



Benefits of using Australian Native Grasses

The use of Australian native grasses has many benefits for the Australian environment. There are both practical and aesthetic benefits from using native grasses that can be utilised in a wide variety of projects.

Native grasses have been the dominant vegetation type for hundreds of thousands of years in Australia. This natural environment before European settlement was characterised by highly weathered, shallow and infertile soils, regular drought, high summer temperatures and spasmodic grazing from highly mobile soft footed herbivores. Much of our native grasslands have been lost to land clearing for agriculture and now only remnants remain. There are many threatened and endangered species of plants and animals whose habitat has been lost. By using native grasses, we are helping to restore habitat and preserve biodiversity.

Native grasses can grow on weathered and shallow soils

Australian native grasses are adapted to soils which have been subject to millions of years of weathering and erosion and so are able to grow on soils which are more like subsoils in other parts of the world. Soil depths of 50 to 100 mm (2 to 4 inches) are quite common across the grasslands of Australia and our native grasses have adapted to grow where soil depth is shallow. Native grasses are an ideal solution for revegetation on roadsides or mine-sites where topsoil is often returned as a veneer over the reconstructed subsoil.

Native grasses can grow on low fertility soils

Glaciation creates new soil through the action of ice crushing and grinding rock into small particles. When ice melts as the earth warms up, there is a good foundation of minerals from the crushed rock to create soil. Soils in Russia, Europe and North America are rich and deep as there have been recent periods of glaciation. In Australia, glaciation only occurred in small areas of the alps, so most of the continent missed out. Our soils are millions of years old and much of the mineral content has been leached away. Native grasses adapted to survive without high levels of soil nutrition. Many of them have the capacity to thrive in soils of low nutrition where many exotic grasses are not able to survive.



Native grasses are adapted to drought

Australia regularly suffers from severe droughts and low rainfall. Australian native grasses are well adapted to this and are usually the first grasses to recover after a drought.

They have a variety of mechanisms for drought avoidance, either through entering a prolonged dormancy, or through having a below-ground crown which is capable of

surviving drought and grazing. These grasses are usually advantaged by the impact of drought and become more prevalent following the breaking of the drought. Once grasses are established they can survive with minimal watering or irrigation.

When native grasses are used for lawns, landscape and amenity uses, there is a much lower (sometimes nil) watering requirement. In pastures, native grasses have a far greater capacity to tolerate drought without the need to resow the pasture following the breaking of the drought. In horticulture, supplementary irrigation in the space between the rows of vines or tree crops may not be needed.



Native grasses tolerate high summer temperatures

Australian summers have high temperatures and native grasses have evolved to be able to tolerate these conditions. Many grasses, such as wallaby grass, retain green colour and some growth throughout the summer. So several native grasses are suitable for lawns and amenity areas where a green colour is desired throughout the year. Many of these grasses are also able to respond to summer rainfall by retaining this slow-growing, but active—state over the summer period.

Native grasses can tolerate spasmodic grazing or mowing

Many Australian native grasses are quite tolerant of heavy grazing and recover well if provided with a sufficiently long period of rest between grazing events. While they may not recover as quickly as some of the exotic grasses, the Australian natives do recover. Many native grasses are quite capable of responding to mowing or grazing on a regular basis. Importantly, they usually do not grow at the same rate as the exotic grasses and provide a more even production of foliage over the course of the year. This offers the practical benefit of reduced mowing, especially during spring when exotic grasses produce large amounts of foliage.

Native grasses can be used for effective and attractive landscaping

There is a considerable aesthetic benefit to be gained from the use of these grasses. There are types of all sizes and shapes. After all there are more than 1000 species of exclusively Australian native species of grass that can be set to match the other plants in the landscape. Tall grasses can waft in the breeze, short types can provide ground cover and colour, and at the same time seedheads varying from white to purple and many shades in between can add colour and texture to gardens and commercial landscapes. In Australia, the balance of these grasses with the native trees and shrubs is pleasing and natural. In other countries these grasses can be used to provide distinct contrasts with the surrounding plants. The aesthetic benefits that native grasses offer are as wide and as varied as the imagination of the landscaper.

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