



Wildfire

Wildfire is the greatest threat to plantations. Foresters undertake programs to reduce the amount of flammable material in and around plantations. This is done by clearing dense undergrowth by the use of slashing, spraying, or grazing. Such measures can prevent small fires from becoming full-scale forest fires.



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Firebreaks are maintained along forest boundaries and forest roads and tracks. These breaks can help stop small fires from jumping between sections of the forest.

Losses due to fire in South Australia's plantations are usually less than one per cent per year. The most significant losses to date were in the Ash Wednesday wildfires of February 1983 when 19,734 ha of plantation forests were burnt in the South East and the Mount Lofty Ranges. However, over half the timber was salvaged and stored under water or did not deteriorate significantly and were successfully processed for wood products.

Fire and Native Forests

Fire has been a significant factor in the ecology of Australia's native forests. Most plant species have survival mechanisms which allow them to either recover or regenerate after wildfire.

Many animals may be killed directly as a result of the fire through burning or suffocation, or indirectly through loss of shelter and food sources. Some small animals suffer not only from the effects of wildfire, but also from increased predation by birds, foxes and other animals because there is less vegetation in which to shelter. Populations of native animals can recolonise from nearby unburnt areas as the vegetation recovers.

A matter of months after a fire the native forest will have started to regenerate. New shoots will be appearing from burnt and blackened trunks and branches, and young seedlings will have started to grow.

If fires occur more often than once every five to seven years, some shrubby plant species may disappear because it takes them up to seven years to be mature enough to produce seeds.

Many Australian plant species have features that allow them to live through fire, including:

- 🌳 Lignotubers – large underground swollen roots that store food and contain a mass of dormant buds. If the tree is damaged, new shoots rapidly grow from these buds, enabling the plant to survive.
- 🌳 Woody fruits and cones protect their seeds during fires (*e.g. banksias and hakeas*).
- 🌳 Epicormic buds on the tree's branches and trunk which sprout when triggered by a stress such as a wildfire which severely damages the crown (*e.g. eucalypts*).
- 🌳 Hard seed coats that require heat or smoke to break dormancy (*e.g. acacias*).
- 🌳 Thick bark which acts as insulation, allowing the tree to survive moderate fires (*e.g. some eucalypts*).

Foresters carry out controlled burns in native forests to reduce the risk of wildfires, and stimulate new growth.

Find Out More

Association for Fire Ecology - www.fireecology.net SA Country Fire Service - www.cfs.org.au
Victorian Country Fire Authority - www.cfa.vic.gov.au