

Prescribed Fire in Young Eucalypt Plantations: Is it worth the risk?

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The area of eucalypt plantations is expanding throughout the world, and Australia is no exception. The increase in eucalypt plantations worldwide is mainly a result of the recognition that eucalypts have high growth rates and superior pulping qualities. Although the majority of eucalypt plantations are grown in short rotations for chip, there are increasing areas being grown for solid-wood products. With the increase in long rotation eucalypt plantations, there is also an increase in the potential for wildfire to impact on this resource. Whilst fire exclusion is currently the preferred management option for short rotation plantations, plantation managers realise that exclusion strategies alone do not ensure that fire remains outside plantation areas. As a result of this realisation, Forests NSW, through the Bushfire CRC, embarked on a project to assess the feasibility of prescribed burning in young eucalypt plantations in northern NSW. The overall aim of the project was to determine the stand age/stem size, fuel load, and weather conditions that are appropriate for prescribed burning in order to minimise damage to plantation trees. A series of experimental fires were conducted in 2005 and 2006 in three age classes of Dunn's White Gum and Spotted Gum plantations in Northern NSW. These burns provided data relating to fire behaviour and tree damage. Tree response to fire was measured over subsequent years. This presentation will discuss preliminary findings relating specifically to fire behaviour, bark damage and subsequent wood quality issues.