

# Gentianella gibbsii

## COMMON NAME

Mt Anglem gentian, Gibbs's gentian

## SYNONYMS

*Gentiana gibbsii* Petrie, *Chionogentias gibbsii* (Petrie) L.G.Adams

## FAMILY

Gentianaceae

## AUTHORITY

*Gentianella gibbsii* (Petrie) T.N.Ho et S.W.Liu

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledons other than Composites

## NVS CODE

GENGIB

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: OL

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: OL

2009 | At Risk – Naturally Uncommon | Qualifiers: OL

2004 | Range Restricted

## DISTRIBUTION

Endemic. New Zealand: Stewart Island (Mt Anglem and Little Mt Anglem).

## HABITAT

Subalpine to alpine on poorly drained ground under low scrub or in open bogs and grasslands. Locally common.



Hananui/Mt Anglem, Rakiura/Stewart Island.  
Photographer: Jesse Bythell, Date taken:  
26/01/2008, Licence: CC BY-NC.



Mt Anglem, Stewart Island. Photographer:  
Melissa Hutchison, Date taken: 20/03/2022,  
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## DETAILED DESCRIPTION

Plants monocarpic, biennial, height in flower 60–200 mm. Caudex unbranched, 10–25 mm long. Root c. 0.9 mm diameter at stem base. Flowering stems terminal only or terminal and lateral, 1–19 per plant, largest flowering stem 1.0–1.6 mm diameter at base, stem colour bronze, lateral flowering stems erect, flowering stem leaves 2–4 pairs per stem, lowest pedicels from ½ up flowering stem or near apex of flowering stem. Rosette of leaves present and distinct from flowering stem leaves, leaves elliptic, leaf apex acute, 13.0–22.0 × 3.6–7.0 mm wide, green, channelled, not recurved, petiole 7.3–14.5 mm long. Petiole 1.0–1.2 mm wide at leaf base. Flowering stem leaves narrowly elliptic. Pedicels 1 per leaf axil, 4.5–60.0 mm long, 0.8–1.1 mm diameter. Flowers 1–28 per plant, 12.5–14.9 mm long. Calyx 9.5–14.7 mm long, bronze-green, hairs at calyx–corolla fusion line present; lobes 8.5–11.8 mm long, 1.7–2.0 mm wide at base, plane, apices acute, margins smooth, sinus hairs sparse. Corolla 11.7–15.3 mm long, white; tube 3.0–3.5 mm long; lobes 8.8–12 mm long, 5.0–6.5 mm wide, apices acute and slightly serrated, hairs below sinus absent or present; nectary 1.7–2.0 mm from corolla base. Filaments 6.5–8.6 mm long from corolla base, 0.5–1.1 mm wide. Anthers 1.1–1.9 mm long, anther wall blue-black, mouth yellow, introrse at anthesis; pollen yellow. Stigma colourless. Ovules 36–49 per ovary. Capsule 15.3–27 mm long.

## SIMILAR TAXA

Distinguished from other *Gentianella* by the very long, narrowly triangular calyx lobes 8.5–12 mm long, and by the persistent rosette leaves on flowering plants. On Stewart Island *G. gibbsii* is sympatric with *G. lineata* from which it is distinguished by being biennial rather than being a polycarpic perennial; by its taller stature (plants 60–200 mm cf. 70–100 mm high), its unbranched rather than branched caudex; and its bronze colour rather than dark green with purple tinting on the stems and leaves.

## FLOWERING

December – March

## FLOWER COLOURS

White, Yellow

## FRUITING

February – May

## LIFE CYCLE

Seeds dispersed by ballistic projection, wind and water (Thorsen et al., 2009)

## PROPAGATION TECHNIQUE

Difficult. Should not be removed from the wild

## THREATS

A Naturally Uncommon, range-restricted endemic which is confined to a small area within the subalpine and alpine vegetation of the Mt Anglem Nature Reserve. There it is locally abundant, and there are no known threats.

## ETYMOLOGY

**gentianella**: Little Gentiana (named after Gentius, 6th century king of Illyria, who found the roots of the yellow gentian to have a healing effect on his malaria-stricken troops)

**gibbsii**: Named in honor of Frederick G Gibbs (1866–1953)

## WHERE TO BUY

Not Commercially Available

## ATTRIBUTION

Fact Sheet for NZPCN prepared by P.J. de Lange (1 November 2004). Description modified from Glenny (2004).

## REFERENCES AND FURTHER READING

Glenny, D. 2004: A revision of the genus *Gentianella* in New Zealand. *New Zealand Journal of Botany* 42: 361–530.

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.

## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/gentianella-gibbsii/>