

HIGHTAILING INTO THE FIRES: BUSHFIRE PLANNING ON ACT HORSE AGISTMENT CENTRES



AUTHOR: NICOLA MAIN
ON BEHALF OF ACT RURAL FIRE SERVICE

This report was commissioned by the ACT Rural Fire Service, ACT Government, and undertaken in partnership with the Commonwealth Government of Australia through the National Disaster Mitigation Funding grants scheme 2009-2010



DEFINITIONS

GLOSSARY

Agistor	a person who pays to keep their horse on someone else's land.
Agistment Centre	used interchangeably with agistment property, a place where horses are agisted.
Agistment property owner	used interchangeably with agistment owner, a person/s who has a lease with the ACT Government over the land for agricultural purposes. This person/s may or may not manage or run the agistment business.
Agistment Manager	person who runs an agistment business (who may or may not have a lease on the land).
Relocation	used in preference to evacuation.

ACRONYMS

FFW	The ACT Farm Fire Wise program
AFAC	Australasian Fire Authorities Council
ACT ESA	Emergency Services Agency
ACT RFS	Rural Fire Service
BAP	Bushfire Action Plan
COAG	Council of Australian Governments
SBMP	Strategic Bushfire Management Plan (Version 2) 2009

TABLE OF CONTENTS

Definitions	2
1. Executive Summary	5
2. Introduction	7
2.2 Background	9
2.2.1 Bushfires and government policy	9
3. Methods	11
3.1 Aims and Objectives of the Study	11
3.1.1 Aim	11
3.1.2 Objectives	11
3.2 Literature Review	11
3.3 Interviews	12
3.4 Horse Agistment Centres	13
4. Findings and Discussion	15
4.1 Profiles	15
4.1.1 Horse ownership: a culture of horse welfare	15
4.1.2 Horse behaviour in the face of bush fire	17
4.2 Bushfire Planning on Horse Agistment Centres	19
4.2.1 The Plan	19
4.2.2 Prepare, Stay and Defend or Go Early	20
4.2.3 Perception of bushfire risk	22
4.2.4 Bushfire prevention	23
4.2.5 Managing horses in bushfire	23
4.2.6 Triggers for enacting plans	24
4.2.7 Leadership and management	24
4.2.8 Agistor presence on properties under threat of fire	25
Concluding remarks	25
5. Conclusion	26
6. Recommendations	29
6.1 Horse Agistment Managers	29
Recommendation 1. Develop a written plan	29
Recommendation 2. Agistor Communication and Awareness	31

Recommendation 3. Local volunteer fire brigade links	31
6.2 ACT Rural Fire Service	32
Recommendation 1. “Prepare and defend or Go early” policy specifically for people with horses in paddocks	32
Recommendation 2. Support for planning by horse agistment managers.	32
Recommendation 3. Bushfire Awareness for horse agistors.	33
Recommendation 4. Horse relocation emergency procedure	33
Recommendation 5. Warnings	33
Recommendation 6. Local brigades	34
6.3 Agistors	34
Recommendation 1. Develop a plan for yourself and horse	34
Recommendation 2. Familiarise yourself with your agistment centre’s plan.	35
7. References	35
8. Appendices	38
8.1 Interviewees	38
Key Informants.	38
ACT Government.	38
Volunteer Bushfire Brigades	39
Horse Agistment Managers	39
Agistors	39
8.2 Agistor accounts of 2003 bushfires on agistment properties.	40
8.3 Agistment Manager interview schedule.	44
8.4 Fire Safety Animal Welfare Act 1992	46

1. EXECUTIVE SUMMARY

Canberra currently has the highest number of horse owners per capita of any city in Australia. There are over 1000 horses currently kept on agistment centres (both public and private) in the ACT, predominately owned and cared for by females of varying ages. Often leading to the participation of the whole family unit. Many horse owners spend a lot of time with their horses, and in doing so are placing themselves in locations of high risk from bushfire.

This, coupled with the tragic first hand experiences at horse agistment properties during the 2003 bushfires led the ACT Rural Fire Service (RFS) to commission a study into the bushfire operational planning of ACT based horse agistment properties. The study aimed to provide the RFS with a better understanding of this industry and their needs, based on knowledge of their current bushfire planning practices. In doing so the RFS plans to provide more relevant and effective support and assistance to this key stakeholder group, provide accurate and helpful information to its members on bushfire, as well as investigate how it can better engage and work with horse owners.

Following a comprehensive literature review, semi-structured interviews were conducted with all horse agistment owners/managers onsite. In all, twenty five horse agistment managers were interviewed on sixteen horse agistment properties. Fifteen key informants were also interviewed along with nine agistors¹ from five centres.²

The report confirms that horse agistment managers face a complex task in preparing and planning for the event of fire on their properties. They need to consider the safety of themselves, their family, any employees as well as the protection of their own and agisted stock. In addition, they must also consider the safety of any agistors who may be present on their property at the time of a fire.

The report found that whilst having a bushfire plan was seen by the vast majority of agistment managers as important, the level of detail of their plans varied significantly. Horse agistment owners/managers acknowledge the importance of the Farm FireWise program (FFW) as a reliable tool for their bushfire planning, especially the value obtained from the individual property visits by RFS staff. However, this report has highlighted the need for more industry specific references in the FFW documentation, particularly around the issues of agistor presence. One of the more significant findings of this report was that the nationally endorsed “Stay and defend or to Go early” policy did not cater for the horse agistment industry, which is particularly concerning as a lot of emphasis is placed on early evacuation.

The findings clearly demonstrated that there is a shared responsibility across the industry, from horse agistment owners/managers, horse owners and the ACT Government through the ACT Rural Fire Service and Government horse paddocks.

¹ Two key informants were also agistors

² See Appendix 8.1 for list of interviewees

Recommendations have been divided into three sections, those for Agistment Owners / managers; Agistors and the ACT RFS. The study has identified the need for a more thorough approach to bushfire planning for lessees/managers. This would be done through improvements to the FFW program so as to better meet the specific needs of this industry including investigating ways for the RFS to provide targeted bushfire information sessions to horse owners and the provision of more formal bushfire training opportunities for all involved. The RFS will also provide information from this report to Brigade members so that when they are sent out to help protect these establishments and community members they have a better understanding of how to work with horse agistment managers to protect people, properties and horses from bushfire. People who agist their horses on fire prone land need to plan for their own safety in the event of bushfire.



2. INTRODUCTION

Large bushfires have burnt across the ACT in the summer almost every decade since the establishment of the ACT in 1911.³ Of these, the January 2003 bushfire caused by far the most damage with 87 rural homes, 414 suburban homes and most of the Stromlo observatory buildings destroyed. In all 164,000 hectares of land was burnt.

Four people lost their lives in homes, or fleeing the fire front in 2003. Less publicly canvassed were the significant numbers of severe injuries sustained in the fire including burns, lung and eye damage. Similarly less well known is the loss of, and injury to, animals. This loss includes valuable stock and horses belonging to rural properties as well as those horses owned by Canberra residents who were agisted on rural properties along the rural-urban interface. An estimated five thousand sheep, several hundred cattle and fifty horses were killed or destroyed as a result of injuries sustained.⁴

As a result of these statistics and the high population of horses and horse ownership in the ACT, the ACT Rural Fire Service commissioned this project to investigate bushfire planning and preparation on horse agistment properties in the ACT. This was to be a first step in improving their understanding of key stakeholder groups. The project was partially funded by the Commonwealth Attorney General's Department under the National Disaster Mitigation Program 2009-2010.

The aim of the project was to provide useful information to the RFS for the purpose of gaining a better understanding of this key stakeholder community group. The Service also intended to look at the current bushfire planning processes for agistment properties in order to better assist and support managers in future planning, with a particular focus on the presence of agistors during a bushfire. The views of horse agistment managers were sought not only to better inform the service but to also share ideas and practices across the group.

Unlike many cities in Australia, Canberra does not have a rural interface characterized by small holdings or "hobby farms". While these holdings exist in nearby NSW, the ACT rural land has very few small acreages. The properties surrounding the city have restrictions on subdivision and are used mainly for cattle, sheep or horse agistment. Currently Canberra has the highest numbers of horse owners per capita of cities in Australia.⁵

Many horse owners of Canberra therefore rely on agistment centres to house their horses rather than keeping them on their own property. Over one thousand horses are currently kept on agistment centres in the ACT (both private and public). Many owners keep more than one horse either for sport, recreation or as companion pets (or a combination).

³ 1919; 1925;1938;1951;1978;1982;1984; 2002.

⁴ Hayward, 2003.

⁵ Williams 2006.

Horse ownership is increasingly characterized by a culture of concern for horse welfare and owners invest much time and money in caring for their animals to a high standard. Many horses are visited once or twice a day, are groomed, rugged, fed and have their health regularly monitored. This level of care means that owners spend much time on agistment properties and, in the event of bushfire, will do all they can to rescue their horses from danger.

Horse Agistment Centres in the ACT are mostly run by landholders who have a lease on the land. In the ACT, rural landholders are expected to play a key part in bushfire mitigation. They are responsible for the bushfire plans, mitigation activities, response and recovery on their own property as well as playing a significant role in the rural landscape as a whole.

Horse agistment managers face a complex task in preparing and planning for the event of fire on their properties. They need to consider the safety of themselves, their family, any employees as well as the protection of their own and agisted stock. In addition, they must also consider the safety of any agistors who may be present on their property at the time of a fire, and whose presence they can influence but ultimately have limited control over.

⁶ Burr, 2009



2.2 BACKGROUND

On the day of the catastrophic firestorm in 2003, hundreds of horse owners went to the horse agistment property where their horse(s) were kept in an endeavor to save them from injury or death. Many evacuated their horses safely prior to the fire front, but many were caught by the fire front as they attempted to move their horses. Four people were severely injured on one agistment property⁷ alone.

Six properties had one hundred percent of the land burnt in 2003 with various levels of asset damage. Five additional agistment properties were directly threatened in 2003. Two of the Territory agistment paddock complexes were burnt in 2003. Territory agistment have been involved in several fires prior to and including 2003, with two directly threatened by fires in 2001.

2.2.1 BUSHFIRES AND GOVERNMENT POLICY

Bushfires are a part of Australian life, it has to be accepted by the Australian people that bushfires often cannot be put out, despite resources and the best intentions of bushfire services. It is for that reason efforts are focused on minimizing the risk of, and mitigating the harm done, by bushfire.

The government employs what they refer to as a “structured risk management process”, consistent with the Australian Risk Management Standard.⁸ Emergency management outlines the phases of this process:

- Research
- Prevention (risk modification⁹)
- Preparedness (readiness¹⁰)
- Response
- Recovery

In 2005 a National Inquiry was held on bushfire mitigation and management by the Council of Australian Governments (COAG). The authors of the report lamented a lack of national bushfire principles and made a suggested list of which three of the suggested principles are most pertinent to this study:

While the risk of bushfire can be modified, it cannot be entirely prevented, strong self reliance (of individuals and communities) is required based on fire knowledge.

A philosophy of shared responsibility between communities and fire agencies is needed for bushfire management and mitigation. “Well informed individuals with suitable levels of preparedness complement the role of bushfire agencies and offer the best way of minimizing bushfire risks to lives, property and environmental assets.”

⁷ McLean, 2003.

⁸ Council of Australian Governments 2005

⁹ Preferred term by the COAG National Inquiry

¹⁰ Preferred term by the COAG National Inquiry

Protection of the lives of firefighters and the community is the highest priority.¹¹

This study is contributing to the research of community bushfire planning with a particular focus on the preparedness phase of risk management. Currently preparedness within the community is largely focused upon householders preparing to face bushfires threatening their homes. The slogan ‘Stay or Go’ has become the short hand for the AFAC policy position encouraging the decision of householders to “Prepare, Stay and Defend your Property or Go Early”.¹² This policy reflects the traditional practice of rural Australians to stay and defend their properties, but emphasizes making a considered choice to do so, otherwise to leave early. This is based upon previous evidence from Australia’s history of bushfires where people were thought to be less likely to be killed if defending a home that offered suitable shelter rather than fleeing at the last minute¹³, the idea that “houses protect people and people protect houses”. However, this policy has been brought under the spotlight in recent years, particularly after the 2009 bushfire in Victoria.¹⁴ While full discussion of this policy is beyond the scope of this report the policy as it currently stands is a relevant part of the context.

All rural landholders in the ACT are required to prepare a Bushfire Action Plan (BAP) to fulfill the requirements of the following:

Land (Planning and Environment) Act 1991 through individual Land Management Agreements;
Emergencies ACT 2004; and
Strategic Bushfire Management Plan 2009.

ACT Farm FireWise is an ACT government initiative that has been set up to assist rural landholders to prepare their Bushfire Action Plans. However, rural landholders are seen to be historically quite self sufficient in dealing with bushfires that threaten their homes and livelihoods. Farm FireWise provides farm visits by an expert on fire planning to assist landholders devise a plan. Importantly, Farm FireWise does not include the dimension of non-resident animal agistors in their information guide, which is targeted at rural landholders and their families, who are ‘farmers’ in the traditional sense.¹⁵

As a result, agistors as a population have not received structured or consistent education or bushfire awareness training. This leaves the population of horse owners, who spend a significant amount of time on properties where they keep their horses, with few resources in the face of fire. While there is excellent material available to assist horse owners who own their own property to devise a bushfire plan that incorporates the needs of horses there is a dearth of material to assist rural landholders who do horse agistment to include the dimension of agistor presence in any comprehensive way.

¹¹ COAG 2005 p.11

¹² Haynes et al 2008

¹³ Haynes et al 2008

¹⁴ Handmer 2005, Manne 2009.

¹⁵ See ACT Rural Fire Service “Information Guide Farm Firewise” 2007

3. METHODS

3.1 AIMS AND OBJECTIVES OF THE STUDY

3.1.1 AIM

To improve the ACT Rural Fire Service's knowledge and understanding of Canberra based horse agistment, and as a result improve future support to people involved with horses through the assistance of developing plans and information.

3.1.2 OBJECTIVES

The main objectives were:

To create informative profiles of this key stakeholder group to better inform RFS brigade members;

To collect ideas about bushfire planning in general and to explore the ideas of managers, in particular surrounding the presence of agistors;

To reflect on the experience of past fires and consider what was done well and what could be done differently; and

To develop recommendations for the RFS to assist in this area of planning.

Secondary objectives were to:

Understand what agistors may wish to see included in a plan at their centre; and

Gain a picture of the presence of agistors on horse agistment properties in past bushfires

3.2 LITERATURE REVIEW

A review of the literature was undertaken in the following areas:

Government policy within the ACT and other states around Australia relating to bushfire preparation.

Bushfire community safety journals for example the Journal of Emergency Management, Fire Australia and social research (Bushfire Community research Council publications).

Horse industry and more general rural industry relating to bushfire prevention or preparation (for example Department of Primary Industry Fact Sheets, Australian Horse Industry Association publications and various horse/pony club publications).

Horse welfare relating to exposure of horses to bushfire including veterinary texts and horse magazines which emphasize horse welfare issues (eg. Hoofbeats Magazine).

The following databases were searched:

The Australian Public Affairs database (APAIS)

Factiva (Newspaper articles on bushfire experiences for horse owners)

¹⁶ See Pearson 2009

Keywords included:

- Horse/equine agistment/property
- Horse/equine industry
- Horses/bushfire/fire/burns
- Pets/bushfire
- Bushfire risk management/safety/preparation/mitigation/planning
- Stay or Go policy
- Bushfire refuge

The literature review provided valuable contextual material on government policy and practical information on bushfire management planning. There is a large body of national and international literature on bushfire planning specifically focusing on the householder and rural dweller. A considerable emerging body of research on the social context of bushfire community safety within Australia and the United States of America is contributing to the understanding of such issues as perception of risk and elements of the choice to prepare for bushfire.

There is considerable material designed to assist horse/pet owners living on their own rural or semi-rural properties to prepare for bushfire. However, the literature review yielded little material within Australia or internationally specifically on the issue of bushfires and horses within the context of keeping a horse on a property not owned by the horse owner.

The literature informed the discussion of the findings throughout the report.

3.3 INTERVIEWS

Semi-structured interviews were conducted with all horse agistment managers onsite. Twenty five horse agistment managers were interviewed on sixteen horse agistment properties. Fifteen other key informants were also interviewed along with eleven agistors¹⁷ from five centres¹⁸. The number of other key informants interviewed were not in significant number to ensure comprehensive representation. Discussion with these informants early in the process however, provided valuable contextual material to assist with the design of the project.

¹⁷ Two key informants were also agistors

¹⁸ See Appendix 8.1 for list of interviewees

3.4 HORSE AGISTMENT CENTRES

Horse agistment centres differ in size, paddock configuration and facilities, which have been roughly divided into the following categories:

- **Large broad acre** holdings (over 250 hectares) with broad acre agistment, herds of horses grazing in paddocks, no stables, no indoor arena (e.g. Territory Agistment Paddocks).
- **Large combined (stables/paddocks)** holdings with broad acre agistment and varying amounts of stabled agistment but **no indoor** arena (e.g. Milapuru, Riverview, Lions Youth Haven, Monaro Park, Hillview, Pine Ridge).
- **Large combined (stables/paddocks)** with broad acre or 'private' paddock¹⁹ agistment and lots of stables and an **indoor arena** (e.g. Stromlo, Canberra Equestrian Centre, National Equestrian Centre, Freshford)
- **Small holdings with stables** only (few or no paddocks) and **indoor arena** (e.g. Forest Park, Equestrian Park, Noble Park, Gooromon Park).
- **Small holdings with stables** and **no indoor** arena (e.g. Bendora).

Several factors of the centre configuration are of significance for bushfire planning. Some centres have a centralized set up, with the arenas, office, parking and stables in one area. Others are very spread out with several parking areas spread over the whole property. Those with private paddocks usually have facilities for parking at each paddock. Those private paddocks that have shelters constructed by agistors have the additional feature of a built asset that the agistor is responsible for maintaining.

Those centres with built structures have a range of buildings that could provide a refuge for horses or people. On almost all the properties there are yards that are available for horses to be put temporarily, providing feed or shelter. The centres with stables have a variety of different buildings. Some are in large stable blocks, others are individual stables set in paddocks dotted around the property.

As with all businesses, horse agistment is very diverse with differences in scale, clientele and varying styles of management. Most are run by the landholder themselves but some are managed by contracted staff. The Territory Agistment paddocks are run by a manager contracted by the ACT Government. Some also have a very strong sense of community among agistors. Different agistment centres have different agistor profiles.

Simply put, centres with stables and an indoor arena tend to have more young agistors. Broad acre properties tend to have older agistors. However, the Territory agistment paddocks often have young people starting out owning a horse and have a more mixed profile.

¹⁹ Small paddocks that hold small numbers of horses usually owned by a single owner. On some properties this includes a horse owner or landholder constructed shelter

Centre	Horse No	Agistor No	2003 burnt?	Agistors present In 2003 fire
Bendora	12	8	n	NA
CEC	170	200 approx	y	y
Forest Pk	100	35	threat	y
Gooromon	26 (15) agisted	9	threat	
Hall E	36	30	n	NA
Hayshed	35	25	n	NA
Kerrabee	200			
(inc school)	40 - 50	y	y	
Monaro	30	20	n	NA
Noble Park	17 own 4 agist	4	n	NA
Pine R	65	50	threat	y
Riverview	56	40	y	y
Stromlo	100	100	y	y
Territory Agistment	300	180	y	y
Tully	22		threat	y
Youth Haven	60	30	y	y

Table 1 Agistment Centres details as at July 2010

Most centers employ no or few staff but there are some that are quite large and employ considerable numbers of staff. Many of the centres have their agistors visit daily, some twice daily. In addition to the agistors several centres run riding schools, which increases the traffic on the property considerably.

4. FINDINGS AND DISCUSSION

This section begins by looking at horse ownership in Canberra and the experiences of agistors in a recent bushfire and follows with a short section on horses in bushfires. The report then covers the specific findings on bushfire planning on horse agistment centres.

4.1 PROFILES

4.1.1 HORSE OWNERSHIP: A CULTURE OF HORSE WELFARE

ACT has the highest per capita horse ownership in Australia. There are currently over one thousand horses on the properties included in this study with approximately seven hundred owners (this is an estimate only as many horses are owned by a family). In Australia over 80% of those engaged in equestrian activities are women,²⁰ which was found to be representative of the ACT according to those interviewed. In fact, many women are reported to have moved onto the urban edge to be near their horses.²¹

A new concern for the physical, mental and emotional welfare of horses has emerged in the last decade encouraging more sympathetic training methods and improved health care.²² As horse trainer Andrew Mclean puts it – they are now a companion and a friend.²³ While riding is a key motivation to own a horse, many people spend a lot of time with their horses even if riding is not very important to them.²⁴

What this means for the study is that there is a very diverse population who spend a considerable amount of time outdoors in the rural environment, not just riding but spending time with their horse. As a result they form a very strong bond and a sense of responsibility for their horse. The thought that they may be burnt in a bushfire is extremely difficult to accept. The stories below demonstrate how far people were willing to go for their horses in the 2003 bushfires and need to be read with the knowledge that many people suffered injury, some extreme, on these horse properties while attempting (many unsuccessfully) to rescue their horses.

Eleven agistors were interviewed for this study nine of whom had experienced fire on the property where they kept their horse in 2003. In addition, stories written by agistors and professionally published²⁵ (some of who were also interviewed in this study) have provided valuable information about agistor's presence on properties in the 2003 bushfires in Canberra.²⁶ All the agistors who retold their stories went to their horses on the day of the fire, either for routine care or to protect them in some way from the bushfire. What emerged from

²⁰ Burr 2009, p73.

²¹ Burr 2009, p78

²² Burr 2009

²³ McLean, A. 2003, p17

²⁴ Burr 2009, p83

²⁵ Matthews 2003

²⁶ See Appendix for the text of several of these published stories

the stories²⁷ of these agistors is the enormous commitment people have to their horses. One agistor, who rode out the fire with her horse sheltering in a shed that had the roof torn off in the wind, wrote:

We were surrounded. The smoke was getting denser but Miranda showed no signs of distress or concern. She stood calmly as I walked over to her and draped the wet towel over her nose. ...I knew it would not be possible to persuade Miranda to come into the shelter, I was spending most of the time with her out in the yard in the smoky wind, one hand holding the towel over her nostrils, the other keeping mine draped about my head and face....it was impossible to see anything – the air was thick with eddying debris. Eyes closed and a towel wrapped around my head and face it was all I could do to try and save myself; there was no question of doing anything for Miranda.

Whilst this agistor was prepared with wet towels and safety clothing, she was putting herself at great risk being outside in a bushfire. As she concluded herself as she crouched in a shelter whose roof was torn off in the wind:

“it was all I could do to try to save myself; there was no question of doing anything for Miranda”

Human safety did not feature as a paramount concern in many of these stories. Many stories of ‘close calls’ were relayed in interview and stories written after the fire:

It was sheer luck that a man in the suburb saw me and told me to shelter under an underpass – and the fire went over the top of us while I stood under the underpass with the two horses. The horses were perfect, didn’t move. I felt panicked but they were fine.

The girls (aged 14 and 15 at the time) led the horses into the suburbs, wearing t-shirts and shorts! We floated the other horses out. I was so worried about the kids after I dropped the horses off, we didn’t know where they were. ...the kids got disoriented. Twenty minutes later it was mayhem, stables on fire, people’s cars on fire – one had a boot full of hay that went up. One friend drove back into the fire to get something she had forgotten.

Many agistors rushed out to the paddocks too late and were stopped by roadblocks.

A sense of commitment to the agistment centre was also evident in the stories. This connection to the land and the people is a characteristic of this community.²⁸ Agistors wanted to stay and help as well as to evacuate or be with their horses.

I went into the paddock to catch my horse and met the agistment manager who said “just go” and I didn’t want to leave my friend and the place, I was so attached to the place.

Several agistors commented that early relocation was highly successful and they would endeavor to do it again. Interestingly one agistor remarked that she had been teased about relocating, as this was seen as overly cautious. The lack of information about the fire was also a consistent theme.

²⁷ See Appendix 8.2

²⁸ Burr 2009

There was no media information – except news that it was far away and emergency services had it under control.

It is an important finding from this study that agistors presence on horse agistment properties on the day of the fire in 2003 was widespread. With over one thousand horses agisted currently on rural properties on the urban edge, there are potentially as many people who may head out to their horse in the event of fire in the future (given that families and friends often assist in the time of emergency). While many agistors who had information about the threat of fire, and who made the decision to act on it, successfully removed their horses, many were caught in the fire front.

The experience of one agistor being ridiculed for being overly cautious by evacuating early fits with the tendency of many (including authorities and some agistment managers themselves), not wanting to alarm or panic people. However, the reluctance to take steps to relocate ahead of time, even if this has to be repeatedly enacted on days of high fire danger, can be the cause of people facing extreme risk.

Agistors need to know and understand information about fire behaviour, the risks to themselves and their horse. But it is vital they know the plan their agistment centre has for bushfire. With this information they can create a plan for their own safety and for the welfare of their horse. It is vital the individual's plans are in line with the plan devised by the agistment manager and understand how they fit into the "big picture".

4.1.2 HORSE BEHAVIOUR IN THE FACE OF BUSH FIRE

The main lessons learnt from those who observed and managed horses in the Canberra firestorm and other recent fire events, are that horses either contained in groups or left in their own familiar territory are unlikely to panic. This was observed by many of those interviewed who experienced the fire and was also confirmed by the local veterinarian who visited many of the properties where horses were killed and injured.²⁹ During the fire front horses in large areas moved to bare ground around gates and troughs. They were also witnessed moving into the burnt out areas of their paddocks.

Horses taken into indoor arenas, stables or barns (32 at Freshford, 74 at Kerrabee and over 100 at Forest Park)³⁰ remained settled and calm for the period when the fire front passed. Importantly these areas were defended from ember attack by tankers or people using water from drums previously prepared . At Curtin and Yarralumla Territory Agistment paddocks horses were put into holding yards and survived with fires burning around the yards.³¹ At Illoura Territory Agistment paddocks 58 horses survived the fires after they were taken into a small holding paddock.

There were many stories of horses being put into unfamiliar but confined areas (underpasses, backyards and even a lounge room) and 'riding out' the fire without panic. However, based on the evidence gathered in this study, this would appear to be more luck than a reliable

²⁹ Ken Jacobs, 2003.

³⁰ McLean, J. 2003.

³¹ McLean 2003.

strategy as horses that are moved into unfamiliar areas, or who are in a large mob being caught by numerous excited people in the face of fire, are more likely to get stirred up and react by running in fear. Horses feel secure in their own herd, removing most of a herd and leaving a few is more likely to cause panic among those left. If a whole herd of horses is to be moved, one agistment group said that moving the 'leader' horse of that herd first helped the others when they were put into the paddock later. If a herd of horses is to be moved into a safer paddock, it is best to ensure they are familiar with the 'lay of the land' – and have resided in the paddock for periods prior to a fire event.

Several accounts were relayed of situations where fences were cut, either to facilitate horse movement or to allow access to firefighting vehicles. It is commonly thought that horses will move through cut fences but this is not borne out by experience. Horses in familiar paddocks still respect a fence whether intact or not. They are unlikely to see an open section of wire. Similarly there were many horses that continued to respect fence boundaries even though the fence posts were demolished by the fire and wires were on the ground.

Many people observed that horses exposed to the fire front tend to stand in a huddle, closer than usual, with heads down and rump to the fire. This compliments the evidence that horses suffer the worst injuries around the rump, between the legs, feet and faces and highlights their ability to act on their own natural instincts to survive. Unfortunately burnt eyes, nostrils, muzzles and feet warranted euthanasia for many horses. Burning of the coronet band can cause severe laminitis, and in many cases the hoof can split from the coronet band and can shear off. Smoke inhalation can cause delayed respiratory problems. In 2003 many horses had an initial post fire check but required closer monitoring over the following days to pick up latent problems . Immediate veterinary treatment is ideal, but early after the fires vets were hampered by roads being physically blocked or closed.

Gear that is left on horses that has any synthetic material (polyester or cotton/polyester blend rugs, fly veils, synthetic halters) can burn and in 2003 caused serious injury to many horses.

There are several excellent publications on preparation and planning for horses in bushfires, which include information on the post fire recovery phase .

In summary, horses have a natural instinct when it comes to bushfire and in many instances, when allowed to mob together in an open, low fuel or bare paddock free of any synthetic gear they stand a good chance of survival. Where it is possible to coordinate putting horses into a suitably built, well prepared and defended structure they are familiar with it is likely to enhance their survival.

³² ACT Government vet, Will Andrew, interview

³³ see Pearson 2007, www.nre.vic.au, Good 1993

4.2 BUSHFIRE PLANNING ON HORSE AGISTMENT CENTRES

4.2.1 THE PLAN

A comprehensive written plan that is circulated to all agistors and reviewed and updated was seen as vital by several managers. Several detailed plans were provided to the RFS as a resource for this study.

It was a common response that managers had a plan in the process of being written.

I have no written plan, it is very ad hoc, I am aware I probably should have one!

The managers' overall ideas about having a plan can be loosely divided into three categories: anti-planning, informal planning and formal written plans.

One of the reasons for planning was a confidence that fire was not a big risk at the particular property or that the brigade was located nearby. The following two managers ran stables with small acreage of day turn-out paddocks:

There is not a big fire risk here, all the stables are built of non-flammable materials

We are in a unique situation with the rural fire brigade at our doorstep...we have very good knowledge, unless someone lights something on the road. If one approached the horses are easily accessible, each horse has a stable and we have the facilities to fight fires in the stables, we could open all the gates and the horses would run it. We have taps in all the paddocks and we may irrigate the paddocks

(I have) no hugely proactive plan, it's a case of sit back and wait and see. A few people ...say "what's the plan?". I tell them I manage fuel, its under control. I've said to people, don't worry we've got water in the paddock

The above managers had not experienced fire on their property in 2003, although had previous experience of evacuating horses in the face of fire on the property or agistment centres they had managed. But confidence for many was boosted by good experiences in the past. Whilst experience can be an advantage in coordinating a successful response to a bushfire event, it can also create overconfidence. Bushfires differ markedly and require plans which encompass multiple backup options.

Trust in the Rural Fire Service being able to attend if a fire broke out was a common source of confidence in those who hadn't experienced fire. Those who had been through 2003 were aware that they cannot rely on having a tanker present.

In some situations, where more than one manager was interviewed, the level of confidence was very disparate. Also, it was clear in some situations that the managers were not 'on the same page', expressing conflicting ideas about a plan. For example one manager expressed evacuation as the preferred option and the other said the horses would all stay on the property.

One manager had a plan prior to 2003 but felt it was so different to what they imagined, he was ambivalent about the idea of a plan.

We had a plan but we never engaged it as it was so different. We expected a fire to come from arson on the nearby road, we didn't expect to have so much time to do things. We did preparation on the buildings (filled gutters with water for example)

While some didn't have a written plan they had obviously thought a great deal about preparation and how they would act in the event of fire and spelt these things out in detail, others were very straight forward principles:

Safety for people and evacuation of people and horses well in advance

On ACT agistment properties a dual layer of community needs are presented. As was expected, the finding from this study was that horse agistment managers felt the question as to whether or not to be present during a bushfire on their property was a simple decision: to prepare, stay and defend.

As rural landholders in the ACT most managers of horse agistment centres are supported by the ACT Farm FireWise Program which was seen by some as very useful for their planning. The farm visits conducted on a one to one basis on site for rural landholders provides the opportunity to have expert advice on preparing their property for the event of fire and making decisions with their families about whether to stay or go. However, as mentioned previously, Farm FireWise is not tailored to a rural enterprise that includes large numbers of agistors as well as their own stock. Additionally, those managers that are not also landholders, are not included in the program and rely on communication with the landholder regarding their responsibilities. Consequently a major way the Rural Fire Service can assist is to adapt Farm Firewise for this particular rural industry accounting for the agistor population.

4.2.2 PREPARE, STAY AND DEFEND OR GO EARLY

Literature available on bushfire safety specifically for horse owners such as the Department of Primary Industries publication "Horses and Bushfires" assumes horse owners are also property owner.³⁴ Both Farm FireWise and Horses and Bushfires are based upon the Prepare, Stay and Defend or Go Early³⁵ policy which tends to focus on single dwelling setting where the home is the focus of asset protection and acts as a defensible refuge for people during the fire front.³⁶ This emphasis on householders as focus for policy and procedure development was criticized in the recent Victorian Royal Commission: "... far less attention has been given to the needs of those who are not at home when bushfires threaten".³⁷

Moreover, the home as a refuge idea has been severely questioned following the Victorian bushfires, it appears nowhere is safe in some circumstances. In a study of the Wangary Fire in 2005, for rural dwellers the 'home as a refuge' was not the predominant concept. Sheds, cars and even open spaces were all seen as shelter.³⁸ As we have seen in this study, agistors were sheltering in cars, sheds, and underpasses.

³⁴ Pearson 2007

³⁵ AFAC 2001

³⁶ Indian 2008 p.54

³⁷ Victorian Bushfires Royal Commission Interim Report 2009, p. 206

Many factors determine the safety of a shelter, including nearby fuel hazards, wind direction and building materials. Many horse agistment centers have no refuge (e.g. Territory Agistment) or are inadequate eg. widespread paddocks with flammable sheds. In this situation agistors who go to their horse when fire threatens have little shelter to protect them. In 2003 many of these sheds and horse shelters blew away. However, in a small grass fire they may provide adequate shelter. Horse agistment centres that have centralized facilities with large metal arenas or community sheds that are cleared of all hazards surrounding them can provide an acceptable shelter from the fire front for horses and people, so long as they are actively protected from ember attack.

In this study the survival of agistors caught out in the open was often expressed as luck, but there was some forethought involved which was based on a level of knowledge. Those on one centre that had parked their cars in an open car park area in case the shelter burnt, and one who moved back and forward to put out burning tyres (a trick he learnt in bushfire training), were acting on varying levels of personal safety knowledge. Many of the agistment managers in this study expressed concern about the Rural Fire Service providing education or awareness training for agistors, as this may then place unrealistic expectations on agistment owners from their agistors. While fears abound about 'too little knowledge' many anecdotal and published stories tell of survival put down to a remembered piece of knowledge.³⁹ Perhaps we should not be so afraid to equip agistors with information of what options are available to them that may prevent injury or death, with reference to an agistment centres bushfire management plans.

Although several researchers note the role pets and livestock play in decisions to stay or go,⁴⁰ the extra dimension of needing to travel toward the fire front with the explicit motive of protecting or saving their horses is largely absent from view in the literature surveyed for this study.⁴¹ What is clear from this study is that agistors will continue to want to 'rescue' their horses by putting them on a float and leaving in the fire front. While only a small number were surveyed, the feeling was unanimous that they would wish to act if their horses were threatened by fire, unless they were completely confident their animals would be taken care of by the managers.

As it is well known, fleeing in the midst of a fire is fraught with danger and can expose those fleeing to high levels of radiant heat, loss of orientation due to poor visibility, traffic jams and fallen burnt vegetation. Many agistment managers supported the provision of education for agistors as well as welcoming them to assist in the event of fire. The Rural Fire Service could play a role in designing specifically targeted education to increase the bushfire awareness of this group in order to assist managers. If this is to be avoided the obvious answer is to impel all horse agistors to leave their horses where they are and accept their fate. This may be more palatable if managers can guarantee that they will take all practical measures to increase the likelihood that the horses will be safe. However, many managers do not have the resources to move horses at short notice into safe areas. While it is best practice to relocate

³⁸ Indian 2008 p54 citing Smith 2005

³⁹ See for example Hughes, G "How we cheated Flames of Death", in the 1009 Victorian Fires

⁴⁰ See Proudley 2008; Handmer ??

⁴¹ With the exception of Handmer ??

⁴² Victorian Bushfires Royal Commission Interim Report p. 177

the horses very early (for example on every total fire ban day) horses cannot be kept in eaten out paddocks for long periods of time as they require fodder to prevent colic and the land will degrade. It may be necessary to devise a specific education campaign which accepts agistors desire to go and move their horse, but also makes it clear they then need to secure their own safety. Given that relocation is a popular form of bushfire preparation for many agistors the Rural Fire Service could tailor the Stay or Go message to assist this population to remove both their horses and themselves, from danger. The Rural Fire Service was seen to be able to assist in successful relocation in three major ways: firstly, in coordinating relocation sites, secondly in coordinating with the police and ACT Government about road closures and thirdly in providing timely and detailed advice about the fire threat to rural landholders.

One of the particular features of the agistor population is that it is largely urban dwelling women, and often their children, not traditional rural landowners. In making a case for bushfire safety information specifically targeting women Goodman argues that research has shown gaps in fire knowledge and perception of risk among women in particular.⁴³ The number of women dying in fires, as a proportion of total bushfire deaths has increased over the past thirty years.⁴⁴ Several women agistors interviewed had extensive knowledge of their local bushfire risk and fire behaviour, had assisted on properties during the 2003 fires and some had developed a comprehensive plan for their horses and their own safety.⁴⁵ However many had very little information and acknowledged that they were at great risk because of this.

While some of the women agistors may have a history of rural life this is not a group that has traditionally been at the forefront in fighting fires. Indeed even many rural women have a history of 'fleeing' fire, often at the behest of a male householder, or leaving so as not to get in the way.⁴⁶ It is easy therefore to discount women as being physically or psychologically fit to assist in the response phase of fire. However, this study has shown that many women were assisting immediately prior and during the 2003 fire event.

Many agistment managers supported the provision of education for agistors as well as welcoming them to assist in the event of fire. The Rural Fire Service could play a role in designing specifically targeted education to increase the bushfire awareness of this group in order to assist managers.

4.2.3 PERCEPTION OF BUSHFIRE RISK

The role of risk perception in preparation for fire has been underlined by much work carried out by Rhodes.⁴⁷ Understanding the perception of risk⁴⁸ among this population is key to any education or awareness provided and warrants further research. As Proudley argues, we need to know more about why people act rather than just prescribing correct behaviours.⁴⁹ It has been shown that the less informed people are, the *less likely they are to believe a threat and see the significance of any danger*.⁵⁰ It is however, the responsibility of the rural

⁴³ Goodman 2010

⁴⁴ Goodman 2010

⁴⁵ For example the Illoura Paddock User's Group

⁴⁶ Indian 2008 p.54

⁴⁷ Rhodes

⁴⁸ Tarrant 2006

fire service to equip these people with the knowledge of bushfire behaviour in order to best manage the danger they may expose themselves to.

*The challenge for agencies is to encourage the community to acknowledge the risk and work with them to prepare them psychologically and physically to take appropriate action and then communicate timely and appropriate information and warnings during an emergency to those who need it.*⁵¹

4.2.4 BUSHFIRE PREVENTION

In response to the question of what went well in the 2003 fires the question was answered by some managers with reference to very advanced planning and preparation. The construction of a 'bushfire management zone' on one property at the design stage was seen to have paid off. On another, decades of bushfire focused hazard reduction was seen to have prevented the fire from encroaching not only onto their property but the nearby suburbs as well. A strictly adhered to regime of slashing, burning and grazing in a year round management of pasture and vegetation debris was seen as key to fire prevention.

Most managers spoke of annual hazard reduction exercises on their property, burning, slashing and grazing areas around assets. For many, who have properties that are a mixed grazing business, fire hazard reduction is an integral part of their property management. Some were critical of the lack of hazard reduction by the government in particular within key areas near their boundaries, such as roadsides. There was also criticism by some that rural landholders are actively prevented by the ACT government from doing hazard reduction burns on their properties.

Several property owners use other stock strategically to graze down high risk areas. There was a focus on surrounding vegetation with regard to hazard reduction, although some referred to the hazards of stored hay. Many of the stable blocks on properties are made from highly flammable materials, filled with straw or sawdust. None of the managers talked about hazard reduction within or around the stables as a precaution. Similarly, where agistors have their own stables and sheds hazard reduction in these areas is left up to the individual agistors and therefore ad hoc.

Dry manure is highly flammable and manure piles and manure in paddocks burnt for days after the fire in 2003. One manager noted that daily cleaning of manure in the paddock in 2003 had contributed to the welfare of her horses and would keep her horses in cleared paddocks during fire season.

4.2.5 MANAGING HORSES IN BUSHFIRE

The ability for managers to protect horses from death and injury in bushfire is tempered by the form of agistment provided on the agistment property. Managers have varied plans to protect horses including provision of low hazard paddocks and plans for moving the animals

⁴⁹ Proudley 2008

⁵⁰ AFAC 2009 p11.

⁵¹ AFAC 2009 p 3.

into defensible indoor spaces or bare yards. In preparing a plan managers need to be clear as to their responsibility for agisted horses in a fire. Agistment properties that are based on a principle of full owner care will differ from establishments which offer horse care services with regard to their responsibility in the event of a bushfire.

One major success in the 2003 bushfires was the movement of horses on properties to indoor areas to protect them from flames and radiant heat. But this was only feasible for centres that had indoor areas available to horses. For those who are broad acre, leaving horses in their familiar paddocks with room to move to bare areas, was also seen as a successful strategy. Many horses died in the fires and some deaths were attributed to being placed in paddocks that, although believed to be less hazardous (due to fuel levels) were not familiar to the horses and consequently they panicked.

A second major success in 2003 was the successful relocation of horses to various locations around Canberra from many of the agistment properties. However, late relocation was the cause of chaos, major human injury and some horse deaths. The timing of relocation is absolutely vital. One of the challenges facing agistment managers is when and how to stop relocation at a time when they are facing a fire front. But of course, judgments about timing are dependent on information about the progress and threat of fire.

4.2.6 TRIGGERS FOR ENACTING PLANS

In 2003 strong informal communication networks among rural landholders, particularly those who were members of local volunteer rural fire brigades provided the benefit of up to date information on the fire and it's likely path, led to relocations instigated or activated by property managers. The trigger for many agistors on these properties who successfully relocated was contact from the agistment managers, for others it was informal networks of friends. With a level of pre-planning the combination of the above might prove a powerful communication tool.

However, this experience was vastly different for other managers who were not aware of the risks of the fire encroaching. There were many messages from authorities that judged the fire as not being a threat to their properties. Comprehensive information about the threat of a fire that is burning in the vicinity was raised as vital by almost all the agistors and managers interviewed in this study who had experienced a bushfire fire. It enhanced their ability to instigate the phoning of agistors to relocate early.

4.2.7 LEADERSHIP AND MANAGEMENT

Provision of information about fire is not sufficient to enact a plan, clear decisions need to be made as to when to take appropriate action once information is provided or other triggers have been activated. A decisive leader was seen by both agistors and managers as essential in a time of crisis. It was noted by several managers that a clear chain of command helped in 2003 to fulfill plans without question or argument. This was backed up by several agistors who appreciated the calm leadership of managers acting in the face of emergency and designating roles and tasks. A well maintained contact list of such leaders would also provide the RFS with another tool for improving communication.

4.2.8 AGISTOR PRESENCE ON PROPERTIES UNDER THREAT OF FIRE

This study found very differing approaches to the presence of agistors on horse agistment properties in the face of fire. One approach can be loosely defined as a 'closed door' policy, the second is an acceptance at some level of the presence of agistors and the third is welcoming their presence and incorporating them into their plans with a clearly defined role. Agistor presence is strongly linked to the nature of the agistment business, the management style, and property layout. Some of the plans for horse safety, in the absence of staff to assist, are reliant on the labour of horse agistors to fulfill them.

Several managers interviewed were categorical that they wouldn't have anyone on the property; others would not want agistors protecting assets or doing any form of fire fighting.

Some people will recklessly and suicidally go to a fire, we should ban all people

However, it was found that several managers who espouse a closed door policy had agistors on their properties in the 2003 fire. It is very difficult to stop people coming to their horse making this option difficult to enforce.

The idea of having select people on the property to help with moving horses and doing some fire fighting activities, such as putting out embers around stables was seen as a way to use a motivated group of agistors, but prevent the chaos of too many people being present. One manager who had their property burnt said they would probably choose which agistors stayed to help next time, rather than having a complete 'open door' policy.

Others would leave it entirely to agistors to decide whether or not to be present:

People need to decide whether to be here themselves, they need to decide early and stick to it

Several managers emphasized that agistors' presence would only be accepted in order to manage their horse but not to engage in any fire fighting. Managers were split on the issue of having agistors assist beyond moving their own horses. This is to be expected and accepted and any amendments made to the Farm Fire Wise program by the RFS should be as flexible as possible to allow for this freedom of choice by managers.

We see the agistors as a resource. Having some trained resourceful people is potentially a huge asset for fire fighting – we can't count on the rural fire service for providing any...It is important to have specific check lists in the plan, you might have to act very quickly ...then you can give them a check list and say do this

Those who would rely on agistors themselves to move their own horses to safety include complexes such as the Territory agistment, comprising large broad acre paddocks with no built assets and no managers on site. On the Territory properties, agistors are encouraged to have their own plans with regard to managing their horses, plans made in consultation with management. In 2003 one group of agistors with horses on Territory Agistment paddocks successfully enacted their plan of relocating horses and then leaving the property.

While managers are unanimous in thinking that horse relocation would need to be carried out 'early', the challenge is defining a point at which agistors would be asked not to come onto the property to remove horses. Another challenge is successfully communicating this. Hampering movement of firefighting vehicles is an obvious reason for controlling vehicle movement on any property. With most properties having one access road this is a vital part of planning. On several properties having somewhere to lead horses to safety, rather than float or truck, was seen as the best option. However, human safety in this situation is difficult to ensure.

Liaison with the local rural volunteer fire brigade, including visits for familiarization or training days was seen as a useful action for managers. The Brigade Captains interviewed welcomed contact by managers. Knowledge of property layout, including muster points for people and animals is vital so firefighting teams can work effectively on a property in time of fire.

In response to what they would like to see in a plan for their agistment property, all the agistors said they would like a plan, which was communicated to them all ahead of time.

I have full confidence in the management but think it is incumbent on the horse agistment manager to sit us down and say this is what we would do

Those on properties that had a communicated plan said they would like it reviewed and to have a reminder in good time. They all said they would like a relocation plan to be part of any bushfire action plan. This would include relocation areas off the property being organized ahead of time and some form of communication between agistors and management.

CONCLUDING REMARKS

There was a small number of managers who thought a plan was of little or no use, and a substantial number who had an informal plan. For these two groups there was not a strong focus on the presence of agistors, they either had a 'closed door' or 'wait and see' approach. For some there was not a clear decision about providing a level of safety for the horses. Confidence that they could deal with a bushfire situation stemmed from either proximity to and links with the local rural volunteer bushfire brigade or from previous experience of fire. While not at the stage of having a written plan a number of these properties had some well thought out informal plans. Prevention, particularly in the form of hazard reduction, was a focus for this group. Those with a closed door approach had given thought to who would move horses if necessary.

A good number of agistment managers had committed their plan to paper and communicated this to agistors. As well as being a requirement of the ACT government for landholders, a written plan has multiple advantages. Firstly, it is much more likely to be comprehensive and cover many issues not commonly thought about; secondly it has the advantage of being able to be communicated and can then allow agistors to devise their own plan for themselves and their horse, which is in line with their agistment managers' wishes.

Centres are very diverse and a plan will reflect this. A centre that has widespread paddocks and small numbers of staff will not be able to bring horses into a central area, whilst small centralized centres with staff on hand can more easily manage the horses themselves and may be overcrowded with all agistors present. Centres with no manager on site will need

the agistors to have a comprehensive plan themselves. As such, the Farm FireWise program administered by the ACTRFS needs to encompass the diversity of practices within this sector.

Centres are very diverse and a plan will reflect this. A centre that has widespread paddocks and small numbers of staff will not be able to bring horses into a central area, whilst small centralized centres with staff on hand can more easily manage the horses themselves and may be overcrowded with all agistors present. Centres with no manager on site will need the agistors to have a comprehensive plan themselves. As such, the Farm FireWise program administered by the ACTRFS needs to encompass the diversity of practices within this sector.

The following is a summary of the many elements of planning that were raised in interviews that already make up plans by horse agistment managers in the ACT. This detail should be used to inform any future amendments to the RFS Farm Fire Wise documentation.

Prevention

Risk – type of fire(s), bushfire behaviour, local terrain

Prevention of risk behaviour (e.g. smoking, driving cars on grass)

Hazard reduction activities prior to fire season (October-March, varies slightly per season)

Contacts – up to date contact list, horse numbers

Communication plan – phone trees, decision re use of centre phone line

Preparation

Dedicated bushfire ‘compound’ or refuge for people, ‘muster point’

Decision re presence of agistors/role

Personal safety, behaviour, gear

Horse safety plan (e.g. relocate, leave in paddock, bring in to yards or familiar low hazard paddock, bring in to arena, defense of buildings housing horses)

What to do if an agistor witnesses a fire outbreak first (contact plan)

Fire fighting equipment (training for those present)

Water sources

Fire information sources

Response

Command and roles

Limit to relocation activity – people coming or leaving property

Knowledge of people on property

Contingency plan (if buildings ignite, if caught in the open)

Ember control

Recovery (short term)

First Aid for people

First Aid for horses

Assessment of dangers

Water/feed for horses

5. CONCLUSION

This study has found that in 2003 agistors flocked to their horse agistment properties and engaged in a range of activities on the day of the fire. Many were on properties when the fire front engulfed the area, with little in the way of protection. Concern and planning for personal safety appeared at the time to be minimal. A greater appreciation of risk has resulted from the experience, but for many who have not experienced fire the risk remains of similar scenes being played out in the future. Agistors are keen to have a plan at their centre that is communicated to them ahead of time and regularly reviewed by management.

All the managers that were interviewed had many ideas about bushfire plans, planning appears to still be in gestation for many centres with ad hoc approaches to agistor safety and horse welfare in the event of fire. Some centres had very well developed plans that incorporated a clear role for agistors and included well thought out safety considerations for agistors.

There are differing approaches to the presence of agistors on horse agistment properties in the ACT in the event of fire. One can be loosely defined as a 'closed door' policy, the second is an acceptance at some level of the presence of agistors and the third is welcoming their presence and incorporating them into their plans with a clearly defined role. The study found that dimension of agistor safety, beyond espousing a closed door policy, was not always well-considered by several managers. Where there is no defensible refuge for people to shelter, agistors are at great risk of being caught out in the open.

All managers welcomed some level of information to help with developing their plans but had quite opposing views about the provision of education/awareness for the agistor population.

Bushfire planning on horse agistment centres must reflect the diverse forms of agistment businesses. All agistment managers need to respect the fact that horse owners in the ACT generally have high standards of horse care and wish their horses to be protected to some degree from the harm of bushfire.

Horse agistment managers need to face the fact that agistors may be present on their properties if threatened by bushfire, either because they happen to be there looking after their animal in the normal course of events, or because they specifically come to evacuate their horse or to move them to a safer place on the property.

Equally agistors need to accept that if they choose to keep their horses on pasture and in herds, a natural environment for a horse, they are vulnerable to bushfire. Some human effort can decrease the likelihood of horses being burnt or perishing in fire, but only with the infrastructure and resourcing to move horses and defend a refuge. Agistors of horses in broadacre paddocks that do not have prior warning may need to leave the horses with their natural instinct to cope in order to consider their own personal safety. It is the responsibility of agistors to put their safety ahead of their horses.

6. RECOMMENDATIONS

The following recommendations have been presented in three parts so as to reflect the findings. They have been developed individually for horse agistment owners/managers, the ACT Rural Fire Service and horse agistors themselves. While the Rural Fire Service is responsible for implementing recommendations for the service, any subsequent action on the behalf of the groups interviewed will be at the discretion of those groups. Action will depend on the status of their current bushfire plans and practices, the capacity of each agistment centre to respond to the recommendations and perceived relevance.

6.1 HORSE AGISTMENT MANAGERS

RECOMMENDATION 1. DEVELOP A WRITTEN PLAN

As a requirement of the Emergencies Act 2004 and the Land Management Agreement between the ACT Government and rural lessees all rural properties should have a documented bushfire management plan.

Prevention:

Plan and conduct hazard reduction that includes cleared or reduced fuel areas around assets, as well as for the protection of stock and human life.

Reduce risk of ignition by prohibiting smoking on the property, not driving (or permitting driving) vehicles on dry grass and carrying water to douse ignitions e.g. on slasher.

Use the industry profiles identified in section 4 of this report to enhance property bushfire management plans and help inform decisions.

Incorporate maps wherever possible into plans of potential/ designated refuge areas for horses and/ or people on the property during fire threat.

Use Prevention, Preparedness, Response and Recovery to help develop detail in bushfire management plans. Include such aspects as running trial scenarios to practice relocation or evacuation plans; test communication plans regularly; consider access for horse evacuation as well as emergency vehicle access etc.

Horse welfare:

Determine what safety actions the manager is able to provide and the limits to safety provision:

- Relocation (within property to safer areas, off property)
- Horse relocation procedure (including who will carry out)
- Relocation refuge
- What role will agistors play in the preparation of horses and at what stages. For example, agistors may remove gear from horses on days of Severe, Extreme and Catastrophic fire danger rating to reduce agistor presence should a fire start.
- Providing or simply identify access for veterinary or emergency services.

Consider providing awareness for agistors and staff on likely horse behaviour before, during and after bushfire. Engage with relevant government agencies that could assist

Triggers for action:

- Determine trigger for relocation (e.g. total fire ban days, appearance of smoke in distance) with back up plans/options.
- Plan for and instigate a communication process (e.g. telephone trees). Consider what information to include, how you will get that information as well as disseminate it.

Leadership

- Determine a clear chain of command that is clearly understood by anyone present. Include this in a plan if possible.
- Where relevant, ensure family and/or staff are knowledgeable on the Go Early or Stay and Defend policy and make a decision prior to fire events. Accept that individuals may choose to leave early, people have the right to choose and should consider their own safety first. Any disagreement about such action at the time of a fire may jeopardise the safety of staff, agistors or livestock.

Agistor presence and safety:

All centres should have a clearly stated stance on agistor presence. They also should provide a last resort refuge for any people who happen to be on the property at the time of a bushfire. If this is not possible (where there are no 'defendable' built structures) then disseminate information about safer options if caught out in the open. Consult with ACTRFS on last resort refuge areas if required.

- If agistors are discouraged from being present:
 - State intended procedure to protect stock (if any)
 - State who will be enacting stock movement
 - Have a contingency plan for a refuge in case agistors are present
 - Consider how to communicate this policy to agistors and how it is to be enforced.
- If agistors are accepted to be present:
 - Be clear about their expected role at the time of fire
 - Ensure knowledge of their whereabouts
 - Have a designated 'defendable' refuge for people
 - Ensure they are appropriately informed.
 - Identify the potential risks and responsibilities they would be accepting.

With the assistance of RFS, consider running mock bushfires exercises, during both day and night,.

Create a contingency plan that incorporates situations when actions fail.

RECOMMENDATION 2. AGISTOR COMMUNICATION AND AWARENESS

- Either provide access to or disseminate a written bushfire management plan to all current agistors.
- As a result of the agistor profiles, consider using newsletters, mail, email, phone, pager, SMS, social networks, notice boards, meeting and any other communication tool to keep in touch with all agistors.
- Instigate or work with ACTRFS to run pre- bushfire season briefings using ACTRFS and "community champions" (those within the horse community that carry respect and can act as mentors) to assist.

RECOMMENDATION 3. LOCAL VOLUNTEER FIRE BRIGADE LINKS

- Consider facilitating training days on the property to assist with hazard reduction and area familiarization of brigade volunteers.. Consider joining the local fire brigade and participating in the training or encouraging staff and family members to do so.
- Encourage local RFS brigades to visit properties and run basic fire awareness programs with your family, staff and agistors.

6.2 ACT RURAL FIRE SERVICE

RECOMMENDATION 1. “PREPARE AND DEFEND OR GO EARLY” POLICY SPECIFICALLY FOR PEOPLE WITH HORSES IN PADDOCKS

Whilst the policy of “Prepare, Stay and Defend or Go Early” remains in place for residents it is important to develop a policy to cater for people who may flock to open paddocks where they keep their horses. Given that there is a large population of people in Canberra that will want to rush to save their horses in time of fire, and may be on properties when fire arrives, devise a policy incorporating advice specifically for people caught in the open. The “Prepare, Stay and defend or Go Early” slogan should be re-conceptualised for this sector.

RECOMMENDATION 2. SUPPORT FOR PLANNING BY HORSE AGISTMENT MANAGERS

Disseminate this report to facilitate the development of a detailed plan by each centre, tailored specifically to their individual property characteristics, management styles and resources. Encourage consideration of how to account for intended or unintended agistor presence in plans and provision of a refuge for any agistors who may be present on the property at the time of bushfire.

Prepare a checklist style document for horse agistment managers to use as a prompt when developing their plans or reviewing them.

Investigate how local brigades can provide greater assistance to agistment managers with hazard reduction burns.

Utilise the agistor profiles, behaviour, expectations etc. in the development of future awareness / education information and programs.

The RFS need to ensure that the ACT Government horse paddocks are included in any future programs targeting the horse agistment industry and that they are required to undertake the same bushfire planning.

Develop relevant information necessary to support agistment managers in decision making processes wherever possible, eg. guidelines for designating last resort refuge areas.

Farm FireWise program to be improved to ensure individual property visits by ACTRFS staff and volunteers continue with a heightened awareness and an understanding of the issues directly related to this industry. Emphasise individual risk assessments.

Ensure wherever possible the experience and expertise of the “horse community” be used to enhance documents/packages.

RECOMMENDATION 3. BUSHFIRE AWARENESS FOR HORSE AGISTORS.

Develop bushfire awareness education for the agistor population in consultation with horse agistment managers. Tailor the education around the plans of agistment centres, reflecting the diversity of approaches to planning for bushfire. Include contingency planning for situations where no refuge is available for agistors caught in the open in fire.

Use these initial profiles and detail to produce targeted education material, campaigns and training opportunities. Transfer knowledge about horse related bushfire awareness and also general bushfire information such as bushfire survival plans.

RECOMMENDATION 4. HORSE RELOCATION EMERGENCY PROCEDURE

In partnership with the ACT Government Vet develop a horse relocation disaster management procedure. Consider relocation sites for the various ACT Disaster Zones.

Liaise with ACT Parks and police about road closure policy and how that may affect horse owners (along with others) wishing to evacuate.

RECOMMENDATION 5. WARNINGS

Investigate ways in which the RFS can provide timely information about any active fires for rural landholders including horse agistment managers. Possibilities may include incorporating trained people from the sector in the incident management teams during fire incidents who are responsible for communicating information about fires to horse agistment centres. Another option would be the formation of Community Liaison Officers who transfer information from the Incident Management Team to the community.

There is a need for varied forms of communication, messages that provide comprehensive but clearly-worded information including:

- Location
- Size of fire
- Speed traveled
- Likelihood of spread
- Level of containment
- Nature of fire (planned, unplanned)

RECOMMENDATION 6. LOCAL BRIGADES

Provide education for local volunteer brigades on the nature of horse agistment properties and the particular challenges faced when present on these properties to fight fire.

Encourage and wherever possible facilitate contact with local brigades through site visits and training exercises.

6.3 AGISTORS

RECOMMENDATION 1. DEVELOP A PLAN FOR YOURSELF AND HORSE

Devise a safety plan for yourself. As a priority consider your own safety and that of your family above the safety of your horse. Know your risks and accept that there may be a point at which you have to leave your horse to face bushfire, even if time has not allowed for a safe removal of the horse from danger. Learn about the danger of being outside in a bushfire and how best to cope with this situation. Organize protective clothing and keep it in your car or tack room on the agistment property throughout the fire season

Educate yourself about bushfire behaviour, familiarize yourself with local bushfire information sources. Consider joining a local brigade. Participate in bushfire awareness opportunities on a regular basis.

If you are responsible for stables or assets, plan for and prepare them prior to and during the bushfire season remove manure piles etc.

RECOMMENDATION 2. FAMILIARISE YOURSELF WITH YOUR AGISTMENT CENTRE'S PLAN

You have a right to request a copy of your centre's plan for bushfire emergency when signing an agistment contract. You have a responsibility to adhere to the plan devised by your centre.

Develop a plan in consultation with your agistment centre about your horse. Accept your managers' decision about agistor presence. Assist your agistment manager only at their request. If you wish to relocate your horse as a risk prevention decide what your trigger will be, what transport is available, it is important to practice this plan.

You have a responsibility to inform your centre of any intentional re relocation and inform when carried out. Keep your centre updated with your contact details.

7. REFERENCES

Australian Horse Industry Horse Safe Code of Practice 2009

Australasian Fire Authorities Council, 2005, Position Paper on Bushfires and Community Safety, Under Review Nov 2009, AFAC Victoria.

Australasian Fire Authorities Council, 2009, Systems Approach to Community Warnings, Sep 2009, Vic

Blanchi, R. and Leonard, J. 2008, Property Safety in Handmer, J and Haynes K (ed.s) Community Bushfire Safety. Bushfire CRC CSIRO Publishing, Collingwood, Vic.

Burr, S. 2009, Women and horses: A study of Australia's Recreational Horsewomen. Exigesis for the fulfillment of the Degree of Doctor of Philosophy at the University of Canberra.

Council of Australian Governments, 2005, National Inquiry on Bushfire Mitigation and management: A report to the Council of Australian Governments, Department of Transport and Regional Services, Canberra.

Doogan, M. 2006, The Canberra Firestorm: Inquests and Inquiry into Four Deaths and Four Fires between 8 and 18th January 2003, Vol 1&2, ACT Coroners Court

Elsworth, G., Gilbert, J., Rhodes, A. and Goodman, H. 2009, Community Safety Programs for Bushfire: What do they achieve, and how? Australian Journal of Emergency Management, Vol 24, No.2. May 2009.

Gilbert, G. 2007, Community Education Awareness and Engagement Programs for Bushfire: An initial assessment of practices across Australia, Bushfire CRC/RMIT University, Vic.

Gill, M. 2008, Underpinnings of Fuel Management for Biodiversity Conservation in Reserves: Fire and adaptive management, Report No. 74. Department of Sustainability and Environment, Melbourne (revised 2009).

Gill, M. and Stephens, S. 2009, Scientific and Social Challenges for the Management of Fire Prone Wildland-Urban Interfaces, *Environmental Research Letters*, Vol 4, 2009.

Good, K. 1993, Fire Safety for Horse Owners, *Journal of Equine Veterinary Science*, Vol 13, No.5, p249-250.

Goodman, H. 2008, A Case For Bushfire Safety Information Targetting Women, *Fire Note*, AFAC/CRC, Issue 58, April 2008.

Gould 2005 cited in Indian 2008

Gow, K. and Paton, D. (ed.s) *The Phoenix of Natural Disasters: Community Resilience*, Nova Science Publishers, NY.

Enarson, E. and Morrow, B. 1998, *The Gendered Terrain of Disaster*, Praeger, Westport, Connecticut

Handmer, J. and Haynes, K. (ed.s) 2008, *Community Bushfire Safety*, Bushfire CRC CSIRO Publishing, Collingwood, Vic.

Handmer, J. and Monson, R. ?? A Long History of Staying to Defend, *Fire Australia*, ??

Handmer, J. and Tibbits, A., 2005, Is Staying at Home the Best Option During Bushfires? Historical Evidence for the Australian Approach, *Environmental Hazards*, Vol 26, 2005, Elsevier

Haynes, K., Tibbits, A., Coates, L., Ganewatta, G., Handmer, J. and McAneney, J., 2008, 100 Years of Australian Bushfire Fatalities: Exploring the trends in relation to 'stay or go policy', Report for the Bushfire CRC

Hayward, M. 2003, Fires in the ACT ACTDIV NEWS, Australian Veterinary Association, ACT Division, Feb, 2003.

Haynes, K. 2009, 100 Years of Stay or Go, *Fire Australia*, Winter 2009, Australian Media Group, pp 30-32.

Hughes, G. 2009, *How We Cheated Flames of Death*, The Best Australian Essays 2009, Black Inc. Melbourne

Indian, J. 2008 The concept of Local Knowledge, in *Community Bushfire Safety*.

Jacobs, K. 2003 Letter to the editor, ACTDIV NEWS, Australian Veterinary Association, ACT Division, Feb, 2003.

Loh, Elsie, *Shifting Risks and Responsibilities – The Balancing Exercise*. The outcomes

of a workshop on the legal issues of 'Stay or Go' and Community Warnings in relation to Community Safety Programs. Fire Note, Issue 6 October 2006. Bushfire CRC

Loh, E. 2008 Legal Implications of the "Prepare, Stay or Go Policy" in Handmer, J. and Haynes, K. (ed.s) 2008, Community Bushfire Safety. Bushfire CRC CSIRO Publishing, Collingwood, Vic.

McLean, A. 2003, Fire Hoofbeats Vol. 24 No.6, April/May

McLeod, R. 2003, Inquiry Into the Operational Response to the January 2003 Bushfires in the ACT, ACT Government, Canberra.

Manne, Robert. 2009. Why We Weren't Warned: the Victorian Bushfires and the Royal Commission The Monthly July, No. 47

Mannix, I, 2009, ABC Radio – An Emergency Agency? Fire Australia, Summer 2008-2009, Australian Media Group, pp 40-43

Martin, W., Raish, C. and Kent, B. 2008, Wildfire Risk: Human Perceptions and Management Implications, Resources for the Future, Washington DC

Matthews, S. 2003 How Did The Fire Know We Lived Here? Canberra's Bushfires, Pirion Press, Canberra.

Niall, E. 2006, Fired Up For Information, Fire Australia, Autumn 2006 Australian Media Group, Victoria, pp 36-38.

Page-Allen, C. 2003, After the Fires, Hoofbeats, Vol. 25, No.1., p10-11.

Paton, D. 2006, Disaster Resilience: An integrated approach, Charles C. Thomas, Springfield.

Paton, D., Burgelt, P. and Prior, T. Living With Bushfire Risk: Social and environmental influences on preparedness, Australian Journal of Emergency Management, Vol 23, No. 3, Aug 2008.

Pearson, N. 2007, Horses and Bushfires, Agriculture Notes, Victorian Department of Primary Industries, Vic.

Proudley, M. 2008, Fire, Families and Decisions, Australian Journal of Emergency Management, Vol 23, No.1. Feb 2008.

Proudley, M. 2009, Exploring the Bushfire Experience from a Domestic Perspective, Fire Note, Issue 40, October 2009, AFAC/CRC.

Rhodes, A. Understanding Community Preparedness and Response to Wildfire Risk

Rohrmann, B. 2007, Exploring Information for Residents on Websites of Fire Authorities – Practical experiences, Australian Journal of Emergency Management, Vol 22, No. 2, May 2007.

Smith cited in Indian 2008

Tarrant, M. 2006, Risk and Emergency Management, Australian Journal of Emergency Management, Vol 21, No. 1, Feb 2006.

Thomas, A., Chataway, J. and Wuyts, M. 1998, Finding Out Fast: Investigative skills for policy and development, Open University, Sage, London.

Tibbits, A, Blanche, R. and Gill, M. Resident's Experiences of the 2003 Canberra Bushfire. Unpublished

Whittaker, J., Haynes, K., McLennan, J., Handmer, J. and Towers, B. 2010, Second Report on: Human Behaviour and Community Safety: Research results from February 7th Victorian Fires, Bushfire CRC, Jan 2010

Williams P. 2007 Courses for Horses, Stateline, Canberra

<http://www.abc.net.au/stateline/act/content/2006/s2034516.htm>

8. APPENDICES

List of interviewees

Agistor accounts of 2003 bushfire

Agistment managers on planning

Interview schedules

Fire Safety: Animal Welfare Act

Emergencies Act (2004)

Land Act 1991 re LMA and BAP

8.1 INTERVIEWEES

Key Informants

1. Christine Lawrence, ACT Equestrian Association (agistor, National Equestrian Centre)
2. Geoff Hyles, Rural Landholder's Association President
3. Peter Fisher, Jindabyne Equestrian Centre, NSW Safer Neighbourhood Place
4. Malcom Gill, Bushfire Cooperative Research Centre, ANU
5. Simon Katz, ACT Bushfire Council
6. Stephen Young, Rural Landholders representative Strategic Bushfire Management Plan; President, Rivers Bushfire Brigade
7. Sandra Burr, University of Canberra, PhD "Women and Horses, A study of Australia's Recreational Horsewomen" (agistor, Riverview)

ACT Government

1. Neil Cooper, Manager, Fire Management; Parks, Conservation and Lands, Territory and Municipal Services

2. Dylan Kendall, Senior Fire Management Officer, Parks, Conservation and Lands, Territory and Municipal Services
3. Kerrin Styles
4. Will Andrew, ACT Government Vet
Arthur Sayer, ACT Rural Fire Service, Farm FireWise

Volunteer Bushfire Brigades

1. Matt Dukiewitz, Captain, Rivers Brigade
2. Matt Bolton, Deputy Captain, Hall Brigade
3. Val Jeffery, Captain, Tharwa Brigade

Horse Agistment Managers

1. Jorgen and Dorthe Hauberg, Kim and Sean Adams, Canberra Equestrian Centre, Chapman
2. John Guth, Stromlo Equestrian Centre, Cotter Rd
3. Ryan Walsh and Natasha Devoe, Territory Horse Agistment
4. Stephen Young, Riverview Horse Agistment, Cotter Rd
5. Rita Marchant, Peter Marchant, Monaro Park, Horse Agistment
6. Nina Boyd, The Hayshed, Piallago
7. Simon Katz, Milapuru, Kambah
8. Grant Hughes, Forest Park, Cotter Rd
9. Danielle Clark, Natasha Kirk, Gooromon Park, Hall
10. Heather Quilty, Noble Park, Hall
11. Peter Burgess, Bendora Stables, Dickson
12. Kylie Higginbotham, Greg Harris, Equestrian Park, Hall
13. Jenny Campbell, Pine Ridge, Belconnen
14. Jan Skyhill, Gerry Nussio, Lions Youth Haven, Kambah
15. Maurice and Maureen Tully, Hillview, Cook
16. John Lowe, National Equestrian Centre, Kerrabee, Cotter Rd

Agistors

1. Heather McLeod, Chair, Government Paddocks User Group
2. Tamara Abed, Riverview
3. Suzanne Breitkopf, CEC (President, Canberra Lakes Pony Club)
4. Judy Hare, CEC (Secretary, Canberra Lakes Pony Club)
5. Paul Cristofani, Riverview (taped interview Jan 2003)
6. Kaye Johnston, Forest Park
7. Claire Thorpe, Illoura Paddock User's Group
8. Angela Pritchard, Illoura Paddock User's Group
9. Keryn Kefous, Illoura Paddock User's Group
10. Sandra Burr, Riverview
11. Christine Lawrence, National Equestrian Centre

8.2 AGISTOR ACCOUNTS OF 2003 BUSHFIRES ON AGISTMENT PROPERTIES

Four of the following stories were relayed by the agistors interviewed for this study. Four additional stories were documented in the publication of stories written about the day in 2003 put together by Stephen Matthews in entitled “How Did The Fire Know We Lived Here?”

Story 1

In 2003 on the Saturday morning I went with my sister and our four kids to collect the guinea pigs (that we keep at the horse agistment property) – the children were worried they may suffer from the smoke! When we arrived the police and HA manager were assessing the situation, but said it would be fine. We didn't have our float there so my sister went and got the float. I took the guinea pigs to mum's and she came back and helped collect our gear. The girls (aged 14 and 15 at the time) led the horses into the suburbs, wearing t-shirts and shorts! We floated the other horses out. I was so worried about the kids after I dropped the horses off, we didn't know where they were, I was frantic driving back to Holder. They eventually got to mum's. When I reflect back it was so stupid to let the kids take the horses.

I rang friends and said to get their horses and other kids came out and rode their horses into the suburbs. The kids got disoriented. Twenty minutes later it was mayhem, stables on fire, people's cars on fire – one had a boot full of hay that went up. One friend drove back into the flames because she had forgotten something. Our friend moved their horses into a group paddock with unknown horses but they panicked, the other horses in that paddock survived but these two died. So many died.

Next time I would just go. Evacuate early.

Story 2

Because I wasn't working I was out there all the time in the two weeks before the bushfire. So I was on high alert. I felt really alone in that. There was no media information – except news that said it was far away and emergency services had it under control. But from the agistment property you could see it every day. But the smoke was a constant reminder...at night it was even more evident. The shape of the fire was like a map of Italy, a blind man could see it was only over the road. Every day I went out to the property I would back the car up to the float just in case. There was a sense from the HA managers that something was going to happen, they were validating what I felt. The manager (friend) asked me to come on the Friday night as her husband was going to fight the fires in the volunteer brigade. But he was sent home by the Captain to be on the property, that night I was really worried. Everything in the morning was eerily still and quite cold I remember. There was a dampness and coolness. I went into the paddock to catch my horse and met the agistment manager who said “just go” and I didn't want to leave my friend and the place, I was so attached to the place. Everyone was there just going through their normal business. I took the horse to the opposite side of town to a friend's place, then I couldn't get back to my home in Curtin for two nights. Ten minutes after I left the police were closing the road.

Story 3

The horse Agistment Manager came down and spoke to all of us. He talked to us about making a clear decision at that moment to stay or go. Four of us decided to stay. I wouldn't have stayed if I didn't have a horse here that I was leasing. He told us to shelter in the woolshed if we needed to or if that burnt to put our cars on the dirt car park and stay there. He showed us the equipment (fire fighting). We had planned to clean out the woolshed (of all the gear and hay) on the Monday. I had already moved my two and my friend's horse by float the day before. Took them all out to a friend's property at Lake George. I would have liked a relocation point, maybe Exhibition Park. A lot of agistors gave me a hard time about evacuating – said I was over-reacting.

On the day I helped move some horses out of their paddocks that had high fuel levels into eaten out paddocks. I didn't feel unsafe at all, when the woolshed went up we all got in our cars, one agistor got quite scared and called triple O. The helicopter came and landed but left when they saw we were OK. We said we were worried about the others (HA managers) up at the house but they replied the house was burning and flew off!

Next time I would think twice about moving horses into paddocks that they don't know.

Story 4

I had a sick pony and went out on Saturday afternoon to check – I didn't even know about the fires because in the morning I was inside all closed up because it was so hot. It was so lucky, everything about that day, for me, was luck. I met a policeman who said it was his personal opinion I should leave. We had our own network for our 'patch' so I got on to as many people as I could. Those I couldn't contact we had agreed to open gates for the horses – they survived but there were lots of loose horses everywhere. There were lots of people away so there were also lots of unknown people, friends, driving around in cars. I put the pony and another horse onto the float and mum took them to Duffy oval, then Curtin playing fields because the police weren't letting people into Duffy. Lots went to Rivett oval. I led the other two to Cooleman Court shopping centre. It was sheer luck that a man in the suburb saw me and told me to shelter under an underpass – and the fire went over the top of us while I stood under the underpass with the two horses. The horses were perfect, didn't move. I felt panicked but they were fine. None of us thought with our heads!

The following stories were relayed in the publication "How Did The Fire Know We Lived Here" edited by Stephen Matthews in 2003.

Kimberley

The trouble was we only had room for four of the five horses (in the floats). My mum wanted to leave one behind – a little pony called Ashes (I thought his name was a bit of a bad omen) ...and come back and get it later. My gut instinct told me, however, not to leave him, so I said I would walk with him and my cousin to Holder, to my grandma's house...The walk seems like a dream. I remember it being so dark and it felt like the fire was right behind us, but we kept telling ourselves not to be stupid and it was ages away. To be honest it seemed exciting and fun at the time. It creeps me out to learn that the houses we passed burnt down ten

minutes after we passed them. Along the way, we nearly took a short cut through Duffy , except Ashes would not go under the underpass. We now know that if we had done that we would have walked straight into the fires, so I guess Ashes saved my life....That night I found out how many horse had died. All the horses in our paddock died...⁵²

Cheryl

Because of the fires we get up early and go out to the paddocks and clean out the small paddock. ..Because of having horses I have been watching the fires all week and thinking “this is not good”. I rang the agistment centre to ask about the fire contingency plan. Plans are to move all the horses into the stables and yards complex. At about 9.30 am I ring the agistment centre to say I will be bringing my horses in and will need yards...back at the paddocks at 11am I arrange shelter yards and bring the horses in. I consider taking Harry’s cotton rug off just in case the fire comes, but decide to leave it on. I will regret this later...I go to the office and agistment centre staff are ringing all the agistors to get the horse in.... At 1pm I go back to the agistment centre to give them a hand, I get stopped at a road block and open my mouth to ask them please to let me through, when the emergency siren comes across the radio.⁵³

Heide and Jayne

My sister Jayne and I have Arabian horses.... kept in a 100 acre paddock. In hindsight we know that the size of our paddock, the fact they all had room to move around in was all that saved them – all fourteen of the horses in our paddock survived. I rang the equestrian centre at 2pm to ask them if the fires were a threat as, living in Belconnen, all I could see was smoke everywhere and I couldn’t really tell from which direction it was coming. I was advised that the fire was not in the vicinity and everything was all right. Because of the extreme conditions of heat and wind , the fire moved so quickly that no one was fully prepared when the fire hit. Jayne rang me again at 4pm and said the fires were now actually in Chapman and all the roads we used to get there were closed off and we had to leave immediately to get the horses. She came and picked me up....the traffic lights weren’t working people were towing horse floats, there were emergency vehicles everywhere with their sirens on.⁵⁴

We got as far as the end of Hindmarsh Drive and when we saw houses burning around us we knew it was going to be really bad. We were turned away by the police. The feeling I had when we were turned away was almost indescribable....We weren’t to know at the time but the fire had already burnt through our paddocks, so really there wouldn’t have been anything we could do at that stage.

⁵² Matthews 2003

⁵³ Matthews 2003

⁵⁴ Matthews 2003

Ann

We were waiting for the fire. Arriving late at the property, I have driven past the house and stables and whatever other people are doing, straight to the paddock where my bay mare, Miranda, lives. The air is still fairly clear and it looks as if the fire could go by without touching us. If it does come our way we should be protected by a large area of heavily grazed, treeless open paddock stretching the best part of a kilometre upwind. The shelter faces east and half has been enclosed to make a cosy stable...With very little to burn, and the shelter to shield us, we should be safe....There was time to prepare. First I dipped a supply of water from the trough a few paces behind the shelter. Then I changed into a long sleeved shirt soaked in water and slipped my t-shirt soaked in water over the muck rake to make a beater. I wet two towels, one for Miranda and one for me to put over our eyes and nostrils if necessary. Then it was a matter of waiting.

A helicopter flew overhead – and disappeared in a smoke haze. Did they see me waving? We are on our own now. Presently the fire went through the long grass of the neighbouring property, less than 200 metres away, traveling parallel to the open over-grazed area upwind of us. It charged along with clear bright flourishes of flame metres into the air, and headed up the hill towards the skyline. Even as I registered its pace and energy, a sudden blaze climbed the rocky knolls away to the left, torching the gum trees and cyprus pines and on into the reserve where the deeper grasses were waiting. We were surrounded. The smoke was getting denser but Miranda showed no signs of distress or concern. She stood calmly as I walked over to her and draped the wet towel over her nose. ..I knew it would not be possible to persuade Miranda to come into the shelter, I was spending most of the time with her out in the yard in the smokey wind, one hand holding the towel over her nostrils, the other keeping mine draped about my head and face. Then I heard the noise. It was like nothing I had ever heard: not a rushing windy noise or the sound of fire cracking but a big deep growling, very close. In the time it took to get across the yard into the shelter it was upon us. It was impossible to see anything – the air was thick with eddying debris. Eyes closed and the towel tight about my head and face, it was all I could do to try to save myself; there was no question of doing anything for Miranda. Fumbling my way to where I guessed the back wall to be, instinctively crouching. I touched one of the heavy poles sunk deep into the ground that support the building. It felt firm, not even shuddering with the impact of the wind. The wind roared on, and now a new sound started – a metallic shrieking, wrenching sound – but still the pole felt solid and unmoving. Twice I tried to open my eyes to see what was going on but as soon as I loosened the towel even slightly my face and closed eyelids were bombarded with flying fragments. There was no sensation of radiant heat and no difficulty breathing – the two things I had feared the most. Then it was all over....I could see Miranda looking out, apparently unharmed, her back to the onslaught as she must have been, through it all. Like me, she must have had her eyes tight shut because...her eyes were uninjured....At some point I realized the roof had gone.⁵⁵

⁵⁵ Matthews 2003

8.3 AGISTMENT MANAGER INTERVIEW SCHEDULE

Project description

1. Information collection on the topic of the specific challenges faced by HA managers in doing bushfire management planning – Comes from the realization of the unusual complexity of issues horse agistment management face
2. The project stems from the fact many people in the ACT and Victoria were injured and killed rescuing pets and particularly horses
3. Realisation by RFS that agistors are a 'hidden' population as far as bushfire education, but wanting to start the ball rolling by looking at the managers perspective on the potential presence of agistors on their property in a fire
4. Want to reflect on and learn from past experience of fire, before the history is lost. Welcoming new ideas. Sharing ideas between agistment centres
5. I am hoping to collect some data from your property such as horse and agistor numbers
6. Understanding the range of different set ups and how to cater for the diverse ways of operating in bushfire plans
7. Not a detailed formal assessment of their plan (if they wish to provide a copy that would be good but only voluntary)
8. To date I have searched literature on the topic and collected a lot of useful material on horses and fire planning and related topics. There is very little written on the specific issue from HA managers perspective
9. Key informants have been interviewed including Government vet, Rural lessees president, Volunteer Brigade Captains, Equestrian Association and a Fire Ecology academic
10. I Acknowledge my personal involvement as a horse agistment manager myself, the only conflict of interest I believe would be my business benefiting from other's plans - sharing information specifically about your plan is not mandatory

Outcome:

Issues paper on specific challenges faced by HA management and on relevant literature pulling together best practices in terms of our plans

Disseminating information to HA managers in a form that suits them (e.g. written paper, workshop with presentations, interactive workshop)

Recommendations for the RFS specifically on how to support managers and agistors and also for other relevant govt agencies on key issues arising

Data:

- How many horses on each agistment property?
- How many agistors/owners?
- How many visits per day?
- How many paddocks?
- Do you employ staff? How many?

Property description:

- Acreage
- Road access (internal/external)

- Buildings/outbuildings
- How many stables/sheds (any owned by agistors?)
- Do you have 'private' paddocks?
- What is the distinction between private and public/paddocks in terms of management responsibility (e.g. grazing management? Storage of flammable fodder/equipment)

Are you happy for this information to be stored and used for disaster planning?

Bushfire management KEY interview questions

What are the key things you think about when considering bushfire threatening the horse agistment property that you run?

Prompts

- Prevent prepare respond recover
- Stay or Go (people, horses)
- Agistor role
- horses

How could the Rural Fire Service assist with your planning and preparation?

- Farm FireWise?
- Other

What would be the best way to receive information from this project?

e.g. Written paper, workshop presentations, interactive workshop, film, internet web page)

Additional Questions

Was your property affected by the 2003 bushfires?

If yes:

In terms of planning/preparation and response what do you think you did well?

e.g.

- Did you have a plan?
- Were you aware of fire threat?
- Did the plan involve agistor role?
- How many people were present on the property?
- What did you do with horses?

Would you do anything differently if your property was threatened again?

General Questions

Would it be useful for RFS to educate agistors regarding bushfire risk and their role in PPRR? (E.g. preparing around their sheds in the summer, decision what to do re relocation of their horses etc)

8.4 FIRE SAFETY ANIMAL WELFARE ACT 1992

Under Section 22 of the Animal Welfare Act

6. Fire Safety

Stable and indoor equestrian buildings are Classified as Class 10 (a) and Class 9 (b) buildings respectively in the Building Code of Australia. They should be approved and constructed in accordance with the Territory Plan and ACT Building Act.

6.1 Precautions to improve fire safety in stables include:

- Doors and exit widths that are suitable for horses; ie not less than 1.2 meters wide and having a minimum ratio of 1 exit for 5 stalls;
- Exit routes should not be obstructed;
- Feed and bedding stores should be fire separated from stables;
- The provision of fire hose reels in stable buildings is recommended complying with the Australian Standard AS 1228 and installed to AS 2441;
- A water pressure of 200 kPa; this may be provided with an electric pump if gravity feed is insufficient. A water tank supply of 7000 litres should serve the hose fire reel where a town water supply is not available, (ie, 2 hours hose operation);
- Water reticulation external to the building where a town water supply is unavailable may be in 50mm diameter polyethylene pipe but within the building to a hose reel 25mm in diameter copper pipe is required. A joint domestic and fire supply is permitted provided the tank supply is adequate for both domestic and fire fighting requirements;
- Smoking should not be permitted in stables;
- Smoke detectors should be considered as an early warning system; and
- Staff should be familiar with the evacuation plan in case of fire.

7. Records

Appropriate records should be kept for each horse, as part of good business management and a health care program.

8. Staff

8.1 Staff should respect horses and have experience handling them.

8.2 Staff should be aware of their responsibilities and be competent to carry them out.

