

Invading the Great Lakes

Nationally, the state of Michigan is known for quite a number of things. Our college/pro sports teams are among the top tiers of their respective leagues, we have some of most bizarre weather patterns of any state in the union, our outdoor activities range everywhere from snow skiing in the winter to playing baseball in the spring, and for Pete's sake, our state is in the shape of a mitten. Among all of the stuff our great state is known for, the Great Lakes is at the top. Currently, our Great Lakes are under attack by foreign invasive species that want to take over all of the lakes and damage their fragile ecosystems. This problem is extremely current and it demands Michigan's immediate attention.

As listed above, the issue is pretty clear. Foreign invasive species from other countries/states are attempting to take over the great lakes which threatens its' delicate ecosystem. According to the NOAA (National Oceanic and Atmospheric Administration), "The Great Lakes ecosystem has been severely damaged by more than 180 invasive and non-native species. Species such as the zebra mussel, quagga mussel, round goby, sea lamprey, and alewife reproduce and spread, ultimately degrading habitat, outcompeting native species, and short-circuiting food webs."¹All of these species that are foreign to Michigan are taking away our natural species and hurting its' ecosystem. It is crucial to start taking these threats seriously, before it is too late.

The significance of the problem to the state of Michigan is that we are extremely affected by the Great Lakes. We are surrounded by four out of five of them and it is our duty to try and take care of them as best as we can. Not only for the species that are native to Michigan, but for ourselves! The IUCN (International Union for Conservation of Nature) states that these foreign invasive species "May impact the tourism industry... They can also affect native fisheries by reducing the number of fish being caught, resulting in less income for fishermen. Finally they are very expensive to get rid of once they are established."² These are not the only impacts that foreign invasive species can affect the human population surrounding these waters. The IUCN also states that "Marine invasive species can cause serious health problems. For example the bacteria that cause cholera can be carried in ships ballast water, which killed more than 10,000 people in South America."³ So not only is it important to keep foreign invasive species out for the Great Lakes ecosystem, but it is important for human health as well, who depend on the Great Lakes for food and water.

My proposal focuses on our Great Lakes and how foreign invasive species are affecting Michigan, and the rest of the United States. However, while my proposal will talk about the Great Lakes as a whole, Lake Michigan will be the primary target. Why Lake Michigan? Well currently, Lake Michigan is on the front lines of this battle with invasive species due to the fact that it is extremely close to the Mississippi river. Right now, Asian carp are knocking on its' door step to get into the Lake. There are efforts to stop it, but DNA of Asian carp have already been found in Lake Michigan, showing that the battle may be coming to an end.

It is an interesting topic to study because not only do invasive species affect the ecosystems of which they invade, but they affect the human population that surrounds these ecosystems.

¹ NOAA. Accessed February 17, 2014. http://www.regions.noaa.gov/great-lakes/great_lakes-restoration-initiative/invasive-species/.

²IUCN. Accessed February 17, 2014. http://www.iucn.org/about/work/programmes/marine/marine_our_work/marine_invasives/seychelles/about_marine_invasive_species/.

³ IUCN. Accessed February 17, 2014. http://www.iucn.org/about/work/programmes/marine/marine_our_work/marine_invasives/seychelles/about_marine_invasive_species/.