Patterns of resprouting of eucalypts after fire

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Abstract

Patterns of resprouting of *Eucalyptus rossii* and *E. macrorhyncha* were monitored on two sheltered and two exposed aspects following a wildfire in February 1991 in the Black Mountain Nature Reserve, ACT. Overall 673 individuals were monitored, 87 per cent of which resprouted. Trees started sprouting 54 days after the fire although sprouting of *E. macrorhyncha* was delayed for up to two months on exposed aspects. Sprouting continued throughout winter, however, rates

appeared to 'slow down' on sheltered compared with exposed aspects over the cooler months. Most trees had sprouted within a year of the fire; three individuals were recorded sprouting after October 1992 (20 months post fire). Larger individuals sprouted more rapidly - approximately 90 per cent of individuals ≥20.1 cm d.b.h had sprouted by the end of August 1991 compared with less than 50 per cent of individuals <20.1 cm d.b.h. The percentage of individuals sprouting only from the base of the tree increased over time. Most of the later sprouters were smaller trees with complete cambial death on the stem. Patterns of resprouting were related to, at least, soil moisture availability, air temperature and tree species, size and vigour.