



PLANT

Corybas expansus

Dune Helmet-orchid

AUS	SA	AMLR	Endemism	Life History
-	V	E	State	Perennial

Family ORCHIDACEAE



Photo: © Cathy Houston

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 'Extremely Restricted'. Relative to all AMLR extant species, the species' taxonomic uniqueness is classified as 'High'.⁵

Corybas expansus may represent an outcrossing form of *C. despectans*.²

Description

Helmet-orchid, with a ground-hugging, bright green leaf, 2.5 cm across, and single flower (maroon, white and green in colour).^{2,7}

Synonym: *Corysanthes expansa*.⁷

Distribution and Population

Occurs in the EP, YP, SL, KI and SE regions.⁷ Strictly coastal and found on the southern tips of Eyre, Yorke and Fleurieu Peninsulas, and Kangaroo Island. Forms small to quite extensive colonies in loose sand and leaf litter and unlike *Corybas despectans* does not extend into harsher environments such as wind blown headlands.²

Post-1983 AMLR filtered record from Aldinga Scrub (single record).⁵ There is a recent record just outside the AMLR region on Hindmarsh Island.³

Aldinga population may be extinct.

There are no pre-1983 records.⁵

Populations in this region are very poorly known and additional populations may be found with increased survey effort (J. Quarmby *pers. comm.* 2009).

Habitat

Grows near the coast on calcareous soils (R. Bates *pers. comm.*). Occurs on the lee side of coastal dunes, in the shelter of trees, particularly *Eucalyptus diversifolia*.²

Also recorded in sandy loam, in a cool and shady area. Growing in moss near *Oxalis pes-caprae*, *Tetragonia implexicoma*, *Myrsiphyllum asparagoides* and *Pinus halepensis*.⁶

Within the AMLR the preferred broad vegetation group is Coastal.⁵

Within the AMLR the species' degree of habitat specialisation is classified as 'Very High'.⁵

Biology and Ecology

Flowers from August to early September.² Pollinated by small fungus flies.⁴

Not well-known due to its specialized and limited habitat well away from settlement.²

Aboriginal Significance

Post-1983 records indicate the entire AMLR distribution occurs in southern Kurna Nation.⁵

Species of Orchidaceae are recorded as being a traditional food source for Aboriginal people in NSW. The small tubers were roasted (Flood 1980).¹

Threats

Inappropriate fire regimes, in particular fires during the growing season may pose a serious threat as this species is likely to be fire sensitive (J. Quarmby *pers. comm.* 2009). Invasion of the weeds Bridal Creeper and Veldt Grass pose a threat (R. Bates and J. Quarmby *pers. comm.* 2009).

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



ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department
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Limited occurrence within the AMLR, however the majority of its known distribution occurs within 2 km of confirmed or suspected *Phytophthora* infestations.⁵

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.⁵ 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: Corybas*. Available from <http://www.flora.sa.gov.au>.

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.

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