

# THE JANUARY-FEBRUARY 2009 FIRES

## **OVERVIEW**

Australia is the driest vegetated continent and, along with Southern California and France, one of the most bushfire prone regions in the world.¹ Bushfires have shaped, and continue to shape, all aspects of the environment—landscape, ecosystems, biological diversity and culture. They occur both naturally and as a result of human actions. Indigenous Australians used fire for a variety of reasons, among them hunting and land management and for ceremonial purposes.²

Bushfires have both positive and negative effects on the Australian environment. They can be vital to the continued rejuvenation of the landscape but can also be fatal to some plant species. Where they encroach on inhabited rural areas and the urban fringe the risk of damage, cost and trauma to communities—including loss of life—increases. Although early European settlers were wary of fire, many quickly began to understand its uses and benefits in modifying the landscape for farming and grazing. Fire was often used as a means of clearing land.<sup>3</sup>

The personal and social costs of bushfires are enormous. According to Emergency Management Australia, there were 815 recorded fatalities resulting from bushfires before 7 February 2009. There is no doubt that the number of people affected is far greater. The financial costs are also significant. Between 1967 and 1999 alone the cost of major bushfires in Australia was \$2.5 billion. For the period 1960 to 2001 one source estimated that more than half of the fire-related deaths and injuries, and more than half the damage, occurred in Victoria. <sup>4</sup>

#### PREVIOUS SIGNIFICANT FIRES

Although comprehensive records were not kept until the 1900s, it is known that a number of major bushfires have occurred in south-eastern Australia since European settlement. (Appendix B lists significant major bushfires in New South Wales, South Australia, Tasmania and the Australian Capital Territory between December 1938 and December 2007. Appendix C lists previous significant Victorian bushfires and their impacts. The term 'significant' is used to refer to a fire that has resulted in at least one of three things: deaths being recorded; substantial [in comparison with other fires in the area] property loss or damage; and the burning of substantial [in comparison with other fires in the area] areas of public land.) Fifty-two significant bushfires have been recorded in Victoria since 1851, two-thirds of them in the past 60 years. Of the two-thirds, those that occurred on Black Friday (1939) and Ash Wednesday (1983) are the two most commonly compared with the fires of 7 February 2009.<sup>5</sup>

Image 1

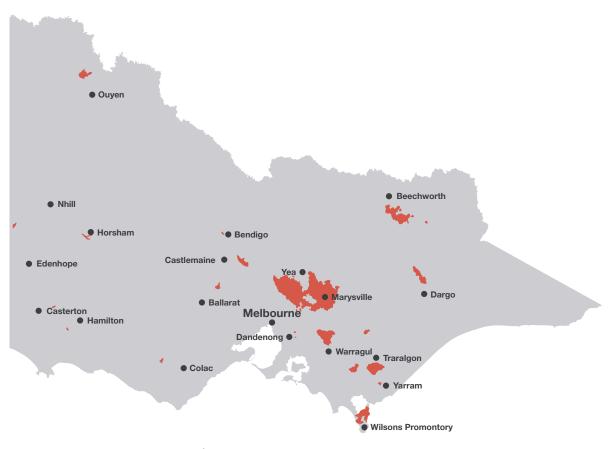


Source: Courtesy of the Herald & Weekly Times.

## **JANUARY AND FEBRUARY 2009**

Despite Victoria's history of fire, the fires in late January and early February 2009—and in particular on 7 February—deeply scarred the people and the landscape of the state. The Commission therefore begins its report with a detailed discussion of 15 of the major fires that burned on 7 February. It describes preparations before 7 February, how the fires started, the areas affected, the progress of the fires, and the management of firefighting, community warnings, roadblocks and emergency relief. Figure 1 shows the extent of the fires.

Figure 1 The January-February 2009 bushfires



Source: Exhibit 11 - Statement of Esplin, Attachment 1.6

The fires discussed, however, were not the only ones that occurred during the 2008–09 bushfire season: Department of Sustainability and Environment and Country Fire Authority staff, as well as volunteers, fought hundreds of fires. The fire season was long and demanding, placing considerable pressure on firefighters even before the worst fires began in early February.

## THE NUMBER OF FIRES

The CFA attended 39,987 incidents in 2008–09; this included 16,103 fires, ranging from fires in rubbish bins to major bushfires such as the Kilmore East conflagration. During the same period DSE attended 825 bushfires.<sup>7</sup>

For DSE, the number of fires in public parks and forests climbed steadily during January 2009 and peaked in early February. The number of fires that had not been extinguished rose from seven on New Year's Day to 29 on 14 January. Then it doubled to 58 by 25 January and continued to steadily increase to 125 in the week before 7 February. By this time firefighting resources had been committed for a fortnight responding to new fires and attending to fires already contained or controlled.<sup>8</sup>

In October 2008 the CFA's Chief Officer, Mr Russell Rees, had warned that the bushfire season was 'rapidly deteriorating'. DSE described the season as 'one of the longest and most demanding firefighting periods in Victoria's history'.<sup>9</sup>

On 7 February Victoria's fire agencies faced enormous difficulties. The CFA responded to 632 incidents; of these, 199 were reported as grass, scrub, tree, vegetation or plantation fires, and 68 of them were controlled within an hour of the original notification. At the same time there were 117 active DSE fires (fires reported as having started on public land), 93 of them having started before 7 February. Not all of these DSE fires were major ones: of the 24 fires reported to DSE on 7 February, four could not be found and 12 were contained to less than 5 hectares.<sup>10</sup>

Because of the sheer number of calls and reports received, it is not clear how many of the calls concerned separate fires, spot fires that developed from other major fires, multiple reports of the same fire, or duplicated responses to the same fire. At least 20 of the 199 grass, scrub, tree, vegetation or plantation fires the CFA responded to were in the vicinity of the Kilmore East fire and probably originated from either the main fire or spot fires.<sup>11</sup>

#### FIRES THE COMMISSION EXAMINED

As noted, the Commission examined the circumstances associated with 15 fires; these were fires that caused the death of people or major damage to property or that had the potential to cause considerable loss. Many of the fires were chosen largely on the basis of their size and impact; some of the smaller ones, however, were chosen in order to provide an insight into the differing circumstances and demands of the day. Broad themes were reviewed for all 15 fires examined, but the Commission concentrated on different detail for different fires.

The Commission examined the following fires:

- Delburn
- Bunyip
- Kilmore East
- Horsham
- Coleraine
- Pomborneit-Weerite
- Churchill
- Murrindindi
- Redesdale
- Narre Warren: Harkaway
- Narre Warren: Lynbrook—Coral Drive
- Narre Warren: Lynbrook—Golf Club Road
- Upper Ferntree Gully
- Bendigo
- Beechworth-Mudgegonga.

#### **OTHER FIRES**

Table 1 summarises other 'significant' fires that burned during January and February 2009 but were not examined by the Commission.<sup>12</sup>

Table 1 Other significant fires - January-February 2009

Incident	Start date	Control agency	Total area burnt (hectares)
Seaford	20.01.09	CFA	5
Langwarrin	21.01.09	CFA	12
Drummond North	22.01.09	CFA	300
Woodend	22.01.09	CFA	193
Merton	27.01.09	CFA	40
Branxholme	29.01.09	CFA	475
Lysterfield	30.01.09	CFA	40
East Tyers – Thomson	07.02.09	DSE	1,778
Wilsons Promontory	08.02.09	DSE	25,200
Muskvale	23.02.09	CFA	2,813
Upwey	23.02.09	CFA	350

Source: Exhibit 192 - DSE and CFA - Operational Debrief Report - 2008/09 Fire Season. 13

Apart from the fires the Commission considered in detail, the Wilsons Promontory fire, which began on 8 February, was by far the largest that confronted Victoria's firefighting agencies during the period in question. The Commission heard some evidence in relation to that fire.

At 18:00 on 8 February a lighting strike caused a fire to start near Sealers Cove, in the Cathedral Range, which is in the eastern part of Wilsons Promontory. South-easterly winds initially pushed the fire to the north. During the next seven to eight days, however, strong easterly winds pushed the fire towards western parts of the promontory.<sup>14</sup>

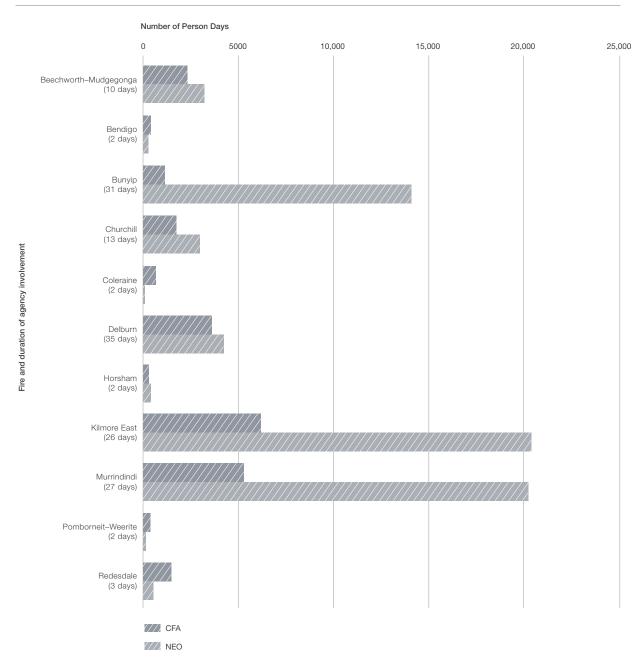
The fire was finally declared under control on 14 March. In 36 days the fire burnt about half the national park, including much of the habitat that provides food, shelter and protection from predators for small mammals.<sup>15</sup>

The wind and climate and the promontory's unique terrain made for hazardous firefighting conditions.<sup>16</sup>

#### THE RESPONSE TO THE FIRES

On 7 February more than 7,000 CFA, Networked Emergency Organisation (including DSE) and Metropolitan Fire and Emergency Services Board firefighters contributed to the firefighting effort. For some, this was the beginning of a much larger effort. During the ensuing month there were more than 80,000 days of firefighter attendance among them more than 60,000 NEO staff and almost 20,000 CFA career staff and volunteers. Figure 2 shows the CFA and NEO contributions to a selection of the fires.<sup>17</sup>

Figure 2 The CFA and NEO commitment to the fires - a summary



Note: Totals include multiple responses by an individual. For example, if a CFA or NEO firefighter attended a fire on more than one day, they are counted for each day they attended.

Source: Exhibit 939 – Details Regarding Emergency Response. 18

In addition to the efforts of CFA, DSE, NEO and MFB firefighters, a number of other individuals and agencies contributed to fighting the fires and to the recovery effort:

- private firefighting crews made up of local farmers and graziers
- interstate firefighters
- industry brigades
- Victoria State Emergency Service
- Victoria Police
- Ambulance Victoria
- local councils
- public and privately owned utilities
- the Australian Defence Force
- numerous individuals and residents.

Without the collective efforts of all individuals, communities and organisations, the damage and disruption caused by the fires would have been more extensive and the risks to life and property even greater.

## PRESENTATION OF INFORMATION

The chapters that follow provide evidence about conditions on 7 February and fire behaviour on the day, concepts relevant to an understanding of the fires, and emergency and incident management arrangements. After that a narrative is presented for each of the fires the Commission considered; it discusses in particular preparation for, the cause of and the response to the fire. Finally, Chapter 15 looks at conclusions that can be drawn from the narratives.

In this part of Volume I all times are presented using the 24-hour clock: this is because the material deals with operational matters, which are usually described using this method, and the material contains quotes and other references that use the 24-hour clock.

## The time lines

The time lines for the fires summarise important events. They are not intended to be a complete record of everything that occurred on the day; rather, they list the main elements of each fire and the pressures facing agencies at the time. In some cases the time line is incomplete because there are gaps in the evidence available to the Commission.

## Maps

The maps show the final fire perimeter and, where applicable, the fire's progress before and after the wind change. They are intended simply to facilitate understanding of the events associated with each fire and are based on the best available data and observations at the time.

## The overview panels

The overview panels summarise some of the main aspects of the fires relating to weather, fatalities, casualties, damage, and the use of firefighting resources. They were compiled using the best available evidence.

Victoria Police provided evidence on fatalities and casualties, the evidence having been gleaned from its investigations into the bushfires. Casualty figures refer to the number of hospital admissions. In the case of fires that were not subject to police investigation, casualty figures were not available; the figures were derived from other sources. Evidence on temperature, humidity and wind conditions on 7 February comes from Bureau of Meteorology's automatic weather stations across the state; figures for each fire come from the station closest to the fire ground.

## Narratives

The narratives for each of the 15 fires the Commission focused on constitute a synopsis of the main events, supported by more detailed consideration of matters the Commission considered relevant to its analysis and recommendations, as presented in Volume II. The narratives are not intended to provide a complete record of every action taken on 7 February 2009. To aid understanding, a glossary of bushfire terms and concepts is provided at the end of this volume, and a brief description of the elements of a bushfire is provided in Appendix D.

- 1 Exhibit 145 Climate Change Impacts on Fire-Weather in South-East Australia (TEN.055.001.0001) at 0011
- 2 Exhibit 142 National Inquiry on Bushfire Mitigation and Management (TEN.049.001.0001) at 0039, 0164; Exhibit 726 Forest of Ash: An Environmental History Chapter 1 Continent of Fire (RSCH.030.001.0001) at 0001; Exhibit 726 Living in a Land of Fire (RSCH.016.001.0663) at 0663, 0665
- Exhibit 720 Inquiry into the Impact of Public Land Management Practices on Bushfires in Victoria (TEN.090.001.0001) at 0050; Exhibit 726 – Forest of Ash: An Environmental History – Chapter 3 – Improving (RSCH.030.001.0028) at 0032–0033, 0036
- 4 Exhibit 142 National Inquiry on Bushfire Mitigation and Management (TEN.049.001.0001) at 0042; Exhibit 959 Summary Australian Bushfire Statistics (From Emergency Management Australia) (TEN.282.001.0001); Exhibit 145 Climate Change Impacts on Fire-Weather in South-East Australia (TEN.055.001.0001) at 0011
- 5 Note that the number of deaths recorded, especially for fires occurring in the 1800s, does not include the Indigenous population.
- 6 Exhibit 11 Statement of Esplin, Attachment 1 (WIT.005.001.0049) at 0111
- 7 Exhibit 855 CFA Annual Report 2009 (TEN.205.001.0001) at 0021
- 8 Exhibit 857 Department of Sustainability and Environment Annual Report 2009 (TEN.201.001.0001) at 0047
- 9 Exhibit 3 Statement of Rees (WIT.004.001.0001) [309]; Exhibit 857 Department of Sustainability and Environment Annual Report 2009 (TEN.201.001.0001) at 0047
- 10 Exhibit 787 Further Statement of Fogarty (WIT.3024.005.0253) [19], Annexure 1 (WIT.3024.005.0260); Exhibit 786 Statement of Clow (WIT.3004.034.0004) [7], [14], Annexure 3 (WIT.3004.034.0016), Annexure 4 (WIT.3004.034.0019)
- 11 Exhibit 786 Statement of Clow, Annexure 3 (WIT.3004.034.0016), Annexure 4 (WIT.3004.034.0019)
- 12 Exhibit 192 DSE and CFA Operational Debrief Report 2008/09 Fire Season (DSE.HDD.0030.0102) at 0111-0113
- 13 Exhibit 192 DSE and CFA Operational Debrief Report 2008/09 Fire Season (DSE.HDD.0030.0102) at 0112
- 14 Exhibit 401 Statement of Mitchell (WIT.3024.003.0315\_R) [62]; Mitchell T9509:20–T9509:22, T9509:27–T9509:30
- 15 Exhibit 989 Parks Victoria Annual Report (RSCH.040.001.0632) at 0647
- 16 Exhibit 989 Parks Victoria Annual Report (RSCH.040.001.0632) at 0643; Mitchell T9509:15-T9509:16, T9510:1-T9510:18
- Exhibit 939 Details Regarding Emergency Response (CFA.600.005.0195); Exhibit 939 Day by Day Breakdown Bendigo (DSE.HDD.0048.0545\_17); Exhibit 939 Day by Day Breakdown Beechworth (DSE.HDD.0048.0545\_18); Exhibit 939 Day by Day Breakdown Bunyip (DSE.HDD.0048.0545\_01); Exhibit 939 Day by Day Breakdown Coleraine (DSE.HDD.0048.0545\_01); Exhibit 939 Day by Day Breakdown Delburn (DSE.HDD.0048.0545\_24); Exhibit 939 Day by Day Breakdown Horsham (DSE.HDD.0048.0545\_24); Exhibit 939 Day by Day Breakdown Kilmore East (DSE.HDD.0048.0545\_05); Exhibit 939 Day by Day Breakdown Murrindindi Mill (DSE.HDD.0048.0545\_13); Exhibit 939 Day by Day Breakdown Redesdale (DSE.HDD.0048.0545\_16)
- Exhibit 939 Details Regarding Emergency Response (CFA.600.005.0195); Exhibit 939 Day by Day Breakdown Bendigo (DSE.HDD.0048.0545\_17); Exhibit 939 Day by Day Breakdown Beechworth (DSE.HDD.0048.0545\_18); Exhibit 939 Day by Day Breakdown Bunyip (DSE.HDD.0048.0545\_01); Exhibit 939 Day by Day Breakdown Churchill (DSE.HDD.0048.0545\_11); Exhibit 939 Day by Day Breakdown Coleraine (DSE.HDD.0048.0545\_09); Exhibit 939 Day by Day Breakdown Delburn (DSE.HDD.0048.0545\_24); Exhibit 939 Day by Day Breakdown Horsham (DSE.HDD.0048.0545\_08); Exhibit 939 Day by Day Breakdown Kilmore East (DSE.HDD.0048.0545\_05); Exhibit 939 Day by Day Breakdown Murrindindi Mill (DSE.HDD.0048.0545\_13); Exhibit 939 Day by Day Breakdown Redesdale (DSE.HDD.0048.0545\_16)