

PREDICTING ACUTE IMPACTS OF FIRE IN JARRAH FORESTS FOR ECOLOGICAL STUDIES

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Bushfires are commonly described in terms such as rate of spread, flame dimensions or Byram's intensity, which reflect suppression difficulty or general damage potential. Meaningful descriptions of bushfires for interpreting ecological effects are those which reflect the amount and rate of heat energy released and its distribution. These factors determine the immediate physical or acute impacts of fire which give rise to ecological effects.

The acute impacts of fire in jarrah forest can be studied and predictive models developed by;

- (i) stratifying the area within and around the flames (impact zones);
- (ii) identifying the physical impacts within these zones;
- (iii) identifying readily measurable descriptions of the amount and rate of heat energy release;
- (iv) identifying factors affecting the transfer of heat to plant tissue and the soil;
- (v) experimenting to determine functional relationships between physical impacts, readily measurable fire descriptions and factors affecting heat transfer.



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CALM
NOT FOR LOAN

ABSTRACTS

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