

Figure 1. Chart of Delaware Bay showing oyster seed beds and planting grounds on New Jersey and Delaware portions of the bay.







Figure 3. Mean (\pm 1S.D.) annual bottom temperatures on Delaware Bay New Jersey oyster seed beds from 1953-1990. Horizontal line is average of annual means (= 19.0 oC, S.D. = 7.9, n = 4974).

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Figure 4. Mean (±1S.D.) monthly (a) and daily (b) bottom water temperatures on Delaware Bay New Jersey oyster seed beds, based on all samples collected from 1953-1990.



Figure 5. Mean (\pm 1S.D.) annual bottom salinities on Delaware Bay New Jersey seed beds from 1953-1990. Horizontal line is average of annual means (= 15.6ppt, S.D. = 4.3, n = 4988).



Figure 6. Mean (±1S.D.) monthly bottom salinities over Delaware Bay New Jersey seed beds, 1953-1990.



Figure 7. Delaware Bay New Jersey oyster seed beds grouped into the four regions designated in this report.



Figure 8. Annual mean (±1S.D.) bottom salinities by Delaware Bay New Jersey oyster seed bed region, 1953-1990.

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Figure 9. Mean monthly Delaware Bay New Jersey oyster seed bed bottom salinities and Delaware River flow rates, 1953-1990.

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Figure 10. (a) Mean annual flow rates of the Delaware River at Trenton, NJ and (b) deviations from long term average flow rates. Horizontal line in (a) is average flow rate for the period 1913-1992 (= 329 m3 s-1, S.D. = 74.8, n = 80).



Figure 11. Cumulative (a) and absolute (b) deviations from mean Delaware River flow (m3 s-1) from



Figure 12. Mean (± 1S.D.) monthly flow rates of Delaware River at Trenton, NJ, 1950-1992.



Average Annual Flow Rate (m³ s⁻¹)

Figure 13. Average annual bottom salinities for Delaware Bay New Jersey oyster seed beds vs. average annual flow rate of the Delaware River at Trenton, NJ. Regression line parameters: intercept = 21.3; slope = -0.017; r2 = 0.66.



Figure 14. Sampling frequency Delaware Bay New Jersey oyster seed beds. The presence of a black square at the intersection of a seed bed and year indicates that dredge samples were taken at that location in that year. The seed beds are listed from farthest upbay to farthest downbay.



Figure 15. Total number of Delaware Bay New Jersey oyster seed beds (solid bars) and grids (cross-hatched bars) from which dredge samples were retrieved in each

NUMBER SAMPLED



Figure 16. Mean number of live oysters within each year for all of the Delaware Bay New Jersey oyster seed beds combined. a. annual mean (±1S.E.) number of spat 20L-1. b. annual mean (±1S.E.) number of yearlings 20L-1. c. annual mean (±1S.E.) number of adult oysters 20L-1. The grand means (±1S.E.) across all years are: 29.11(0.02) spat 20L-1, 13.47 (0.01) yearlings 20L-1, and 58.38 (0.03) adult oysters 20L-1 (all are back-transformed from In values).



Figure 17. Mean percentages of dead oysters within each year for all of the Delaware Bay New Jersey oyster seed beds combined. a. annual mean (\pm 1S.E.) % spat mortality (RSM x 100). b. annual mean (\pm 1S.E.) % drill-induced spat mortality (RDSM x 100). c. annual mean (\pm 1S.E.) % oyster mortality (ROM x 100). Mortality measures are defined in the text.



Figure 18. Mean number of live oysters within each year for the Delaware Bay New Jersey oyster seed beds in the Upper region. a. annual mean (\pm 1S.E.) number of spat 20L-1. b. annual mean (\pm 1S.E.) number of yearlings 20L-1. c. annual mean (\pm 1S.E.) number of adult oysters 20L-1. The grand means (\pm 1S.E.) across all years are: 57.09 (0.36) spat 20L-1, 40.43 (0.20) yearlings 20L-1, and 197.15 (0.75) adult oysters 20L-1 (all are back-transformed from In values).