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Whorled Eremophila

Endangered Flora of Western Australia

If you think you have seen this plant, please call the Department of Conservation and Land Management's Katanning District on (08) 9821-1296.

The genus *Eremophila* is endemic to Australia where it is represented in all mainland States. Currently, there are some 200 named species and many unnamed ones. Most occur in semi-arid and arid regions where they are found in a range of habitats over a wide area. The plants are commonly referred to as emu bushes or poverty bushes.

J. Wrigley made the first known collection of *Eremophila verticillata* (whorled Eremophila) from near Newdegate in 1968. A few years later (in 1980) P. Luscombe made a collection of the species from private property between Kalgarin and Pingaring. Although this second population was found on a similar soil type and geological formation as the first, plants had a slightly different morphology, with very hairy branches and leaves that were grey in appearance. The plants were located in an area of land that was being cleared for cropping and no plants have been located in that area since.

In 1987 Departmental staff from Katanning District discovered a population southeast of Newdegate.

Whorled Eremophila is a small shrub to one metre high and 80cm across with erect or spreading branches that are nearly cylindrical in cross-section. The lower section of the branches are often bare of leaves on mature plants. The narrow leaves, 2.5-6cm long by 1mm wide, are fleshy, stalkless, green to purplish, in whorls of three and are pressed against the branches. The flowers are tubular, violet and have a white interior with purple spots. The outside of the corolla is covered with soft hairs.

Whorled Eremophila is closely related to *E. ternifolia* but differs in its smaller, narrower, appressed leaves and different shaped fruit, in which the carpels are neither unequal nor free in the upper half (Chinnock 1986).

Whorled Eremophila is endemic to Western Australia where it is apparently confined to an area southeast of Newdegate. Habitat is powdery brown loam over dolomite in open low *Eucalyptus* woodland of *E. longicornis* (Morrell), *E. annulata* and *E. flocktoniae* (Merrit) over *Maireana erioclada* and *Threlkeldia diffusa*. The species is currently known from two extant populations containing a total of around 567 mature plants. Surveys for plants in the area of three old populations have proven unsuccessful and all three are currently presumed extinct.



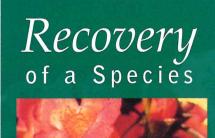
A close up of the tiny 6mm long flowers. Photo - A.Brown

Whorled Eremophila was declared as Rare Flora in September 1987 and ranked Critically Endangered (CR) in September 1998 due to its small area of occupancy, low number of plants, a decline in the number of populations and a decline in area and quality of habitat. The main threats are mining, poor recruitment, vehicle damage, salinity, road maintenance, inappropriate fire regimes and competition from associated native species and weeds.

The Department has set up the Katanning District Threatened Flora Recovery Team to coordinate recovery actions that address the greatest threats to the survival of the species in the wild (see overleaf).

Whorled Eremophila is known from just two populations and the Department is keen to know of any others.

If unable to contact the district office on the above number, please phone the Department's Wildlife Branch on (08) 9334 0422.



The Department is committed to ensuring that Critically Endangered flora does not become extinct in the wild. This is done through the preparation of a Recovery Plan or Interim Recovery Plan (IRP), which outlines the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of threatened taxa in the wild and begin the recovery process.

IRPs are prepared by the Department and implemented by Regional or District Recovery Teams consisting of representatives from the Department of Conservation and Land Management, community groups, private landowners, local shires and various government organisations.

Whorled Eremophila

Recovery actions that have been, and will be, progressively implemented to protect the species include:

Protection from current threats: These include weed control; fencing, seed collection; propagation; translocations; conducting further surveys; and regular monitoring of the health of populations.

Protection from future threats: These include the development of a fire management strategy; and researching the biology and ecology of the species. Other actions include ensuring that relevant authorities, landowners and Departmental personnel are aware of the species' presence and the need to protect it, and that all are familiar with the threats identified in the Interim Recovery Plan.



A mature plant of Whorled Eremophila. Photo - A.Brown



Numerous tiny flowers are produced in late Spring and Summer. Photo - A.Brown

IRPs will be deemed a success if the number of individuals within the population and/or the number of populations have increased.

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Habitat of Whorled Eremophila. Photo - L.Monks

