

# Carex perplexa

## COMMON NAMES

Surville Cliffs bastard grass

## BIOSTATUS

Native – Endemic taxon

## CURRENT CONSERVATION STATUS

2023 | At Risk – Naturally Uncommon | Qualifiers: OL

[Jump to previous conservation statuses](#)

## CATEGORY

Vascular

## STRUCTURAL CLASS

Sedges

## DETAILED DESCRIPTION

Tufted sedge of ultramafic habitats forming large, spreading clumps.

**Culms** 400–500 × 0.7–0.9 mm, glabrous, trigonous, > leaves; leaf-sheaths 30 mm or less, yellow-brown, nerves light brown. **Leaves** 6–11 per culm, 200–550 × 2–5 mm, weakly channelled, green; upper surface keeled, keel scabrid, margin scabrid, apex acute, trigonous, scabrid. **Spikes** linear, up to 55 mm long, 2–3 mm wide, usually subtended by 1 leaf-like bract 15–95 × 0.2–1.2 mm; female florets proximal, 15–24, internodes 3.5 mm long at spike base decreasing to 0.6 mm above; male florets distal, 15–20, overlapping. **Glumes**: male glumes 3.5–4 × 1 mm, narrow elliptic-lanceolate, light brown; female glumes 3.5–4 × 1–1.2 mm, elliptic lanceolate to narrow elliptic, deciduous, light brown. **Utricles** 4.2–4.3 × 1.2–1.3 mm, planoconvex, ovate to elliptic, glabrous, light brown. **Nuts** 2.2–2.4 × 1–1.2 mm, oblong, light green to silver-green.

## SIMILAR TAXA

*Carex perplexa* appears to be most closely related to *C. uncinata* L.f.. This is a larger plant with longer spikes (up to 200 mm long), more female flowers per spike (60–120), and with larger fruits (utricles) and glumes. *Carex uncinata*, in common with all other New Zealand hook sedges except *C. subtilis* K.A.Ford and *C. parvispica* K.A.Ford (which have  $2n = 94, 96$  chromosomes respectively), has  $2n = 88$  chromosomes.

## DISTRIBUTION

Endemic. North Island, North Cape, Surville Cliffs, where it is only known from one small area of the 120 ha exposure of ultramafic rock.

## HABITAT

Ultramafic rock and talus in shaded sites under pohutukawa (*Metrosideros excelsa* Sol. ex Gaertn.) trees. Usually found growing with *Carex ophiolithica* de Lange et Heenan.



In cultivation ex Surville Cliffs. Photographer: Jeremy R. Rolfe, Date taken: 26/10/2007, Licence: CC BY.



Staminate florets, Te Paki. Photographer: Jeremy R. Rolfe, Date taken: 17/11/2010, Licence: CC BY.

## THREATS

Currently this species is confined to a single remnant stand of forest on the Surville Cliffs. This forest remnant is a survivor from past fires which all but destroyed the forest of the ultramafic zone at North Cape. *Uncinia perplexa* dislikes strong sun and so is vulnerable to the loss of the associated pohutukawa forest. The main threat to this forest is continuing browse from possums but fire is also a serious risk. Some weeds such as pampas grass (*Cortaderia selloana* (Schult. et Schult.f.) Asch. et Graebn.) and prickly hakea (*Hakea sericea* Schrad. et J.C.Wendl.) also pose a risk through potential competition should they become better established at North Cape.

## GENUS

Carex

## FAMILY

Cyperaceae

## AUTHORITY

Carex perplexa (Heenan et de Lange) K.A.Ford

## SYNONYMS

*Uncinia perplexa* Heenan et de Lange

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## FLOWERING

December

## FRUITING

January–April

## PROPAGATION TECHNIQUE

Very easy from divisions of whole plants and from seed. However plants are slow growing and inclined to die unless fertilised frequently with a magnesium rich fertiliser.

## CULTIVATION

Not commercially available. However plants are held by one University and by Landcare Research.

## ETYMOLOGY

**carex**: Latin name for a species of sedge, now applied to the whole group.

**perplexa**: From the Latin per (completely) and plectare (to entwine), referring to the entangled nature of the relationship among the species

## MANAAKI WHENUA ONLINE INTERACTIVE KEY

[Key to indigenous and naturalised Carex in New Zealand](#)

## NVS CODE

CARPER

## CHROMOSOME NUMBER

2n = 132

## PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Naturally Uncommon | Qualifiers: OL

2012 | At Risk – Naturally Uncommon | Qualifiers: OL

2009 | Threatened – Nationally Critical | Qualifiers: CD, OL

2004 | Threatened – Nationally Critical

[Jump to current conservation status](#)

## REFERENCES AND FURTHER READING

Heenan PB, de Lange PJ. 2001. A new, dodecaploid species of *Uncinia* (Cyperaceae) from ultramafic rocks, Surville Cliffs, Northland, New Zealand. *New Zealand Journal of Botany* 39(3): 373–380.

<https://doi.org/10.1080/0028825X.2001.9512743>.

## ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 7 March 2004. Description modified from Heenan & de Lange (2001).

## NZPCN FACT SHEET CITATION

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## MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/carex-perplexa/>

## PDF DATE

27 May 2026