# Pteridium esculentum

## COMMON NAMES
bracken, rarauhe, bracken fern

## BIOSTATUS
Native

## CURRENT CONSERVATION STATUS
2023 | Not Threatened | Qualifiers: SO
Jump to previous conservation statuses

## CATEGORY
Vascular

## STRUCTURAL CLASS
Ferns

## FLOWER COLOURS
No flowers

## DETAILED DESCRIPTION
Fern with deeply rooted, subterranean rhizomes. **Stipes and rachis** chestnut brown at base, yellow-brown to russet at apex, woody, grooved, smooth, bearing sparse non-glandular hairs or ± glabrous stipe 0.2–1.3–(2.0) m or more long, 3–8–(15) mm diameter, woody. **Lamina** broadly elliptic or broadly ovate, 0.25–1.5–1.8 × 0.2–1.0–1.4 m wide, 3–4-pinnate at base, dark green (often glaucescent) above, paler beneath, adaxially glabrous, abaxially with sparse red-brown hairs on midribs and dense colourless appressed non-glandular hairs along veins. **Longest pinnae** arising at narrow angles; longest 150–650 × 80–400 mm. **Secondary pinnae** arising at narrow angles; longest 50–260 × 15–130 mm; basal one often much-reduced; midribs of primary and secondary pinnae narrowly winged. **Tertiary pinnae** decreasing markedly in length along secondary pinnae; longest 7–70 × 2–20 mm, with winged midribs. **Quaternary pinnae** to 12 × 4 mm; ultimate pinnules linear, straight, acute, entire, adnate and decurrent on 1 side. **Sori** continuous along pinna margin. **Indusium** > 0.2 mm wide, membranous, entire, glabrous. **Spores** dark yellow to orange yellow., granulose.



Lake Hawea. Photographer: John Sawyer, Licence: CC BY-NC.



Catlins, December. Photographer: John Barkla, Licence: CC BY.

## SIMILAR TAXA
A distinctive species which could not be confused with any other indigenous, naturalised or exotic fern present in New Zealand.

## DISTRIBUTION
Indigenous: New Zealand: Kermadec (Raoul Island only), North Island, South Island, Stewart Island/Rakiura, Chatham Islands and Antipodes Islands. Also South East Asia, Australia, Lord Howe, Norfolk Islands extending into western Oceania.

## HABITAT
Common in mainly seral habitats from the coast to the low alpine zone.

## GENUS
Pteridium

## FAMILY
Dennstaedtiaceae

## AUTHORITY
Pteridium esculentum (G. Forst.) Cockayne

## SYNONYMS
Pteridium aquilinum var. esculentum (G.Forst.) Kuhn

## ENDEMIC TAXON
No

## ENDEMIC GENUS
No

## ENDEMIC FAMILY
No

## FLOWERING
None (spore bearing)

## FRUITING
None (spore bearing)

## PROPAGATION TECHNIQUE
Despite its weedy nature this species is actually surprisingly difficult to grow from spores and/or transplants of young or mature plants. Best results seem to be from plants which spontaneously arise as pot contaminants within nurseries.

## WETLAND PLANT INDICATOR STATUS RATING
FACU: Facultative Upland
Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

## CULTIVATION
Rarely if ever, deliberately cultivated. May be commercially available from a specialist fern nursery.

## PLANT OF THE MONTH
This plant has been featured as a Plant of the Month – see Trilepidea: NZPCN newsletter for August 2017 for the full story.

## ETYMOLOGY
**pteridium**: Like Pteris; a fern known to the ancient Greeks; from the Greek pteris
**esculentum**: Edible; from the Latin esca and edere; in recognition of its value to the maori as a food plant

## NVS CODE
PTEESC

## CHROMOSOME NUMBER
2n = 104

## PREVIOUS CONSERVATION STATUSES
2017 | Not Threatened | Qualifiers: SO
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
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Auckland conservation status information is sourced from the "Conservation status of vascular plant species in Tāmaki Makaurau / Auckland" Simpkins E et al. (2025) report.
Otago: 2025 | Regionally Not Threatened 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.
Northland: 2026 | Regionally Not Threatened Help
Current regional threat status assessments prepared according to Crisp et al. (2025) are displayed when available. The Northland conservation status information is sourced from the "Conservation status of indigenous vascular plants in Northland | Taitokerau" Ford et al. 2026 report.

## REFERENCES AND FURTHER READING

Brownsey PJ. 1998. Dennstaedtiaceae: *Flora of Australia 48*: 214–228.
Brownsey PJ, Smith-Dodsworth JC. 2000. New Zealand Ferns and Allied Plants. David Bateman, Auckland, NZ. 168 p.

## ATTRIBUTION

Fact sheet prepared for NZPCN by P.J. de Lange 11 January 2011. Description adapted from Brownsey (1998) and Brownsey & Smith-Dodsworth (2000).

## MORE INFORMATION

https://www.nzpcn.org.nz/flora/species/pteridium-esculentum/

## PDF DATE

25 August 2026