

# Lepidosperma neozelandicum

## COMMON NAME

fountain sedge, fountain grass

## SYNONYMS

*Lepidosperma filiforme* Labill. auct. non.; *Lepidosperma filiforme* var. *neozelandicum* (Kük.)

## FAMILY

Cyperaceae

## AUTHORITY

*Lepidosperma neozelandicum* (Kük.) R.L.Barrett & K.L.Wilson

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Sedges

## CURRENT CONSERVATION STATUS

2017 | At Risk – Declining | Qualifiers: DP

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining | Qualifiers: DP

2009 | Not Threatened

2004 | Not Threatened

## DISTRIBUTION

Endemic. New Zealand: North Island (Te Pahi to about Whangarei, thence scattered to Opuatia wetlands in the northern Waikato); South Island (north-west Nelson from Puponga to the Mangarakau Swamp).

## HABITAT

Coastal to lowland. Often on poorly drained clay soils on low hill country but also widespread in gumland habitats, and on damp sandy flats and in peat bogs (especially in Northland). This species is also abundant on the ultramafic soils of the Surville Cliffs, Te Pahi, Northland. Often found as the main sedge species under far north shrubland dominated by *Kunzea* Rchb. and *Leptospermum* J.R.Forst. et G.Forst.

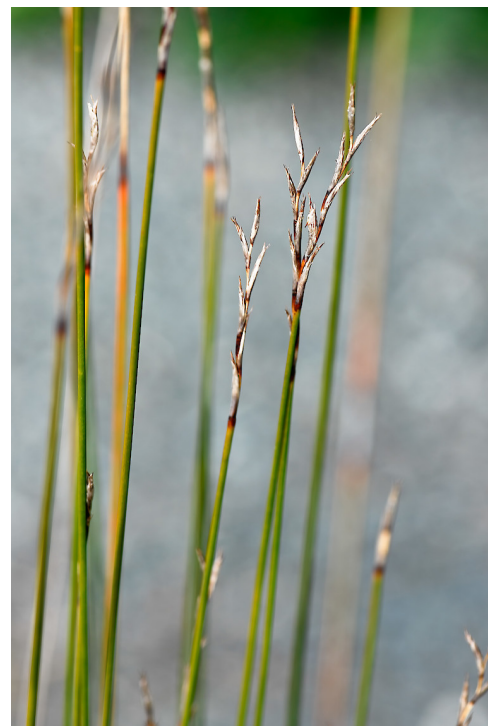
## WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

Commonly occurs as either a hydrophyte or non-hydrophyte (non-wetlands).



Lake Ohia. Photographer: Jeremy R. Rolfe, Date taken: 05/09/2008, Licence: CC BY.



In cultivation ex Mangarakau Swamp. Photographer: Jeremy R. Rolfe, Date taken: 19/07/2007, Licence: CC BY.

## DETAILED DESCRIPTION

Stout, rush-like sedge forming dense yellow-green tussocks up to 2 m tall. **Culms** terete, numerous, densely packed, wiry, erect with upper third often arching, 0.5–2.0 m tall, 1–2 mm wide. **Leaves** all reduced to closely appressed, reddish to maroon sheaths, with a subulate, almost filiform lamina 5–20 mm long. **Inflorescence** a simple or rarely branched spike 30–90 mm long. **Spikelets** 10 mm, not fascicled, 2-flowered, with only the upper flower fertile; bracts subtending spikelets membranous, grey-brown, nerved, more or less equal spikelets in length. **Glumes** 4–6, narrow- or oblong-lanceolate, acute or acuminate, with dark brown centre and pale membranous margins. **Hypogynous scales** 6, 1 mm long, white, triangular when mature, fused at the base into a cup. **Nut** (rarely seen) 4 × 1.5 mm, oblong, trigonous, green with white thickened obtuse angles; persistent style-base small, creamy brown, pubescent, occasionally minutely apiculate.

## SIMILAR TAXA

Most likely to be confused with *Schoenus brevifolius* and *S. tendo* which have a superficially similar growth habit and often grow with *Lepidosperma neozelandicum*. *Schoenus brevifolius* differs by its sterile culm tips which are distinctly pinched-in near the tip, so leaving a small arrow-shaped head (see fact sheet for that species), and larger, dark brown inflorescences with dark red-brown, flattened pendulous spikelets, bearing numerous, smaller (1.5 × 1.1 mm) turgid, white nuts. *Schoenus tendo* differs by the distinctly floppy/flaccid culms, whose sheath orifices are distinctly cobwebby ciliate, and by the more open, pendulous, inflorescences with dark brown spikelets and smaller (1.5 × 1.0 mm), frequently produced, unequally biconvex, obovoid, obtuse to retuse pale cream to brown nuts.

## FLOWERING

October–January

## FRUITING

December–May (fruits very rarely seen)

## LIFE CYCLE

Scaly nuts are dispersed by water, wind and possibly ants (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Very difficult to cultivate. Seed difficult to germinate. Plants resent root disturbance and usually die if transplanted. However, considerable success has been achieved growing plants and germinating seed in untreated saw dust. Nevertheless, this is an attractive species to grown in a sunny situation, preferring poorly drained clay soils.

## THREATS

Declining through loss of habitat following conversion of gumland and lowland scrub and wetlands to farmland and urban areas. *Lepidosperma neozelandicum* is still common in some parts of the far north of the North Island (especially Te Pahi, Ahipara and Lake Ohia) and in North West Nelson but it has been lost from much of the southern part of its North Island range and this decline is ongoing.

## ETYMOLOGY

**lepidosperma:** Scale seed

## NOTES

Nuts are very rarely produced by New Zealand plants probably because most inflorescences are infected by *Lepidosperma* smut (*Moreaua rodwayi*). The reproductive ecology of this species would make an interesting study.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 6 August 2006. Description adapted from Moore & Edgar (1970).

## REFERENCES AND FURTHER READING

Barrett RL, Wilson KL. 2012. A review of the genus *Lepidosperma* Labill. (Cyperaceae; Schoeneae). *Australian Systematic Botany* 25(4): 225–294. <https://doi.org/10.1071/SB11037>.

Moore LB, Edgar E. 1970. Flora of New Zealand, Volume II. Indigenous Tracheophyta: Monocotyledones except Gramineae. Government Printer, Wellington, NZ. 354 p.

Thorsen MJ, Dickinson KJM, Seddon PJ. 2009. Seed dispersal systems in the New Zealand flora. *Perspectives in Plant Ecology, Evolution and Systematics* 11: 285–309.

### **NZPCN FACT SHEET CITATION**

Please cite as: de Lange, P.J. (Year at time of access): *Lepidosperma neozelandicum* Fact Sheet (content continuously updated). New Zealand Plant Conservation Network.

<https://www.nzpcn.org.nz/flora/species/lepidosperma-neozelandicum/> (Date website was queried)

### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/lepidosperma-neozelandicum/>