Myriophyllum aquaticum

COMMON NAMES
parrot's feather

FAMILY
Haloragaceae

AUTHORITY
Myriophyllum aquaticum (Vell. Conc.) Verdc.

FLORA CATEGORY
Vascular – Exotic

STRUCTURAL CLASS
Herbs - Dicotyledons other than Composites

NVS CODE
MYRAQU

CONSERVATION STATUS
Not applicable

SIMPLIFIED DESCRIPTION
Sprawling emergent perennial herb with light grey-green foliage that is feathery in appearance (deeply divided). Submerged leaves are also finely divided and are often bright pink in colour.

DISTRIBUTION
Widely naturalised in the North Island (locally common in Auckland, Waikato, Wairarapa and Manawatu), rare but scattered throughout the South Island.

HABITAT
Typically invades disturbed, polluted, high nutrient, well lit, still or slow-moving waterbodies. Wetlands, water margins, streams, rivers, slightly saline estuary edges and river mouths.

WETLAND PLANT INDICATOR STATUS RATING
OBL: Obligate Wetland
Almost always is a hydrophyte, rarely in uplands (non-wetlands).

DETAILED DESCRIPTION
Sprawling emergent perennial herb. Emergent leaves are a light grey-green, up to 3.5 cm long, and deeply divided (pinnate), giving them a feathery appearance. They are arranged in whorls of 4-6. The stem can be up to 2m long, but with only up to the top 10 cm emerging above water. Fibrous roots occur at the lower stem nodes. Submerged leaves are longer (up to 4 cm long, with filiform pinnae that are often bright pink in colour. Flowers in the axil of emergent whorls of leaves are white, tiny (up to 1.5mm across), with no petals. Only female flowers in New Zealand and other countires outside the native range.

Mawaihakona Stream, Upper Hutt. Photographer: Jeremy R. Rolfe, Date taken: 26/01/2008, Licence: CC BY.

Myriophyllum aquaticum. Photographer: Auckland Regional Council, Licence: Public domain.

SIMILAR TAXA
Very similar to 5 native Myriophyllum spp all have stems less than 1 m long (except the endangered M. robustum). M. robustum is the most similar, M robustum is pointed at the leaf tip wheras M. aquaticum is rounded. May be confused with Ceratophyllum demersum but hornwort has forked rather than feathery foliage.

FLOWERING
September, October, November, December, January, February

FRUITING
No seed produced because only female plants in New Zealand.

LIFE CYCLE
Stem fragmentation and lateral stem growth. It does not produce viable seed in New Zealand, with only female flowers known to exist here. No seed produced because only female flowers.
Fragments are dispersed by wave action or mechanical harvesting.

YEAR NATURALISED
1970

ORIGIN
South America

REASON FOR INTRODUCTION
Ornamental aquarium and pond plant.

TOLERANCES
Can grow in fast-moving to still water; tolerant of occasional frosts and some salinity.

ETYMOLOGY
myriophyllum: Many leaves

NATIONAL PEST PLANT ACCORD SPECIES
This plant is listed in the 2020 National Pest Plant Accord. The National Pest Plant Accord (NPPA) is an agreement to prevent the sale and/or distribution of specified pest plants where either formal or casual horticultural trade is the most significant way of spreading the plant in New Zealand. For up to date information and an electronic copy of the 2020 Pest Plant Accord manual (including plant information and images) visit the MPI website.

ENVIRONMENTAL WEED (2024)
This plant is named in a list of 386 environmental weeds in New Zealand 2024 prepared by DOC. 759 candidate species were considered for inclusion on this new comprehensive list of environmental weeds in New Zealand. The species considered were drawn from published lists of weed species, lists of plants that must be reported or managed by law if observed, existing national and regional programmes and agreements for pest management, and species already managed by the Department of Conservation (DOC). Candidate species were then assessed to see if they were fully naturalised and whether they have more than minor impacts in natural ecosystems. Read the full report here.

ATTRIBUTION
Factsheet prepared by Paul Champion and Deborah Hofstra (NIWA).

REFERENCES AND FURTHER READING
Champion et al (2012). Freshwater Pests of New Zealand. NIWA publication. http://www.niwa.co.nz/freshwater-and-estuaries/management-tools/identification-guides-and-fact-sheets/freshwater-pest-species.
DiTomaso JM, EA Healy (2003). Aquatic and riparian weeds of the west. University of California Agriculture and Natural Resources Publication 3421, 462pp.
Johnson PN, Brooke PA (1989). Wetland plants in New Zealand. DSIR Field Guide, DSIR Publishing, Wellington. 319pp.
Popay et al (2010). An illustrated guide to common weeds of New Zealand, third edition. NZ Plant Protection Society Inc, 416pp.
WSDE (2001). An aquatic plant identification manual for Washington's freshwater plants. Washington State Department of Ecology, 195pp.

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/myriophyllum-aquaticum/

PDF DATE
17 September 2024