Summer flounder Data Update for 2017

National Marine Fisheries Service
Northeast Fisheries Science Center
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Woods Hole, MA 02543

Fishery and Survey Data

Reported 2016 landings in the commercial fishery were 3,542 mt = 7.809 million lbs, about 96% of the commercial quota (3,683 mt = 8.120 million lbs). Estimated 2016 landings in the recreational fishery were 2,804 mt = 6.182 million lbs, about 114% of the recreational harvest limit (2,458 mt = 5.419 million lbs). Total commercial and recreational landings in 2016 were 6,346 mt = 13.991 million lbs and total commercial and recreational discards were 1,409 mt = 3.106 million lbs, for a total catch in 2016 of 7,755 mt = 17.097 million lbs (Table 1, Figure 1), about 5% above the 2016 ABC of 7,375 mt = 16.259 million lbs.

State and Federal survey stock abundance and biomass indices, with the exception of the Massachusetts indices, all decreased from their most recent peaks during 2009-2012 to 2016 (Figures 2-11). Indices of recruitment (age 0 fish) were generally lower over the last 6-7 years than in the previous decade; recruitment indices in 2016 were highly variable (Figures 12-18).

Table 1. Commercial (comm) and recreational (recr) fishery landings, estimated commercial and recreational dead discard, and total catch (metric tons) as used in the assessment of summer flounder, Maine to North Carolina. Includes MRIP 2004-2016 estimates of recreational catch, and 1982-2003 recreational catch adjusted by the 2004-2011 MRIP to MRFSS ratio for each catch type.

Year	Comm Landings	Comm Discard	Comm Catch	Recr Landings	Recr Discard	Recr Catch	Total Landings	Total Discard	Total Catch
1982	10,400	n/a	10,400	8,163	284	8,447	18,563	284	18,847
1983	13,403	n/a	13,403	12,527	361	12,888	25,930	361	26,291
1984	17,130	n/a	17,130	8,405	399	8,804	25,535	399	25,934
1985	14,675	n/a	14,675	5,594	88	5,682	20,269	88	20,357
1986	12,186	n/a	12,186	8,000	555	8,555	20,186	555	20,741
1987	12,271	n/a	12,271	5,450	502	5,951	17,721	502	18,222
1988	14,686	n/a	14,686	6,550	328	6,878	21,236	328	21,564
1989	8,125	456	8,581	1,417	43	1,460	9,542	499	10,041
1990	4,199	898	5,097	2,300	225	2,525	6,499	1,122	7,621
1991	6,224	219	6,443	3,566	412	3,978	9,790	631	10,420
1992	7,529	2,151	9,680	3,201	332	3,533	10,730	2,483	13,213
1993	5,715	701	6,416	3,956	874	4,830	9,671	1,575	11,246
1994	6,588	1,535	8,123	4,178	660	4,838	10,766	2,195	12,961
1995	6,977	821	7,798	2,428	723	3,152	9,405	1,545	10,950
1996	5,861	1,436	7,297	4,398	656	5,054	10,259	2,092	12,351
1997	3,994	806	4,800	5,314	535	5,849	9,308	1,341	10,649
1998	5,076	634	5,710	5,588	705	6,293	10,664	1,339	12,003
1999	4,820	1,660	6,480	3,747	683	4,430	8,567	2,343	10,910
2000	5,085	1,617	6,702	7,376	915	8,291	12,461	2,532	14,993
2001	4,970	405	5,375	5,213	1,225	6,438	10,183	1,630	11,813
2002	6,573	922	7,495	3,586	746	4,332	10,159	1,668	11,827
2003	6,450	1,144	7,594	5,213	847	6,060	11,663	1,991	13,653
2004	7,880	1,606	9,486	4,974	1,013	5,987	12,854	2,619	15,473
2005	7,671	1,484	9,155	4,929	950	5,879	12,600	2,434	15,034
2006	6,316	1,482	7,798	4,804	768	5,572	11,120	2,250	13,370
2007	4,544	2,110	6,654	4,199	1,002	5,201	8,743	3,112	11,855
2008	4,179	1,162	5,341	3,689	1,154	4,843	7,868	2,316	10,184
2009	5,013	1,446	6,459	2,716	1,140	3,856	7,729	2,586	10,316
2010	6,078	1,466	7,544	2,317	1,066	3,383	8,395	2,532	10,927
2011	7,515	1,096	8,611	2,645	1,093	3,738	10,160	2,189	12,349
2012	5,916	718	6,634	2,853	815	3,668	8,769	1,533	10,302
2013	5,643	712	6,355	3,351	758	4,109	8,994	1,470	10,464
2014	4,991	785	5,776	3,356	932	4,288	8,347	1,717	10,064
2015	4,843	670	5,513	2,209	563	2,772	7,052	1,233	8,285
2016	3,542	738	4,280	2,804	671	3,475	6,346	1,409	7,755

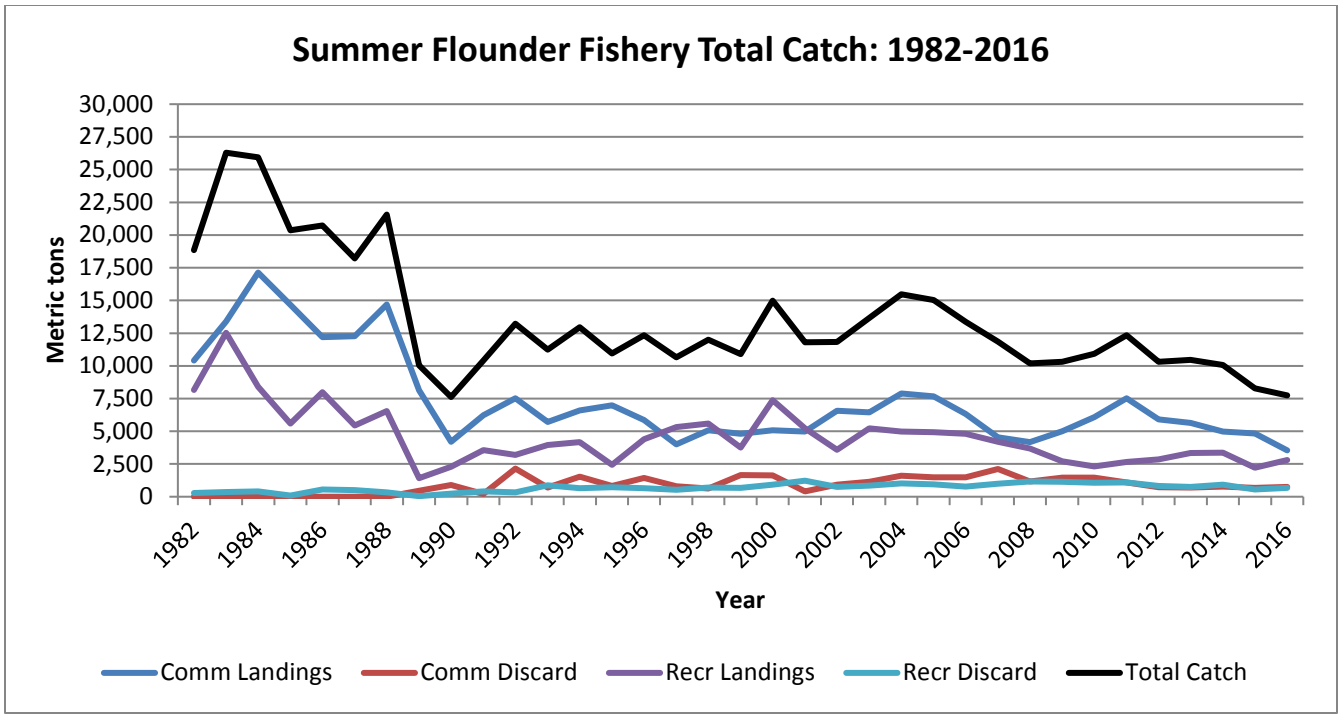

Figure 1. Summer flounder fishery total catch.

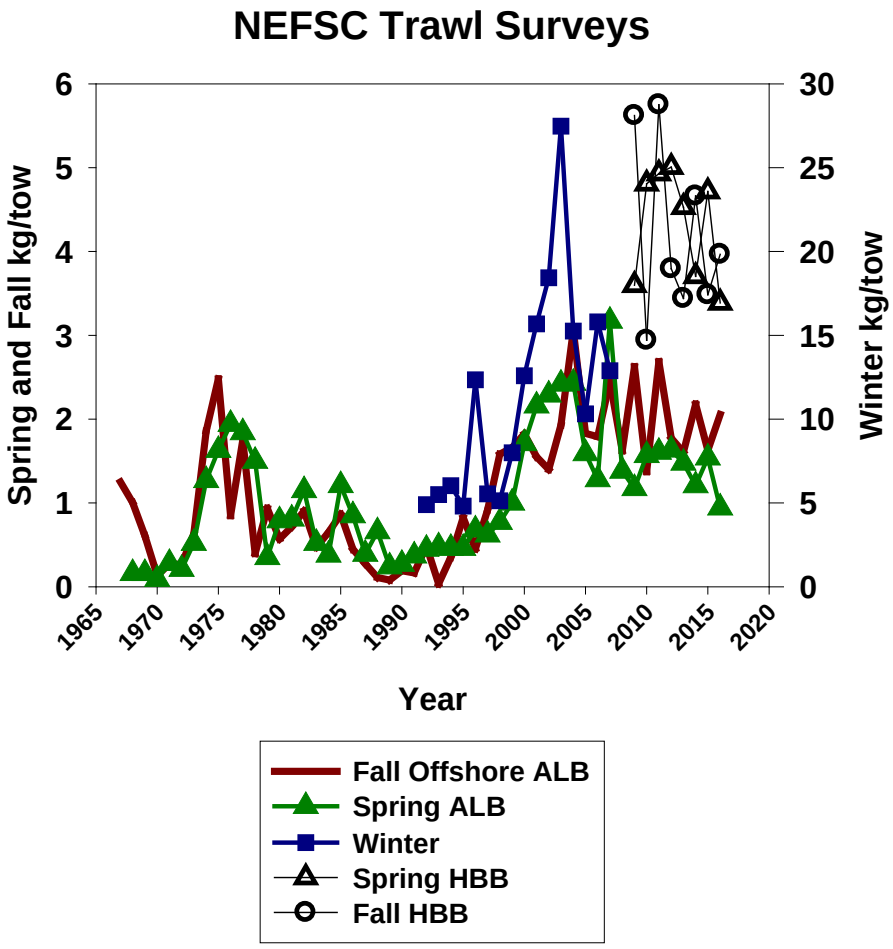

Figure 2. NEFSC trawl survey biomass indices for summer flounder. 'ALB' indices are calibrated FSV Albatross IV indices; 'HBB' indices are uncalibrated FSV Bigelow indices.

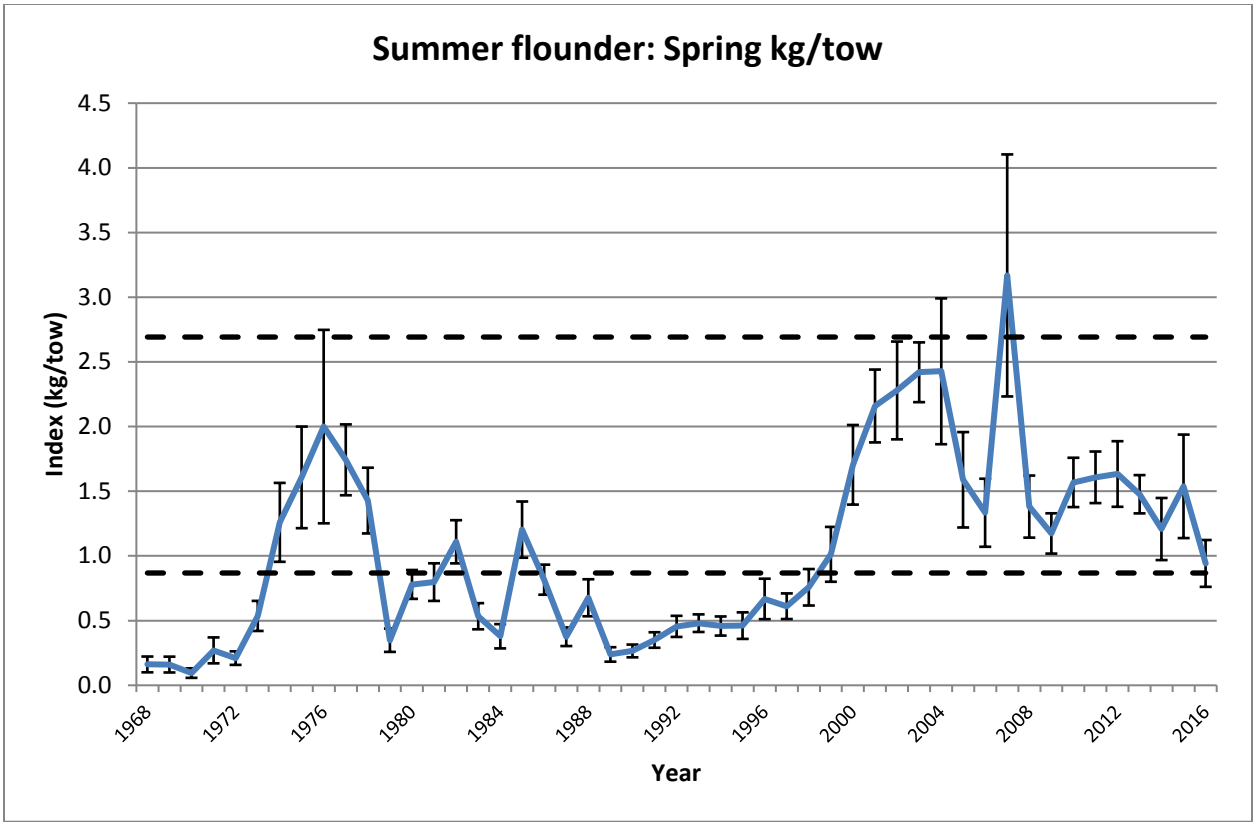

Figure 3. NEFSC spring trawl survey indices of summer flounder biomass. Whiskers around each annual index represent +/- one standard deviation. Dashed lines represent 80% confidence intervals around the 2007-2011 mean, a period when the stock was estimated to be at or above SSBMSY and not experiencing overfishing.

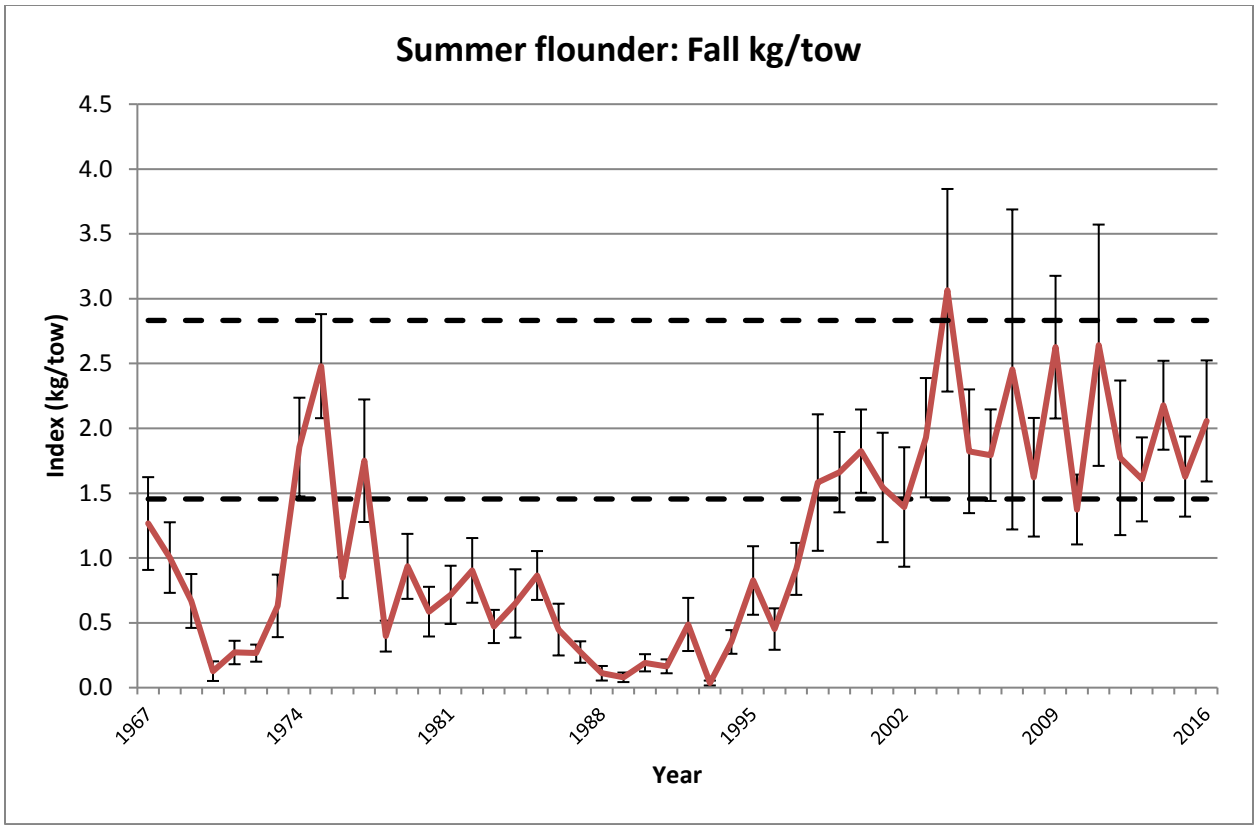

Figure 4. NEFSC fall trawl survey indices of summer flounder biomass. Whiskers around each annual index represent +/- one standard deviation. Dashed lines represent 80% confidence intervals around the 2007-2011 mean, a period when the stock was estimated to be at or above SSBMSY and not experiencing overfishing.

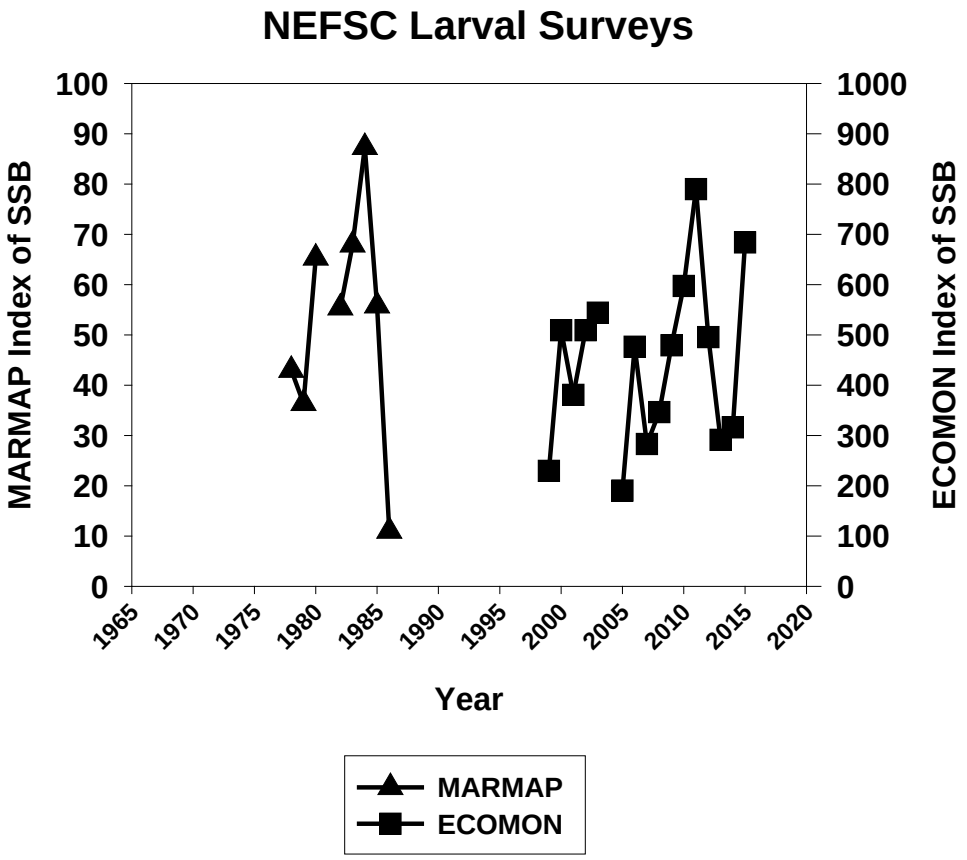

Figure 5. NEFSC larval survey indices of summer flounder spawning stock biomass (SSB).

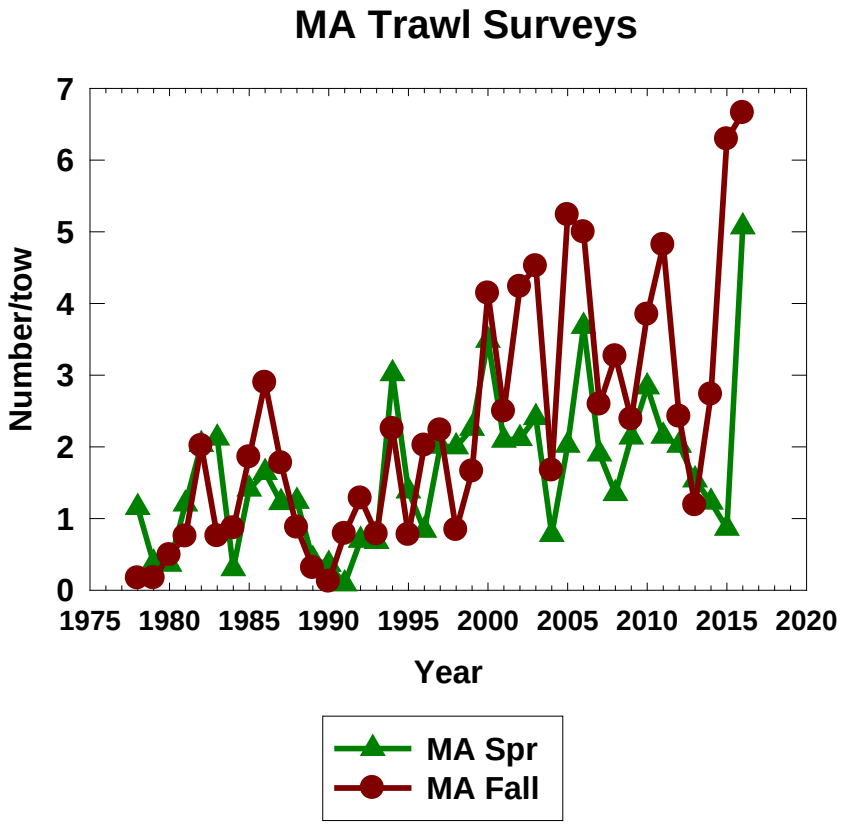

Figure 6. MADMF trawl survey indices for summer flounder.

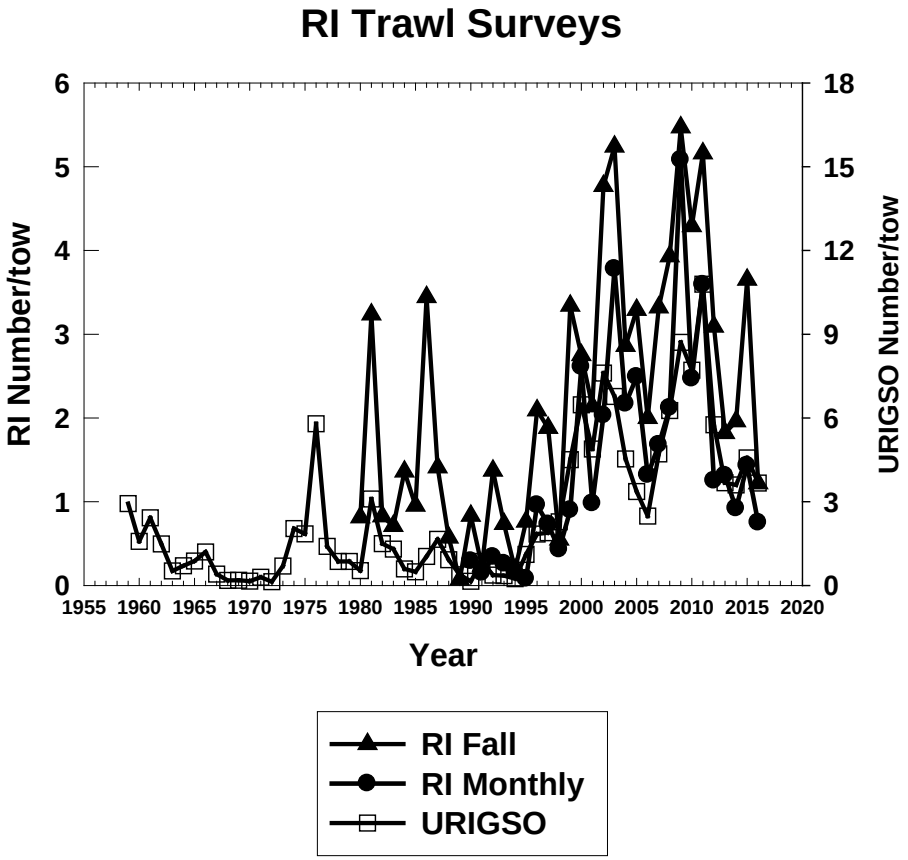

Figure 7. RIDFW and URIGSO trawl survey indices for summer flounder.

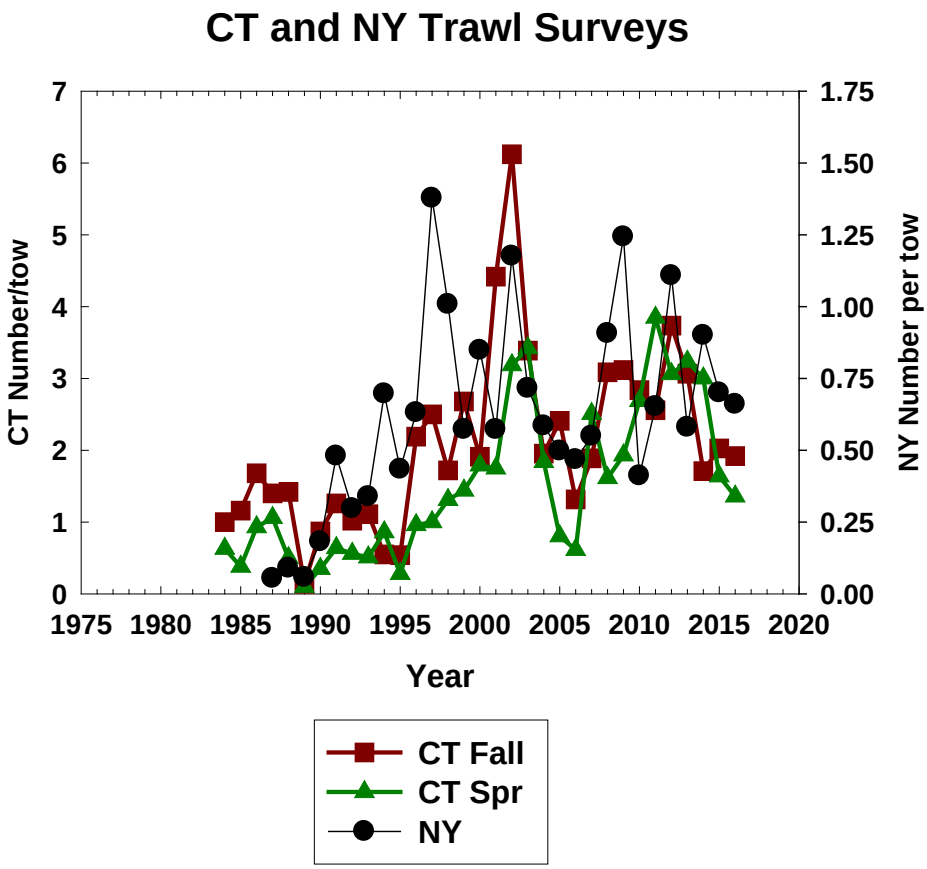

Figure 8. CTDEP and NYDEC trawl survey indices for summer flounder.

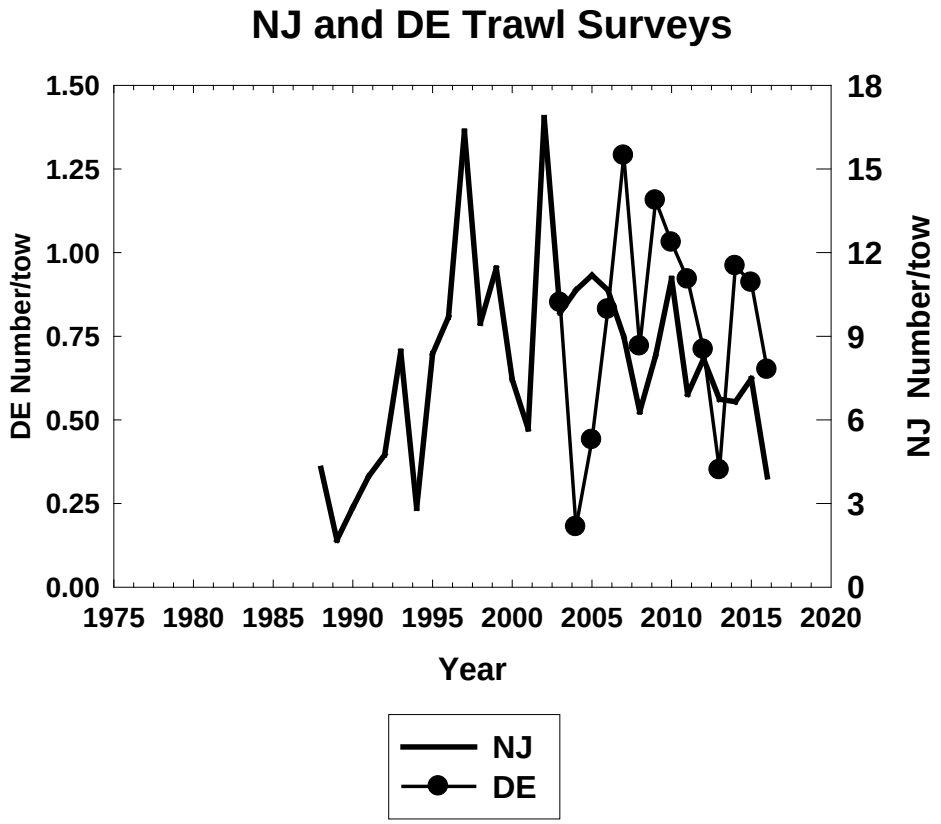

Figure 9. NJDMF and DEDFW trawl survey indices for summer flounder.

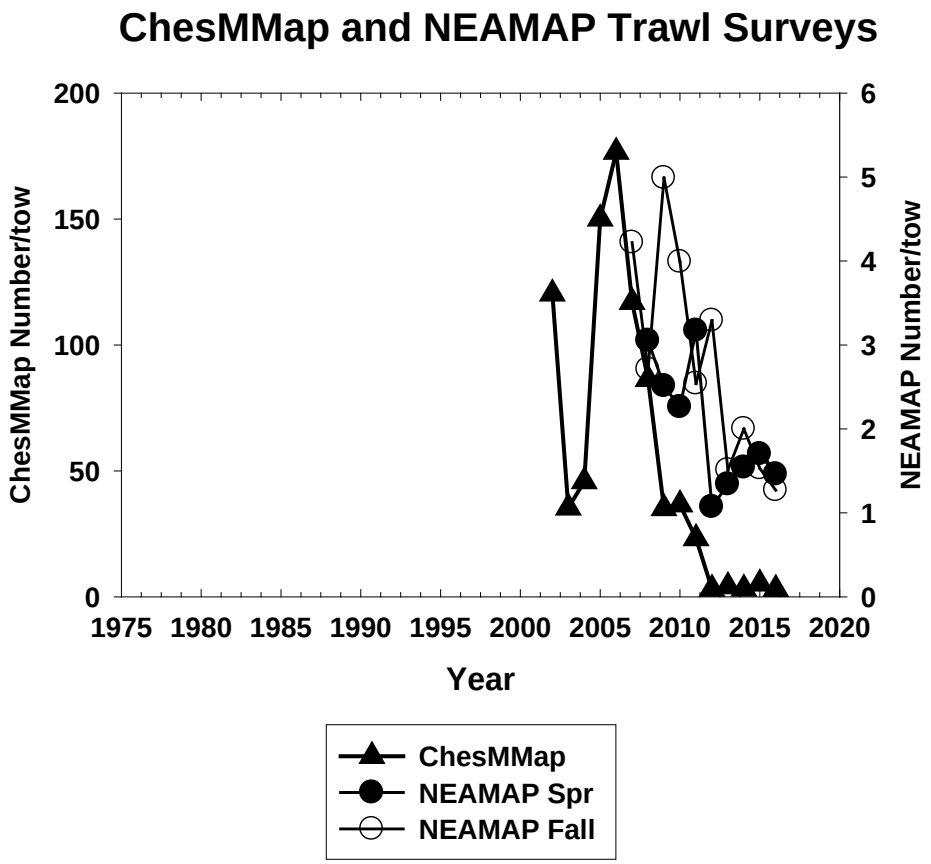

Figure 10. ChesMMAP and NEAMAP trawl survey indices for summer flounder.

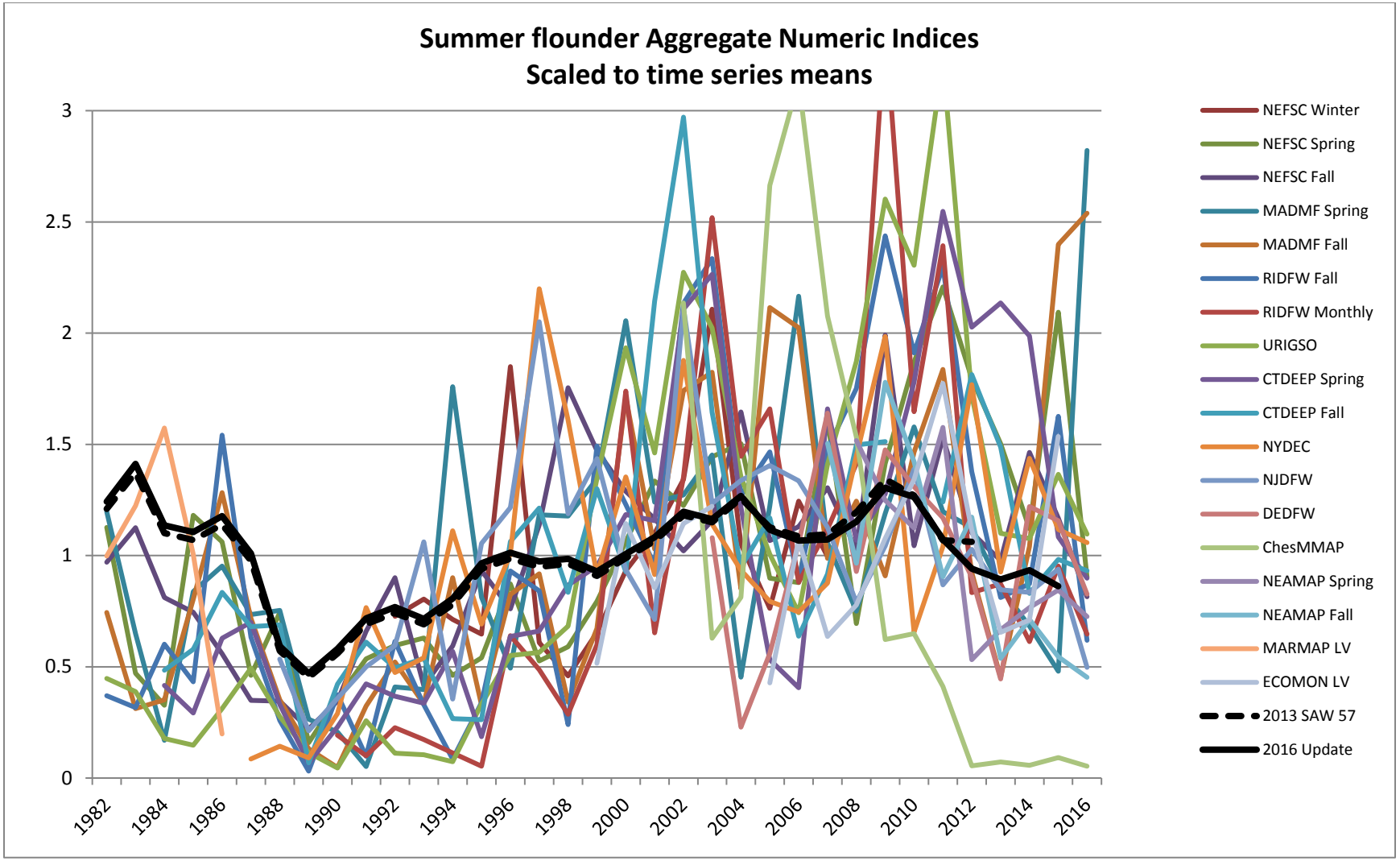

Figure 11. Summer flounder aggregate indices of numeric abundance.

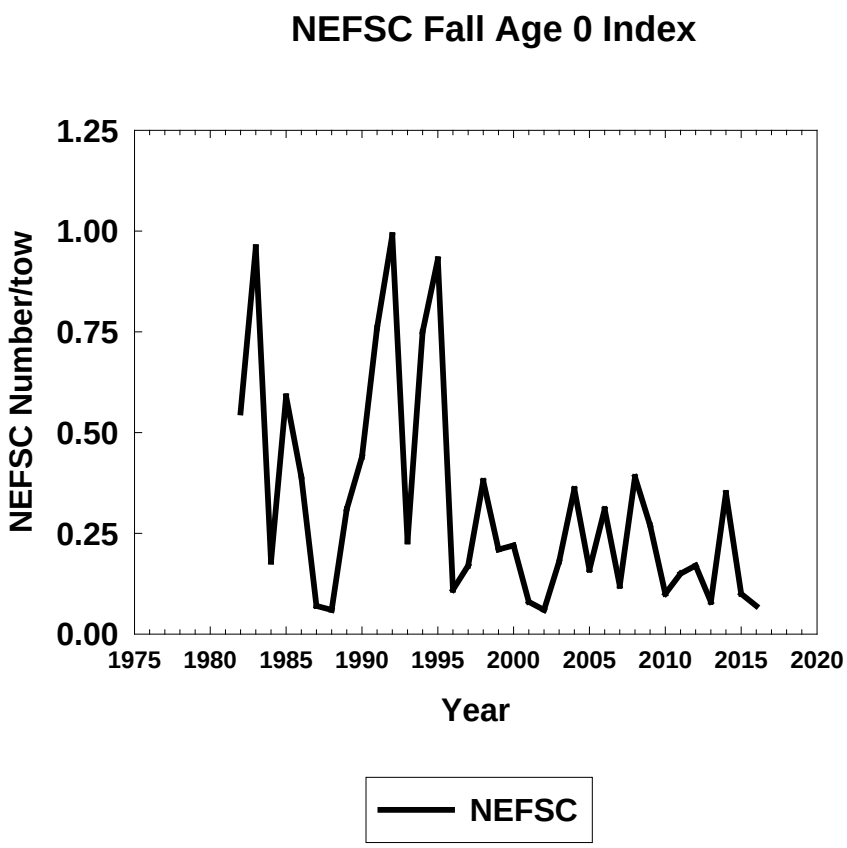

Figure 12. NEFSC age 0 abundance indices for summer flounder.

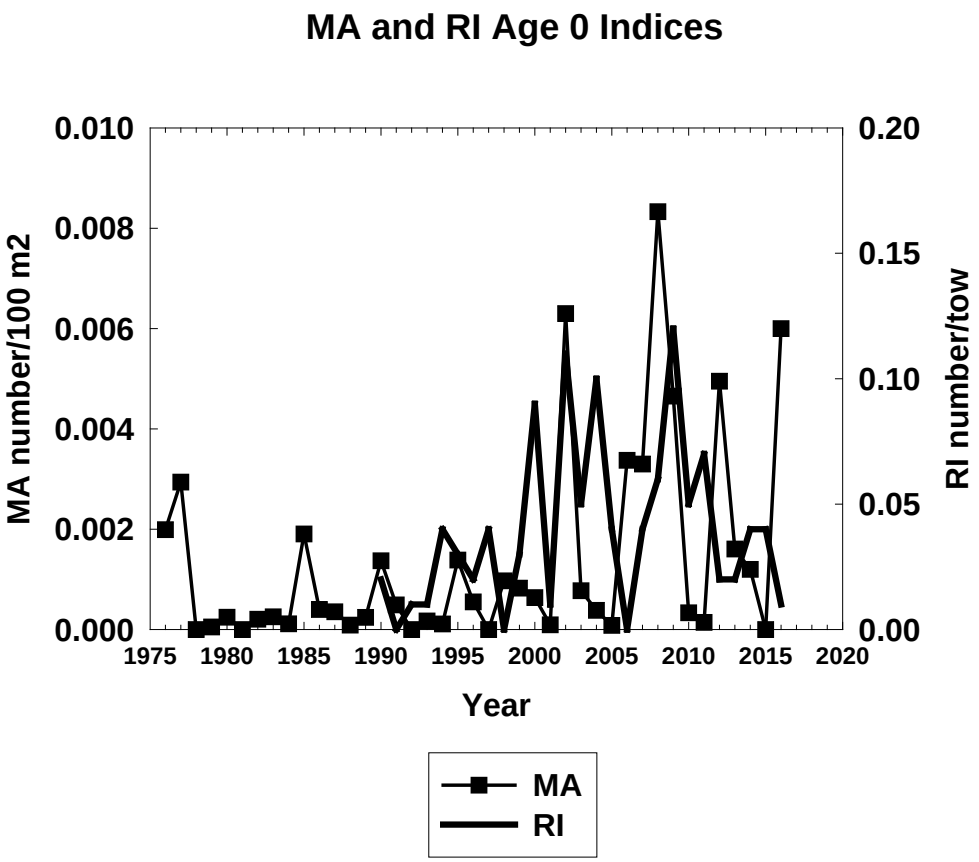

Figure 13. MADMF and RIDFW age 0 abundance indices for summer flounder.

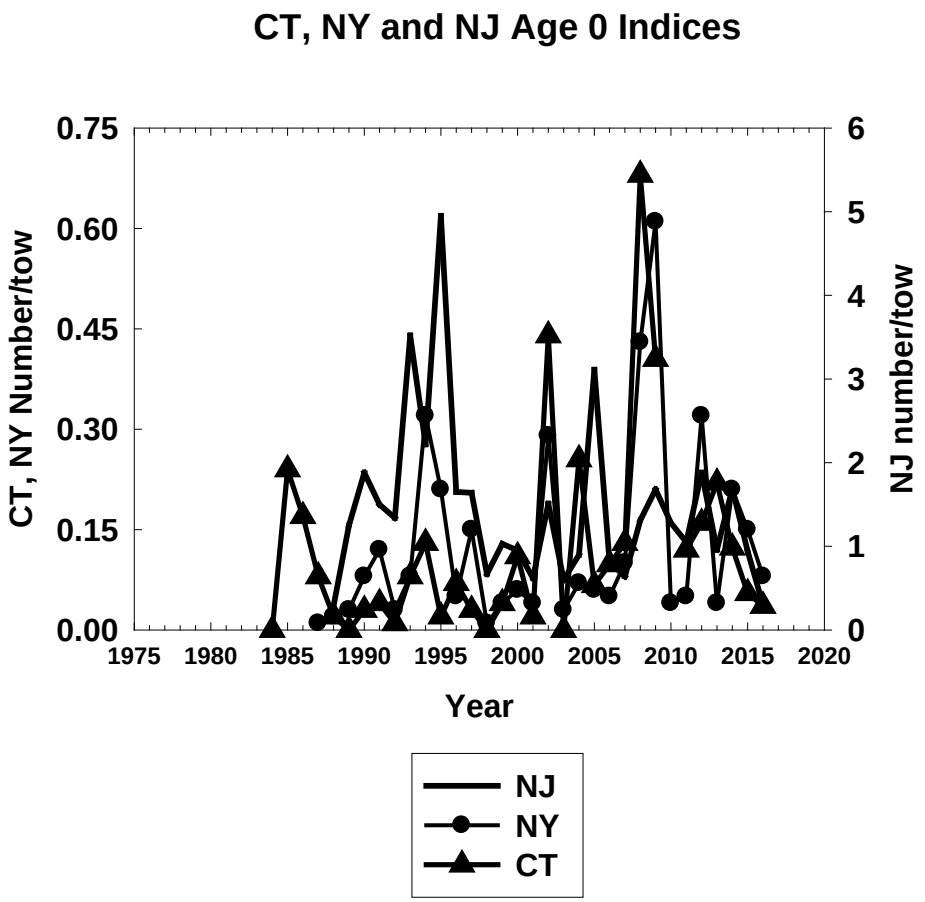

Figure 14. CTDEP, NYDEC, and NJDFW age 0 abundance indices for summer flounder.

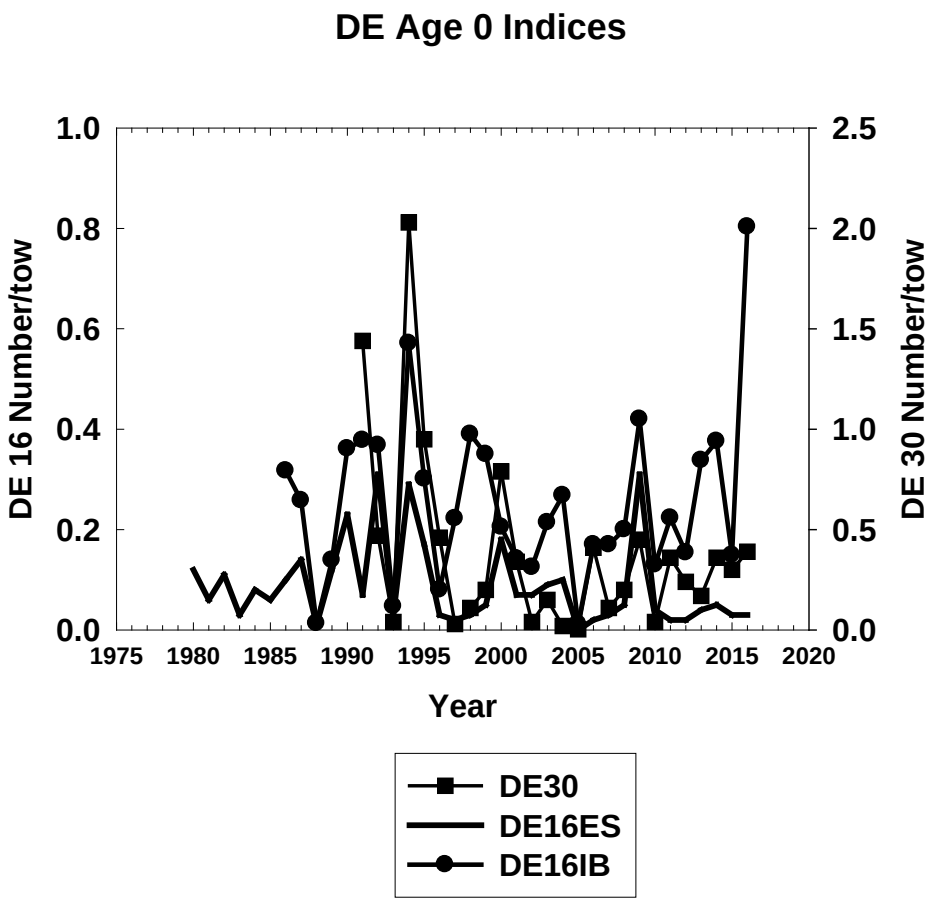

Figure 15. DEDFW age 0 abundance indices for summer flounder.

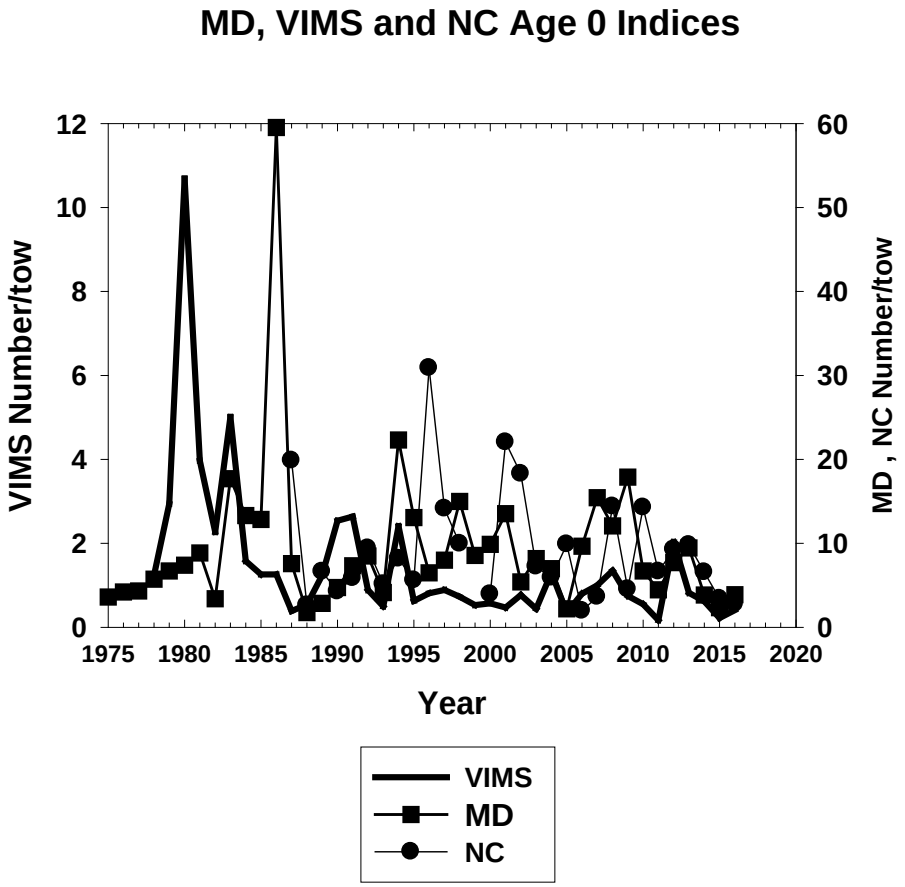

Figure 16. MDDNR, VIMS, and NCDMF age 0 abundance indices for summer flounder.

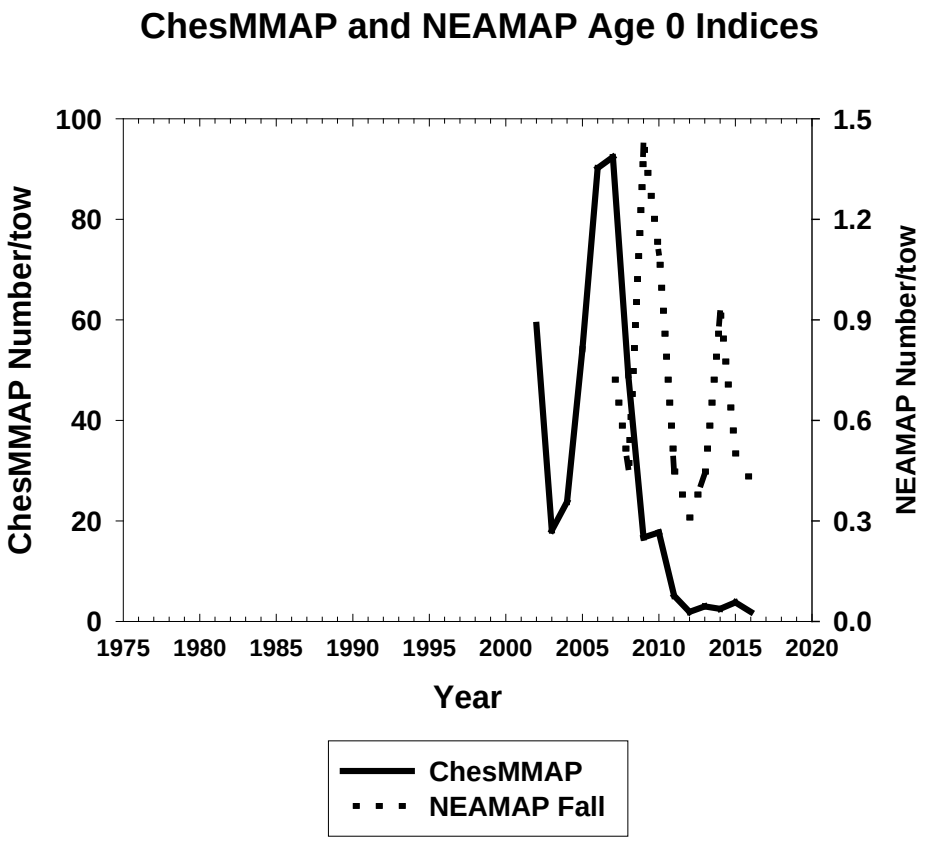

Figure 17. ChesMMAP and NEAMAP age 0 abundance indices for summer flounder.

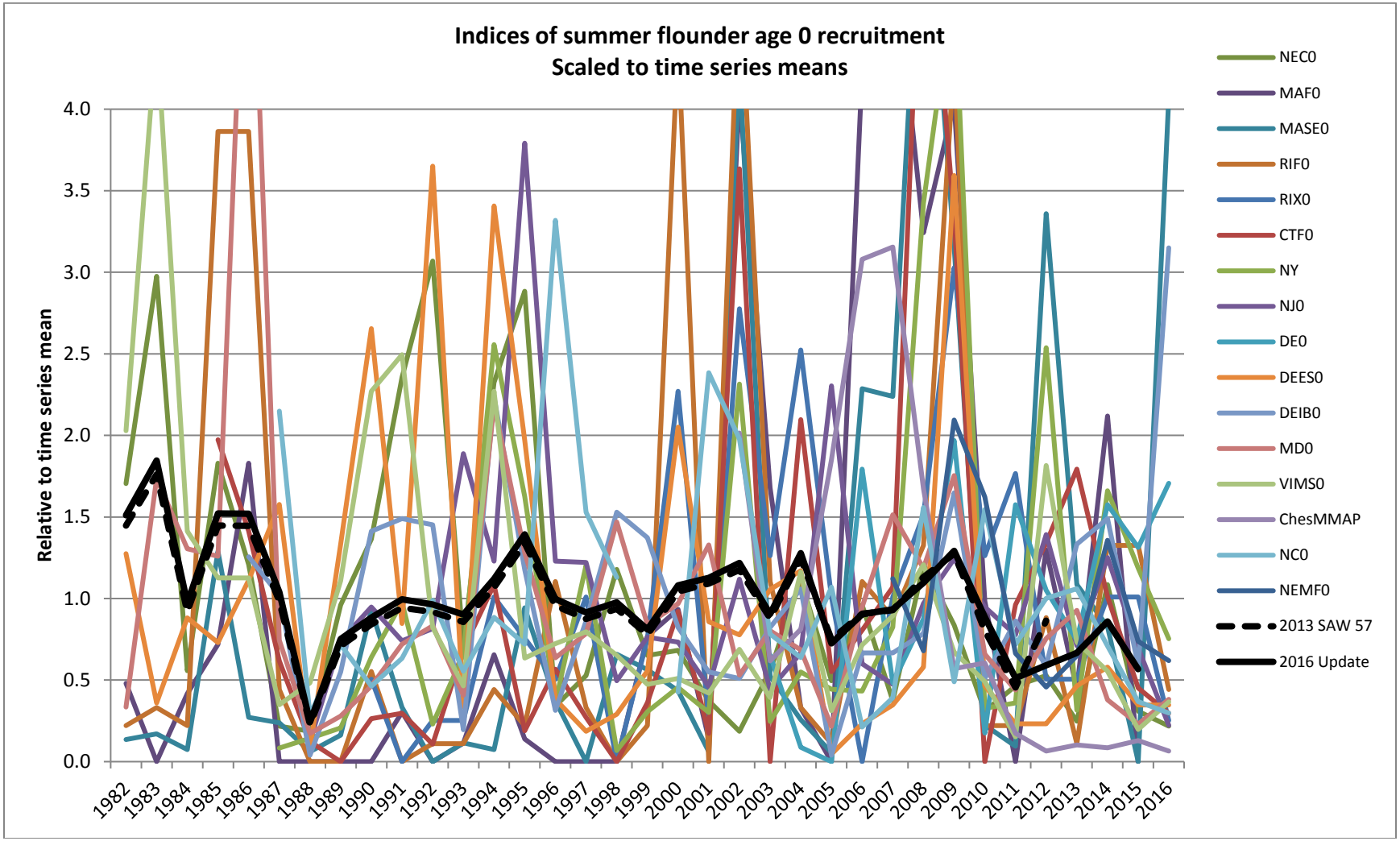

Figure 18. Summer flounder age 0 recruitment indices.