

# Carex chathamica

## COMMON NAME

Chatham sedge

## SYNONYMS

None

## FAMILY

Cyperaceae

## AUTHORITY

Carex chathamica Petrie

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Sedges

## NVS CODE

CARCHA

## CHROMOSOME NUMBER

2n = c.64

## CURRENT CONSERVATION STATUS

2017 | At Risk – Naturally Uncommon | Qualifiers: IE, RR, Sp

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Naturally Uncommon | Qualifiers: IE, RR, Sp

2009 | At Risk – Naturally Uncommon | Qualifiers: IE

2004 | Sparse

## DISTRIBUTION

Endemic. Chatham Islands where present on Chatham (Rekohu), Pitt, and South East Islands.

## HABITAT

Predominantly found in peaty ground such as bogs, in wet clearings, at the margins of streams, lakes and ponds, and in swamps.

## WETLAND PLANT INDICATOR STATUS RATING

FACW: Facultative Wetland

Usually is a hydrophyte but occasionally found in uplands (non-wetlands).



Chatham Islands. Photographer: Peter J. de Lange, Licence: CC BY-NC.



Carex chathamica. Photographer: Gillian M. Crowcroft, Licence: All rights reserved.

## DETAILED DESCRIPTION

Rhizomatous, short-creeping, stoutly tufted, dark green to orange green, leafy sedge of peat bogs and swampy ground. **Rhizomes** woody up to 10 mm thick, loosely covered in fibrous brownish-grey sheath remnants. **Culms** 0.05–0.35–1 m × 1.5–3–6 mm. trigonous, smooth, stout and sturdy; basal sheaths light- to chestnut-brown. **Leaves** not overtopping inflorescence, 6–8–10 mm wide, dark green to light green above, paler beneath, double-folded, margins slightly thickened, distinctly though finely serrate, especially toward the tapering apex; base of leaf neither sheathing or enlarged but marked by a distinct purple ligule. **Inflorescence** of 6–8–(12) simply, light brown spikes; uppermost 2–4 spikes male, these shorter and more slender than the female, more or less approximate; remaining spikes female with a few males near apices, 30–75–(90) × 10–15–(20) mm, erect on stout peduncles, both spikes and peduncles reducing in size toward distal end of inflorescence; subtending bracts leafy, > inflorescence, almost enclosing the peduncles with their sheaths. **Glumes** > utricles, linear-lanceolate, emarginated or entire, faintly nerved, membranous, light brown to dark brown or red purple (sometimes almost black), paler towards the margins, midrib pale brown prolonged as a long hispid awn. **Utricles** 3–4.5 × 2 mm, unequally biconvex, obovoid, turgid, pale green to brownish green, lateral nerves well-marked, otherwise smooth, margins glabrous, abruptly contracted to a narrow, deeply bidentate beak, slightly > 0.5 mm long, crura finely scabrid; stipe 0.5 mm long, white. **Stigmas** 3. **Nut** 2 mm long, pale grey-brown, trigonous, oblong-obovoid.

## SIMILAR TAXA

*Carex chathamica* is a distinctive species of peat bogs and peaty open clears within forest. From the three other wide-leaved species of *Carex*, (*C. trifida* Cav., *C. ternaria* Boott in Hook.f., and *C. ventosa* C.B.Clarke in Cheeseman) present in the Chatham Islands, *C. chathamica* is ecologically separated from all but *C. ternaria*. *Carex ternaria* is a species of lake margins, slow flowing streams, ponds and permanent pools within peat bogs, its range rarely overlaps with *C. chathamica* from which it can be easily distinguished by its much greater stature (up to 3 m tall) and by its solitary rather than geminate basal spikes. Though ecologically distinct from the forest dwelling *C. ventosa*, herbarium specimens have been confused. Thus, *C. chathamica* can be distinguished from *C. ventosa* by its distinctly long-rhizomatous tufted, rather than shortly rhizomatous tussock forming habit, dark green to orange green rather than light green to pale glaucous green leaves, glumes which exceed rather than equal the utricles in length, and much less distinctly nerved and beaked utricles.

## FLOWERING

October–December

## FRUITING

November–March

## LIFE CYCLE

Nuts surrounded by inflated utricles are dispersed by granivory and wind (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Best grown in permanently damp, peaty soils. Does well in cool, shaded sites, and is ideal around ponds or bordering streams. In the northern plant of New Zealand it has proved difficult to maintain and dislikes long periods of drought, humidity or both.

## THREATS

A biologically sparse species that is widespread, though never abundant on the Chatham Islands. In some places it is threatened by grazing and disturbance by stock and feral pigs.

## ETYMOLOGY

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

**chathamica**: From the Chatham Islands

## WHERE TO BUY

Not commercially available

## ATTRIBUTION

Description adapted from Moore and Edgar (1970).

## REFERENCES AND FURTHER READING

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.

## MORE INFORMATION

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