

# FIRE NOTE

ISSUE 20 MAY 2008

## AWARENESS OF BUSHFIRE RISK - TAMBORINE MOUNTAIN CASE STUDY

### SUMMARY

This Fire Note outlines the results of a case study undertaken in Tamborine Mountain in south east Queensland that investigated awareness of bushfire risk.

The area is characterised by escarpments, tall open forests and sub-tropical rainforest. The predominant level of bushfire risk is rated as high. The study area is peri-urban and incorporates residential, rural and farming properties.

The study used a mixed methods approach to explore agreements and differences in the perceptions and expectations of fire services and the community. Initially, a number of individual and group interviews were undertaken with members of the local fire brigades and community groups to identify bushfire issues in the area.

A self-completion questionnaire was designed to collect data on a wide range of social factors. Five hundred questionnaires were delivered in May 2005 and an overall response rate of 33 percent was achieved with a total of 163 completed surveys returned.

### ABOUT THIS PROJECT

This study is based on the masters thesis of Bushfire CRC student Luke Balcombe out of the Bushfire CRC Understanding Communities Project C1.

The Project leaders are Alison Cottrell, Centre for Disaster Studies, James Cook University, and Judy Newton, Queensland Fire and Rescue Service.

More information is available at  
<https://www.jcu.edu.au/centre-for-disaster-studies>

[www.bushfirecrc.com](http://www.bushfirecrc.com)

### PERCEPTIONS AND EXPECTATIONS - HOW THEY DIFFERED

Community meetings and the survey revealed that community members have priorities that take precedence over concerns about bushfires. Interestingly, although the local fire service has a major concern for bushfires, their day to day activities relate more to responding to motor vehicle accidents. Local fire service personnel felt that most people in the community would rely on them in the event of a bushfire. Although the survey revealed that half of households would not rely on the fire services, this is still a substantial portion of people expecting a service from volunteers who are limited in number. In relation to bushfire preparations, the survey results showed that bushfire preparations had been undertaken by 58% of respondents, which indicated a

disturbing 42% of respondents had not taken action (Figure 2).

Although individual householders felt themselves to be the people most responsible for personal and household safety in the event of a fire, should one happen, expectations may change. There were also clear differences of expectations in terms of delivery of information to the public. Interestingly, although the fire services perceived public opposition to controlled burns, the survey and community meetings indicated that people supported controlled burns but had concerns that burns should not get out of control and should be timed appropriately.

▼ BELOW: TAMBORINE MOUNTAIN, SOUTH-EAST QUEENSLAND. VIEWED FROM ALPINE TERRACE.



## A DIFFERENCE IN PERCEPTIONS AND EXPECTATIONS.....AND WHERE THEY AGREED

FIRE SERVICE PERSPECTIVE	COMMUNITY PERSPECTIVE
Most people are unaware of the bushfire risk.	Most people said they are aware of the bushfire risk but have other priorities in their life that take precedence.
Most people in the community rely on fire services to respond to a bushfire	At least half said they would not rely on help from fire services in a bushfire.
The public expects things to be done for them.	Individual householders see themselves as the most responsible for personal and home safety.
Can advise residents but cannot tell residents they need to take action.	Frustrated by lack of specific advice on what to do and no help provided.
Controlled burns are not wanted by the public.	People supported controlled burns as long as they are carefully done.

COMBINED PERSPECTIVE
Experience of fire increases awareness of risks.
Risk awareness is not related to recent Australian bushfire events.
Views about the bushfire vary.
Fire breaks are a necessary fire management initiative.
The local bushfire season was perceived to be from early spring to summer.
There is a need for Bushfire Management Plans to be effectively implemented.

### PERCEPTIONS AND EXPECTATIONS - HOW THEY AGREED

Both fire service personnel and community members reported the view that experience of bushfires makes people better prepared. However, review of other research shows that the “experience of fire” does not necessarily increase the “awareness of risks” as it depends on factors such as how long ago or how awful the experience was and how much loss was experienced.

Media coverage of fire was described by fire services as not being linked to the local situation because ‘fires like that don’t happen here’ and these views were also reported in the community meetings.

There was a view by the community representatives, fire services and the community surveys that views on bushfire risk were quite varied in the area. Consequently, a ‘one size fits all’ approach to community information activities may not be appropriate.

Management Plans were seen to be important by both fire services and the community but everyone recognised that they were not effectively implemented. The local Bushfire Management Plan developed as part of the Tamborine Mountain Escarpment Management Plan (Watson, 2001), which was initiated by the community and developed in consultation with the community, specified the development and maintenance of 120 kilometres of firebreaks.



◀ LEFT: MANY HOUSES AT TAMBORINE MOUNTAIN ARE IN A PERI-URBAN ZONE. THE AREA HAS A MIX OF TALL OPEN FORESTS AND SUB-TROPICAL RAINFOREST.



▶ RIGHT: A TYPICAL HOUSE AT TAMBORINE MOUNTAIN.

**OTHER BUSHFIRE-RELATED ISSUES**

These issues are separate from how the perceptions and expectations agreed and differed because they were solely from either the fire services' or the community's perspective.

**Fire Service bushfire-related issues**

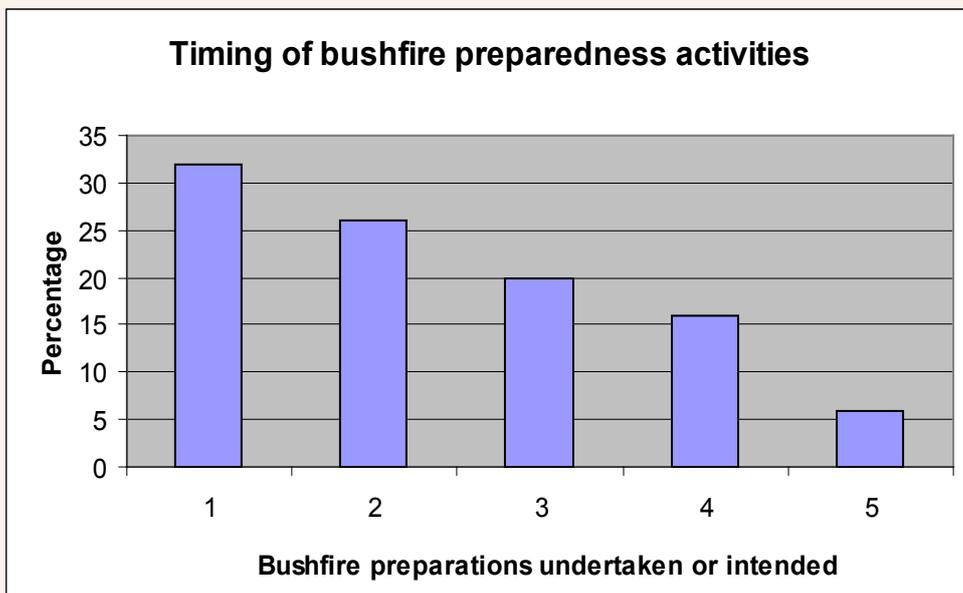
Local fire service personnel felt the community is confused about the roles of urban and rural fire brigades, especially relating to volunteer membership. They want to improve their capacity to convert data and information relevant to bushfire mitigation and management into knowledge to guide decisions, and want to know how to better inform the public of the need for preparation against the risk of bushfire without sensationalising the topic. There was a perceived need to find ways of improving the community's participation in bushfire mitigation and management.

**Community bushfire-related issues**

Community groups seek optimum controlled burn return intervals, and some justification of how and when controlled burns are done. Householders were not confident about the costs of protecting property against fire and what to do for bushfire safety if needed. A wide range of media was found to be the preferred way of receiving information. Direct contact with fire services was not preferred. There are a high proportion of retired people in the community and should be seen as a resource. Strategies need to be developed to effectively engage the resources of time and knowledge available in the community.



▲ ABOVE: WONGAWALLAN ROAD, EAGLE HEIGHTS, TAMBORINE MOUNTAIN.

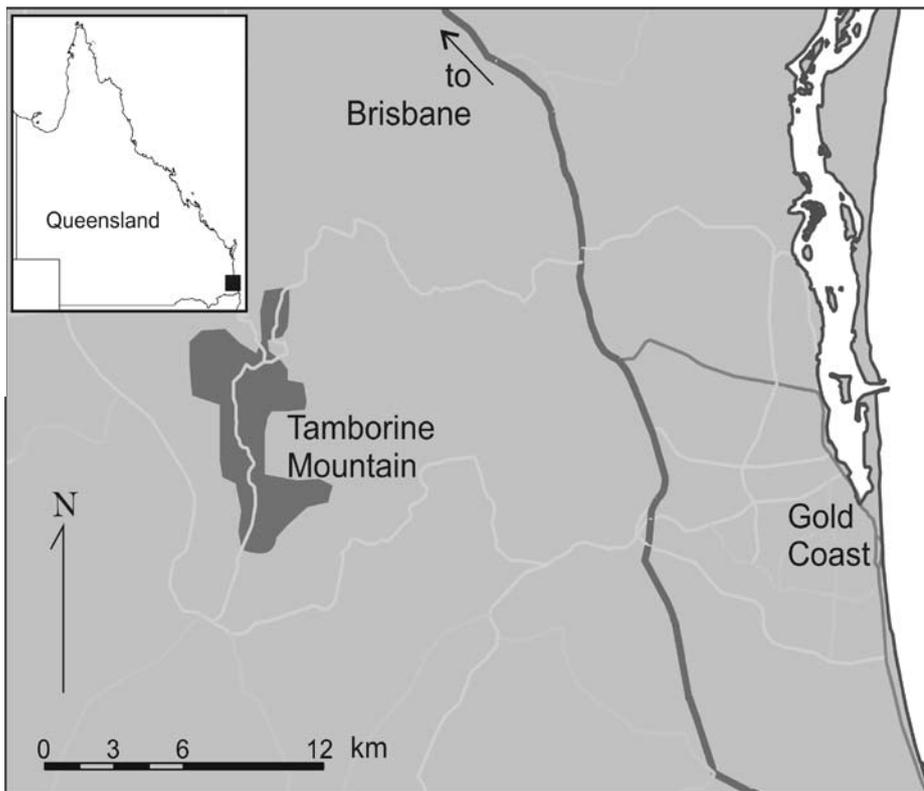


**TAMBORINE MOUNTAIN BUSHFIRE AWARENESS SURVEY**

Timing of bushfire preparedness activities (N =158)

Legend:

- 1. Preparative actions taken in the last three months (32%).
- 2. Preparative actions taken before the past few months (26%).
- 3. Aware of actions but have not taken it (20%).
- 4. Would consider action before the fire season (16%).
- 5. Would look for further information or advice (6%).



## KEY IMPLICATIONS

A major issue for fire services is how to gain attention when other issues take priority for the community. There is also a need to approach preparedness issues in a variety of ways. At Tamboorine Mountain, there appears to be a substantial section of the community that is not at all prepared. Conversely, there is a substantial group of people who think they are responsible for their safety, but are nonetheless not adequately prepared.

Different groups require different community education approaches and this is complicated as they are not discrete, easily identifiable groups. There was active community involvement in the preparation of the Tamboorine Mountain Escarpment Management Plan, which indicates that the community may be a resource for fire services.

## PUBLICATIONS

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**Bushfire Cooperative Research Centre**  
Level 5/340 Albert Street  
East Melbourne VIC 3002

Telephone: 03 9412 9600  
[www.bushfirecrc.com](http://www.bushfirecrc.com)

Bushfire CRC is a national research centre in the Cooperative Research Centre (CRC) program, formed in partnership with fire and land management agencies in 2003 to undertake end-user focused research.

**Australasian Fire Authorities Council**  
Level 5/340 Albert Street  
East Melbourne VIC 3002

Telephone: 03 9418 2388  
[www.afac.com.au](http://www.afac.com.au)

AFAC is the peak representative body for fire, emergency services and land management agencies in the Australasia region. It was established in 1993 and has 26 full and 10 affiliate members.