## **BushFIRE Arson Bulletin**



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## Proportion of deliberate bushfires in Australia

The Australian Institute of Criminology recently completed an extensive analysis of bushfire data collected by Australian fire agencies (Bryant 2008). Approximately 280,000 vegetation fires from 18 Australian fire and land management agencies were included in the analysis, representing around five years of fire data from each agency. The analysis focused on spatial and temporal trends in deliberate vegetation fires – when and where fires occurred, particularly in comparison with non-deliberate fires.

Although the analysis was carried out on an agency and state/territory basis, the availability of national fire data allows some conclusions to be drawn on the proportion of deliberate fires Australia-wide. It was found that the proportion of vegetation fires that were deliberate varies between agencies and regions, as well as across time of day and time of year. However, on average across the country, approximately 13 percent of vegetation fires are recorded as being deliberate and another 37 percent as suspicious. That is, for all vegetation fires for which there is a cause recorded, 50 percent may be lit deliberately (Figure 1).

Other 4%
Reignition/spot 5%
Natural 6%
Accidental 35%
Suspicious 37%
Deliberate 13%

Figure 1: Proportion of vegetation fires in Australia by assigned cause

Source: Combined Australian fire agencies [computer data file]

Some caution should be taken when considering these figures. Just over 40 percent of vegetation fires across Australia do not have a cause assigned by the responding fire agency. Furthermore, inconsistencies exist between and within agencies in recording data. For example, different agencies may have different thresholds as to when they consider a fire to be deliberate, suspicious or unknown. Despite these uncertainties, it is clear that natural fires are actually quite rare and that the vast majority of vegetation fires arise from human causes, including deliberate arson. These figures suggest that reducing deliberate bushfires can have a significant influence on the total number of fires in Australia.

## Reference

Bryant C 2008. *Understanding bushfire: 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/

