

Invasive Species in Lake Champlain

Invasive species are destroying our beloved Lake Champlain so, we have to find ways to reduce their presence in Lake Champlain. This essay will explore how these invasive species are interfering with the condition of the lake, and also the potential threat that these species have to humans. There are so many invasive species destroying Lake Champlain, zebra mussels, asian clams, and alewife are just some of them. If we don't make them stop, Lake Champlain will never be the same.

Zebra mussels are a huge problem, and in order for them to survive they have to cling on to a hard surface. They also attach themselves to native species including Mollusks, and in doing so, they are risking many Mollusk species to become extinct. Once the Zebra Mussels die, the byssal threads that hold onto the hard surfaces detach, and this leads to them washing up on shore. Also, it is dangerous. Zebra Mussels are sharp enough to cut your feet. They contribute to biomagnification (which are toxins that are concentrated inside of them and released into the water and passed on to their predators). Their main predator is the Round Goby whose prey are Walleye, Bass, and Perch. Biomagnification is a big problem for fishermen who eat those fish.

Asian Clams are small, less than 1.5 inch clams. They spread very fast because a single clam can reproduce by itself and it can release hundreds of new clams in a day. The Darrin Fresh Water Institute were the first people to find Asian Clams, they first found them in Lake Avenue and now they have spread to our beautiful Lake Champlain. These clams like sandy or gravelly

bottom areas with shallow, warm water. The reason that Asian Clams are a threat to Lake Champlain is because they drive the growth of algae which would take over our gorgeous lake.

Alewife were originally from the Atlantic Ocean. They don't like winter in freshwater lakes (like Lake Champlain), and they are very sensitive to change in water temperature so they die easily when it becomes winter in Vermont. Though Alewives can stay preserved in the winter, once the lake warms up they all wash up on shore in very big numbers. Nobody is sure how the Alewife came to Lake Champlain but it could have entered the lake through the Hudson River or the Richelieu River.

In conclusion, we should try to rid our lake of these destructive, invasive species so that our lake can stay as beautiful as it once was. We all have to work together to try and prevent the spread of invasive, exotic species that threaten Lake Champlain.

Sites:

https://people.uwec.edu/piercech/zebra/index_files/Page581.htm

<https://www.echovermont.org/animals-exhibits/invasives/>

<https://lakegeorgeassociation.org/science-protection/citizen-science/invasive-asian-clams#:~:text=Asian%20clams%20cause%20a%20number,algae%20and%20foul%20the%20water.>

<https://vtfishandwildlife.com/newsroom/lake-champlain-alewife-die-off#:~:text=%E2%80%9CAlewives%20are%20an%20invasive%20fish,easily%20killedu%20when%20this%20happens.%22>

<https://vtfishandwildlife.com/learn-more/landowner-resources/liep-invasive-species-program/aquatic-invasive-animals/alewife>

