The Shortnose Cisco... a *Species at Risk* in Canada

COSEWIC Status - ENDANGERED May 2005
SARA Status - ENDANGERED December 2007

Coregonus reighardi
Illustration © Paul Vescei

This species has been identified as Endangered by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). It is formally listed as Endangered under both the federal *Species at Risk Act* (SARA) and the Ontario *Endangered Species Act, 2007*. As per the *Species at Risk Act*, a recovery strategy will be developed for this species.

General Description

The Shortnose Cisco (*Coregonus reighardi*) is one of 10 cisco species found in Canada. It is a member of the Salmonidae family and has the following characteristics:

- Short head;
- Small eye;
- Small snout with distinctly dark pigmentation;
- Small terminal mouth with lower jaw included in the upper jaw;
- Gill raker count of 32 to 42;
- Silvery in appearance;
- Maximum weight 420 g; and
- Total average length of 265 mm.

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Distribution

Historically found in Lake Huron, Lake Michigan and Lake Ontario, it is believed that the Shortnose Cisco may now be extinct. It has not been recorded in Lake Ontario since 1964, Lake Michigan since 1984 nor Lake Huron since 1985.

Habitat and Life History

Very little is known about the habitat preferences and life history of the Shortnose Cisco. It was a deepwater fish, considered one of the 'chub' species, which lived in clear, cold-water environments all year long. It has been collected in water depths ranging from 22 to 110 m. The Shortnose Cisco was the only known spring-spawning cisco in the lakes where it occurred and likely migrated to deep water for spawning. There is some evidence that fall spawning may have also taken place. Sexual maturity was reached at two to three years. The maximum age was eleven years for females and nine years for males. It was prey for Burbot (*Lota lota*) and deepwater forms of Lake Trout (*Salvelinus namaycush*).

Diet

The Shortnose Cisco fed primarily on deepwater crustaceans, *Mysis diluviana* and *Diporeia* subspecies along with copepods, aquatic insect larvae and fingernail clams.

Threats

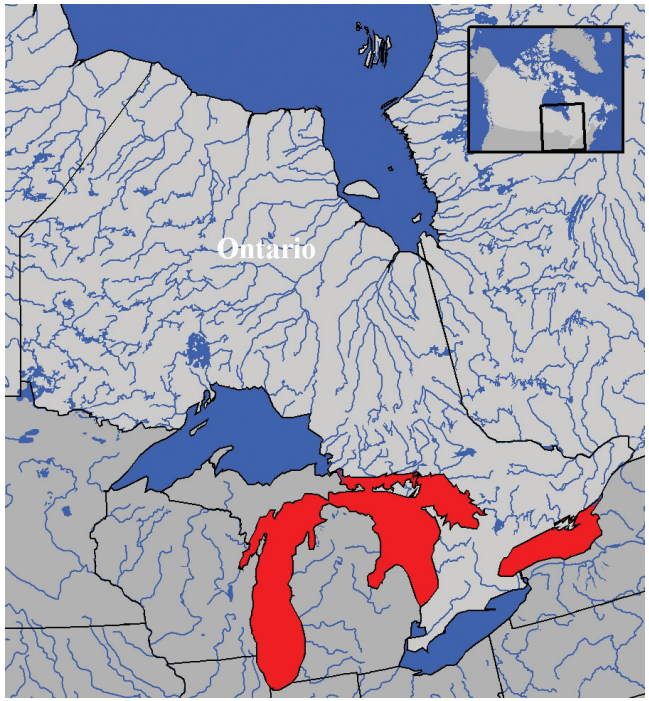
Overfishing, ecosystem changes and interbreeding (hybridization) with other ciscoes have all been implicated in the decline of the Shortnose Cisco. Commercial overfishing, starting in the late 1800s, had the most immediate and profound effect on the Great Lakes cisco populations, leading to the collapse of the chub fishery by the 1930s. The introduction of non-native species into the Great Lakes may have furthered the decline of the Shortnose Cisco, along with other native fish stocks. In particular, competition and/or predation from Sea Lamprey (*Petromyzon marinus*), Alewife (*Alosa pseudoharengus*), Rainbow Smelt (*Osmerus mordax*) and more recently Zebra and Quagga mussels (*Dreissena* spp.) have either contributed to the decline of the Shortnose Cisco, or have impeded its re-establishment. Hybridization between the Shortnose Cisco and other deepwater cisco species is also suggested as hastening its decline.

Similar Species

The Shortnose Cisco resembles the Lake Herring or Cisco (*C. artedi*) and other deepwater ciscoes such as the Bloater (*C. hoyi*), Kiyi (*C. kiyi*), Shortjaw Cisco (*C. zenithus*) and Blackfin Cisco (*C. nigripinnis*), but is distinguished by the distinctive dark pigmentation of the snout.

Text Sources: COSEWIC Status Report 2005; Recovery Strategy for the Shortnose Cisco (*Coregonus reighardi*) in Canada (*draft*) 2011.

Historical distribution of Shortnose Cisco in Canada



For more information, visit the SARA Registry Website at www.SARAregistry.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."