

Abundance and diversity of organisms found in the T/S State of Maine ballast tanks

Ships often cross the oceans and travel great distances transporting their merchandise to their destination. Ships therefore can be vectors for aquatic invaders that get introduced into the ships ballast tanks and get a free ride to these different countries. Once released into the new environment there is a potential that these organisms could thrive and outcompete some of the native species. This study analyzed the organisms within the ballast tanks of the T/S State of Maine during a two month cruise. The goal was to collect and preserve samples of the ballast tanks each time there was an intake or outtake. Following the cruise, organisms were identified to the class level using microscopy. The hypothesis was that from each sample there would be numerous amounts of organisms of different classes and that there would not be a significant difference between organisms within samples taken from the intake and outtake of the same location. Additionally, I hypothesized that there would be a significant difference of organisms found at different locations. The only organisms found in any samples collected were from a ballast intake at the entrance of Chesapeake Bay, Virginia. One of the organisms that was found could cause a potential threat if introduced to a new ecosystem.

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