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Swamp starflower

Endangered Flora of Western Australia

If you think you've seen this plant, please call the Department of Environment and Conservation's (DEC's) Swan Coastal District on (08) 9405 0700.

Commonly known as swamp starflower, *Calytrix breviseta* subsp. *breviseta* is a small erect to spreading shrub growing up to 40 centimetres in height. The leaves are two to 10 millimetres long and 0.4 to 1.1 millimetres wide. The lobes are shaped linear to narrowly elliptic, are widely spaced and arranged alternately along the stem. Attractive star-shaped purple-blue flowers are produced in October and November, each with numerous yellow stamens and large whisker-like projections called awns.

Swamp starflower is found growing in winter-wet sandy clay soils near the base of the Darling Scarp. While it appears to be quite similar to the subspecies *stipulosa*, it differs in having longer narrow leaves and longer petals.

Government Botanist James Drummond first discovered the swamp starflower sometime before 1837. It was then recorded from the Gosnells and Bellevue areas in 1901 and 1915, but was later thought to have become extinct due to the extensive clearing of its habitat. In 1990 a thorough survey of the Perth area was undertaken and resulted in

its rediscovery by staff from the Department of Conservation and Land Management (which has subsequently merged with the Department of Environment to form the Department of Environment and Conservation).

Swamp starflower was ranked as Critically Endangered in 1995 and DEC, through the direction of the Swan Region Threatened Flora and Communities Recovery Team, has been addressing the most threatening factors affecting its survival in the wild. There are currently only two populations of swamp starflower recorded and they both occur in the Kenwick area. These populations are threatened by weed invasion, firebreak maintenance activities, grazing by rabbits, trampling by horses, changes in hydrology and inappropriate fire regimes.



Closeup of flowers illustrating the numerous stamens and whisker-like projections typical of the genis *Calytrix*. Photo – Andrew Brown



Swamp starflower in full flower. Photo - Andrew Brown



DEC is committed to ensuring that Critically Endangered taxa do not become extinct in the wild. This is done through the preparation of a Recovery Plan (RP) 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 the threatened species in the wild and begin the recovery process.

IRPs are prepared by DEC and implemented by Regional or District recovery teams consisting of representatives from DEC, Botanic Gardens and Parks Authority, community groups, private landowners, local shires and various government organisations.

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

Protection from current threats — Recovery actions that are currently being implemented include a translocation of the species to a secure site; the propagation of plants from seed collected from wild populations grown into seedlings for use in the translocation; weed control; rubbish removal; installation of rare flora markers to mark the extent of each population; survey to locate new populations of the species; and continued research into the biology and ecology of the swamp starflower including monitoring of the species postburn.

Protection from future threats — Other recovery actions include the development of a fire management plan to protect the subspecies from inappropriate fire regimes; the maintenance of dieback hygiene; regular monitoring of the health of each population; ensuring that relevant authorities, land owners and DEC personnel are aware of the subspecies' presence and the need to protect it and are all familiar with the threatening processes identified in the Interim Recovery Plan.

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

This project is funded by the Australian and State Governments' investment through the Natural Heritage Trust administered in the Swan Region by the Swan Catchment Council.



A two-year-old seedling flowering for the first time. Photo – Andrew Brown



 $Swamp\ starflower\ is\ found\ in\ winter-wet\ areas\ that\ begin\ to\ dry\ out\ as\ the\ species\ begins\ flowering.\ Photo-Andrew\ Brown$





