



Calignee
Flowerdale
Kilmore
Kingslake
Kingslake West
Marysville
Strathewen
St Andrews
Steels Creek

WE HAVE *still* NOT LIVED LONG ENOUGH

BLACK FRIDAY & BLACK SATURDAY

» TOM GRIFFITHS

*W*e should have seen this coming. We *did* see this coming. Yet we failed to save lives. We have still not lived long enough.

'They had not lived long enough' were the words Judge Leonard Stretton used to describe the people who lived and worked in the forests of south-eastern Australia when they were engulfed by a holocaust wildfire on 'Black Friday', 1939. He wrote:

Men who had lived their lives in the bush went their ways in the shadow of dread expectancy. But though they felt the imminence of danger they could not tell that it was to be far greater than they could imagine. They had not lived long enough. The experience of the past could not guide them to an understanding of what might, and did, happen.¹

the fragility and brevity of a human lifetime in forests where life cycles and fire regimes had the periodicity and ferocity of centuries. He was indicting a whole society.

In 1939 Australians were deeply shocked by what had happened in their own backyard. Rampant flame had scourged a country that considered itself civilised. As well as shock, people sensed something sinister about the tragedy and its causes. Judge Stretton tried to find the words for it in his fearless report. Of the loss of life at one sawmill settlement, he wrote: 'The full story of the killing of this small community is one of unpreparedness, because of apathy and ignorance and perhaps of something worse'. The 'something worse' that he tried to define was an active, half-conscious denial of the danger of fire, and a kind of community complicity in the deferral of responsibility.

WHEN THE 1939 FIRES RAGED THROUGH THE FORESTS OF MOUNTAIN ASH, SETTLERS DID NOT EVEN KNOW HOW SUCH A DOMINANT AND IMPORTANT TREE REGENERATED.

The judge, who conducted an immediate Royal Commission into the causes of the fires, was not commenting on the youthfulness of the dead: he was lamenting the environmental knowledge of both victims and survivors. He was pitying the innocence of European immigrants in a land whose natural rhythms they did not yet understand. He was depicting

There is something sinister also about the dreadful tragedy of 'Black Saturday' in 2009, although the character of it is different. Those of us who know and love these forests and the people who live in or near them are especially haunted. In 1939, some of the ignorance and innocence was forgivable, perhaps. 'Black Friday' was a late, rude awakening from the colonial

(all images)

Steels Creek valley, Victoria, in May 2009, three months after the 'Black Saturday' fires.

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era of forest exploitation and careless fire use, and it demanded that people confront and reform their whole relationship with the bush. When the 1939 fires raged through the forests

calls 'the fire flume'.⁴ It is the most distinctive fire region of Australia and the most dangerous in the world. When a high pressure system stalls in the Tasman Sea, hot northerly winds flow relentlessly down from central Australia across the densely vegetated south-east of the continent. This fiery 'flume' brews a deadly chemistry of air and fuel. The mountain topography of steep slopes, ridges and valleys accelerate and channel the hot air, temperatures climb to searing extremes in January and February, and humidity evaporates such that the air crackles. Lightning attacks the land ahead of the delayed cold front and a

dramatic southerly change turns the raging fire suddenly upon its victims.

There is a further ingredient to the chemistry of the fire flume. Across Australia,

WE NOW HAVE FEWER EXCUSES FOR ENVIRONMENTAL INNOCENCE. WE KNEW THIS TERRIBLE DAY WOULD COME. WHY, THEN, WAS THERE SUCH AN APPALLING LOSS OF LIFE?

of valuable mountain ash (*Eucalyptus regnans*), settlers did not even know how such a dominant and important tree regenerated. Sawmillers had been exploiting the mountain ash intensively for half a century, it had become 'probably the most important forest tree' in Victoria in terms of its economic potential, and people had been living at its feet and working under its canopy all their lives, yet humans did not yet know how to grow it.² In the seventy years since 1939, we have lived through a revolution in scientific research and environmental understanding, we have developed the beginnings of an ecological consciousness, we have 'prised into the personal life of *Eucalyptus regnans*' (as one botanist put it), and we have come to a clearer understanding of the peculiar history and fire ecology of these forests.³ We now have fewer excuses for environmental innocence. We knew this terrible day would come. Why, then, was there such an appalling loss of life?

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Victorians live entirely within what the international fire historian Stephen Pyne

eucalypts are highly adapted to fire. Over millions of years these trees have turned this fragment of Gondwana into the fire continent. But in the south-eastern corner — especially in the forests of the Victorian ranges and Tasmania — a distinctive type of eucalypt has evolved. The mountain ash is a tree of wonder, the tallest flowering plant in the world. Colonists cut it down to measure its height. The trunk of the mountain ash is a smooth white or greenish grey and it sheds long ribbons of bark. At its base clings a rough fibrous stocking. It is a very rapid grower and can reach a height of forty metres in twenty years. Eventually it grows to a hundred metres and it lives for centuries. At its feet, amongst the heavy leaf litter, there move puny people whose lifetimes are a sixth of that of the trees. Here is the fatal mismatch between the biographies of the people and the biographies of the trees they aspire to manage.

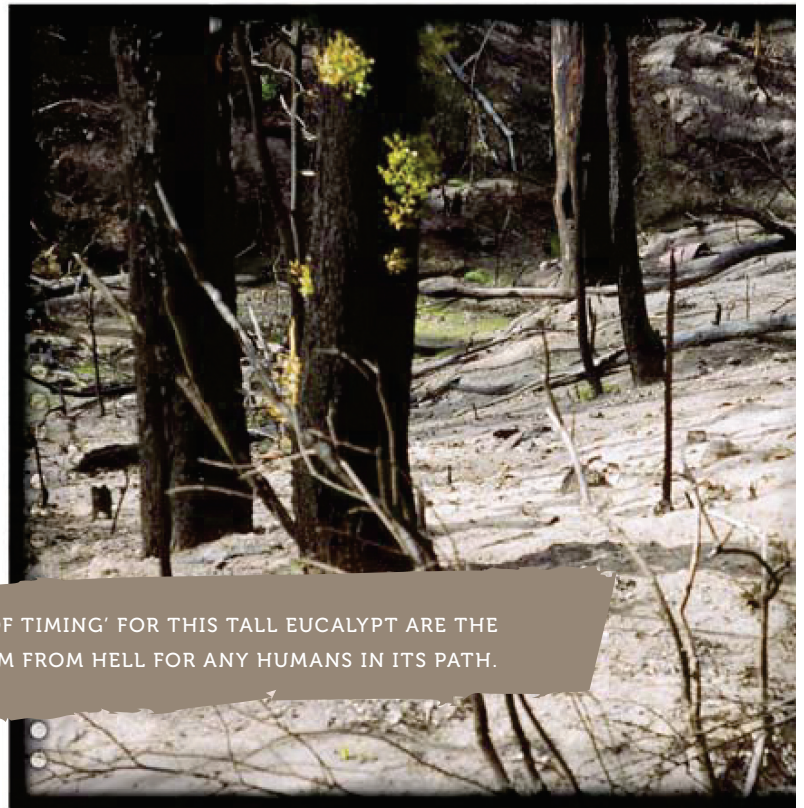
Ash-type eucalypts (the mountain and alpine ash) have developed a different means of regeneration. Although they do produce epicormic shoots from their branches after fire,

drought or insect damage, they do not develop ligno-tubers under the ground from which they can renew themselves, and mountain ash and alpine ash rarely coppice (that is, grow new shoots from a cut stump). For their survival, therefore, they are unusually dependent on their seed supply. Mountain ash dies out unless fire periodically sweeps the forest, for it is principally fire that releases the seed from the tree's hard capsules. However, the tree is also unusually sensitive to fire. Its bark is thin, and mature trees are easily killed by fire. Furthermore, if a second fire comes before the regrowth has developed its own viable seed, a whole forest can be wiped out.

This apparently paradoxical relationship between ash and fire results in a crucial 'miracle of timing' that is essential to regeneration.⁵ Mountain ash generally occurs in even-aged stands. That, and the persistence of soil charcoal, are evidence of past catastrophic fires. Mountain ash is very sensitive to light surface fires, but it seeds prolifically in intense crown fires. In fact, it possesses features that seem to promote such fires: a heavy fall of inflammable leaf litter (two or three times that of other eucalypts), particularly in dry seasons, hanging streamers of bark that take the flames up to the

create a 'miracle of timing' for this tall eucalypt are the very same ones that conjure a firestorm from hell for any humans in its path.

So these great forests of ash renew themselves *en masse*. These magnificent trees have evolved to commit mass suicide once every few hundred years — and in European times, more frequently. The very existence of mature ash forests such as those found by Europeans in the mid-nineteenth century is testimony to a fire regime of very occasional widespread but



THE CONDITIONS THAT CREATE A 'MIRACLE OF TIMING' FOR THIS TALL EUCALYPT ARE THE VERY SAME ONES THAT CONJURE A FIRESTORM FROM HELL FOR ANY HUMANS IN ITS PATH.

canopy and become firebrands hurled by the wind in advance of the flame, and open crowns whose pendulous foliage encourages updrafts. And how do these precious seeds survive the intense heat they indubitably need? The well-named botanist, David Ashton, suggested that perhaps it is the very flammability of the crown that protects the seed in its capsule — just long enough. In the crown of the tree ahead of the fire front, the heat is brief and explosive and, some observers say, is followed by cool updrafts of air before the arrival of the surface fire. This fragile and complex circumstance certainly works. At Noojee after the 1939 fires, forester A. H. Beetham found that nearly two-and-a-half million seedlings per hectare of mountain ash germinated.⁶ The magnificent mountain ash is actually a fire weed. The conditions that

intense conflagrations. Not all the communities that were incinerated in 1939 and 2009 were in or near the forests of ash, but many were, and the peculiar fire ecology of the trees is another deadly dimension of this distinctive fire environment. These are wet mountain forests that only burn on rare days at the end of long droughts, after prolonged heatwaves, and when the flume is in full gear. And when they do burn, they do so with atomic power.

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But even holocaust fire has cultural dimensions — Black Friday and Black Saturday were both intriguing artefacts of nature and

history, they were cultural exaggerations of a natural rhythm. Even as we discover their ecological depth, we are reminded of their historical specificity. They were distinct products not just of their region's ecology, but also of their particular social eras — of intensive forest-based sawmilling in 1939, and of uncontrolled urban expansion into bushland in 2009. And now there is the added cultural factor of human-induced global warming.



FOR THOSE OF US WHO KNOW THE HISTORY, THE MOST HAUNTING ASPECT OF THIS TRAGEDY IS ITS FAMILIARITY.

The 2009 fires were 'unprecedented', as many commentators have said. They erupted at the end of a record heatwave and there seems little doubt this was a fire exacerbated by climate change. But it is the recurrent realities that are more striking. For those of us who know the history, the most haunting aspect of this tragedy is its familiarity. The 2009 bushfires were 1939 all over again, laced with 1983... the same images, the same stories, the same words and phrases, and the same frightening and awesome natural force that we find so hard to remember and perhaps unconsciously strive to forget. It is a recurrent nightmare. We know this phenomenon, we know the specific contours of the event, and we even know how people live and how people die. The climate change scenario is frightening. But even worse is the

knowledge that we still have not come to terms with what we have already experienced.

The Bureau of Meteorology predicted the conditions superbly. The Victorian Premier, John Brumby, issued a general warning. Fire experts knew that people would die that day. History repeated itself with uncanny precision. Yet the shock was, and still is, immense. It is the death toll, and not the weather, which makes the event truly unprecedented.

The Victorian Emergency Services Commissioner, Bruce Esplin, woke at 6 am on Black Saturday with, as he put it, 'this feeling of dread'.⁷ It was probably no accident that he used that word 'dread', the same one Leonard Stretton used to describe the feelings of bush workers in the summer of 1938-39 as the dry undergrowth crunched ominously under their boots. Esplin conducted the inquiry into the 2002-03 Victorian fires and spoke then of his keen sense that Judge Stretton was looking over his shoulder. While writing his own report, Esplin had read Stretton's Royal Commission summary again and again and he knew very well Stretton's portentous prose. Every Victorian with some knowledge of fire history has for years been fearing that 1939 could happen again. We thought it might have come

in the summer of 2002-03. In the late spring of that fire season, after a long dry winter, I toured the Victorian forest communities that had been devastated by Black Friday, giving talks about the fire history of the region. In village halls and Rotary Clubs on unseasonably warm evenings, people came out to talk about the past, but really to rehearse the future. History revealed itself as a kind of public therapy. By talking about 1939, bush residents could voice their fears about 2003. I talked and listened to people preparing for another horror summer. There was that air of 'dread expectancy'. And a great fire did kindle and erupt, a vast alpine fire that burned for two months and also roared into Canberra. But the 2003 fire, although it burnt roughly the same area as the 1939 fire, miraculously took few lives. The central

Victorian communities north and east of Melbourne were spared, thus the nightmare of 1939 still stalked us. And so Bruce Esplin woke with dread that morning of Black Saturday.

On that morning, an hour's drive to the north of Melbourne, thousands of families awoke to a fierce day and instinctively stayed indoors. Most had probably heard the warnings the day before. Many knew that, in the event of fire, if they were not going to stay and defend their homes, then they should leave early. But when, exactly, was *early*? It was still too early for most that Saturday morning — there were no reports of fires close by, and anyway it was better to stay at home than to travel in such conditions. 'Everyone was fatigued by the hot days', recalled one survivor who lost his home. 'It produced complacency. The whole family was having a siesta. Tarps were strung up on the windows, the air-con was on. The tarps were flapping, I couldn't sleep'. Later that day, without time for any further decisions, people with fire plans were ambushed by a monster. 'Many times before we've seen smoke', they remembered. Another recalled: 'We've stood on our front lawn and watched fires on the ridge. This was not a fire, but a tsunami, a wave of gas not so much of flames'. 'Normally you see a cloud', observed a survivor. 'This one was so hot it was white — like a giant cumulus. We never saw flames. It was incandescent'. At Woods Point in 1939, old residents initially ignored the huge pall of smoke coming over the north-eastern hill; they had seen it often enough. Within an hour their town was incinerated. At Marysville in 2009, tourists were innocently captivated by a photogenic magenta 'thundercloud' billowing above the town; it was about to descend on the settlement 'like an atomic bomb'. The survivors spoke constantly of the immense speed and noise of the fires. 'No-one could have stopped it', they said.⁸

Emergency Service chiefs in what was called 'the war room' in Melbourne, equipped with the best communication technology, were also overtaken by the speed and ferocity of the event. By early afternoon on that Saturday, fire



authorities in that 'war room' were anxious but buoyant. So far as they knew, fire activity was limited. Yet the Kilmore fire was already alight and rampaging. Dozens of people died in the next two hours. Esplin recalled: 'We were sure that the fires were taking houses at that stage but we had no idea they were taking lives'. The close association in this fire between houses and death had not yet been made. Kinglake West was consumed, then Strathewen, St Andrews, Kinglake, Steels Creek, Calignee and Flowerdale, all were incinerated. By 6 pm, with the southerly change sweeping across central Victoria, there was still no confirmation in the 'war room' that any lives had been lost. Driven by the new southerly winds, fire bore down on Marysville and vaporised it. Esplin heard the news six hours later. When he went to bed at 1.30 am the official death toll stood at 14.

In a recent article in *The Monthly*, Robert Manne, who survived the fire in Cottlesbridge due to 'a mere fluke of wind', analysed the evidence so far presented to the Teague Royal Commission in an attempt to understand why so few warnings were issued by authorities on the day.⁹ He was perplexed and angry that people in the path of the fire were not given the benefit of the latest information about the fire-front. One shares his dismay — yet it is also consistent with the logic of the 'leave early or stay and defend' policy that such warnings would not be issued, not out of incompetence or carelessness or bureaucratic paralysis, but because of a conviction that late warnings would precipitate late departures and that people are most vulnerable when in panicked flight — and also that they are safest, if well prepared, in their own homes.



The 'leave early or stay and defend' policy has developed and hardened over those two decades and in many areas it has demonstrably saved lives and homes. Now, suddenly and dreadfully, it has become the problem. In this distinctively deadly fire region it misled people to believe that they could defend an ordinary home in the face of an unimaginable force, and it constrained authorities from informing the public of the

movements of the fire-front on the fatal day.

A 'stay and defend' option is only realistic in such places and conditions if every property has a secure fire refuge or bunker. A bunker at the shire hall or at the end of the street is not good enough — people will die getting to it. I welcome the Prime Minister's promise to rebuild these communities 'brick by brick' — and I would like him to add: 'and bunker by

It is this assumption — that people could hope to defend their homes in the fire flume on a forty-something degree day of high winds after a prolonged heatwave and a long drought — that demands scrutiny. The ratio between homes lost and lives lost seems to be much higher in these fires than any other; in other words, people stayed at home, were stranded from information, and died. And those who

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died fleeing did so at the very last minute when they realised with horror that there was no identifiable 'early' on such a day in such a place, and that the fire plan they had carefully nurtured over years had never had the remotest chance of working. The recommended survival strategy of 'leave early or stay and defend your home' was a death sentence in these Victorian mountain communities in such conditions.

We can understand why this policy has evolved and it has much to recommend it. It is libertarian; it recognises the reality that people prefer to stay in their own homes and defend them if they can; it seeks to minimise late evacuation which is so often fatal; and it encourages sensible planning and preparation. It will continue to guide people well in most areas of Australia. For the last twenty-five years since the horrific Ash Wednesday fires, we have been able to tell ourselves a story that even though feral fire seemed to be escalating, we were learning better how to survive it.

bunker'. Many people built bunkers in their backyards in the second world war and most, thankfully, were not used. But we know for certain that any secure bunkers built in these Victorian forest towns *will* be used in the next generation, and they will save lives. This is an appropriate challenge to the design and construction industries of the fire continent.

We need to abandon the idea of a *national* fire plan and develop ecologically sensitive, bioregional fire survival strategies. We need to move beyond an undifferentiated, colonial sense of 'the bush' as an amorphous sameness with which we do battle, and instead empower local residents and their knowledge of local ecologies. The quest for national guidelines was fatal for the residents of these Victorian mountain communities on such a day; it worked insidiously to blunt their sense of local history and ecological distinctiveness. Clearing the backyard, cleaning the gutters and installing a better water pump cannot save an ordinary

home in the path of a surging torrent of explosive gas in the fire flume.

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In 1989, I was involved in a historic sites survey of these forests.¹⁰ Some of the grimmest and most moving relics of intensive sawmilling we identified were old dugouts built in the 1920s, 30s and 40s. In those days, dugouts should have been provided at all sawmills. They were trenches in the ground or in the side of embankments, generally supported with corrugated iron sheeting and timber props heaped over with earth. They had one narrow opening, which could be shielded with a blanket that was to be kept constantly wet during a fire. Water, food and first aid equipment were to be stored inside. All too often, however, no dugouts were provided for workers and their families at sawmills. The dugout that saved the lives of workers in the Ada forest had been built only over the opposition of the manager, who believed that fire would never invade the cool, moist southern side of the range. In spite of the tragedies and loss of life in the 1926 and 1932 fires in these same forests, there were still many sawmills without dugouts. They were the sawmiller's responsibility. They were to be built and stocked at the sawmiller's expense. Many didn't bother.

So when the fire bore down upon them, timber workers buried their belongings and tried to bury themselves. Some burrowed into the sawdust heaps and made themselves an awful, suffocating tomb. Some jumped into water tanks and were boiled. The few who did survive without well-equipped dugouts were near big, broad creeks in which they could immerse themselves, or else they were able to find a large cleared area, in the centre of which they lay down, wrapped themselves in wet blankets and kept their nerve. The trauma of Black Friday drove some people off the edge of sanity for the rest of their lives. When the survivors tried to walk out to civilisation after the fire had passed, they found themselves lost. It was a different landscape. All familiar things had gone. The matchstick trees were no guide to where they were.

It took courage and desperation to climb underground 'like a wombat' and stay there. Even where dugouts existed, many bushworkers did not trust them. At the Ru oak No. 3 mill in the Rubicon forest, workers crammed the dugout with their furniture and fled. The four slowest died. But their furniture survived. Some of it can still be found there today, 'embedded in the collapsed remains of the dugout'.¹¹

Ruby Lorkin survived the fire in a dugout at the Ada No. 2 mill near Powelltown. In 1984, she recalled her ordeal:



I had only walked a few yards down the wooden tramline to the mill, when a torch of burning bark fell at my feet and set the line alight. My husband called 'Run, run for your life into the dug-out'. I dropped the tea billies and food and ran. The men were still frantically soaking the mill. When they saw it was no use they were forced to come into the dug-out. How we lived through that dreadful inferno I shall never know.

It was 113 degrees in Melbourne so you can imagine how awfully hot it was there as the worst fires in Australian history swept over us, sweeping sawmill, houses, horses, everything before it. I think, maybe, because it went so quickly, fanned by a terrific north wind behind it was the reason we survived. We two women were told to lie down on the ground whilst water was thrown over us, until the water reached boiling point and we could not drink it. Four men at a time stood at the small opening of the dug-out holding up soaking blankets until the blankets dried, caught alight and were swept from their hands in a few moments, then another four went forward to take their place. The Engineer went berserk and tried to take his wife outside and had to be quietened by knocking him unconscious to save his life. The next morning, when the fire had gone taking our homes and all our possessions, we crawled out although our clothes were riddled by sparks which fell down through the small funnel the men had put in for a chimney and the men's hands were badly scorched by holding up the blankets. Strangely, no one was badly burned.¹²

Research by historian Peter Evans has shown that, although sheltering in a dugout was often deeply traumatic in the way Ruby Lorkin described, dozens of people did survive the fire by going underground. Only three people died in a dugout in 1939. That unfortunate trio were the mill owner and his wife — Ben and Dorothy Saxton — and a young timber worker Michael Gorey. A small distance away, thirty sawmill employees survived in the big dugout that Saxton had wisely built at his Tanjil Bren sawmill. But when the extreme crisis came, Ben Saxton, as mill owner, possibly felt the need to segregate himself from his own men,

to maintain a certain social distance even in an emergency. The alternate dugout in which he took refuge was too small and it collapsed.¹³

The fire refuge dugout was a distinctive cultural response to the history of fire in these tall Victorian forests. Few dugouts were built in other forest regions. It is a clue to the emerging bush wisdom of the inhabitants of these distinctive forests. There are hardly any official dugouts in this region today — many of the old forest refuges have collapsed or decayed and many were deliberately destroyed because they were seen to be unsafe. The original reason for them being put there appeared to have been forgotten.

* * *

There is a perennial question in human affairs that is given real edge and urgency by fire: *do we learn from history?* Testimony from the 1939 and 2009 fires suggests that there is one thing we never seem to learn from history. That is, that nature can overwhelm culture. That some of the fires that roar out of the Australian bush are unstoppable. As fire manager, Mike Leonard, puts it, 'there are times when you have to step out of the way and acknowledge that nature has got the steering wheel at the moment'.¹⁴ It seems to go against the grain of our humanity to admit that fact, no matter how severe are the lessons of history.

Managers and scholars of bushfire have observed that our society experiences a heightened awareness of the danger of fire immediately after a tragic event such as Black Saturday, but that complacency sets in as the years pass and the memory of the horror dims. But there is another psychological pattern which is more troubling and that we can observe at work in our midst right now. The forgetting of the recurrent power of nature is immediately and insidiously embedded in the ways we describe and respond to great fires in their aftermath. Our sympathy for the victims of bushfire, the surge of public financial support and the political imperative to rebuild as swiftly as possible conspire to constrain cultural adaptation. Such sacrifice of life cries out for meaning and for a kind of unbending resolution in the face of nature. There is often an emotional need, as people return and rebuild, to deny the 'naturalness'

and therefore the inevitable recurrence of the event. Black Saturday, we tell ourselves, was unique, it was unprecedented, it was 'unnatural' and it was a 'disaster'. Culture can — and *will* — triumph over nature.

There is an irresistible tendency to use language that describes fire almost wholly in terms of tragedy and destruction. Not only do we talk in crisis-language, we also use military metaphors and comparisons — partly because, in the face of an awesome natural force, they offer some comforting human agency. We refer (as I have above) to the authorities bunkered down in the Melbourne 'war room'. We revere the heroism of the firefighters and compare them to Anzacs. At the national memorial service, the Prime Minister spoke of 'a new army of heroes where the yellow helmet evokes the same reverence as the slouch hat of old'. We describe forests as *destroyed* even if they are highly evolved to burn. We yearn to send out better technology to suppress the fire front. We bomb the flames with water. We talk of hitting the fires hard and hitting them fast. Arsonists, it seems, are actually 'terrorists'. The fires, we tell one another, are 'a threat to national security'.

We all have to learn better when to retreat — and we have to find another word than 'retreat'.

Right now in Victoria, as bereaved folk return to their country and renew their communities, our fellow Australians are conducting the most intriguing and important experiment. These bushfire towns — where the material legacy of the past can never survive for long — need to work harder than most to renew their local historical consciousness. There is a dangerous mismatch between the cyclic nature of fire



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THE GREATEST CHALLENGE IN FIRE RESEARCH IS CULTURAL.

But the military metaphors, however apt and enabling, make us believe that we can beat fire, somehow. They define heroism as staying and fighting. Leaving early, in such a culture, might be seen to be cowardly. At the moving national memorial service to the victims of Black Saturday, many speakers, in honouring the dead and their heroism, were also unwittingly cornering another generation. 'Courage', declared Kevin Rudd, 'is a firefighter standing before the gates of hell unflinching, unyielding with eyes of steel saying, "Here I stand, I can do no other"'. Yet one of the triumphs of this recent tragedy is that not one firefighter died on Black Saturday, although an ACT firefighter did tragically die in the aftermath. On the day itself, fire officers knew when to retreat. It must have been a shocking decision to make, but it was the right one, or the death toll would have been much higher.

and the short-term memory of communities. There are emotional and political constraints to adaptation. The greatest challenge in fire research is cultural.

There will be more Black Fridays and Saturdays, and they're not all black. We have to accept them and plan for them, like drought and flood. We should aim to survive them even if we can't hope to prevent or control them. And we should celebrate, as I think we are already beginning to do, the stimulus that such fires give to community.¹⁵ Modern Australian society, like Australian nature and like Aboriginal civilisation, will learn to see the positives about fire. We cherish the green growth that returns so quickly. We can feel pride that key concepts of fire ecology and models of bushfire behaviour were developed in Australia, that landscape-scale prescribed burning has been pioneered here as a method of bushfire management, and

that 'the Australian Strategy' contrasts with the more 'muscle-bound, paramilitary response' to fire in North America.¹⁶ These innovations grew from a realisation that fire was so much a part of the Australian landscape and character that it could never be eliminated or suppressed. It had to be accepted and used. Perhaps we can even, sometimes, learn to see a fired landscape (of the right intensity and frequency) as beautiful, as 'clean', as Aboriginal people do.

Let me finish by returning to Leonard Stretton's haunting words. There was another meaning to his declaration that 'they had not lived long enough'. He was saying that lived experience alone, however vivid and traumatic, was never going to be enough to guide people in such circumstances. They also needed history. They needed — and we need it too — the distilled wisdom of past, inherited, learned experience. And not just of the recent human past, but of the ancient human past, and also of the deep biological past of the communities of trees. For in those histories lie the intractable patterns of our future. ■



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This is an extended version of my analysis of the Black Saturday fires which first appeared on 16 February 2009 in *Inside Story* (ed. Peter Browne) at <<http://inside.org.au/we-have-still-not-lived-long-enough/>>. I have also drawn on my article '“An unnatural disaster”: Remembering and forgetting bushfire' in *History Australia*, 6 (2), December 2009: 35.1-35.7.

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8. Most of these quotes are from survivors of the Black Saturday fire at Steels Creek, Victoria, where the Australian National University and the National Museum of Australia are engaged in a collaborative community history project. The Woods Point story was told by Gerald Alipius Carey to the 1939 Royal Commission and can be found in Moira Fahy's online documentary about Black Friday <<http://www.abc.net.au/blackfriday>>, and the Marysville account is by Kate Legge, 'Blithe Oblivion', *Weekend Australian Magazine*, 7-8 March 2009, pp. 18-21.
9. Robert Manne, 'Why We Weren't Warned: The Victorian Bushfires and the Royal Commission', *Monthly*, July 2009, pp. 22-35.
10. This work for the Historic Places Branch of the Victorian Department of Conservation and Natural Resources resulted in my books, *Secrets of the Forest* (Sydney: Allen & Unwin, 1992) and *Forests of Ash: An Environmental History* (Melbourne: Cambridge University Press, 2001).
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12. Evans, 'Refuge from Fire', p. 216.
13. Evans, 'Refuge from Fire', p. 224.
14. Mike Leonard and other fire managers are featured on Moira Fahy's Black Friday online documentary on the ABC website.
15. See Jack Waterford on the Canberra fires of 2003 in 'Rebuilding Canberra's Spirit', *Griffith Review*, edition 2, (2003), pp. 91-114.
16. Stephen J. Pyne, 'Black Saturday: The Sequel', *Peeling Back the Bark* (US Forest History Society website) <<http://fhsarchives.wordpress.com/2009/02/10/historian-stephen-j-pyne-on-the-australian-fires/>>. Also see Pyne, *Burning Bush*, chapter 18, on development of 'The Australian Strategy'.