

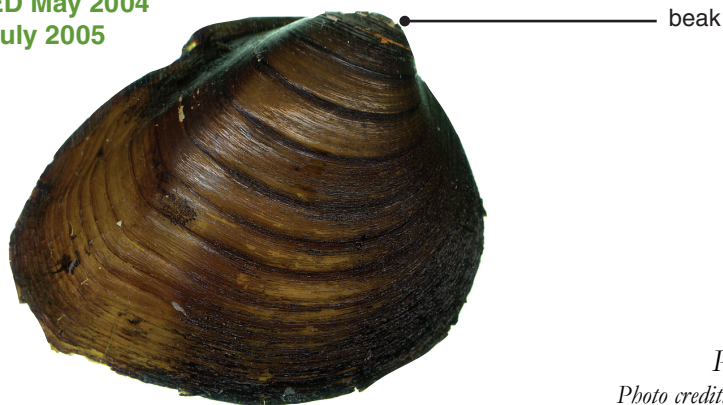
Aquatic Species at Risk



The Round Pigtoe... a Species at Risk in Canada

COSEWIC Status - ENDANGERED May 2004

SARA Status - ENDANGERED July 2005



Pleurobema sintoxia

Photo credit: Environment Canada

General description

The Round Pigtoe (*Pleurobema sintoxia*) is one of Canada's 54 freshwater mussel species and belongs to the Family Unionidae. Its lifespan is unknown, but other members of its genus can live for more than thirty years. The Round Pigtoe has the following features:

- a medium-to-large freshwater mussel, reaching lengths between 7.5 and 13 cm;
- adult shells are deep reddish-brown in colour, juveniles are tan;
- inside of shell (nacre) is white or shades of pink;
- shell is usually somewhat rectangular in shape, relatively thick and solid with a roughened surface; and
- raised part at the top end of the shell (beak) is compressed, turned forward and slightly elevated, extending beyond the hinge line.

This species has been identified as Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is listed under the federal *Species at Risk Act* (SARA) and was afforded protection under the Act as of July

2005. Additional protection is afforded through Ontario's *Endangered Species Act, 2007*. As required under SARA, a recovery strategy and an action plan have been developed for this species.

Freshwater mussels are molluscs, soft-bodied animals without a skeleton (invertebrates), that live on the bottom of streams, rivers, lakes and ponds. They use a muscular foot to burrow and crawl and have a pair of hinged shells. Mussels are filter feeders — nature's water purifiers — and are food for other wildlife like fishes, otters, mink, muskrats and some birds. They are also among the most endangered creatures in the world.



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Distribution

In North America, the Round Pigtoe was once widely distributed from New York and Ontario, west to South Dakota, Kansas and Oklahoma, and south to Arkansas and Alabama. In Ontario, it occurred in lakes Erie and St. Clair and in the Detroit, Grand, Niagara, Sydenham and Thames rivers. Though its current distribution is similar to the historical range, only a few of these mussels remain in the Grand and Thames rivers, and small, but reproducing populations exist in the Sydenham River and the delta area of Lake St. Clair.

Habitat and life history

The Round Pigtoe can live in a wide range of habitats, from small rivers in areas of moderate flow with gravel, cobble and boulder substrates (bottoms) to larger rivers in mud, sand and gravel at varying depths. Its breeding season lasts from early May to late July and the larvae (glochidia) are released before winter. Like most other freshwater mussels, the glochidia are parasitic on fishes—the glochidia attach to the gills of a host fish until they reach their juvenile, free-living stage and drop off into the substrate below. Adult Round Pigtoe are essentially



sessile and may move only a few metres along river or lake bottoms. The host fishes for this mussel in Canada are the Spottfin Shiner (*Cyprinella spiloptera*), Northern Redbelly Dace (*Phoxinus eos*), Bluntnose Minnow (*Pimephales notatus*), Bluegill (*Lepomis macrochirus*) and Central Stoneroller (*Camptostoma anomalum*).

Diet

Like all species of freshwater mussels, the Round Pigtoe filters its food from the water. Bacteria and algae are its primary food sources.

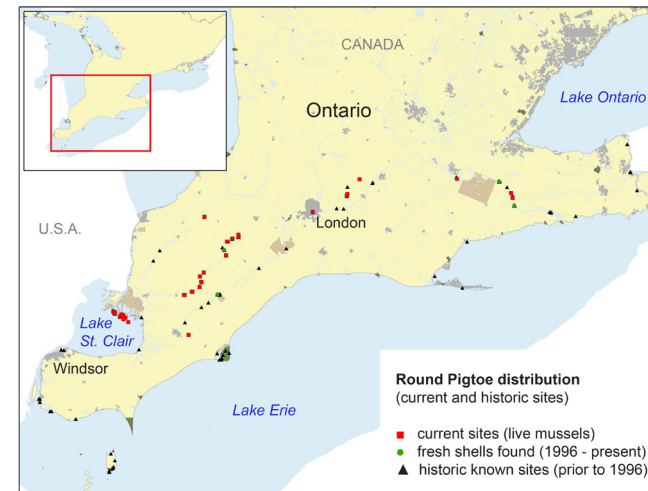
Threats

The introduction and spread of the Zebra Mussel (*Dreissena polymorpha*) throughout the Great Lakes severely reduced or eliminated the Round Pigtoe in Lake St. Clair, Lake Erie, and the Detroit and Niagara rivers. Loss of habitat and decreased water quality from siltation and pollution continue to threaten this species, as remaining populations are found in heavily populated areas with poor agricultural and urban land-use practices. The Round Pigtoe was also harvested for the historic pearl button industry and is now used in the cultured pearl industry. Commercial harvesting is closed in Canada and most of the U.S., making poaching a possible future threat to this mussel.

Similar species

This species is similar to the Wabash Pigtoe (*Fusconaia flava*) and the Hickorynut (*Obovaria olivaria*).

Round Pigtoe distribution in Canada



Text Sources: COSEWIC Status Report on the Round Pigtoe (*Pleurobema sintoxia*) in Canada. 2004; Fisheries and Oceans Canada. Action Plan for the Sydenham River in Canada [proposed]. 2012; Fisheries and Oceans Canada. Recovery Strategy for Northern Riffleshell, Snuffbox, Round Pigtoe, Mudpuppy Mussel and Rayed Bean in Canada [proposed]. 2012; Metcalfe-Smith et al. Photo Field Guide to the Freshwater Mussels of Ontario. 2005.

For more information, visit the SARA Registry at www.SARAreistry.gc.ca or the website below.

Cette publication est également disponible en français.

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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 or harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species.”