

Logging 'amplified' severity of Black Summer bushfires

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An analysis of the fire footprint of the 2019-2020 Black Summer bushfires has found logging elevated the risk of high-severity fires.

A team of Australian researchers, including Professor David Lindenmayer and Dr. Chris Taylor from The Australian National University (ANU), completed the study.

The Black Summer bushfires burned through more than 24 million hectares and destroyed thousands of homes.

Professor Lindenmayer said while [weather conditions](#) had the biggest influence on the severity of the fires, these effects were amplified by [logging](#). According to Professor Lindenmayer, logged forests always burn at greater severity than intact forests.

"Logging increases the probability of canopy damage by five to 20 percent and leads to long-term elevated risk of higher severity fire," he said.

"On the other hand, if disturbance due to logging is minimized, canopy damage can be reduced, in turn reducing the risk of uncontrollable fires."

Dr. Chris Taylor from ANU says that "even in mild fire weather, logged forests were more likely to suffer high severity fire than unlogged forests under more severe weather conditions."

Researchers from ANU, Curtin University, Macquarie University and University of Queensland contributed to the study.

Dr. Michelle Ward of the University of Queensland says that "research shows that forests become dramatically less likely to burn when they mature. Mature forests are also less likely to carry fire into the treetops."

Dr. Robert Kooyman of Macquarie University says that "protected areas and associated threatened species, including rainforest assemblages, are

at higher risk of [fire](#) impacts where they occur adjacent to previously logged eucalypt [forest](#)."

The study's authors warn that logging is not just increasing the risk of severe fires, but also the risk to [human lives](#) and safety.

"We cannot forget the impacts these megafires had on people's lives," Professor James Watson of the University of Queensland said.

"We need to use the evidence to reduce the risk of future megafires wherever possible and it is obvious logged forests increased the risk and severity of these fires."

"Reducing the amount of logging can reduce the risk of uncontrollable high severity fires that endanger humans, homes, and biodiversity."

The [research](#) has been published in *Nature Ecology and Evolution*.

More information: David B. Lindenmayer et al, Logging elevated the probability of high-severity fire in the 2019–20 Australian forest fires, *Nature Ecology & Evolution* (2022). [DOI: 10.1038/s41559-022-01717-y](https://doi.org/10.1038/s41559-022-01717-y)

Provided by Australian National University

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