



**PLANT**

*Thelymitra holmesii*

**Blue Star Sun-orchid**

AUS	SA	AMLR	Endemism	Life History
-	V	V	-	Perennial

Family *ORCHIDACEAE*



Photo: © Ken Bayley

**Conservation Significance**

The AMLR distribution is disjunct, isolated from other extant occurrences within SA. Within the AMLR the species' relative area of occupancy is classified as 'Very Restricted'.<sup>5</sup>

**Description**

Slender Sun-orchid, 10-40 cm high. Leaf narrow-linear, thick and fleshy, deeply channelled, to 20 cm long.<sup>4</sup> Flowers bright-blue inside, slate coloured outside, usually one to three, rarely up to ten, opening in warm sunshine. Self-pollinated.<sup>4</sup>

Synonyms: *Thelymitra pauciflora* var. *holmesii*.<sup>2</sup> Similar species: *T. pauciflora*, *T. mucida*, *T. aff holmesii*.<sup>2</sup>

**Distribution and Population**

Also occurs in NSW, ACT, VIC and TAS.<sup>3,8</sup> In SA occurs in FR, NL, SL, KI and SE regions.<sup>4</sup> More common in eastern Australia.<sup>2</sup> Restricted to high rainfall districts in the SMLR, especially Fleurieu Peninsula, forming small populations in swamps.<sup>2,4</sup>

Once abundant in the Mount Compass and

Myponga swamps and grew as far north as Mount Crawford. Variation in form of flowers in the SL region indicates that there are probably undescribed cryptic species present.<sup>2</sup>

Post-1983 AMLR filtered records mostly from the Mount Compass area, with single records from Mount Bold and near Piccadilly.<sup>5</sup>

Pre-1983 AMLR filtered records indicate historically it occurred near Happy Valley, Mylor and Meadows.<sup>5</sup>

**Habitat**

Occurs in swamps, peat bogs, creeks and waterholes which may be up to 2 m deep in winter. Can rapidly colonise sand borrow-pits.<sup>2</sup>

Recorded habitat in AMLR includes *Leptospermum continentale* shrubland with sedge and fern understorey; and sandy heathland around swamp margins, with *Thelymitra merranae*, *T. aff. pauciflora* and *T. juncifolia*.<sup>6,7</sup>

Within the AMLR, the preferred broad vegetation group is Wetland.<sup>5</sup>

Within the AMLR the species' degree of habitat specialisation is classified as 'High'.<sup>5</sup>

**Biology and Ecology**

Flowers from late October to early December.<sup>2</sup> Flowers are self-pollinating.<sup>6,8</sup> Flowers well after fire or other disturbance which opens up dense swamp thickets.<sup>2</sup> Hybrids have been reported with *Thelymitra ixioides*, *T. pauciflora* and *T. juncifolia*.<sup>2,4</sup>

**Aboriginal Significance**

Post-1983 records indicate the AMLR distribution occurs in Peramangk Nation and southern Kurna Nation. Also occurs in Ngarrindjeri Nation.<sup>5</sup>

*Thelymitra* spp. are recorded as traditional year round food resource for Aboriginal people in NSW (tuber eaten).<sup>1</sup>

**Threats**

Threats include weed infestation and competition (Blackberry), and livestock grazing.<sup>6,7</sup>

Approximately half of known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.<sup>5</sup>

**Further information:**

Biodiversity Conservation Unit, Adelaide Region  
Phone: (61 8) 8336 0901 Fax: (61 8) 8336 0999  
<http://www.environment.sa.gov.au/>

© Department for Environment and Heritage FIS 90346 May 2008

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





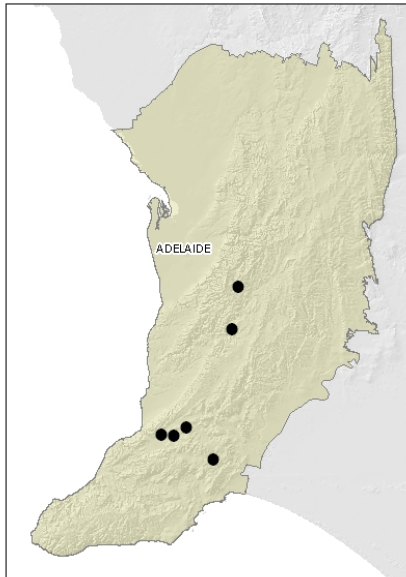
# ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department  
for Environment  
and Heritage

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.<sup>5</sup> 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 Council of Heads of Australian Herbaria (2002). *Australia's Virtual Herbarium*. Available from <http://www.flora.sa.gov.au/avh/> (accessed July 2007).
- 4 Department for Environment and Heritage *Electronic Flora of South Australia species Fact Sheet: Thelymitra holmesii Nicholls*. Available from <http://www.flora.sa.gov.au> (accessed September 2007).
- 5 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.

6 Department for Environment and Heritage (2007). *State Herbarium of South Australia Database*. Unpublished data, extracted October 2007.

7 Department for Environment and Heritage (2007). *Wetlands Inventory Database of South Australia*. Unpublished data, extracted October 2007.

8 Jones, D. L. (2006). *A complete guide to native orchids of Australia including the island territories*. New Holland Publishers, Australia.

## Further information:

Biodiversity Conservation Unit, Adelaide Region  
Phone: (61 8) 8336 0901 Fax: (61 8) 8336 0999  
<http://www.environment.sa.gov.au/>

© Department for Environment and Heritage FIS 90346 May 2008

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



Government  
of South Australia