



PLANT

Thelymitra cyanapicata

Blue Top Sun-orchid

AUS	SA	AMLR	Endemism	Life History
CE	E	E	AMLR	Perennial

Family ORCHIDACEAE



Photo: © R. Bates

Conservation Significance

Endemic to the AMLR where the species' relative area of occupancy is classified as 'Extremely Restricted'.⁴

Until 2007, this species was considered nationally extinct.² Listed as critically endangered in 2008 (J. Quarmby *pers. comm.* 2009).

Description

Sun-orchid; leaf to 10 cm long. Flower stem wiry, purplish, to 20 cm tall. Flowers few, tiny, about 14 mm across, a uniform deep blue, not or hardly fragrant.²

Synonyms: Previously included in *Thelymitra pauciflora* as *T.* 'blue column'.²

Distribution and Population

Known only from southern AMLR, however a similar plant has been found at Penola CP in the SE. Once may have had a wider distribution, perhaps also in VIC where similar habitat exists.² Approximately 100 plants were found in a clear-felled pine forest at Knott Hill, Kuitpo in October 2007. Prior to this, only

known from nearby in the 1980s (R. Bates *pers. comm.*).

There are no pre-1983 records.⁴

Habitat

Occurs in *Eucalyptus viminalis*, *E. obliqua* open swampy woodland with a dense understorey of tea-tree, sedges, rushes and ferns including *Leptospermum continentale*, *Baumea tetragona*, *Gahnia sieberiana* and *Isolepis inundata*. Occurs in low-lying creeks and swamps with wet sandy soils. This habitat type is classed as part of the Fleurieu Peninsula swamps ecological community, which is listed as a Critically Endangered under the EPBC Act.⁵

Within the AMLR the preferred broad vegetation group is Wetland.⁴

Within the AMLR the species' degree of habitat specialisation is classified as 'Very High'.⁴

Biology and Ecology

Flowers from October to early November.² Flowers are self-pollinating, only opening for two to three hours per season in warm humid weather (R. Bates *pers. comm.*).²

Known to hybridise with *Thelymitra pauciflora* and *T. juncifolia*.²

Aboriginal Significance

Post-1983 records indicate the entire AMLR distribution occurs in southern Peramangk Nation.⁴

Thelymitra sp. Are recorded as traditional year round food resource for Aboriginal people in NSW (tuber eaten).¹

Threats

The known distribution of the Blue Top Sun-orchid is considered to be severely fragmented. All known sites occur within very small fragments of remnant vegetation that are surrounded by large areas of pine plantation, vineyard, and cleared agricultural land. Therefore there is an increased risk of extinction due to habitat fragmentation, low population size, a reduced probability of recolonization and grazing pressure.⁵

Both sub-populations within Knott Hill Forest Reserve are now in small reserved areas protected from potential impacts of direct forestry operations and the areas are actively managed. There is still a risk from Phytophthora

Further information:

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Prepared as part of the Regional Recovery Plan for Threatened Species and Ecological Communities of Adelaide and the Mount Lofty Ranges, South Australia 2009 - 2014



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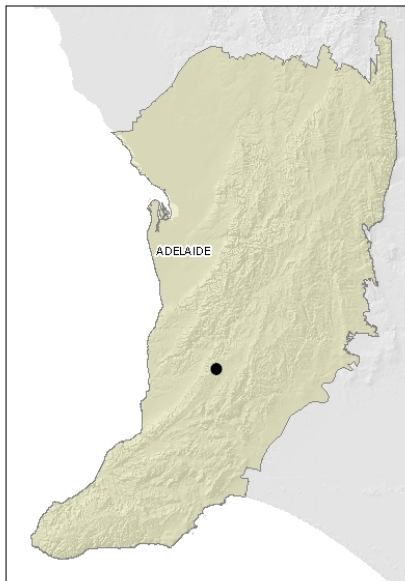


and reduced availability of water due to adjacent establishing pine plantation and long-term impacts from climate change (J. Crampton *pers. comm.* 2009).

Very limited within the AMLR region, however the majority of known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.⁴

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

Regional Distribution



Map based on filtered post-1983 records.⁴ Note, this map does not necessarily represent the actual species' distribution within the AMLR.

References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

1 Australian National Botanic Gardens (2007). *Aboriginal Plant Use - NSW Southern Tablelands*. Available from <http://www.anbg.gov.au/apu/index.html> (accessed August 2007).

2 Bates, R. J., ed. (2007). *South Australian Native Orchids. Electronic version, August 2007*. Native Orchid Society of South Australia.

3 Department for Environment and Heritage. (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Expert Flora Workshop, Unpublished Notes*. Participants: Bickerton, D., Croft, T., Jury, T., Lang, P., Prescott, A., Quarmby, J. and Smith, K., Adelaide.

4 Department for Environment and Heritage (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database*. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.

5 Quarmby, J. (2007). *Species information sheet for Thelymitra cyanapicata Jeanes*. Department for Environment and Heritage, Adelaide.

Postscript: a Conservation Advice and species profile is now available from <http://www.environment.gov.au/sprat>

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