

ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA Threatened Species Profile

Department for Environment and Heritage

Veronica derwentiana ssp. homalodonta

AUS	SA	AMLR	Endemism	Life History
-	Е	E	State	Perennial

Family SCROPHULARIACEAE



Photo: © Tim Jury

Conservation Significance

Endemic to SA. 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'. Relative to all AMLR extant species, the species' taxonomic uniqueness is classified as 'High'.¹

Further taxonomic investigation is required as this subspecies is very similar in appearance and distribution to *Veronica derwentia* ssp. *anisodonta*.²

Description

Large herbaceous shrub up to 1.5 m high and 2 m across. Plants form large clumps with the stems emerging annually from a long-lived rootstock. Large, opposite leaves with evenly spaced, regular teeth. White or pale lilac to pale blue tubular flowers (25-130) in large stalked clusters at the ends of the branches (Briggs and Ehrendorfer 1992).³

Distribution and Population

The species *Veronica derwentiana* also occurs in NSW, VIC and TAS. In SA, is known from Mt Lofty southwards, KI (western half) and SE (Mt Burr and Hells Hole near Mt Gambier).⁴ Three subspecies occur in SA, all of which are considered rare.⁴

Post-1983 AMLR filtered records isolated along the

Further information:

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

spine of the MLR, from Mount Crawford Forest, Cherryville/Basket Range, south-east of Belair NP, Scott Creek CP, Kuitpo, and Hindmarsh Valley areas.¹

Pre-1983 AMLR filtered records indicate a similar distribution with additional historic records at Myponga and Inman Valley, however there is insufficient data to indicate any declines in extent of occurrence.^{1,3}

Habitat

Grows beside streams and waterfalls or associated with limestone caverns.⁴ Occurs in moist sites in gullies or near creeks in high rainfall areas (K. Brewer *pers. comm.*; Briggs and Ehrendorfer 2002).³

Distribution appears to be fragmented. Occurs in isolated populations, many separated by areas of unsuitable habitat. 3

Within the AMLR the preferred broad vegetation groups are Heathy Woodland, Wetland and Heathy Open Forest.¹

Within the AMLR the species' degree of habitat specialisation is classified as 'High'.¹

Biology and Ecology

Flowers from October to January.⁴ Biology is not wellknown. Individual plants may be very long-lived. One large plant at Cherryville has remained unchanged in size for the past 25 years but very few seedlings occur naturally. Plants can be propagated from seed or from vegetative cuttings. This suggests that seed viability is not a problem but that there are specific requirements for seed germination (K. Brewer *pers. comm.*).

A large increase from four to fifty plants was recorded for a population on Kangaroo Island, which may have been related to recruitment after fire.³ However, it does not always increase in population size after fire (K. Brewer *pers. comm.*). Plants may be more obvious after fire when overstorey weeds are destroyed. Response to fire requires further study.³

Aboriginal Significance

Post-1983 records indicate the AMLR distribution occurs in Peramangk Nation, eastern Kaurna Nation and southern Ngarrindjeri Nation.¹



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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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Threats

Threats are not well-known but may include:

- weed competition: weeds may compete with seedlings and prevent recruitment, or lead to a decline in the vigour of adult plants, the most serious weed threats are Montpelier Broom and Blackberry (K. Brewer *pers. comm.*)
- inappropriate weed control methods: including off-target damage, e.g. during spraying of Blackberries along watercourses (T. Jury *pers. comm.*)
- small population size: occurs in small isolated clumps, widely separated from other subpopulations limiting genetic exchange
- lack of recruitment
- grazing and/or physical damage by livestock or other herbivores
- altered hydrological regimes
- human impacts: e.g. encroachment of residential land use
- disease: plants may be susceptible to *Phytophthora* as they are shallow-rooted and occur in moist locations (K. Brewer *pers. comm.*).³

Within the AMLR, the majority of known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.¹

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.¹ Note, this map does not necessarily represent the actual species' distribution within the AMLR.

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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 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.

2 Department for Environment and Heritage. (2007). Summary of two Wetland Threatened Flora Workshops (unpublished spreadsheet).

3 Department for the Environment and Heritage (2005). *EPBC Nomination to list in the Critically Endangered category Derwentia derwentiana subsp. homalodonta (Mount Lofty Speedwell).* Available from http://eied.deh.gov.au/biodiversity/threatened/nominations/ pubs/derwentia-d-homalodonta.pdf.

4 Jessop, J. P. and Toelken, H. R., eds. (1986). *Flora of South Australia*. South Australian Government Printing Division, Adelaide.

