





▲ A Department of Sustainability crew tries to control bushfires south of Jamieson, Victoria. In 2006 Victoria's fireflighters faced searing temperatures and strong winds as they battled huge blazes sweeping across the state's north east and Gippsland regions.

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HEATWAVES

In Australia during the last century heatwaves caused more deaths than any other natural hazard. In 1939 a heatwave in southern Australia caused 438 deaths.

Marble Bar, WA, holds the world record for the longest heatwave. For 160 days from 31 October 1923 to 7 April 1924 temperatures averaged more than 38°C (100°F).

What is a heatwave?

A prolonged period of excessive heat and humidity, during which temperatures average more than 38°C.

What causes heatwaves?

Slow-moving warm fronts during the hottest months of the year.

What are the effects of heatwaves?

- Humans people suffer from heat stress when the body absorbs more heat than it can dispel. Heat stroke (hyperthermia) can be fatal.
- $\label{eq:constraints} \mbox{Agriculture-animals suffer heat stress in a similar way to humans, and crops and vegetables are also at risk.}$
- Vegetation plants and trees often perish under excessive heat. Heatwaves are also a major contributor to severe bushfires.
 Infrastructure heatwaves can cause damage to roads, railways and bridges.
- Utilities water and electricity consumption increases during heatwaves, often causing shortages. Computers can also overheat and break down.

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WAJOR DR	OUGHTS IN AUSTRALIA:	
- 1901-3	Sheep and cattle numbers halve	d, wheat crop all but lost – Darling R
	nearly ran dry at Bourke, NSW.	
1911-16	19 million sheep and 2 million ca	
m 1918-20	Virtually the whole continent aff	ected.

40% drop in wheat harvest and A\$300–500 million lost in farm income. Drought contributed to the 1967 Tasmanian bushfires.

Losses of over A\$5 billion, influenced by a strong El Niño weather pattern. South Australia, Victoria and the Murray-Darling Basin experience the driest period since 1900.

Total losses A\$3 billion over eastern Australia.

30 million sheep lost.

THESE-68

NATURAL DISASTERS IN AUSTRALIA 1967-99 Average annual cost (A\$ million) Number of deaths Number of injuries Floods 314 99 1.019 Severe storms 284.4 58 942 958 266.2 154 Cyclones 191 144.5 13 Earthquakes 77.2 223 4,185 Bushfires Landslides 1.2 18 1 1,087.5 565 7,296