# Meeting Notes, Outcomes & Evaluation

## Meeting Title
Fire Masterclass 2013

## Type
Two field trips and a 1-day intensive workshop

## Date
9-11 October 2013

## Location
University of Tasmania, Staff Club

Field Trips to Dunalley and Collinsvale/Molesworth-Mt Field

## Attendees
- **Andres Holz** (University of Tasmania), **Bec Harris** (Antarctic Climate & Ecosystems CRC/Landscapes and Policy Hub), **Dan Jamieson** (Parks Victoria), **David Bowman** (University of Tasmania/Landscapes and Policy Hub), **Dick Williams** (Retired - Former CSIRO), **Fang Li** (Institute of Atmospheric Physics/Chinese Academy of Sciences), **Grant Williamson** (University of Tasmania/Landscapes and Policy Hub), **Hamish Clarke** (NSW Office of Environment and Heritage/Climate Change Research Centre/ARC Centre of Excellence for Climate System Science, University of NSW), **Jon Marsden-Smedley** (University of Tasmania), **Mark Chladil** (Tasmanian Fire Service), **Matthias Boer** (Hawkesbury Institute for the Environment/University of Western Sydney), **Phil Zylstra** (Centre for Environmental Risk Management of Bushfires/University of Wollongong), **Ross Bradstock** (Centre for Environmental Risk Management of Bushfires/University of Wollongong), **Sam Wood** (University of Tasmania), **Sandra Whight** (State Fire Management Council), **Suzie Gaynor** (Landscapes and Policy Hub), **Ted Lefroy** (Landscapes and Policy Hub)

## Field Trips
- **Mike Brown** (Tasmanian Fire Service), **Mr John Harkin** (Bushfire Recovery Unit)
- **Bernard Lloyd** (multi-media specialist), **Vanessa Mann** (Landscapes and Policy Hub)

## Apologies
- Adrian Pyrke (Department of Primary Industries, Parks, Water and Environment), Brett Murphy (University of Melbourne), Geoff Carey (ANU), Nathan Bindoff (Antarctic Climate & Ecosystems CRC/Landscapes and Policy Hub), Owen Price (University of Wollongong), Paul Fox-Hughes (Bureau of Meteorology), Stuart Matthews (CSIRO)

## Pre-class watching
- **Firestorm: the story of the bushfire at Dunalley**, published by the Australian edition of The Guardian - best viewed with Google Chrome or Firefox.
  - [http://www.guardian.co.uk/world/interactive/2013/may/26/firestorm-bushfire-dunalley-holmes-family](http://www.guardian.co.uk/world/interactive/2013/may/26/firestorm-bushfire-dunalley-holmes-family) (suggested by David Bowman)

  **Tasmania’s Stateline report on old-growth forest:**
  - [www.youtube.com/watch?v=cIL28Kokp5s](http://www.youtube.com/watch?v=cIL28Kokp5s) (suggested by Sam Wood)

  **After the Fires – with Dr Rob Gordon** - a DVD prepared by the Tasmanian Bushfire Recovery (suggested by John Harkin)

## Notes taken by:
David Bowman

## Circulated to:
All attendees and apologies

## Circulated on:
14 October 2013

Fire Masterclass Notes
# Meeting Summary

The event, spread over three days, was designed to probe fire prediction at a variety of spatial and temporal scales. The field trips to a disaster area, and then to a landscape fire event that could have triggered a disaster of truly extraordinary proportions (threat to Hobart), provided a very real grounding for the more theoretical discussions about fire in the earth system and across Australia.

The generous time commitment and presentations from the fire managers (especially the Chief Fire Officer Mike Brown and John Harkin) were highlights.

The mix of skills of the participants provided an extraordinary capacity to the workshop and the generous spirit and intellectual openness provided a stimulating meeting that was greatly appreciated all round.

A most important legacy of the masterclass has been the opportunity for sharing knowledge and networking. There are numerous potential spin-off projects, but the next step will be finding funding to place these on a sustainable footing.

# Key Emerging Points

1. Understanding the risk of fire disasters is a very high priority for fire managers and politicians, an intellectual space where fire ecologists and modellers can make substantial contributions.

2. Basic information such as the onset time (and climate drivers) of fire seasons remains lacking for Australia, making detection of change in fire season length impossible.

3. Operationally, there is surprisingly good capacity to predict fire behaviour/risk at the near term but there are lots of surprises out there. So, while the Dunalley fire disaster was very well predicted with appropriate warnings, the behaviour and evolution of the fire was not easily predicted.

4. The sketchy prehistorical (ie pre-European settlement) knowledge of fire activity signals that even without climate change there remains risk of extreme fire disasters, possibly much larger than recorded in historical records.

5. Fire prediction at the regional scale - Earth scale is confounded by an enormous number of feedbacks, the most critical being fuel type and canopy cover and the interaction with climate change and CO2.

6. There is evidence that the most basic dichotomisation in fuel types is between forest and grass (savanna) fuel systems, and interestingly this division has long been recognised by fire behaviour modellers. In Australia the occurrence of forest/grass fires regimes can be predicted by simple climate parameters reflecting energy and moisture availability.

7. There is scope to using global fire models to provide a quasi-estimate of uncontrollable fires, and explore how climate change may influence this risk at regional to global scale.

# Web Address

**Feedback and Evaluation**

**Most valuable part:**
- Telling me there is another application of fire scheme: project the extreme fire event
- The Dunalley Drive
- Jon Marsden-Smedley’s deconstruction of the 2013 fires
- The 4-switch model
- Final discussion
- Being exposed to the very different aspects/sides of fire
- Friday’s talks and discussions were really interesting
- Modelling overview was great
- Being with “The Gang” again
- Fang’s talk
- Interaction with other people, discussions about their ideas
- The short presentations

**What worked well:**
- All of it; Field trips; Masterclass presentations; The discussion forum
- The day trips were great, good idea to change Thursday’s plans to include the walk in Mt Field.
- The talks and importantlty, chairing of the talks.
- The discussion session on Friday after lunch.
- Interactions with other people, discussions following talks
- The mountain ash walk was informative to me
- Would have liked more time for the discussion – it felt rushed
- I was pretty happy to sit and listen, I absorbed a lot!

**The valuable parts of the field trips:**
- Seeing the impact of the fires
- Seeing recovery in recent burnt areas and Mike Brown’s presentation
- Hearing Mike Brown’s opinions about the Dunalley fire was very interesting and seeing the Dunalley/Molesworth comparison.
- Discussions, grounded in reality – looking at real fire and fuels
- Looking at burning patterns

**Was the masterclass helpful to your research work?** YES = 9  NO = 0

**What will you do differently thanks to the masterclass?**
- Saw refinements that can be built into Bushfire Risk modelling to drive community preparedness
- I would like to speak to Fang Li more; also thinking about the interactions between fire, danger/behaviour/regimes and different scales (contextental versus regional)
- I will make sure I stay more current in my reading and discussions with researchers
- There are some potential collaborations I will pursue

**Please share with us any additional suggestions or thoughts about the masterclass?**
- Some way of summarising the Masterclass would be good
- It would be interesting to stand in a fire effected area with detailed data available and to discuss the different scenarios and responses, and what effect these may have on values at the site.
- Excellent venue, food & facilities.
- Dinner food was disappointing but evening was great