Figure B3-1. NEFSC Scallop Survey Maps with Closed Areas (a) Georges Bank





Figure B3-2. Growth in shell height and meat weights of a scallop that started at 40 mm shell height, using the standard growth and shell height/meat weight parameters for Georges Bank.











Figure B3-4. Natural mortality as estimated by clapper ratios, assuming the clapper separation rate given by Merrill and Posgay (1964).



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Figure B4-1. Sea scallop management timeline since 1982. "MPP" denotes meats per pound.

Figure B4-2. Long-term scallop landings (MT meats) in NAFO areas 5 and 6 (U.S. and Canada Georges Bank)



Figure B4-3. U.S. landings by region, 1964-2003.





Figure B4-4. Landings-per-unit effort (lbs meats per day absent) for Georges Bank and the Mid-Atlantic Bight.

Figure B4-5. Cull sizes (the point of 50% retention) and discarded to kept ratios (by weight) for observed scallop trips (excluding closed area access trips).



Fig. B5-1. Comparison of observed and predicted shell height frequencies for lined and unlined dredges with 2.0 inch rings from the Serchuck and Smolowitz (1980) experiments. Input data shown in top panel; model comparisons in bottom panel.



Figure B5-2. Estimated selectivity of the lined survey dredge.



Figure B5-3. Estimated selectivity of commercial scallop dredges with 3.5" and 4" rings. The solid line is the 3.5" ring dredge selectivity from SARC-23, the dashed-dotted line is the estimated selectivity from the F/V Tradition experiment, and the long dashed line is the estimated 4" ring selectivity.



Figure B5-4. Typical inclinometer traces from 15 minute tows in the 2003 NMFS scallop survey.







Figure B5-5. Stratified mean sea scallop abundance (>40 mm) in Georges Bank and the Mid-Atlantic, overall, and open and closed, with bootstrapped confidence intervals. Note the changes in scales for the graphs.

(a)





Figure B5-6. Stratified mean sea scallop biomass in Georges Bank and the Mid-Atlantic, overall, and open and closed, with bootstrapped confidence intervals. Note the changes in scales for the graphs.

(a)







Mid-Atlantic, Biomass per Tow, 1979-2003

Figure B5-7. Comparison of biomass distributions on Georges Bank and the Mid-Atlantic in 1994 and 2003.

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(a) Georges Bank

-70°

-69°

41°

40°

-66°

-67°

-68°





Figure B6-1. Estimates of fishing mortality (Two-bin survey, catch-biomass, rescaled catch-biomass, and Beverton-Holt) for Georges Bank, Mid-Atlantic, and combined.



(a) Georges Bank

(b) Mid-Atlantic





