

Time to tackle burning issues

SUNDAY SOAPBOX

Tasmanians face tough decisions if they are to survive in their highly flammable landscape, writes David Bowman

ON January 4, Tasmanians witnessed the destructive capacity of bushfires.

Fortunately, lives were not lost, but the economic and emotional toll will change many people's lives forever.

The recent Molesworth fire, thankfully, was less destructive. But the risk of more destruction remains until we get soaking rains. The summer 2012-13, which is not over yet, will be remembered as a bad fire season.

I am not surprised by this turn of events. Since returning to Tasmania six years ago I have been worried about the risk of a major fire disaster in southern Australia.

My worse fears were confirmed in 2009 by the Victorian Black Saturday fires that killed 173 people, destroyed thousands of homes and, by some estimates, tore billions of dollars from that state's economy.

Through my professional networks I increasingly hear stories of fires that simply did not play by the rules.

During my national and international travels, I have witnessed the impact of megafires that have burnt massive areas and behaved in ways that have confounded old hands who have fought many fires. Fires have torn through containment lines at extraordinary speeds, sometimes ploughing into urban areas.

I discovered that some landscapes have burnt at frequencies that are highly unusual – for instance areas in the Victorian Alps that have been burnt three times in the past decade when the normal fire return time would be around once in 50 years.

I have tried to imagine what such megafires could do to our island – unfortunately, in my mind's eye I see the destruction of a lot of infrastructure and loss of life. I have communicated my concerns to anyone who will listen.

I suspect this summer has made a lot more people think about bushfire risks. Hopefully more people are beginning to take steps to reduce their risk.

What is causing the increase in fire disasters?

This is a big question and involves understanding the effects of past fire management, urban sprawl into flammable bushland, and climate change. Globally, there seems to be a surge of increasingly destructive fires because of all these factors.

Reversing the trend presents a tremendous challenge that is as much social as it is an environmental problem.

I spend a lot of time researching at the University of Tasmania.

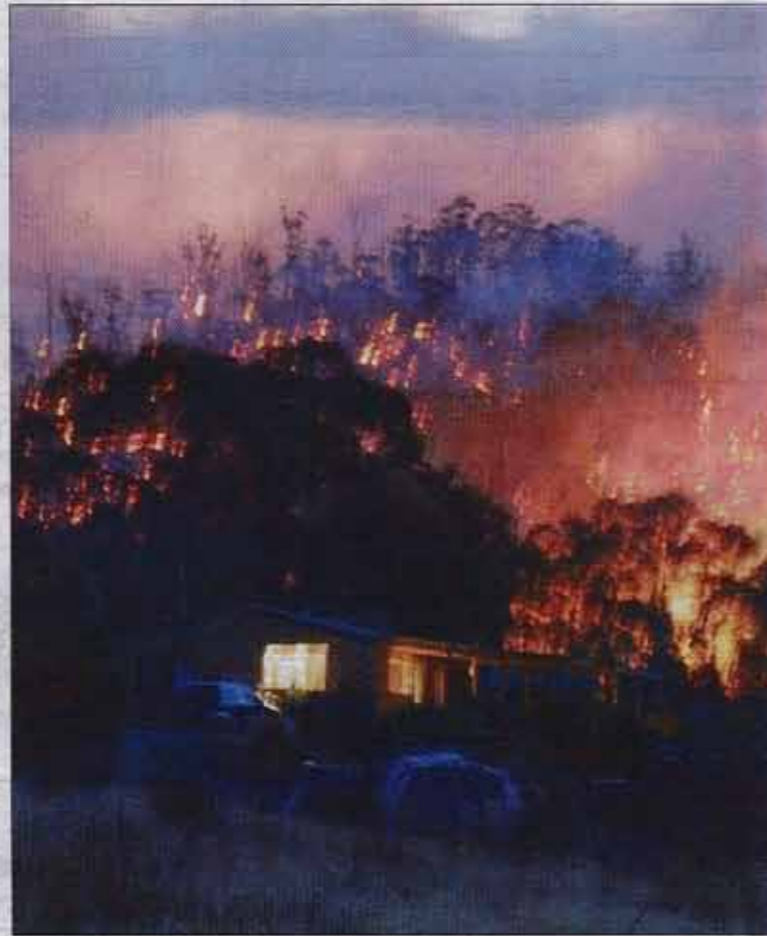
The most basic facts that need to be understood is that fire is the product of three ingredients – heat, oxygen and fuel. In the case of bushfires this means ignitions (people or lightning), wind and dry vegetation.

The Australian bush is made up of very flammable plants that can burn fiercely and which have the extraordinary ability to bounce back from fire.

Once dried out by hot, rainless conditions, the only limiting factor to fire is ignitions.

Dry lightning storms can start fires, and the incidence of these storms is on the increase. Fires also start from accidental causes, including sparks from powerlines – hot windy days are the very days powerlines are most prone to sparking and they cause a disproportionate number of fires under these conditions. About half the Victorian Black Saturday fires were caused by powerlines.

Finally, there are criminals and mentally ill people who deliberately set fires on total fire-ban days.



In Tasmania there are large areas of bush that only dry out infrequently. When these areas dry out and burn, they produce some of the most intense fires in the world.

Unfortunately, the city of Hobart is nestled below such a forest. In 1967, Hobart was threatened by extremely serious bushfires that killed 62 people, and destroyed 1400 houses.

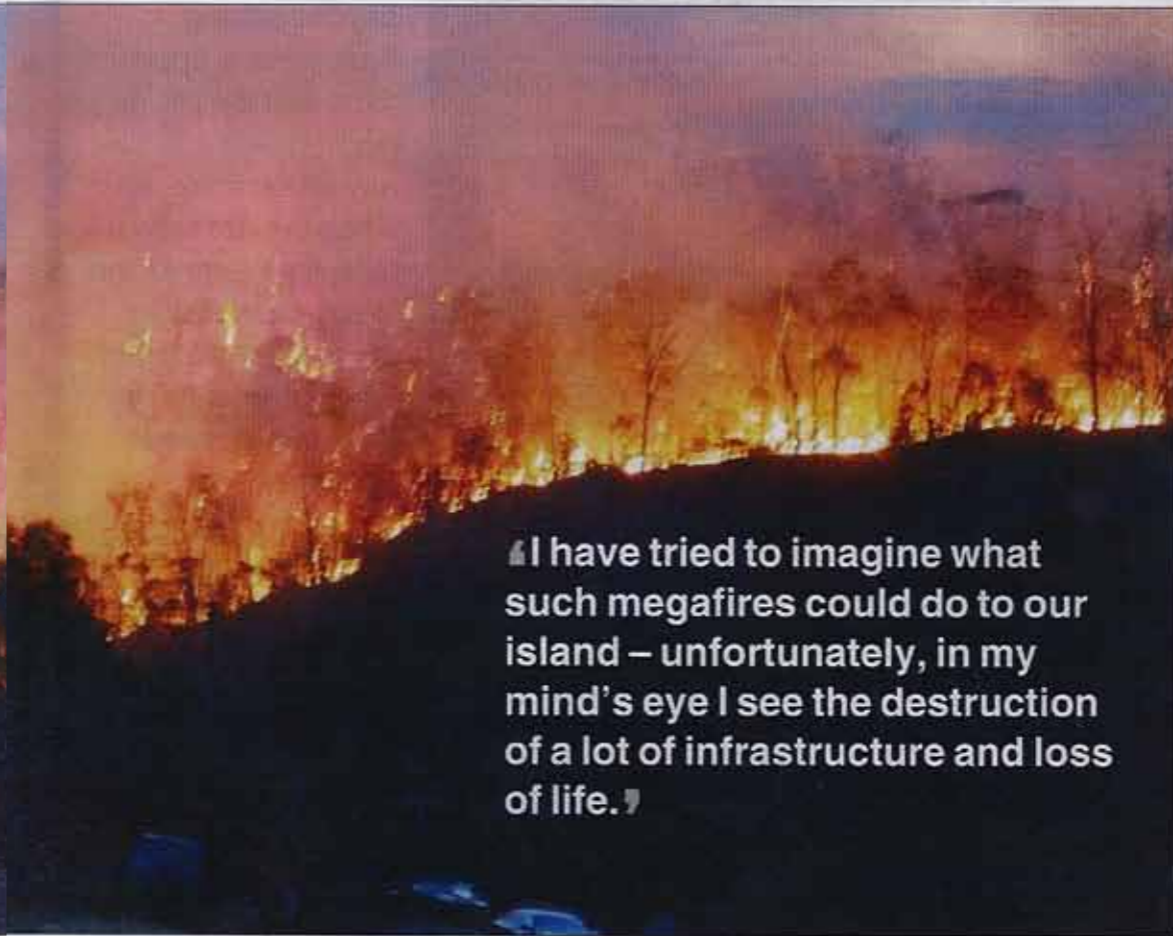
And what can we do to reduce the risk of bushfire?

Living with bushfire-prone landscapes demands changes for nearly every Tasmanian, because we live in close proximity to bushland. Each year people living in areas vulnerable to

bushfire need to follow the excellent advice about preparing for bushfire season provided by the Tasmania Fire Service.

We need to make this part of the summer routine just as much as sunscreen and hats.

Over the next five years we need to start thinking seriously about making neighbourhoods and properties more fireproof. This includes increasing the number and extent of "defendable spaces" that enable firefighters to do their work – actions include cutting down trees, cutting back flammable understoreys, and making turning circles for trucks on dead-end roads.



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DANGER: The raging bushfire at Glen Dhu Rd in Molesworth threatens homes.

Some people will need to build fire bunkers if they are to reside in really dangerous dense bush with heavy fuel loads.

We also need to recognise the important role of planned burning in managing fuels around urban areas, and accept that a by-product of this approach to manage fuels, and reducing the risk of severe fires, is the production of smoke.

It is critical to note that planned burning is not a cure-all. Burning vast areas of south-west Tasmania to meet some annual target, like the

controversial decision to burn 5 per cent of the Victorian wildlands annually, will not make towns and cities safer.

To work effectively, planned burning must be very close to where people live. The strategy can only work if people understand the need for the burning. We need to accept the risks associated with planned burns, like escapes. The community will need to accept the smoke pollution from burn-offs, understanding that it is mild and short-lived compared with choking smoke from intense bushfires that can linger for days.

Over the next decades, I think our way of living in bushland will be very different – we will live in more fire-proof houses, we will have developed better physical and mental skills and strategies to survive bushfires. We will have a greater acceptance of fuel management including the use of animals to eat fuels.

I am confident we can live sustainably with our flammable landscapes but we have a lot of work ahead to get to that point.

We are all in this together. It was heartening to witness the superb

The author



David Bowman is Professor of Environmental Change Biology at the University of Tasmania. He is internationally recognised for his research into bushfires.

response of the Tasmanian community following the Forestier Peninsula fires.

I hope that goodwill and strong spirit will mark future discussion and debates about bushfires. We need to find common ground about acceptable risks for the community and individuals, weigh up economic and environmental costs, and individual and community responsibilities.

We need political leadership and bipartisanship to chart this course – turning bushfires into a political football will be counter-productive.

We need high-quality scientific information to anchor discussions that can easily become confused and emotive.

Bushfires are part of this island – they are not going away. We need to understand and accept that simple truth.

Picture: DAMIAN BESTER