

# Impact of zebra mussels (*Dreissena polymorpha*) on the algal community of artificial streams

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## Abstract

Zebra mussel (*Dreissena polymorpha*) is an exotic species that appears to be affecting the algal community in the Ohio River. It consumes most algae and passes any uneaten algae back into the water. The zebra mussels are capable of filtering more than a liter of water a day, which has allowed the level of light penetration in the river to increase due to removal of particulate organic and inorganic matter. The zebra mussels also produce feces and pseudofeces, which release nutrients into the water. By comparing artificial streams containing zebra mussels with streams lacking zebra mussels and manipulating the level of light transmittance, we have concluded that the zebra mussels have altered the algal community by clearing the water and allowing more algae to grow. The zebra mussels do not appear to be selectively feeding. However, their feeding patterns have taken away the advantage of any one species, thus allowing an increase in algal diversity to occur.