

Wisdom versus Folly

A case study in Australian bushfire management. By Roger Underwood

Many years ago I watched a grainy, flickering film of the British infantry making their attack on the opening day of the Battle of the Somme. The terrible footage shows the soldiers climbing from their trenches and, in line abreast, walking across no-man's-land towards the enemy lines. They scarcely travel a few paces before the German machine gunners open up. They are mown down in the thousands, chaff before a wind of fire.

I can still remember my anger when I realized what that carnage represented. It spoke of the deep incompetence of the generals who devised the strategy. It spoke of front-line men led by people without frontline experience. It spoke of planners unable to think through their plans. It spoke of a devastating failure of the human imagination.

Worst of all, it demonstrated that the generals had not studied the lessons of history. In the final year of the American Civil War, 50 years earlier, the Union army had been

equipped with Springfield repeating rifles, replacing their single-shot muskets. The impact on Confederate soldiers attacking defenders armed with repeating rifles was identical to that later inflicted by machine guns on the Western Front. But it was a lesson unlearned, of collective wisdom disregarded.

The catastrophic bushfires in the Australian states of Victoria, New South Wales, the Australian Capital Territory and South Australia in recent years are dramatic expressions not just of killing forces unleashed, but of human folly. No less than the strategies of the World War I generals, these bushfires and their outcomes speak of incompetent leadership and of failed imaginations. Most unforgivable of all, they demonstrate the inability of people in powerful and influential positions to profit from the lessons of history and to heed the wisdom of experience.

But what about the malignant influence of global warming on bushfire conditions, making things impossible for firefighters? What

about the unprecedented weather conditions that made the Victorian fires of February 2009 “unstoppable”? What about the years of drought making the bush superready to burn? Were not the conditions beyond human understanding, making killer bushfires inevitable? And what about the promises of technology, the supraerial tankers and so forth, that will give the initiative to our firefighters once and for all?

I am well aware of drought, of the terrible conditions on the days of the fires, and of the proposition that all this is a result of global warming. Of course drought and bad fire weather increase the risk of serious bushfires. But unstoppable bushfires are not the inevitable consequence. And while I will always welcome improved firefighting technology, I know from experience and from an understanding of the simple physics of bushfire behavior that technology can never be a substitute for good land management. The serious bushfire is like a disease that is incubated over many years; good land management is the preventative medicine that ensures the disease does not become a killer epidemic.

To me, the epidemic of recent killer bushfires in Australia is not an indicator of what is inevitable in the future. It is an indicator of the consequence of what has happened in the



PHOTOS COURTESY ROGER UNDERWOOD

Intense fire in eucalypt forest: February 2009. There is no question that the influence of green activists at all levels has resulted in a steep decline in the standard of bushfire management in Australia. Our bushfire generals have no excuses.

past. To me, these fires toll like bells: they toll for failed leadership, failed governance and failed land management.

The issues of leadership and governance are central. What these fires point to is that the leaders of our society, Victoria's politicians and senior bureaucrats, have palpably failed to do the most fundamental thing expected of them: to safeguard Victorian lives and the Victorian environment in the face of an obvious threat. They have failed to discharge their duty of care. Just as we now look back with incredulity at the amateurish strategies of the generals in The Great War of 1914-1918, so will future Australians look back on the work of those responsible for land and bushfire management in this country (our bushfire generals) in the years leading up to The Great Fires of 2003-2009.

The toll of the 2009 Victorian fires is shocking. Over 170 lives—lost. Thousands of homes—destroyed. Millions of dollars worth of social and economic infrastructure—reduced to ashes. The work of generations, the farmlands, stock, fences, woolsheds, yards—dead and gone. Native animals and birds—killed in the millions. Beautiful forests—cooked, in some cases, stone dead. Catchments—eroding. The costs—multimillions of dollars. Carbon dioxide released into the atmosphere—the equivalent of a year's supply for the whole of Australia. Psychological damage to children and families—inescapable.

They cannot say they didn't know we have serious bushfires in Australia. Australians have not arrived only recently in this hot, dry sclerophyllous land. Even if we overlook for a moment the fire-management experience of aboriginal people, accumulated over 40,000 years or so, nonaboriginal Australians have been here for more than 200 years, with 200 fire seasons, dozens of prolonged droughts, tens of thousands of thunderstorms, lightning strikes and bushfires.

They cannot say the impacts of intense bushfires on human communities were unimaginable. We have known for 200 years that European settlement represented the insertion of a fire-vulnerable society into a fire-prone environment. We have seen the consequences of mixing hot fires and settlements on too many occasions to doubt the result.

They cannot say that Australians are powerless in the face of the bushfire threat, that bushfires are unstoppable. From the earliest days of settlement, through to the evolution of the fire-management systems developed by



The aftermath: eucalypt forest in Victoria destroyed by high-intensity wildfire. The environmental excuse that fires have become unstoppable because of global warming is no more than a gutless cop-out.

experienced land and forest managers in the 1950s and 1960s, we have known what is needed to minimize bushfire intensity and bushfire damage. From at least the 1960s, we have known how to build and maintain houses in fire-prone environments to optimize their survival.

And they cannot say that they were not warned. Warnings have emerged from the aftermath of every damaging bushfire for the last 70 years or more...from inquiries, commissions and reports, from independent auditors and from land managers, bushfire scientists, foresters, farmers and firefighters. In recent years the warnings have come thick and fast. In recent years warnings have even flowed in from Greece, Portugal, the western United States and Canada.

Over and over again, the same message has been sent:

■ In our climatic zone with hot dry summers and periodic drought, and with our flammable vegetation and frequent lightning strikes, bushfires are inevitable.

■ If fuels are allowed to accumulate, bushfires in eucalypt forests rapidly attain an intensity that exceeds the human capacity to extinguish them, notwithstanding the most modern and massive suppression forces.

■ Communities and economic assets in the path of high intensity fires will suffer hor-

rible damage.

But! Potential damage can be minimized by application of a fire-management system that incorporates responsible planning and high standards of preparedness and damage mitigation, especially fuel reduction.

And we have a choice: fires are inevitable, but we can choose to have mild controlled fires or ungovernable infernos.

Our politicians and bushfire generals cannot say they have not been warned, only that the message was not received or that it was received but ignored.

Why is this so? There are two answers.

Politics. In the last 25 years and when it comes to bushfire management, Australia's governments have failed to govern. The focus of politicians has been on getting elected and staying in power, not in providing intelligent, tough and effective governance. This has led to political parties courting the preference votes of pressure groups and of city-based electors who are in the thrall of pressure-group philosophies.

There is no question that the influence of green activists at all levels has resulted in a steep decline in the standard of bushfire management in this country. Their influence is exemplified by two things: (1) opposition to prescribed burning for fuel reduction, resulting in unprecedented fuel buildups in parks,

forests and reserves close to population centers; and (2) rural residential developments, in which developers and residents have been prevented or discouraged by environmentalist-dominated local councils from taking measures to ensure houses are bushfire safe.

Technology. Australian bushfire authorities have been seduced by the siren call of technology. This has lured them into a fatal trap. Their assumption is that any fire can be contained so long as they have enough hardware to throw at it. This approach arose in the United States in the years after World War II, and is thus known to Australian land managers as “the American Approach.”

The American Approach is fundamentally flawed. Fifty years of its application in the United States and 10 years in Australia has demonstrated that no force of firefighters in the world can stop a crown fire in heavy forest that is generating a jet stream of spot fires downwind. The bravest men and women, armed with the most expensive equipment, are simply overwhelmed.

This reality has not penetrated the Australian bushfire generals. Not only have we seen the American Approach increasingly supported, and then watched as it invariably fails when pitted against hot fires in heavy fuels, but it has taken on a life of its own. Every year more money is poured into the purchase of superexpensive equipment, while the outcomes on the ground just get worse.

Adoption of the American Approach has been accompanied by an equally disastrous institutional rearrangement: the progressive transfer of bushfire responsibilities from land-management agencies to the emergency services. In this scenario the focus of funding is shifted from preparedness and damage mitigation to emergency response. What this means is less emphasis on fuel reduction and more on building up fleets of water bombers and other high-tech firefighting gizmos. We end up with an enormous paramilitary force with the function of attacking fires after they start, but doomed to failure when faced with multiple fires in heavy fuels under windy conditions.

These failing institutional arrangements persist because they are supported by powerful vested interests. The emergency services have a vested interest in maintaining a huge fire-suppression machine, while for politicians it is simpler to finance suppression systems than damage mitigation. Moreover, they can bask in the glow of measures that are highly visible to the media, giving the impression that they are doing something useful,



The alternative to wildfire—a mild prescribed burn in light fuels due to previous burning.

irrespective of the fact that it will fail under bad fire conditions. How often has a politician been seen lighting the first match of a prescribed burn, compared with the occasions when you see them breaking the champagne over a newly purchased helicopter?

I am not critical of the firefighters on the ground, professional or volunteer. I know them to be brave, resourceful and tough. But they are increasingly being asked by their own leadership to do the impossible.

But what of the assertions from the Wilderness Society that because of global warming, big unstoppable bushfires are here to stay, and we might just as well get used to them. I regard this as an insult to human intelligence and the human spirit. If the computer scenarios are correct and it does become hotter and drier, this means we have to make even greater efforts at fire prevention, preparedness and damage mitigation. The idea that there is nothing we can do in the face of global warming but retreat into a bunker and wait for the next fire to come at us over the horizon is utterly defeatist. And suggestions that the bushfire problem will go away if only Australians reduce their carbon-

dioxide emissions are surely an example of kindergarten-level thinking.

The need for mitigation of bushfire damage through fuel reduction by prescribed burning is central to effective bushfire management. I support it unequivocally, although I set some clear parameters: burning must be based on sound research into fuel characteristics, fire behavior and fire effects; burns must be conducted professionally by trained personnel using the best-available burning guides; and every burn must be part of an overarching strategic approach, the carefully designed and constantly updated jigsaw known as the Strategic Burning Plan.

This is how it has been done for years in Western Australia. But even here the system has slipped in recent years, as foresters battled to keep a fuels' management program going in the face of cunning opposition from environmentalists and compliant politicians.

Nevertheless, 50 years of experience in Western Australia has demonstrated beyond argument that while fuel reduction by prescribed burning does not prevent bushfires, it ensures that fires do less damage, and it makes them easier and safer to extinguish. In



gambler's terms, it shortens the odds in favor of the firefighter. In human terms, it means fewer are likely to be burnt to death.

There is no need for new research to demonstrate the value of prescribed burning. The need is to apply existing knowledge in a vastly expanded prescribed-burning program on the lands that burn, to upgrade the fire skills of field staff in parks and forests so that they can handle burns confidently and efficiently, and to develop comprehensive planning and control systems to ensure burning is professionally carried out. Above all is the need for governments to recognize these needs, to act on them and to support their staff in the field.

And here's the rub. Based on history, the prospect for change is small. Governments always want to stay in office, and to do so in Australia this means pandering to those who have consistently opposed responsible bushfire management. The environmental activists and academics who benefit from the status quo are already marshalling their resources in its defense, supported by the bushfire generals who do not want to lose their power or see funding going to land management (which they do not control) instead of new water bombers and tankers (which they do).

Notwithstanding the opposition from vested interests, this time it is going to be hard for Australian governments to find excuses for doing nothing.

It must finally dawn on them that in the Australian bush, if you do not manage fire, you cannot manage for anything else. It's a simple equation: get your bushfire management right or be prepared to lose the lot.

I started this paper with reference to the futility of the strategies adopted by the generals throughout the first three years of World War I. It is significant that the breakthrough in 1918, the new strategy, was designed by an Australian, indeed a Victorian, Gen. Sir John Monash. The Monash strategy was based on establishing unambiguous objectives, anticipation of difficulties, attention to detail and the advice of experts. His advisers were men who had been at Gallipoli and in the trenches in France and Belgium and who spoke from experience on the ground, not from ideology.

Australian bushfire management is crying out for a new Monash, a leader who understands that the current approach has failed and is doomed to continuing failure because the people who designed and support it have no frontline experience.

The environmentalist approach to bushfire management, including reliance on aerial firefighting, has been given a fair go. It has had a good test. And it has failed. Their excuses, especially that fires have become unstoppable because of global warming, are no more than a gutless cop-out.

The choices before Australians are straightforward: do we want our bushfire and land-management planning done by professionals with frontline experience or by campus intellectuals and ideologists? Is it smarter to manage bushfire fuels by burning them at times of our own choosing when conditions are mild or to stand back, do nothing and risk being engulfed by fire at the worst possible time? Given that fires are inevitable, which is preferable: a controlled or a feral fire?

Do we opt for wisdom or for folly? ■

Roger Underwood has nearly 50 years experience in bushfire management. He started his career in a firefighting crew, became a district and regional forester, and spent nine years as general manager of the Department of Conservation and Land Management in Western Australia, where he was responsible for fire management in state forests, national parks and nature reserves for the western third of Australia. His e-mail address is yorkgum@westnet.com.au.

Notes from America

By Ed Depaoli

Roger Underwood has done an excellent job. He is correct when he says the "American Approach" is fundamentally flawed. One could argue that America does not have an approach, rather we have disorganized noise from environmentalists and politicians who prevent any meaningful fuel management.

Timber cannot be harvested because of lawsuits, so it burns; grass cannot be grazed because of lawsuits, and it burns; scientists and those with vast management knowledge are ignored, and their wisdom is shelved.

Environmentalists make noise. They are not bashful in their efforts to silence those who do have the experience and knowledge to manage our forests and rangelands. Katie Fite of Western Watersheds says: "BLM must move away from blind acceptance of myths put forth by commodity-driven range scientists often tied to western land-grant universities. BLM must use best available science, not be driven by commodity production-minded researchers." Western Watersheds concentrates on filing lawsuits to eliminate all grazing on federal lands. The fact that fuel buildup often results in enormous and deadly fires does not seem important to Katie Fite and her anti-livestock friends.

Politicians also periodically make noise: On March 31, 2009, Sen. Harry Reid said: "There are currently no systematic and cost-effective approaches to restoring degraded rangelands." This is not true.

The obvious question is, "Why does this vacuum exist?" Roger Underwood answers it when he says, "Governments have failed to govern." ■

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