

Eastern Waterfan

Peltigera hydrothyria

STATUS

Threatened 

Not Listed 

81



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Species Description

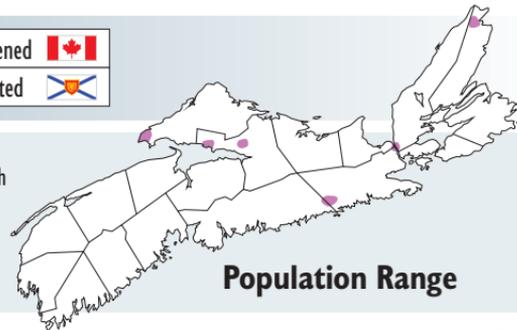
Eastern Waterfan is a foliose (leaf-like) aquatic cyanolichen made up of fan-shaped lobes (each 3-10 mm wide). Its upper surface is blackish, jelly-like, and translucent when wet (appears reddish in sunlight), and grey when dry. It has branched beige veins on its lower surface. Reddish-brown shield-shaped apothecia (sexual reproductive structures) are present along its edges.



Dry lichen, showing branched veins

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Restricted to eastern North America. In Canada, six occurrences are known in Nova Scotia.



Population Range

Habitat

Found attached to rocks in partially-shaded streams. Occurs underwater and on stream margins and may be found out of water during periods of low stream flow in the summer. It is often found in backwater areas below small waterfalls and boulders, where it is protected from the main stream flow. Cool, clear, sediment-free waters, with moderate pH and low pollution levels are important requirements for this species.



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Look for Eastern Waterfan on rocks in partially-shaded, clear streams with small waterfalls and boulders. Underwater it can look similar to seaweed.

Interesting Points

- Outside of Nova Scotia, there are three occurrences of Eastern Waterfan in New Brunswick and one in Quebec. The Canadian occurrences account for 25% of the global population.
- The Western Waterfan (*Peltigera gowardii*) occurs in British Columbia in Canada and is listed as Special Concern by COSEWIC.
- The Waterfan lichens are one of a very few leaf-like (foliose) lichens that can grow underwater.



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Growing above the water



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Similar Species

Streamside Stickleback

(*Dermatocarpon luridum*): Occurs on streamside rocks. Green when wet and grey when dry. Lobes not translucent or with branched veins.



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Blue Jellyskin

(*Leptogium cyanescens*): Occurs on mossy streamside rocks. Blue-grey when dry and black and jelly-like when wet. No branched veins.



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Nostoc spp. colonies:

Lobed, jelly-like cyanobacteria colonies that can grow underwater on rocks but are bumpy, green and have no branched veins.



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Other similar species include Common Water Moss (*Fontinalis antipyretica*) and Veinless Pelt (*Peltigera membranacea*).

Threats to Survival

- Siltation and decreased water quality (riparian forest harvesting, road construction).
- Decreased stream water flow (forestry operations, hydrofracturing).
- Climate change (lower water flow, decreased humidity).
- Air pollution (acid rain).



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Stream siltation after a heavy rain

How You Can Help

Learn to recognize this species and report your sightings. Do not disturb streams or stream margins. Landowners can maintain riparian forests on their properties. Support sustainable forestry practices and climate change initiatives.



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Contacts, Information & Sighting Reports

Contact: Nova Scotia Environment (902) 237-0841

Info: www.sararegistry.gc.ca

Sighting Reports: 1-866-727-3447 or www.speciesatrisk.ca/sightings