When you can't live in the bush for the trees

By Kathryn Hore

There are three things a fire needs. Whether it be a cooking fire, a bushfire or the kind of raging firestorm experienced in Victoria on February 7 2009, killing 173 and destroying many more, the essential fire triangle remains the same. It needs oxygen. Heat; that is, a source of ignition. And fuel.

In our efforts to withstand the bushfires the state of Victoria is inherently prone to, and which the rising density of our bush living is turning into an increasingly mortal threat, we inevitably turn to this trifecta of fire essentials. To remove any one of the three is to extinguish the flames. Yet oxygen remains a necessary constant and sources of ignition, from dry lightning to arson, prove elusively impossible to eliminate. Which leaves us with the one thing seemingly within our control.

Remove the fuel.

In the weeks following Black Saturday, as the firestorm last February is known, the calls for increased fuel reduction burning reached a fever pitch. Perhaps inevitably, the aftermath of such horror saw a search for meaning through blame. Angry, if erroneous, accusations against green groups perceived to oppose fuel reduction - "eco-terrorists" putting trees before lives - were matched by an Opposition scoring political points against a Government which had failed to reach its own back-burning targets in eight years out of the preceding ten. Seven months on and the calls to fight fire with fire remain all the stronger for their temporal distance. Of the fifteen key issues before the Royal Commission into the fires, prescribed burning tops the list. With 485 submissions alone, it has generated stronger interest than the contentious Stay-or-Go policy, compulsory evacuations or the distinct lack of warnings on the day.

Fuel reduction burning is the deliberate lighting of low intensity fires to remove bark, leaf litter and other potential fire fuels from the forest floor. The DSE's own literature (the Department of Sustainability and Environment is responsible for much of the back-burning in Victoria) describes controlled burning as "a complex and difficult process" which is "inherently risky." Victoria sees only ten to twelve days each year in which the weather is considered suitable; cool enough to keep the burn under control, hot enough for the flames to do their job. Yet there is no predicting the unpredictable, such as the controlled burn at Wilsons Promontory in 2005 when the wind turned unexpectedly north. The resulting bushfire saw a midnight evacuation of campers, threatened to destroy the Prom's only township and closed the national park for eighteen days.

Jack Rush QC, counsel assisting the commission, says "the purpose of prescribed burning is not to prevent fire from occurring, but to reduce the intensity of fire, it's rate of spread… the difficulty of suppression." He draws from what fire experts everywhere already know: fuel loads impact directly upon fire intensity. Yet so does the weather, a factor particularly pertinent to

Victoria's hottest day on record, Black Saturday, and the rate of a fire's spread comes down to everything from wind speed and moisture content through to fuel particle size, vegetation height and topography.

Victoria has some of the most fire prone geography in the world. Thanks to our dry, eucalypt forests and intense summer climate, we're up there with southern California and the Mediterranean coast as one of the three most flammable places on earth. Our native eucalypts, which drop bark, branch and leaf litter all year round, contain at least four percent volatile oils. On warm days, the vaporised eucalyptus oil rises above the tree tops to create that distinct blue haze which so characterises the Australian landscape. These forests burn fiercely and rebound quickly. They respond well to fuel reduction burning; often they respond by creating more fuel.

Drive now through some of the areas burnt out seven months ago and you can see the bracken is thriving while the eucalypts are already shooting new buds from beneath their bark. These are plants created by fire for fire; bracken is one of the most flammable fire fuels in the bush. Regular burning, as fuel reduction aims to be, favours plants which thrive on fire and dries out everything else, until all we are left with is just so much more fuel for the flames. In the Blue Mountains of New South Wales, another bushfire prone territory, assessments of regular burns throughout the 1990s found thirty percent were successful in reducing fuel loads, but forty percent had only a neutral effect. The final thirty percent were simply classified "negative". That is, the burns actively increased fuel loads, not decreased them.

Fuel reduction burning sounds deceptively simple: remove the fuel and with it the bushfire threat. Yet Black Saturday was no ordinary bushfire and it consumed everything, including large patches of forest already subjected to controlled burns. After twelve years of drought, previous bushfires and the Government's own prescribed burning program, fuel loads were already at a minimum by 2009's killer summer. Further fuel reduction would have a made no difference on a day which combined record high temperatures with gale-force winds, after almost no rain for two months and a heatwave so intense it had quietly killed hundreds long before the fires began. Extreme weather created Black Saturday fires so ferocious they rated an off-the-scale 120 to 190 on the Macarthur Fire Danger Index – an index only supposed to go to 100. According to experts, in some places that day the very soil itself was burning.

There is no panacea to stop a firestorm. Yet in those angry calls for increased fuel reduction can be heard a desperate cry for solutions, a need to be told how to make the State safe. This is the true danger of prescribed burning, the sense of false security, the complacent assumption that by reducing fuels, all will be okay. As if a tool which helps us at certain times, in certain places, mitigate the fire risk, can somehow bring holistic guarantees.

To make a home amongst the gum trees in Victoria is to accept the risk of fire. And sometimes the only thing you can do is reduce the fuel loads as best you can, then get the hell away.

Kathryn is a Melbourne writer who has chosen to live amongst the gum trees in the Victoria's Dandenong Ranges.