The conversation surrounding forests and bushfire is important, but it must stay grounded in evidence

There is no simple solution or single practice that can eliminate fire risk on its own, writes **Dr Shaun Suitor**

Recent commentary on bushfire behaviour in Tasmania's forests has drawn heavily on a new study by Professor David Bowman examining how wildfire interacts with regrowth and mature eucalypt forests.

As someone working in the forest science space, I welcome both the scrutiny and the debate. Bushfire is a serious risk in Tasmania, and it is right that new research is examined carefully. At the same time, it is important that individual studies are interpreted accurately, and in the broader context of what we already know about fire, landscapes and a rapidly changing climate.

The study analysed the 2019 Riveaux Rd bushfire in southern Tasmania, using detailed pre- and post-fire data to examine how fire behaved across a mixed-landscape of mature forest and regrowth following harvesting. Under the moderate fire weather conditions experienced during that event, regrowth forests burned, on average, at higher local severity than adjacent mature forests.

That finding is not surprising, nor should it be dismissed. Forest scientists and land managers, including Sustainable Timber Tasmania, have long recognised that younger regrowth can contain denser lower canopies and more continuous "ladder fuels", which can influence how fire moves vertically through a forest under certain conditions – acknowledging that reality is an important part of responsible forest management.

One needs to be careful not to conflate this site-specific result with a general explanation for large bushfires.

Crucially, the research does not support the claim that forestry causes megafires, nor that regrowth forests, in themselves, drive bushfire spread at the landscape-scale. A substantial body of peer-reviewed research, including work by Prof Bowman and colleagues, demonstrates that while some regrowth areas can experience higher fire severity under certain conditions, regrowth forests do not increase fire contagion, do not increase fire spread, and are not associated with elevated landscape-scale bushfire risk, particularly where regrowth occurs as patches embedded within a broader matrix of mature forest.

One of STT's AI-powered fire cameras on Tylers Hill Picture: Supplied

These most recent findings are consistent with Bowman et al's 2022 analysis of the 2019-20 Black Summer fires, which concluded that extreme fire weather overwhelmingly overrides disturbance history, including harvesting, when large and severe bushfires occur.

The Bowman study adds valuable insight into how forest structure can influence fire severity under particular conditions. But it does not support claims that forestry is the dominant driver of landscape-scale fire risk.

It is acknowledged that all forest types, whether in production forest areas or reserves such as National Parks, are increasingly exposed to bushfire risk under a changing climate. For this reason, fire risk requires active, evidence-based management across the landscape, regardless of forest age or land use.

The study also highlights a broader and often overlooked reality: Tasmania, similar to many mainland Australian areas, now contains extensive areas of regrowth forest created not only by past harvesting, but by regular intervals of severe bushfires over the past decades. That landscape does not disappear if harvesting stops. The real question is how regrowth, across all tenures, is actively managed over time to reduce risk to people, property and the environment.

At Sustainable Timber Tasmania, fire risk is approached as a whole-of-estate, whole-of-system challenge, fully recognising its growing complexity under climate change. Sustainable Timber Tasmania continues to invest in traditional foundations of fire preparedness and response: maintaining an extensive forest road network, fuel breaks and access corridors, retaining trained firefighting staff and equipment, and undertaking targeted fuel management.

At the same time, Sustainable Timber Tasmania recognises that traditional approaches can be augmented by new technology. Sustainable Timber Tasmania is continually learning and adapting.

We are currently engaged in more than 30 active research projects spanning fire behaviour, fuel dynamics, climate impacts, forest condition and detection technologies, in collaboration with universities, government agencies and industry

partners.

One practical outcome of this research effort has been a major investment in early fire detection. Sustainable Timber Tasmania is now a national leader in the operational use of AI-enabled fire cameras, with 11 cameras fully embedded in day-to-day fire operations, integrated with satellite-based detection systems.

During the 2025-26 fire season, the system identified more than 630 confirmed detections, with 558 initially detected by cameras and 76 by satellite, and 81 fires escalated to fire management agencies for response.

Building on this capability, Sustainable Timber Tasmania, in collaboration with the Tasmanian Parks and Wildlife Service, Tasmania Fire Service and Indicium Dynamics, is leading the development of the Tasmanian Integrated Fire Camera Network.

With more than 30 cameras statewide, it will be the largest co-ordinated fire camera network of its kind in Australia, significantly strengthening early detection across public, private and reserved land.

This is not about any single technology or management lever. Fire and forests are complex, and that complexity is increasing as the climate warms. There is no simple solution, and no single practice, whether thinning, prescribed burning, forest maturity or fire exclusion, that can eliminate risk on its own.

All involve trade-offs across fire behaviour, biodiversity, carbon storage and operational feasibility.

The conversation about forests and fire is important. But it needs to stay grounded in evidence, acknowledge uncertainty, and focus on practical solutions that reduce risk and build resilient landscapes for the future.

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