

# Northern Brook Lamprey

*Ichthyomyzon fossor*



Status: **Special Concern**



Photo: Gary Meszaros



Photo: Konrad P. Schmidt

## Threats:

- ◆ Use of lampricide for the control of the invasive Sea Lamprey
- ◆ Pollution
- ◆ Changes in water levels and temperature

## Description:

- ◆ Small, non-parasitic lamprey 9-16 cm long
- ◆ Has a round mouth with teeth arranged in a circle
- ◆ Skin leathery without scales
- ◆ Upper body dark grey or brown and the sides are grey or silver; belly orange or silver
- ◆ End of tail dark grey or black; base of the dorsal fin tan; dorsal fin is continuous and the caudal fin is oval
- ◆ Eyes are bluish and there is single nostril between the eyes

## Biology:

- ◆ Non-parasitic; larvae feed on diatoms and protozoans (small aquatic animals), adults never feed
- ◆ Adults spawn in gravelly riffles and then die; individuals can lay over 1,000 eggs
- ◆ Larvae (ammocoetes) hatch, burrow into the soft mud, and spend six years growing
- ◆ Metamorphose into an immature adult which lasts about 8 months; mature sexually quickly, emerge from the mud, and disperse as adults to the spawning grounds
- ◆ Adults never feed and live for at least six months before spawning and dying

## Habitat:

- ◆ Likely never common in Ontario
- ◆ Lives in small rivers, particularly clean headwaters of creeks and small rivers with coarse gravel to rock bottoms
- ◆ Prefers warm water

Species at Risk  
STEWARDS' GUIDE SERIES

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## STEWARDS' GUIDE SERIES

Status: **Special Concern**

### Northern Brook Lamprey on Your Property? *Here's What You Can Do:*

- ◆ **Follow regulations relating to the destruction or harmful alteration of fish habitat as outlined in the Federal Fisheries Act.**
- ◆ **See a Northern Brook Lamprey?** Submit your sighting to the Natural Heritage Information Centre at [nhic.mnr.gov.on.ca/MNR/nhic/species/species\\_report.cfm](http://nhic.mnr.gov.on.ca/MNR/nhic/species/species_report.cfm). Photographs with specific locations or mapping coordinates are always helpful.
- ◆ **Contact the Ministry of Natural Resources.** If you find a Northern Brook Lamprey in a stream on your property, you may be eligible for stewardship programs that support the protection and recovery of species at risk and their habitats. Contact the MNR for more information.
- ◆ **Learn More.** Check out the Species at Risk section on the Ontario Ministry of Natural Resources website at [www.mnr.gov.on.ca](http://www.mnr.gov.on.ca).



### Ontario's *Endangered Species Act*

Ontario's *Endangered Species Act, 2007* came into force on June 30, 2008, making Ontario a North American leader in the protection of species at risk and their habitats.

Compared to Ontario's previous Act, written in 1971, the new ESA 2007 provides:

- ◆ Science-based assessment of species' status
- ◆ Automatic protection of a species and its habitat once it's listed as endangered or threatened
- ◆ Broader protection for species at risk and their habitats
- ◆ Greater support for volunteer stewardship efforts of private landowners, resource users, and conservation organizations
- ◆ A commitment to recovery of species through recovery planning
- ◆ Greater accountability, including government reporting requirements

Ontario is home to more than 30,000 species, most of which have stable populations.

However, more than 180 species in Ontario, 34 of which are found in Parry Sound-Muskoka, are currently considered "at risk" because of threats like:

- ◆ Habitat loss
- ◆ Global changes in insect populations
- ◆ Pollution
- ◆ Invasive species
- ◆ Climate change
- ◆ Over-harvesting
- ◆ Road mortality



Learn more about Species at Risk on the Ontario Ministry of Natural Resources website at [www.mnr.gov.on.ca](http://www.mnr.gov.on.ca).