

CFS FACT SHEET - PREPARING YOUR PROPERTY

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Preparation throughout the year is an essential key to ensure that you, your property and your family survive a bushfire. A well prepared home is more likely to survive a bushfire than one that hasn't been prepared.

Even if you are not around there is a greater chance that your home will survive if you have undertaken the correct preparations.

Managing Vegetation

Creating and maintaining a defendable space around a home does not have to mean the removal of all trees, just the careful management of vegetation to reduce the amount and type of readily available fuel. Available fuel is any vegetation or litter that is less than 6mm in thickness or diameter.

This will:

- increase the chances of a home surviving the fire front and provide a shelter for people at this time
- provide a defendable space that householders can use to defend their home from ember attack before and after the fire front
- reduce the chance of direct flame contact and radiant heat igniting your home during the passage of the fire front.

You need to consider how the vegetation around your house will burn and what impact it will have on your ability to defend your home.

The layout of a property and garden, such as the use of paths and clumping of plants and shrubs, can help create a defendable space and reduce the bushfire's spread, speed, heat and intensity.



Hazards around houses do not give you a defendable space

The fire's path depends on where available fuel is located. For example, fire does not spread easily over low-fuel areas such as driveways, pools, tennis courts, gravel and mown lawns.

It is advisable to keep dense shrubs away from a house, particularly windows. Burning shrubs close to houses can crack windows and allow embers to enter the house. They can also ignite wooden structures, outdoor furniture and pergolas.

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Grouping plants in clusters with clear areas between the groups makes it more difficult for the fire to move from one area to another and reduces its intensity.

Many people believe that trees are the major threat during a bushfire; however, the fire front is carried by the undergrowth (fine fuel), including grasses, leaf litter and shrubs.



Well maintained



Excessive fine fuel undergrowth

Bark is the main concern with trees. Bark that is coarse, loose or flaky is dangerous as it helps the fire climb higher into a tree, adding to the height of the flames, the heat of the fire and contributes to ember attack.

Fine fuels that continue from the ground to the tree crown are known as ladder fuels because they help the fire climb up into the tree tops.

To limit this effect, look at what is growing under the trees and consider how easily fire might be able to climb upwards.



Loose bark



Dry grass

You can reduce ladder fuels by:

- pruning shrubs so that their tops are well away from the lower branches of trees
- pruning the lower branches of shrubs/trees to separate the foliage from the surface fuels underneath
- reducing accumulated debris such as loose flaky bark, dead twigs, leaves or needles on shrubs and trees
- mowing, raking and weeding to remove fine fuels from around the house.

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Points to note about your plants

Flammable material that is within 20 metres of your house should be removed. If this is not possible, use pathways and gravel areas to provide fuel breaks, making sure all shrubs and trees are spaced to avoid a continuous canopy or line of vegetation to your house.

Ensure ongoing maintenance by the removal of dead branches, fallen leaves, long grass and vegetation litter.

- All plants burn but some are more flammable than others: review the vegetation in your location.

Don't rely on your garden being 'non-flammable'. Maintain your garden or it will become a fire hazard. Maintain watering, remove any dead material, and regularly prune lower branches and limbs during the year.

Landscape management	Management features
A photograph showing a lawn with a sprinkler system installed. The lawn is mown and there are shrubs and trees in the background. A driveway and a house are visible further back.	Sprinkler system in place, mown area around house, shrubs away from structure, driveway(paths next to house.
A photograph of a house with a dirt path leading up to it. Shrubs are planted along the path and some are near the base of the house. The surrounding area appears to be a mix of grass and low-lying plants.	Pathway around house, shrubs away from structure, low tree branches trimmed, leaf litter cleared.
A photograph of a garden area with various shrubs and flowers. The shrubs are densely packed and some are taller than others. A small structure is visible in the background.	Clumping of shrubs, use of pathways, lower tree branches trimmed, reduced ladder of fuel, spaces between fuel clusters, no overhanging trees.

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Landscape management	Management features
	Use of pathway and driveway to help create defendable space, no overhanging trees, spaces between fuel groups.
	Mown lawn, raking to reduce fine fuel load, lower tree limbs trimmed, cleared areas, separate fuels, pathways and gravel areas create a defendable space.

Structural preparation

You may need to modify your property to make it better able to survive a bushfire. Some modifications may be costly, although many can be achieved at low cost when done by yourself over a period of time. It is best to consider property preparation as a year-long seasonal plan and not leave it until the last moment.

There are many ways you can improve the odds of your house surviving a bushfire.

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Structural modifications for ember proofing

Target area	Examples	Action
Underfloor spaces		Protect underfloor spaces with non-combustible sheeting or metal flywire. This will prevent embers from landing under the house and starting small spot fires.
Roof space		Roof scribing (iron roof) or sarking (tile roof).
Eaves		Boxed eaves
Vents, crevices	 Vent not covered	Cover all external vents with metal flywire.
Evaporative/window air conditioners		Protect evaporative air conditioners with metal flywire screens. Check with your evaporative air conditioner supplier to ensure the performance of the system will not be compromised by installing the mesh.
Cladding, gaps		Ensure any external timber cladding is regularly maintained and all gaps are sealed.



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Target area	Examples	Action
Skylights		Make non-combustible firescreens to cover external skylights.
Gutters, downpipes		Fit leaf guards to gutters to prevent a build-up of leaves.
Fencing, pergola, lattice		Install fencing made from non-combustible materials such as metal or brick.
Fuel, chemicals		Ensure that fuel and chemicals are properly stored and not surrounded by fine fuel.
Doors		Select solid core doors with metal flywire screen and use non-flammable draught excluders and pet access doors. Place weather stripping around the inside of doors and windows to eliminate any gaps.
Windows		Windows should have metal flywire screens or shutters, and well maintained timber window frames. Place weather stripping around the inside of doors and windows to eliminate any gaps.



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Water supply and reticulation

Water is the cheapest, most readily available and effective fire suppressant. A home that is well prepared for a bushfire will have a good supply of water independent of mains supply and methods of pumping it to the house independent of electricity.

How much water?

It is recommended that you have sufficient water to last for two hours of continuous use.

Generally a minimum of 5000 litres is suitable for the average sized house where hoses are used. On larger houses or where a sprinkler system is installed you may need to consider a minimum of 20,000 litres.

Most people install a tank to hold the water but other options include swimming pools, ponds, dams and drums.

Pumps

It is recommended that you have a petrol or diesel powered pump suitable to pressurise your system.

Generally this can be achieved by using an engine with a power output of 3.9 KW. An electric pump with a generator may be a suitable alternative.

Hoses

A lot can be achieved with ordinary garden hoses; however, permanently installed hose reels giving access all around the house are more effective.

Sprinkler systems

A sprinkler system will help to extinguish embers that land around your home and could be part of your Bushfire Survival Plan. A system can ease the physical demands of property defence in an emergency. Make sure that your sprinkler system has an adequate water supply, an activation mechanism, a delivery system including pipes and heads, and metal parts and fittings.



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Maintenance activities

A well-maintained home has a greater chance of surviving a bushfire. Some activities will need to be done before the summer fire season; others will need to be undertaken regularly during summer.

Target Area	Maintenance action
	Clear fine fuels from around the house.
	Clean leaves and debris out of gutters.
	Clear accumulated leaf litter and other fine fuels from around the house. On days of strong winds you will notice where leaf litter accumulates around your house. This is where embers will land during a bushfire.
	Remove flammable items from around your house (for example, paper, boxes, crates).

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Target Area	Maintenance action
	LPG cylinders have a vent pipe that should be facing away from the house. Remove any fine fuels located near cylinders.
	Move woodpiles away from the house.
	Store fuel supplies and chemicals away from the house.
	Regularly maintain firefighting equipment such as hoses, pumps and mechanical devices.

For more information about being Bushfire Ready:

Contact the Bushfire Information Hotline
on **1300 362 361 (TTY 133 677)**
or visit www.cfs.sa.gov.au



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