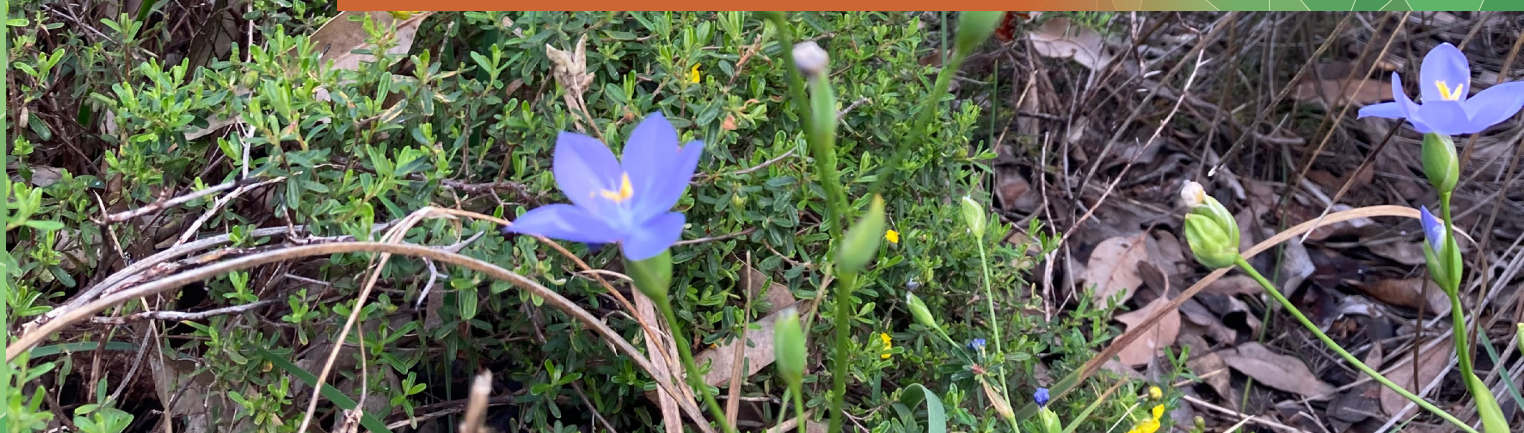


## Fact Sheet: Plant biodiversity of the south-west forest



Jarrah forest diversity Beelu National Park.

The planning area supports over 3750 vascular plant species and subspecies/varieties – a remarkable richness – and the number of known species continues to grow with new discoveries.

The south-west forests form a large part of the Southwest Australian global biodiversity hotspot – one of 36 regions from across the world recognised for having an exceptional and rich diversity that is exposed to significant threats. In addition to being remarkably species-rich, the south-west forests include karri, one of the world's tallest flowering plants, along with many other culturally important species such as moodjar (*Nuytsia floribunda*, Western Australian Christmas tree) and (*Xanthorrhoea preissii*, and balgas or grasstrees), and iconic trees such as jarrah and marri.

The south-west forests are a subset of the broader Southwest Australian Floristic Region in which nearly half (47 percent) of the more than 8500 species/sub-species is endemic.

The diversity of the south-west flora relates to its evolution through varying climates in an ancient, weathered landscape. Following the separation of Australia from Antarctica 65 million years ago, the climate of the south-west has fluctuated over time and is now generally more arid than it has been in the past. This resulted in the extinction and contraction of rainforest species and the expansion of hard-leaved (sclerophyllous) vegetation that is adapted to low-nutrient, weathered soils, including the evolution of new species of *Callitris*, *Drosera*, *Banksia*, *Eucalyptus* and *Gastrolobium*.

Plants of the genus *Gastrolobium*, sometimes referred to as fluoroacetate 'poison peas', contain the naturally occurring poison sodium fluoroacetate (1080). This is used in the toxic baits used for managing foxes and feral cats. Native animals have evolved with these plants and have developed a tolerance to the toxin. However it is lethal, even in tiny amounts, to introduced foxes and feral cats.

By far the greatest plant diversity in the forest ecosystem is in the understorey and the sedge-lands and fringes of rock outcrops associated with the forest. The composition of tree species in the upper and mid-stories is relatively uniform.

One-hundred and twenty four vascular plant species and subspecies are listed as threatened and four as extinct under the *Biodiversity Conservation Act 2016*. A further 583 taxa are listed as 'Priority' flora, with either insufficient information to assess their conservation status, or as they are naturally rare. The most significant threats to these flora species include disease, land clearing and fragmentation, inappropriate fire regimes and weed invasion.

Threatened and Priority flora are often found in locations with older and/or geographically restricted landscape features such as granite outcrops of the Darling Scarp and the Walpole-Denmark hinterland, where there are large numbers of short-range endemic species.

### Further reading

Information on threatened plant species and communities is periodically updated. Current lists are available at [dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities](http://dpaw.wa.gov.au/plants-and-animals/threatened-species-and-communities)

Information on *Gastrolobium* 1080 is available on the DBCA home page [www.dbca.wa.gov.au/parks-and-wildlife-service/wildlife-and-ecosystems/western-shield](http://www.dbca.wa.gov.au/parks-and-wildlife-service/wildlife-and-ecosystems/western-shield) Managing threats

The management of Western Australia's south-west forests will be outlined in the *Forest Management Plan 2024-2033*. For more information visit our website at [dbca.wa.gov.au/forest-management-plan](http://dbca.wa.gov.au/forest-management-plan)