

Atlantic Ribbed Mussel Survey

Gowanus Canal - 7th Street Turning Basin

Survey Date: November 4, 2023



Introduction

On November 4th, 2023, The Gowanus Dredgers Canoe Club organized a volunteer survey of the bulkhead along the 7th Street turning basin, located in the Gowanus Canal. The primary goal of the survey was to estimate how many Atlantic Ribbed Mussels (*Geukensia demissa*) are living in the estimated 1,209 feet of mixed material bulkhead.



Counting mussels in the bulkhead



Wild-set mussels in the bulkhead

Survey Site Details

Observations were made via canoe by a group of 7 volunteers, along a contiguous stretch of bulkheads and edges spanning from the full length of the 7th street turning basin to the steel bulkhead towards the 6th Street turning basin. Bulkhead materials observed include timber bulkheads, concrete, rip rap, rocks, mud flats. Mussels were counted by looking in all crevasses and along the water line. Tally was kept with a clicker. To the best of the volunteer(s) ability, each individual mussel was counted as one. Spat smaller than 10mm were not counted.



Total Number of Mussels Counted = 2,528

Observations

Based on previous surveys, we anticipated the highest concentration of mussels to be along the older wooden bulkhead. This previous finding proved consistent with our observations. We were surprised to find a good number of mussels wild-set in cracks in the concrete bulkhead on the south side of the turning basin. We observed a few large (dead) wild set oysters along the same concrete bulkhead. Additionally noted were several active suspension feeding organisms within the turning basin on the wooden materials. Speculatively identified as sea anemones, they potentially warrant further interest as to accurately document the biodiversity utilizing wooden and textured substrates.



Mussels covered in coal tar



Mussels in concrete southern wall



Creatures speculatively ID'ed as sea anemones on the textured surface of the bulkhead



Survey participants observe the bulkhead

Despite a heavy layer of coal tar along much of the bulkhead, we observed mussels thriving and even saw evidence of spawning. The largest mussels were located in areas that appeared to be places of more water exchange, like by outflow pipes.

