Symposium
Managing Victoria’s Biodiversity under Climate Change

What practical steps can we take to help Victoria’s native species and ecosystems survive the impacts of climate change?

2015 OCTOBER 8-9
Ground floor conference room, Bio 21 Institute, 30 Flemington Road, Parkville VIC 3052

Organised by

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Symposium

Managing Victoria’s Biodiversity under Climate Change

What practical steps can we take to help Victoria’s native species and ecosystems survive the impacts of climate change?

How the symposium will work

Over two days, a series of speakers will briefly outline likely impacts of climate change on Victoria’s ecosystems. Their presentations will address a likely scenario, or a series of scenarios, in 2050. Each talk will be followed by 20 minutes of discussion facilitated by a similarly qualified person.

All symposium participants are encouraged to take part in the discussions and recommend useful management actions that can be taken by State Government agencies, local councils, community organisations and/or private landholders.

After the symposium, the information that has emerged will be compiled by ecologist Dr Ian Lunt and published online.

A likely climate scenario for Victoria in 2050

Assuming ongoing high levels of global greenhouse gas emissions, temperatures in Victoria would be 1.2°C to 2.5°C warmer than recent decades. Around the state, temperatures above 40°C in summer would occur two to four times more frequently, and heat waves would be more frequent and longer. There would be fewer frosts in winter. For any location its projected climate would resemble that of sites today hundreds of kilometres further north, or at significantly lower elevation. For example, Melbourne’s climate would be roughly like the current one of Wagga Wagga.

Average rainfall is likely to be lower, particularly in winter and spring. There are likely to be more intense downpours in summer, making it more difficult to store and use water. Soil moisture for cropping and pasture would be much lower than now. Some drier summers are also possible. Along with the first decade of the century, later decades are likely to have rainfall below the long-term average. Major bushfires would be more common.

In the mountains, snowpack would be reduced by 50%.

The sea level could rise 25cm above 1995 levels, with low-lying bayside and coastal communities more frequently inundated. Increasing areas would be at risk from flooding during intense summer storms.

MORE INFO

Get more climate prediction information from Climate Change Australia
SYMPOSIUM PROGRAM

Day one – Thursday 8 October

9.00-9.05 Housekeeping
9.06-9.15 Welcome: Dr Bill Birch, President, Royal Society of Victoria
9.15-9.45 Setting the scene. Climate change impacts on ecosystems – what will future natural communities look like?
Speaker: Dr Penny Whetton (Honorary Research Fellow with CSIRO’s Oceans and Atmosphere Flagship; lead author of the regionalisation and climate scenarios chapters of the Third Assessment Report of the IPCC)

9.50-10.30 Alpine and sub-alpine systems
Speaker: Adj Prof Dick Williams (CSIRO ret.; Charles Darwin University)
Facilitator: Dr Libby Rumpff (Post-doctoral researcher, School of BioSciences, University of Melbourne)

Break (10.30-11.00)

11.00-11.40 Tall/wet forests and rainforests
Speaker: Dr Chris Taylor (Research fellow, University of Melbourne)
Facilitator: Prof Rod Keenan (Ecosystem and Forest Sciences, University of Melbourne)

11.40-12.20 Dry forests and grassy woodlands
Speaker: Prof Ralph Mac Nally (Institute for Applied Ecology, University of Canberra)
Facilitator: Prof Andrew Bennett (La Trobe University & Arthur Rylah Institute)

Lunch (12.20-1.20)

1.20-2.00 Mallee/Wimmera
Speaker: Prof Michael Clarke (Head School of Life Sciences, La Trobe University)
Facilitator: Prof Brendan Mackey (Director, Climate Change Response Program, Griffith University)

2.00-2.40 Riverine/wetland systems
Speaker: Prof Max Finlayson (Institute for Land, Water and Society, Charles Sturt University)
Facilitator: tbc

Break (2.40-3.10)

3.10-3.50 The coastline and Port Phillip Bay
Speaker: Prof Jon Barnett (School of Geography, University of Melbourne)
Facilitator: Prof Mick Keough (Marine Ecology, University of Melbourne)

3.50-4.40 People in Victorian ecosystems: how can ecosystem services (water, microclimates, carbon capture, gene pool etc.) be maintained?
Speaker 1: Assoc Prof Sarah Bekessy (Global, Urban and Social Studies, RMIT University)
Speaker 2: Assoc Prof Kathryn Williams (School of Ecosystem and Forest Sciences, University of Melbourne)

4.40-5.00 Summing up: Caitlin Griffith (Community Education and Engagement Manager, Victorian National Parks Association)

Day two – Friday 9 October

9.00-9.10 Welcome: Chris Smyth, Victorian National Parks Association
9.10-9.15 Welcome to Minister: University of Melbourne
9.15-9.30 Hon Lisa Neville, Minister for Environment, Climate Change and Water
9.30-9.50 Setting the scene. The past and the future: a palaeoecological perspective
Speaker: Prof Peter Gell (Environmental Management, Federation University)

9.50-10.30 Managing fire and its impacts
Speaker: Prof John Handmer (Research and Innovations, RMIT University)
Facilitator: Tom Fairman (Forest and Fire Ecology PhD student, University of Melbourne)

Break (10.30-11.00)

11.00-11.40 Managing weather impacts: drought, flood, CO2, extreme temperatures
Speaker: Prof Janette Lindesay (Fenner School, Australian National University)
Facilitator: tbc

11.40-12.20 Managing invasive species
Speaker: Prof Steven Chown (School of Biological Sciences, Monash University)
Facilitator: Andrew Cox (CEO, Invasive Species Council)

Lunch (12.20-1.20)

1.20-2.00 Connectivity and restoration (benefits and threats)
Speaker: Dr Jim Radford (Science and Research Manager, Bush Heritage Australia)
Facilitator: Pip Walsh (Ex-Bush Heritage Australia)

2.00-2.40 Managing refugia: identifying and maintaining areas of high genetic diversity
Speaker: Prof Brendan Mackey (Climate Change Response Program, Griffith University)
Facilitator: Dr Andrew Weeks (School of BioSciences, University of Melbourne)

Break (2.40-3.10)

3.10-3.50 Triage: setting realistic priorities (threatened species and ecosystems)
Speaker: Prof Michael McCarthy (School of BioSciences, University of Melbourne)
Facilitator: Assoc Prof Brendan Wintle (School of BioSciences, University of Melbourne)

3.50-4.20 Final discussion forum
Facilitators: Dr Kath Handasyde (University of Melbourne) & Prof Andrew Bennett (La Trobe University & AI) & Prof Dr Brendan Mackey (Director, Climate Change Response Program, Griffith University)

4.20-4.50 Summing up and ‘Where to from here?’
Prof Ary Hoffmann FAA (School of BioSciences, University of Melbourne)

4.50-5.00 Wind-up: Prof Lynne Selwood (Royal Society of Victoria) and Phil Ingamells (Victorian National Parks Association)
SYMPOSIUM REGISTRATION

What and where?
The symposium Managing Victoria’s Biodiversity under Climate Change will be held on:

- Thursday October 8th and Friday October 9th 2015 in the ground floor conference room, Bio 21 Institute, University of Melbourne – 30 Flemington Road, Parkville VIC 3052 (100m west of the Royal Women’s Hospital.)

Who should register?
The symposium should will useful to scientists, land managers, conservation NGOs and anyone else who is interested in the future of Victoria’s natural heritage: our remarkable biodiversity.

All symposium participants are invited to contribute their knowledge and experience during the many discussion periods. After the symposium, the information emerging will be compiled and published online.

NOTE: Because registrations must be limited to 200 places, single day registrations are not available.

How do I register?
Registration for the two days costs $120.

Limited positions are available for NGOs and concession card holders at $100.

Registration includes lunch and refreshments for the two days.

Inquiries
For more information, call the Victorian National Parks Association on (03) 9341 6500 or email philipi@vnpa.org.au

Photos: Glenn Ehmke, Phil Ingamells, Clyde O’Donnell, Colin Totterdell

The symposium is organised by the Victorian National Parks Association, the Royal Society of Victoria and University of Melbourne. Major sponsors: the Department of Environment, Land, Water and Planning; Parks Victoria.