

The Hickorynut is one of Canada's 54 freshwater mussel **I** species and one of only two mussels in the genus Obovaria found in Canada. Also known as the Olive Hickorynut, this mussel is nearly oval-shaped shell with a maximum length of 7.5 cm and a green to yellowish-brown shell colour that turns dark brown with age. A complete species profile on the Hickorynut can be found on the Fisheries and Oceans Canada website.

In Canada, known populations are now only found in certain rivers and their tributaries within the Great Lakes-St. Lawrence drainage system, from Lake Huron in southern Ontario to Quebec City in the east. Rivers include the Mississagi River, Ottawa River, St. Lawrence River and the Saint François River.

Proposed listing under SARA: Endangered

In 2011, this species was assessed as endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). If listed as endangered under the Species at Risk Act, a recovery strategy and action plan will be developed.

Provincially, the Hickorynut is listed as endangered under Ontario's Endangered Species Act, 2007 and is part of the list of wildlife species that could be listed under Quebec's Act respecting Threatened or Vulnerable Species.

One of the purposes of the *Species at Risk Act* (SARA), proclaimed by the Government of Canada in 2003, is to provide for the legal protection of wildlife species and the conservation of biological diversity.

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) has the mandate to conduct assessments on the status of wildlife species and categorize them according to their level of risk for extinction (extinct, extirpated, endangered, threatened, or special concern).

The Government of Canada considers scientific evidence, comments received from Canadians during consultations, and potential socio-economic impacts before making a decision whether or not to include the species on the List of Wildlife Species at Risk under SARA.

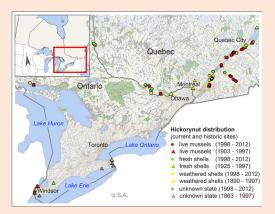
Recovery planning is undertaken for all listed species, and prohibitions are put in place protecting species assessed as extirpated, endangered or threatened.

The consultation process - Your comments

As part of the consultation process, the Government of Canada would like to hear your opinions on listing the Hickorynut as endangered under the *Species at Risk Act*, and any comments on the potential positive and negative impacts this listing would have on you, your industry, your community and/or the ecosystem. Your answers will be used to help inform the decision whether or not to list the species. To provide your input, please go to www.SARAregistry.gc.ca and click on Public Consultations.

Threats

The introduction of Zebra and Quagga mussels in the 1980s and 90s wiped out the Hickorynut in the Detroit and upper St. Lawrence rivers. The invasive mussels can attach to Hickorynut shells by the hundreds, preventing them from eating, breathing, moving and reproducing, and continue to threaten the remaining Hickorynut populations. Dams along the large river habitats of the Hickorynut are another serious threat. Indeed, in the first stages of life, Hickorynut larvae



need to attach themselves to a fish in order to develop. The Lake Sturgeon, which is thought to be the main host fish for Hickorynut larvae, is unable to traverse the dams. With fewer hosts, the chances of enough larvae reaching their free-living stage to maintain the population are greatly reduced. Pollution from industrial and agricultural activities also threaten the Hickorynut and its host fish by decreasing the water quality of the habitat.

Special significance of the 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.

Possible management measures

If the Hickorynut is listed under SARA, Fisheries and Oceans Canada will, in collaboration and consultation with stakeholders and partners, use the best available information to develop a recovery strategy and action plan for the species.

Protection and recovery of species under SARA

If the Hickorynut is added to the List of Wildlife Species at Risk as endangered, it will be legally protected under SARA and subject to prohibitions. It will be illegal to kill, harm, harass, capture or take a Hickorynut, or possess, buy, sell or trade any part of one unless authorized by a permit issued under SARA. It will also be illegal to destroy the critical habitat of the Hickorynut— the habitat necessary for its survival and recovery— once it is identified in the recovery strategy or action plan.

References

COSEWIC. 2011. COSEWIC assessment and status report on the Hickorynut (*Obovaria olivaria*) in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 46 pp.

