

Brunonia australis



Brunonia australis. H & A Wapstra.

FAMILY: BRUNONIACEAE

BOTANICAL NAME: *Brunonia australis*,
Sm. ex R.Br., *Prodr.* 590 (1810)

COMMON NAME: blue pincushion

COMMONWEALTH STATUS: (*EPBC Act*)
Not Listed

TASMANIAN STATUS: (*TSP Act*) rare

Description

A small herb with a perennial rootstock. **Leaves:** The leaves arise from the base of the plant creating a rosette of silky soft leaves (due to the presence of many fine hairs). They are greyish, entire and between 4-10 cm long (including the leaf stalk) and 3-15 mm wide. **Flowers:** The flowers are distinctively bright, cornflower blue. They are tubular and measure between 6-8 mm long. The flowers are crowded, forming a hemispherical head that is between 15-20 mm in diameter. The flower heads are situated on erect, slender, leafless stalks between 10-30 cm tall. Each plant produces up to two flower heads at a time. Flowering occurs from mid November to late January. **Fruit:** The fruit is a small nut, resembling a shuttlecock, enclosed in the flower base (description from Cunningham *et al.* 1992, Strickland 1992). Most herbarium specimens have been collected from November to January. ***Brunonia australis* is the only member of the family Brunoniaceae.**

Distribution and Habitat

On the mainland this species occurs in all States. It is found in dry forests, mallee and desert country. In Tasmania, *Brunonia australis* typically occurs in grassy woodlands and dry sclerophyll forests dominated by black peppermint (*Eucalyptus amygdalina*) or less commonly white gum (*Eucalyptus viminalis*) or stringybark (*Eucalyptus obliqua*). Some smaller populations are found in heathy and shrubby dry forests. It occurs on well-drained flats and gentle slopes with elevations of between 10 and 350 metres. Rainfall varies from 600 mm in the Midlands area to about 1000 mm at Blackwood Creek. It is most commonly found on sandy and gravelly alluvial soils with a particular preference for ironstone gravels. Populations found on dolerite are usually small. It can persist in disturbed sites such as roadside cuttings and grazed areas where it resprouts from rootstock (Threatened Species Unit 2001).

Key Sites and Populations

Key sites for this species include Evandale, Franklin Rivulet, Beaconsfield, Holwell Road, Powranna, Lake River Road, Devon Hills, Lefroy, Prospect, the Casino Golf Course, Youngtown, Norwood, Elphinstone Road, Bishopsbourne, Ecclestone Road – Riverside, Westwood, Relbia, Glenwood Road, Hadspen, Carrick, Mount Joy, Bracknell, Trevallyn State Reserve, Launceston Gorge, Long Plains, Epping Forest, Native Plains, south of Latrobe, Moriarty, Quamby Brook Road, Blackwood Creek, Exeter, Gravelly Beach, Birralelee, Selbourne, Legana, Deddington, Isis Valley, East Tamar Highway, East Devonport and Mathinna Plains (although this population may be extinct).

Known Reserves

Reserved in the Carr Villa Conservation Area, Henry Somerset Orchid Private Sanctuary, Punchbowl Conservation Area, Lefroy Forest Reserve, Franklin Rivulet Forest Reserve, Trevallyn State Reserve and the Yorktown Historic Site.

Ecology and Management

A considerable decline has been recorded since settlement. A major cause has been the loss of habitat through urban development and hobby farm expansion. Conversion to pasture and clearing for timber plantations has also contributed to decline in the species. *Brunonia australis* does not tolerate heavy grass competition or invasion by weeds such as gorse (*Ulex europaeus*). Cessation of occasional disturbances such as fire or grazing that opens up the understorey and reduces competition is therefore likely to be detrimental in some populations, particularly as seed does not persist in soils for longer than a few months. Care should be taken when using fire to open up the habitat in some areas to ensure that subsequent heavy cover with wattle, bracken and weeds is not encouraged, as this will ultimately cause a reduction in habitat. A contraction in range of the species is potentially ongoing as many populations are relatively small and subject to continuing threats, particularly as many of these sites are on private land and roadsides. Reducing habitat loss is the most significant factor in arresting the decline. Small populations may become unviable, as the species will not self-pollinate (Threatened Species Unit 2001, TPLUC 1996).

Conservation Status Assessment

There is debate as to whether this species should be listed at all due to the large number of populations and the high number of individuals. However, *Brunonia australis* is a particularly sensitive species and many think that it should continue to be protected under Tasmanian legislation.

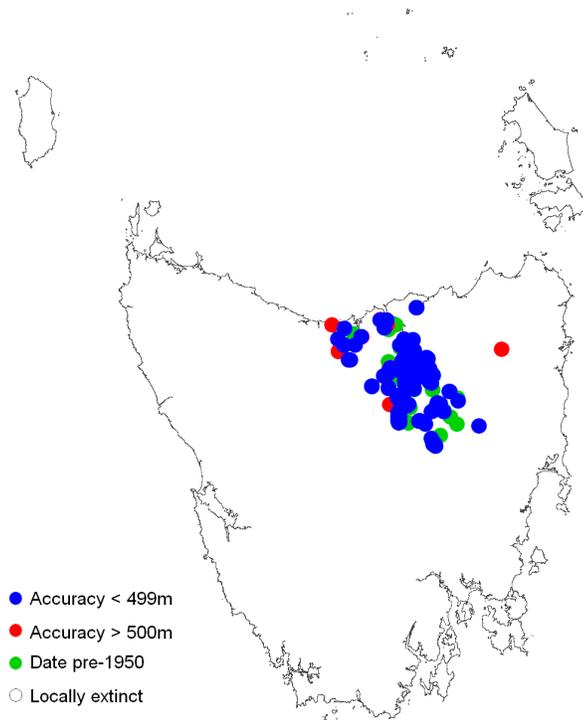
Further Information

- Cunningham, GM, Mulham, W, Milthorpe, P & Leigh, J 1992, *Plants of Western New South Wales*, Inkata Press, Sydney.
- Pyrke, A 1994, *Soil Disturbance by Native Mammals and Germination and Establishment of Plant Species*, BscHons.Thesis, University of Tasmania, Hobart.
- Strickland, K & P 1994, *Peninsular Plants*, Volume Two, Kareelah Bush Nursery, Melbourne.

- Tasmanian Public Land Use Commission 1996, *Environment & Heritage Report Vol IV, Background Report*, Part C, Tasmanian Commonwealth Regional Forest Agreement, Hobart.
- Threatened Species Unit 2001 *Draft Listing Statement, Blue pincushion Brunonia australis*, Department of Primary Industries, Water and Environment, Hobart.

Tasmanian Distribution

(Extracted from the Natural Values Atlas, March 2008)



1:25 000 Map Sheet

Beaconsfield, Bell Bay, Bridgenorth, Cleveland, Cluan, Conara, Cressy, Delmont, Devonport, Dilston, Evandale, Exeter, Hanleth, Harford, Latrobe, Launceston, Liffey, Lilydale, Longford, Millers, Montana, Nile, O'Connors, Poatina, Prospect, Railton, Victoria, Westbury, Weymouth.

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View

<http://www.dpiw.tas.gov.au/threatenedspecieslists>

Contact details

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Permit

It is an offence to collect, disturb, damage or destroy this species unless under permit.