

Mt Buller & Mt Stirling Planting Guide



Mt Buller & Mt Stirling Alpine Resort Management Board

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Photograph: *Leucochrysum albicans*, Hoary Sunray

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Prostanthera cuneata, Alpine Mint-bush

Purpose

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

This guide aims to address:

- 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;
- Weed control – advice on controlling and identifying weeds.

Introduction

The Australian Alps is a spectacular and unique habitat to plants and animals that are endemic to this environment. Over millions of years flora and fauna have evolved with continuous climate and geomorphologic changes to live efficiently within the alpine ecosystems.

The remaining land in Australia is generally flat and dry with mountain ranges extending across the continent's South East corner, in Victoria, the Australian Capital Territory, New South Wales and also Tasmania. The climate in the High Country is drastically different from the climate of the surrounding lowlands, caused by a corresponding decrease in air temperature with increasing altitude.

Temperature gradient is reflected by distinct changes in flora communities with increasing altitude. Simply driving up to Mt Buller and Mt Stirling there is an obvious change where the *montane* Alpine Ash forest meets the *sub-alpine* Snow Gum zone and further on where the Snow Gums meet 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 characterised 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.

Some families of flora and fauna found in the snow-country may be widespread in other parts of Australia, however there are many species, communities and whole ecosystems can be found nowhere else in the world. The snow-country comprises only a tiny fragment of Australia's landmass, and this is 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 there is such a small area for these species to survive in this vast 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 impact positively rather than negatively on the alpine environment. One way we can do this is by planting native flora species around lodges to provide more habitats for native fauna, give back the required nutrients to the soil and to help stop erosion and weed dispersal.



Craspedia coolaminica, Billy-button

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;
- Increase the appeal and potential value of your property.

If you are a developer, any vegetation including trees, which are removed during development, must be replaced to achieve a net gain in vegetative cover, as specified in the planning permit. Even if no vegetation is 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 effectively revegetate disturbed areas and/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 and Mansfield State Forest;
- Decreased utilisation 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. It recognises 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.



Derwentia derwentiana, Derwent Speedwell

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 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. Permits are required to take seed and/or cuttings from plants within the Resort; several local suppliers have these permits and can propagate a range of plants for interested stakeholders.

Within 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. To obtain contacts for these plant propagators and distributors call the Alpine Resort Management Board on 03 5777 6077.

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).



Tasmannia xerophila, Alpine Pepper

Scientific Name	Common Name	Growth Form	Conditions	Flower Colour
<i>Baeckea gunniana</i>	Alpine Baeckea	Shrub to 1.5m	Wet areas	White
<i>Baeckea ramosissima</i>	Rosy Baeckea	Prostrate shrub	Open exposed areas	White
<i>Baeckea utilis</i>	Mountain Baeckea	Shrub to 2m	Shaded wet areas	White
<i>Brachyscome rigidula</i>	Leafy Daisy	Forb	Open areas	Purple
<i>Craspedia glauca</i>	Common Billy buttons	Forb	Open areas	Yellow
<i>Craspedia jamesii</i>	Green Billy-button	Forb	Open areas	Yellow / orange
<i>Derwentia derwentiana</i>	Derwent's Speedwell	Forb to .5m	Sub-alpine zone	Pink/white
<i>Dianella tasmanica</i>	Tasman Flax-Lily	Tufted forb	Sub-alpine zone	Blue / purple
<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>Leucopogon macraei</i>	Alpine Beard Heath	Shrub to 1.5m	Sub-alpine zone	White
<i>Olearia phlogopappa</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 squamulosum</i>	Forest Phebalium	Shrub to .5m	Exposed areas	Yellow
<i>Pimelea alpina</i>	Alpine Rice Flower	Shrub to .5m	Exposed alpine areas	White
<i>Pimelea ligustrina</i>	Tall Rice Flower	Shrub to 1.5m	Sub-alpine zone	White
<i>Poa costiniana</i>	Bog Snow-Grass	Grass	Exposed areas	

Scientific Name	Common Name	Growth Form	Conditions	Flower Colour
<i>Poa ensiformis</i>	Sword Tussock-grass	Grass	Sub-alpine zone	
<i>Poa fawcettiae</i>	Horny Snow Grass	Grass	Widespread	
<i>Poa hiemata</i>	Soft Snow Grass	Medium to Small Tufted Grass	Wet heathland	
<i>Podocarpus lawrencei</i>	Mountain Plum Pine	Shrub to 1.5m	Widespread	Small red fruit
<i>Podolobium alpestre</i>	Alpine Podolobium	Shrub to 2m	Sub-alpine zone	Yellow
<i>Prostanthera cuneata</i>	Alpine Mint-bush	Shrub to 1.5m	Widespread	White
<i>Richea continentis</i>	Candle Heath	Shrub to .3m	Wet areas	White
<i>Stylidium graminifolium</i>	Grass Triggerplant	Forb to 1m	Widespread	Pink / purple
<i>Tasmannia xerophila</i>	Alpine Pepper	Shrub to 1m	Sub-alpine zone	
<i>Xerochrysum subundulatum</i>	Orange Everlasting	Forb	25cm	Orange / Yellow

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. A native plant fertilizer may be used when planting to increase plant growth, though they will grow without it. 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.

How do I look after my Plants?

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

Mulching will

- improve the microbial activity in the soil
- Retain soil moisture
- Stabilize the soil
- Reduce competition with weeds
- Improve the aesthetics of your garden

Mulch can come in many forms. Different areas of your property may require a variety of mulches. Rock, eucalyptus chips (local eucy mulch), weed free straw and pinned erosion matting (jute mesh) are some common products used on Mt Buller. Any mulch you use must be free of weeds and seeds or you risk introducing new environmental weeds into the Resort.

Please ask the Environmental Manager on Mt Buller about any mulch that maybe available to Mt Buller and Mt Stirling stakeholders: 03 5777 6077.



Brachyscome rigidula, Leafy Daisy

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*), Twiggy 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 are 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 or contact the Alpine Resort Management Board.

Please contact the Mt Buller & Mt Stirling Alpine Resort Management Board
if you have any further queries.
louise@mtbuller.com.au – 03 5777 6077

Happy planting!