Triglochin mucronata



Triglochin mucronata. Neville Walsh.

FAMILY: JUNCAGINACEAE

BOTANICAL NAME: *Triglochin mucronata*,

R.Br., Prodr. 343 (1810)

COMMON NAME: prickly arrowgrass

COMMONWEALTH STATUS: (EPBC Act) Not

Listed

TASMANIAN STATUS: (TSP Act) endangered

Description

Triglochin mucronata is an annual herb up to 10 cm high. It has filiform leaves, which are shorter than the scape. The raceme is up to 1.5 cm long, usually few-flowered, sometimes reduced to a solitary terminal flower. Perianth segments number 3-6, segments of the lower whorl are 0.8-1.7 mm long, all or some bearing an anther; the upper whorl, if present, is smaller, usually without anthers. Group of mature carpels subturbinate, 2-5 mm wide, stylar beaks of fertile carpels shortly spreading, of sterile carpels suberect, bases with or without short spurs (description from Curtis and Morris, 1994). Triglochin mucronata may be distinguished from the other two ephemeral Tasmanian Triglochin species (T. minutissima and T. centroacarpa) by its fruits. The mature fruit of T. mucronata is subturbinate, the stylar beaks of fertile carples spreading, while the other two species exhibit mature fruit that is linear-pyramidal in shape, with styles short and erect (Curtis and Morris, 1994). Triglochin mucronata fruits between September and November (Flora of Victoria, 1994) when it is best searched for though the species may not emerge during dry seasons. This species was previously known as Triglochin mucronatum.

Distribution and Habitat

Triglochin mucronata is found in Victoria, South Australia, Western Australia and Tasmania. Within Tasmania, *Triglochin mucronata* is known from Vansittart Island and Flinders Island. This species is quite inconspicuous, and grows in herbfields on damp saline soils of salt-flats and coastal saltmarshes (Flora of Victoria, 1994).

Key Sites and Populations

Key sites include Vansittart Island (on the northern edge of a small, seasonal lagoon behind the south western end of Bates Bay) and Flinders Island at three separate populations on the west coast of the island (Blue Rocks Flat, the northern edge of the extensive Long Point salt marsh south of the first section of the Long Point Road and



on the eastern side of the northernmost water at Cameron's Inlet).

The total population size of *Triglochin mucronata* in Tasmania is loosely estimated to be about 150 plants though no plants have been seen since 1976 despite targeted searches (Whinray 2007).

Known Reserves

Possibly in Cameron's Lagoon Conservation Area.

Ecology and Management

Triglochin mucronata is under threat from weed encroachment, grazing, clearance of its habitat, and stochastic events.

All subpopulations are thought to be under threat from weed invasion. Whinray (2007) observed eight exotic pasture and weed species growing in the vicinity of the Long Point population in 1970. This population was situated near the inlet for a drain into the saltmarsh, which would have provided a vector for weed transfer. All of the other populations are from sites that have experienced varying levels of disturbance – the Cameron's Inlet site is near a rough vehicular track, and the other two sites are exposed to grazing by sheep (Whinray, 2007). All of these activities are likely to speed the incursion of weed population into this plant's habitat.

Whinray (2007) observed that the populations at both Blue Rocks and Vansittart Island are vulnerable to grazing by stock. The Vansittart Island site was grazed by sheep until about twenty years ago, when the sheep were replaced with cattle. It is likely that this subpopulation is extinct. The Blue Rocks Sedges Flat site is also not fenced off from sheep.

The Blue Rocks Sedge Flat site was partially cleared by previous owners, who bulldozed a fire break along the southern and eastern edges of the northern remnant, and the site is thought to potentially be under this windrow (Whinray, 2007). The site has also been subject to subdivision proposals.

The small size of subpopulations makes them particularly susceptible to local extinctions from chance events.

Wind is the most likely pollination vector for this species (A. Hingston pers. comm.).

Conservation Status Assessment

The species was listed as endangered in October 2008 because of its restricted distribution, low numbers of plants and subpopulations and a continuing decline.

Further Information

- ➤ Curtis, WM & Morris, DI 1994, *The Student's Flora of Tasmania*, Part 4B, Printing Authority of Tasmania, Hobart.
- Flora of Victoria 1994, Volume 2 Ferns and Allied Plants, Conifers and Monocotyledons. Eds. N.G. Walsh and T.J. Entwhistle. Royal Botanic Gardens Melbourne and National Herbarium of Victoria. Incata Press, Melbourne.
- Whinray, J. 2007, Triglochin mucronatum: Nomination for Listing or De-Listing of a Taxon of Flora or Fauna. Threatened Species Scientific Advisory Committee, Hobart, Tasmania.



Tasmanian Distribution

(As per Threatened Species Section records, March 2009)



1:25 000 Map Sheets

Puncheon, Leventhorpe, Sellars.

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