

## Bushfire risk at the rural/urban interface

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Living in a bushfire prone area provides many life style advantages but present a risk to life and property. This paper describes the development of a model to predict the potential risk of loss of a specific house at the rural/urban interface.

The three fundamental mechanisms of attack have been considered: embers, radiation and flame contact. The spatial and temporal property of these attack mechanisms are combine with our evidence based knowledge of house loss. The probabilistic model takes into account a wide range of parameters such as vegetation, climatic conditions, topography, building design, human behaviour and infrastructure element local to the house. Each of these elements may play a role in mitigating or contributing to building loss.

The model used the principle of aggregated probability of failure of each object that contributes to the risk of house loss.

The outcomes of the model provide a risk estimate for any given building/environment/people scenario and allow us to determine the level of risk mitigation achieved by a specific strategy or combination of strategy. The application of this model will be aimed at fellow researchers, community education, policy development, town planning, and regulation reform.

***Facilitating increased community consciousness towards bushfires***