Gunnera hamiltonii

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Threatened – Nationally Critical | Qualifiers: CD, RR, RF
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

FLOWER COLOURS
Yellow

DETAILED DESCRIPTION
Creeping, stoloniferous, dioecious herb herb forming compact. Stolons buried close to surface, fleshy, succulent, up to 4 m long, 3—5 mm diameter, internodes 5—8 mm long, exposed parts red or red—green, clad in wispy hairs. Leaves in compact, tight, overlapping rosettes; petioles stout, winged 20—50 x 2—4 mm widening toward amplexicaul leaf base, lamina succulent, coriaceous, 20—30 x 10—25 mm, deltoid, rhomboid to broadly—ovate, apex sub-acute to acute, cuneately narrowed to base or truncate margins crenulate, teeth oblong, obtuse, 1.0—1.4 mm, slate grey, dark grey—green or reddish grey, glabrate to glabrous. Inflorescence an ebracteate, erect, fleshy, stout, spike located within leaf axils: male flowers 10—40 (or more) on a spike up to 30 mm tall, sessile; calyx lobes 2—3, often rudimentary, lobes 0.1—0.2 x 0.08—0.1 mm equal, valvate, deltate, entire, glabrous; sepals much reduced or absent, 0.3—0.4 x 0.2—0.3 mm, oblong, glabrous, caducous, petals similar; stamens 1—2, subsessile, anthers yellow; female flowers initially obscured within foliage, densely packed on spike, calyx, sepals and petals absent or rudimentary, as for ¡á, ovary 0.3—0.5 x 0.1—0.2 mm, urceolate, greenish-white, hyaline, glabrous, styles 2 prominent, suberect, 1.0—1.5 mm, falcate-flexuous, subulate-filiform; stigmas papillate . Fruiting spike erect, 10—35 mm long; drupes widely spaced, fleshy, pendulous, 3 mm, clavate. Endocarp 2.8—2.9 mm, broadly obovate, dull yellow or pale brown red.



Mason Bay, Stewart Island. Photographer: John Sawyer, Licence: CC BY-NC.



Female flower, in cultivation. Photographer: Bill Clarkson, Date taken: 28/08/2008, Licence: CC BY-NC.

SIMILAR TAXA
Distinguished from all other New Zealand Gunnera by the deltoid, finely toothed grey-green leaves, and stout, prominently winged petioles.

DISTRIBUTION
South Island. Endemic to sand dunes near Invercargill and along the western side of Stewart Island.

HABITAT
A coastal species of consolidated, sparsely vegetated damp sand, in dune slacks and swales.

THREATS
Known from four natural and at least one planted population. Plants from that population are in cultivation. Another population at Doughboy Bay, Stewart Island is at risk from coastal erosion. The main threat to this species is that, with the exception of Doughboy Bay, where male and female plants grow in the same area (though not intermingled), male and female plants are isolated from each other, such that in the wild sexual reproduction and seedling recruitment is unknown. It is not clear whether the current sex distribution is natural (though the Doughboy population argues it is not), and if conservation management should include mixing of sex-types.

GENUS
Gunnera

FAMILY
Gunneraceae

AUTHORITY
Gunnera hamiltonii Kirk

SYNONYMS
None

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
August - December

FRUITING
March - July (based on observation of cultivated plants)

LIFE CYCLE AND DISPERSAL
Fleshy drupes are dispersed by frugivory and possibly ants (Thorsen et al., 2009).

PROPAGATION TECHNIQUE
Easily grown from rooted pieces and divisions of whole plants. Seed produced from fruits made in cultivation has germinated readily. Grows best in damp, shaded ground free of weeds. Very hardy, pieces accidentally frozen for several days, when thawed continued to grow.

CULTIVATION
Not widely cultivated. Plants are occasionally sold by commericial nurseries (more frequently in the southern South Island), and specimens are held by several Botanic Gardens and universities.

PLANT OF THE MONTH
This plant has been featured as a Plant of the Month – see Trilepidea: NZPCN newsletter for June 2005 for the full story.

ETYMOLOGY
gunnera: Named after Bishop Gunner, a Swedish botanist
hamiltonii: Named after W. S. Hamilton (of Southland)

CHROMOSOME NUMBER
2n = 34

PREVIOUS CONSERVATION STATUSES
2017 | Threatened – Nationally Critical | Qualifiers: CD, RR, RF
2012 | Threatened – Nationally Critical | Qualifiers: RF, RR
2009 | Threatened – Nationally Critical | Qualifiers: RF
2004 | Threatened – Nationally Critical
Jump to current conservation status

REFERENCES AND FURTHER READING

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Christchurch, Canterbury University Press. 471pp.
Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 1 October 2003. Description from de Lange et al. (2010).

NZPCN FACT SHEET CITATION

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MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/gunnera-hamiltonii/

PDF DATE

27 May 2026