

Chionochloa nivifera

COMMON NAME

Fiordland snow tussock

SYNONYMS

None (first described in 2004)

FAMILY

Poaceae

AUTHORITY

Chionochloa nivifera Connor et K.M.Lloyd

FLORA CATEGORY

Vascular – Native

ENDEMIC TAXON

Yes

ENDEMIC GENUS

No

ENDEMIC FAMILY

No

STRUCTURAL CLASS

Grasses

NVS CODE

CHINIV

CHROMOSOME NUMBER

$2n = 42$

CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: DP, RR

PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: RR

2009 | At Risk – Naturally Uncommon

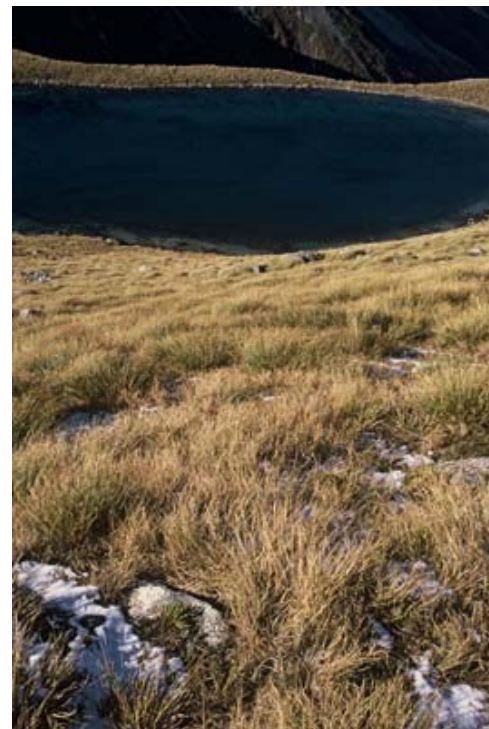
2004 | Range Restricted

DISTRIBUTION

Endemic. New Zealand: South Island (south-eastern Fiordland).

HABITAT

Alpine, in short *Chionochloa crassiuscula* subsp. *torta* Connor grassland.



Mountains above Lake Monowai. Photographer: Kelvin Lloyd, Licence: All rights reserved.

DETAILED DESCRIPTION

- Short dark green snow tussock of densely aggregated, compressed, suberect to ± prostrate shoots from a sheath-covered old low-creeping prone stout stem, of 1–3 finely pointed leaves accumulating and weathering in situ. **Leaf-sheath** 30–100 mm, strongly keeled above, reddish purple below becoming stramineous, persistent, inter-rib hairs minute; margin usually somewhat wavy, short hairy above or not; apical tuft of hair 0.5–1.0 mm or absent. **Ligule** narrow, to 0.25 mm. **Leaf-blade** to 300 × 2 mm, prominently keeled below as in leaf-sheath, strongly compressed, becoming flat, 3–5 mm wide, thin and weak, persistent, abaxially glabrous except for prickle-teeth on keel towards long fine twisting apex, adaxially prickle-toothed on nerves, margin with long hairs below and prickle-teeth above or hairs absent. **Culm** to 350 mm, glabrous, compressed, < leaves; sheath heavily nerved and sometimes empurpled. **Inflorescence** 60–100 mm, laxly open, pulvinate, of 11–20 solitary spikelets on long glabrous drooping branches and pedicels, naked below, occasionally 1–2 hairs below spikelet. **Spikelet** 8–10 mm long, of 3–5 florets, with awns flexed inwards and intercrossing. **Glumes** unequal, glabrous except for occasional long hairs at base of upper glume, occasionally mucronate, < adjacent lemma lobes; lower to 5 mm, 3–5-nerved, upper to 7 mm, 7-nerved. **Lemma** 3–6 mm; hairs dense at margin and aside central nerve, scattered and fewer elsewhere though sometimes in all internerves, greater than or equal to sinus; lateral lobes 2–3.5 mm, triangular-acute, or awned to 1.5 mm, apex ciliate; central awn 4 mm flexed inwards from flat or slightly rotating column 0.50–0.75 mm, tip sometimes hooked. **Palea** 3.5–5.5 mm, ~ tip of lemma lobes, pointed or shallowly bifid, apex ciliate; keels long ciliate above glabrous below; flanks long hairy below. **Callus** 0.6–1.0 mm; hairs 2–3 mm. **Rachilla** 0.50–0.75 mm, glabrous. **Lodicules** 1.0 mm including hairs to 0.6 mm. **Anthers** 2.5 mm, empurpled. **Ovary** 0.75 mm; stigma-style 2.5 mm. **Seeds** 2.0–2.5 mm.

MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to the grasses of New Zealand](#)

SIMILAR TAXA

Allied to *Chionochloa macra* Zotov and *C. pallens* Zotov. Both *C. nivifera* and *C. pallens* are distinguished from *C. macra* by the leaf-sheath which is keeled rather than rounded and either keeled or compressed leaf-blades. *Chionochloa nivifera* is distinguished from *C. pallens* by the strongly compressed, weak rather than keeled and tough leaf-blades, and by the glabrous, flexuous and drooping inflorescence branches. The inflorescence branches of *C. pallens* are hairy and erect.

FLOWERING

Unknown—insufficiently studied and collected.

FRUITING

Unknown—insufficiently studied and collected.

LIFE CYCLE

Florets are wind dispersed (Thorsen et al., 2009).

PROPAGATION TECHNIQUE

Difficult—except in cooler climates. It has been successfully cultivated in Dunedin and at Manaaki Whenua Landcare Research, Lincoln but proved impossible to maintain in Auckland. Dislikes drought and humidity.

THREATS

Range Restricted—known from only a few locations where it can be at times locally common. However, the total area it occupies is very small. There are no known threats and further, as a newly described species from a remote part of New Zealand, it is likely to prove more widespread as this part of the country becomes better explored.

ETYMOLOGY

chionochloa: Snow grass

ATTRIBUTION

Description adapted from Connor and Lloyd (2004).

REFERENCES AND FURTHER READING

Connor HE, Lloyd KM. 2004. Species novae graminum Novae-Zelandiae II. *Chionochloa nivifera* (Danthonieae: Danthonioideae). *New Zealand Journal of Botany* 42: 531–536.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/chionochloa-nivifera/>