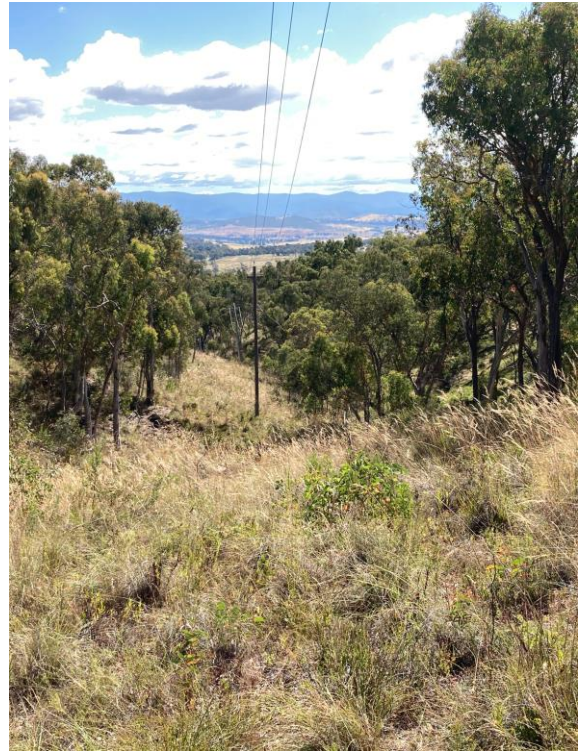


8 JANUARY 2003

This material was gathered during the fires by Rick McRae, then with the ACT Emergency Services Bureau.



The view from the north-west corner of Black Mountain. LEFT: 8 January 2003, with the dust storm obscuring any view of the ranges in the distance. The tree canopy is very thin due to the lead-up conditions. RIGHT: 7 January 2023, showing a clearer sky and a healthier forest.



There was widespread arson in early January 2003 on that part of Black Mountain. It was fortunate that no fires arose from this during the bad fire danger days.



ABOVE: 8 January 2003: Understorey on Black Mountain, showing the effects of lead-up conditions.

BELOW: 7 January 2023: Understorey in a wet summer.

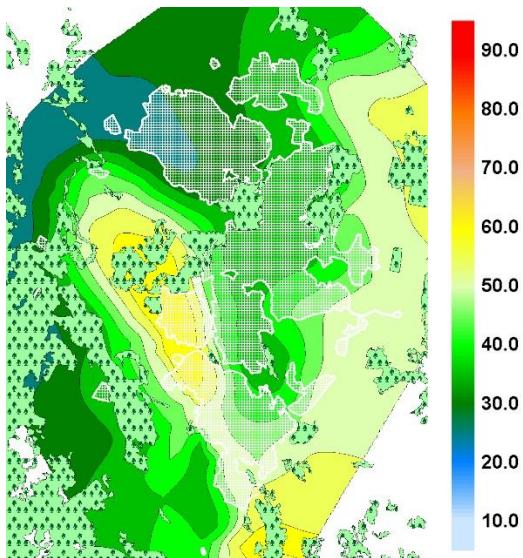




ABOVE: Helicopter view of a fire on Coleman Ridge on 6 January 2003. This area was hot by the fire tornado 12 days later.

BELOW: The helicopter trip was to use an electronic fuel moisture meter to assess fuel flammability in the high country. The results, a day after a thunderstorm, showed that the underlying drought level was high.

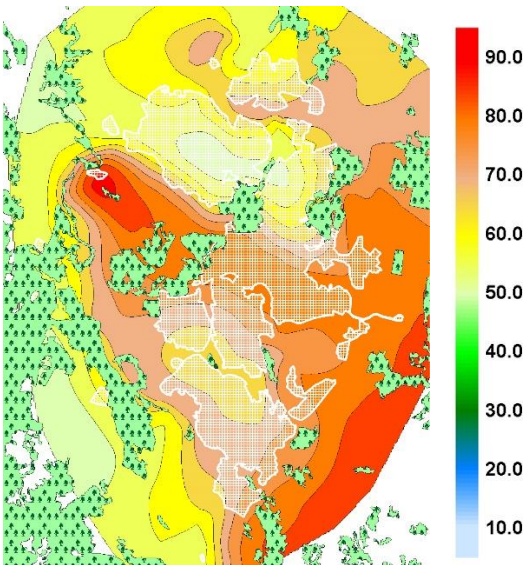




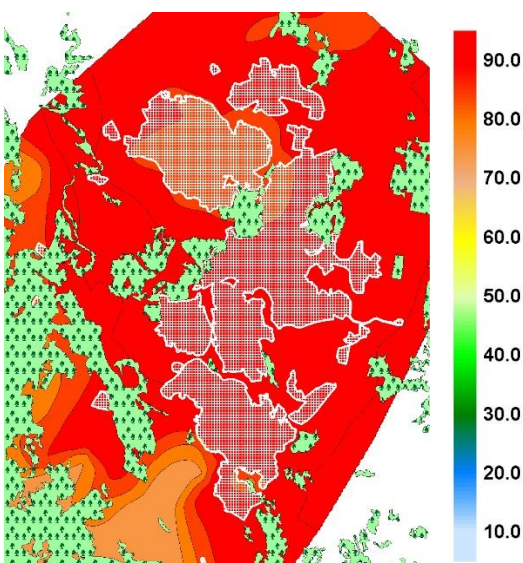
29 October 2002: Grassland curing around Canberra. The change from this point, over the next three weeks was and still is unprecedented.

The scale is curing in percent. At 0% the grass is green and non-flammable. Above 60% some flammability occurs. At 100% it is fully flammable.

This change coincides with the spike in drought level seen below.



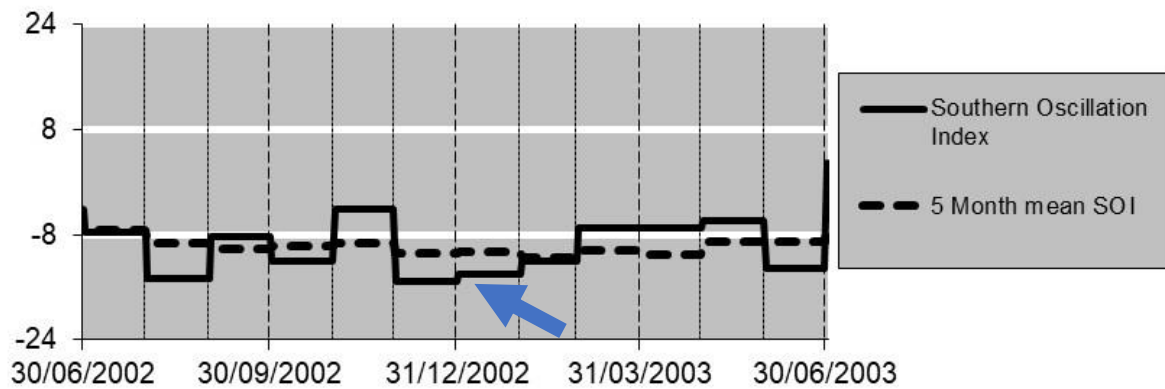
6 November 2002



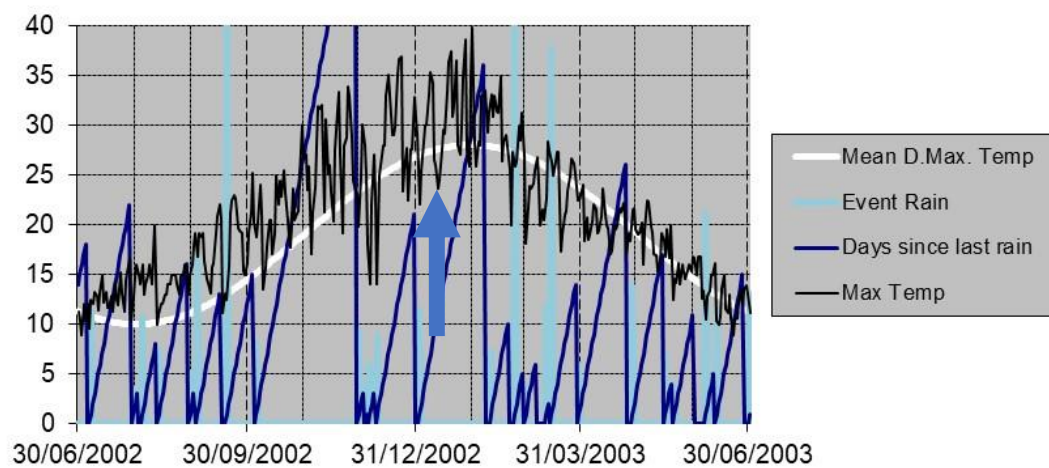
18 November 2002: The entire landscape is now flammable.

Change like this normally takes around 2 months.

The mapped data are from field surveys.

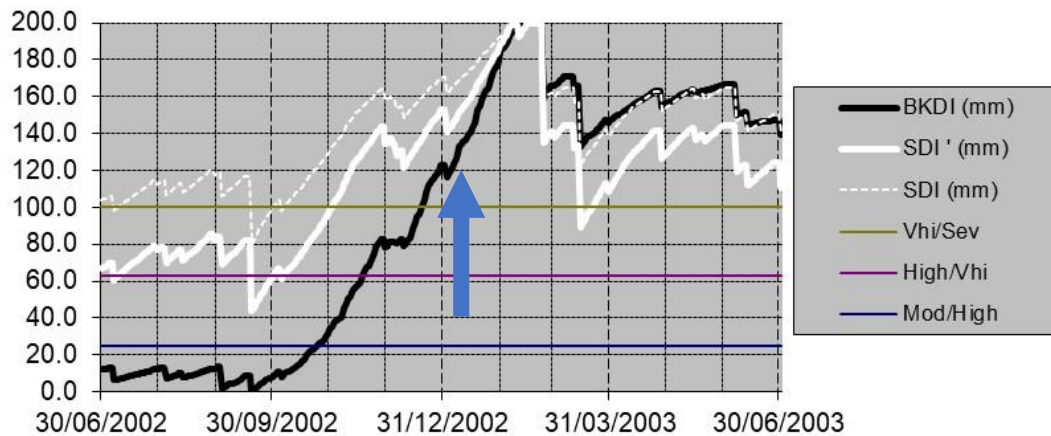


ABOVE: The Southern Oscillation Index clearly showed the impact of a long-running El Niño (shown by SOI below -8). The blue arrow points to 8 January.

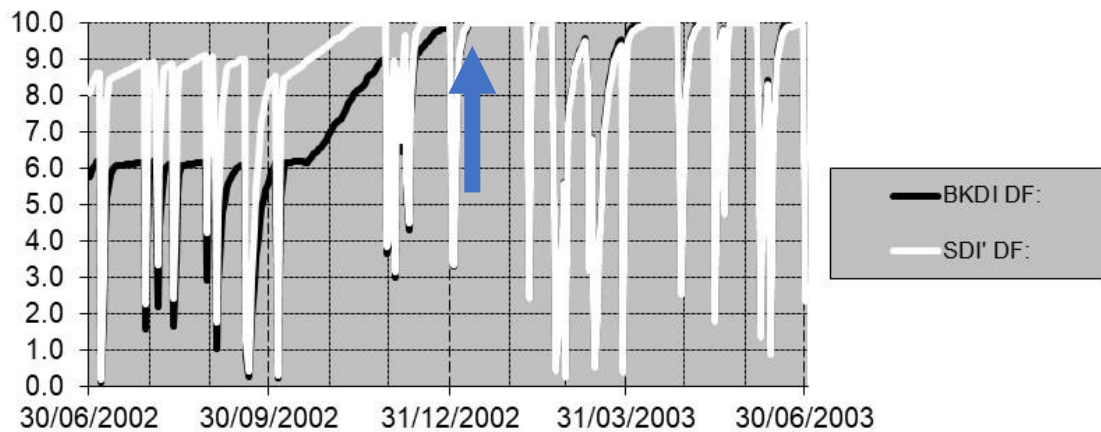


ABOVE: Bureau of Meteorology weather observations from Canberra Airport showed that:

- Temperatures were running well above normal since July.
- There had been a major run without rainfall in October. (It turned out that a second dry run had started.)



ABOVE: The drought Indices were all trending up from a low start in September, eventually maxing out. 0mm means very wet soil surface, 200mm means extremely dry soil surface.



ABOVE: The Drought Factor derived from the Drought Indices. Zero means wet surface fuels and no flammability, 10 means fully flammable surface fuels. Problems arise with DF exceeds 6. Forest Fire Danger is directly proportional to DF. Note the short relief from storms in early January.



ABOVE: The drought severity is obvious in the low storage levels of Corin Dam, 6 January 2003.

NOTE: NEW HOT MIX PLANT INSTALLED AT
MUGGA QUARRY. POSSIBLE SMOKE SIGHTINGS
FROM TOWERS FOR INDIANS CONTACT
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Tower operators are trained to report bearing and distance, but the hazy sky made distance estimates unusable. Bearings are relative to a standard tower north, which was somewhat different to actual magnetic north due to the age of the towers.

It was obvious that this was a regional effort, and a high-level meeting to synchronise efforts was held that night at Queanbeyan.