

Rare Flora of the Mount Lesueur Area

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The Mt Lesueur region has much to offer to the botanical enthusiast. Covering its rugged plateau landscape is a heathland flora with one of the richest concentrations of rare wildflowers in Western Australia.

This is highlighted in the accompanying map, which shows the relative density of species of the Proteaceae (banksias, dryandras, grevilleas, hakeas, etc.) in south-western Australia. The Mt Lesueur region ranks alongside the Fitzgerald River National Park and the Darling Range, and is exceeded only by the Stirling Range, in the richness of species in this group of plants. The same applies about many other groups of plants.

It is little wonder that Mt Lesueur has captured the imagination of botanists ever since James Drummond first traversed its slopes in the 1850s. It certainly impressed C.A. Gardner who, in 1947, discussed the botanical virtues of the region in a paper given prominence as the first article in the inaugural issue of *The Western Australian Naturalist*. The first detailed study of the region's vegetation was undertaken by N.H. Speck as part of a Ph.D research project completed in 1958. Speck regarded the vegetation and flora so distinctive as to warrant recognition of the area as a new botanical district within the geographical subdivisions recognised for south-western Australia.

Subsequent research has indeed highlighted the rich complement of rare and geographically restricted species that makes the Mt Lesueur region's flora unique. A review of available information in 1981 by consultant botanist, E.A. Griffin, showed that 38 named and 24 unnamed species with a maximum geographical range of less than 160km occurred within the proposed Mt Lesueur Nature Reserve. These include three species gazetted as rare flora under the Wildlife Conservation Act — Lesueur Hakea *H. megalosperma*, Pine Banksia *B.*

tricuspis, and Gairdner Range Starbush *Urocarpus phebaloides*. Several other plants among those recorded for the region are proposed for gazettal as rare once they have been formally named by botanists and field surveys of their distribution and abundance are complete.

There is every likelihood that further rare plants will be discovered near Mt Lesueur. For example, over the past two years, four more gazetted rare plants have been found (Boyagin Mallee *Eucalyptus exilis*, Fishbone Banksia *B. chamaephyton*, Leafy Stachystemon *S. axillaris* and

▼ Pine Banksia *Banksia tricuspis*. A gazetted rare shrub confined to the the immediate vicinity of Mt Lesueur. Its large inflorescences are up to 20cm long and appear in autumn-winter.



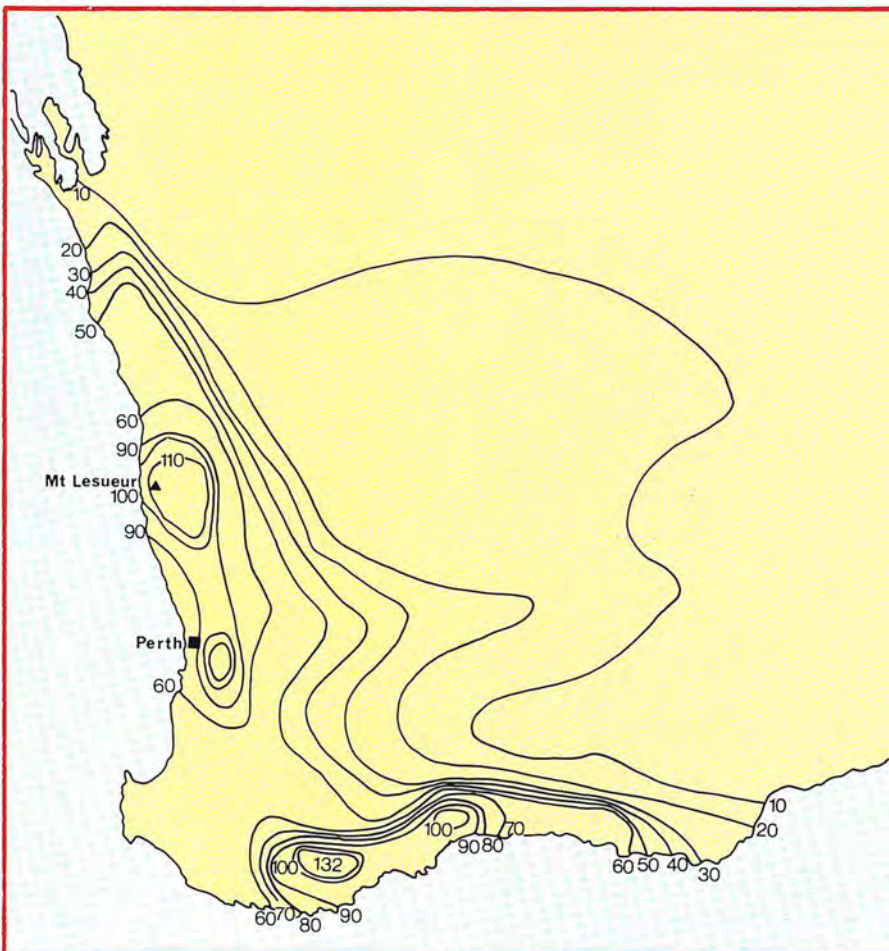


▲ White Spider Orchid *Caladenia longicauda*. The segments of this orchid commonly exceed 10cm in length, making it the largest representative of this family to be seen near Mt Lesueur.



▲ Winter Bell *Blancoa canescens*. The 3-4cm long flowers of this herb attract birds as pollinators. The species was illustrated by C.A. Gardner in a paper extolling the botanical virtues of the Mt Lesueur region. It was regarded by him as a rare species, but it is now known to be common in the northern sandplains.

▼ Isoflor map of the Proteaceae showing relative species richness for this plant family in south-western Australia. Each isoflor line encompasses areas having the number of species indicated. The map is based on data for 426 species compiled by N.H. Speck for his 1958 Ph.D thesis. Note the high concentration of species around Mt Lesueur.



▼ Black Gin *Kingia australis* with Mt Lesueur in the background. This location is the most northerly known for Kingia, as well as for Jarrah and Mountain Marri.





▲ *Eucalyptus suberea* growing on the slopes of Mt Lesueur. Only recently recognised as an undescribed species, this rare mallee is another relict, having no close relatives among eucalypts. Small populations of it are distributed along the breakaway systems near Mt Lesueur.

▼ *Eucalyptus lateritica* growing on Mt Michaud. This is a rare species soon to be named formally by botanists. It is confined to lateritic breakaway country between Mt Lesueur and Coomaloo Creek.



▲ Lesueur Hakea *Hakea megalosperma*. A very rare shrub confined to the Mt Lesueur region and south-east near Cataby. This species has no close relatives, presumably evolving in isolation for a long time and persisting in relict populations on high lateritic hills.

Star Orchid *Thelymitra fuscolutea* var. *stellata*), together with small populations of new unnamed species of eucalypt and a *Conostylis*. The discovery of Boyagin Mallee near Mt Lesueur extended the range of this species some 300 km northwards. Previously, it was only known from a few populations near Pingelly to the south-east of Perth. This remarkable disjunction in geographical distribution indicates the importance of Mt Lesueur as a refuge where previously widespread species have been able to persist during presumably adverse climatic changes.

Other species display the same pattern as Boyagin Mallee with small populations at Mt Lesueur well-removed from the main species' occurrence. These include such well known plants as Jarrah *Eucalyptus marginata*, Mountain Marri *E. haematoxylon* and Black Gin *Kingia australis*.

The aggregation of rare species, geographical outliers of widespread species, and a remarkably rich assemblage of plants in the small area surrounding Mt Lesueur makes the region exceptionally valuable for flora conservation.

Once created, the proposed Mt Lesueur Nature Reserve will rectify what has been an important deficiency in the State's network of nature reserves and national parks.