

OPINION

Oh, Canada – don't make the same wildfire mistakes as Australia

DAVID LINDENMAYER and CHARLES KREBS

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A wildfire burns on Mount Underwood near Port Alberni, on Vancouver Island, B.C. in August 2025. COLBY REX O'NEILL/AFP/GETTY IMAGES

David Lindenmayer is a professor at the Australian National University. Charles Krebs is a professor at the University of British Columbia.

Both Canada and Australia have experienced megafires in the past few years, the size and severity of which have been unprecedented. It has been suggested that Canada needs to “fight fire with fire” in order to solve the problem, and follow Australia’s lead in tackling this national environmental issue.

Wrong. Rather, it is critically important that Canada does not repeat the mistakes that Australia has made.

The widespread application of prescribed burning or hazard-reduction burning has been proposed as a way to protect people and property in Canada. Prescribed burning to reduce fire hazards has been employed throughout large parts of Australia. Yet robust scientific evidence showing that it is effective is remarkably limited. In some places, prescribed burning can reduce fire severity and restrict fire spread for a few years, but afterwards the regrowing vegetation becomes more flammable – an increased fire-risk effect that can last for many decades. That is: short-term gain, but long-term pain.

A sobering fact is that prescribed burning makes very little difference in extreme-fire weather – precisely the conditions when most houses are lost and people die. One of us (Prof. Lindenmayer) lived through many weeks of extensive prescribed burns around the town of Marysville in the Australian state of Victoria. Just months later, in February, 2009, the entire town was razed by wildfire; all but a few buildings were destroyed and 34 people died. This was far from an isolated incident.

Some people have suggested more prescribed burning is needed to emulate the way Indigenous people employed prescribed burns to prevent wildfires, again citing Australia as a leading example.

Whilst Australia's First Nations used cultural fires for hunting, promoting food growth and clearing pathways, it was not used for asset protection. The areas they burned were small and very localized. Fire authorities in Australia have somehow ignored this fact.

The huge scale and often very high intensity of the prescribed burns now being lit are the polar opposite of how First Nations people burnt the land. These massive-scale burns have significant negative impacts on the environment, on human health, and on Australia's wildlife. For instance, medical data quite clearly show that Australians are far more likely to die from respiratory problems linked with prescribed burning than they are to die in a wildfire.



Volunteers with the Victoria Country Fire Authority conduct and monitor a prescribed burn in western Victoria, Australia. JESSE WINTER/THE GLOBE AND MAIL

An important fact – from an analysis of ice cores – is that many megafires have occurred in Australia over the past 2,000 years, even though First Nations people were applying cultural burns.

Beyond the issue of the questionable effectiveness of widespread prescribed burns, scientific studies in Australia show that forests that are logged and then regenerated are characterized by a pulse of elevated flammability that can last for 40 to 70 years. Many government agencies responsible for managing logging operations have refused to acknowledge that science.

Importantly for North Americans, scientific studies of the Western part of the continent and Central-Eastern Canada are showing similar logging-fire flammability patterns to those seen in Australia. These scientific warnings should be accommodated in the Canadian government's latest \$1.2-billion subsidy to the country's timber industry. Governments in both Canada and Australia need to recognize the potential for an increased fire burden that comes with logging natural forests.

Opinion: It's not a bird! It's a Super Scooper plane, Canada's most powerful waterbombing tool to fight against wildfires

A crucial mistake made in Australia has been that an overreliance on prescribed burning has given people a false sense of security. It has led people to think they are safe from wildfires when they are not. Fire authorities also have not been transparent about the health risks of smoke from prescribed burning. Nor have they been upfront about the fire legacy of large-scale industrial logging. Canada can learn from the Australian experience and not make the same mistakes.

Climate change and past forest management means that the risks of wildfires are now greater than ever – irrespective of whether they are in Canada or Australia. All firefighters know that the best time to extinguish a fire is when it is small. A key message of hope is that new technologies, such as fast-flying drone fleets with infrared sensors, can help with rapid detections of ignitions and swift suppression, potentially within tens of minutes. These are the same kinds of technologies being used in the horrific war in Ukraine – but they can be adopted for good, and help us tackle the problem of wildfires not only in Canada and Australia, but the world over.