

Aquatic Species at Risk



The Lake Winnipeg Physa... a *Species at Risk* in the Prairie Provinces

COSEWIC Status – ENDANGERED November 2002

SARA Status – UNDER CONSIDERATION



Physa spp.

Photo by E. Pip (University of Winnipeg)

General Description

The Lake Winnipeg Physa (*Physa* sp.) is a freshwater snail and member of the Physidae. It has the following characteristics and distinguishing features:

- Shell is small (usually less than 11 mm long) and fragile with a dull, often pitted surface
- Shell is globe-shaped with a depressed spire and thin lip
- Fresh shells are bluish grey in colour, while the animal itself is light grey and sparsely peppered with black spots
- Shell width-length ratio is greater than 0.70, and the aperture-shell length ratio exceeds 0.80

This species has been identified as Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is currently being considered for listing under the federal *Species at Risk Act*

(SARA). Protection is afforded through the federal *Fisheries Act*. If listed under the SARA, it will be afforded additional protection. Under the SARA, a recovery strategy must be developed for this species.



Distribution

This snail has only recently been formally described and, therefore, there is no published information on its distribution. However, it appears to occur only in Lake Winnipeg, despite extensive surveys in Manitoba, Ontario, Saskatchewan, North Dakota, Minnesota and in nearby lakes and tributaries of Lake Winnipeg. Within Lake Winnipeg, its distribution is discontinuous and patchy, being found at only five of the 90 sites surveyed in 2001. Its disappearance from two historical sites suggests that it is in decline.

Habitat and Life History

The Lake Winnipeg Physa is found in shallow water (less than 1 m deep) on medium to large algae-coated rocks in windswept areas close to shore. The lake bottom is typically gravel, sand and rocks. It occurs only in areas where other snails thrive. The biology of the Lake Winnipeg Physa is not known. However, other Physa snails in Lake Winnipeg reproduce in June and July, and adults overwinter. The lifespan is likely not more than one year.

Diet

The Lake Winnipeg Physa feeds on algae.

Threats

Two factors have been identified as possible threats to the Lake Winnipeg Physa: habitat degradation due to shoreline modification and development, and water pollution from agricultural, municipal and industrial sources.

Similar Species

There are three other described species of *Physa* in Lake Winnipeg, *P. gyrina*, *P. integra*, *P. jennessi skinneri*, all of which are thinner in proportion to the total shell length than the Lake Winnipeg Physa. Other globe-shaped snails, which superficially resemble the Lake Winnipeg Physa include *P. globosa* and *P. utahensis*, both found in the United States.

Text Sources: COSEWIC Status Report 2002.

For more information, visit the SARA Registry Website at www.SARAregistry.gc.ca and the Fisheries and Oceans Canada (DFO) Website noted below.

LAKE WINNIPEG PHYSA DISTRIBUTION



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www.aquaticspeciesatrisk.gc.ca

Section 32 (1) of the *Species at Risk Act* (SARA) states that “no person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.”