Epilobium cinereum

COMMON NAMES
willowherb

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened | Qualifiers: SO
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

SIMPLIFIED DESCRIPTION
An erect much branched perennial plant, often with an overall reddish look. Leaves fairly small, grey-green to reddish, narrow elliptic, and covered in strigulose hair, with prominent and widely spaced teeth. Flowers very rarely white, often rose tinted, on a strigulose hairy ovary and pedicel.

FLOWER COLOURS
Red/Pink

DETAILED DESCRIPTION
Erect, much branched perennial or annual herb 0.15-0.60 m tall, often reddish-tinged, not obviously stoloniferous; plants strigulose, inflorescence, densely so, hairs comprising an admixture of glandular or non-glandular erect hairs often also present, the stems pubescent all round, conspicuously exfoliating and often somewhat woody near the base. Leaves mostly opposite alternate alternate in the upper half, grey-green, often tinged reddish, densely strigulose, the lateral veins visible to prominent, usually 3-5 on each side of the midrib; lamina 5.0-23.0 × 1.5-7.0 mm, linear to narrowly elliptic, apex subacute to acute or obtuse, base attenuate, margins coarsely serrate, bearing 1-8 teeth on each side, shortly pedunculate or subsessile. Inflorescence erect. Flowers erect. Ovary 10-24 mm long, on a pedicel 0-15 mm long, investiture usually densely though finely strigulose with an admixture of white or greyish-white, glandular or eglandular erect hairs. Floral tube 0.6-1.2 mm deep, 1.2-1.9 mm diameter, usually bearing a conspicuous ring of long hairs within. Sepals 2.5-7.5 × 0.8-1.7 mm, keeled, strigulose, bearing glandular or eglandular hairs also. Petals 3.5-12.0 × 2.0-6.5 mm, the notch 0.8-1.5 mm deep, rose-purple (very rarely white). Stamen filaments white of two types: long 1.5-5.0 mm long and short 1.0-4.5 mm. Anthers cream, 0.5-1.0 × 0.3-0.52 mm. Style 2.5-9.0 mm long, white. Stigma 1.5-4.0 × 0.9-1.5 mm, white, clavate, surrounded by (very rarely held well above) the anthers at anthesis. Capsule 30-68 mm long, densely strigulose, indumentum comprising an admixture of glandular and eglandular erect hairs; pedicel 6-20 mm long. Seeds 0.8-1.0 × 0.3-0.4 mm, brown, reticulate-mammilate to reticulate-papillose, obovoid, chalazal callus absent, apex rounded (not beaked); coma 7.0-10.5 mm long, white, breaking off readily.

Flowers, The Brook, Nelson. Photographer: Chris Ecroyd, Date taken: 21/11/2018, Licence: CC BY-NC.

Pureora forest, Volcanic plateau. Photographer: Marley Ford, Date taken: 02/06/2019, Licence: CC BY-NC.

SIMILAR TAXA
Epilobium cinereum is easily distinguished from all other epilobia except the threatened E. hirtigerum on account of its upright, heavily branched growth habit, finely puberulent, greyish (often red-tinged) stems, foliage, pedicels and capsules, and dark rose-purple flowers which open widely at anthesis. Epilobium hirtigerum is usuall;y easily distinguished from E. cinereum on account of its larger overall size, glabrous stoloniferous winter growth habit, and by the stem hairs which in E. hirtigerum are in mixtures of long, spreading eglandular, shorter glandular and strigulose hairs. In the North Island at least, E. hirtigerum is further distinguished by its smaller, consistently white flowers which scarcely open.

DISTRIBUTION
Indigenous. New Zealand: North, South, Stewart and Chatham Islands. Also Australia (Queensland, New South Wales, Victoria, South Australia and Tasmania). Naturalised at least on the Hawaiian Islands if not elsewhere in the Pacific.

HABITAT
Coastal to upper montane. In open, often dryer habitats on banks and rock outcrops, as well as around lake, river and ephemeral wetland margins. Often a prominent urban weed, especially in derelict properties, old car yards, and in car parks. In these habitats it often associates with Epilobium ciliatum, E. hirtigerum, E. tetragonum and Lachnagrostis filiformis.

GENUS
Epilobium

FAMILY
Onagraceae

AUTHORITY
Epilobium cinereum A.Rich.

SYNONYMS
Epilobium billardiereanum subsp. cinereum (A.Rich.) P.H.Raven et Engelhorn

TAXONOMIC NOTES
Raven & Raven (1976) prefer to treat *Epilobium cinereum* as *E. billardierianum* subsp. *cinereum*. However, irrespective of their comments for Australia it is clear that in New Zealand *E. cinereum* is a widespread, morphologically stable unit that is only occasionally seen sympatric (and even syntopic) with the ecologically and morphologically distinct *E. billardierianum*. Further hybrids between both subspecies and *E. billardierianum* are as yet unknown from New Zealand, although Raven & Raven (1976) suggest that they are frequent in Australia. From a New Zealand perspective it is difficult to accept such morphologically distinct species as subspecies because of their reported behavior in Australia. Also, as with any *Epilobium*, given an opportunity hybridism is likely to happen, even with distinct relatives, as it is the main driver for speciation in the Australasian representatives of the genus. in this regard Raven & Raven (1976) are inconsistent, accepted at species rank other epilobia, which following their treatment of *E. billardierianum* should also be regarded as subspecies, or even merged.

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
September - May

FRUITING
October - July

PROPAGATION TECHNIQUE
Very weedy and probably best not cultivated as it is inclined to spread rapidly. Epilobium cinereum is a common urban weed in many cities and towns of eastern New Zealand

WETLAND PLANT INDICATOR STATUS RATING
UPL: Obligate Upland
Rarely is a hydrophyte, almost always in uplands (non-wetlands).

ETYMOLOGY
epilobium: From the Greek epi- 'upon' and lobos 'a pod', the flowers appearing to be growing on the seed pod.
cinereum: Ash-grey

NVS CODE
EPIBSC

CHROMOSOME NUMBER
2n = 36

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened | Qualifiers: SO
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Auckland: 2025 | Regionally Not Threatened | Qualifiers: DPS, DPT Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Otago: 2025 | Regionally At Risk – Regionally Naturally Uncommon | Qualifiers: CI,DPS, DPT, RR Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Otago conservation status information is sourced from the "Conservation Status of Indigenous Vascular Plants in Otago, 2025" Jarvie S et al. (2025) report.

REFERENCES AND FURTHER READING
Raven, P.H.; Raven, T.E. 1976: The genus Epilobium in Australasia. New Zealand DSIR Bulletin 216. Wellington, Government Printer.
Webb, C.J.; Simpson, M.J.A. 2001: Seeds of New Zealand Gymnosperms and Dicotyledons. Christchurch, Manuka Press.

ATTRIBUTION
Fact sheet prepared for NZPCN by P.J. de Lange 22 August 2011. Description adapted from Raven & Raven (1976) and Webb & Simpson (2001).

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/epilobium-cinereum/

PDF DATE
25 May 2026