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OYSTERS AND THE BAY

The Chesapeake Bay has been considered for many years, the fastest growing, and productive, oyster growing place in the world. Unfortunately, from the time period of 1880 to 2005, oyster landings have decreased drastically. The main reason being, over-harvesting, diseases, and habitat loss. As a result, this has led to a decrease in the Chesapeake Bay's health and the industries it supports.

Even though the oyster population in the Chesapeake Bay has been decreasing drastically since the late 1800's, oysters are still filter-feeding to keep the Chesapeake Bay watershed clean, while the oysters get their meal at the same time. An oyster filter-feeds by opening its shell and pushes water through its gills to extract plankton and small vegetation. Oysters can filter-feed more than 50 gallons of water a day. Another impact that oysters make on the Chesapeake Bay is how quickly they can reproduce. Oysters reproduce at a rate so quickly, they may be able to restore their population one day.

Oyster reproduction occurs in the summer when temperatures rise and water gets warm. The male oysters release sperm, and female oysters released unfertilized eggs. When joined together, an egg becomes fertilized. Once fertilized, the next stage of growth is the trochophore, which is a small translucent, free-swimming larva. Then the larva grow to become a veliger, which is the final larval stage of oysters. The next stage is the pediveliger stage, at this particular

moment in an oysters life, the oyster has a foot coming out of its shell which makes it possible for the oyster to walk or crawl on the sea floor, and the pediveliger turns into a spat. When they become a spat, they settle on adult oysters. Then the spat turn in to adult oysters, and will release sperm or eggs, to start the life cycle over again.

Some more challenges oysters face include, rising acidity levels in the Chesapeake Bay, predators such as blue crabs, cow nose rays, and wading birds. As the population, of oysters increase, more people decide to catch oysters as an occupation which can cause a decrease in population unless regulations are upheld. Another problem that effects population growth is new forms of transportation and technology, such as cars and boats. Which can release gas and oil into the water.

We can do our part by helping the bay in many ways like planting trees near the shoreline to slow down and filter rainwater run-off. We can also, dispose of marine wastes properly while on a boating trips, this can also make an impact, by throwing waste away when you get home from your trip, instead of into the bay. Reduce the use of fertilizer on your lawn can also improve the bay. If you apply too much fertilizer, it can wash off the land and into the bay. The last thing you can do to help the bay is to clean up the garbage on the beach because plastic and metals take hundreds of years to dissolve. So, do your part to help the Chesapeake Bay and the oysters in it.



Here is a picture of my great grandfather “Willie Coates” and my great uncle “Willie Coates Jr.”