

Great Lakes AIS Landing Blitz: aquatic invasive species facts

Clear, easily referenced facts about aquatic invasive species (AIS) are organized below to provide appropriate context to the upcoming Great Lakes AIS Landing Blitz events:

General AIS facts

- 188 non-native species are established in the Great Lakes according to the National Oceanic and Atmospheric Administration and Michigan Sea Grant (Sturtevant et al., 2019)
- 31% of non-native species in the Great Lakes are believed to be invasive and causing negative impacts according to the National Oceanic and Atmospheric Administration and Michigan Sea Grant (Sturtevant et al., 2019)
- 42% of threatened or endangered species are considered at risk due to non-native species (via Michigan Department of Environment, Great Lakes, and Energy)

Economic impacts

- From 2017 – 2020 the Cleveland Metroparks has been the steward of \$560,000 for aquatic invasive plant management, or roughly \$140,000 annually (via Mark Warman, Cleveland Metroparks)
 - In 2017 & 2018, \$372,925 was spent on early detection/rapid response for Hydrilla in Ohio's Lake Erie Basin (via Mark Warman, Cleveland Metroparks)
 - In 2019 & 2020, \$226,355 was spent on early detection/rapid response for all aquatic plants in Ohio's Lake Erie (via Mark Warman, Cleveland Metroparks)
- New York State watercraft inspection stewards surveyed more than 250,000 boaters during the 2019 season, finding more than 97% of boaters were compliant with our clean, drain, dry law (via Cathy McGynn, New York State Department of Environmental Conservation)
- New York State spends more than \$5 million per year on aquatic invasive species control and management and close to \$5 million per year on boat stewards (via Cathy McGynn, New York State Department of Environmental Conservation)
- \$24 million is spent per year controlling aquatic plants in Michigan, including Eurasian watermilfoil (via Michigan Department of Environment, Great Lakes, and Energy)
- \$200 million per year is lost by the Great Lakes region due to the effects of ship-borne invasive species on sport fishing, commercial fishing, wildlife watching, and raw water usage (via Michigan Department of Environment, Great Lakes, and Energy)
- \$5.7 billion per year is the estimated total economic impact of aquatic invasive species in the Great Lakes region via Michigan Department of Environment, Great Lakes, and Energy)

Scale of the recreational boating pathway

- Based on U.S. Coast Guard and Transport Canada data, there is a total of 4,896,184 registered motorized boats under 26 feet in length in Great Lakes states and provinces

Reference:

Sturtevant, R.A., Mason, D.M., Rutherford, E.S., Elgin, A., Lower, E., and F. Martinez. 2019. Recent history of nonindigenous species in the Laurentian Great Lakes; An update to Mills et al., 1993 (25 years later). *Journal of Great Lakes Research* 45:1011–1035.