

NAILS

In a house, nails hold and place everything together. In the Chesapeake Bay, oysters do the same. Without the oyster, the Bay and its reefs would fall apart. Consider the oyster as the nails of the Chesapeake Bay.

In the seventeenth century, it was documented that oyster beds were miles long in the Bay. The oyster population was said to be so significant that they were a hazard to nautical navigation. Oysters have been consumed by humans throughout history due to their accessibility and abundance. Now oysters are often considered more of a delicacy due to their declining numbers. Oysters are also used by many marine creatures to create habitats, food, and protection from predators. For instance, fish like the blenny will put their eggs inside oyster shells to keep them safe. Crabs and other small fish also like to hide in or behind oysters for protection. By allowing light to shine in, oysters also clean the murky waters and help vital grasses and algae grow. Each oyster, like a nail, helps to build the floors, frames, and windows of the reef. The Bay was once like a clean, healthy, and thriving mansion.

Over the last hundred years, the Chesapeake Bay and the oyster population have seen many threats to their foundation. It is estimated that over seven million pounds of pollution is dumped into the Bay each year. Fertilizer and plastics are two of the main pollutants. Oysters are filter feeders, meaning they feed on particles suspended in the water. They consume, filter and process the polluted waters and food. We often are told about the damage overfishing does to the oceans and marine life. Oysters have also been overharvested at a shocking rate. The current oyster population in the Chesapeake Bay is at a recorded all-time low, estimated to be about one percent of what it was in the 1800s. The more oysters we remove means less remain

to filter and clean the water. Most adult oysters can filter a colossal fifty gallons in one day! And if human causes do not kill the oysters, diseases often will. MSX is an invasive disease from Japan. It is usually found in the oyster gills and can easily annihilate a whole oyster reef. Dermo is also a disease that affects the growth of oysters, causing many to die in their second year of life. Every house and building requires routine maintenance and care. After many years of neglect and mistreatment, the mansion has collapsed. The reefs have crumbled and need to be rebuilt, starting with the most basic materials, the nails.

The oysters are a key part of the Chesapeake Bay that we can't afford to lose. Once the nails start to rust and corrode, so does the Bay, and all that depends on it. This is why it is crucial to protect the oysters. Off the shores of Mathews County, an impressive project is underway to restore oyster reefs. The Piankatank River Oyster Recovery Project is working to develop hundreds of acres of habitat for oysters. If you stand on the shore or get closer with a boat, you can see the crane and the barge working to drop granite rock into the water. Another more personal way to help is by supporting or volunteering at an oyster aquaculture farm. These farms grow thousands of oysters that filter and clean the Bay. You could also donate empty oyster shells to the Chesapeake Bay Foundation's Shell Recycling Program. This program collects and then recycles the empty shells into new reef habitats. You could also try and grow oysters yourself. Some organizations donate or sell cages and spat-on-shell to help get projects started. And the next time you are lucky enough to have oysters for dinner, make sure you throw the empty shells back in the water. Why would you do this you may ask? Oysters are always born as males, but they turn into females after a year. Their spat is then produced and hopefully will latch onto the empty shells you toss in the water, over time growing into new oysters. There are so many ways we can help protect and grow oysters.

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Oysters have been helping the Bay for thousands of years. They play an important role by keeping everything in place, as do nails. Oysters are some of the most unique and vital organisms in the world. I hope you consider the oysters, the nails of the Chesapeake Bay.