

## ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA Threatened Species Profile

Department for Environment and Heritage

PLANT

**Showy Violet** 

### Viola betonicifolia ssp. betonicifolia

AUS	SA	AMLR	Endemism	Life History
-	Е	E	-	Perennial

Family VIOLACEAE



Photo: © Peter Lang

#### **Conservation Significance**

In SA, the majority of the distribution is confined within the AMLR, disjunct from the remaining extant distribution in other States. Within the AMLR the species' relative area of occupancy is classified as 'Extremely Restricted'. Relative to all AMLR extant species, the species' taxonomic uniqueness is classified as 'High'.<sup>6</sup>

#### Description

Small herb with short erect stems, to ankle high. Grows as single plants. Leaves oblong or lance-shape. Petals purple.<sup>4,9</sup>

#### **Distribution and Population**

Also occurs in NSW, VIC, TAS and ACT. In SA only occurs in SL region with historical records also in the SE region.  $^{1,3}$ 

Previously thought to be extinct in SA but was recently rediscovered in Mount Bold Reservoir (D. Duval *pers. comm.*). Exists in small patches of up to 100 plants.<sup>8</sup>

Pre-1983 AMLR filtered records indicate it once had a wider distribution, occurring near Kangarilla, Woodside, Nairne, Meadows, and south of Gumeracha.<sup>6</sup>

#### Habitat

Occurs in a variety of habitats, including woodland, forest, healthland, shrubland and herbfields.<sup>2,11</sup>

At Mount Bold, recorded growing in damp grassy *Eucalyptus obliqua* +/- *E. viminalis* woodland and lower south facing slopes in a shallow gully, with *Eucalyptus viminalis, E. obliqua, Ranunculus lappaceus, Ajuga australis* and *Scaevola albida* (T. Jury *pers. comm.*).<sup>8</sup>

Within the AMLR the preferred broad vegetation groups are Heathy Woodland and Grassy Woodland.<sup>6</sup>

Within the AMLR the species' degree of habitat specialisation is classified as 'Moderate-Low'.<sup>6</sup>

#### **Biology and Ecology**

Flowers from September to January.4,9

Provides ground cover for butterflies and is a known food plant of the butterfly *Argyreus hyperbius inconstans* (which does not occur in SA).<sup>10</sup>

Recorded as having a robust fire response, unlikely to be affected by repeated fires.<sup>7</sup>

#### **Aboriginal Significance**

Post-1983 records indicate the entire AMLR distribution occurs in southern Peramangk Nation.<sup>6</sup>

#### Threats

Threats include:

- weed competition: populations are currently under threat from Montpelier Broom (*Genista* monspessulanus) (D. Duval pers. comm.)
- inappropriate site management: e.g. off-target damage from herbicide spraying of watercourses is a potential threat
- habitat destruction: may be affected by the proposed increase in the capacity of Mount Bold Reservoir (D. Duval *pers. comm.*)<sup>5</sup>

Very limited within the AMLR region, however the majority of known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.<sup>6</sup>

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

#### Further information:

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



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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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#### **Regional Distribution**



Map based on filtered post-1983 records.<sup>6</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** Barker, W. R., Barker, R. M., Jessop, J. P. and Vonow, H. P., eds. (2005). *Census of South Australian Vascular Plants, 5th Edition.* Botanic Gardens of Adelaide & State Herbarium, Adelaide.

**2** Botanic Gardens Trust (1993). *PlantNET - The Plant Information Network System of Botanic Gardens Trust.* Available from <u>http://plantnet.rbgsyd.nsw.gov.au</u> (accessed September 2007).

**3** Council of Heads of Australian Herbaria (2002). *Australia's Virtual Herbarium.* Available from <u>http://www.flora.sa.gov.au/avh/</u> (accessed July 2007).

**4** Department for Environment and Heritage *Electronic Flora of South Australia species Fact Sheet: Viola betonicifolia Sm.* Available from <u>http://www.flora.sa.gov.au</u> (accessed September 2007).

**5** 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.

**6** 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.

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7 Department for Environment and Heritage (2007). *Combined Fire Response Database.* Unpublished data, extracted September 2007.

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

**9** Prescott, A. (1988). *It's Blue with Five Petals*. Ann Prescott, Adelaide, South Australia.

**10** Sands, D. P. A. and New, T. R. (2002). *The Action Plan for Australian Butterflies*. Environment Australia, Canberra.

11University of Melbourne (2008). The Grimwade Plant<br/>Collection.Availablefrom<br/>from<br/>http://www.botany.unimelb.edu.au/buffalo/<br/>(accessed<br/>March 2008).

