

Settlement of Invertebrate Larvae in the Charleston Harbor

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Hypothesis

Our research focuses on the effect on larvae settlement the Charleston harbor on the west side has compared to the harbor on the east side. We will also be testing the effect of different surface textures to see if one type is preferred over another. The most abundant larvae settlement expected is on the rough side of a ceramic tile

Methods

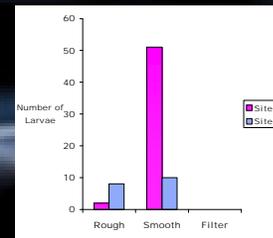
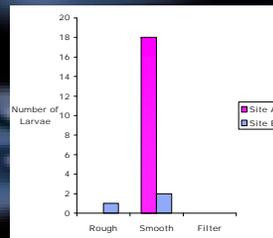
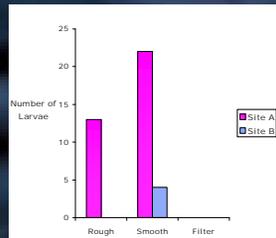
- Six cinder blocks were placed in the Charleston Harbor, three on the east side and three on the west side
- Attached to each cinder block were two ceramic tiles, one smooth and one rough, and one aquarium filter
- These cinder blocks were left for three weeks. Materials were then collected and species counted.

Background

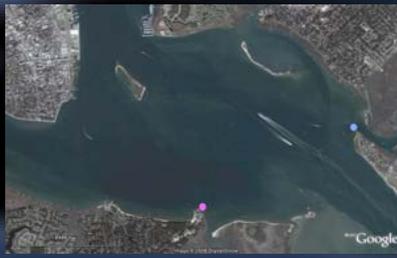
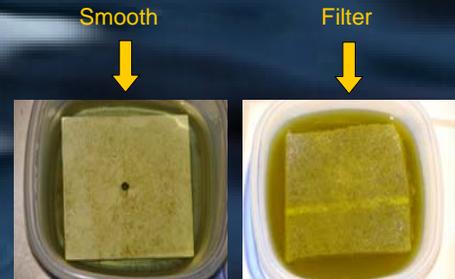
The larval stage of marine invertebrates has been difficult to study due to the small size of the organisms. The distance larvae disperse depends on the speed and direction of currents and the length of time a larva can spend in the water column. This experiment was designed to test larvae settlement in different areas and on different surface types.

Conclusion

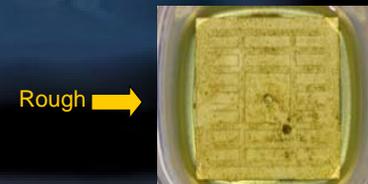
The larvae *Chthamalus* sp. was the only invertebrate larvae found on the test plates. Our results indicated that settlement preference for the barnacle species was on the smooth texture opposed to the rough texture. The numbers of *Chthamalus* counted from the plates at Site A far exceeded the numbers observed from Site B.



The above graphs show data from all three sets of blocks, one from each location.



The above map shows the locations for Site A and Site B





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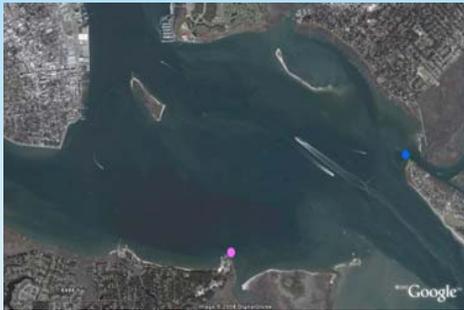
Our research focuses on what effect the harbor on the west side closest to Grice has compared to the harbor on the east side in regards to larvae settlement. We will also be testing the effect of different surfaces textures to see if one type is preferred over another. The most abundant larvae settlement expected is on the rough side of a ceramic tile.

Methods

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The larvae *Chthamalus* sp was the only invertebrate larvae observed on the test plates. Our results indicated that settlement preference for the barnacle species was on the smooth side of the ceramic tile opposed to the rough texture. The numbers of *Chthamalus* counted from the plates at site A far exceeded the numbers observed from Site B.



The above map shows the locations for Site A and Site B

