

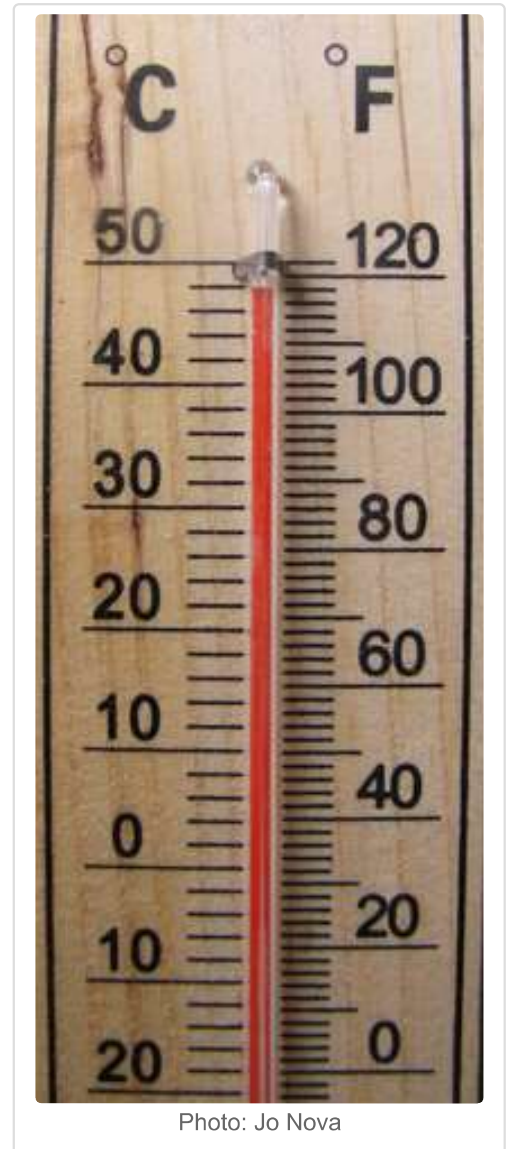
Extreme heat in 1896: Panic stricken people fled the outback on special trains as hundreds die.

Post by: Lance Pidgeon with assistance from Chris Gillham and others.

It is as if history is being erased. For all that we hear about recent record-breaking climate extremes, records that are equally extreme, and sometimes even more so, are ignored.

In January 1896 a savage blast “like a furnace” stretched across Australia from east to west and lasted for weeks. The death toll reached 437 people in the eastern states. Newspaper reports showed that in Bourke the heat approached 120°F (48.9°C) on three days (1)(2)(3). The maximum at or above 102 degrees F (38.9°C) for 24 days straight.

By Tuesday Jan 14, people were reported falling dead in the streets. Unable to sleep, people in Brewarrina walked the streets at night for hours, the thermometer recording 109F at midnight. Overnight, the temperature did not fall below 103°F. On Jan 18 in Wilcannia, five deaths were recorded in one day, the hospitals were overcrowded and reports said that “*more deaths are hourly expected*”. By January 24, in Bourke, many businesses had shut down (almost everything bar the hotels). Panic stricken Australians were fleeing to the hills in climate refugee trains. As reported at the time, the government felt the situation was so serious that to save lives and ease the suffering of its citizens they added cheaper train services:



“The Commissioner of Railways promised a deputation of members of Parliament to run a special train every Friday at holiday excursion rates for the next month to enable settlers resident in the Western part of the colony to reach the mountains to escape the great heat prevailing.”

(Source)

It got hotter and hotter and the crowded trains ran on more days of the week. The area of exodus was extended to allow not only refugees from western NSW to flee to the Blue Mountains but also people to escape via train from the Riverina to the Snowy Mountains. The stories are heartbreaking. *“A child sent to the mountains to escape the city heat died at the moment the train arrived.”* *“Six infants have died at Goulburn since January 1 through the excessive heat.”* Towns were losing their esteemed, lamenting the loss of the good reverend, or of their well known miners. Children were orphaned.



“A woman has been brought to the Bulli Hospital in a demented condition, suffering from sunstroke. She was tramping the roads, with her husband, two days before, when she was prostrated by a sunstroke. Her husband carried her through all the sweltering heat to Bulli, taking two days over the journey.” (Source).



In 1896 the heat was causing people to faint, become demented and was even blamed for driving people mad. *“Several women fainted in the streets. A little girl, while walking along Surrey Hills, suddenly became demented through the heat.”* In Bendigo *“a young man named Edward Swift, hairdresser, was so overcome by the heat*



The Victorian heatwave of 2009 was sold as the worst heat

that he was unable to work, and in despair shot himself, in the breast. It is a hopeless case." Longreach "police authorities at Longreach received information that a man who was insane was about fourteen miles out of the town." "The bodies of people who die of sunstroke decompose very quickly". An axe wielding man in Bourke cut down three telegraph poles before he was "secured" by police. Presumably the real cause of the madness was something else, but the heat was the last straw. "Birregurra was stirred from its wanted sleepiness on Saturday evening last by the appearance in the streets of a mad man who caused no small consternation." It could be that nuttiness was equally common on other months, or other years. But at the time, people blamed the heat.

wave in southern Australia for 150 years.

With this and people dropping dead in the streets from Perth through Adelaide to Sydney, the heat wave was described as being universal from west to east . It went north into Queensland and south through Victoria...twice, by which time Australians considered themselves to be "Under Fire".

Later in 1896, heat waves also occurred in India, Burma, Borneo, America. (It was bad in New York. Listen here.) There was heat in England, Germany and Spain. 1896 was an example of extreme weather. [It was obviously the fault of the evil power stations, eh? Just 14 years earlier, Edison had built the first coal-fired electric generating station. If only people had understood just how dangerous it was. 😊 - Jo]

Thermometers were non-standardized in 1896. Some of the extraordinary temperatures come from thermometers with descriptions like ("under passion tree vine.") There it got to 123 in Ultimo in Sydney on January 14. Though some thought the vine thermometer was actually more accurate " *namely, that what is known as the true shade is the shade afforded at the Observatory by one of the loveliest little summer-houses, almost buried in foliage, but with lattice-work all round, so that the breeze may play upon the thermometers, but where the sun's rays can by no means be admitted.*".

Was the 2009 heatwave really worse than 1896?

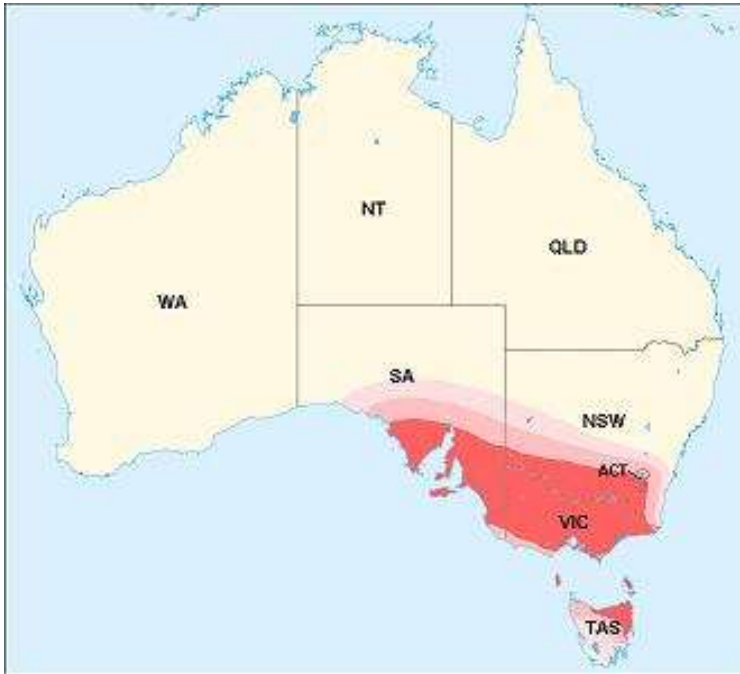
The Victorian heatwave of 2009 was sold as the worst heat wave in southern Australia for 150 years. But it does not appear to be as widespread, as long, or as hot. (Though caveats of comparing different thermometer placements apply — the old ones were in odd places, but the new ones are not necessarily well placed either, with some near airports, buildings and walls). What the newspaper records of 1896 show is that modern extreme heatwaves may not be at all unprecedented in temperature, severity and certainly not worse in terms of suffering.



"These events are unprecedented," Victoria's energy and resources minister Peter Batchelor said on Saturday. "In some respects, they are not unlike a natural disaster, impacting on a community like a flood or tornado." (2009)

The Victorian heatwave began on Jan 25 2009 and broke on Jan 30. Deaths in Victoria were estimated at between 200 – 374. The population of Victoria in 2009 was about 5 million, about four times larger than the population of NSW at the turn of the century. Death-rates are not a good indicator to compare the severity of heatwaves, as deaths in 1896 would have been less if air conditioners and modern hospitals had been available then.

How widespread was the heat in 2009?



The [Wiki page](#) associated with the above map, makes claims like “January 7th 45.2° C (113.4° F) – Hottest day recorded in Wagga Wagga since records began in 1941”. Records did not begin in Wagga in 1941. That was just when they began at the airport. In 1896 the temperature in Wagga Wagga got to 116.5° F or 46.9° C. It also points out that Melbourne for three days in a row had temperatures peak above 43° C. This is nearly the same temperature (109° F) that by midnight of the 22 Jan 1896 [Brewarrina got down to](#).

How widespread was the heat in 1896?

Please note: As well as the caveats mentioned above, the dates given below may be inaccurate and the modern Australian definition of a heatwave may not have been met in all locations.

This widespread:

[Yalgoo](#) W.A. Dec 25 1895 122° or 127° F “*the Emerald Hotel, an iron structure*” or at the Court House ” The latter structure is a ” *wooden frame with duck covering.*”; [Marra station N.S.W.](#) 130 F on Jan 21. The link shows a full months record. “*The figures were the readings of three different glasses, which were hung in the front verandah at the Marra, station, and were placed out from the wall on a frame to allow the air to get round them, thereby preventing the heat from the wall affecting the instruments.*”; [Berlino](#) S.A. 130° F Jan 22. The thermometer “*hangs on a stone house with a thickly thatched verandah facing West*” ... “*never reached by the sun*“. From Jan 5 to Jan 13, Berlino recorded many temperatures of 118° – 130° F; [Kopperamanna Bore, via Hergott Springs](#) S.A. “*under date of January 23 : — ‘For the last month the heat here has been excessive. The lowest the glass has registered in the shade, a good canegrass shed, has been 108°. On three different days it showed 118°, and three times 116°, the average for the last month having been 113°.*”; [Cockburn](#) S.A. 122° F Jan 25 (but measured *in the general store*); Near Cobar at [Paddington station](#) around the same “*days it rose to 120deg. and 123deg., on a cool verandah, It seems almost incredible, but one night we looked to see what it was at 11 o’clock, and it registered 106deg.*”.

Plus

Geraldton W.A. Wednesday, 1 Jan 1896 - 114° F "at Geraldton observatory".

Geraldton W.A. Thursday, 2 Jan - 115° F "A child succumbs to the heat." at "Northampton, where the thermometer ranged even higher than at Geraldton."

Geraldton W.A. Friday, 3 Jan - 125° F most papers, 115° F in some (possibly a date error as it matches the previous day).

Perth W.A. 3 Jan - 112° F "Five deaths have been reported in the city on account of the great heat."

Mullewa W.A. 3 Jan - 121° F "The town has been enveloped in clouds of dust." and "crowds of people have had to sleep out of doors. Water is very scarce."

Carnarvon W.A. 3 Jan - 121° F Brick House station "It is farther reported that the mercury has been up as high as 125 in the shade there."

Pinjarrah W.A. 3 Jan - 114° F followed by a minimum of 97° F.

Southern Cross W.A. Week ending 5 Jan - "averaged 115deg." "It has often been as high as 122deg." Mr McKay died in his office chair of heat apoplexy.

Cue W.A. Sunday, 5 Jan - "Three weeks of uninterrupted excessive heat" "each day exceeded 105" "on two occasions reaching 118."

Wilcannia N.S.W. Monday, 6 Jan - 117° F "Wyalong follows close with 114°. Then come Nowra and Corowa with 112."

Isisford Qld. 6 Jan - 112° F "The Government Astronomer states that the high temperature has been caused by a heat wave which has come across the continent from Port Darwin,".

Bourke N.S.W. 6 Jan - "The fact is that out of 93 weather telegrams sent in, 64 gave temperatures ranging from 100° at Cooma, Tabulam, Tenterfield, and a few other places, up to 118° in the shade recorded at Brewarrina and at Bourke. There were 22 stations which reported temperatures ranging from 110° to 118° inclusive."

Canowindra N.S.W. 6 Jan - 114° F "Reaching the highest point on record".

Farina S.A. 6 Jan - 113.5° F "the place occupied by the thermometer being a shadebox such as is used at the Adelaide Observatory."

Ungarie N.S.W. 6 Jan - 125° F "rural districts do not always recognise the nice distinctions between true shade and other shade."

Farina S.A. Thursday, 9 Jan - 112.3° F

Quirindi N.S.W. Monday, 13 Jan - 120° F. Out of 54 temperatures shown on that list only one does not meet the 95° F (35° C) heatwave threshold.

Bulli N.S.W. 13 Jan - 115° F "This has been, the hottest day known".

Kiama N.S.W. 13 Jan - 117° F "A Scorcher Everywhere. Death and Distress."

Parramatta N.S.W. 13 Jan - 111° F "Fruit Broiled on the Trees." "Birds and Animals Drop Dead."

Camden N.S.W. Tuesday, 14 Jan - 123°F "Great Heat Wave" "LIST OF CASUALTIES."

Araluen N.S.W. Friday, 17 Jan - 110° F "It was thought that the heat had passed, but it was back again to-day"

Brewarrina N.S.W. 17 Jan - 122° F "125 deaths attributable to heat apoplexy" (Sydney).

West Wyalong N.S.W. 17 Jan - 114° F "The thermometer at the post office".

Nannine W.A. Saturday, Jan 18 - "After about three weeks of most oppressive heat, with the thermometer frequently registering 120deg. in the shade, the weather has

broken.”

Farina S.A. Tuesday, Jan 21 - 112.3° F *“Old residents say this is the hottest summer they have ever experienced.”*

Broken Hill N.S.W. Wednesday, Jan 22 – 113½° F *“Two horses dropped dead in the street from the effects of the heat.”*

Farina S.A. 22 Jan - 113° F *“The temperature of our police cell was 148° several times.”*

Charleville or Cunnamulla QLD. 22 Jan – 120.5 ° F (116 °F official) *“The average daily temperature from the 1st instant exceeded 114 degrees.”* 25 days!!

Olary S.A. Thursday, 23 Jan - 116° F *“and dust flying in clouds during the afternoon.”*

Adelaide S.A. 23 Jan - 111° F *“Herbert Crown, an ostler at the Langham Hotel, fell down in King William-street this afternoon with sunstroke.”*

Swan Hill Vic 23 Jan - 116° F *“To-day, it is again exceedingly oppressive”.*

Farina S.A. 23 Jan - 114.3° F *“Five deaths have occurred in the town and one outside”.*

Mildura Vic 23 Jan - 120° F *“PHENOMENAL HEAT IN VICTORIA.”*

Broken Hill 23 Jan - 115° F *“Dr Enill took the temperature of the body an hour and a half after death, and found that it was 109¾ .”*

Halbury S.A. 23 Jan – 118° F *“Many children are unwell, and it will go hard with them unless a change soon, comes.”.*

Rapanyup Vic 23 Jan - 113° F *“To-day it is again exceedingly oppressive”.*

Natimuk Vic 23 Jan - 115° F *“Telegrams from the country districts show that the heat was general throughout the colony.”(Victoria).*

Bega N.S.W. 23 Jan - 113° F *“The minimum heat during last night was 73 . To-day the heat was terrific In the true shade the reading was 113 at 2pm”.*

Geelong Vic 23 Jan - 110° F *“ Largely due to a burning north-west wind.”*

Hergott Springs S.A. 23 Jan *“On three different days it showed 118° and three times 116°, the average for the last month having been 113°F. “*

Grenfell and Ivanhoe N.S.W. 23 Jan - 122 ° F *“At Ivanhoe the heat was so intense that the mail horses fell dead on the road.”*

Charleville / Cunnamulla QLD. Friday, 24 Jan – 126/5° F *“The official readings at the Post Office are lower; but the instruments used are placed in a thickly-planted garden which has been heavily irrigated during the last week,”* So at which town was this garden and non Stevenson screen recording? The clue is in the name “Grosvenor” here.

Cunnamulla QLD 24 Jan – *“ The official record showed a reading on Tuesday of 111 degs. in the shade, on Wednesday 116 degs., and to-day 117 degs. On Wednesday at midnight, the high temperature of 99 degs. was recorded.”*

Isisford QLD 24 Jan – *“The thermometer on Monday rose to 114 degs., on Tuesday to 112 degs., on “Wednesday 115 degs., and to-day 118 degs. The country is very bare and the water is giving out fast.”*

Wilcannia N.S.W 24 Jan - 123° F *“not a breath of wind was stirring during the night”.*

Hillston N.S.W. 24 Jan- 115° F *“Anything under 110 is now beginning to be looked upon as contemptibly cool.”*

Wilcannia N.S.W. Saturday, 25 Jan – 120° F *“The thermometer fell 50deg. at Wilcannia, but a death from sunstroke occurred there yesterday.”*

It goes on, can readers check these ones?

125°F at Middle camp station Netely. (Perhaps 160 kilometres south-east of Broken Hill).

129°F at Gundabooka Station near Bourke. (or try here).

125°F at Nelyambo station (Near Nyngan?).

121°F at Namagee N.S.W. "There is no appearance of a change".

125°F at White Cliffs.

124°F at New Angeldool, Jan 27.

124°F at Mossgiel (Where is that?).

What caused the phenomenal heatwaves that hit the world in the late 1800s? It obviously wasn't our air-conditioners and SUV's, and carbon dioxide levels had barely risen over pre-industrial levels (the rise nearly all occurs after WWII).

Photos credit: CBC bank history of country NSW

Rating: 8.9/10 (109 votes cast)

Extreme heat in 1896: Panic stricken people fled the outback on special trains as hundreds die. , 8.9 out of 10 based on 109 ratings

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Ken Stewart
November 6, 2012 at 6:11 am

#1

Well done Lance and the team, and well done Jo. This will be good to hold as a reference po for all future heat waves. Has the Bureau been asked to comment on this?

Ken