

Australopyrum velutinum



Image by Richard Schahinger

FAMILY: POACEAE

BOTANICAL NAME: *Australopyrum velutinum*
(Nees) B.K.Simon, *Austrobaileya* 2: 241 (1986)

COMMON NAME: velvet wheatgrass

COMMONWEALTH STATUS (EPBC Act): Not Listed

TASMANIAN STATUS (TSP Act): rare

Description

Australopyrum velutinum is a tufted or shortly rhizomatous perennial grass. The flowering stems (culms) tend to be erect, up to 35 to 40 cm high, and covered with velvety hairs (at least below the flower-head). Leaf blades flat or folded, slender, erect, up to 15 cm long and 2 to 4 mm wide, tapering to an in-rolled point; ligule a narrow membranous rim. Leaves usually covered by a short fine pubescence, at least when young. Inflorescence a dense spike, 2 to 5.5 cm long, compact, though there is often a gap separating the lowest spikelets. The spikelets are erect and sessile, 5 to 8 flowered, green with purplish tips, sessile in two rows on opposite sides of the rachis and more-or-less appressed to it, c. 1 cm long; glumes subequal, lanceolate, 6 to 7 mm long, conspicuously 3–9-nerved, smooth and shining, though usually scabrous along the midrib, tapering to a short pungent point 1 to 3 mm long; lemma resembling the glumes but slightly longer and less prominently nerved; palea about equal to body of lemma. Flowers from December to February (description from Costin et al. 1979, Curtis & Morris 1994, Walsh 1994). **Confusing species:** The other Tasmanian species, *Australopyrum pectinatum*, has a rather open spike, and at maturity the spikelets spread widely and the glumes reflex sharply outwards and downwards ... rather than remaining adjacent to the lemmas (Curtis & Morris 1994).

Distribution and Habitat

Within Australia *Australopyrum velutinum* is known from New South Wales, Victoria and Tasmania (Walsh 1994). In Tasmania there are confirmed records of the species from Surrey Hills, Middlesex Plains and the area around Lake Augusta, with unvouchered records further to the east near Waddamana and the Great Western Tiers. Habitat includes sod tussock grassland and sedgey grassland, as well as the banks of creeks, associated species including *Poa labillardierei*, *Poa fawcettiae*, *Trisetum*

spicatum, *Empodisma minus* and *Gunnera cordifolia*. The confirmed records occur at altitudes between about 600 and 1150 metres above sea level.



Plates 1 & 2. *Australopyrum velutinum*: habit and sedgeland/grassland habitat near Carter Lakes (images by Richard Schahinger; 5 January 2017)

Key Sites and Populations

Middlesex Plains, Lake Augusta area (Lake Botsford to Wild Dog Tier).

Known Reserves

Central Plateau Conservation Area, Vale of Belvoir Conservation Area and (possibly) Great Western Tiers Conservation Area.

Ecology and Management

There is little information as to the ecological requirements of *Australopyrum velutinum* in Tasmania. Surveys of known sites are required to provide information for management purposes, including the relative impacts of threatening processes, the species' response to disturbance such as fire and grazing, as well as seed viability, germination, dormancy and longevity.

Personnel with the Tasmanian Seed Conservation Centre located some locally dense patches of the species in flower near Carter Lakes in early 2017 (Plate 2). Follow-up surveys revealed a complete lack of seed (Wood, pers. comm.); further surveys are required to determine if this is a widespread issue, and the possible cause(s).

Conservation Status Assessment

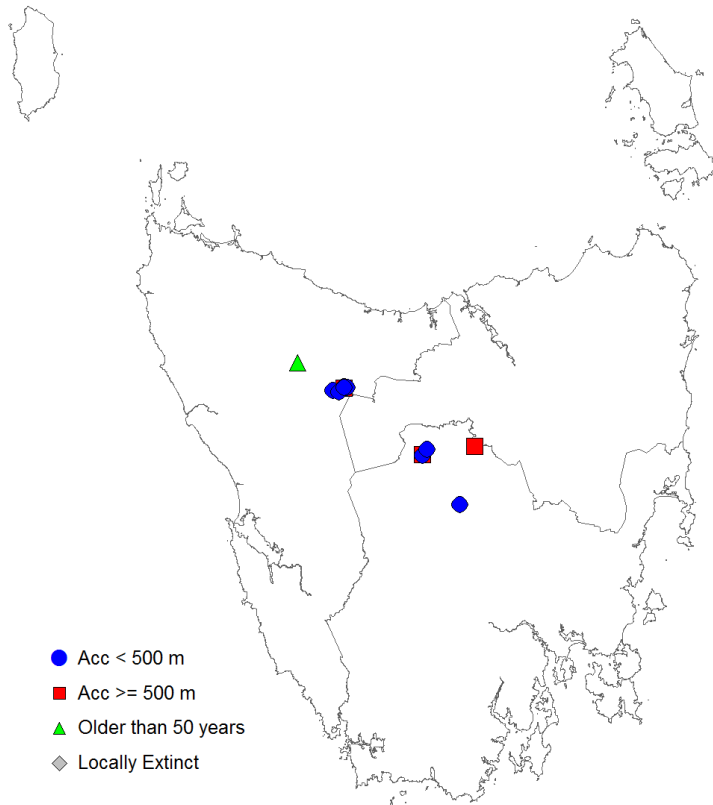
The earliest collections of *Australopyrum velutinum* in Tasmania date to February 1837, viz., Middlesex Plains and Chilton (Surrey Hills), the latter being the designated type locality (Barkworth & Jacobs 2011). The species is known to persist at Middlesex Plains but has not been recorded again from Surrey Hills despite intensive botanical surveys in recent decades. Few of the recorded sites in Tasmania have any notes on abundance or extent; surveys of these sites are required to determine the species' current status before its conservation status can be re-assessed.

Further Information

- Barkworth, M.E. & Jacobs, S.W.L. (2011). The *Triticeae* (Gramineae) in Australasia. *Telopea* 13(1–2) 37–56.
- Costin, A.B., Gray, M., Totterdell, C.J. & Wimbush, D.J. (1979). *Kosciusko Alpine Flora*. CSIRO/Collins Australia.
- Curtis, W.M. & Morris, D.I. (1994). *The Student's Flora of Tasmania, Part 4B*. St. David's Park Publishing, Hobart.
- Walsh, N.G. (1994). Poaceae. In: Walsh, N.G.; Entwisle, T.J. (eds), *Flora of Victoria Volume 2, Ferns and Allied Plants, Conifers and Monocotyledons*. Inkata Press, Melbourne.

Tasmanian Distribution

(As per Threatened Species Section records, June 2017)



1:25 000 Map sheets

Ada, Bradys Lookout, Guildford (?), Lea, Pencil Pine, Split Rock, Waddamana.

Date last modified: 09/06/2017

Cite as:

Threatened Species Section (2017). *Notesheet for Australopyrum velutinum (velvet wheatgrass)*. Department of Primary Industries, Parks, Water and Environment, Tasmania.

View

www.dpipwe.tas.gov.au/threatenedspecieslists

Contact details

Threatened Species Section, Department of Primary Industries, Parks, Water and Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (03) 6165 4340.

Permit

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