Anisotome lyallii

COMMON NAMES
Lyall's carrot

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | At Risk – Declining | Qualifiers: DPS, DPT, RR
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

SIMPLIFIED DESCRIPTION
A medium-sized perennial member of the carrot family reaching up to ½ a metre across and up to 0.8 metres in height when flowering. The large fern-like leaves are bright green to dark green, overtopped by a branching pale green flower stem which has clusters of white flowers at the ends. Found only in the deep South.



In the Catlins. Photographer: John Barkla, Licence: CC BY.



In the Catlins. Photographer: John Barkla, Licence: CC BY.

FLOWER COLOURS
White

DETAILED DESCRIPTION
Perennial herb up to 0.8 m tall. **Basal leaves** on petioles 10–150 × 15–100 mm; sheaths 3–130 × 15–40 mm (sheaths of cauline leaves inflated); lamina oblanceolate to oblong, 0.10–0.45 × 0.02–0.13 m, 2–3-pinnate; primary leaflets 5–10 pairs, rhomboid, deltoid to ovate, shortly petiolate, coriaceous; secondary leaflets spathulate to rhomboid, sometimes ovate; leaflet margins not thickened, often pinnatifid, rarely deeply incised into broad or narrow, toothed segments; teeth obtuse to acute, not piliferous. **Inflorescence** up to 0.9 m tall and 10 mm diameter at the first node; peduncles 20–150 mm long. **Flowers** dirty white to white. **Staminate plants**: involucre comprising several linear to lanceolate bracts, 4–18 × 0.5–2.5 mm; involucel of several linear bracteoles 2–10 × 0.25–1 mm; rays 10–35, 5–25 mm long; pedicels 10–30, 1–5 mm long. **Carpellate plants**: involucre of several linear to lanceolate bracts 5–25 × 0.5–5 mm, the bracts sometimes bearing reduced blade at the tip; involucel of several linear bracteoles 2–10 × 0.5–1.5 mm; rays 4–30, 5–30 mm long; pedicels 5–25, 1–7 mm long; styles slender, 1–2 mm long, divergent to divaricate. **Mericarps** narrowly elliptic to elliptic, ovate or elliptic-ovate, 4.0–7.5 mm long; apex usually slightly narrowed; base obtuse to truncate; 5-ribbed, ribs even, equal, thin, narrowly winged, opaque or translucent at margin; surface dull, ribs orange, orange-brown or dark brown, vittae visible or partially obscured, red-brown or dark brown.

SIMILAR TAXA
Most closely allied to *A. acutifolia* Kirk, which is a much larger, soloniferous plant with wider, coarsely toothed leaves and ligulate leaf sheaths. *Anisotome acutifolia* is allopatric from *A. lyallii* and is endemic to the Snares Islands/Tini Heke group.

DISTRIBUTION
Endemic. New Zealand: Te Waipounamu | South Island (Fiordland coast from Jacksons Bay to Puysegur Point, Nugget Point to South Head), Rakiura | Stewart Island (common along western and southern coastline), Solander Island / Hautere.

HABITAT
Coastal. On steep, south facing, sparsely vegetated cliffs, and in coastal turf, herbfield and on damp peaty ledges. Sometimes in coastal grassland, on boulder falls and even on sand dunes and beaches. In all its habitats it always found near the sea often within the spray zone.

THREATS
Accessible populations in Fiordland and on Stewart Island/Rakiura are probably browsed by deer. It is very common on Solander Island / Hautere and occurs in reasonable numbers in the south-eastern part of the South Island. Nevertheless because this species is being browsed by deer it is probably in decline.

GENUS
Anisotome

FAMILY
Apiaceae

AUTHORITY
Anisotome lyallii Hook.f.

SYNONYMS
Ligusticum lyallii Hook.f., Anisotome intermedia Hook.f., Ligusticum intermedium Hook.f., Ligusticum intermedium var. oblongifolium Kirk, Anisotome intermedia var. oblongifolium (Kirk) Cheeseman

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

FLOWERING
November – January.

FRUITING
January – March.

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

PROPAGATION TECHNIQUE
Easily grown from fresh seed and rooted pieces. Prefers a sunny situation. It should be planted in a deep, permanently moist, peaty soil. This species does not like humidity and hot climates, and does best in a south facing or cool site, even though for it flower it needs full sun for most of the day.

ETYMOLOGY
anisotome: Unequal sided
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
ANILYA

CHROMOSOME NUMBER
2n = 22

PREVIOUS CONSERVATION STATUSES

2017 | At Risk – Relict | Qualifiers: RR
2012 | At Risk – Naturally Uncommon | Qualifiers: Sp
2009 | At Risk – Naturally Uncommon
2004 | Range Restricted
Jump to current conservation status

REGIONAL CONSERVATION STATUSES

Otago: 2025 | Regionally Threatened – Regionally Endangered | Qualifiers: CI, PF, RR, St Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The 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

Dawson JW. 1961. A revision of the genus *Anisotome* (Umbelliferae). *University of California Publications in Botany 33*: 1–98.
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. https://doi.org/10.1016/j.ppees.2009.06.001.

ATTRIBUTION

Fact Sheet prepared for NZPCN by P.J. de Lange 14 April 2007. Description based on Dawson (1961).

MORE INFORMATION

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

PDF DATE

26 August 2026