

Fire Technology Transfer Note

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The case of a fire-affected community: West Melton fire, December 2003

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Introduction

A study of a fire-affected community was conducted to gain an understanding of the social ramifications of a wildfire event and to analyse how one community responded to this type of disaster. The research focused on the West Melton community, located just west of Christchurch, in the Selwyn District. This is the first in a series of case studies planned by the Scion Rural Fire Research Group to examine community resilience to, and recovery from, wildfire events. The research for this study was carried out by Laura Kelly for a Masters of Arts degree in Anthropology at the University of Canterbury, with additional supervision by the University of Tasmania and Scion.

Background

On 14 December 2003 a wildfire swept through West Melton, a township of about 280 people located 15 km west of Christchurch in what is characterised as the rural-urban interface (Figure 1). The community has a diverse population living primarily on lifestyle blocks, with an average property size of about 8 hectares.

The wildfire was the result of a fire in a pile of horticultural rubbish that was lit on 20 November 2003. Although thought to have been extinguished, the fire appears to have remained smouldering for a period of time and, due to what fire fighters and public officials characterised as a series of unfortunate events, it reignited about three weeks later causing significant damage as it spread through the West Melton community. Damage occurred to a house, caravan, boat, sheds/outbuildings, farming machinery/equipment, exotic tree plantations, gardens, fencing, shelter belts, and animals (Figure 2).

Twenty in-depth interviews conducted more than two years after the event, during the winter of 2006, provided the data to help identify and describe West Melton residents' perceptions of the fire and the fire risk in the area, and steps taken since the 2003 fire to manage this risk². In qualitative research such as this, scientists select their sample on the basis that each individual provides insights that are particularly useful in developing an understanding of a specific issue, problem or event, not because they statistically represent a specific demographic of the larger population. Each of the people interviewed for this study provided

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² Kelly, L. 2007. *Risk, blame and belonging: An exploration of the West Melton Fire of December 2003*. A thesis submitted in partial fulfilment of the requirements for the Degree of Master of Arts in Anthropology, University of Canterbury.

pieces necessary to complete the puzzle of the West Melton fire. In this note we highlight findings in four areas: major impacts of the fire, assessing blame for the fire, responsibility for managing fire risk, and steps taken to reduce risk since the fire.

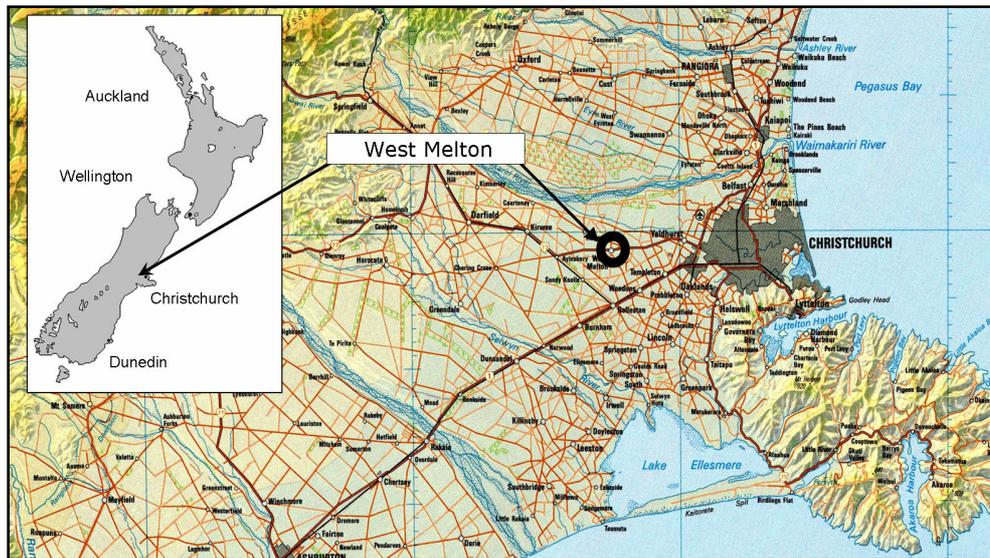


Figure 1. Location of West Melton (MapWorld, 2000, 1:500,000);

Findings

Major impacts of the fire:

- The West Melton fire gave emergency managers an opportunity to test the district's emergency strategy and learn from the experience.
- Evacuation:
 - Between 150 and 300 residents were evacuated during the fire, with some residents viewing the evacuation as unnecessary.
 - Some people refused to evacuate and were prepared to stay and defend their property.
 - In general, residents who were relatively new to the area were more willing to evacuate than those who had lived in the area longer.
- Immediately after the fire, the community pulled together to help those in need.
- After the fire was contained and people started to question what happened during the fire, differences between "old lifestylers" and "new lifestylers" became apparent. Although membership in these groups is not always clear-cut, residents in both groups seemed to share an understanding of what it means to belong to one or the other group:
 - Old lifestylers are accustomed to deriving economic gain from working their land, with most having lived in West Melton since before 1991 and the introduction of the Resource Management Act.
 - New lifestylers moved to the area after 1991 primarily seeking a lifestyle focused on leisure activities and aesthetics, and generally gain their principal income from work outside the community.
 - New lifestylers' perceptions of risk are based principally on urban life experiences that do not include wildfire; few were prepared when the fire came.
- Old lifestylers described the impacts of the fire as more significant for new lifestylers than themselves.
- Affected residents often experience psychological stress following a fire, and the West Melton fire left some residents feeling vulnerable for several years.
- Old lifestylers know that future wildfires are likely, whereas new lifestylers are not as certain.

Assessing blame for the fire and resulting damage

It is common for people to assign blame for a human-caused disaster and for the damage that occurs in disasters like wildfire in a manner that minimises their personal responsibility for any damage. West Melton residents interviewed for this study focused on five agents when assigning blame: individuals who started the original fire, new lifestylers, the Selwyn District Council, New Zealand Police, and responding fire crews.

- People who started the original fire - although there was no fire ban in effect at the time, residents indicated that the original fire should not have been lit because of existing high-risk weather conditions.
- New lifestylers - they were perceived as lacking the correct local knowledge that would have prompted them to take steps to reduce the risk of wildfire and subsequent damage on their properties.
- Selwyn District Council -
 - allowed one of the local fire alarms to be disconnected 10 months earlier and some residents claimed that this resulted in their having no warning of the fire;
 - did not have a fire ban in place at the time the fire was lit, despite what residents perceived as high-risk weather conditions;
 - allowed the West Melton Volunteer Rural Fire Force to be 90 minutes away at training on the day of the fire;
 - did not mow grass along roadways, which contributed fuel to the fire.
- New Zealand Police - they enforced the evacuation order, and residents claimed that if people had been allowed to stay and defend their property fire damage would have been reduced.
- Responding fire crews - because they were not from West Melton, residents felt that these crews lacked the local knowledge that would have enabled them to fight the fire most effectively.



Figure 2. This house was destroyed in the 2003 West Melton fire.

Responsibility for managing fire risk:

- New lifestylers saw the Selwyn District Council as responsible for managing fire risk, including supporting the Rural Fire Force so it can respond effectively and, if necessary, forcing landowners to cut dry grass and remove other fire hazards around their homes.

- Old lifestylers held individuals responsible for managing fire risk on their own property.

Steps taken to reduce risk since the 2003 fire:

- Old lifestylers stated that they did not need to take additional steps because they had already prepared and organised in a way that limited damage from wildfire.
- Some new lifestylers have become proactive in managing fire risk, mowing grass more frequently and planting less flammable vegetation.
- Both new and old lifestylers indicated that they had reassessed their insurance. New lifestylers in particular had increased their liability insurance.

Conclusions

Fire managers interviewed about the West Melton fire felt that nothing could have been done to prevent the fire. People will often explain an event based on their perceptions of that event, not necessarily the facts. Two years later, the West Melton residents we talked to still did not believe the official story, despite education initiatives following the fire by the Selwyn District Council and West Melton Residents Association.

Rural fire managers interviewed felt that the public's preparation and awareness of fire risk need to improve, but to achieve this goal, the managers need to appreciate how different members of the public understand and approach risk. Building local knowledge about fire risk is a challenge in communities such as West Melton that experience rapid population growth and high turnover. In addition, residents who have lived in the area for a long time and think they know the local fire risk need to be challenged to understand how changes in the community have changed that risk.

Tackling the wildfire risk management challenge collaboratively - old lifestylers, new lifestylers, Council, rural fire managers, businesses, and community groups – will ensure that the message becomes relevant to everyone. A shared local knowledge thereby is created that can result in increased community resilience and improved recovery.

Additional planned case studies will highlight the variability in community response to wildfire and how different social characteristics demand different approaches to working with communities to increase resilience and reduce wildfire risk.

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