

# Learning from Burning

We must learn to live with bushfires rather than try to resist them.

A year after Victoria's Black Saturday fires we've got a new emergency warning system with "catastrophic" at the top. I first heard it used in an ABC radio report about a fire in South Australia. The local controller said: "The danger has been rated as catastrophic, but people shouldn't panic". Lesson: semantics is no solution.

We have new systems to send emergency alerts to mobile phones as SMS and texts. You've got to have your number on the lists, which have to be updated regularly. Lesson: this may be no more effective than radio as a prime source of emergency advice.

The interim report of the Victorian Bushfires Royal Commission and other responses to Black Saturday emphasise the need to prevent the loss of life and property from bushfire. Policy-makers and politicians look to technology for solutions, from mobile communications to Elvis helicopters, and from building materials to bunkers.

Unfortunately there is too little emphasis on preventing destructive fires from actually happening by using knowledge to inform changes to our behaviour rather than gizmos that may help us feel secure enough to resist change.

The knowledge is simple. Regular small-scale burning - just like the original Australians practiced after at least 40,000 years experience - is the best strategy to prevent destructive fires. A study of the Black Saturday firefields by the Bushfire Cooperative Research Centre pointedly refreshes this knowledge.

In the area affected by the Bunyip fire, sections burnt by bushfire in 2004 and a prescribed burn in 2005 showed considerably less crown scorch and defoliation, indicating lower intensity. Similar results occurred in areas of the Kilmore fire, which had been burnt over the previous decade.

Most of the area burnt by the Churchill fire had not been burnt since 1939, but a patch of less than a hectare in the most severely burnt area had been burnt not long before. After Black Saturday, trees there still had buds on their trunks as they responded to that earlier event.

Fire is part of the living Australian landscape. In the past 200 years the humans in this landscape have stopped enabling many small fires over space and time and started trying to repress fire everywhere. Fire has changed from a tool to a threat. Applied with ingenuity and



## Cover Story

Footprints left in the ancient Australian landscape reveal how the first Australians coped with the last ice age, while the fossil record continues to play a role in understanding the complexity of modern human origins (see p.14).

Image: iStockphoto

effort, the repression strategy has usually worked.

But when it fails - as it inevitably does on days when weather and all other factors conspire to prove it wrong - all the energy repressed for several decades is unleashed in a maelstrom. For the people there at the time, and for the whole living landscape that has evolved over eons to prosper in the presence of regularly occurring small intensity fire, these are indeed catastrophes.

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**Australasian  
Science**  
[australasianscience.com.au](http://australasianscience.com.au)

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**PATRONS:** *Australasian Science* is supported by Nobel Laureate Professor Peter Doherty and renowned science broadcaster Robyn Williams, representing excellence in science and its communication.

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Rates are at [australasianscience.com.au](http://australasianscience.com.au)

**DISTRIBUTION:**  
Gordon & Gotch Ltd

PRINT POST APPROVED PP 331379/0032

ISSN 1442-679X \*RRP \$7.95 incl. GST

*Australasian Science* is published 10 times per year. The opinions expressed in this publication are those of the authors and do not necessarily represent those of the publisher.

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