

## **4. Summary of Post 1960 Major Fire Events**

## OVERVIEW OF THE PERIOD

### Fire of Human Origin

During the period 1956 to 1986, Kosciuszko National Park was regularly burnt in a broad acre manner for hazard reduction, most of the area falling into the “Hume-Snowy Scheme”. Aerial ignition was sometimes given the name amongst its practitioners of “the new fire stick”, burning the country in a broad-scale mosaic pattern as was the assumption regarding pre-European practice.

Following 1986, the NPWS adopted a practice of strategic hazard reduction which focused on burning smaller parcels of land close to towns or in strategic areas rather than burning large areas. The ecological focus of this burning excluded burning from fire sensitive communities, resulting in much of the Park receiving fire only in natural bushfire events or as a result of other human activity such as campfires or illegal burning.

Examination of 53 random post-burn reports (NPWS 2004) between 1975 and 2004 found that 24% of prescribed burns had at some stage escaped their containment lines and required suppression activity. Although the majority of these were small “spot-over” incidents, broad-acre burns conducted in the 1970’s had occasionally escaped to produce large fires, the largest recorded being the 20,700Ha Mt Youngal fire in the 1977-78 fire season. As an average figure over the modern period, there were 11 unplanned fires recorded within KNP each year.

### Fire of Natural Causes

Fire sizes in the NSW and ACT Alpine Parks during this period are given in table 4. Fires greater than 100,000 Ha occurred on only 1 occasion (the separate ACT and NSW/Vic fires of 2003), and given the average of 11 fires in a year this suggests that 100,000Ha fires are about a 1 in 44 year occurrence under this management.

**Table 4.** Percent occurrence of fires in the NSW and ACT Alpine National Parks during the modern period

Size Category	Percentage of fires
< 1Ha	36%
1 – 10 Ha	32%
10 – 100 Ha	20%
100 – 1,000 Ha	8%
1,000 – 10,000 Ha	3%
10,000 – 100,000 Ha	0.8%
> 100,000 Ha	0.1%



*Figure 25.* Approaching fire in Kiandra during 1964/65. Photograph John Zylstra



*Figure 26.* Strongly wind-driven plume from the Ravine fire 1964/65. Photograph John Zylstra



Figure 27. Aftermath of the 1965 fire in the Kiandra area. Photograph unknown



Figure 28. "Fire weeds" - *Senecio* and *Trachymene* species growing under Alpine Ash killed by the 1972 Schlink's Pass fire. Photograph unknown



*Figure 29.* Night flames at Snowy Creek, Victoria during the 2003 fires. Photo DSE Victoria



*Figure 30.* Pyrocumulonimbus cloud from the fire approaching Canberra on Jan 18, 2003. Photo ACT ESA

**TABLE 5**  
**SUMMARY OF POST 1960 MAJOR FIRE EVENTS**

Locality	Nearest Park/Reserve	Accuracy (Tab. 1)	Comments	Sources
<b>1964-65</b>				
Talbingo – Eucumbene	KNP	4	86,300 Ha burnt in 2 fires on the Bogong Ranges and stretching from Talbingo to Providence Portal. Main fire ignited by accident and spread by spotting from ridge to ridge, burning back into the flatter frost plains	Aitchison 2004, Zylstra 2001
Gippsland	-	1	315,000Ha burnt, 60 buildings lost	DSE 2004
<b>1971-72</b>				
Mt Buffalo	Buffalo	4	12,140 Ha burnt, roughly the northern half of Buffalo NP	DSE 2004
<b>1972-73</b>				
Pilot Wilderness	KNP	4	30,900 Ha burnt by arsonists between the Victorian border and Ingebyra, to the west of the Snowy River	NPWS 2003
Grey Mare Range – Schlink’s Pass	KNP	4	13,000Ha burnt from Mt Tate to Pretty Plain Ck.	NPWS 2003
<b>1977-78</b>				
Mt Youngal	Alpine, KNP	4	20,700 Ha burnt across the Murray Valley. An escaped broad-acre Hume-Snowy prescribed burn	Hume-Snowy 1978
<b>1978-79</b>				
Canberra	-	4	Fire caused by accident burnt 16,300 Ha to the north of Canberra	Env. ACT 2004a
<b>1982-83</b>				
Gudgenby	Namadgi, KNP	4	Lightning fire burnt 34,200 Ha in southern Namadgi	NPWS 2003
Gippsland	-	4	“Ash Wednesday”: 210,000Ha, 47 fatalities, 2000 houses	DSE 2004

<b>1984-85</b>				
Mt Fainter (Bogong HP)	Alpine	1	Listed as a major fire	Mooney 2004
Cabramurra	KNP	4	8,000Ha burnt between Tooma Dam and Cabramurra	NPWS 2003
Tumut	KNP	4	9,000Ha burnt in the Bogong Peaks	NPWS 2003
Canberra / Queanbeyan	-	4	28,850 Ha burnt to the east of Canberra in 3 main fires with several smaller. All suspected arson.	Env. ACT 2004a
Mt Buffalo	Mt Buffalo	1	Listed as a major fire	Mooney 2004
<b>1987-88</b>				
Byadbo	KNP, Alpine	4	“Blackjack & Gattamurrh Fires” – 62,800 Ha, lit by 5 lightning strikes	NPWS 2003, Robson 1988
<b>1990-91</b>				
Byadbo	KNP	4	10,000 Ha burnt in the Byadbo wilderness, cause unknown	NPWS 2003
<b>1997-98</b>				
Mt Howitt	Alpine	4	“Alpine Fires” – 32,000 Ha burnt, suspected cause a campfire	DSE 2004
<b>2002-03</b>				
Byadbo	KNP	4	“Slaughterhouse Fire” lit by 4 lightning strikes on 20 December, burnt 33,400 Ha with no damage to private property external to the Park.	DEC/RFS 2004
Alps	Alpine, Buffalo, KNP, Brindabella, Namadgi	4	Multiple lightning strikes from the evening of January 7 (Vic) to mid January 8 (ACT) ignited fires eventually burning 1.7 million Ha. 1 death in Victoria from vehicle accident, 4 deaths and nearly 500 homes destroyed in Canberra, no deaths or loss of homes in NSW.	DSE 2004, DEC/RFS 2004

## **FIRE HISTORY OF THE AUSTRALIAN ALPS – A SUMMARY**

The earliest consistent records of fire in the Australian Alps found so far have been taken from the sediments of Club Lake in Kosciuszko National Park, and date back to approximately the year 1400 AD. Using these, the scars left by even the mildest fires in the sensitive bark of the Snowgums, the memories of the “Mountain Men” of our time and the modern mapped records we can divide the past 600 years into the following time periods and roughly estimate fire frequency and extent for Kosciuszko National Park as an indication of the entire Alps region:

- 1400 – 1600 Moderately frequent / intense fires through the mountains, due either to climate or management
- 1600 – 1840 Low frequency fire (average 10 per annum throughout KNP) with rare high intensity events. Fires of 100,000 Ha or greater on average every 49 years.
- 1840 – 1955 High frequency fire (average 50 per annum throughout KNP) largely due to management, frequent high intensity bushfire events. Fires of 100,000 Ha or greater on average every 12 years.
- 1955 – present time. Low frequency fire (average 11 per annum throughout KNP) with small part due to management; high intensity bushfire events moderately frequent. Fires of 100,000 Ha or greater on average every 44 years.

Intensity of bushfire events is related to fuel, terrain and weather conditions. Management that has encouraged the proliferation of elevated fuels and/or encouraged drier forest types to replace wet forests has created more opportunities for high intensity fire to occur.

Very large fires have only occurred naturally when there have been sufficient successful ignitions in the right areas and under the right climate and temporal weather conditions. The only record of such a fire has been 2003, although other comparable and larger events have occurred in the early European period when there have been sufficient human ignitions.

Ignition source is the limiting factor for fire in the mountains, the more fire that is present in the mountains at any given time, the greater the likelihood will be of a bushfire event.



Figure 31. Fred Fletcher at White's River Hut, where he worked on snowlease country when the 1939 fire came through. Photo P. Zylstra

## A Vision from Generations Past

The judgement of Leonard Stretton was that even the venerable and seasoned bushmen of the Alps “*had not lived long enough*” to know what to expect of fire in those mountains. There is no need however for us to limit our learning to our own lifetimes when those who have gone before us have so much to offer. The memories and records of men that rode the mountains with their stock (figure 31) or those before that watched the peaks carefully over thousands of years should not be left to fade. Where people have forgotten, the trees hold the memory; and where the trees have forgotten there is history stored in the earth itself, in charcoal and pollen from centuries long forgotten.

There are some broad trends that can be seen as we look back; we

see the last days of a time when fires were very rarely lit in the high country and large fires rarely seen. These days of open high plains with their summer feasts and masses of wildflowers rolled into the time of the mountain graziers and foresters – men who's faces still light up at the mention of a beloved valley or peak. During these years, fire was introduced regularly as the older days were forgotten. The fires of Black Thursday in 1851 (figure 32) had driven men higher into the Victorian Alps searching for grass and bringing their fire with them. Amongst the mountain men of that time

were the quiet, wise voices of a few that saw the mountains changing in their lifetimes, but the voices were perhaps too quiet or too few. By the time these men began to leave the mountains, the high country had been changed and fire was there to stay. Even with no hands to light them, the fires of 2002/03 burnt half the area burnt in 1939. Both of these fires, along with those of 1952 and possibly other years such as 1930/31, 1926,



Figure 32. The Black Thursday fires of 1851. Photo DSE, VIC.

1924 and those around the turn of the century enormously larger than any experienced in the Alps in the century prior to these new ways. If 1939 taught us that we need to be more careful with fire, 2003 taught us that fire could still come despite our greatest

care. It reminded us that fire has its favourite pathways through the mountains, and it taught us that the way we change the mountains can turn a freak storm into the beginning of something far larger, that very few of us alive could have ever expected.

The mountains recover slowly from the changes of the past 6 generations. The vast expanses of wildflowers slowly return to the glory they had when the early mountain men first saw them; but the minds of men change more slowly if they ignore the lessons of the past. We are no longer limited to the vision of 1 lifetime, we have a far longer period to tell us that although fire will always be with us, it will hold less terror as we learn the places it belongs, and respect the places that should be free of it.

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*But sad are those who treasure still the tales of ages past  
For they, and all these precious tales will disappear at last  
And who will there be left to tell the stories to the flames?  
Alone, the ancient mountains will remember them in vain.  
And silent still, the old, old mountains tower overhead  
And still, against the dusted skies, the spiders weave their thread  
The Gang Gangs chatter restlessly as night draws into dawn  
And cold, the darkened embers wait to see what age is born.*

'A Campfire Yarn', P. Zylstra

## **DISCLAIMER**

The data provided in this report and its associated maps has been collected with every effort to maintain its integrity and accuracy. The data however cannot be guaranteed to be free of errors, and as this report makes clear elsewhere, many omissions will occur due to the fact that much fire history was not recorded at the time it occurred and many fires are no longer remembered. The limitations of the data are more explicitly set out in Table 1. The opinions expressed in this work are those of the author and do not necessarily represent those of the individuals that have kindly contributed, or of the Australian Alps Liaison Committee.

The Australian Alps Liaison Committee accepts no liability for any problems that may arise from any work carried out using this data.

