

How can trees and shrubs reduce the impact of bush fires around my home and property?

The selection of fire retardant trees and plants, and careful consideration of their placement, may assist in preventing damage to your property should a bush fire pass through your area.

Most property loss in a bush fire occurs as a result of 'ember attack'. This is when leaves and bark drift from the fire itself and lodge in and around your home, starting another fire. In some instances, plants and shrubs located in garden beds surrounding your home can burn intensely and contribute to ember attack and direct flame contact with your property.

There are a number of prevention strategies which can break the path of dangerous wind flow towards your home. Fire retardant plants create a barrier between flying embers and your property. These plants also lessen the impact of potential ember attacks as they do not produce excessive amounts of bark and leaves which can be carried by the strong winds experienced during a bush fire.

What are fire retardant plants?

There are many varieties of trees, shrubs and ground covers which resist intense burning and/or have less chance of contributing to ember attacks. These plants have a number of distinguishing features, including a high salt and moisture content and a low volatile oil content in the leaves.

Usually fire retardant trees have thick, well defined bark and few branches low to the ground. These trees and shrubs rarely shed large quantities of leaves and twigs and their seeds are usually enclosed in woody capsules.

Can fire retardant trees and shrubs catch fire?

Yes, all trees and plants can burn under the right circumstances. The extent to which they will burn depends on the intensity of the bush fire itself, and amount of ember or flame attack.

Fire retardant trees and plants will normally burn at a lesser rate than other plant varieties. Many Australian trees and plants are adapted to survive bush fire and use fire as a means of seed dispersal and propagation.

In general, non-Australian introduced plant species have few survival mechanisms but may burn less readily than many native trees and shrubs.



Where should I plant fire retardant trees?

Planting fire retardant trees should be considered when creating 'shelter belts' and wind breaks. Inappropriate trees may increase the intensity of the fire. The extent of ember attack may also be reduced as less burning embers are produced when fire retardant plants burn.

Around the home, trees should always be planted away from buildings, with branches and twigs regularly trimmed to ensure they do not overhang your house. Normal prevention activities should always be undertaken, including trimming lower branches of trees to roof height, and maintaining an area cleared of twigs and leaves near the house.

How should I prepare garden beds?

Fire retardant shrubs and ground covers are better placed in garden beds maintained free of weeds as these unwanted plants may contribute directly to increasing the intensity of the fire.

By selecting the appropriate plants and designing and maintaining a weed-free garden bed, the direct contact of flame under the eaves and roof line or against the walls of your property will be greatly reduced.

What happens after the plants have been scorched by fire?

Fire retardant plants may survive a bush fire, depending on the intensity of the blaze. In natural environments, these plants tend to provide the only refuge and source of food for many small marsupials, birds and insects until the surrounding natural environment recovers.

In the case of 'shelter belts' where fire retardant trees have been planted, the plants will continue to provide protection from wind and sun.



Fire Retardant Plants

Zanthorrea
nursery

Trees and Shrubs which are listed as Fire Retardant

This short list of species that may be suitable for planting has been collated from information from FESA in consultation with the Nursery Industry Association of WA, CALM and other groups. The list is not exhaustive and does not suggest how the plants will react to the many unpredictable variables of fire.

It should be noted that in certain locations, the listed species may be considered as a weed unless carefully managed. In all cases, you should consult with your local nursery or shire to determine the suitability of planting various plant species in your area.

Trees (Australian Natives)

- *Acmena smithii* (lilly pilly)
- *Angophora costata* (apple jack)
- *Banksia marginata*
- *Casuarina cunninghamiana* (river she oak)
- *Casuarina obesa* (swamp sheoak)
- *Eucalyptus conferruminata*
- *Eucalyptus maculata* (spotted gum)
- *Eucalyptus sargentii* (Salt River gum)
- *Grevillea robusta* (silky oak)
- *Hymenosporum flavum* (native frangipani)
- *Lagunaria patersonia* (pyramid tree)
- *Melaleuca lanceolata* (Moonah)
- *Tristania conferta* (box tree)

Trees (Exotics)

- *Acer negundo* (box elder maple)
- *Alnus joruliensis* (evergreen alder)
- *Ceratonia siliqua* (carob)
- *Coprosma repens* (mirror bush)
- *Fraxinus* spp (ash)
- *Laurus nobilis* (laurel)
- *Liquidambar styraciflua*
- *Photinia glabra* (red leaf photinia)
- *Photinia serrulata* (Chinese hawthorn)
- *Pittosporum eugenioides*

Shrubs (Australian Natives)

- *Acacia cyclops* (coastal wattle)
- *Acacia howittii* (sticky wattle)
- *Acacia pravissima* (Ovens wattle)
- *Acacia saligna* (golden wreath wattle)
- *Acacia terminalis* (cedar wattle)
- *Acacia vestita* (hairy wattle)
- *Anigozanthos* species (kangaroo paw)
- *Atriplex* spp (saltbush)
- *Eremophila* spp (poverty bush)
- *Grevillea* 'Poorinda Constance'
- *Grevillea aquifolium* (prickly grevillea)
- *Grevillea barklyana* (gully grevillea)
- *Grevillea victoriae*
- *Hakea elliptica*
- *Hakea salicifolia*
- *Hakea suaveolens* (sweet hakea)
- *Myoporum insulare*
- *Olearia* species
- *Orthrosanthus* species
- *Patersonia* species

Shrubs (Exotics)

- *Camellia* spp
- *Hibiscus* spp
- *Santolina* spp (lavender cotton)

Ground Covers (Australian Natives)

- *Atriplex* spp (saltbush)
- *Carpobrotus* spp (pigface)
- *Dichondra repens*
- *Grevillea aquifolium*
- *Kennedia* spp (coral pea)
- *Maireana* spp (Bluebushes)
- *Myoporum parvifolium*
- *Rhagodia* spp (saltbush)

Ground Covers (Exotics)

- *Ajuga reptans* (bugle flower)
- *Drosanthemum floribundum*
- *Mesembryanthemum* spp
- *Pelargonium* spp (geranium)
- *Rosmarinus officinalis* prostrate (rosemary)
- *Selliera radicans*
- *Verbena erinoides* (crucinella)