

# Winter Burning Guide

Controlled burns in winter may  
help protect your home this summer



To help protect your home from summer bush fires, FESA  
recommends you manage the vegetation on your bush block.





## Winter Burning Guide

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# Winter Burning Guide

This Guide provides basic information on planning and conducting a burn in a forested area within the Perth Hills. It should be used in conjunction with the FESA Winter Burning DVD.

The process described has been developed for properties of 5 hectares or less. For larger properties it is strongly recommended that you consult your local government for information and advice.

## Reducing fuel

### Reducing vegetation (fuel) around your property may help protect your home from bush fire this summer.

The intensity (heat) and spread of a bush fire is determined by the amount of fuel (vegetation) available to burn. If you reduce the amount of fuel around your property, a bush fire will burn more slowly and will generate less heat. This will reduce the risk to your home and assist firefighters in extinguishing a fire.

There are a number of ways you can reduce fuel levels. These include:

- Hand clearing (raking and removing leaf litter)
- Mechanical (mowing, pruning or slashing vegetation)
- Chemical (using herbicides to remove vegetation)
- Burning

Fire is a natural part of the Australian environment and therefore burning is a popular and efficient method of reducing fuel.

The winter months are the perfect time for you to use fire to reduce fuel on your property. The weather conditions in winter will assist you in safely and effectively conducting your burn.



## Planning to burn? What now?

If you are planning to burn, the following five steps will assist you in preparing and conducting your burn.

### 1 Divide your bush land into five manageable areas

Divide the bush land on your property into five areas. Use existing breaks such as paths, driveway, cleared areas, creeks or rock outcrops to assist you in dividing your property.

Each area should be between 50 m<sup>2</sup> (10 m x 5 m) and 200 m<sup>2</sup> (20 m x 10 m).

When using fire on your property, it is important to establish and maintain a combination of burnt and unburnt areas.

Burning one small area at a time will ensure that the burns are of a manageable size and intensity, and will reduce the impact on the environment.

### 2 Assess the fuel load and determine which area to burn first

Use FESA's 'Visual Fuel Load Guide for scrub vegetation of the Swan Coastal Plain' to assess the fuel levels within each area. There are three simple steps to measuring the amount of fuel:

- Find a photograph in the 'Visual Fuel Load Guide ...' that best reflects the amount of **scrub** vegetation in each area.
- If there is leaf litter on the ground (leaves, twigs, bark etc), measure the depth of the litter with a ruler (in millimetres). Convert the leaf litter depth to tonnes per hectare (t/ha) using the following table.

| Litter Depth (mm) | 5   | 10  | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 |
|-------------------|-----|-----|----|----|----|----|----|----|----|----|----|
| t/ha              | 2.7 | 5.3 | 8  | 11 | 13 | 16 | 19 | 21 | 24 | 27 | 29 |

- Add the **scrub** fuel (from the photograph) and the litter fuel together (t/ha) to get an overall fuel measurement.

The area with the highest amount of fuel should be burnt in the first year.

Generally, you should aim to reduce the fuel around your property to less than 8 t/ha.



### 3 Sketch the area

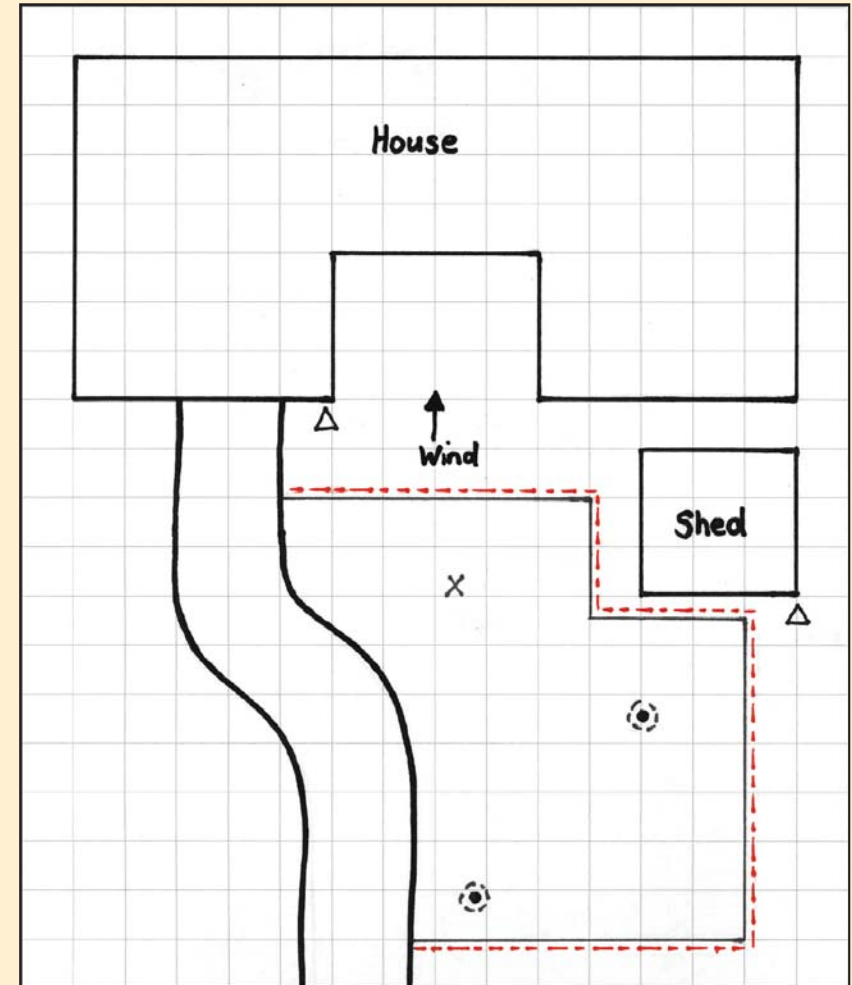
Neatly sketch the area you have decided to burn. Include buildings, driveways, fences, large trees and water sources.

Include firebreaks that need to be constructed. Firebreaks are areas of bare earth or non-combustible material (e.g. a raked path, a road or driveway) that separate the burn area from buildings, sheds, fences and unburnt areas. You will need a firebreak around the perimeter of your burn area. You may also decide to construct firebreaks within the burn area around specific plants or assets that you wish to protect from fire (e.g. an orchid, a shed or a fence).

The sketch will assist you in preparing the area for burning. An example sketch is provided on the right.



### Example sketch



#### Legend

- Asset: •
- Firebreak: - - - - -
- Water source: Δ
- Ignition point: X
- Wind direction: W →
- Burn area: □
- Scale: 1:2 metres



#### 4 Prepare the area

Using your sketch as a guide, construct firebreaks using a rake. These should be at least one metre in width.

Locate and test water sources to ensure they are adequate. Hoses should be long enough to reach around the perimeter of the burn site. If your hose is not long enough, ensure you have a number of buckets available.

#### 5 Determine when to burn

Check the FESA website ([www.fesa.wa.gov.au](http://www.fesa.wa.gov.au)) for information on when to burn in your area. The best time to burn is between late June and early September as the weather conditions and moisture in the vegetation will cause the fire to burn cooler and for a shorter period of time. Large tree limbs and logs are unlikely to catch fire during this time.

Based on the information on the FESA website, determine a possible date for your burn.

### Before you burn

Contact your neighbours at least four days prior to burning to let them know your plan. You may be able to help each other by burning together.

### On the day of the burn

- Check the wind forecast on the Bureau of Meteorology website ([www.bom.gov.au](http://www.bom.gov.au)). The wind needs to be between 12 and 19 kilometres per hour. At this speed leaves and twigs will be in constant motion. If there is too little wind, the fire may not burn or smoke may linger. If there is too much wind it may be difficult to control the fire.
- Check the wind direction. This will assist you to predict which direction the fire will burn, and where the smoke will blow.
- Look at the sky and make sure it is clear and not hazy. This is to make sure smoke does not become a problem. Do not burn if the Bureau of Meteorology has issued a haze alert for the day of the burn or the next day.
- Check that it has been between five and ten days since the last time it rained.

### Undertaking the burn

- Wear appropriate protective clothing. This includes cotton or wool long-sleeved shirt and trousers, gloves, eye protection and boots.
- Light the fire with a single ignition point after 3:00 pm.
- The ignition point should be within five metres from a firebreak with the wind blowing towards the firebreak.
- If the fire does not look like it is going to burn the entire area, you may wish to ignite another point 15–20 metres away from the first one (within five metres of a firebreak).
- Have a hose or another source of water on standby in case you need to put the fire out.
- The fire should burn slowly and self-extinguish by 6:30 pm.
- Monitor the fire until it is extinguished.
- When the flames have gone out, use a metal rake to move the smouldering vegetation around. This will help to fully extinguish the fire. Water can also be used to put out any smouldering areas.
- At the end of the burn there may be some patches of unburnt vegetation and leaf litter on the ground.



### The day after the burn

Check the burn area to make sure the fire has not reignited. There should be no smoke, smouldering vegetation or glowing embers.

## Day of Burn Checklist

| Have you checked that...                                         | Yes / No |
|------------------------------------------------------------------|----------|
| It is a good time to burn in your area (check FESA website).     |          |
| Neighbours have been notified.                                   |          |
| Winds are between 12 and 19 kilometres per hour.                 |          |
| A haze alert has not been issued for today or tomorrow.          |          |
| The sky is clear.                                                |          |
| It has been between five days and ten days since it last rained. |          |
| It is later than 3:00pm.                                         |          |

**If you have answered YES to all of the above questions, the conditions are suitable for you to burn.**

For more advice consult your Local Government, local Volunteer Bush Fire Brigade or FESA.

## Points to remember when burning

- Light the fire with a single ignition point (monitor the progress of the fire and add a second ignition point if necessary).
- The ignition point must not be more than five metres away from a firebreak.
- Have water ready to put the fire out.
- **Do not leave the fire until it has gone out or you have put it out.**

