

THE JAWLESS FISH

for 6th-8th Science

By Tina Williams

What is an Invasive Species

- an organism that is not indigenous, or native, to a particular area
- may be aquatic (water) or terrestrial (land)
- causes economic and/or environmental harm

What is this?!?



Sea Lamprey

Bighead Carp



Zebra Mussels



Northern Snakehead

Effects of Aquatic Invasive Species

Environmental Costs

- Loss of beneficial native species
- Degradation of water quality
- Disruption of local food web
- Decreased biodiversity



Effects of Aquatic Invasive Species

Recreational Losses

Interference with recreational activities such as:

- Swimming
- Paddling
- Boating
- Sport Fishing



Effects of Aquatic Invasive Species

Economic Impacts

- Damage to infrastructure (clogging dam gates, canals, and irrigation systems)
- Invasive species management and control costs a lot of money
- Can reduce the property value of waterfront homes
- Can negatively impact businesses and tourism



Zebra Mussels invading a shopping cart that was found in the water

How an Invasive Species Destroys the Environment



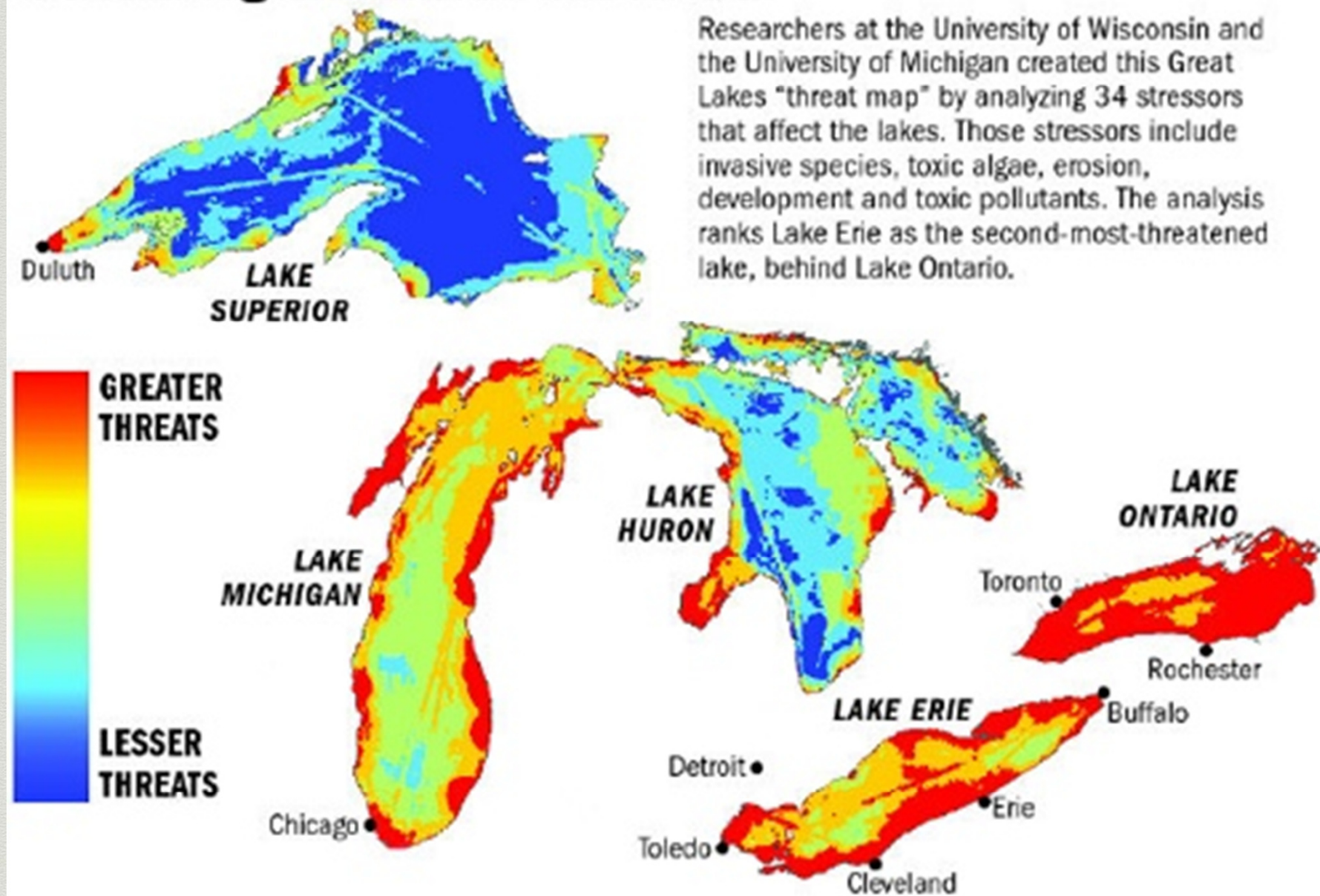
<https://www.youtube.com/watch?v=apXUdf1XR-c>

<https://youtu.be/rtsmacpmOlo>

<https://youtu.be/-syhodlyx10?t=26>

Measuring threats to the lakes

Researchers at the University of Wisconsin and the University of Michigan created this Great Lakes "threat map" by analyzing 34 stressors that affect the lakes. Those stressors include invasive species, toxic algae, erosion, development and toxic pollutants. The analysis ranks Lake Erie as the second-most-threatened lake, behind Lake Ontario.



Sources: Great Lakes Environmental Assessment and Mapping Project, University of Michigan

THE COLUMBUS DISPATCH

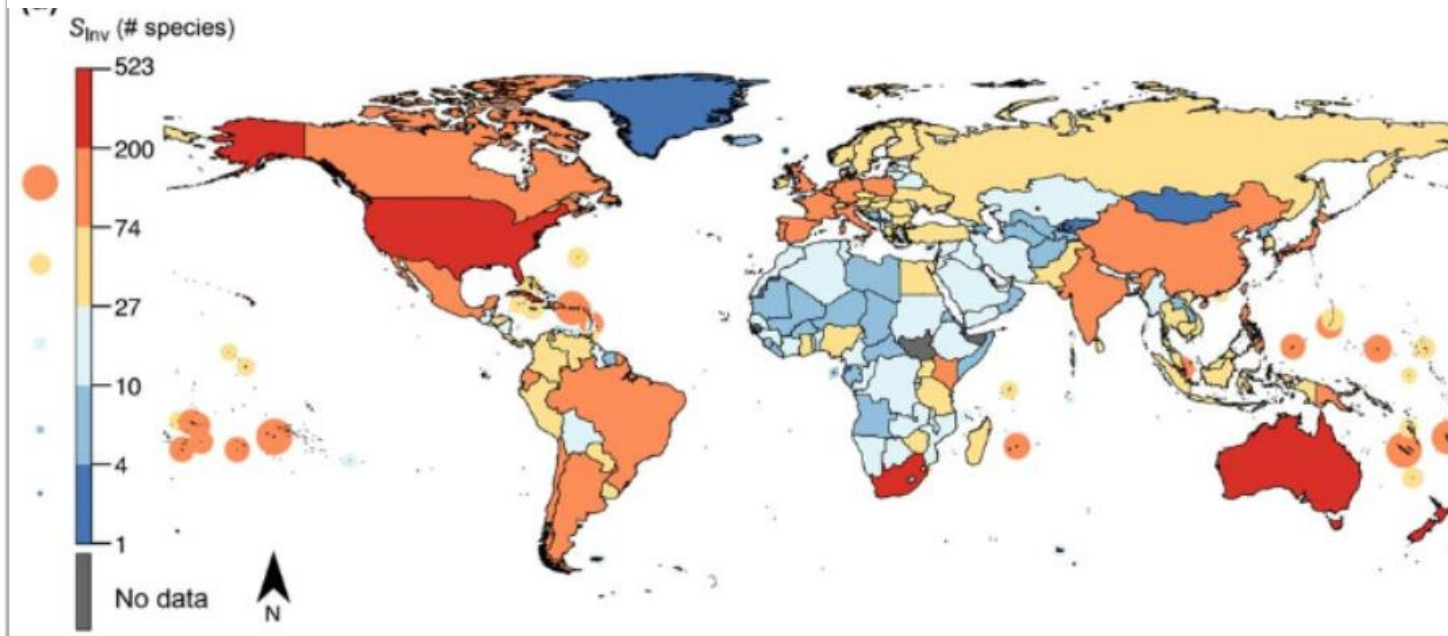
Zebra and Quagga Mussel Sightings Distribution *Dreissena polymorpha* and *D. rostriformis bugensis*



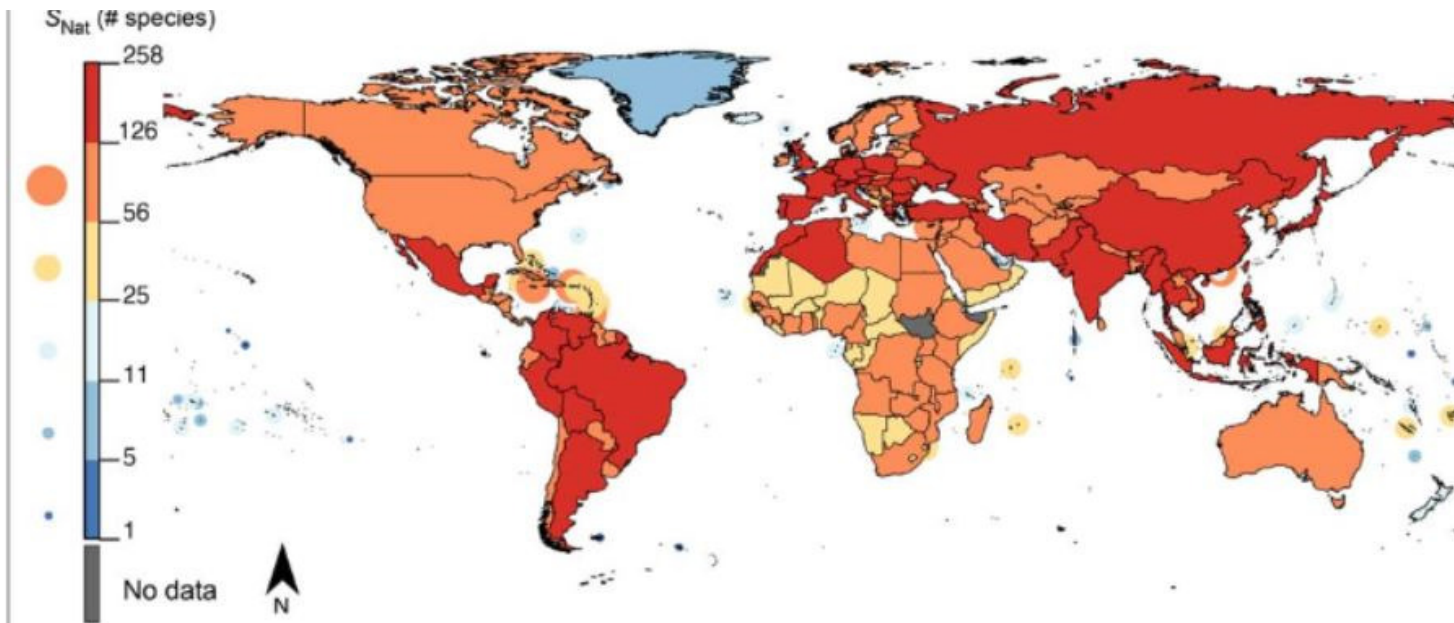
Map produced by the U.S. Geological Survey
Nonindigenous Aquatic Species Database, July 13, 2017.

- Zebra mussel occurrences
- Quagga mussel occurrences
- ▲ Zebra or Quagga mussel occurrences
- Both species occurrences
- Zebra/Quagga mussels eradicated
- Zebra/Quagga mussels failed

Number of invasive species currently found in a country



Number of invasive species that came FROM a country and are considered invasive in other countries



How Can We Prevent the Spread?

- Prevent the spread of invasive species



FIGHT THE SPREAD OF AQUATIC INVADERS

TRANSPORTZERO.ORG

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