

The most common aquatic invasive species in Douglas County is the Zebra Mussel. They are native to the Caspian Sea region of Asia, and were first introduced to North America by commuting ships in the 1980's. Since then, they have been able to make their way from the Great Lakes to inland lakes. Zebra Mussels have been able to expand their habitat throughout the Midwest by both recreational and commercial trade boats. However, they do have other ways of making their way from one lake to another. Zebra Mussels pose both ecological and biological threats to our area lakes and serve as a severe annoyance to our lakes area recreationists, yet there are ways of preventing the spread of them.

When Zebra Mussels are present in area lakes, there are possible ecological threats that they pose. First, they disrupt the food chain. They succeed in doing this when they filter feed. When they filter feed they remove microscopic organisms from the water. These microscopic organisms are ones that play an important role in nourishing young fish. When the Zebra Mussels are consuming large amounts of these microscopic organisms, plankton in particular, on a regular basis, there is less available for young freshwater fish that are dependent upon them. As a result, the survival rate of young fish decreases and all parts of the food chain are negatively affected (Harmful Aquatic).

Secondly, Zebra Mussels threaten native mussels, a biological threat. They do this when they attach themselves to them. A common characteristic of mussels is that they fix themselves to hard surfaces. However, Zebra Mussels are different because they will attach themselves to native mussels. Some native mussels are more permissive of the Zebra Mussels than others.

The native mussels that are the least tolerant of the Zebra Mussels become more susceptible to environmental stressors like water temperature changes, scarcity of food, and parasite related diseases. As Zebra Mussels continue to expand their area of inhabitation, biologists are concerned that the population of native mussels will decrease and that some populations may even die off (Harmful Aquatic).

Zebra Mussels also serve as a nuisance for those who use area lakes for recreational purposes. Zebra Mussels attach themselves to docks, boat lifts and boat hulls. They can also plug water intake ports of boats, causing boats with outboard motors to overheat. Also, people that water their yards with lake water can have their water intake clogged (Zebra Mussel). Swimmers are also affected by the presence of Zebra Mussels. Deposits of dead mussels can wash up on area beaches, resulting in a hazard to bare feet and an unpleasant odor (IA DNR). More than anything, Zebra Mussels serve as an annoyance for recreational lake users.

Although, there is one benefit to having Zebra Mussels present. They improve water clarity. They are able to make the water more clear because of their excessive filtering. However, there is a drawback to this benefit. Along with having clearer water, comes more vegetation. More vegetation can cause quite an obstacle for anglers, boaters, swimmers and other recreational users (Harmful Aquatic).

There are multiple ways of preventing the spread of Zebra Mussels. First, when exiting a body of infested water, remove any visible plants, fish or animals from the boat. Next, remove any mud or dirt. Be sure to also inspect the boat trailer, any bait buckets or clothing that came into contact with the infested water.

Then, drain any water from the infested body of water at the site. Some examples of things that would need to be drained would be motors, jet drives, live wells, boat hulls, scuba tanks and bait buckets. After all equipment has been examined and/or drained, clean them. It is recommended that hot water or salt water is used. If neither is available use high pressure water to clean equipment such as boats, motors, trailers, anchors, decoys, floats and nets. If possible, allow five days of drying time before entering new waters. Lastly, don't forget about man's best friend. In between each trip to the lake be sure to give the dog a warm bath (General Procedures).

In conclusion, the negatives of Zebra Mussels in our area lakes outweigh the positive. They cause a disturbance in our classic aquatic food web, kill off our native mussels, and drive us nuts! They may make it possible for us to see to the bottom of Lake Carlos one day, but then it would also be overgrown with vegetation. Thankfully, there are common procedures for preventing the spread of these creatures. I believe that with the proper knowledge, Douglas County will be able to be successful in preventing the spread of Zebra Mussels and serve as a leader to other counties in doing the same.

Works Cited

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Leading the Way

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