

Quartz-loving synaphea

E n d a n g e r e d F l o r a o f W e s t e r n A u s t r a l i a

If you think you've seen this plant, please call the Moora District office of the Department of Conservation and Land Management on (08) 9652 1911.

Quartz-loving synaphea (*Synaphea quartzitica*) is a low sub-shrub with several stems. The flattened leaves have 6-15 cm long petioles, and are pinnately divided with two or three pairs of lobes to 6 mm wide. The flowering spikes carry many bright yellow flowers, which appear July to August, are 6-18 cm long and are often only a little taller than the foliage.

The first known collection of quartz-loving synaphea was from the Moora area in October 1908 by Dr. J. Burton Cleland and this specimen is now housed in New South Wales. Surveys conducted in August 1998 located three additional populations nearby. However, all of the known populations are relatively small and isolated.

Quartz-loving synaphea is endemic to the Moora - Watheroo area of Western Australia. It occurs on chert hills in tall shrubland of *Allocasuarina campestris* with *Xanthorrhoea* sp.(balga), *Melaleuca radula* (graceful honey-myrtle), *Daviesia dielsii*, *Acacia aristulata*, *Stylidium* and *Kunzea* species.

It has also been found in sandy soil at the base of a chert slope.

Seed production is low in most synapheas, including many that are sensitive to fire. Staff of the Department of Conservation and Land Management's (the Department's) Threatened Flora Seed Centre noted in 1998 that virtually all the potential seed produced after flowering had aborted and only one seed was collected. The more frequent occurrence of this species along existing tracks and on long overgrown tracks suggests that disturbance stimulates germination. However, as recent research undertaken for an Honours project indicated that it sets very little seed, this alone will not ensure its success.

Quartz-loving synaphea has roots that tolerate fires and this would allow them to regenerate in the absence of seed. New



Lobed leaves and long flowering spikes distinguish this species. Photo – Gillian Stack

growth has been observed resprouting from otherwise apparently dead plants of quartz-loving synaphea.

Quartz-loving synaphea was ranked as Critically Endangered in 1998 and the Department, through the direction of the Moora District Threatened Flora Recovery Team, has been addressing the most threatening factors affecting its survival in the wild (see overleaf).

Quartz-loving synaphea is currently known from five populations totalling around 300 plants. The Department is keen to hear of any other populations.

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

Recovery of a Species



The Department 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 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, Botanic Gardens and Parks Authority, community groups, private landowners, local shires and various government organisations.

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Recovery actions that are being implemented are:

Protection from current threats: these include the erection of signs that mark the site of the populations; control of rabbits; the development of a fire management strategy to protect the species from inappropriate fire regimes; and regular monitoring of the health of the populations.

Protection from future threats: these include the collection of genetic material; the maintenance of live plants away from the wild (ie. in botanic gardens); conducting further surveys; researching the biology and ecology of quartz-loving synaphea; enhancing plant numbers by direct propagation and translocation techniques; acquiring the land on which it occurs; and ensuring that relevant authorities, land owners and Departmental personnel are aware of its presence and the need to protect it, and that all are 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 poster is sponsored by the Endangered Species Program of the Natural Heritage Trust.



Quartz-loving synaphea occurs in chert hills. Photo – Gillian Stack



Bright yellow flowering spikes appear in this species from July to August. Photo – Gillian Stack



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