

# Bushfire impacts finds quarter-million hectares burnt

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Binna Burra Lodge before and after the bushfire. Credit: Leighton Pitcher

A Griffith study has mapped the scale and impact the 2019 bushfires had on South-East Queensland bushland, finding that 13% of rainforests and 24% of our national parks in the area were likely burnt.

In new research published in *Ecological Management and Restoration*, School of Environment and Science honors student Isabella Smith used Geomorphic Information System (GIS) mapping to get a clearer view of where the fires occurred and which national parks, [plant communities](#) and threatened [plants](#) were likely burnt.

Smith was supervised by Professor Catherine Pickering and Dr. Eleanor Velasquez, who assisted in analyzing data that found 240,000 hectares of the region may have burnt, including 107,606 hectares of national parks.

The results also found that some 74 regional ecosystems and the potential habitats of 74 threatened plant species were likely affected. This included 16% of wet open forests and 13% of rainforests.

Smith said the results provided preliminary insights into the potential scale of the fires and impact on biodiversity from mapping using online data.

"But we also noted that more detailed mapping including of fire intensity and perimeter combined with ground truthing and ongoing monitoring would be required to better understand changes in fire regimes in the region," Smith said.

"Mega fires in the spring and summer of 2019/2020 in Australia burnt large areas where this type of disturbance was rare in the past, including in the South-East Queensland region.

"With our climate changing, it is important to understand the impact of these unprecedented fires, including where they burnt plant communities

were fire was rare in the past including the globally important rainforest in South-East Queensland."

Professor Pickering said these [fire](#)-ravaged areas were also the habitats of some important rare and threatened plants.

"And with hot dry conditions predicted to be more common in the future, there is a real risk that some may not recover from such large-scale fires," Professor Pickering said.

The research, "Quantifying [potential effect](#) of 2019 fires on [national parks](#) and vegetation in South-East Queensland," has been published in *Ecological Management and Restoration*.

Provided by Griffith University

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