



Vegetation Management Plan for Area between Mainhouse and Meditation Space

**Report to
Bundagen Cooperative**

Disclaimer

The author of this report accepts no responsibility should injury, loss of life or damage to property result from a bushfire emergency. The actions recommended in this report may help to mitigate injury or damage but the responsibility for ensuring these management strategies are implemented lies solely with Bundagen Cooperative Ltd.

Introduction

This Vegetation Management Plan provides advice to Bundagen Community with respect to the proposed upgrade of the Mainhouse area for public use. It describes the existing vegetation between the Mainhouse and the Meditation Space and recommends management actions to be followed. If followed these actions may reduce the risk associated with bushfire.

This report has been prepared based on the understanding that none of the buildings in the Community area where the vegetation is to be managed is intended for accommodation. Furthermore, that a designated fire shelter is to be built in the open space area called the 'sports field' to provide refuge for users of the Mainhouse in the event of a bushfire emergency.

Description of area in question

Figure 1 shows the buildings, vegetation and gradients in the area in question (Midcoast Building and Environmental, 2016).



The Managed Area (yellow arrow on map) is the subject of this report. The species found in this area are a combination of:

- (i) naturally regenerated native regrowth (predominantly *Acacia* species and mixed rainforest species);
- (ii) native and introduced trees which have been planted by Bundagen Community members (eg *Grevillea robusta*, coral trees, lilly pillys);
- (iii) introduced weeds predominantly *Lantana camara* and *Senna pendula*
- (iv) native vines (water vine *Cissus hypoglauca*)

Appendix 5 in the Rural Fire Services document 'Planning for Bushfire Protection' (2006) describes the principles of landscaping for bush fire protection. These aim to:

- Prevent flame impingement on the dwelling;
- Provide a defensible space for property protection;
- Reduce fire spread;
- Deflect and filter embers;
- Provide shelter from radiant heat; and
- Reduce wind speed.

The existing vegetation between the Main House and the Meditation Space, if actively managed according to the recommendations of this report, will achieve these objectives.

Species Composition in relation to buildings

In the paper "*Landscape and Building Design for Bushfire Areas*" G.C. Ramsay and L. Rudolph have provided 14 attributes of vegetation which affect bush fire attack. In summary these attributes are:

- moisture content of leaves;
- Volatile oil content of leaves;
- mineral content of leaves;
- Leaf fineness;
- Density of foliage;
- Continuity of plant form;
- height of lowest foliage above ground;
- Size of plant;
- Dead foliage on the plant;
- Bark texture;
- Quantity of ground fuels;
- Fineness of ground fuels;
- Compaction ability of ground fuels; and
- mineral content of ground fuel.

In the area of managed vegetation, Bundagen Cooperative should consider issues such as;

- direct planting of species (only rainforest species with non-flammable bark, non-volatile leaves)
- gradual removal of acacia species (these short-lived species can create flammable deadfall)
- woody Weed control (control of *Lantana camara* and *Senna pendula*)
- native vine control (Although not highly flammable, these vines can catch and dry falling deadfall from trees and shrubs and create a 'bridge' between the ground level and the canopy)

Management of Vegetation in zone

Actions to be implemented to reduce the risk of bushfire can be divided into:

	Management Action	Fire Season (Sep – Mar)	Off season (April – August)	Responsibility
1	Tractor mulching (grass)	Fortnightly	As required	Regular scheduled Mainhouse maintenance
2	Brushcutting / Push mowing around buildings	Fortnightly	As required	Regular scheduled Mainhouse Maintenance
3	Weeding/pruning close to buildings	As required	Before August	Working Bees / Helping Hands
4	Underscrubbing / tree pruning / thinning	As required	Before August	Working Bees / Helping Hands
5	Removing deadfall branches	As required	Before August	Working Bees / Helping Hands
6	Burning firepiles	As required	Before August	Working Bees / Helping Hands

Management Actions 1 and 2 are to be done during the fire season. Actions 3 to 6 are to be done in the off season when the weather is cooler and bushfire risk is minimal.

Management Actions

1. Tractor Mulching

Slash grass using only mulcher or mulcher/catcher to avoid creation of rows of combustible mulch

2. Brushcutting/ push mowing around buildings

Grass and weeds need to be cut short regularly in the immediate vicinity of buildings to prevent the potential spread of fire along the ground to buildings. Cut grass should be collected in a catcher or raked up and removed from around the building.

3. Weeding/ pruning branches close to buildings

All branches within 1.5 metres of buildings should be pruned prior to fire season. Any grass or weeds missed by the push mower/brushcutter [in (2) above] should be hand weeded in the immediate vicinity of the buildings.

4. Underscrubbing/ tree pruning / thinning in APZ

Low branches below 2 metres above the ground should be pruned (underscrubbing) to prevent any potential ground fire spreading into canopy. Branches of trees along road easements and within car parks should be pruned where they impinge on minimum clearances required for emergency vehicles (see figure below). Trees and branches should also be managed (pruned or removed) to prevent continuity of plant form. That is, to create gaps between the foliage of trees and shrubs.

Clearance requirements for emergency vehicles on rural properties.

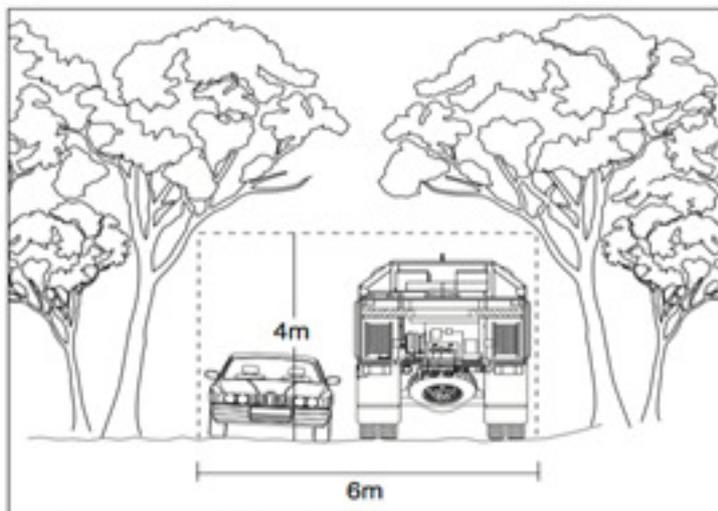


Figure 4.5 Property access road requirements (rural areas)

Planning for Bushfire Protection, December 2006, p 22

5. Removing woody weeds

Lantana and Senna pendula are common weeds in this area and should be removed as part of management of this area.

6. Reducing spread of native vines

Native vines are also common amongst vegetation in the area. Abundant vines can create fire hazards by catching tree branch deadfall, pulling trees lower to the ground and by creating continuity between trees.