



# BushFIRE Arson Bulletin

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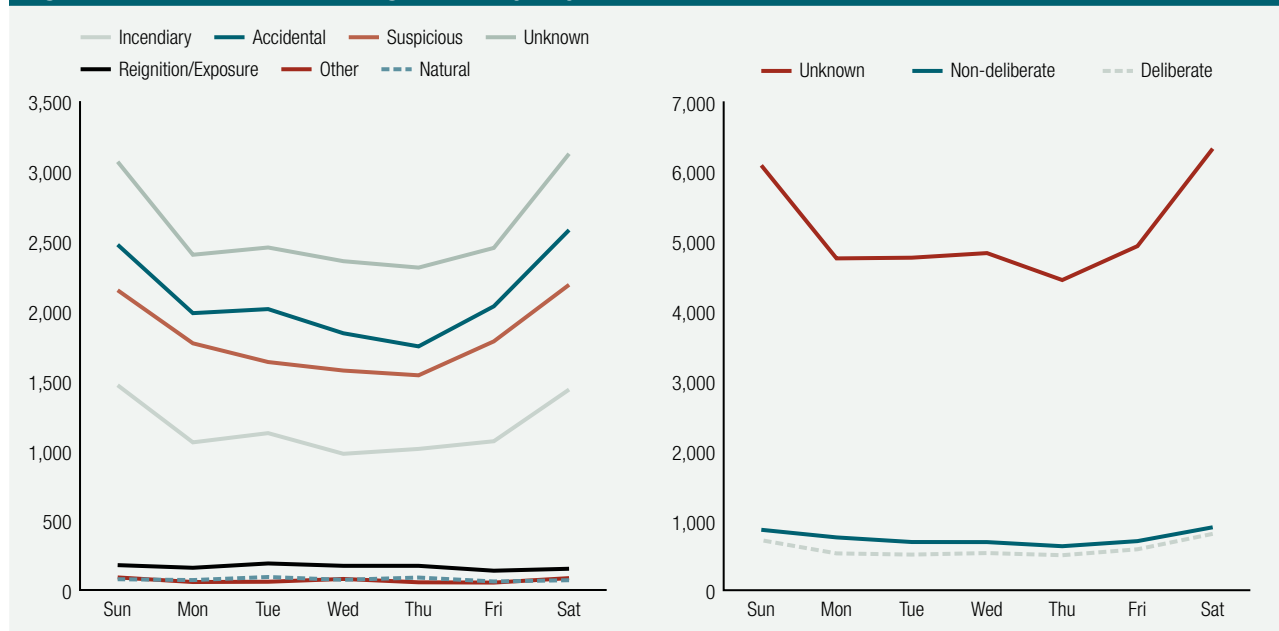
## Weekly patterns in bushfire ignitions

There are many patterns in bushfire ignitions (Bryant 2008). Some of these are geographical; others relate to the time of day or to the day of the week when ignition occurred. A number of inferences can be made about the strong relationship between bushfire cause and ignition pattern.

Figure 1 plots the number of bushfire ignitions against day of the week in the data from a New South Wales and a Queensland fire agency. Deliberately lit fires are likely to be categorised as either suspicious or incendiary; in the latter, a legal decision or physical evidence indicates that the fire was deliberately set. From an analysis of the data provided by 24 agencies, particularly NSW, it is apparent that naturally caused fires show no weekend-weekday variation. Human-induced ignitions, however (those labelled accidental, incendiary or suspicious) peak on the weekend.

Figure 1 also shows that the largest category of fire cause is unknown. This occurs in a substantial proportion of agency data in this country. But the weekend peaks indicate that many of these fires are human-induced, most likely simply because more people are in bush settings on weekend days than on weekdays. Improved data collection and/or knowledge about the causes of fires could enable better targeting by place and time of prospective ignition hot spots, including fires that are human-induced.

**Figure 1: Number of bushfire ignitions, by day of the week**



Source: New South Wales Fire Brigades 1997–98 to 2001–02 (AIC computer data file; n = 55,730)

Source: Queensland Fire and Rescue Service 1997–98 to 2001–02 (AIC computer data file; n = 45,525)

## Reference

Bryant C 2008. *Understanding bushfires: trends in deliberate vegetation fires in Australia*. Technical and background paper no. 27. Canberra: Australian Institute of Criminology. <http://www.aic.gov.au/publications/tbp/tbp027/>

