Invasive sea lamprey population increases in 2 Great Lakes

Overall abundances at historic low in other Great Lakes



ANN ARBOR – Although the Great Lakes, for the most part, have seen an historic low in sea lamprey, some of the lakes have seen an increase.

The <u>Great Lakes Fishery Commission</u> released a report this month detailing the latest numbers on the invasive sea lamprey in Great Lakes waters.

Populations of the invasive sea lamprey remain at near-historic lows in Lakes Michigan, Huron, and Ontario, though the destructive, parasitic pest has increased in abundance in Lakes Superior and Erie.

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Sea lamprey population increases in Lakes Superior and Erie were greater compared to the other lakes even as abundances are generally holding steady.

"Sea lampreys are the scourge of the Great Lakes and must be controlled," said David Ullrich, chair of the <u>Great Lakes Fishery Commission</u>. "Without sea lamprey control, the Great Lakes fishery would be laid to waste by the voracious predator. Unfortunately, sea lampreys are here to stay."

What are sea lamprey?

Sea lampreys (Petromyzon marinus) are parasitic fish native to the Atlantic Ocean. Sea lampreys, which parasitize other fish by sucking their blood and other body fluids, have remained largely unchanged for more than 340 million years and have survived through at least four major extinction events.

Sea lampreys are unique from many other fishes in that they do not have jaws or other bony structures, and instead possess a skeleton made of cartilage. While sea lampreys resemble eels, they are not related and are set apart by their unique mouth: a large oral sucking disk filled with sharp, horn-shaped teeth surrounding a razor sharp rasping tongue.

What is the impact of the sea lamprey invasion?

Sea lampreys have had an enormous, negative impact on the Great Lakes fishery, inflicting considerable damage. Before the sea lamprey invasion, Canada and the United States harvested about 15 million pounds of lake trout in the upper Great Lakes each year. By the late 1940s, sea lamprey populations had exploded.

They fed on large numbers of lake trout, lake whitefish, and ciscoes—fish that were the mainstays of a thriving Great Lakes fishery. By the early 1960s, the catch had dropped dramatically, to approximately 300,000 pounds, about 2% of the previous average.

During the time of highest sea lamprey abundance, up to 85% of fish that were not killed by sea lampreys were marked with sea lamprey attack wounds. The once thriving fisheries were devastated, and along with them, the hundreds of thousands of jobs related to the region's economy.

What can be done about sea lampreys?

The sea lamprey control program, administered by the Great Lakes Fishery Commission, relies on exploiting sea lamprey vulnerability when they are congregated in Great Lakes tributaries, at either the larval or adult stages of their life cycle. Lampricides—pesticides selective to lampreys and the primary sea lamprey control tactic—are deployed to kill larval sea lampreys in the tributaries, while a combination of barriers and traps are used to prevent the upstream migration and reproduction of adult sea lampreys.

Check out the full report below:

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Article: <u>Invasive Sea Lamprey</u> <u>Population Increases in 2 Lakes</u>

Review Questions:



- 1. Which 2 lakes have had an *increase* in Sea Lamprey numbers?
- 2. Which 3 lakes have low numbers of Sea Lamprey?
- 3. Where are Sea Lamprey native the Great Lakes, or the Atlantic Ocean?
- 4. How many pounds of Lake Trout were caught in the Great Lakes each year before the Sea Lamprey invasion?

5. How many pounds of Lake Trout were caught in the Great Lakes in the early 1960s, after the Sea Lamprey invasion?

6. Compare your answers to questions 4 and 5. Why did the number of Lake Trout in the Great Lakes go down?

- 7. The article states that Sea Lamprey are controlled when they congregate in Great Lakes tributaries. What is a tributary?
- 8. There are three control methods currently used for Sea Lamprey: lampricides, barriers, and traps. Which method is used to control larval (baby) sea lamprey?

Which methods are used to prevent upstream migration of adult Sea lamprey?

