Aciphylla lyallii

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened | Qualifiers: DPS, DPT
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

DETAILED DESCRIPTION
Variable sparse-leaved tufted herb, simple to branched leaves. **Leaves** pinnate, up to approximately 30 cm long. **Sheaths** approximately 50 x 10 mm, with pale membranous margins; **stipules** approximately 20 mm x 2 mm, tapering to pungent apex; **petioles** keeled, up to about 100 mm long, lower internodes approximately 30 mm long. **Primary pinnae** 2 pairs, up to 100 mm x 3 mm, sometimes with short accessory pinnule; margins thickened, smooth. Rarely some specimens have simple leaves and sometimes leaves are exstipulate. **Flowering stems** of male plants slender to rather stout, up to approximately 40 cm long including narrow inflorescence up to 20 cm long. **Bract-sheaths** approximately 40mm x 15 mm, thin; stipules up to 15 mm long, linear, pungent; lamina with up to 3 pairs of pinnae up to 15 mm long, terminal leaflet up to 20 mm long. **Umbels** on slender peduncles up to approximately 30 mm long; umbellules several, up to approximately 10 mm diameter, on filiform unequal rays. **Flowering stems** of female plants grooved, up to 90 cm x 5 mm including inflorescence about 20 cm long, **Bracts** erect, concealing umbels; sheaths approximately 40 mm x 10 mm, rather thick; stipules approximately 10 x 2 mm, narrowed to pungent apex; lamina of 1-2 pinnae approximately 30 mm long, terminal leaflet slightly longer. Umbellules few. **Fruit** approximately 5 mm long; mericarps 5-winged; vittae 1-2 per furrow, 2-4 commissural.

SIMILAR TAXA
Differs from most other similar stature species by the large sheaths that almost entirely envelop the seeds. Mark (2012) suggests when not in fruit the irregular spaced joints on the leaves can be used to confirm an identification.
From the *A. montana* var. *gracilis* & *A. montana* var. *montana* group, Dawson (1979), suggests in *A. lyallii* the petiole is concave compared to convex in the former; petiole margins are acute compared to rounded; leaves of young plants are simple compared to pinnate; adult leaves may remain simple compared to adult leaves never being simple.

DISTRIBUTION
Endemic. South Island, throughout wetter mountain regions, common in Fiordland, absent from Nelson.

HABITAT
Low-alpine (1100-1400 m.a.s.l.), favours permanently wet habitat within tussock-herbfield, often overlooked.

GENUS
Aciphylla

Mt Burns, January. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

Craigieburn ski field, Canterbury. Photographer: Jesse Bythell, Date taken: 29/01/2011, Licence: CC BY-NC.

FAMILY
Apiaceae

AUTHORITY
Aciphylla lyallii Hook.f.

TAXONOMIC NOTES
In Allan (1961), it is suggested there is some confusion regarding specimens which have been collected as *A. cuthbertiana*, these are the proven to be the same species and then regarded as a synonym.
A. montana was initially treated as a synonym of *A. lyallii*, until being further researched and thoroughly described by Dawson (1979).

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
December - January

FRUITING
December - March

LIFE CYCLE AND DISPERSAL
Winged schizocarps are dispersed primarily by wind (Thorsen et al., 2009).

ETYMOLOGY
aciphylla: From the Latin acicula 'needle' and the Greek phyllum 'leaf', meaning needle-leaf.
lyallii: Named after David Lyall (1817-1895), 19th century Scottish naturalist and surgeon with the Royal Navy, who explored Antarctica, New Zealand, the Arctic and North America and was a lifelong friend of Sir Joseph Hooker.

NVS CODE
ACILYA

CHROMOSOME NUMBER
2n = 22

PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened | Qualifiers: DP
2012 | Not Threatened
2009 | Not Threatened
2004 | Not Threatened
Jump to current conservation status

REGIONAL CONSERVATION STATUSES
Otago: 2025 | Regionally At Risk – Regionally Naturally Uncommon | Qualifiers: DPS, NR, NS, Sp 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

Allan, H. H. 1961. Flora of New Zealand. Vol. 1. Wellington: Government Printer. pg. 477.
Dawson, J.W. 1979 Aciphylla montana Armstrong, A. lecomtei sp. nov., and related species. New Zealand Journal of Botany, 17:3, 339-351.
Mark, A. F. 2012. Above the Treeline: A Nature Guide to Alpine New Zealand. Craig Potton Publishing, Nelson. pg.148.
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 2009 Vol. 11 No. 4 pp. 285-309

ATTRIBUTION

Description adapted by M. Ward from Allan (1961).

MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/aciphylla-lyallii/

PDF DATE

25 May 2026