

Glycine microphylla



Image by Richard Schahinger

FAMILY: FABACEAE

BOTANICAL NAME: *Glycine microphylla*
(Benth.) Tindale, *Brunonia* 9: 181 (1987)

COMMON NAME: Small-leaf glycine

COMMONWEALTH STATUS (EPBC Act):
Not Listed

TASMANIAN STATUS (TSP Act):
vulnerable

Description

Scrambling perennial herb; stems stoloniferous, twining, almost hairless or with short, backward-curving hairs. Leaves clover-like (trifoliolate) and dimorphic: lower leaves with leaflets obovate to elliptic, 0.5 to 5 cm long and 2 to 9 mm wide; upper leaves with leaflets lance-shaped, 1.5 to 5 cm long and 1 to 6 mm wide, the leaflet apices mostly acute. Upper surface of leaflets hairless or strigose, lower surface more densely strigose. Small linear outgrowths (stipellae) to 0.75 mm long present at the base of each leaflet stalk. The inflorescence consists of a 5 to 13-flowered raceme borne on 2 to 4 cm stalks in the leaf axils; flowers pea-like, white, pink or purplish, 5 to 7 mm long. Fruit a linear pod, 15 to 30 mm long by 2.5 to 4 mm wide, sparsely strigose; seeds 3 to 7. Flowering mostly from November to February. (Description adapted from Walsh & Entwisle 1996 and Harden 2002)

Confusing species: There are several native herbs in Tasmania with trifoliolate leaves that may be confused with *Glycine microphylla*, among them *G. clandestina*, *G. latrobeana*, *Desmodium gunnii* and *D. varians* (Lynch 1994, Baker & Duretto 2011). The distinguishing features of *G. microphylla* include the following: stoloniferous stems, leaflets with fine reticulate venation, and persistent stipellae (Walsh & Entwisle 1996). *Glycine clandestina* also twines but its leaflets have coarser venation and the middle leaflet lacks stipellae; *G. latrobeana* tends not to twine, has obovate to orbicular leaflets and its stipellae are minute and deciduous. *Glycine* fruit are linear and open by two valves, whereas *Desmodium* fruit, while also more-or-less linear in shape, are strongly lobed and separate into one-seeded parts.

Distribution and Habitat

On mainland Australia *Glycine microphylla* occurs in New South Wales, Queensland, South Australia and Victoria (Walsh & Entwisle 1996, Harden 2002). In Tasmania the

species occurs in the north and northeast, with ‘outlying’ populations in the far northwest at Woolnorth and Mt Cameron West (Preminghana). It grows on a variety of substrates, mostly in dampish eucalypt forest and woodland, where it often co-occurs with another rare leguminous species, *Desmodium gunnii*.

Key Sites and Populations

Mt Cameron West, Dogs Head Hill, Gog Range, Mt Paul, Mt Peter, Apsley River, Cape Lodi, Little Beach Creek, Four Mile Creek.

Known Reserves

Dogs Head Hill Forest Reserve, Douglas-Apsley National Park, Freycinet National Park, German Town Forest Reserve, Lagoons Beach Conservation Area, Little Beach State Reserve, Moulting Lagoon Game Reserve, Reedy Marsh Forest Reserve.

Ecology and Management

Glycine microphylla produces hard seeds typical of the pea family and is likely to have a relatively long-lived soil-stored seed bank, germinating after mild to hot fires. The species is thought to be highly palatable to stock, but is capable of resprouting from a woody rootstock after browsing, fire or drought. Grazing over the spring-summer period over many years, in combination with frequent firing, has the capacity to eliminate the species from a given site.

Bees are the most likely pollination vector for this species (A. Hingston pers. comm.).

Conservation Status Assessment

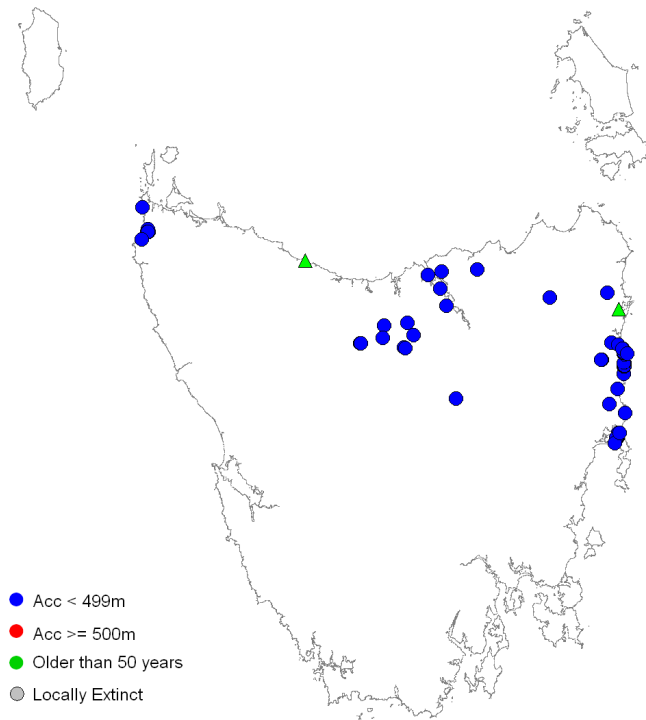
Glycine microphylla was listed as rare on the TSP Act in 1995 and uplisted to vulnerable in 2002. Twenty-five sites have been recorded since its first listing, a third of them within formal reserves, bringing the total number of sites to more than thirty. A re-assessment of the species’ conservation status is considered timely, bearing in mind that there is limited information available for many of the recorded sites.

Further Information

- Baker, M.L. & Duretto, M.F. (2011). *A Census of the Vascular Plants of Tasmania and Index to the Student’s Flora of Tasmania and Flora of Tasmania Online*. Tasmanian Herbarium, Tasmanian Museum and Art Gallery, Hobart.
- Harden, G.J. (Ed.) (2002). *Flora of New South Wales. Revised Edition. Volume 2*. University of New South Wales Press Ltd, Sydney.
- Lynch, A.J.J. (1994). The identification and distribution of *Glycine latrobeana* (Meissn.) Benth. in Tasmania. *Papers and Proceedings of the Royal Society of Tasmania* 128: 17–20.
- Walsh, N.G. & Entwisle, T.J. (1996). *Flora of Victoria, Volume 3. Dicotyledons: Winteraceae to Myrtaceae*. Inkata Press, Melbourne.

Tasmanian Distribution

(As per Threatened Species Section records, March 2012)



1:25 000 Map Sheets

Beaconsfield, Bell Bay, Blue Tier, Burnie, Cameron, Coles Bay, Deloraine, Dublin Town, Exeter, Falmouth, Friendly, Gog, Henry, Ironhouse, Lodi, Marrawah, Montana, O'Connors, Parkham, Piccaninny, Retreat, Ringarooma, Seymour, Sheffield, St Helens, St Marys, Studland.

Date last modified: 19/03/2012

View

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

Contact details

Threatened Species Section, Department of Primary Industries, Parks, Water & Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (03) 6233 6556; fax (03) 6233 3477.

Permit

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