# Lachnagrostis littoralis subsp. salaria

## COMMON NAMES
southern coastal wind grass

## BIOSTATUS
Native – Endemic taxon

## CURRENT CONSERVATION STATUS
2023 | Not Threatened
Jump to previous conservation statuses

## CATEGORY
Vascular

## STRUCTURAL CLASS
Grasses

## DETAILED DESCRIPTION
Densely tufted, light green to greyish green or glaucous, coarse, stiffly erect annual to short-lived perennial grass 30–400 mm tall, whole plant often withering early and culms not breaking up below panicle. **Branching** intravaginal. **Leaf-sheath** firmly membranous, glabrous. **Ligule** 1.5–3.0 mm, oblong, tapered, subobtuse or denticulate, sometimes lacerate, undersides smooth. **Leaf-blade** firm 40–150 × 0.5 mm, often involute, or flat, up to 2 mm wide, underside smooth or minutely papillose, rarely scabrid, upper surface minutely scabrid on ribs and margins, leaf tip acute to subobtuse. **Culm** 70–300 mm, included within leaf-sheaths, internodes finely scabrid below panicle, rarely visible until culm breaks up at maturity. **Panicle** 40–200 × 10–180 mm, delicate, ± contracted, later spreading (sometimes remaining contracted), enclosed at base by sheath of uppermost culm-leaf; branches and branchlets ± erect, all ± equal in length, slender, scabrid, naked for much of their length, the ultimate branchlets tipped by 1–2 spikelets. **Spikelets** 3–4 mm, light green or greenish brown, slender. **Glumes** unequal; lower slightly shorter, elliptic-lanceolate, acute 1-nerved; upper elliptic-ovate ± acuminate, 3-nerved, smooth, keel scabrid, margins hyaline, finely scabrid above. **Lemma** 2.5–3.0 mm long, elliptic-lanceolate; 5-nerved with scattered to rather dense short silky hairs, often glabrous above, lateral nerves shortly excurrent, faintly scabrid; awn 2.5–4.0 mm long, ± mid-dorsal, straight or curved, slightly twisted near base. **Palea** slightly < lemma, nerves 0.1–0.2 mm apart, keels 0.3 mm apart, minutely excurrent, faintly scabrid at apex. **Callus** hairs dense, very short, to 0.5 mm long covered one-fifth of lemma. **Rachilla prolongation** 0, or up to 0.9 mm long, with hair tuft to 1.2 mm long. **Lodicules** 0.8–0.9 mm long, linear, acute. **Anthers** 0.5–0.7 mm. **Seed** 1.3–1.6 × 0.4 mm.

## SIMILAR TAXA
This supspecies often keys to *Lachnagrostis ammobia* in the Flora, a species which is also found within part of the range of *L. littoralis* subsp. *salaria*. In contrast, *L. ammobia* is usually found on sandy areas (rather than estaurine salt meadow), the infloresence is open and usually lies close to the ground (rather than contracted then opening and erect) and has larger spikelets (> 4mm) and hairier lemma. Distinguished from *L. littoralis* (Hack.) Edgar subsp. *filiformis* by the curved rather than geniculate awn, and generally larger size and taller stature. *Lachnagrostis littoralis* subsp. *salaria* is allopatric from subsp. *littoralis*, being confined to the eastern South Island (from North Canterbury south) and Stewart Island. It is also a much coarser grass than subsp. *littoralis*. From *L. filiformis* it differs by the ± equal lengths of the naked primary and secondary panicle branches, and by the lemma usually 1.8–3.0 mm (cf. 1.3–2.0 mm long in *L. filiformis*) and anthers 0.4–0.7 rather than 0.2–0.5 mm long. *Lachnagrostis littoralis* subsp. *littoralis* further differs from *L. filiformis* in that it is strictly coastal and usually a much smaller, more delicate, annual grass.

## DISTRIBUTION
Endemic. Restricted to the South Island where it is known from estuaries near Christchurch south to the Foveaux Strait and Stewart Island. It also occurs inland at the Sutton Salt Lakes, near Middlemarch, Otago.

## HABITAT
Mainly coastal, where it inhabits estuaries and saltmarshes. Usually on open mud flats or on shell beds in places often flooded during spring or King tides. Very rarely found inland around salt pans and lakes.

## GENUS
Lachnagrostis

## FAMILY
Poaceae

## AUTHORITY
Lachnagrostis littoralis subsp. salaria Edgar

## SYNONYMS
None

## TAXONOMIC NOTES
*Lachnagrostis littoralis* subsp. *salaria* warrants elevation to species rank (see Murray et al. 2003, Murray et al. 2005).

## ENDEMIC TAXON
Yes

## ENDEMIC GENUS
No

## ENDEMIC FAMILY
No

## FLOWERING
October–February

## FRUITING
November–May

## PROPAGATION TECHNIQUE
Easy from fresh seed. Prefers to grow in full sun within a damp soil.

## ETYMOLOGY
**lachnagrostis**: From “lachne” (wool) referring to the distinctive callus hairs of this genus and “agrostis” by which Trinius (1820) actually meant “a grass” (not an Agrostis). So the generic name means “a hairy (woolly) grass” not “a hairy (woolly) Agrostis” as is often incorrectly stated (see Gardner 2014).
**littoralis**: From the Latin littus ‘shore’, meaning shore-loving or growing on the shore

## MANAAKI WHENUA ONLINE INTERACTIVE KEY
Key to the grasses of New Zealand

## NVS CODE
LACLSS

## CHROMOSOME NUMBER
2n = 56

## PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened
2012 | Data Deficient
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

## REGIONAL CONSERVATION STATUSES
Otago: 2025 | Regionally Data Deficient 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

Edgar E, Connor HE. 2000. Flora of New Zealand. Vol. V. Grasses. Manaaki Whenua Press, Christchurch, NZ. 650 p.
Gardner RO. 2014. Notes on the wind grass *Lachnagrostis filiformis* (Poaceae). *Auckland Botanical Society Journal 69*: 168–170.
Murray BG, Weir I, Ferguson AR, de Lange PJ. 2003. Variation in DNA C-value and genome size in New Zealand native grasses. *New Zealand Journal of Botany 41*: 63–69.
Murray BG, de Lange PJ, Ferguson AR. 2005. Nuclear DNA Variation, Chromosome Numbers and Polyploidy in the Endemic and Indigenous Grass Flora of New Zealand. *Annals of Botany 96*: 1293–1305.
Trinius CB. 1820. *Fundamenta Agrostographiae*. J.G.Huebner, Vienna.

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April June 2005. Description modified from Edgar & Connor (2000)
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## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/lachnagrostis-littoralis-subsp-salaria/

## PDF DATE

25 May 2026