

Figure B1. Landings of scup from Maine through North Carolina, including US commercial and recreational landings (1950-2001).

### NER Commercial Scup Landings at Length

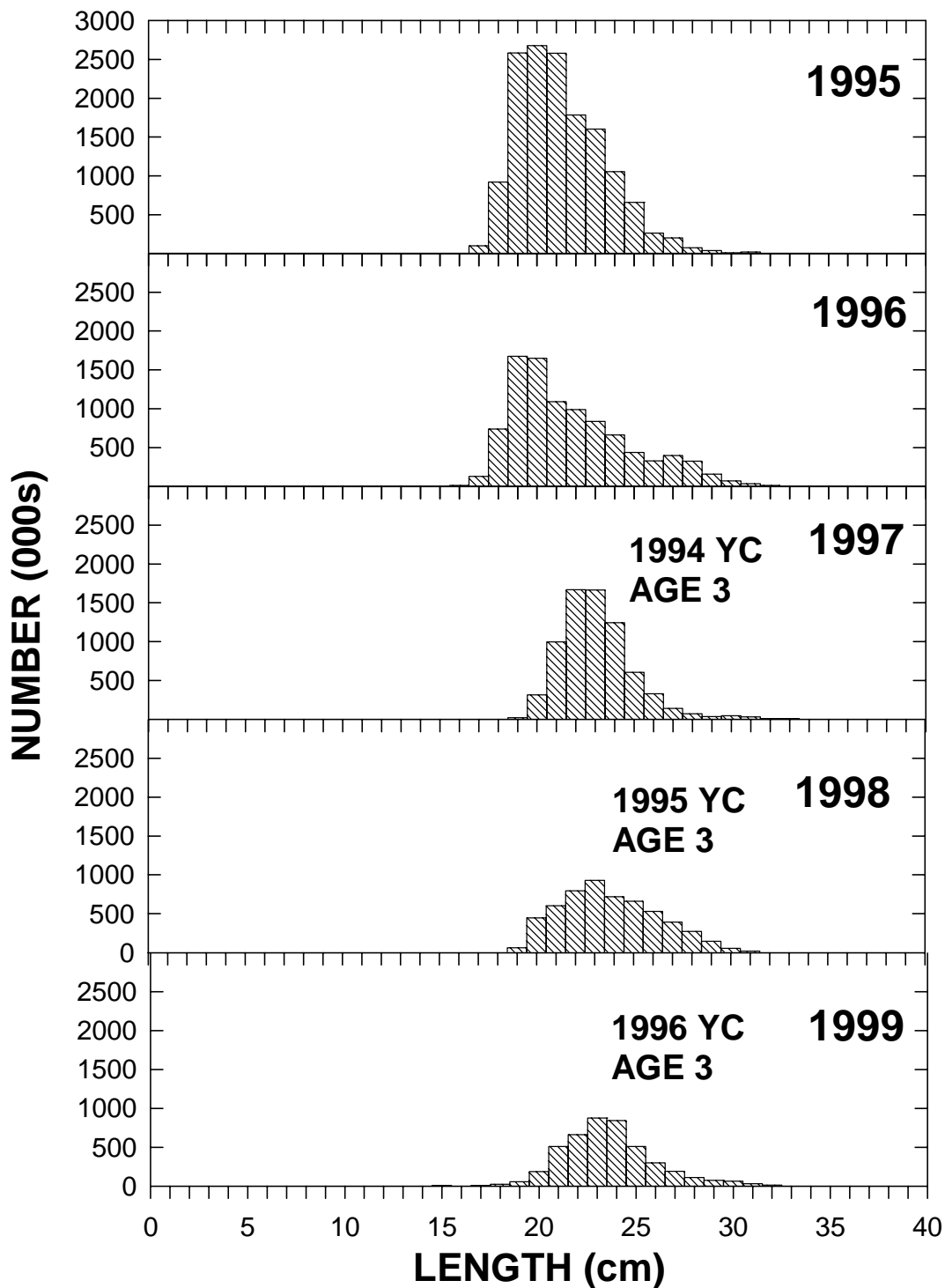


Figure B2. Northeast Region (NER; ME to VA) commercial fishery estimates of scup landings at length (fork length, cm) for 1995 to 1999.

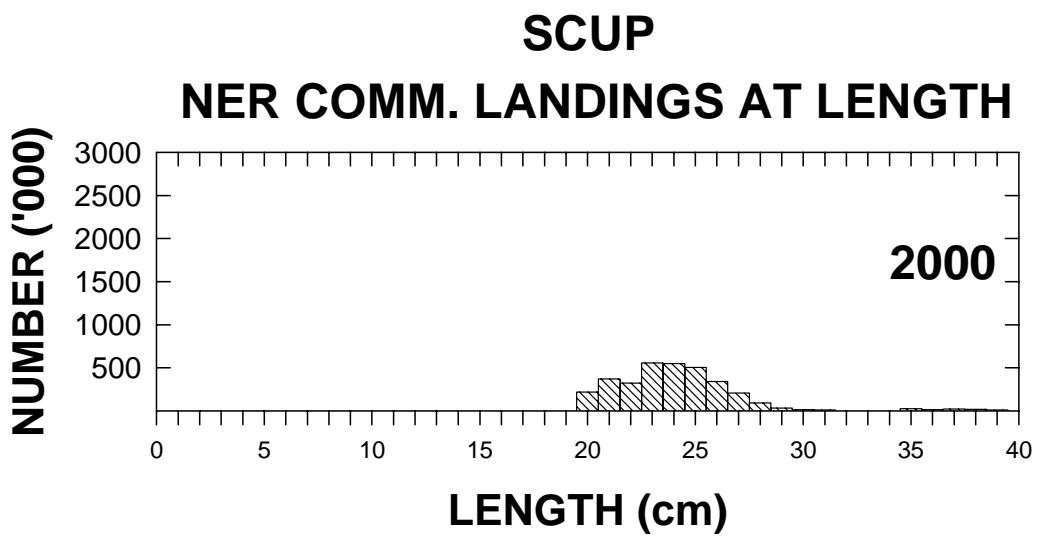


Figure B3. Northeast Region (NER; ME to VA) commercial fishery estimates of scup landings at length (fork length, cm) for 2000.

### Scup Commercial Discards at Length

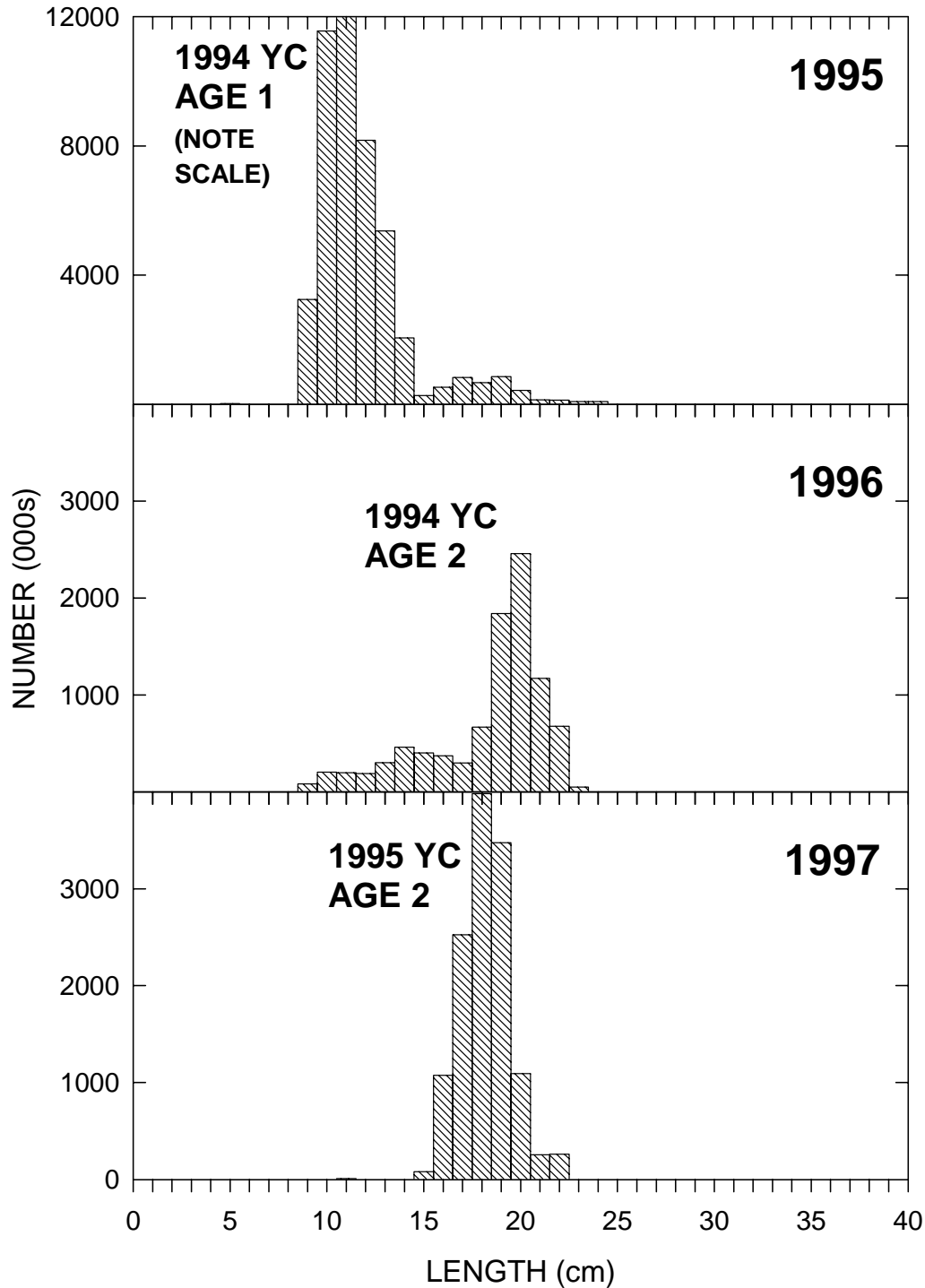


Figure B4. Northeast Region (NER; ME to VA) commercial fishery estimates of scup discards at length (fork length, cm) for 1995-1997.

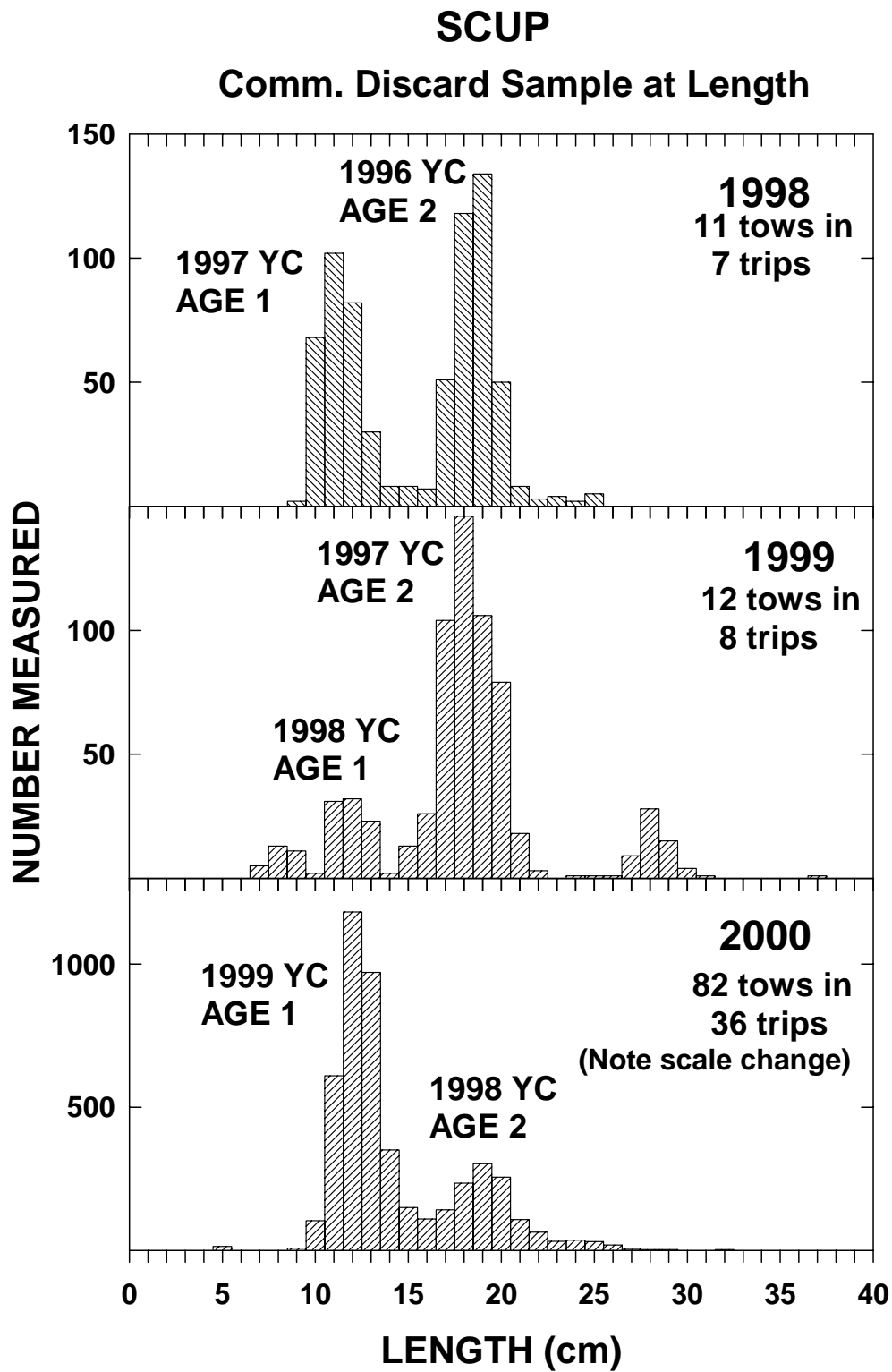


Figure B5. Northeast Region (NER; ME to VA) commercial fishery estimates of scup discards at length (fork length, cm) for 1998-2000.

# SCUP

## Comm. Discard Sample at Length

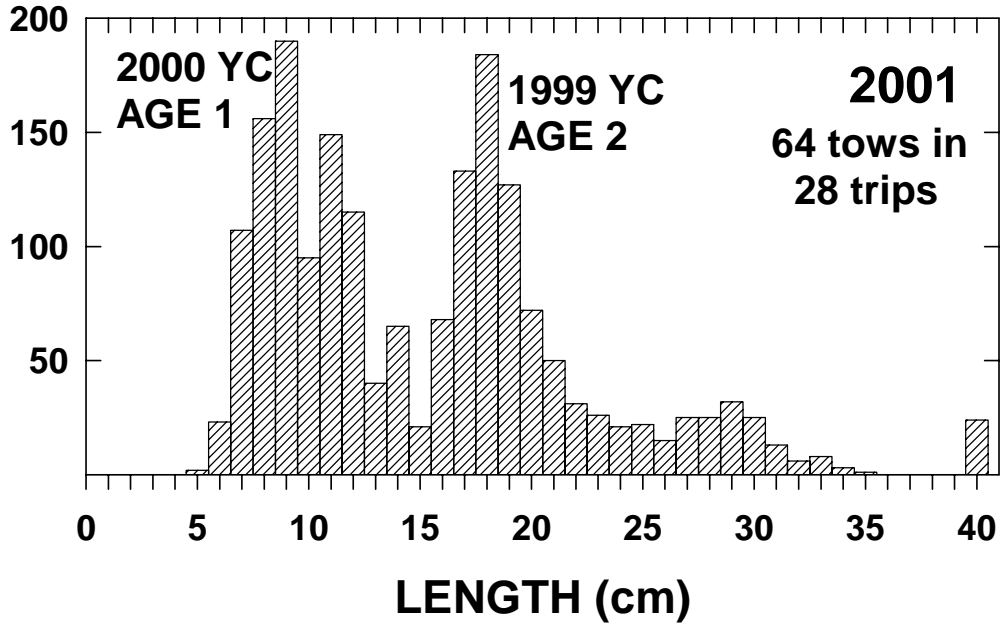


Figure B6. Northeast Region (NER; ME to VA) commercial fisher estimates of scup discards at length (fork length, cm) for 2001.

### Recreational Estimated Catch at Length

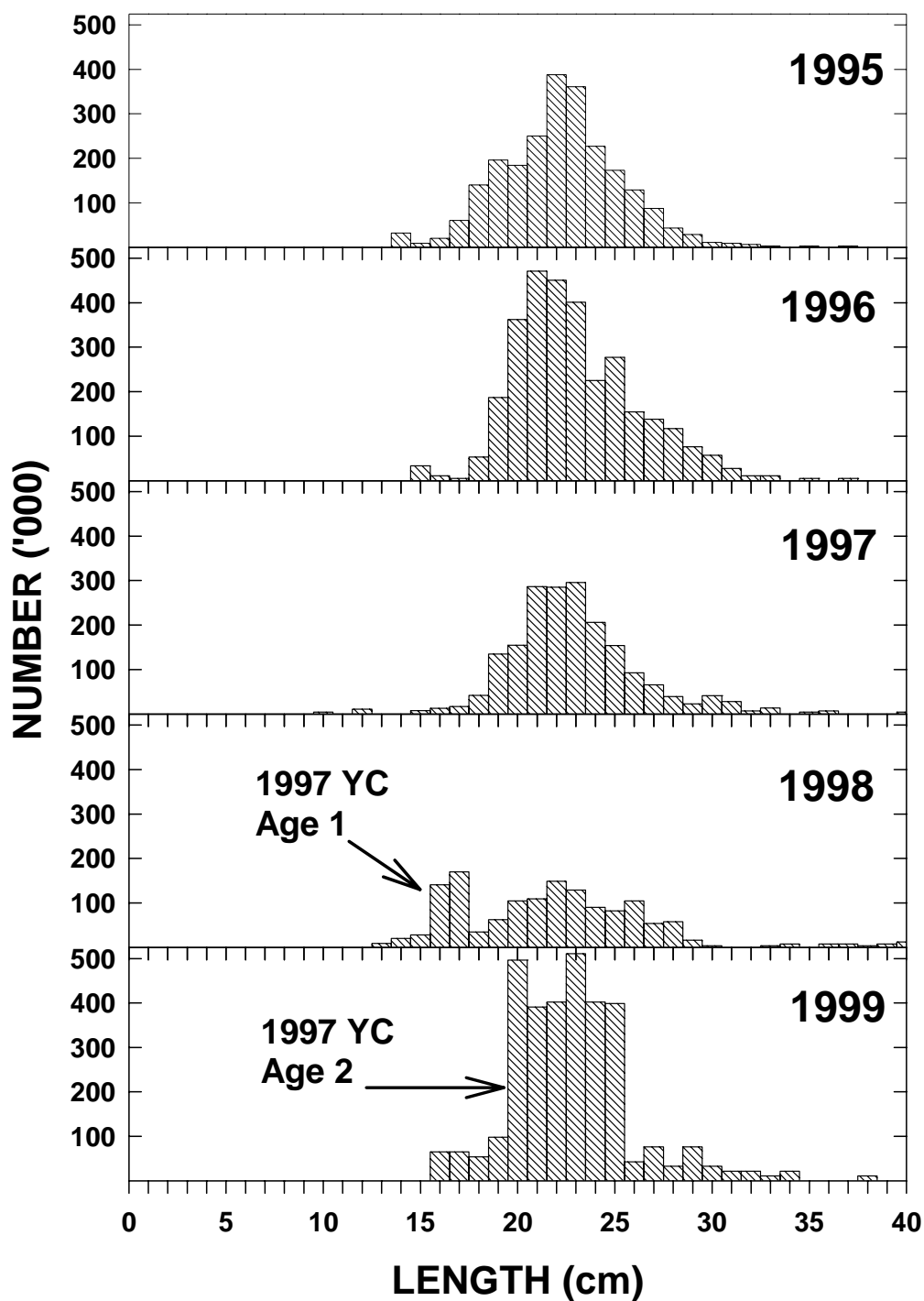


Figure B7. Coastal recreational fishery estimates of scup catch at length (fork length, cm; ME to NC) for 1995 to 1999.

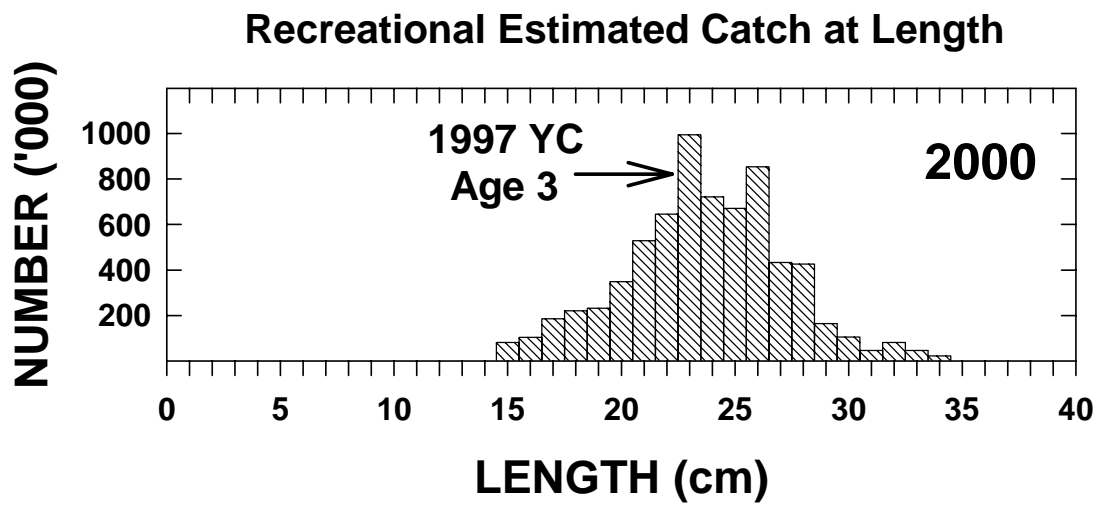


Figure B8. Coastal recreational fishery estimates of scup catch at length (fork length, cm; ME to NC) for 2000.



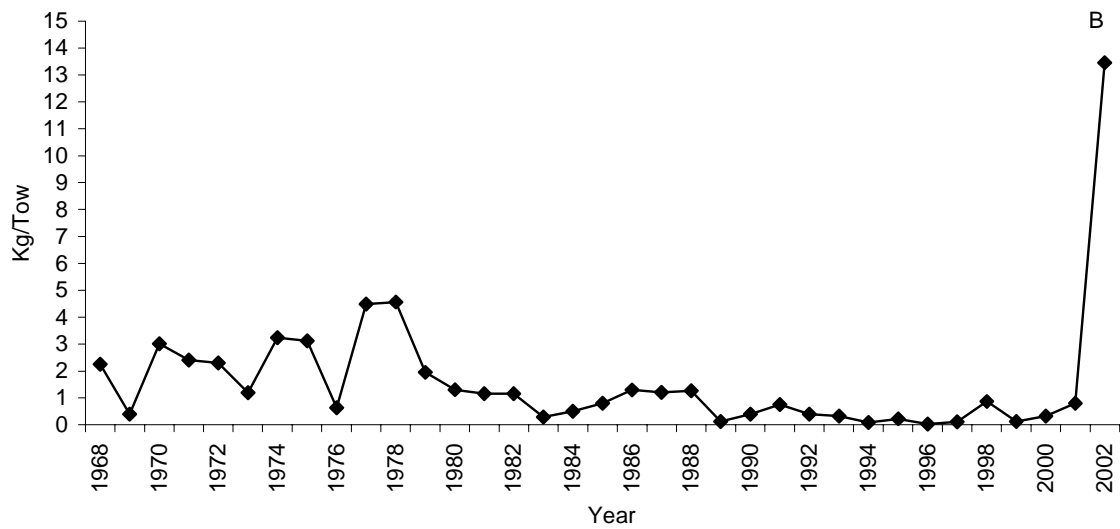
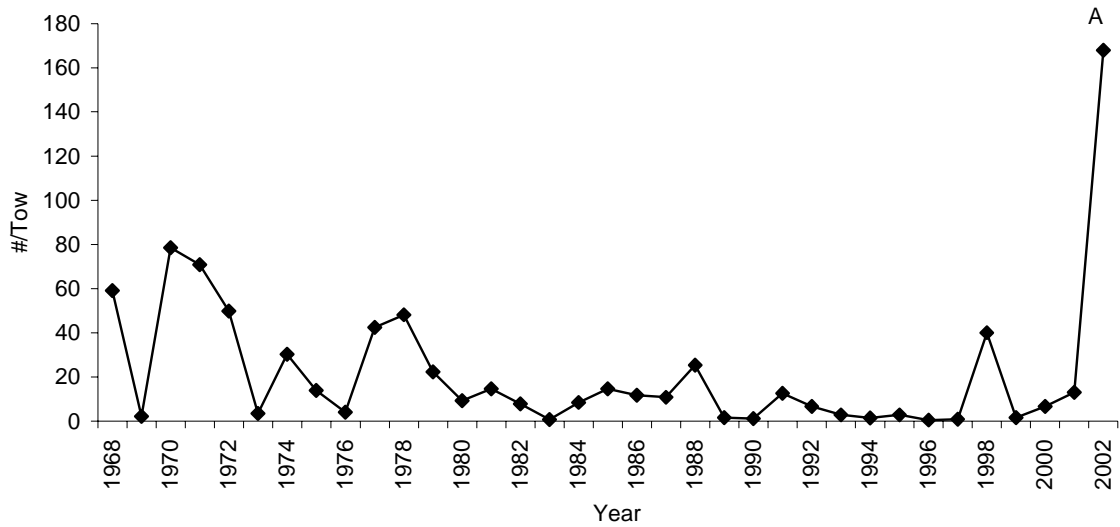


Figure B9. NEFSC spring research vessel survey (1968-2002) indices for scup abundance (A) and biomass (B) based on offshore strata 1-12, 23, 25, and 61-76. **Note that 2002 indices are preliminary.**

NEFSC Fall Survey

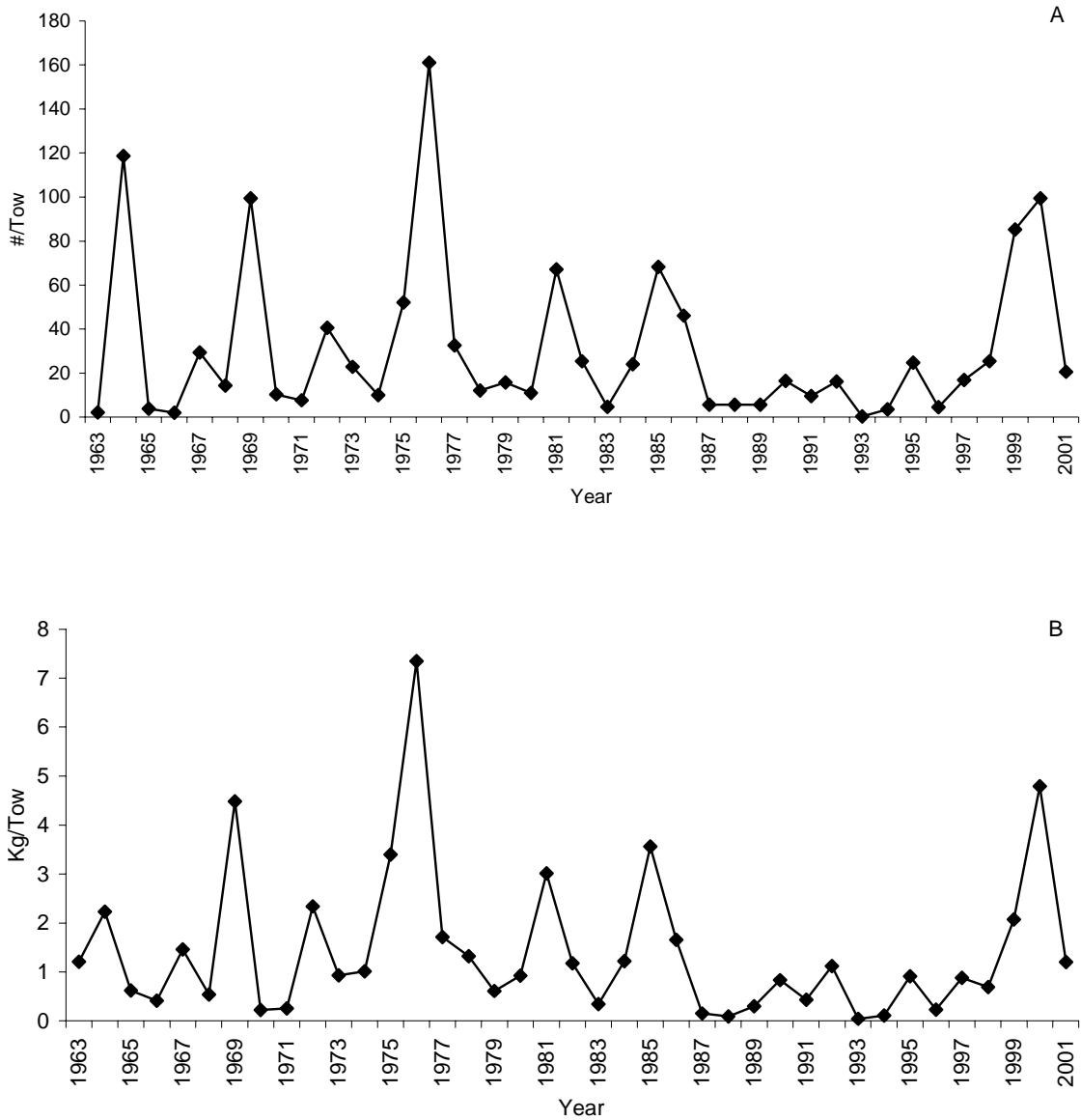


Figure B10. NEFSC fall research vessel survey (1963-2001) indices for scup abundance (A) and biomass (B) based on offshore strata 1-12, 23, 25, and 61-76.

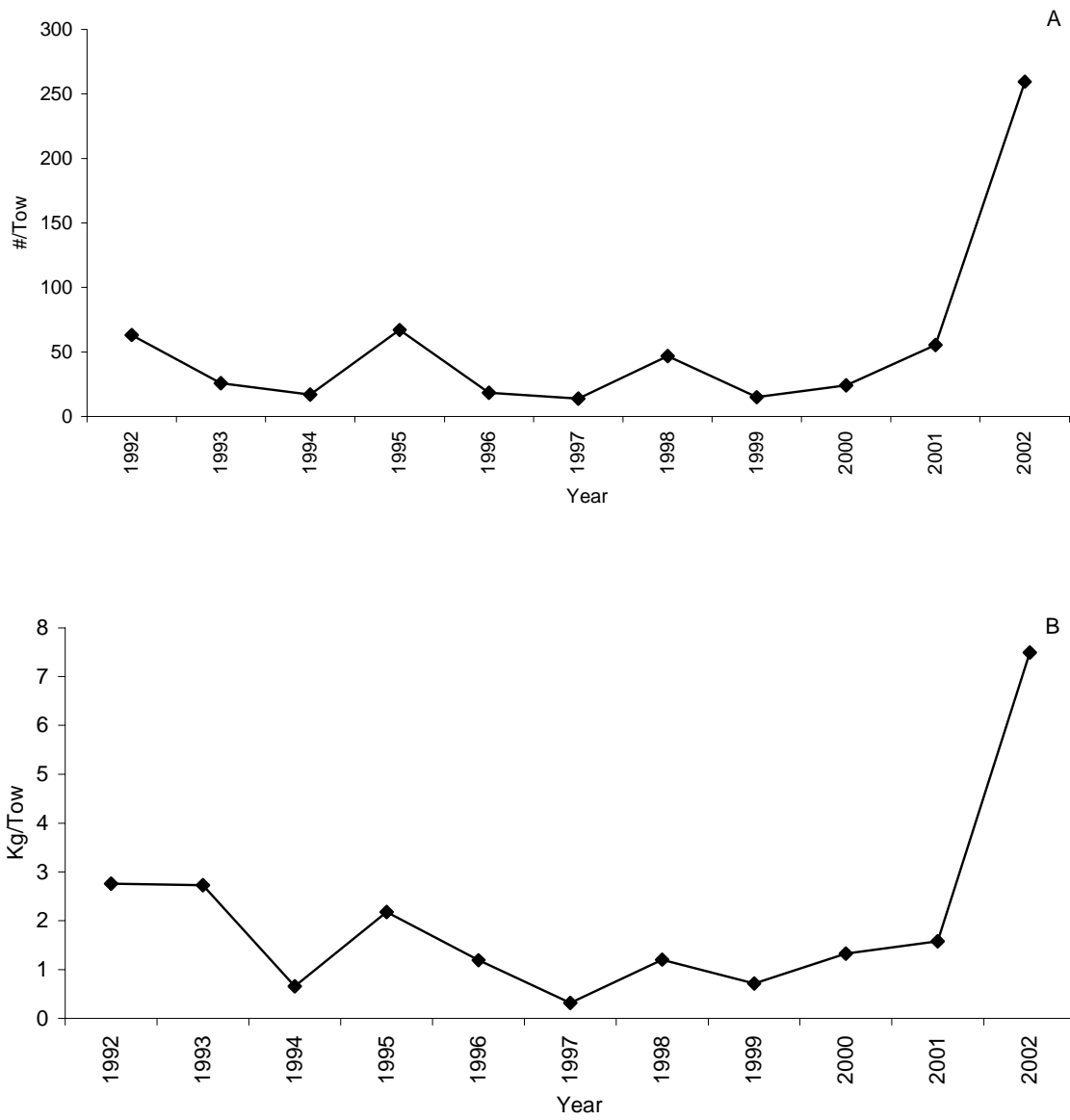


Figure B11. NEFSC winter research vessel survey (1992-2002) indices for scup abundance (A) and biomass (B) based on offshore strata 1-12 and 61-76. **Note that Winter 2002 indices are preliminary.**

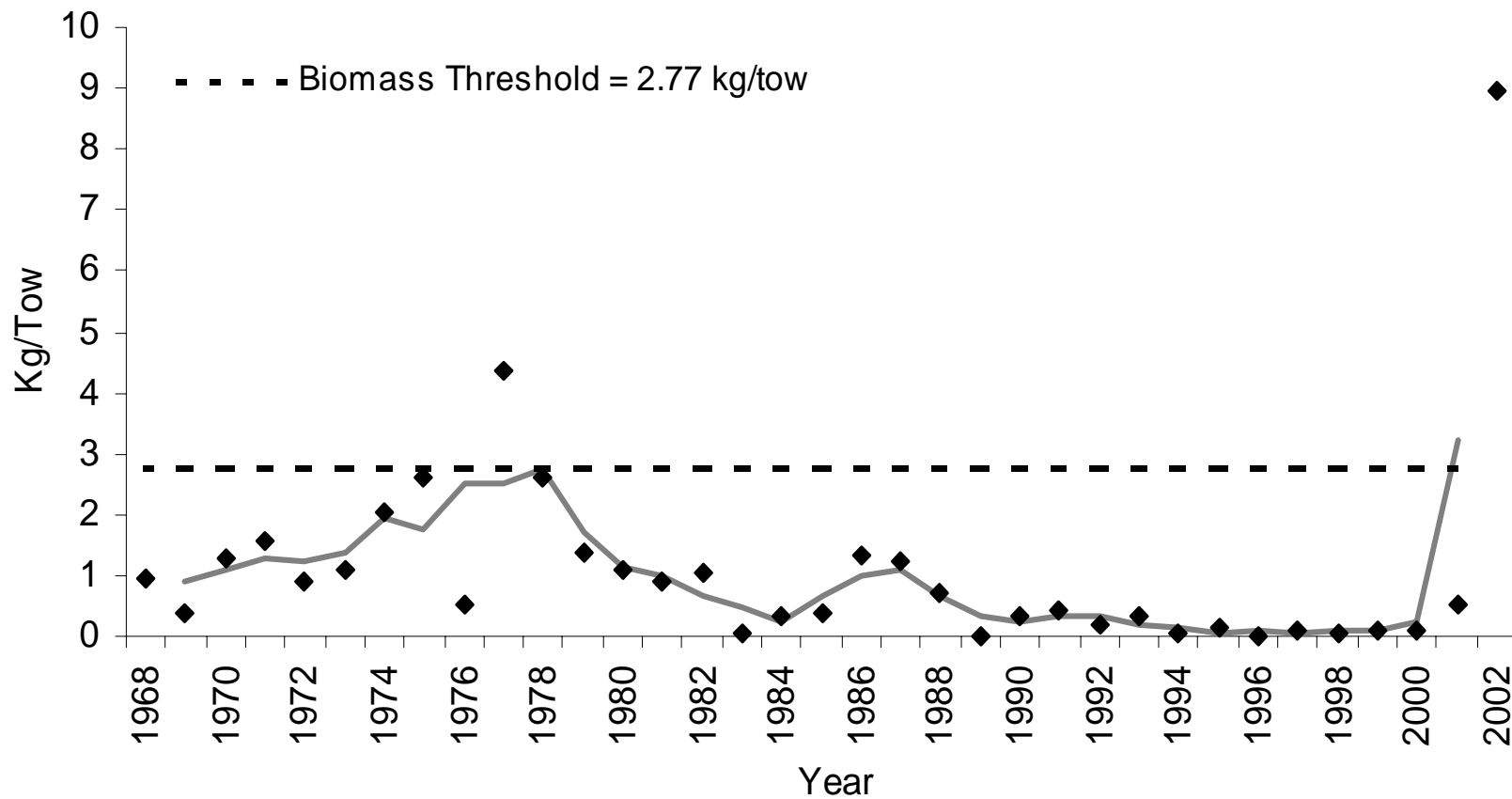


Figure B12. Scup spawning stock biomass per tow (SSB kg/tow) index (points). The solid line represents the 3-year moving average of the SSB. The dotted line represents the biomass threshold adopted for scup in Amendment 12 to the FMP. This threshold is based on the maximum value of the SSB index (2.77 kg/tow, 1977-1979).

### MADMF Spring Survey

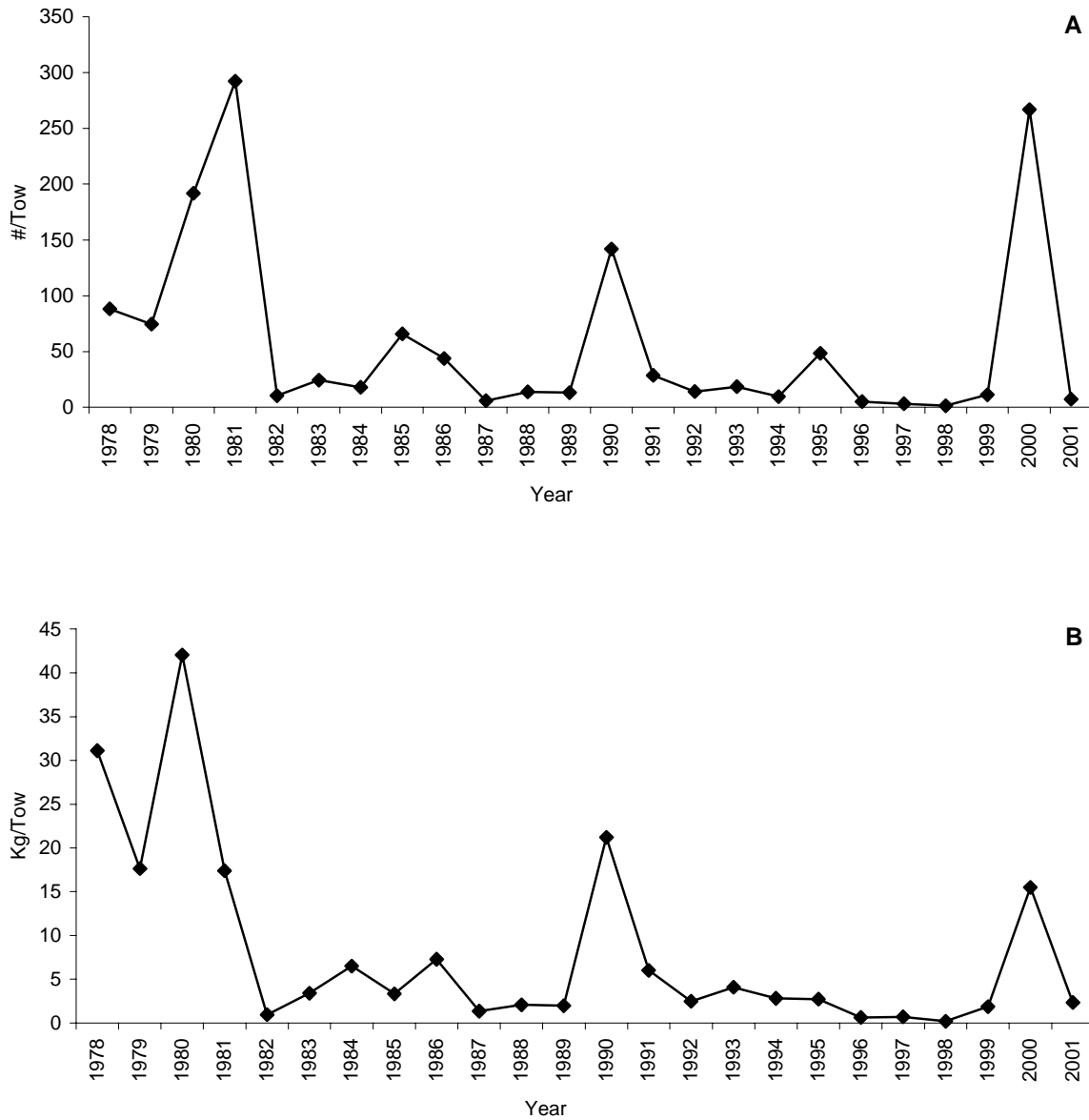


Figure B13. MADMF spring survey (1978-2001) indices for scup abundance (A) and biomass (B) based on survey regions 1, 2, and 3.

### MADMF Fall Survey

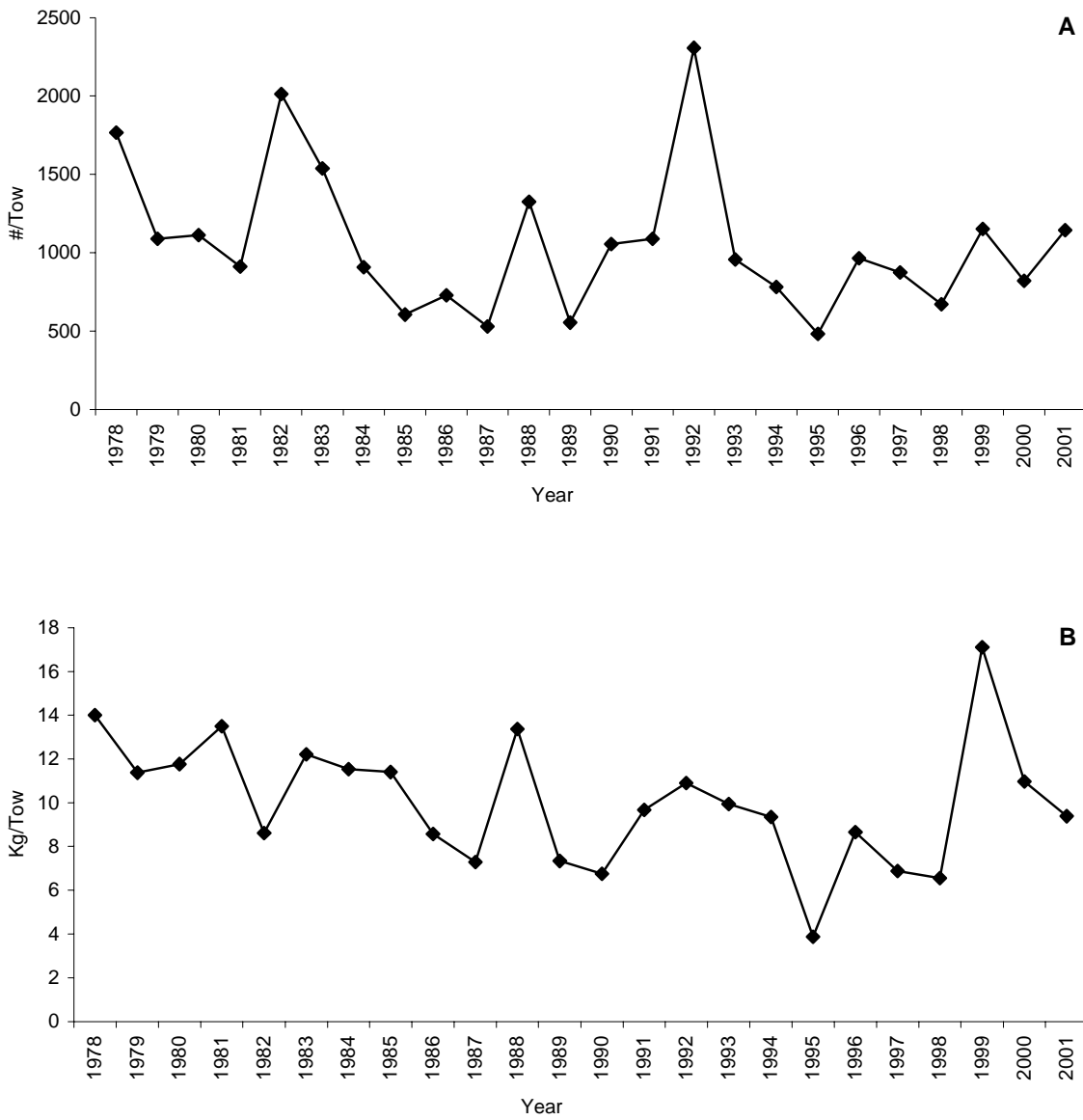


Figure B14. MADMF fall survey (1978-2001) indices for scup abundance (A) and biomass (B) based on all survey regions.

RIDFW Spring Survey

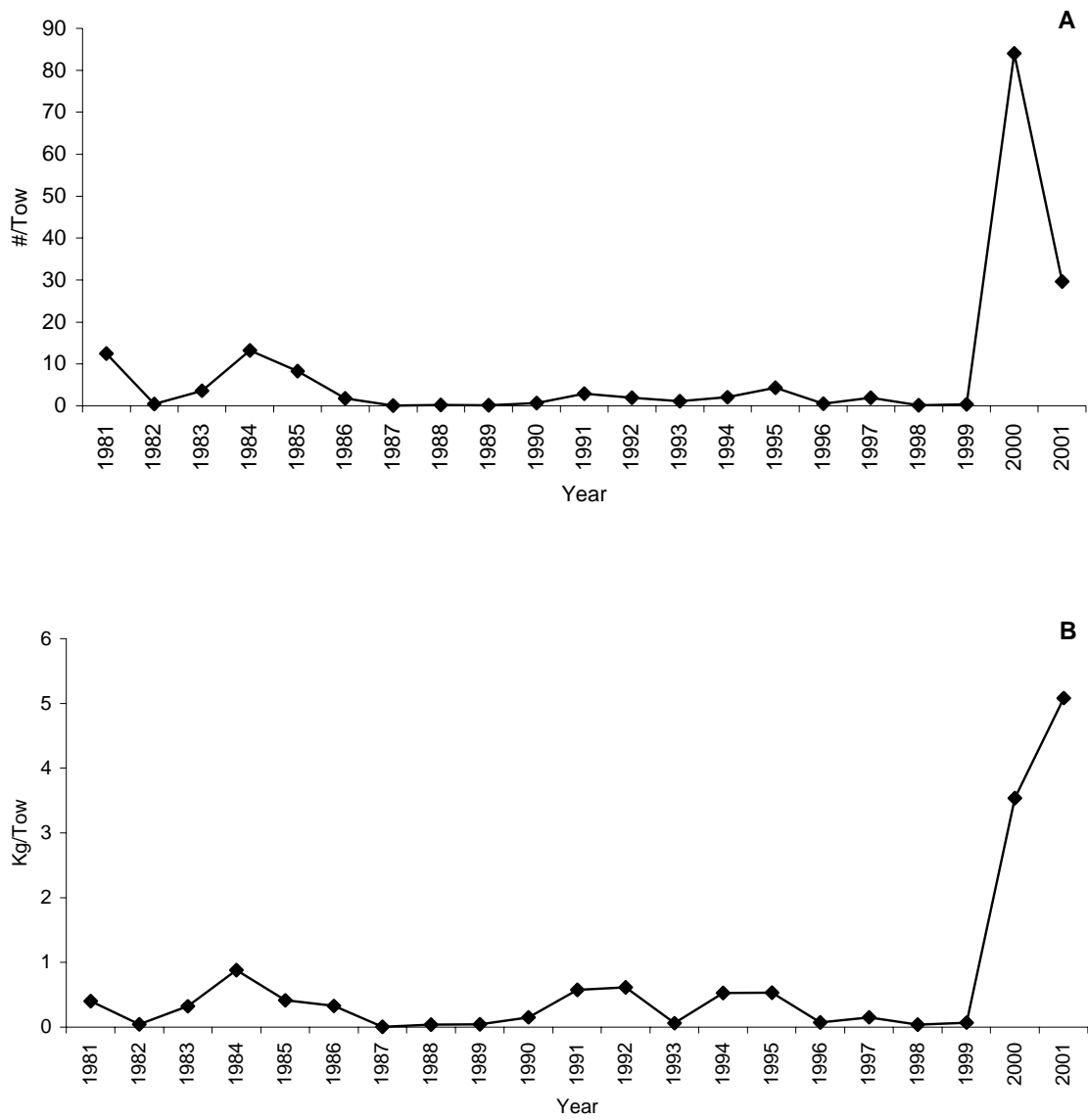


Figure B15. RIDFW spring survey (1981-2001) indices for scup abundance (A) and biomass (B).

RIDFW Fall Survey

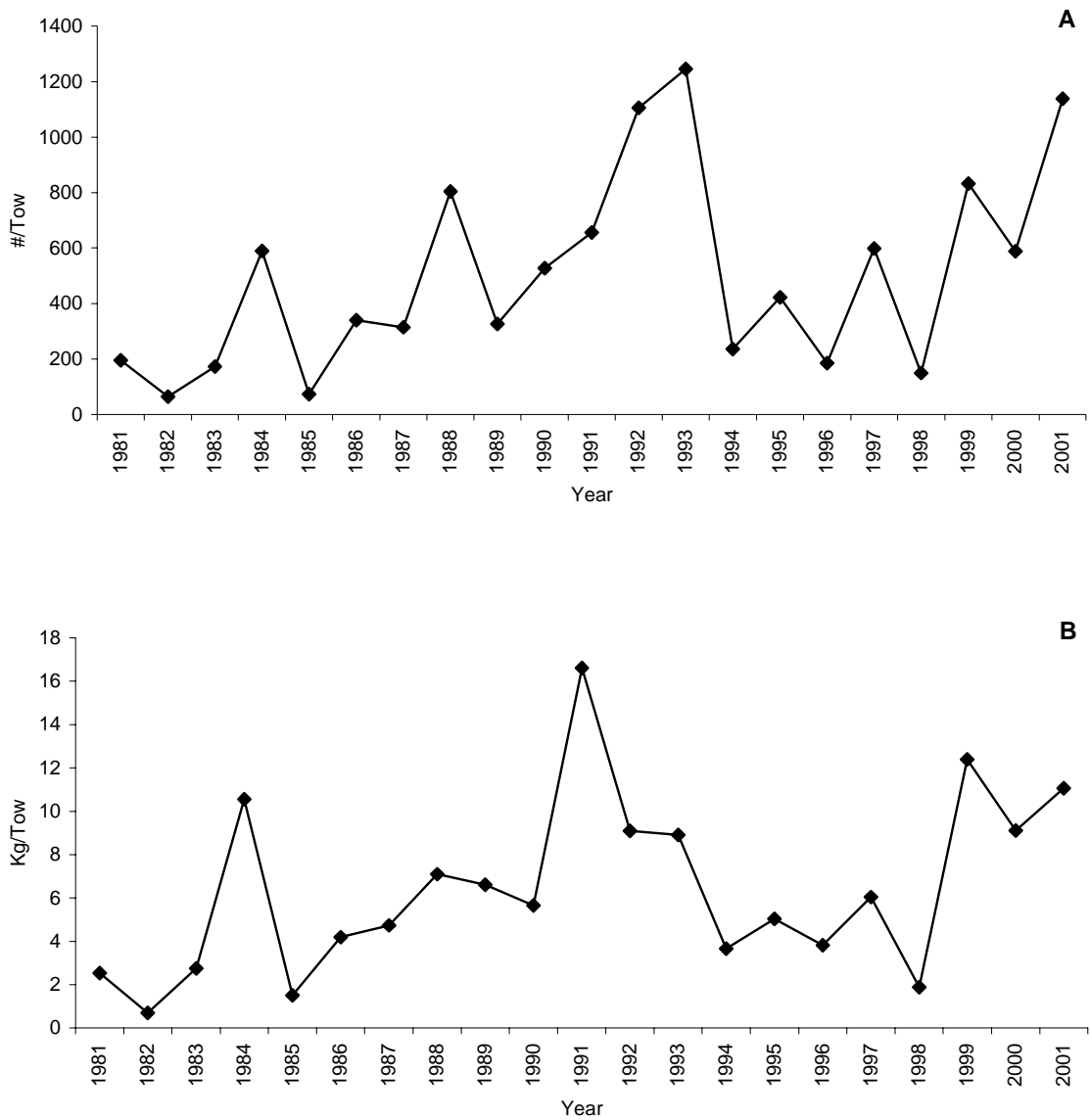


Figure B16. RIDFW fall survey (1981-2001) indices for scup abundance (A) and biomass (B).



CTDEP Spring Survey

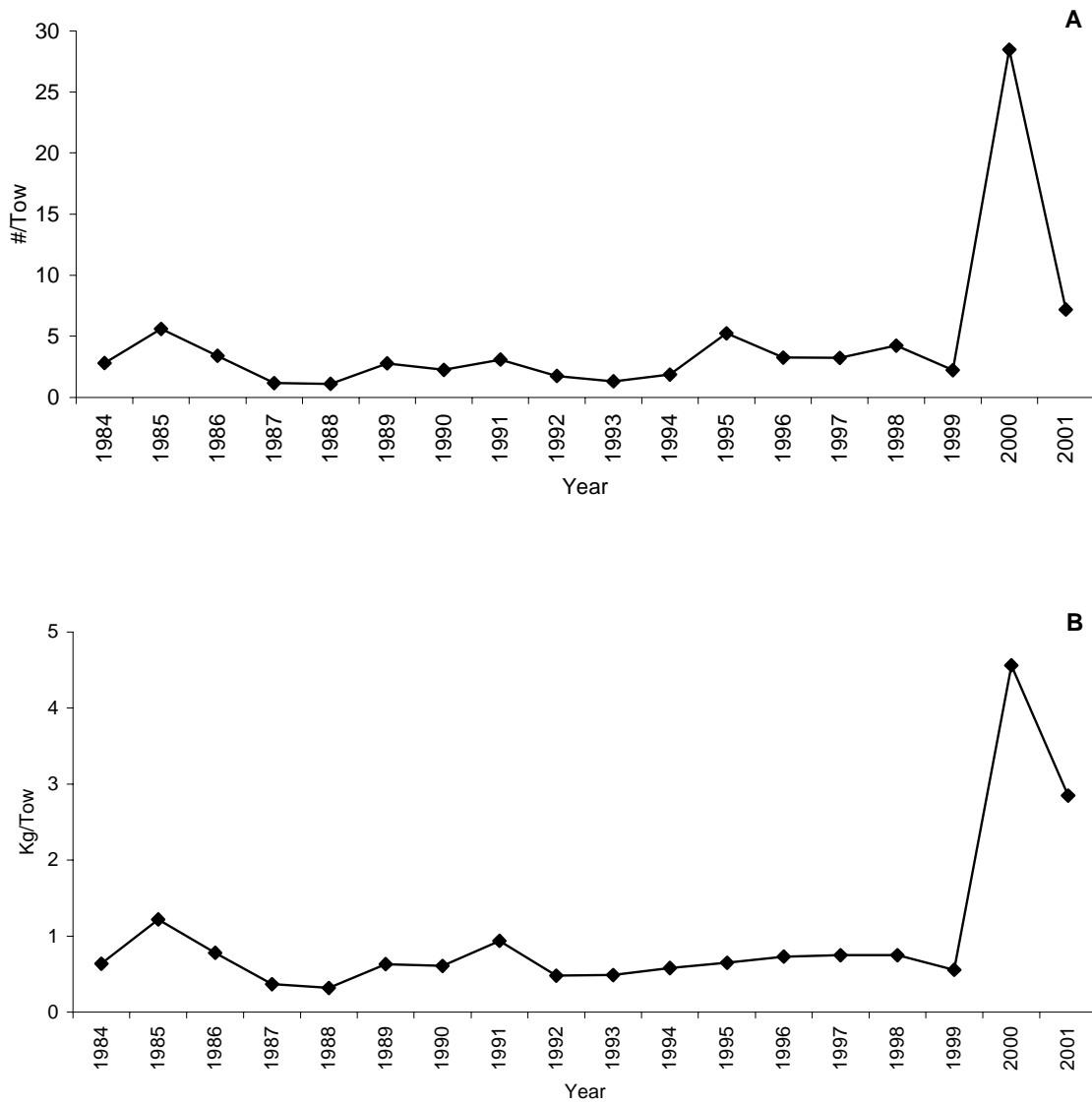


Figure B17. CTDEP spring survey (1984-2001) indices for scup abundance (A) and biomass (B).

CTDEP Fall Survey

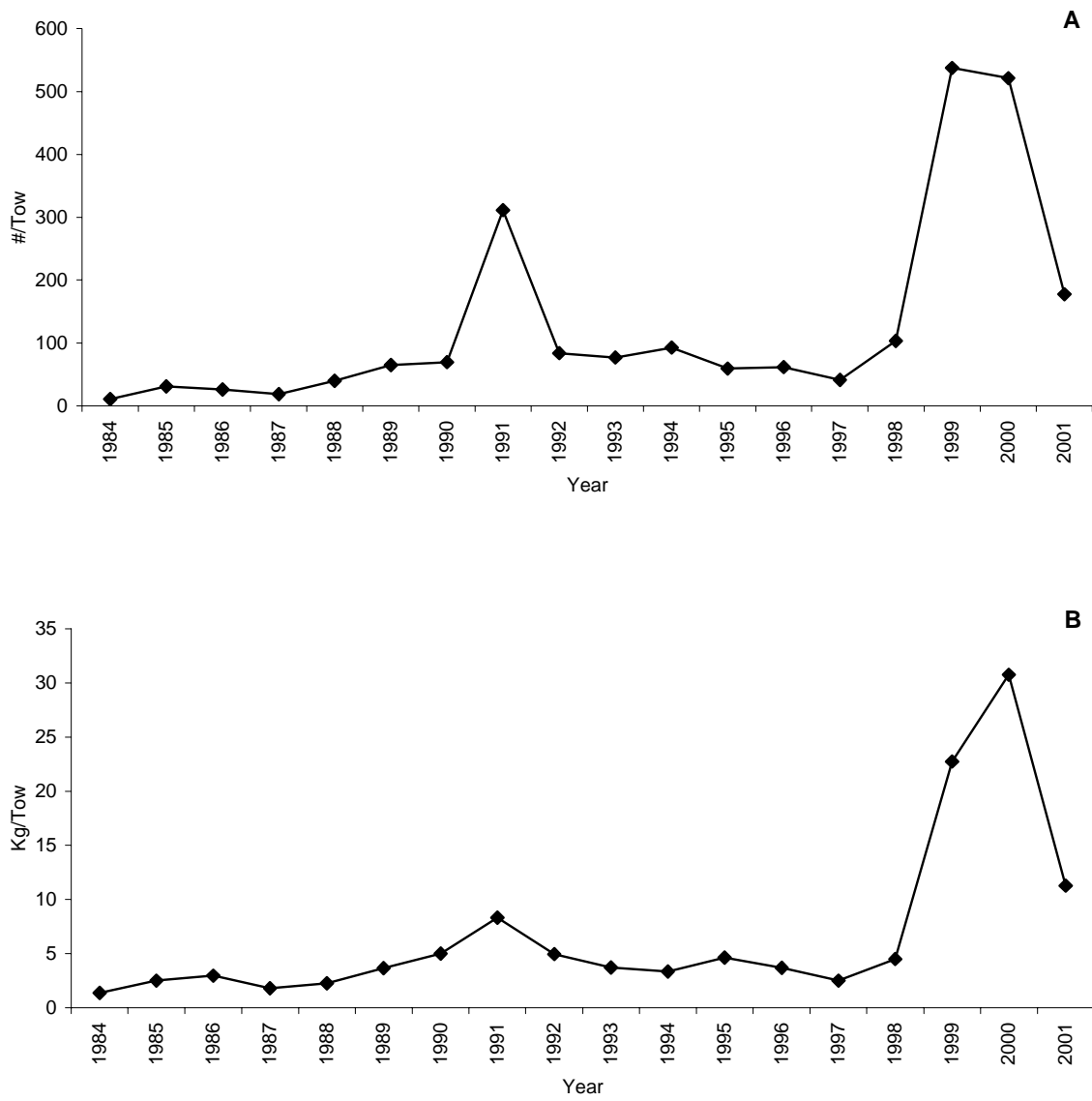


Figure B18. CTDEP fall survey (1984-2001) indices for scup abundance (A) and biomass (B).

NJBMF Annual Survey

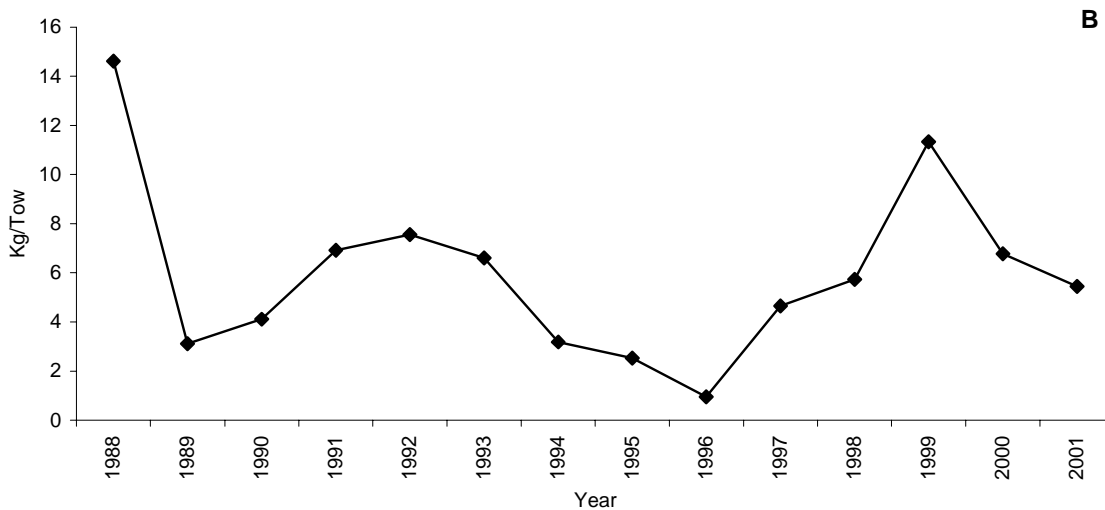
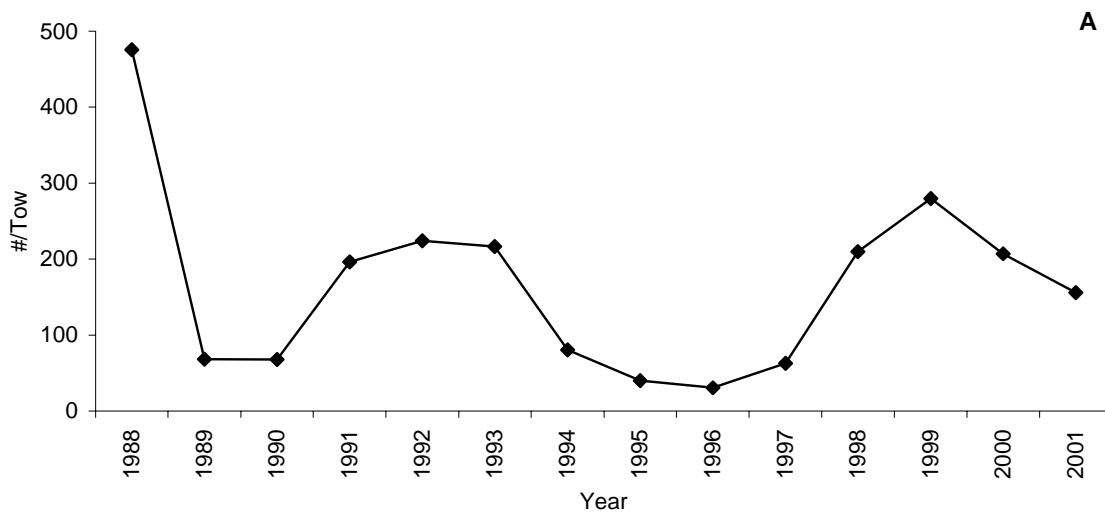


Figure B19. NJBMF survey (1988-2001) indices for scup abundance (A) and biomass (B).

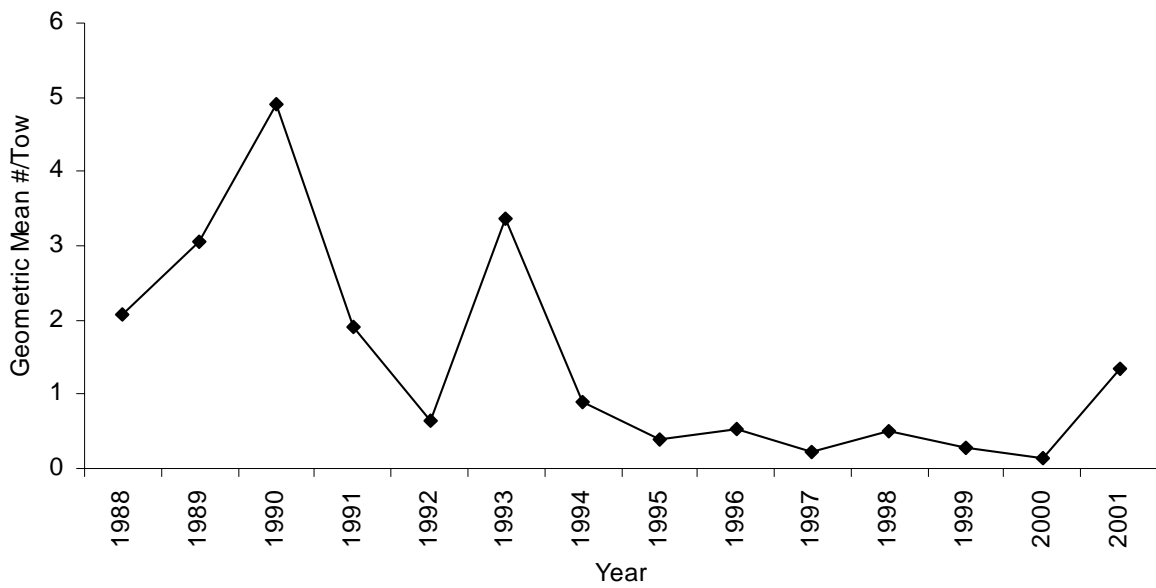


Figure B20. VIMS survey (June – September; 1988-2001) indices for young-of-the-year scup abundance.

NYDEC Survey

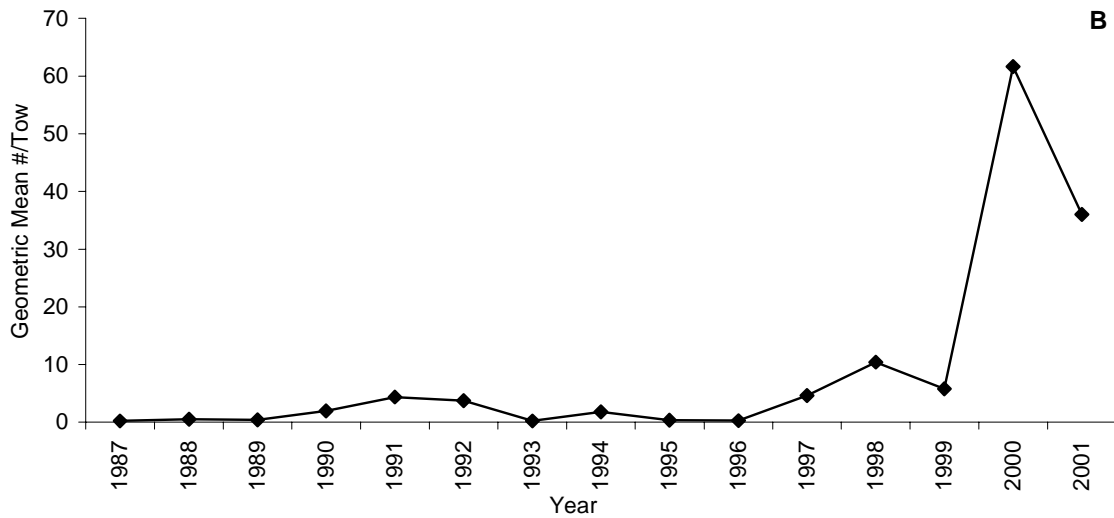
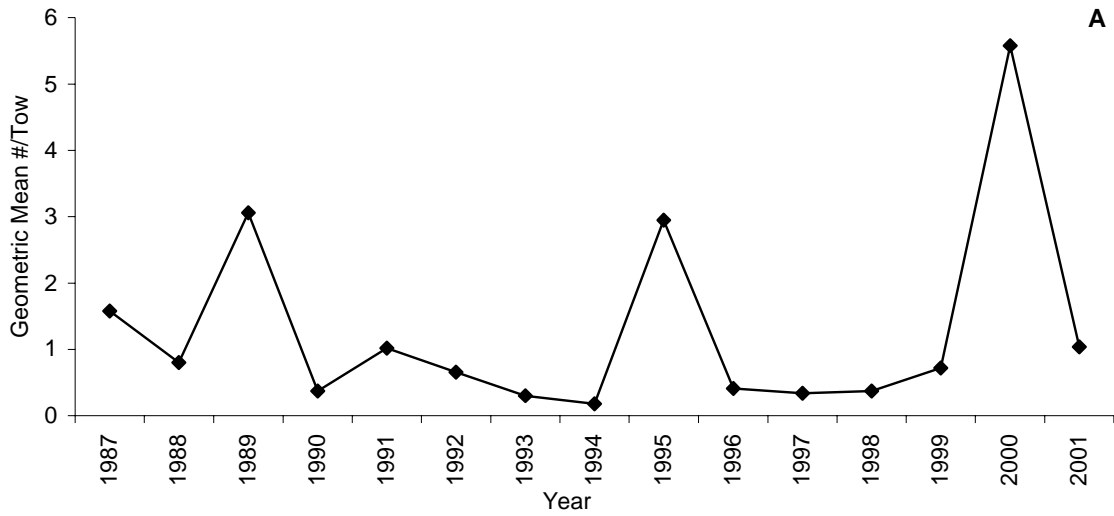


Figure B21. Yearling (A; June-August) and young-of-the-year (B; August-September) scup recruitment indices from the NYDEC survey (1985-2001).

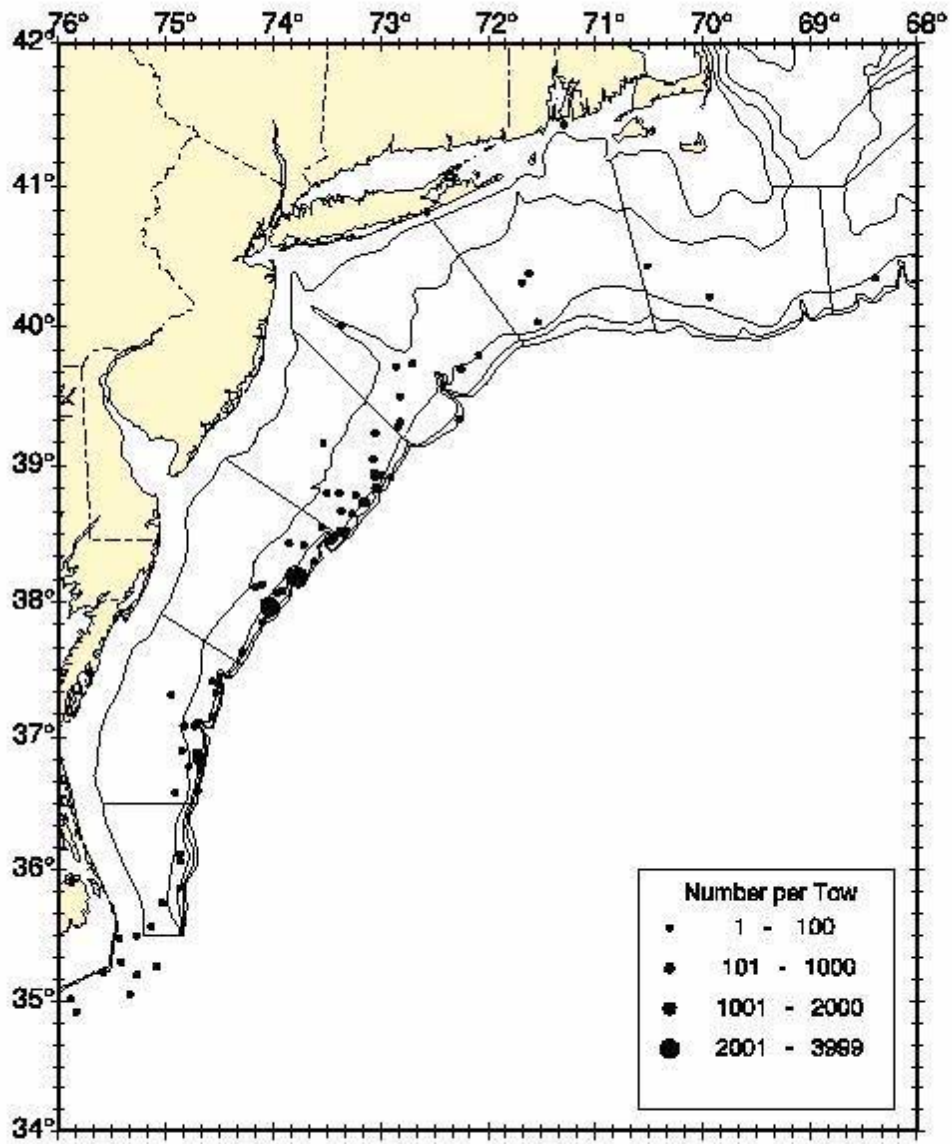


Figure B22. Distribution of scup during NEFSC 1992-1998 spring bottom trawl survey.

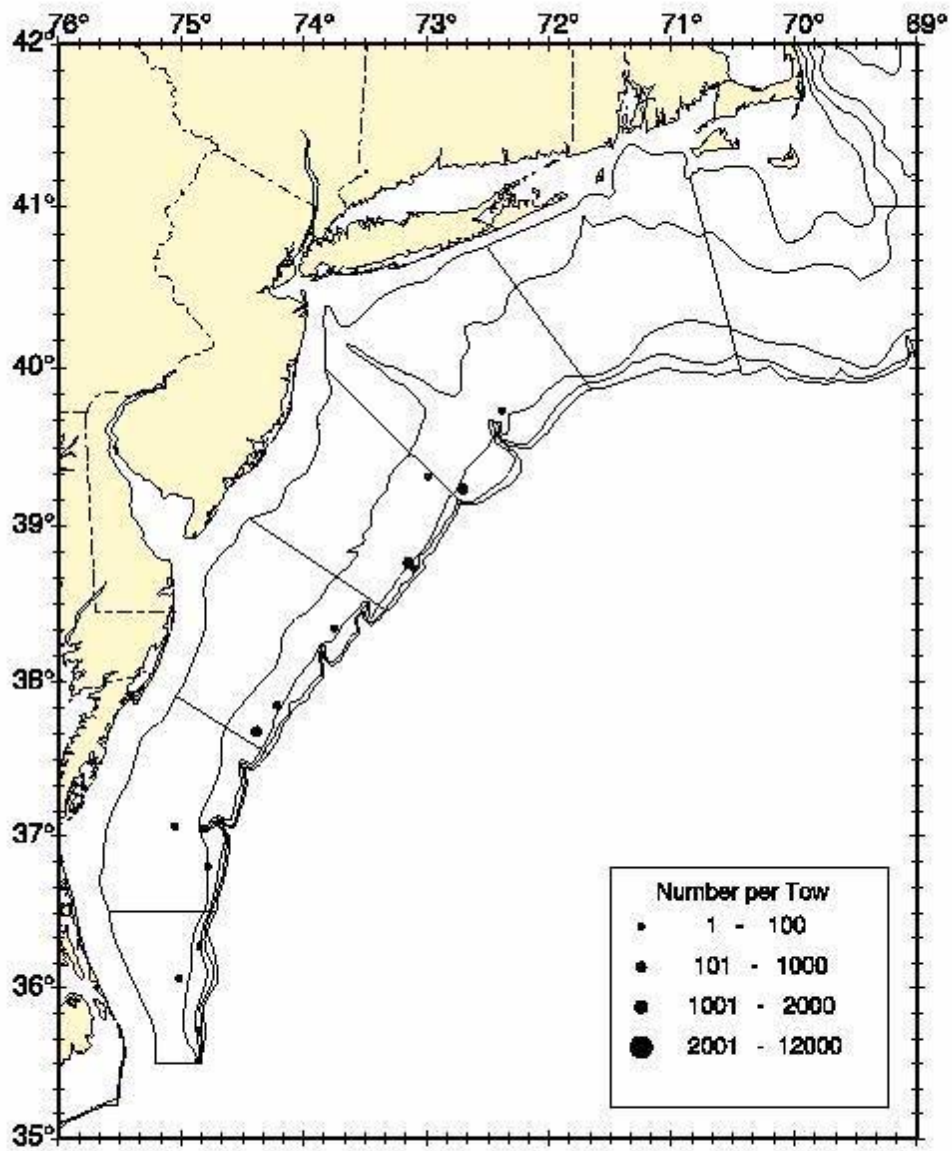


Figure B23. Distribution of scup during NEFSC 2001 spring bottom trawl survey.

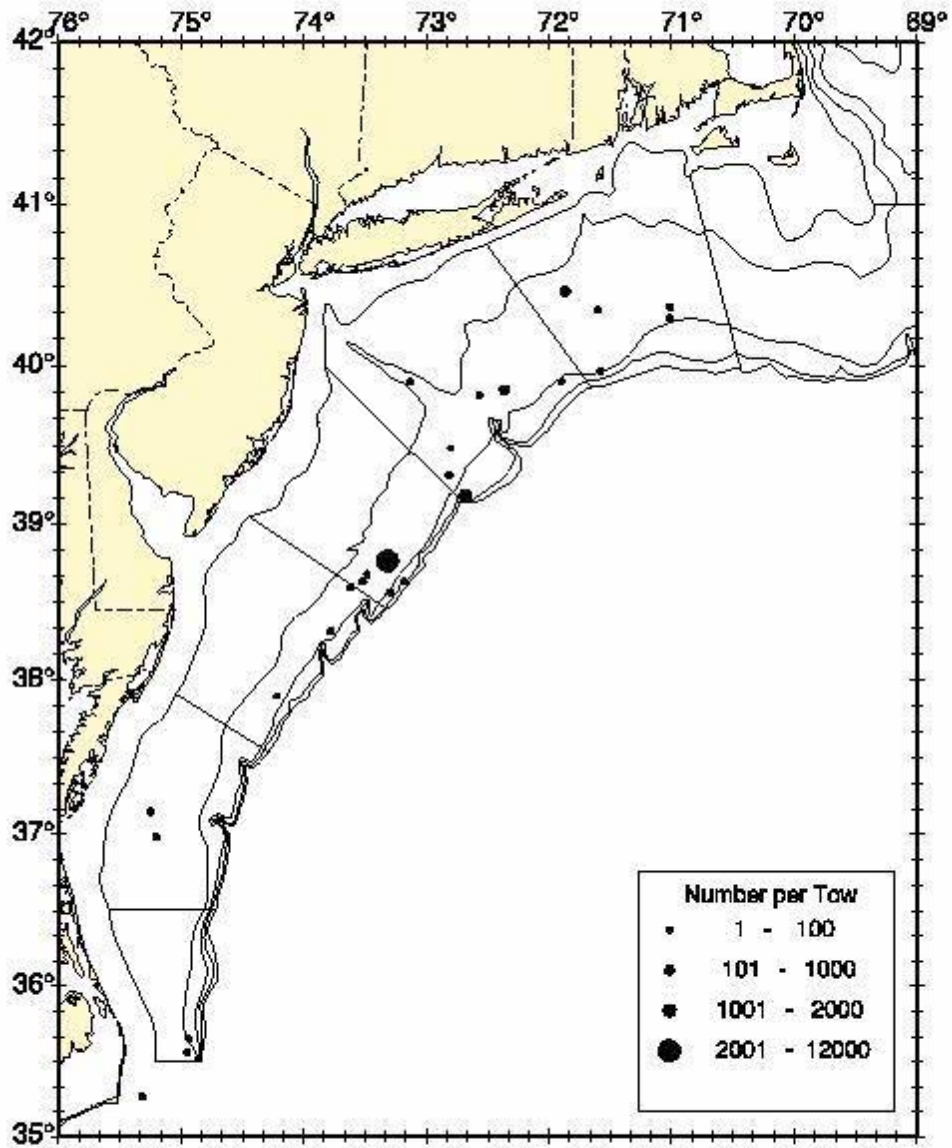


Figure B24. Distribution of scup during NEFSC 2002 spring bottom trawl survey.



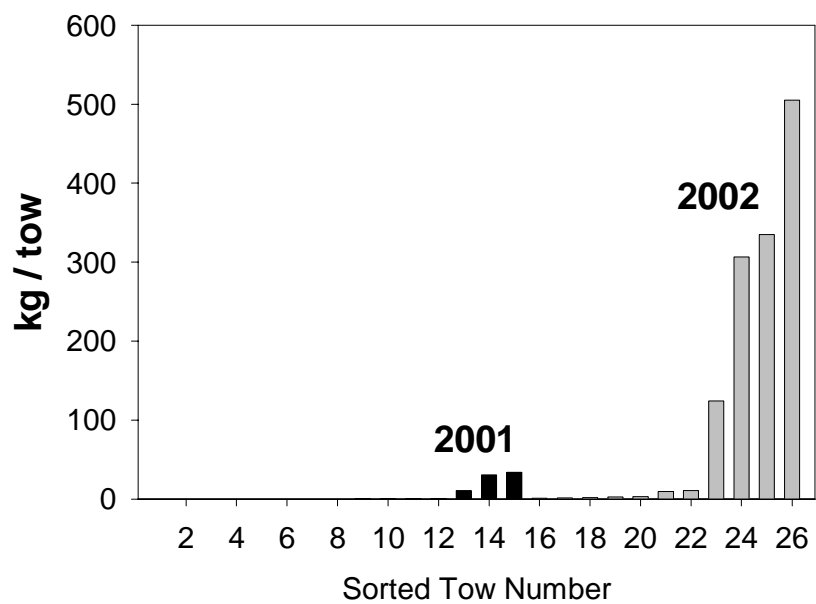


Figure B25. Comparison of the occurrence of positive scup tows and the associated magnitude as observed in the NEFSC 2001 and 2002 spring survey.

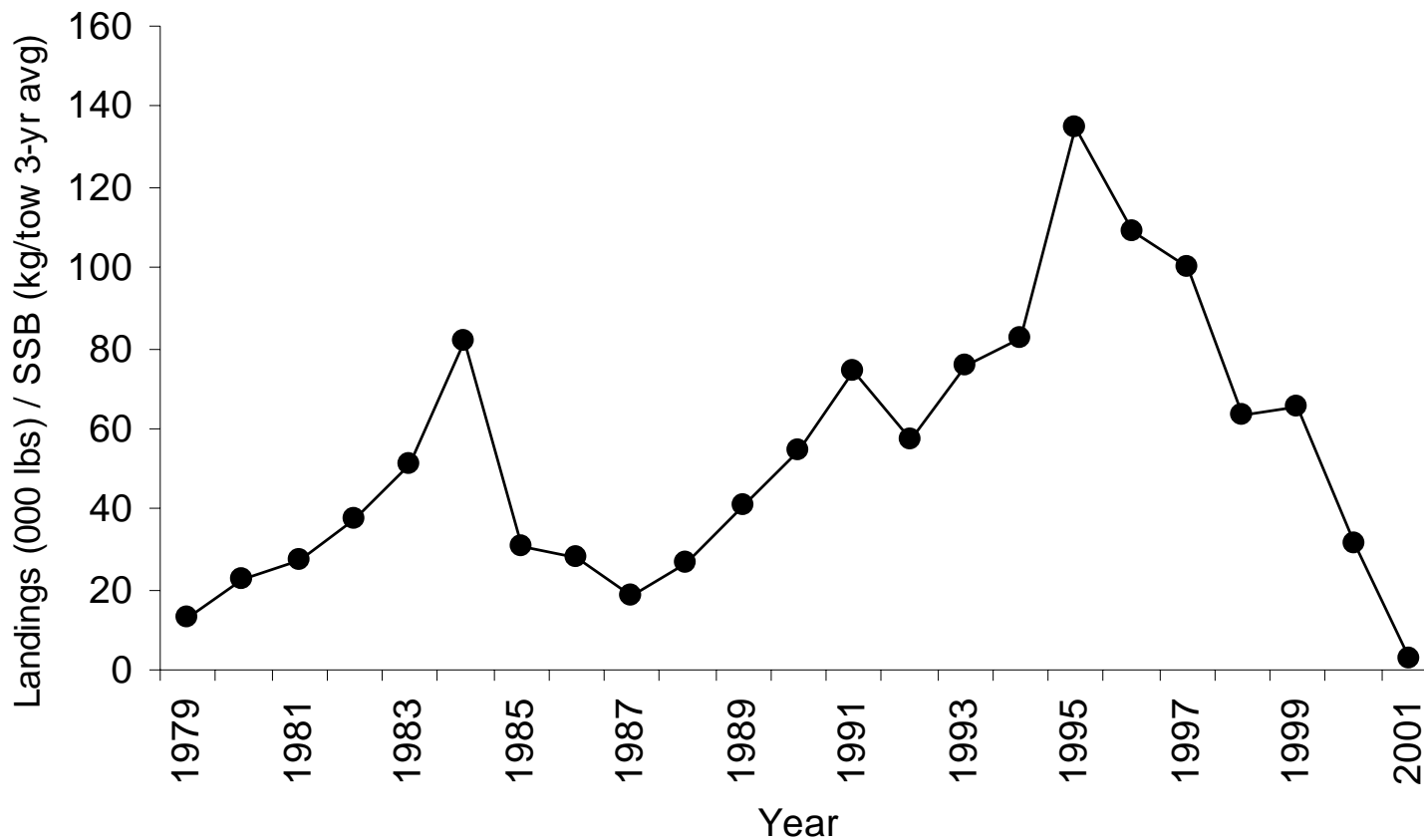


Figure B26. Estimated relative exploitation index based on total landings (1,000's of lbs.) and the NEFSC spring SSB survey (kg/tow; three-year average).

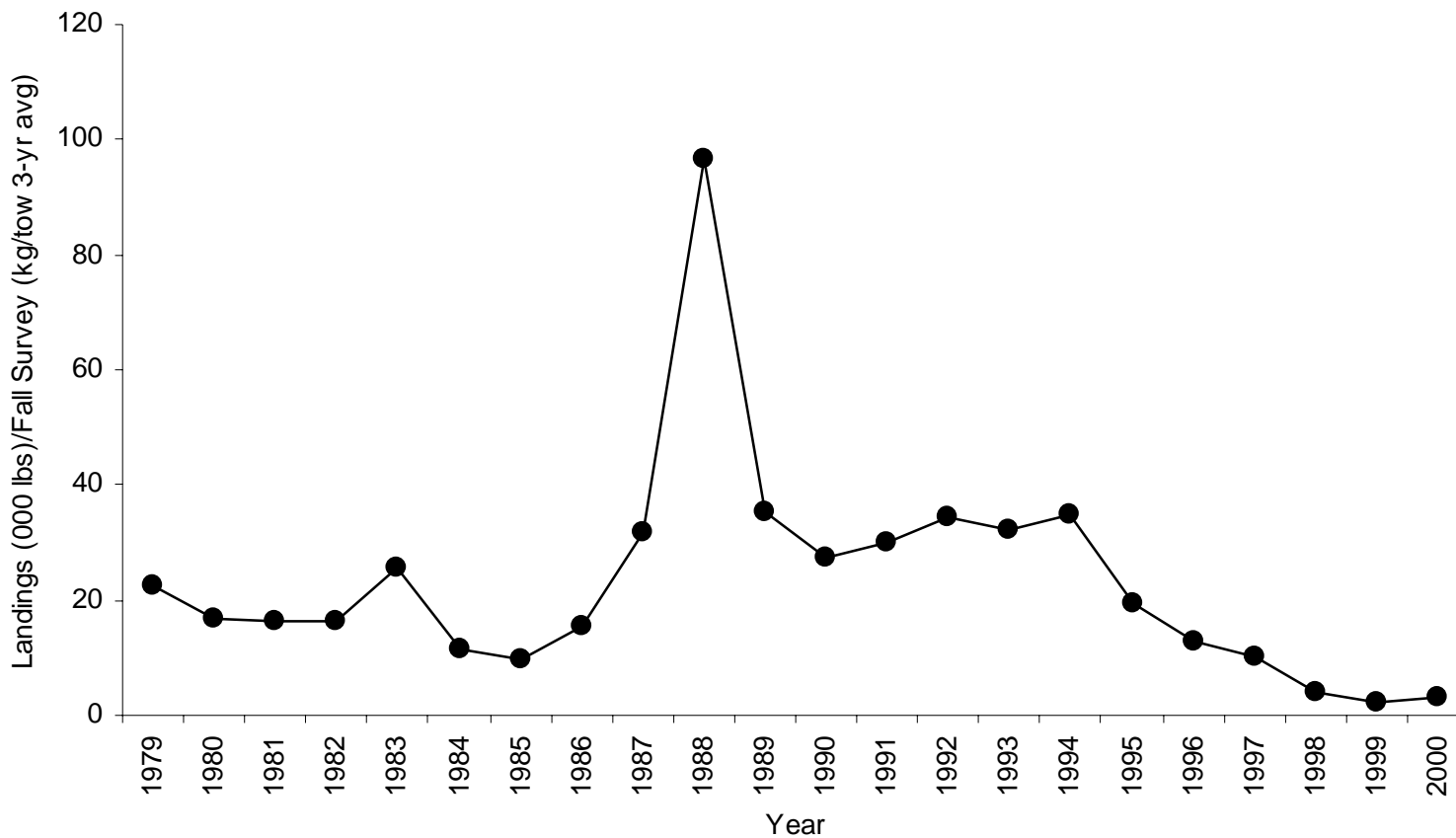


Figure B27. Estimated relative exploitation index based on total landings (1,000's of lbs.) and the NEFSC fall survey (kg/tow; three-year average).

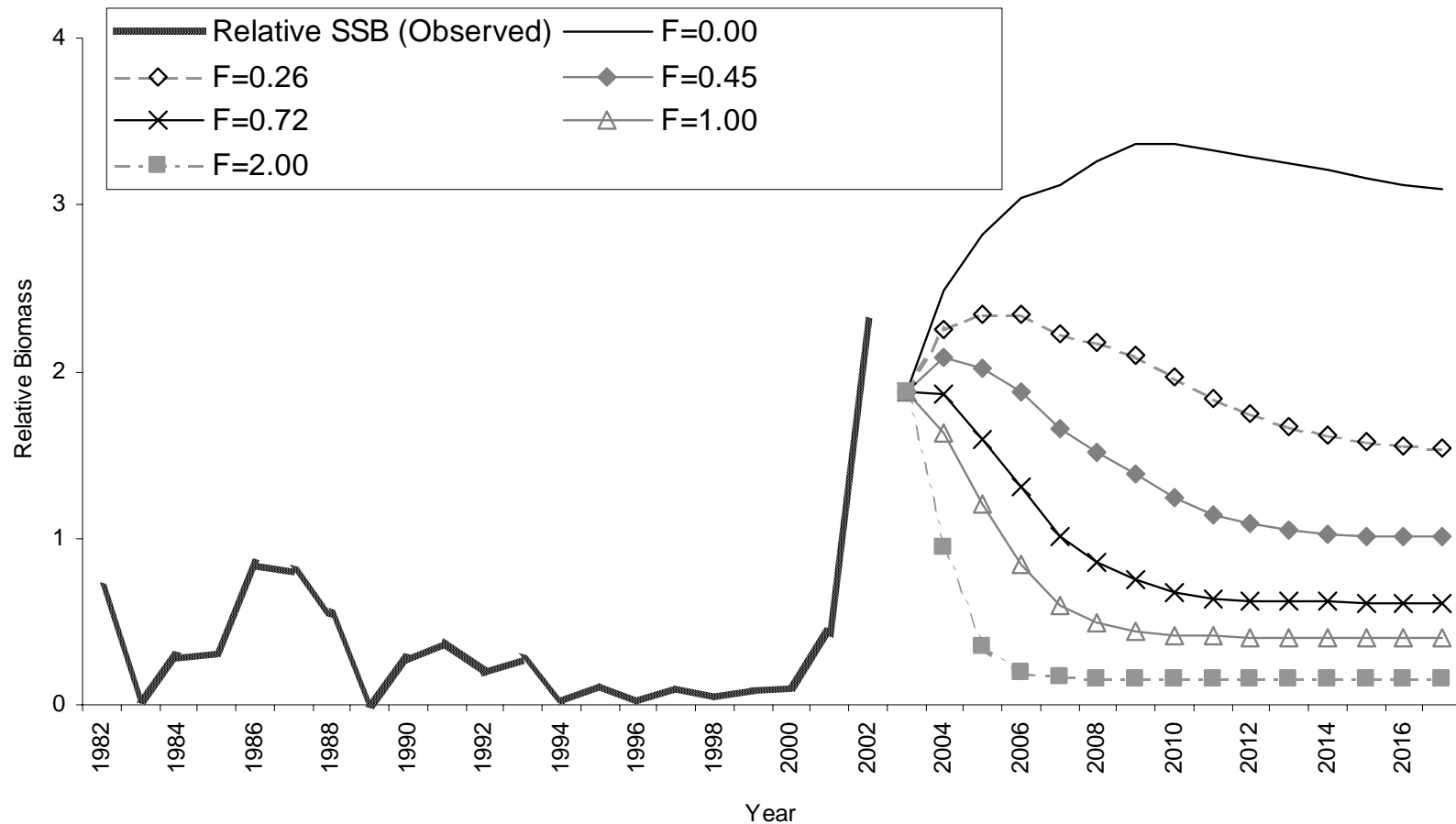


Figure B28. Observed trends in relative SSB (ln+1) and projections of scup relative biomass starting with average of 2000-2002 NEFSC spring survey catch per tow, offshore strata only. Yearly recruitment is assumed equal to the long-term median catch per tow at age 1 (1977-2002). Projections are for F values of 0.00, 0.26, 0.45, 0.72, F=1.00, and F=2.00.