

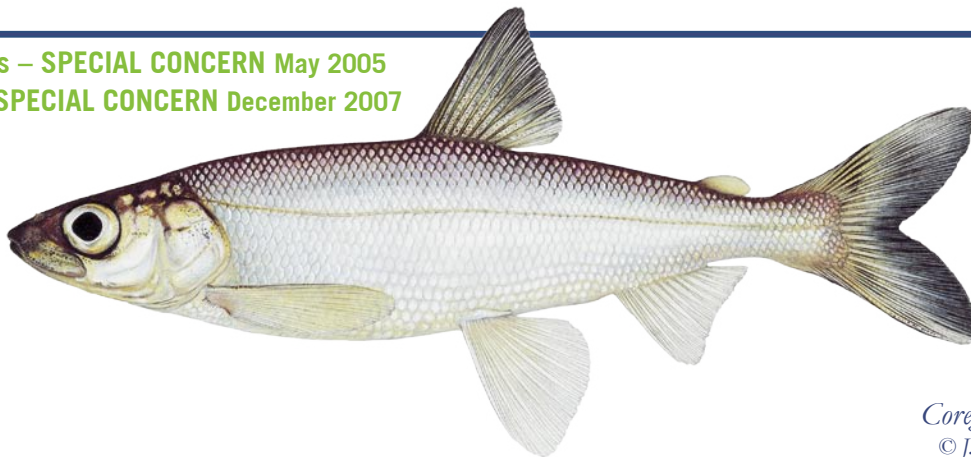
Aquatic Species at Risk



The Kiyi... (Upper Great Lakes population) a *Species at Risk* in Ontario

as designated under the federal *Species at Risk Act*

COSEWIC Status – SPECIAL CONCERN May 2005
SARA Status – SPECIAL CONCERN December 2007



Coregonus kiyi
© J. R. Tomelleri

This species has been identified as Special Concern 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 SARA as of December 2007. Additional protection is afforded through the federal *Fisheries Act*. Under the SARA, a management plan must be developed for this species.

General Description

The Kiyi (*Coregonus kiyi*) is one of ten cisco species found in Canada. It is a member of the Salmonidae family and has the following characteristics:

- Large eyes comprising 22 to 26% of the head length
- Terminal mouth with lower jaw usually extending beyond the upper jaw
- Lower jaw has distinct projection (not seen in illustration)
- Long paired fins
- From 34 to 47 gill rakers
- Silvery in appearance
- Maximum total length is 250 mm



Distribution

The Kiyi is endemic to all of the Laurentian Great Lakes except Lake Erie. The Upper Great Lakes population is believed to now exist only in Lake Superior. It was last recorded in Lake Huron in 1973 and in Lake Michigan in 1974. The Lake Ontario population is considered extinct, last recorded in 1964.

Habitat and Life History

Little is known about the habitat preferences and life history of the Kiyi. It lives in a clear, cold-water environment at depths ranging from 35 to 200 m; however, it is rarely found in waters less than 108 m deep. Kiyi have been collected over lake bottoms of clay and mud substrates. Spawning generally occurs in the late fall at depths greater than 100 m. The age of maturity is two to three years. The maximum known age for females is ten years, and for males seven years. The Kiyi is prey for Burbot (*Lota lota*) and deepwater forms of Lake Trout (*Salvelinus namaycush*).

Diet

The Kiyi feeds on deepwater crustaceans such as *Mysis relicta* and *Diporeia hoyi*.

Threats

Commercial overfishing of Kiyi was likely the cause of its decline in lakes Huron, Michigan and Ontario. Further, remnant Kiyi populations in lakes Huron and Ontario may have competed with, or have been preyed upon by, introduced fish species such as the Sea Lamprey (*Petromyzon marinus*), Alewife (*Alosa pseudoharengus*) and Rainbow Smelt (*Osmerus mordax*).

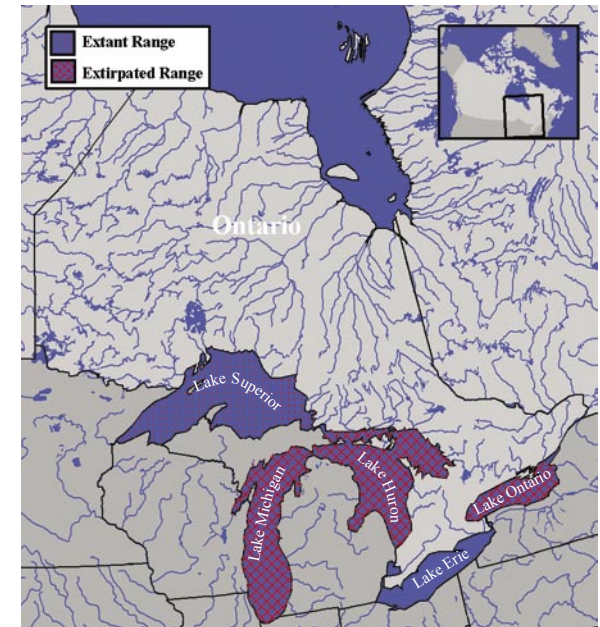
Similar Species

The Kiyi can be distinguished from the two other deepwater cisco species (*C. hoyi* and *C. zenithicus*) known to exist in the Great Lakes by its unique combination of large eyes and long paired fins.

Text Sources: COSEWIC Status Report 2005.

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

KIYI DISTRIBUTION



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