGRAM

La Trobe University, Bundoora. Tuesday June 7, 2016

9.00-9.05 **Acknowledgement of Country Phil Ingamells**

9.05-9.10 **Welcome to La Trobe University Prof Keith Nugent, Deputy Vice Chancellor Research, La Trobe University**

9.10-9.35 **Planning and prioritising action for climate change impacts in Victoria**

Speakers: Katherine Lake and Natasha McLean

Katherine is a climate change policy and law specialist currently managing the development of the second Victorian Climate Change Adaptation Plan at the Department of Environment, Land, Water and Planning. Her group is working to ensure the whole-of-government adaptation plan addresses climate change risks Victoria is facing now, as well as putting in place durable adaptation processes that will last into the future.

Natasha is a scientist working on environmental policy at the Department of Environment, Land, Water and Planning. Her group works on high level policy direction including the Biodiversity Plan and developing information for people to prioritise actions leading to focussed, effective and efficient biodiversity conservation outcomes.

9.35-9.55 **VicNature2050, and 'Keeping regions distinctive'**

Speaker: Dr Ian Lunt

Ian is an Adjunct Associate Professor at the Institute for Land, Water and Society at Charles Sturt University, and is the new science communications coordinator for the Pew Charitable Trusts' 'Modern Outback' campaign. He synthesised the outcomes from last year's symposium on 'Managing Victoria's Biodiversity under Climate Change' to create the website, www.VicNature2050.org.

9.55-10.15 **A 'Hedge Fund' for Victoria's biodiversity – an 'investment portfolio' approach for a robust and bio-diverse future**

Speaker: Graeme Newell

Graeme is the program Leader of a multi-disciplinary team at the Arthur Rylah Institute (ARI), which is the biodiversity research centre for DELWP. Graeme and his colleagues develop innovative spatial products to improve conservation planning and management for DELWP and other Government agencies across south-eastern Australia.

10.15-10.35 **Discussion (previous two sessions)**

Facilitator: Prof Ary Hoffman FAA

Ary leads a research group at the Bio21 Institute, School of Biosciences, University of Melbourne, working in the areas of climate change adaptation and pest/disease control vectors. His group undertakes research on adaptation of organisms to environmental stresses including climate change and chemical pollutants.

Morning tea (10.35-11.05)

11.05-11.20 **Case study 1: Responding to streamflow changes**

Jarod Lyon, Arthur Rylah Institute

Jarod is a research scientist at the Arthur Rylah Institute and the head of a team of researchers in the Applied Aquatic Ecology Program. They examine the various aspects of restoration ecology, ecological management plans and intervention based research.

11.20-11.35 **Case study 2: Ash to ashes to ash: management intervention following multiple short-interval fires**

Dan Jamieson

Dan has been a Fire Ecologist with Parks Victoria for over 10 years, where he develops decision enabling tools to mitigate future fire risk to vulnerable ecological values.

11.35-11.50 **Case study 3: Of droughts and flooding rains: woodland birds and climate change**

Prof Andrew Bennett, La Trobe University and Arthur Rylah Institute

Andrew holds a joint appointment as Professor of Ecology at La Trobe University and a Science Leadership role at the Arthur Rylah Institute. He has broad interests in landscape ecology and conservation biology, with a particular focus on understanding how human land-use and landscape change affect native wildlife and ecological processes.

11.50-12.15 **Discussion with above three as panel**

Facilitator: Fern Hames

Fern has a role leading Science Communication and Collaboration at DELWP's Arthur Rylah Institute for Environmental Research. She has over 30 years' experience across a range of roles, including those in research, policy, environmental education, international volunteering, citizen science, communications and engagement.

Lunch (12.15-1.15)

1.15-1.30 **Genetics and the capacity for existing species to adapt**

Prof Paul Sunnucks

Paul is an educator and researcher at Monash University. He heads the Persistence and Adaptation Research Team (PART), which applies field biology, ecological genomics/genetics and spatial environmental analysis to the population biology of animal species that are exposed to natural and anthropogenic conditions.

1.30-1.50 **Discussion**

Facilitator: Prof Lynne Selwood

Lynne is an educator and researcher at the University of Melbourne, specialising in the field of marsupial developmental biology. She is the immediate past-president of the Royal Society of Victoria.

1.50-2.10 **Passive and active management**

Dr Jim Radford

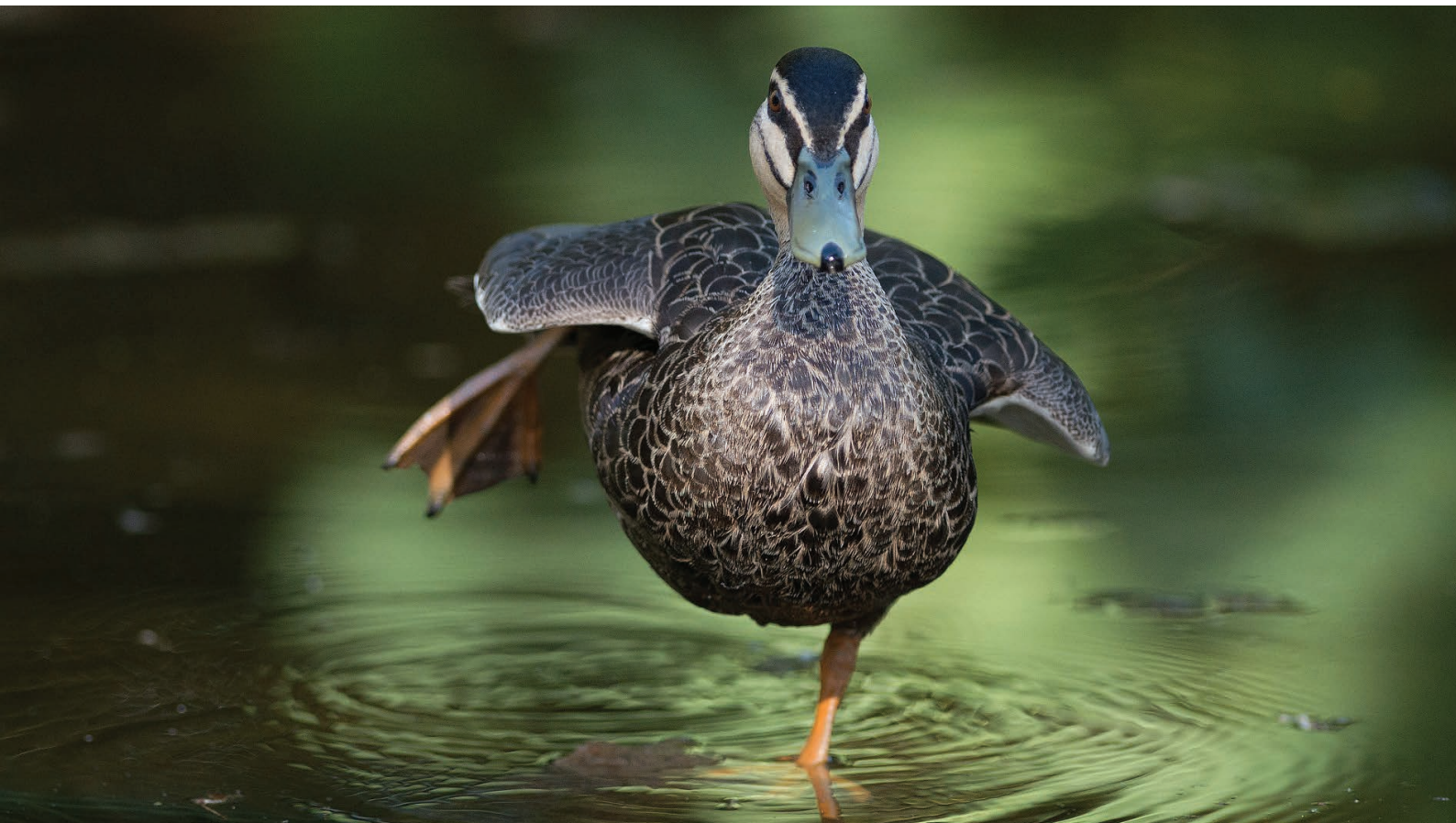
Jim is the science and research manager for the conservation team at Bush Heritage Australia. His research is concerned with the loss of endangered species and poorly protected ecosystems.

2.10-2.30 **Discussion**

Facilitator: Dr Peter Green

Peter is Head of the Department of Ecology, Environment and Evolution, School of Life Sciences, at La Trobe University. He is an ecologist with a broad range of interests, including forest ecology, plant-animal interactions, seed and seedling ecology, invasion biology, and the ecological strategies of plants.

Afternoon tea (2.30-3.00)



www.VicNature2050.org

[#VicNature2050](https://twitter.com/VicNature2050)

3.00-3.15 **Climate ready revegetation for resilient future landscapes**

Dr Elisa Raulings

Elisa is the Business Unit Leader, Conservation Planning and Science, for Greening Australia/Parks Victoria. Her research includes dispersal and landscape connectivity and how knowledge garnered at the regional scale can assist restoration at the local scale.

3.15-3.35 **Discussion**

Facilitator: Dr Peter Green, La Trobe University

3.35-3.55 **Building knowledge – management experiments and ‘learning by doing’**

Prof Michael Clarke

Michael is Head, School of Life Sciences, at La Trobe University. He has a long-standing interest in the impact of fire on fauna. He has published internationally on the ecology and conservation biology of birds, reptiles, mammals, fish and plants.

3.55-4.15 **Discussion**

Facilitator: Dr Mark Norman

Mark is currently Chief Conservation Scientist for Parks Victoria. Until recently he was Head of Sciences at Museum Victoria, where he led the museum's natural sciences research team of curators, collection managers, postdoctoral fellows, postgraduate students, research associates and volunteers.

4.15-4.35 **Some perspectives**

Panel discussion

4.35-4.55 **Where to from here?**

Facilitator: Prof Ary Hoffman FAA

4.55-5.00 **Thanks and wind-up**



Our changing landscapes: acting on climate impacts

The second VicNature 2050 symposium looks at how, when, where and indeed whether we should intervene in landscapes while they become transformed under the influence of changes in the climate.

What are the possibilities and problems involved in increasing the genetic diversity of vulnerable species, or introducing new 'climate ready' species, especially in areas where increased landscape connectivity is needed?

This symposium follows on from an earlier symposium, Managing Victoria's Biodiversity under Climate Change, held at the University of Melbourne's Bio21 Institute in October 2015.

The presentations and discussions from that event have been summarised by ecologist Ian Lunt, and appear as '10 things we can all do to help nature adapt to a new climate', at www.VicNature2050.org

How this symposium will work

A series of speakers (see program within) will briefly address a range of relevant issues. Presentations will be followed by 20 minutes of discussion facilitated by similarly qualified people.

All symposium participants are encouraged to take part in the discussions.

The presentations and discussions will then be synthesised in a single article, aimed at clarifying possibilities for rehabilitating natural areas for State Government agencies, local councils, community organisations and private landholders. The article will appear on the VicNature2050 website.

A likely climate scenario for Victoria in 2050

Climate prediction information can be accessed from the Climate Change Australia website at www.climatechangeinaustralia.gov.au/en/publications-library/cluster-reports

Advisory group

- Prof Ary Hoffmann FAA (School of BioSciences, University of Melbourne)
- Prof Lynne Selwood (University of Melbourne and Royal Society of Victoria)
- Dr Bill Birch (President, Royal Society of Victoria)
- Prof Andrew Bennett (La Trobe University and Arthur Rylah Institute)
- Phil Ingamells (Victorian National Parks Association)
- Fern Hames (Arthur Rylah Institute)
- Dr Elisa Raulings (Greening Australia)

The symposium is hosted by:

- Victorian National Parks Association
- Royal Society of Victoria
- Bio21 Institute University of Melbourne
- Greening Australia
- Arthur Rylah Institute/DELWP
- La Trobe University

Major sponsors:

- Department of Environment, Land, Water and Planning
- Parks Victoria

MORE INFO

Visit www.VicNature2050.org, phone the Victorian National Parks Association on (03) 9341 6500 or email VicNature2050@vnpa.org.au
Photos: David Paul/Museum Victoria, Christine Connelly, Phil Ingamells.

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