



# Mt BULLER/MT STIRLING PLANTING GUIDE

**Mt Buller & Mt Stirling Alpine Resort Management Board**

**Version 3 – 2005**

Photograph: *Tasmannia xerophila*, Alpine Pepper

**Purpose**

The purpose of this guide is to provide developers, the general public and other interested parties information about planting and gardening in the alpine environment at Mt Buller and Mt Stirling. This guide aims to facilitate beautification of the Mt Buller village and protection and improvement of the ecological integrity of Mt Buller and Mt Stirling.



*Richea continentalis*, Candle Heath

Specifically this guide will address the following areas:

- When to plant – advice on the best time of year to plant;
- What to plant – advice on which species are suitable for different areas;
- How to plant – advice on soil preparation and planting techniques;
- How to look after plants – advice on what maintenance is required to ensure the ongoing survival of plants;
- Where to get materials and equipment – contacts for plants, straw, fertilizer and other equipment.
- Weed control – advice on controlling and identifying weeds.

**Introduction**

Australia’s alpine environment is a spectacular and unique environment, home to plants and animals that are not found anywhere else. These flora and fauna evolved over millions of years in response to continual climatic and geographic changes. The current distribution of plants and animals across Australia is a result of the interaction between the forces of evolution and the environment.

Australia is relatively flat, dry and hot compared to other parts of the world. The southeastern corner is the exception to both these rules, where high mountain ranges extend across Victoria, the Australian Capital Territory, New South Wales and also Tasmania. The climate in these mountains is drastically different from the climate of the surrounding lowlands, caused by a corresponding decrease in air temperature with increasing altitude.

This temperature gradient is reflected by distinct changes in the floral communities with increasing altitude. This is quite evident driving up to the Mt Buller village. Three of the more distinct vegetation zones are the impressive stands of Alpine Ash in the



*Baeckea utilis*, Mountain Baeckea

montane zone, the distinctive and beautiful Snow Gums in the sub-alpine zone and the treeless herb fields and grasslands that lie in the alpine zone. The plants and animals that inhabit these three zones are specifically adapted to the climatic conditions found there.

**The alpine zone** is loosely defined as being the area above the physiological limit of tree growth. The alpine zone is subject to heavy, persistent blanketing with snow for extended periods of time. **The sub-alpine zone** is characterized by the presence of Snow Gums, but also experiences persistent snow throughout winter. These two zones, often referred to as 'snow-country', comprise about 11,500 square kilometres, or 0.15% of the Australian landmass.



*Podolobium alpestre*, Alpine Shaggy-pea

Some of the species of flora and fauna found in the snow country may be widespread in other parts of Australia, but many species are found solely in the high country. Species, communities and whole ecosystems that exist in Australia's high country can be found nowhere else in Australia, let alone earth. The snow-country comprises only a tiny fragment of Australia's landmass, but this is precisely why it must be valued, protected and treasured. Any endemic species should be thought of as rare or endangered, regardless of population sizes, purely because in such a huge, vast land as Australia, they are restricted to such a small part of that land.

In addition to protecting the alpine environment, it is important that we celebrate it for its unique beauty. To live, work or play in this environment is a privilege. We all have a responsibility to ensure our lives and activities don't impact negatively on the alpine environment. One way you can do this is by planting native flora species around your lodge.



*Craspedia coolaminica*, Billy Buttons

***Why Should I Plant?***

Regardless of whether you are a developer, resident, property owner or other stakeholder at Mt Buller or Mt Stirling, there are many benefits to planting native plants including:

- Native plants provide food and habitat for native fauna;
- Native plants blend in with and complement the natural environmental aesthetics of Mt Buller;
- Revegetation controls surface runoff, stabilizing soil and preventing erosion;
- Planting with native plants increases the viability of existing vegetation communities and the overall ecological integrity of the resort.

If you are a developer, any trees that are removed during development must be replaced at a ratio of at least ten to one (i.e. For every tree removed, ten must be planted), as specified in the planning permit. Even if no trees are removed developers still have an obligation, explicitly contained in the conditions of the planning permit, to restore and rehabilitate disturbed ground. Additionally, landscaping and revegetation works will also add to the value of the property and may lead to quicker sales, higher prices or increased occupancy.

Failure to revegetate disturbed ground or planting exotic plants can contribute to several environmental problems:

- Soil loss due to lack of vegetation, leading to increased sedimentation in the rivers and streams which sustain life, agriculture, commerce and ecological systems elsewhere in the catchment;
- Potential invasion of environmental weeds and their outward disbursement into other environments such as the Alpine National Park;
- Decreased utilization by native fauna;
- Some exotic plants can provide shelter or food to pest animals such as foxes.

The Mt Buller and Mt Stirling Alpine Resort Management Board’s goal “to protect and rehabilitate native flora and vegetation associations within the resort area” agrees with State and Federal government objectives to increase net vegetation cover.



*Pimelea ligustrina*, Tall Rice-flower



*Prostanthera cuneata*, Alpine Mint-bush

It recognizes that native vegetation communities provide a range of ecosystem functions that are fundamental to overall environmental health.

The environmental values of Mt Buller and Mt Stirling are a major attraction for many guests, particularly those that visit outside of winter. There are currently many initiatives focused on promoting the non-winter visitation of guests to the area, so revegetation and beautification of the Resort are essential components of this shift in patronage.

***When Should I Plant?***

Planting should take place from December through to no later than the end of March. This will allow the plants a short time to “settle” before the cold weather sets in. Any plants put in after March are less likely to survive the extreme cold of winter.

***What Should I Plant?***

It is important that any plants you want to grow are locally indigenous. This means that they must be native, but they must also be grown from seed or cuttings collected at Mt Buller or Mt Stirling. This is referred to as genetic provenance and is important because plants from this area may be slightly but significantly different in their genetic makeup to the same species growing elsewhere.

In the Australian Alps a particular plant species may be widespread, but individual populations may be completely isolated due to geographic factors. This means that breeding between communities is rare. Hence there is very little genetic exchange between populations. In such relative isolation individual populations may adapt traits that are not present in other populations. Such traits or adaptations may actually make them better suited to local conditions. Possible adaptations that may occur include resistance to disease, the ability to survive extreme temperatures and increased seed production.

What this means to you is that by purchasing and planting locally indigenous plants, your plants will be adapted to local conditions and will probably grow better than plants from outside this genetic provenance.

Below is a list of species available in Spring and Summer. Also included to help you choose the best plants is some basic information about the size and shape of the plant, its preferred conditions and the colour of the flowers (where applicable).

<b>Scientific Name</b>	<b>Common Name</b>	<b>Growth Form</b>	<b>Conditions</b>	<b>Flower Colour</b>
<i>Baeckea gunniana</i>	Alpine Baeckea	Shrub to 1.5m	Wet areas	White
<i>Baeckea ramossissima</i>	Rose Baeckea	Prostrate shrub	Open exposed areas	
<i>Baeckea utilis</i>	Mountain Baeckea	Shrub to 1.5m	Shaded wet areas	White
<i>Brachyscome rigidula</i>	Leafy Snow Daisy	Forb	Open areas	Purple
<i>Coprosma nitida</i>	Shining Coprosma	Shrub to 1m	South side area	
<i>Craspedia coolimenica</i>	Billy buttons	Forb	Open areas	Yellow

*Mt Buller Mt Stirling Planting Guide*

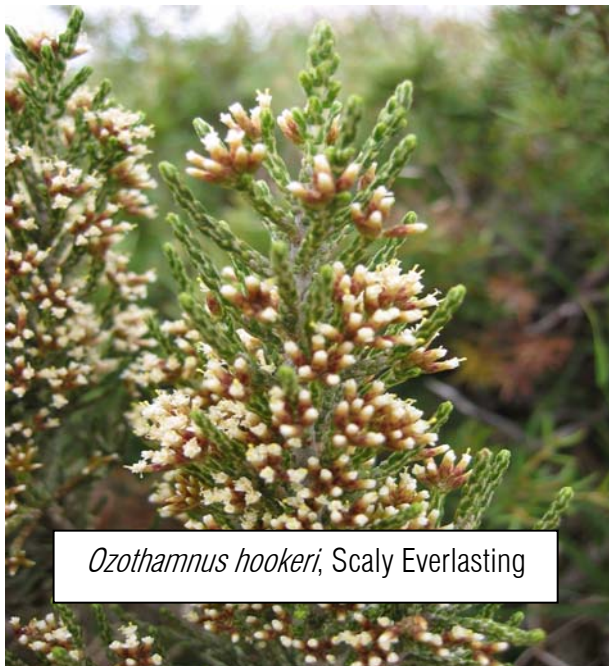
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<i>Derwentia derwentiana</i>	Derwent's Speedwell	Forb to .5m	Sub-alpine zone	Pink/white
<i>Derwentia perfoliata</i>	Diggers Speedwell	Forb to .3m	Exposed rocky areas	Purple
<i>Dianella tasmanica</i>	Tasman Flax Lily	Deep rooting lily	Sub-alpine zone	Blue
<i>Epacris paludosa</i>	Swamp Heath	Shrub to 1.5m	Wet areas	White
<i>Eucalyptus pauciflora ssp. niphophila</i>	Snow Gum	Tree to 15m	Sub-alpine zone	
<i>Grevillea australis</i>	Alpine Grevillea	Shrub to .5m	Exposed open areas	Creamy white
<i>Grevillea victoriae</i>	Royal Grevillea	Shrub to 2.5m	Sub-alpine zone	Red
<i>Leptospermum grandifolium</i>	Mountain Tea Tree	Tree to 5m	Wet areas	White
<i>Leucopogon macraei</i>	Alpine Beard Heath	Shrub to 1.5m	Sub-alpine zone	White
<i>Micrantheum hexidreaum</i>	Box Micrantheum	Shrub to 1.5m	Sub-alpine zone	
<i>Olearia algida</i>	Alpine Daisy Bush	Shrub to .5m	Exposed areas	White
<i>Olearia phloggopappa</i>	Dusty Daisy Bush	Shrub to .5m	Exposed areas	White
<i>Orites lancifolia</i>	Alpine Orites	Shrub to 1.5m	Exposed areas	Cream
<i>Ozothamnus hookeri</i>	Kerosene Bush	Shrub to .5m	Exposed areas	Cream
<i>Phebalium phyllicifolium</i>	Forest Phebalium	Shrub to 1.5m	Exposed areas	Yellow
<i>Phebalium squamulosum</i>	Mountian Phebalium	Shrub to .5m	Exposed areas	Yellow
<i>Pimelea alpina</i>	Alpine Rice Flower	Shrub to .5m	Exposed areas	White
<i>Pimelea ligustrina</i>	Tall Rice Flower	Shrub to 1.5m	Sub-alpine zone	White
<i>Poa costiniana</i>	Prickly Snow Grass	Grass	Exposed areas	
<i>Poa ensiformis</i>	Ledge Grass	Grass	Sub-alpine zone	
<i>Poa fawcettiae</i>	Soft Snow Grass	Grass	Widespread	
<i>Podocarpus lawrencei</i>	Mountain Plum Pine	Shrub to 1.5m	Widespread	
<i>Podolobium alpestre</i>	Alpine Shaggy Pea	Shrub to 2m	Sub-alpine zone	Yellow
<i>Prostanthera cuneata</i>	Alpine Mint Bush	Shrub to 1.5m	Widespread	White

<i>Richea continentis</i>	Prickly Candlesticks	Shrub to .3m	Wet areas	White
<i>Rytidisperma apicola</i>	Crag Wallaby Grass	Grass		
<i>Tasmannia xerophila</i>	Alpine Pepper	Shrub to 1m	Sub-alpine zone	

***How Do I Plant?***

Because of the rocky nature of the soil in most parts of Mt. Buller and Mt Stirling the best planting tool is the mattock. This creates a good-sized hole for planting easily and quickly and can be used to dislodge rocks that may get in the way. Mulching is a good idea and is best carried out prior to planting so as to avoid burying or trampling of tube stock. Fertilizers are not necessary. Avoid importing topsoil – it can contain seeds of exotic plants and also lacks the soil microbes particular to this area that locally sourced plants need to flourish.



*Ozothamnus hookeri*, Scaly Everlasting

***How do I Look After my Plants?***

It is essential that newly planted species get a good supply of water in the warm months prior to their first winter. After winter they should be able to fend for themselves.

***Where do I get the Right Advice, Materials and Equipment?***

Plants and advice:

- Please contact Louise Perrin at the resort Management Board Office on 03 5777 6077

Mulching:

- Any mulch you use must be free from weeds and seeds or you risk introducing new environmental weeds into the Resort.
- Local eucalyptus mulch is stockpiled on Corn Hill Road for use by Mt Buller stakeholders

Other equipment:

- There are several hardware and garden supply stores in Mansfield that will be able to help you with other equipment.

***Notes About Weed Control***

It was explained earlier why it is important to plant only locally indigenous plants. It is equally important to ensure no new exotic plants enter the Mt Buller and Mt Stirling Alpine Resort. An exotic plant is defined as any plant that is not locally indigenous. Many plants that are now considered environmental weeds and are the focus of millions of dollars worth of weed eradication projects in Australia were deliberately introduced because they had some perceived

value aesthetically, commercially, as a food source or for some other practical use. Blackberry (*Rubus fruticosus*) was originally introduced for its fruit and has invaded vast tracts of land across temperate Australia, including Mt Buller and Mt Stirling. Other examples at Mt Buller include Yarrow (*Achillea millefolium*), Soft Rush (*Juncus effusus*), St John's Wort (*Hypericum perforatum*), Twiggly Mullein (*Verbascum virgatum*) Spear Thistle (*Cirsium vulgare*), English Broom (*Cytisus scoparius*), Sycamore (*Acer pseudoplatanus*), Bent Grass (*Agrostis capillaris*) and many more. Some of these are becoming serious problems, spreading out from the village and ski slopes into other more natural ecosystems. Please remember that the Alpine National Park shares a boundary with the Resort. We have an obligation to prevent the spread of weeds into the park from Mt Buller and Mt Stirling.

The present roll-call of weeds at Mt Buller and Mt Stirling is long enough and it is extremely important that we take steps to prevent the establishment of new weeds. In practical terms this means not planting anything exotic around lodges, apartments or hotels and not transporting any soil, straw or other material that may contain seeds of exotic plants. Keep in mind that cars, trucks, motorbikes, bicycles and even footwear with dirt or mud on them are a potential source of seeds. Any equipment required for landscaping works should be washed down prior to transporting to Mt Buller.

The Mt Buller and Mt Stirling Resort Management Board is working to eliminate weeds in the Resort. For help with identification of weeds at Mt Buller or Mt Stirling, check the website [www.mtbuller.com.au](http://www.mtbuller.com.au) or contact the Alpine Resort Management Board.



*Derwentia derwentiana*, Derwent Speedwell