

# Sonchus kirkii

## COMMON NAME

puha, shore puha, New Zealand sow thistle

## SYNONYMS

*Sonchus asper* var. *littoralis* Kirk, *Sonchus littoralis* (Kirk) Allan

## FAMILY

Asteraceae

## AUTHORITY

*Sonchus kirkii* Hamlin

## FLORA CATEGORY

Vascular – Native

## ENDEMIC TAXON

Yes

## ENDEMIC GENUS

No

## ENDEMIC FAMILY

No

## STRUCTURAL CLASS

Herbs - Dicotyledonous composites

## NVS CODE

SONKIR

## CHROMOSOME NUMBER

2n = 36

## CURRENT CONSERVATION STATUS

2017 | At Risk – Declining

## PREVIOUS CONSERVATION STATUSES

2012 | At Risk – Declining

2009 | At Risk – Relict

2004 | Gradual Decline

## DISTRIBUTION

Endemic. Three Kings, North, South, Stewart and Chatham Islands.

## HABITAT

Coastal. Usually on cliff faces in or around damp seepages where it often grows with the blue green alga *Nostoc* and fern *Blechnum blechnoides*.

This species has a distinct preference for base rich rocks such as basalt, calcareous mudstones, siltstones, limestone or apatite-rich greywacke faces. On some offshore islands this species extends up into coastal scrub and herbfield. It occasionally grows on stabilised sand dunes. Indications are that this species once occupied a wider range of habitats but has retreated to those less suited to other faster growing introduced weeds.

## WETLAND PLANT INDICATOR STATUS RATING

FAC: Facultative

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



Single plant. Photographer: Lisa Forester, Licence: CC BY-SA.



*Sonchus kirkii* on Bluff track. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

## DETAILED DESCRIPTION

Biennial to perennial herb (50-)150-600(-1000) mm tall. Taproot stout and swollen above. all parts exuding white latex when ruptured. Stem erect, simple or branched, finely grooved and ribbed, glabrous, hollow. Leaves thick, dull glaucous, lanceolate to narrowly oblong or linear oblanceolate (30-)80-200(-550) x (10-)30-60(-150) mm, margins dentate. Rosette and lower stem leaves pinnatifid to c.1/2 way to midrib; lobes broadly triangular, spreading or deflexed. Upper leaves not lobed, narrowly triangular to linear, or narrowly oblanceolate. Inflorescence cymose to umbellate. Capitula few to many. Involucre 10-15 mm, turbinate to cylindrical, bracts imbricate, recurved at fruiting. Florets yellow. Achenes elliptic, brown, strongly flattened, (3-)4 x 1-1.8 mm, 3-ribbed on each face, winged, wings and ribs smooth. Pappus hairs, fine, white.

## SIMILAR TAXA

Easily distinguished from all the other naturalised *Sonchus* species by the very large, glaucous, non-spinose leaves.

## FLOWERING

August - April

## FLOWER COLOURS

Yellow

## FRUITING

September - June

## LIFE CYCLE

Pappate cypselae are wind dispersed (Thorsen et al., 2009).

## PROPAGATION TECHNIQUE

Easy from fresh seed. Short-lived and best treated as an annual.

## THREATS

Appears to be declining over most of its range but especially in the North Island. The main threat seems to be from competition by faster growing weed species. Specifically there is some evidence that suggests it may be outcompeted by the introduced sowthistles *Sonchus asper* and *S. oleraceus* which grow faster, and thus can more quickly colonise the habitats preferred by *S. kirkii*. The species has also declined markedly along the south Wellington coast. Here it was once very common up until the mid 1980s subsequently it has disappeared from many of its former haunts, partly as a result of weed invasion and quarrying for rock, but it has also vanished from apparently stable, mainly indigenous habitats. The exact reason(s) for this loss are as yet unclear.

## ETYMOLOGY

**sonchus**: Sow thistle

**kirkii**: After Thomas Kirk (18 January 1828 - 8 March 1898), a NZ botanist and lecturer in natural sciences and regarded as a leader of botanical enquiry in NZ for over three decades. One of his most significant publications was Forest flora of NZ (1889) but he also contributed over 130 papers to the Transactions and Proceedings of the NZ Institute and other journals.

## FURTHER STUDY

The relationship of this species to the Chatham Island endemic, monotypic genus *Embergeria*, and New Zealand endemic genus *Kirkianella* needs critical study.

## ATTRIBUTION

Fact sheet prepared by P.J. de Lange for NZPCN (1 June 2013)

## REFERENCES AND FURTHER READING

Cameron, E.K. 2000. Native sow thistle *Sonchus kirkii* rediscovered in the Auckland region. Auckland Botanical Society Journal, 55, 21-24.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

### **NZPCN FACT SHEET CITATION**

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### **MORE INFORMATION**

<https://www.nzpcn.org.nz/flora/species/sonchus-kirkii/>