Banking on seeds for bushfire recovery project



Velleia perfoliata is a small plant only found in the Hawkesbury District to the Upper Hunter Valley region of New South Wales (NSW). Listed as vulnerable in NSW, you will find this species growing in shallow, sandy soil. Reaching a maximum of 50 centimetres high, *Velleia perfoliata* can be recognised by its small, yellow flowers and light green, spoon-shaped leaves. This species dramatically increases in number after fire which allowed for a diverse collection to be made following the 2019-20 summer bushfires.

Description

Velleia perfoliata is a small herb with yellow flowers that are 12 millimetres long. Each flower has 5 petals, 2 point upwards and 3 point downwards. Its leaves are light green in colour and shaped like a spoon. Each leaf is between 10 - 12 centimetres long and 3 - 4 centimetres wide. The leaves radiate from a cluster at the base of the plant from which the flowering stalk stretches up to 50 centimetres tall. At the base of the flowering stalk this plant has fused leaf-like structures (bracteoles) that form a funnel.

Key Facts

Common name: N/A

Historical notes: First recorded in 1904

Conservation status (state): Vulnerable (NSW)

Conservation status (EPBC): Vulnerable

Maximum height: 50 centimetres

Lifespan: 2 - 3 years

Flowering season: Spring (Sept - Nov)



Distribution

Velleia perfoliata is only known from the Hawkesbury district and upper Hunter Valley region of New South Wales.

Habitat and Ecology

Velleia perfoliata is found in shallow depressions of sandy soil on sandstone shelves, rocky hill sides, under cliffs and along tracks and trails. It grows in open forest and heath over sandstone. This species has also been found growing on moss and lichen mats that have formed on rock.

Flowering is highly variable and can occur in any season. Peak flowering periods generally occur in spring to early summer (September - December).







Australian Network for Plant Conservation Inc



Department of Biodiversity, Conservation and Attractions















Velleia perfoliata is listed as Vulnerable both nationally and in New South Wales and is threatened by:

- Track and fire trail maintenance activities this species increases in number following fires so too frequent fires or suppressing fire activities can cause disturbance to the species life cycle.
- Weed encroachment this species is often mistaken for a weed and accidentally removed.

Few known populations of *Velleia* perfoliata exist in remote locations which are not exposed to disturbance threats (e.g. weed removal and track and fire trail management). Finding additional populations would increase the species' future security.

Conservation activities by the Australian Seed Bank Partnership

Velleia perfoliata has been found to increase in number dramatically post-fire, providing staff from the Australian PlantBank at the Australian Institute of Botanical Science, Australian Botanic Gardens, Mt Annan, a good opportunity to undertake collections and verify species presence at known sites in 2020-21. At a one site in Yengo National Park where habitat was only partially burnt, this species was observed in high abundance in the burnt area but only sporadically in the adjacent intact heath. This enabled more diverse collections to be made than previously possible, and the accompanying data about the species abundance and ecology will be used to further inform land managers for future management of the species.

References

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https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10827 https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Velleia~perfoliata This fact sheet was produced with funding awarded under Tranche 2 of the Australian Government's Bushfire Recovery for Wildlife and Habitat Community Grants Program.