Zander (Sander lucioperca)

What Ontario is Doing

To prevent this unwanted invader from coming into the province, Ontario has regulated Zander as **prohibited** under the Invasive Species Act. For more information on the Invasive Species Act and Regulations visit <u>www.ontario.ca/invasionON</u>.

Background

Zander, also commonly known as Pike-Perch, European Pike-Perch and European Walleye, is a fish from freshwater and brackish habitats in western Eurasia. This species is very similar to its North American cousin, Walleye. Like Walleye, this is a very popular game fish, and has been intentionally introduced in thousands of lakes in Europe outside of its native range to establish sport and commercial fisheries.

Preferring to live in lakes, rivers and streams, Zander have also been found in the Northeast Atlantic brackish coastal waters. Zander prospers in calm waters ranging from 2-30 m deep, but is mostly found at depths of 2-3 m. It tolerates water temperatures ranging from 4-30°C, but is not tolerant of waters with very low dissolved oxygen. Although Zander were mostly introduced into lakes, the species has spread across Europe by migrating through rivers and streams, and is now present in more than 2,500 lakes in that continent.

Range

Zander is native to continental Europe through to western Siberia. Over time, Zander has intentionally been introduced into new regions for sport fishing, aquaculture and to remove unwanted smaller fish species from some areas in Europe. It has been introduced to many countries such as China, Turkey, Algeria, Morocco, Tunisia, USA, Belgium, Bulgaria, Croatia, Cyprus, Denmark, France, Italy, The Netherlands, Portugal, Slovenia, Spain and the United Kingdom. Zander was similarly intentionally introduced into Spiritwood Lake in North Dakota in 1989, where it has become established. It is not currently known to occur anywhere else in the United States, or in Canada.

Impacts of Zander in Ontario

Zander can compete with native fish species for food and habitat resources. Zander can also prey directly on native fish species, reducing biodiversity and changing the species composition of ecosystems. Hybridization is known to occur between Zander and Volga Pike-Perch, and there are concerns that it could also interbreed and hybridize with related native Ontario species like Walleye or Sauger. This species can also spread new diseases to a body of water and infect many other aquatic species living there, with possible negative impacts to aquaculture and fisheries.

How to Identify

Zander looks similar to Walleye and Sauger, and could be confused with these native species. It can be identified through the following physical characteristics:

- Can grow up to 100 cm in length
- Gill cover (opercle) does not have a spine (the gill cover of native Walleye and Sauger both have 1 short sharp spine)
- Two dorsal (back) fins, the first containing spines and the second containing soft rays
- The anal fin has 2-3 spines and multiple soft rays
- Tend to be green to blue-grey on the side with a white belly and yellow-grey fins
 - The dorsal (back) and caudal (tail) fins have rows of black spots on the membranes, this is most visible on the spiny dorsal (back) fin
- Mouth that has many small teeth and 1 2 enlarged canine teeth in anterior part of each jaw

What You Can Do

- Learn how to identify Zander and how to prevent the introduction or spread of this unwanted species.
- Never buy or keep live Zander. It is against the law to keep a Zander as a pet, use it as bait, or have a live Zander in your possession.
- Don't release any live fish into Ontario lakes or rivers. If you are fishing and incidentally catch a Zander, you must destroy it. Do not return it to the water.
- If you have any information about the illegal importing, distribution or sale of live Zander, report it immediately to the MNRF TIPS line at 1-877-TIPS-MNR (847-7667) toll-free anytime. You can also call Crime Stoppers anonymously at 1-800-222-TIPS (8477).
- If you've seen a Zander or other invasive species in the wild, please contact the toll free Invading Species Hotline at 1-800-563-7711, or visit <u>EDDMapS Ontario website</u> to report a sighting.

Other Resources

Ontario Ministry of Natural Resources and Forestry

Ontario Invading Species Awareness Program

Invasive Species Centre

For More Information

Contact the Invading Species hotline at 1-800-563-7711.

Photos – From Wiki Commons



By Harka, Akos [CC BY 3.0 (http://creativecommons.org/licenses/by/3.0)], via Wikimedia Commons https://commons.wikimedia.org/wiki/File%3ASander_lucioperca_Hungary.jpg

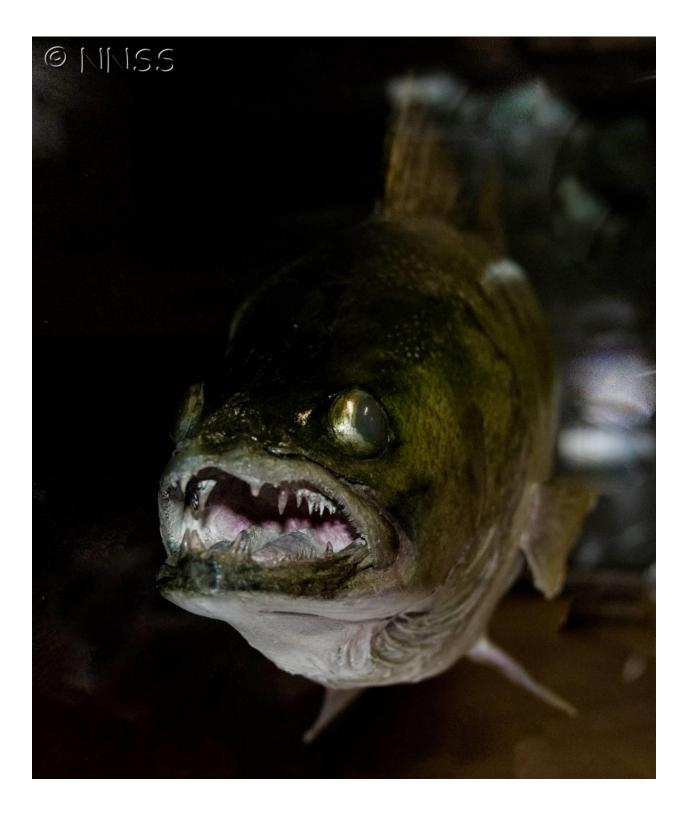


By eLNuko (Own work (own photo)) [Public domain], via Wikimedia Commons

https://commons.wikimedia.org/wiki/File%3ASander_lucioperca_1.jpg

Credit to GBNNSS (GB Non-Native Species Secretariat)

http://www.nonnativespecies.org/gallery/index.cfm?searchtype=s&query=Zander&habitat=&organis mtype=&cmdSearch=Search





Below is a Pickerel (Esox americanus) for comparison of similarities



By Fredlyfish4 (Own work) [CC BY-SA 3.0 (http://creativecommons.org/licenses/by-sa/3.0)], via Wikimedia Commons

https://commons.wikimedia.org/wiki/File%3AEsox_americanus_UMFS_2014.jpg