



*Hillborough Road South Hobart following the 1967 bushfires, photo courtesy of Tasmania Fire Service collection.*

## **PART B: HISTORY OF BUSHFIRE IN TASMANIA**

Bushfire is part of the natural history of Tasmania and continues to be a feature of the landscape, as it does for many parts of Australia, especially the south-eastern areas of Australia.

### **Fire's Role in the Environment**

Fire forms an important part of Tasmania's ecosystem and it was used by Indigenous Tasmanians for managing the land and biodiversity and for hunting. Early European settlers also used fire widely in land management practices. In addition, natural fire occurs through lightning strikes.

Some vegetation, such as dry sclerophyll forest in the middle, northern and eastern areas of Tasmania, recovers well from fire, and many species rely on fire for regeneration. The southern and western areas are mainly wetter and fire is not so common or as suitable for regeneration, though the button grass plains can burn readily at most times.

Southern Australia is reputedly one of the most bushfire prone areas of the world and Tasmania is included.

### **Fire since European Settlement**

This overview of fire history does not represent all fire activity. Rather, it provides a description of significant and major fires, with more detail on fire activity in the more recent fire seasons.

Since European settlement in 1803, Tasmania has experienced a number of significant bushfire events.

In January 1854, a large bushfire burnt through the Huon and Port Cygnet areas destroying homes and farming equipment. The size of the fire is unknown, but 14 people died and many were injured. Due to the reliance on local farmers for food production, it is likely there would have been significant community recovery challenges.

From December 1897 to January 1898, devastating fires burned around Hobart and across the Mount Wellington ranges. It is estimated that six people died; 43 properties were destroyed between Oyster Cove and Mount Wellington, including the Longley Hotel, a police station, post office and two churches; and extensive damage to farming areas and infrastructure was sustained.

Strong winds and high temperatures contributed to significant fires in the Derwent and Huon Valleys in the summer of 1933–34. It is estimated that the Forest Fire Danger Index rating reached 92, placing it in today's Extreme range (see Table D.1 in PART D for the Index). Details on property damage are not available; however, a timber mill along with timber valued at \$1.1M in today's terms were lost.

## **1967 Bushfires**

A wet winter and early spring in 1966 led to increased vegetation growth across many parts of Tasmania. Over 1966–67, the State experienced the driest summer since 1885, and on 7 February 1967, southern Tasmania experienced the worst bushfire event in its history.

By mid-morning on 7 February, it is estimated there were 110 fires burning in the southern part of the State. Many were reportedly started from burn-offs in previous days, and others were either accidental or deliberately lit. The temperature on the day reached 39 degrees and a Forest Fire Danger Index rating of 128, placing it in the Catastrophic range.

Over 24 hours, the bushfires:

- burned 264 270ha
- destroyed 1 400 homes and other 128 buildings
- killed 62 people and injured another 900
- destroyed 80 timber bridges, 5 400km of fencing and 1 500 vehicles
- caused stock losses of 62 000.

In some ways, the 1967 bushfires were similar to the events experienced in January 2013. Fires started beforehand and were not completely extinguished; authorities had to contend with multiple fires burning in different areas; and the fires ran through rural and seaside towns where people sought refuge on beaches and in clearings.

A comparison of the weather conditions between the 1967 bushfires and those that are the subject of this Inquiry is provided in PART D.

## **Fires between 1980 and 2000**

Over a more recent period there has been a series of significant bushfire events which continue to challenge the capability of authorities to deal effectively with them.

In February 1981 the west coast town of Zeehan was threatened by bushfires over a number of days and proved difficult to contain and extinguish. Fortunately there was no substantial damage on this occasion.

A 5 000ha fire in February 1982 at Kempton and Broadmarsh was not as kind, killing one person, seriously injuring two others, and destroying eight buildings, 38 outbuildings, substantial farming equipment and fences, and 3 000 livestock. The government of the day declared a State of Emergency for the region.

The Coal River Valley town of Richmond was threatened by a 2 400ha fire in February 1993, though damage was not serious. It took three weeks to contain and extinguish the fire.

A bushfire started from the re-ignition of a previous fire at Ridgeway in January 1998. The fire burned through Fern Tree, Mount Nelson, Taroon and Bonnet Hill and cut the southern outlet between Hobart and Kingston for an extended period of time. Approximately 50 people were injured and seven homes were destroyed.

## **Fires since 2000**

In January 2003, a deliberately-lit fire extended through the Broadmarsh, Mount Dromedary and Brighton areas for two weeks and threatened rural properties throughout the affected area. Despite the fire coming in to suburban Brighton through nearby grassland areas, there was no property loss.

Late 2006 proved to be a busy time for firefighters. In October a deliberately-lit fire started at Risdon Vale on Hobart's eastern shore and ran down the Meehan Range. There was a significant threat to houses and communities. The 800ha fire left 18 000 people without power for a relatively short time as the fire moved under transmission lines, and traffic was diverted away from the Tasman Highway, disrupting access to Hobart Airport. Hobart experienced unusually high temperatures and winds and low humidity for that time of the year, and the Forest Fire Danger Index rating of 123, placing it in the Catastrophic range.

In December of the same year, a fire on the State's east coast destroyed 26 houses and 28 outbuildings. This fire burned over a significant area and impacted on the towns of St Marys, Scamander and Four Mile Creek, and many smaller communities in these areas. One person was killed and there was significant interruption to the tourist season as it approached its peak period.



*Photo courtesy of Bernard Plumpton*

At the same time, firefighters in the south were dealing with a large bushfire near Kellevie. Difficult terrain caused problems with accessing the fire, and it took several weeks to contain and extinguish. Both the east coast and Kellevie fires destroyed an estimated \$50M in production forest for Forestry Tasmania.

The Lavinia Reserve on King Island sustained serious environmental damage when a deliberately-lit fire burned over 12 500ha in February 2007. This fire proved difficult to resource as the island is reasonably isolated.

In March 2008, the Heemskirk fire destroyed 18 500ha and threatened west coast infrastructure, such as the Savage River mine. The fire was eventually contained before it could impact on the mine and severe economic disruption was averted.

In January 2010, a deliberately-lit 6 500ha fire started near Wayatinah in the Upper Derwent Valley. The fire burned for several days with high fire danger ratings of 48 being reached on 31 January. The fire had the potential to travel into New Norfolk. A large area of regenerated forest and pine plantation was lost and fences, hay sheds and other farming infrastructure destroyed.

The 2009–10 fire season was characterised by a wet winter breaking a prolonged drought which generated significant growth of vegetation across the State. This growth provided a potential link for fires between separate forested areas. A wet winter provided a slow fire start to spring; however, several hot and windy days created an environment for several bushfires to burn, most notably at Dolphin Sands on 20 November, where three houses were destroyed and numerous others were damaged.

Over summer there were several major bushfire events, including a protracted fire at York Town involving significant timber reserves and a potential to impact on the town of



*Photo courtesy of Bernard Plumpton*

Beaconsfield. Other significant fires occurred in mid to late January at Lake Macintosh (3 500ha were burnt), Wayatinah (6 500ha) and Montagu (2 200ha).

A La Nina weather cycle drove a generally quiet fire season with a wetter than average summer in 2010–11. There was a relatively short period when fire permits were required for burning off, but a longer period was required on King Island, where there were concerns over dry surface fuels and the potential for bushfires to burn overnight. A dry autumn provided some additional fire activity.

For the 2011–12 fire season, La Nina conditions provided a quiet lead-in time for vegetation fires in the southern region while the number of fires in the north and north west were normal. Regular rain in the north west region meant there was below normal bushfire activity, with only one significant fire at Marrawah. The northern region was normal and the south region experienced lower than normal fire activity.

The fire permit period began on 22 December 2011 and continued until after Easter, except in the northwest and the Furneaux Group, where it finished earlier. Despite a reasonably quiet bushfire season, there were still major fires at Evandale (280ha were burnt), Powranna (300ha), Meadowbank (5 250ha) and Symmonds Plains (600ha).

During the 2012–13 fire season, there were a number of fires and it was a busy fire season. Details on these fires are provided in Table E.2 and in PART E.

## Summary

Therefore it can be seen that there are a range of fires to be dealt with in a fire season, with variation caused by weather conditions in the lead up to or throughout the season.

Each fire is potentially a major or significant fire if not properly dealt with or where weather conditions compromise the ability to effectively suppress them.

Tables B.1 and B.2 and Figures B.3 and B.4 below provide numerical and comparative information on the fires over the last decade.

*Table B.1*

Season	2002/03		2003/04		2004/05		2005/06		2006/07		2007/08	
Month	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Jul	1	15.5	1	10.0	1	1.0	0	0.0	1	0.1	0	0.0
Aug	1	0.2	1	63.6	0	0.0	0	0.0	3	364.3	2	199.0
Sep	6	103.2	1	31.2	7	79.8	1	1.1	8	169.7	4	174.5
Oct	4	2.9	2	15.1	19	12994.5	2	1.0	13	46672.3	13	1320.6
Nov	9	1504.1	24	86414.1	8	120.1	8	562.9	8	6717.1	6	4849.0
Dec	9	2984.9	15	15203.9	6	67.9	3	36.3	22	54470.2	8	204.1
Jan	24	46142.7	12	12753.8	21	6207.4	17	9850.1	13	32522.8	16	5649.7
Feb	12	11007.8	9	1291.3	3	161.6	3	4.7	13	20535.0	9	1295.3
Mar	5	102.8	5	1687.2	4	184.7	3	4572.5	5	56727.6	10	20007.7
Apr	2	175.7	1	0.1	4	881.5	1	25.1	5	367.1	2	5692.0
May	2	7.8	1	6.2	1	1.7	1	9.4	0	0.0	1	1.2
Jun	0	0.0	2	1.2	0	0.0	0	0.0	0	0.0	1	11.9
Totals	75	62047.5	74	117477.7	74	20700.4	39	15063.2	91	218546.1	72	39404.7



Table B.1

Season	2008/09		2009/10		2010/11		2011/12		2012/13	
Month	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area
Jul	0	0.0	0	0.0	0	0.0	1	0.8	0	0.0
Aug	0	0.0	0	0.0	0	0.0	0	0.0	2	13.2
Sep	2	101.0	0	0.0	0	0.0	1	0.6	2	52.7
Oct	27	3797.6	5	777.7	4	23.1	2	31.2	9	530.0
Nov	4	520.7	6	805.7	5	213.0	10	232.6	9	4545.4
Dec	6	100.7	3	0.9	2	29.3	12	512.0	26	11856.6
Jan	14	3020.6	26	10228.3	3	107.2	24	723.9	32	93422.9
Feb	5	599.3	16	12581.7	0	0.0	10	6421.7	25	5607.4
Mar	2	3.9	4	81.2	10	4113.8	9	435.5	20	3134.4
Apr	1	4.4	0	0.0	0	0.0	5	94.5	2	5.7
May	1	360.9	0	0.0	2	4.6	1	4.8	0	0.0
Jun	0	0.0	0	0.0	4	29.3	0	0.0	1	98.7
Totals	62	8509.0	60	24475.4	30	4520.2	75	8457.7	128	119267.0

Table B.2

Season	2008/03 - 2011/12		2012/13	
Month	No.	Area	No.	Area
Jul	0.5	2.7	0.0	0.0
Aug	0.7	62.7	2.0	13.2
Sep	3.0	66.1	2.0	52.7
Oct	9.1	6563.6	9.0	530.0
Nov	8.8	10193.9	9.0	4545.4
Dec	8.6	7361.0	26.0	11856.6
Jan	17.0	12720.6	32.0	93422.9
Feb	8.0	5389.8	25.0	5607.4
Mar	5.7	8791.7	20.0	3134.4
Apr	2.1	724.0	2.0	5.7
May	1.0	39.7	0.0	0.0
Jun	0.7	4.2	1.0	98.7
Annual	65.2	51920.2	128.0	119267.0
Av fire size		796.3		931.8

Data includes fires greater than 0.1 hectare in size, derived from Tasmania Fire Service and Parks & Wildlife Service databases. Quality assurance has not been verified.

Figure B.3

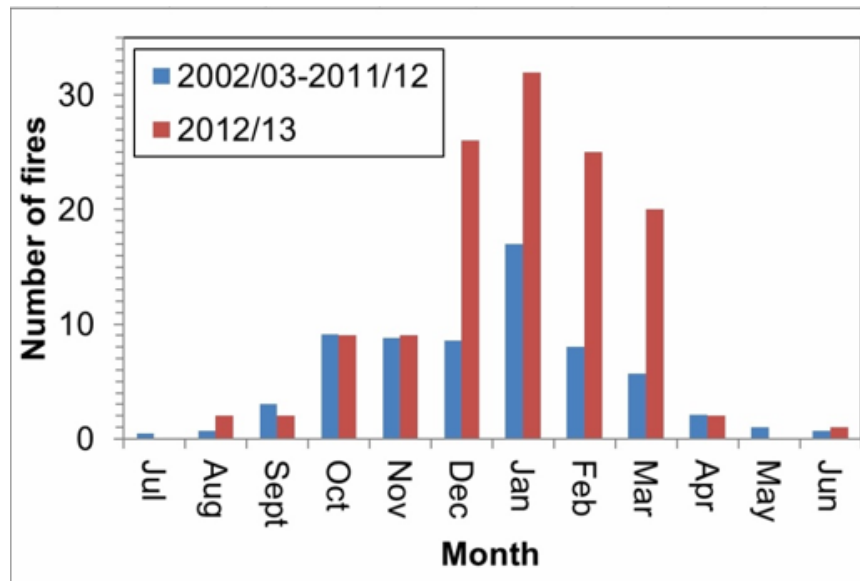
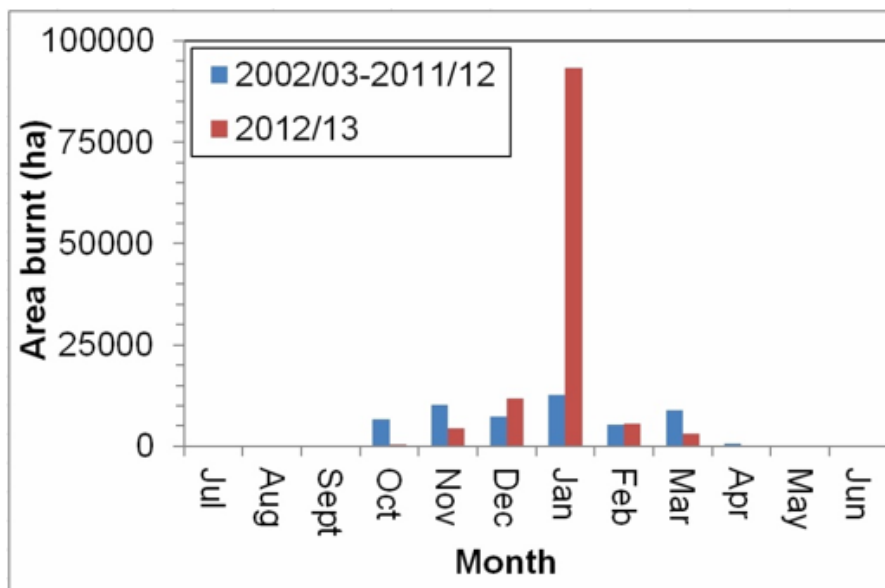


Figure B.4



The chronology of historical fire events does seem to indicate an increasing risk of their occurrence. This may be the product of better recording systems in more contemporary times, and it is necessary to examine supplementary information to better understand whether the risk is increasing or not. In one sense though, the fire risk can already be acknowledged as significant without the need to go any further.

