# Glimpses of 'community' through the lens of a small fire event

*Helen Goodman and John Gawen analyse a community's reaction to the 'Shire of Boldrewood' fire.*


## Abstract

In eliciting feedback from household members affected by ember attack in an urban interface fire, researchers found evidence of latent and actual strengths at the individual, household and community levels. How the emergency services acknowledge and work with these strengths across Australia's varied community landscape provides both ongoing challenges and opportunities for increasing community safety.


## Introduction

This article describes results from part of a small study that was carried out following a fire on the boundary of a rural Australian town. We discuss community responses to the threat, at the informal household level of family and friends assisting those who were impacted by the fire, and at the neighbourhood level. At the household level, we see a thread of similar states of mind and action running through those households that had had farming experience, in terms of their acceptance of the threat of fire, some preparedness for this, and an 'automatic' decision to stay with their properties. At the community level, we highlight two particular responses. One is the response of a community member with expertise in fire safety, who resided outside the fire impacted area, and assisted in his role as a concerned citizen. His efforts were regarded by the relevant households as valuable and substantial. The other is the 'post fire' widening of membership of a pre-existing neighbourhood group of three households who had jointly purchased a private fire unit prior to the fire. We link our findings particularly to some recent Australian literature in the field.

The setting is made anonymous to encourage readers to make connections with their own communities. We will refer to the fire event as the Boldrewood Fire, and the city impacted as the city of Starlight. This study was carried out in a region where an ongoing fire service position in community education/development was only beginning.

Two Bushfire Cooperative Research Centre (BCRC) researchers were in the area within a month of the Boldrewood fire. Interest was expressed in a small study to gain feedback from the community on their response to the fire. This article draws on data arising from 11 interviews, 10 with affected households, and one with private fire unit owners in a nearby neighbourhood. Additional research on the timing and content of the public broadcasting of this fire event is not presented in this article.

## The context of the fire event

The Boldrewood fire began before the official fire season at around 9.30 on a weekday morning, in the rural Shire of Boldrewood. This was the first fire to threaten the City of Starlight (population 15,000) since the Marsh fire a few years prior in which there were significant community losses. The Boldrewood fire crossed into the City of Starlight and impacted on homes on its perimeter. The fire – said to have commenced from a machinery spark at a rural Shire home – was initially extinguished by a neighbour with the use of a jointly owned private fire unit. It reignited in nearby scrub, travelled across several acres over the city boundary, into a privately owned gully with a disused factory site at the bottom. It then emerged at the first of several city streets

© Newspix/News Ltd

*Several homes in "Boldrewood" experienced "urban interface" fires.*

adjoining this rural land, with spotting at two locations further into these residential streets. The gully hampered fire fighting efforts, but the fire was brought under control within a period of about four hours.

No homes or lives were lost. The city street facing the gully was the most impacted, with several homes experiencing ember attack and one home losing some roofing. The fire is accurately described as an 'urban interface' fire. In all, resources used included at least 29 vehicles from the combined emergency services attended, aerial suppression, and an unknown number of private fire units.

## Profile of urban households

Sixteen homes were approached using a doorknock method within a month of the fire. Residents in three declined ("not convenient"), three were unoccupied, and 10 responded favourably to the opportunity. We refer to these households as 'household A', 'B' etc'. Tables 1 and 2 below set out the number of households interviewed, and describe some of their characteristics.

**Table 1 Households interviewed**

| | |
|---|---|
| Number of households interviewed | 10 |
| Number of adults present during interview | 17 |
| Total number of usual occupants (including children) of these 10 households | 22 |

**Table 2 Life stage', residential and occupational profile of households and their 'Stay-Go' decision[1]**

| Household Number[2] | Life stage | Years at present address | Home ownership | Farming Experience | Fire Experience | 'Stay-Go' Decision |
|---|---|---|---|---|---|---|
| B<br>G<br>H | Family with young children, with at least one partner working | 2<br>17<br>Less than 1 | Yes<br>No<br>Yes | No<br>No<br>Yes | No<br>No<br>Yes | Go<br>Go<br>Stay |
| C | Couple Middle Aged: both working | 10 | Yes | No | No | Go |
| D<br>F<br>I | Couple - Older /retired (over 70) | Less than 5<br>11<br>30 | Yes<br>Yes<br>Yes | Yes<br>No<br>No | Yes<br>No<br>Yes | Stay<br>Go<br>Stay |
| E | Single woman – 40's: working | 2 | No | No | No | Stay |
| J | Single woman, 60's: retired | 6 | Yes | Yes | Yes | Stay |
| A | Single woman, 70's: retired | 15 | Yes | Yes | Yes | Stay |

## Life Stage and Home Ownership

Of the ten households, three comprised families with young children with at least one partner in paid work, one comprised an employed middle aged couple, three comprised retired couples, and three comprised single women, one in paid work and the other two retired.

Six of the households had lived at their current address for over 5 years, and four for less. The longstanding residents included one of 30 years, one of 17 years and one of 15 years.

Of the ten homes, eight were owned and two were rented. At the time of the interview, residents in two households intended to leave and find work in another part of Australia. Of the five workplaces referred to, three were local, the fourth more than 80 kilometres away, and the fifth offshore.

[1] The Australasian Fire Authorities Council (AFAC) has a national policy position known as the 'prepare, stay and defend or leave early' policy, and is sometimes abbreviated to the 'stay or go' position. The AFAC position paper, "Position Paper on Community Safety and Evacuation During Bushfires is available at: www.afac.com.au

[2] The households were ascribed an alphabetical letter in the order in which they were interviewed.

### *"Farm" Experience*

Four households in Table 2 (H, D, J & A) have or had farming experience. One household (H) currently owned and ran a farm and three (households D, J and A) were retired farmers, one comprising a couple and the other two, single women. These four households had farmed within 100 kilometres of Starlight, typically in grain and sheep industries. On the day of the Boldrewood fire, a member of household H retrieved their fire unit from the farm and used it in the defence of their own and neighbours' property.

### *Fire Experience*

Table 2 details 5 households with fire experience (H, D, I, J and A). Four of these households (H, D, J & A) are discussed above as having 'farm experience'. These households reported their familiarity with stubble fires from their work as grain growers, with fires from other causes, and with the fire prone nature of the farming landscape which surrounded Boldrewood.

While the farm currently owned by household H had narrowly missed being impacted by the Marsh fire in 2005, fire had been part of their landscape as farmers. Within household H was an older family member who had been a past member of the rural fire service. As noted above, this household also owned a fire unit which they retrieved from their farm the day of the Boldrewood fire.

While retired from farming, households D, A and J reported drawing on their past experience with fire in their approach to the Boldrewood fire. Household J readily recalled her (farming) father fighting fires with "spades and wet bags" in her childhood, and recalled her own adulthood with her husband in a farming community near Starlight, which she described as a "tinder box". Household A said she too had "learned what to do" in fires. "We always burned off as farmers". She was alert to the smoke on the skyline at the outset, as was household D, a couple, who reported sighting "a wisp of white smoke".

There was only one household (I) in Table 2 who did not have farming experience but whom we have classified as having "fire" experience. The male in this household reported that he had experienced fires during the WW2 Blitz in London, and that as a young boy had learnt that small fires following a fire hazard can be extinguished.

### *No Fire Experience*

Table 2 also denotes five households (B, G, C, F, and E) with no fire experience. We see these households as constituting a continuum, which we describe starting with the 'least experienced' in relation to the threat of fire.

The residents in Household B were born outside Australia, and had had no exposure to or experience with bushfire. Household F had retired to Starlight from outback Australia, where they regarded the grassfires they had experienced as in no way comparable to either the Marsh or the Boldrewood fires.

The next three households (C, E and G) while not having direct bushfire experience, drew on some hazard related experiences. Household C reported being threatened by a nearby fire 10 years previously in another part of Australia. Household E recalled her prior experience some years prior as an SES volunteer, and reported that she gained further courage on the day of the fire when she put on her one remaining piece of State Emergency Service (SES) gear, her boots. Household G, the last of the five households on the 'no fire experience' continuum, comprised a young family where the mother had always intended to leave in the event of fire. She always had a packed bag near the front door on a Total Fire Ban day. Her partner, who worked offshore, felt his offshore workplace training included dealing with structural fires may have assisted him in circumstances other than the ones he faced that day, when he felt obliged to accompany his partner and children who wanted to leave the area.

### *Risk Perception*

We asked householders how they rated the risk of fire in their area. Eight of the ten households regarded Boldrewood as a high risk area. Some regarded the area as fire prone, given its similarity to the terrain on which they had previously farmed. Some used the phrase "a tinder box", and drew attention to two previous "lucky escapes" for the city of Starlight: the Marsh fire in 2005 and another in 2001. Several noted that the Marsh fire had heightened their perception of risk.

Two households, (B and I) were both overseas born. While stating that they did not see Boldrewood as a high fire risk area, their other responses suggested otherwise. Household B expressed dissatisfaction with the continually dry climate and found it "scary" and "isolated" asking: "Where do you go if there's a fire in Starlight - into the sea?" They were moving out to a "greener" part of Australia, more like their country of origin. Household I had had several discussions with their neighbour about the fire risk of tires piled against their shared fenceline[3]. We concluded that both these households had some risk awareness.

Awareness of risk was expressed in other ways. Two households noted that while the City cleared scrub, it had been left in a pile, thus increasing the fire risk. Two other households reported that property owners in the rural Shire of Boldrewood appeared not to be required to put in the fire breaks which were required of them when they were farming. Three households

referred specifically to the threat posed by the pile of wooden pallets in the disused factory site at the bottom of Boldrewood Gully. One resident said she was unhappy about this rubbish in the gully but did not know who she should approach. One resident felt that their risk was increased by the failure of the Water Authority to remove fallen timber from a nearby access track.

### *Property Preparedness and Planning*

Our data on household property preparedness levels were not comprehensive across all the households.

The households of current or past farmers (H, D, J and A) had made a prior decision that they would stay with their property, although the female partner in household H had decided she would go with the children in the event of a fire. Households D, J, and A talked of trying to keep their fuel loads down, and household H had only just moved into their home, which they regarded as poorly prepared for fire, with dense shrubs close to the house[4]. Household I had also decided he would stay, and had prepared his garden, had assembled and checked his equipment to deal with spot fires, but his wife was not committed to a plan. For at least one of the older farmers, their preparation was limited by their age. Household A was over 70, and while she regularly raked and cleared fine fuels, she was not able to clean her own gutters, which were full of leaves on the day of the fire.

The female partner in household G had always planned to leave, with the male partner stating that it would depend on circumstances. Household C had planned years before that they would leave, and had discussed this with their neighbour, and had also attended to minimising garden foliage.

Household B (overseas born young couple) had not heard of the 'stay and defend or leave early' plan. We have no data on household E or F on this question of household preparedness and planning.

The resident in household E, while not saying that she had made a plan or prepared her rental home, did report an ongoing dispute with her neighbour involving trees on her rental property which were regarded by all parties prior to the fire as a fire hazard. The managing estate agent had been unable to get the interstate landlord to agree to act.

### *"Stay and defend or leave early" (abbreviated to 'stay' or 'go')*

Table 2 shows six households (H, D, I, E, J, A) who decided to 'stay' with their property. Five of these households are categorised by us as having 'fire experience' (H, D, I, J, A) and four of these five (H, D, J, and A), as having 'farm experience'. We have explained household I as not being from a farming background, but having experience from the Blitz in London as a small boy. What is noteworthy here about these five of the six households who stayed with their properties (H, D, I, J and A), is not only that they stayed, but that they reported this position as if it was an uncontestable decision. Households A and D for example reported immediately making preparation, getting in washing, turning on sprinklers, filling the bath and gutters, and wetting towels. It seemed to us that the action pattern in these households does not formally follow a step wise direction through planning, preparedness, towards the 'stay' or 'go' question, but appears to be more integrated into a 'wholistic' pattern of thinking, or state of mind.

The only household then that did not have fire experience but remained with her property, was household E. A single woman living alone, household E was initially equivocal about whether to stay or leave, but accepted the offer of support from a community member – someone she had not met - with fire experience who arrived at a critical time. She reported his arrival as "providing a link to the substance of community". This is also the householder who recalled drawing on her past history with the SES.

### *Assistance given or received – family and neighbourhood informal support.*

Families and friends provided considerable support. Eight households were assisted by visits from partners (households B, H and G), workmates (households B, and H), adult children (households C, G and J), other adult relatives (households A, and I), and neighbours (G). One household (D) declined the offer of help from adult children deeming it unsafe for them to enter the district due to the traffic congestion. Household C had visiting adult children, and grand children, in temporary residence at the time.

[3] These tires caught alight on the day of the fire, and heightened the risk to both properties

[4] Household H was working on landscaping his garden the afternoon of our interview. Some other examples of post fire activity included a household deciding to leave their fire unit at this home not at their farm; quotes received for tree removal; requests to researchers for information on desirable garden plants and maintenance strategies; praise of the City of Starlight having created incentives with removing fees for dumping rubbish at certain times; purchase of additional equipment, and where this was not affordable, expressions of regret; household debates about the danger of mulch.

Assistance at the neighbourhood level was evidenced in the farming family who brought their fire unit in from their farming property and used it for their own and others' protection. Households A, D, and G accepted help from someone unknown to them who had considerable fire experience, and who elected to help as an individual rather than under the auspices of a formal authority, such as a fire service[5]. One woman who lived on her own doubted that she would have stayed had it not been for this person's assistance.

We cite one other piece of relevant data. Household B comprised a young woman and child who left the property. Her husband whom she had called, arrived home with a workmate, and they too decided to leave. As they drove away, this man turned around and noticed that others were staying. He thought that perhaps he too could manage to stay, so he returned to their home. What is interesting to us here is his report that he drew support from the mental picture of others staying.

Some households commented on the differences between farm and urban communities. One said that as a farmer "you expect to manage on your own", but that also "others will jump in and help where necessary". More than one person felt that "Starlight people" were less neighbourly and less inclined to "pitch in".

In short, there was considerable informal support from a range of associated people, both in terms of able bodies and private equipment. Some felt, however, that the level of community assistance associated with farming communities was greater than in this urban environment.

### *Additional Community Interview*

The only additional interview presented here was with one of the joint owners of the private fire unit from the rural Shire which first attended the fire. He reported that three weeks after the Boldrewood fire, the fire unit owners met and extended their group membership from 3 to 8 households. Members inspected each other's equipment, set up a telephone tree, and made a map of their households showing the type and location of equipment. These activities, while self initiated in this example, also form part of a range of approaches used by fire service community education staff in facilitating community groups to strengthen their capacity to respond to the threat of fire. The common characteristics of this Boldrewood neighbourhood group, several of whom had been farmers, was described to researchers as "an awareness of and an understanding of fire".

## Discussion

This small study finds resonance with findings made in other Australian studies of community response to the threat of bushfire. Even the brief descriptions of these 10 households are enough to remind us of the need to be careful with the use of the word 'community'. Marsh and Buckle's (2001) notion of thinking of a 'mosaic of communities' is helpful here. The idea of a 'mosaic of communities' suggests that while we need to examine place based communities within a defined geographic area such as the 'urban interface', we also need to be mindful of other forms of 'community'. For example, it is also important to understand how, if at all, residents in a particular area relate to each other and have preexisting networks, skills, resources or beliefs which might influence how they respond to the threat of fire.

In this study for instance, a group of residents drew on prior experience as farmers in their response to the impending threat posed by the Boldrewood fire. Other research has pointed to fire awareness among people with a long term association with the land (McGee and Russell, 2003; Stone, 1994) and also the willingness of some in this group to share that experience and knowledge with others in a crisis (Goodman, Healey and Boulet, 2007). Those with a farming background presumed they would remain with their properties as a matter of course. Interestingly, while there appeared to be a carryover of knowledge and skills from a life of farming (how to prepare a home, observe the landscape etc), there was a sense of loss voiced by some in this group about the social networks which accompanied farming, networks that were not present for them in their new interface residential area.

Most of the Boldrewood interviewees believed that they lived in a high risk environment, a finding we attribute in the main to the recent Marsh fire experience, although we acknowledge the caution in the literature about the time frame over which a positive effect of experience can have an impact on individuals' thinking, as suggested by Weinstein (1989).

Clearly some residents self organize, and act with local independence. A local group in the Boldrewood fire neighbourhood area collaborated with each other through the joint purchase of the private fire unit and related collective actions. The presence of existing knowledge and skills held by some as farmers was seen to underpin this collaboration, in a similar way as it appeared to underpin the decision to stay for four of the affected households. These strengths contribute to community capacity and resilience and warrant recognition. Some residents respond to emergency service agencies working alongside them through programs such as Community Fire Guard

[5] We have interviewed this person but do not present this data in this article.

(Beckinsale, 1994; Boura, 1998) and other State variants (eg Community FireSafe in South Australia). It is also the case that resources to facilitate activities like 'community fire guard' groups are not available across all high risk areas, although printed materials and website information is typically available to those who self organize.

There are significant indications from fire service community education staff that many residents regard community meetings such as occur through the convening of in a 'Community FireSafe' group, as a welcome relationship building exercise in its own right. When this observation is thought about alongside what we saw to be both the latent and realised capacity at the household and neighbourhood levels, this suggests there is more capacity within neighbourhoods for active and effective cooperative ventures than may be evident. The case of household E provides an interesting image: a single woman, who was initially unprepared and unsure of her capacities, was assisted by the unexpected arrival of a person – whom she did not know - with expertise. This unexpected help prompted her to feel "connected to the substance of community". This in turn (or at the same time?) encouraged her to draw on the strength of her experience as an SES volunteer. How best, then, to draw on these latent interacting community strengths for the overall goal of enhancing community safety?

Social systems at the community level are complex and diverse. Cottrell (2005) has noted that this domain of study raises more questions than answers, and with others, argues that we view 'community' as a resource not a problem (Bushnell, Balcombe and Cottrell, 2007; Tarrant, 2006; Paton, 2000). Tibbitts and Whittaker (2007) have set out some of the challenges which as yet have to be addressed in the implementation of the "stay and defend or leave early' policy. There are no 'quick fixes' here, although we do have exemplars from different States of structures and processes for community involvement in Emergency Management (Pisaniello and McKay, 2002; Cottrell, 2005), that can build on the resources which exist, such as Australian Bureau of Statistics data (Ferrier, 2000) and Geospatial data (McRae, 2001).

Inquiry towards understanding patterns of interaction in community systems is necessary to see where and how it is appropriate for formal systems, such as fire services, to seek to develop collaborative relationships with those whose actions at a community level can increase bushfire preparedness. The idea of 'governance' (Pierre, 2000; Kooiman, 2000) is one promising one to tease out the different types of association between key parties in a particular domain: self governance, with examplars from the collective response of citizens as forms of association within a community; co-governance, where collaborative structures are formed to advance a shared goal, and hierarchical governance, as might be seen in certain strictly adhered to communication systems within an organization. These concepts help us to build theory about constituent elements in the widely used policy framework of 'shared responsibility' between governments and community in relation to community safety and the threat of fire. Knowing what these key interactive elements are, we can then think evaluatively about what criteria to use to assess their presence, their processes and their effect on desired outcomes. Knowing more about the latent and actual community capacities may help us think about respectful approaches to 'shared responsibility' between community and emergency services for community safety, and, as we will set out in our future theoretical work, how different patterns of 'governance' arrangements may be formed and sustained.

## Acknowledgements

The authors acknowledge the role of Mae Proudley, Project C6 of the Bushfire CRC, who acted as scribe for the two half days of interviews, and worked with Helen Goodman on transcribing these 10 interviews, while heavily occupied in her own Master's research. We also acknowledge discussions held with members of BCRC Project C7, Project Leader, Gerald Elsworth, and researchers, John Gilbert, Kaye Stevens, and Alan Rhodes.

## References

Beckinsale, D., (1994), Community fireguard and the rural-urban interface, *Fire Management Quarterly* Vol.10, pp.1-8.

Boura, J., (1998), Community Fireguard: Creating Partnerships with the Community to Minimize the Impact of Wildfire, Paper presented at InFire – Fire Information for the 21st Century, The International Network for Fire Information and Reference Exchange Conference, Melbourne.

Bushnell, S., Balcombe, L., and Cottrell, A., (2007), Community and Fire Service perceptions of bushfire issues in Tamborine Mountain: what's the difference?, *Australian Journal of Emergency Management*, Vol.22, No.3, pp.3-9.

Cottrell, A., (2005), Sometime's it's a big ask, but sometimes it's a big outcome: community participation in flood mitigation, *Australian Journal of Emergency Management*, Vol.20, No.3, pp.27-31.

Cottrell, A (2005), Communities and bushfire hazard in Australia: more questions than answers. *Environmental Hazards*, Vol 6, pp.109-114.

Ferrier, N., (1999/2000), Demographics and Emergency Management:knowing your stakeholders. *Australian Journal of Emergency Management*, Vol.14, No.4, pp.2-4.

Goodman, H., Healey, L., and Boulet, J., (2007), Community Responses to Bushfires: The role and

nature of Systems of Primary Sociality. *New Community Quarterly*, Vol.5, No.1, pp.11-25.

Kooiman, J., (2000), Societal Governance: Levels, modes, and orders of social-political interaction, In J. Pierre (Editor), *Debating Governance*, Oxford University Press, pp.138-164.

Marsh, G., and Buckle, P., (2001), Community: the concept of community in the risk and emergency management context, *Australian Journal of Emergency Management*, Vol.16, No.1, pp.5-7.

McGee, T., and Russell, S.,(2003), "It's just a natural way of life…." An investigation of wildfire preparedness in rural Australia, *Environmental Hazards*, Vol 5, pp.1-12.

McRae, R., and Walker, A., (2000/2001), Community Mapping – an Aid to Emergency Management. *Australian Journal of Emergency Management*, Vol.15, No.4, pp.22-27.

Paton, D., (2000), Emergency Planning: Integrating community development, community resilience and hazard mitigation, *Journal of The American Society of Professional Emergency Planners*, Vol.V11, pp.109-118.

Pierre, J., (2000), Introduction. Understanding Governance, In J.Pierre (Editor), *Debating Governance*, Oxford University Press, pp.1-10.

Pisaniello, J., McKay, J., Reedman, G., Stephenson, M., Mitchell, L., (2002), Effectively involving an Australian rural community in a Risk Management Process: a 'community partnerships' approach, *Australian Journal of Emergency Management*, Vol.17, No.2, pp.30-39.

Position Paper on Community Safety and Evacuation During Bushfires", www.afac.com.au ,Retrieved 1 June 2007.

Tarrant, M., (2006), Risk and Emergency Management, *Australian Journal of Emergency Management*, Vol.21, No.1, pp. 9-14.

Tibbitts, A., and Whittaker, J., (2007), Stay and defend or leave early: Policy problems and experiences during the 2003 Victorian Fires, *Environmental Hazards*, Vol.7, pp.283-290.

Stone, S., (1994), Changing cultures in the farming community, In: Cosgrove, et al, (Ed.), Restoring the Land: Environmental values, Knowledge and Action, Melbourne University Press, Melbourne, pp.202-237.

Weinstein, N., (1989), Effects of personal experience on self-protective behaviour. *Psychological Bulletin*, Vol 105, pp.31-50.

## About the Author

**Helen Goodman** is a Research Fellow at the Bushfire Cooperative Research Centre (BCRC), Project C7

John Gawen is the Manager of Community Education, Country Fire Service, South Australia.

Helen may be contacted at helen.goodman@rmit.edu.au