

**Characteristics of Eastern oyster, *Crassostrea virginica*, populations in the Upper East River, NY**

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**Abstract**

Oyster reefs once populated much of the lower Hudson-Raritan Estuary (HRE) but have disappeared due to overfishing and anthropogenic discharges contaminating the waterway. Through previous research, the upper East River has been identified as an area where beds of wild oysters can presently be found. This study included an assessment of their abundance by assessing three locations on the Bronx side of the East River. Field surveys, transect counts and side-scan sonar were utilized to estimate the abundance. In addition, oysters were collected and their physiological condition was measured and compared to harvestable oysters analyzed from Long Island Sound, CT. Results show that the condition of the East River oysters, as measured by the condition index, was significantly less than the Long Island Sound farmed oysters. Local differences in the condition of the oysters among the three East River locations were also noted. Though the condition of the East River oysters is poor, the abundance of oysters in this part of the HRE is a positive sign of improving estuary health and natural reestablishment of the species.