Press Release

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Using Australian Plants for a fire break

With the onset of summer and the prevailing dry conditions, we have some tips about using some Australian native plants as a firebreak.

As many areas in Australia are subject to hot and often very dry summers with strong gusty winds. Some plants e.g. Eucalyptus spp. have high levels of volatile oils in their foliage. Places with dry conditions and plants that are high in volatile oils are amongst the most fire-prone areas in the world.

To ensure maximum safety for a site, you would need to remove all burnable material for a considerable distance away from whatever you are trying to protect. This could result in a barren, unattractive and undesirable landscape. By careful selection and placement however, it is possible to have plants near to houses and other buildings while still maintaining an acceptable safety level.

Careful placement of plants can significantly reduce the impact of fire. The immediate area around buildings should be free of trees and other combustible materials. Lush grass, paved areas, driveways, etc. in this area can provide an effective barrier to the passage of fire.

A fire-retardant shelter belt placed at right angles to prevailing winds will also protect buildings. Do not place these too close to buildings. A minimum distance between shelter belts and buildings should be the height of the shelter belt - although ideally the distance should be 3 to 5 times the height of the shelter belt. The shelter belt will act to reduce the wind which fans the fire, and it will deflect heat and smoke and catch burning airborne material. The shelter belt should be made up of fire-tolerant or resistant species.

Keep trees at least the same distance as the height of the mature tree from any buildings. For example, if the height of a particular tree is 20 metres when fully grown, then it should be planted at least 20 metres away from any building (if the tree falls, then burning branches won’t hit the building).

Consider Prevailing Winds
The prevailing winds will affect the way fires travel, and where ash and burning embers fall. It is important to note that prevailing winds may vary from season to season, although days of extreme fire danger are usually characterised by hot gusty winds with wind shifts later in the day.

Consider Vehicular Access
Access routes to dams, pumps, roads, and so on should be kept free of trees and flammable material. This includes all routes of escape.

Note: Those people planting shelter belts or corridor plantings to provide habitat, safe passage, food, etc. for wildlife, may have to compromise a little in their design. Wildlife corridors may have to be sited sufficiently far away from your buildings and structures so as not to pose a fire risk.
**Maintenance: Points to Remember.**

- Water trees in summer (this helps keep moisture in the plant high).
- Fertilise your plants regularly in summer. A plant that has lush green growth is less likely to burn.
- Have a hose ready at all times, and ensure water is readily available.
- Only use mulches near buildings that will not burn readily. You should remove twigs, leaf litter, etc. from the ground. A compact mulch of stone or even wood-shavings is not generally a problem, but leaves and twigs are a problem in a bushfire. Leaf litter can be dug in or composted to prevent it burning.
- Remove flaky loose bark from trees. Smooth-barked trees are less likely to catch fire.
- Prune lower branches so that burning debris under plants can’t ignite foliage.
- Remove dead trees and fallen branches.
- Fill hollows/cavities (hollow trunks, depressions where branches break and rot gets in) with concrete - or remove the plant, fire can catch in such hollows and the tree may smoulder for some time unnoticed.
- Avoid large dense clumps of trees and shrubs particularly near buildings.
- Have succulent ground cover, lawn or gravel under large trees or regularly slash or cut any underlying scrub and grass to remove potential fuel for fires.

**Fire Resistant Plants**

- The following types of plants are less likely to catch alight and burn in a fire:
  - Plants with high salt content (e.g. *Alphotinia* spp., *Rhadodia* spp., *Atriplex* spp., *Eucalyptus occidentalis*, *E. sargentii*).
  - Plants with fleshy or watery leaves (e.g. cacti and succulents).
  - Plants with thick insulating bark.
  - Plants which have their lowest branches clear of the ground.
  - Plants with dense crowns.

Read more on using Australian plants in your landscape design with our ebook “[Landscaping with Australian Plants](#)”

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If you have any queries or would like to arrange an interview, please call or email the ACS head office on the Gold Coast on (07) 5562 1088 and ask for our Media and Marketing Officers ( [admin@acs.edu.au](mailto:admin@acs.edu.au) ).

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