Polystichum wawranum

BIOSTATUS
Native – Endemic taxon

CURRENT CONSERVATION STATUS
2023 | Not Threatened
Jump to previous conservation statuses

CATEGORY
Vascular

STRUCTURAL CLASS
Ferns

DETAILED DESCRIPTION
Rhizomes short, erect. **Stipes** 150–550 mm long. Stipes and rachises densely scaly. **Scales** filiform (hair-like); almost always widest at base; those from the stipe-rachis junction 40–120 microns wide at mid length; usually dark brown, but often appearing black to the naked eye; apex long and tapering; margins often with protrusions, which are usually blunt; often densely fimbriate around base, so much so that in young fronds the stipe and rachis scales appear to be underlain by a dense white tomentum. **Lamina** 270–590 × 110–280 mm; bipinnate with the basal primary pinnae of some large fronds becoming tripinnate; varying in colour from olive-green to blue-green, usually with primary and secondary costae blackish blue. **Primary pinnae** in 18–35 pairs, the longest 55–140 × 13–35 mm. **Secondary pinnae** usually adnate, but becoming free and sessile to almost stalked towards the base of primary pinnae, particularly in basal primary pinnae; often with only sparse marginal toothing, sometimes almost entire but for apical point. **Sori** round. **Indusia** peltate, ± flat, ± round, with entire, although often undulate and/or scalloped, margins; often deciduous; central dark area usually insignificant (c. < 10% of surface area).

Erua Forest. Photographer: Jeremy R. Rolfe, Date taken: 24/11/2013, Licence: CC BY.

Sori and scales on abaxial surface of frond, Erua Forest. Photographer: Jeremy R. Rolfe, Date taken: 24/11/2013, Licence: CC BY.

SIMILAR TAXA
Polystichum wawranum is recognised by its hair-like scales, closely inserted and relatively long narrow pinnae, indusia mostly lacking obvious dark centres, and relatively small spores. It is likely to be confused only with *P. neozelandicum* subsp. *neozelandicum* and subsp. *zerophyllum*, which are distinguished from *P. wawranum* by having wider scales, indusia with larger dark centres, and larger spores. *Polystichum wawranum* is commonly sympatric with *P. neozelandicum* subsp. *neozelandicum* in northern New Zealand, otherwise its range overlaps with both *P. neozelandicum* subspecies only on the Chatham Islands.

DISTRIBUTION
Endemic. New Zealand: North Island (northern), Chatham Islands.

HABITAT
Coastal to montane. Often on cliff faces, especially those composed of base-rich substrates such as calcareous sandstone, limestone, basalt and schist. A rupestral or terrestrial fern of coastal shrublands and forest, gorges, riparian forest as well as open sites on hillsides, in rough pasture or on alluvial terraces. It has also colonise urban areas where it sometimes a feature of roadside banks and cuttings.

THREATS
Not Threatened—though very scarce on the Chatham Islands.

GENUS
Polystichum

FAMILY
Dryopteridaceae

AUTHORITY
Polystichum wawranum (Szyszyl. in Wawra) Perrie

SYNONYMS
Aspidium wawranum Szyszyl. in Wawra

ENDEMIC TAXON
Yes

ENDEMIC GENUS
No

ENDEMIC FAMILY
No

PROPAGATION TECHNIQUE
Easily grown from fresh spores and transplants. However, often slow to establish. Does best in a shaded site planted within a deep, free draining humus-enriched fertile soil. Polystichum wawranum benefits from regular applications of lime.

CULTIVATION
Occasionally sold by specialist native plant nurseries, usually as *P. richardii*

ETYMOLOGY
polystichum: Many rows (of sori); from the Greek polus and stikhos; parallel rows of spore cases

NVS CODE
POLWAW

CHROMOSOME NUMBER
2n = c.164

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

REGIONAL CONSERVATION STATUSES
Auckland: 2025 | Regionally Not Threatened | Qualifiers: DPS, DPT Help
The regional threat classification system leverages off the national assessments in the NZTCS, providing information relevant for the regional context. Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.

REFERENCES AND FURTHER READING
Perrie LR, Brownsey PJ, Lockhart PJ, Large MF. 2003. Evidence for an allopolyploid complex in New Zealand *Polystichum* (Dryopteridaceae). *New Zealand Journal of Botany 41(2)*: 189–215. https://doi.org/10.1080/0028825X.2003.9512841.

ATTRIBUTION
Fact sheet prepared for NZPCN by P.J. de Lange (12 November 2012). Description adapted from Perrie et al. (2003)

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/polystichum-wawranum/

PDF DATE
08 June 2026