

Grass Trees/Balgas (Xanthorrhoea)

The common name for the *Xanthorrhoea* is Grass Tree or Balga. Grass Trees/Balgas epitomise the Australian bush; they're beautiful, ancient, hardy, thrive in nutrient poor soils and respond to wildfire by flowering profusely.

All 28 species of Grass Tree/Balga are native only to Australia. The common Grass Tree/Balga (*Xanthorrhoea preissii*) is endemic to Western Australia and grows naturally in sand, loam or gravelly soils, to a height of five metres. They have a lifespan of up to 600 years.

The Grass Tree/Balga are important to Aboriginal people across Australia. Grass Tree/Balga resin is traditionally used as glue in spear-making and in patching up water containers. Whilst the flower spikes make fishing spear shafts and firesticks; the tough seed pods are used as cutting implements; and the flower's nectar forms a sweet, slightly fermented drink. This nectar also attracts a wide variety of insects, birds and mammals. Once pollinated, the flowers form a tough, pointed fruit capsule that's typically matt-black.

Grass Trees/Balgas and fire

Grass Trees/Balgas are not a grass, nor are they a tree. Their "trunks" are made up of tightly packed leaves and can grow up to a height of five metres. Trunk-less Grass Trees/Balgas grow out of underground stems.

Grass Trees/Balgas do not shed their old leaves. The bases of their leaves are packed tightly around their stem, and are held together by a strong, water-proof resin. As the old leaves accumulate, they form a thick bushy "skirt" around the trunk. This skirt is highly flammable, and in a bushfire, the tightly-packed leaf bases shield the stem from heat and

allow Grass Trees/Balgas to survive the passage of fire. Grass Trees/Balgas can recover quickly after a fire due to reserves of starch stored in their stem. The flowering of Grass Trees/Balgas is not dependent on fire; however, it can stimulate the process. Without fire, Grass Trees/Balgas may take several years to flower.

Wildfires/bushfires that often start in hot, dry, windy weather can quickly burn through weeds and undergrowth, gaining momentum to reach into tree canopies, burning a much higher proportion of vegetation and having a greater environmental impact. Wildfires have the potential to kill older Grass Trees/Balgas due to the high intensity exposure of heat and flames.

Grass Trees/Balgas and hazard reduction burning

Hazard reduction Grass Tree burns (also known as prescribed, controlled and planned burns) are carried out in cooler conditions, often after recent rainfall, to create slow-moving, low intensity fires in carefully selected areas within appropriate vegetation communities. Hazard reduction Grass Tree burns in cool conditions can reduce fuel build-up in the undergrowth, help control weed infestations and encourage floristic diversity.

Burning of Grass Trees/Balgas and surrounding leaf litter can be undertaken as a low intensity cool burn, which will significantly reduce the fuel load and risk of a high intensity wildfire/bushfire.



Pre-arson event



Post arson event (unplanned bushfire/wildfire)







Grass Tree/Balga hazard reduction burn

Grass Tree/Balga flowering