Brook Floater

Alasmidonta varicosa

STATUS	
	Special Concern
	Threatened

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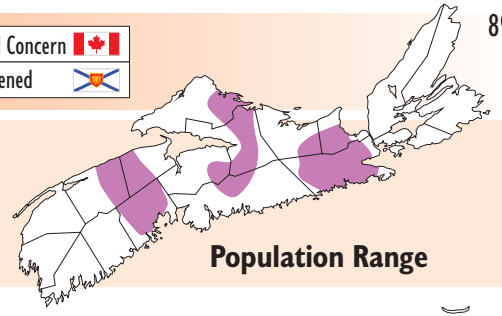
Species Description

The Brook Floater is a freshwater mussel that is typically 5-6.5 cm long and up to 3 cm wide. Its shell is yellowish brown to dark brown in colour and is kidney-shaped. It has horizontal growth lines along its shell intersected with tiny perpendicular ridges. It has a cantaloupe coloured "foot" (a muscular structure used for movement), which can be visible when the shell is open. The top of the shell near its hinge (the "umbo" region) often shows signs of wear. Its inner shell colour is typically bluish-white.

Occurs in 10 rivers and lakes in NS. Its global range is restricted to northeastern North America, and in Canada only occurs in NS and NB.



Population Range

Habitat

The Brook Floater typically inhabits clean, moderately flowing rivers and streams with sand or gravel bottoms. In Nova Scotia, it has also been observed in clear water lakes with sandy bottoms.

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The Brook Floater is found buried in sandy or gravelly bottoms of rivers or lakes.

Interesting Points

- The Brook Floater can live up to 15 years and does not mature until it is six years old!
- Adults generally travel very short distances in a day (centimetres to a few meters per day).
- Dispersal of this species primarily occurs at the parasitic larvae stage. Tiny glochidia larvae attach to the gills and fins of host fish, and may be transported kilometers away where they drop off and mature into adults.

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This species is thought to have always been uncommon in Canada, but due to severe declines in the USA, the Canadian population has become globally important.


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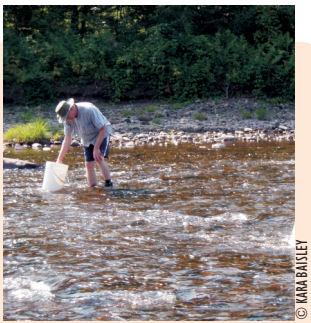
Similar Species

Freshwater mussels are sensitive to handling and should not be disturbed if possible.

Alewife Floater (Anodonta implicata):
Larger, thick shelled, not kidney shaped. Inner shell colour white or pinkish.

Triangle Floater (Alasmidonta undulata):
Similar size, no perpendicular ridges or kidney shape. Inner shell colour blueish-pink and whitish pink.

Creeper (Strophitus undulatus):
Similar size and shape. Surface rough.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Brook Floater surveys

Threats to Survival

- Poor agricultural and land management practices that result in riparian habitat loss and degradation, nutrient and chemical runoff, and sedimentation.
- Activities that degrade natural riparian habitat (residential development, off-road vehicle use, forestry practices, livestock river access, and road construction).
- Water level fluctuations from dams (changes in habitat, susceptibility to predation and desiccation).
- Impacts to host fish populations (invasive alien fish, migration barriers).


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How You Can Help

Maintain the natural vegetation and habitat along riparian areas to preserve water quality and ecosystem function. Farmers and landowners can practice proper nutrient and chemical management practices. Prevent the introduction of invasive species - it is illegal to move fish from one body of water to another.

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Contacts, Information & Sighting Reports

Contact: DFO Species at Risk 1-866-891-0771 or xmarsara@mar.dfo-mpo.gc.ca
Info: www.sararegistry.gc.ca, www.dfo-mpo.gc.ca/species-especes
Sighting Reports: 1-866-727-3447 www.speciesatrisk.ca/sightings