Black Sea Bass Data Update

Presentation to MAFMC SSC
July 23,2014
Baltimore, MD

Northeast Fisheries
Science Center

Black sea bass 2012-2013 commercial landings by area and market category

Market Category

2013 kg

area	uncl	large	jumbo	medium	small	total	Pct
512-539	14,355	76,359	87,402	45,056	12,400	235572	23%
611-623	22,733	220,399	223,245	167,130	16,603	650111	63%
625-636	91	41,136	26,321	54,594	19,148	141291	14%
	37,179	337,894	336,968	266,780	48,151		
	4%	33%	33%	26%	5%	1,026,974	

2012

area	uncl	large	jumbo	medium	small	total	Pct
512-539	7,758	50,177	75,563	19,428	8,065	160,991	21%
611-623	20,597	161,640	155,255	165,155	13,497	516,143	66%
625-636	1,037	26,400	23,527	38,357	15,611	104,933	13%
	29,392	238,217	254,344	222,940	37,173		
	4%	30%	33%	29%	5%	782,067	

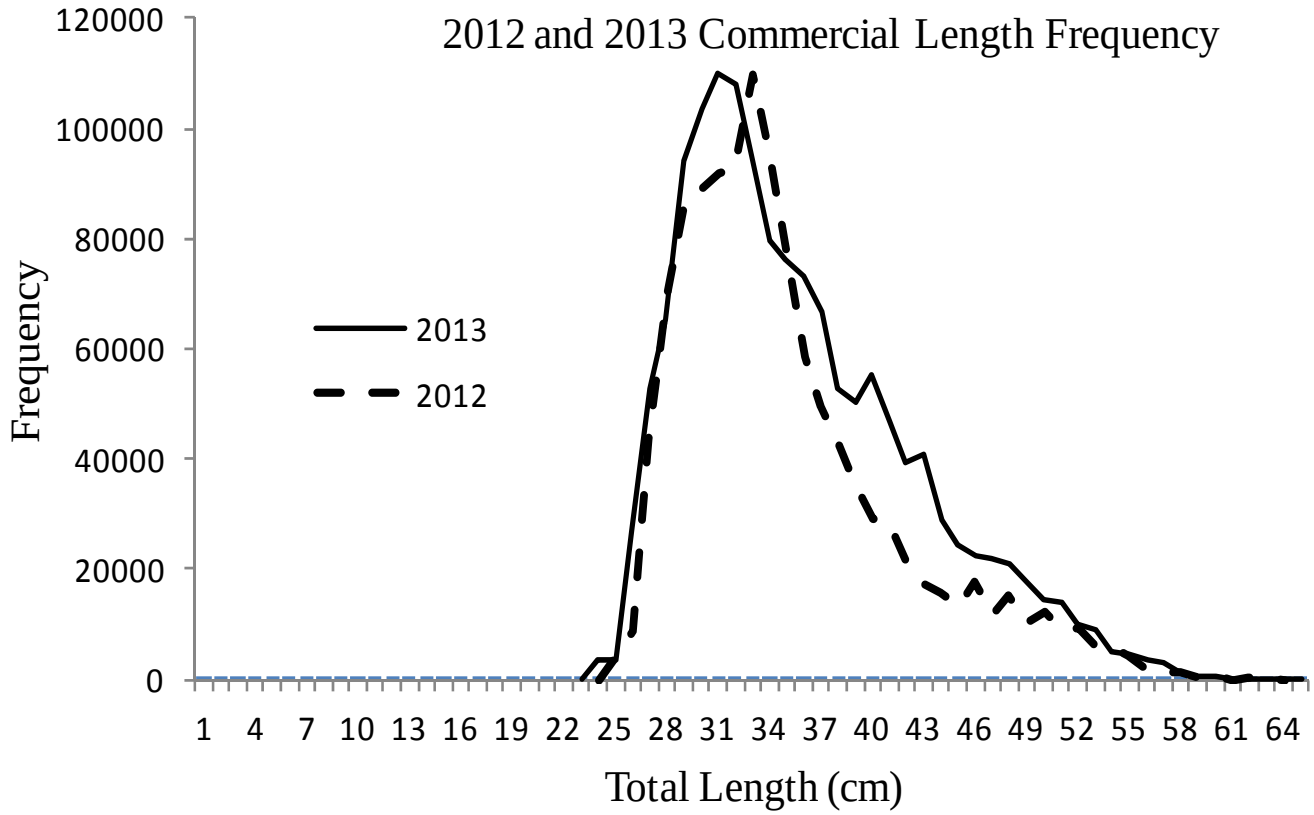
Black sea bass 2012-2013 commercial landings by gear and market category

2013 kg

	uncl	large	jumbo	medium	small	total	
POTS + TRAPS,FISH	9,939	60,909	49,832	91,365	28,065	240,110	23%
TRAWL,OTTER,BOTTOM,FISH	5,566	222,814	260,773	90,128	14,799	594,079	58%
HANDLINE	4,170	34,232	20,680	28,385	2,159	89,625	9%
OTHER	4,433	23,791	23,823	47,386	3,727	103,159	10%

2012 kg

	uncl	large	jumbo	medium	small	total	
POTS + TRAPS,FISH	10,042	55,871	49,434	114,524	23,518	253,390	32%
TRAWL,OTTER,BOTTOM,FISH	7,342	144,943	146,224	58,220	9,073	365,801	47%
HANDLINE	7,767	24,956	46,460	13,062	2,637	94,881	12%
OTHER	4,241	12,448	12,227	37,134	1,944	67,995	9%


2012 and 2013 Commercial Length Frequency
Frequency
120000
100000
80000
60000
40000
20000
0
2013
2012
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46 49 52 55 58 61 64
Total Length (cm)

Black sea bass 2012-2013 commercial discard estimates by gear

2013	mt	mortality rate	losses (mt)
Bottom otter trawl	148.4	1.00	148.4
handline	11.1	0.15	1.7
fish pot	31.1	0.15	4.7
lobster pot-offshore	1.7	0.15	0.3
other	2.9	1.00	2.9
total discard mt	195.2		
total discard loss mt			157.9

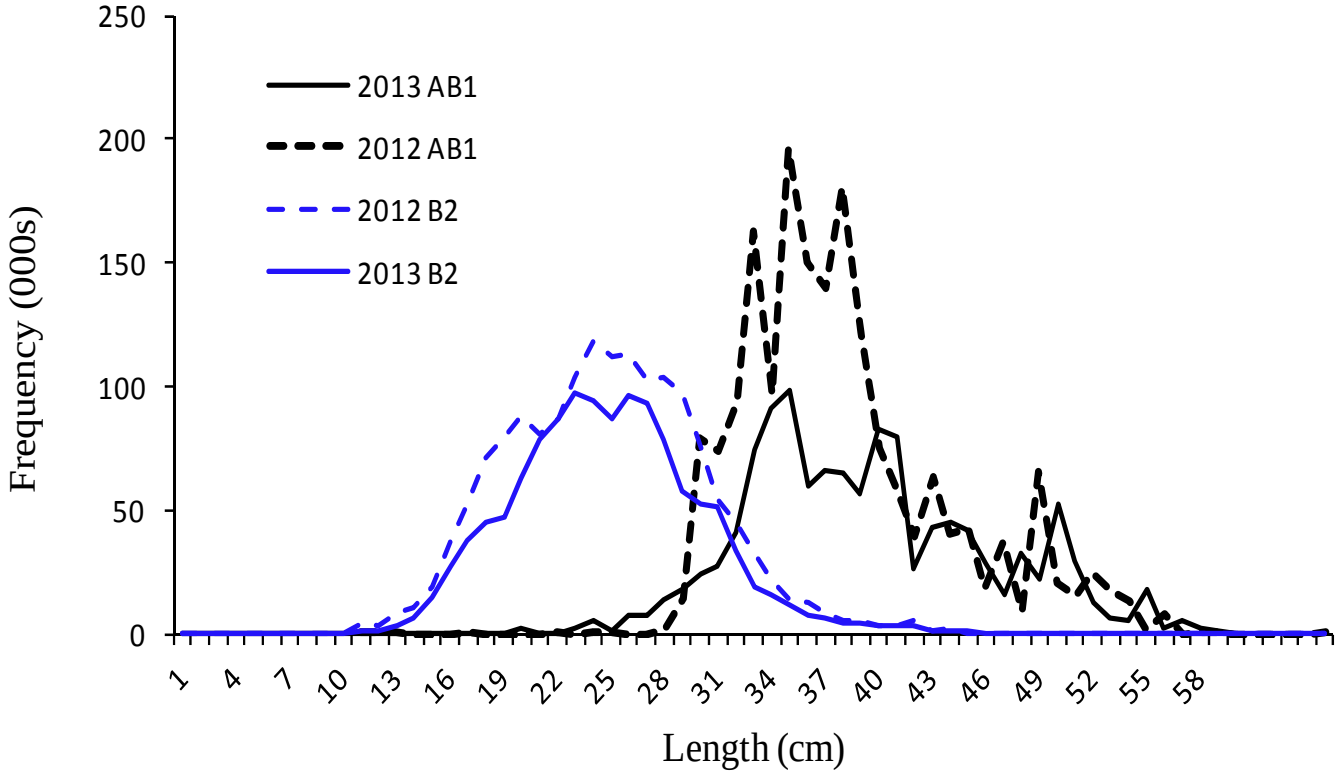
2012	mt	mortality rate	losses (mt)
Bottom otter trawl	91.8	1.00	91.8
handline	12.9	0.15	1.9
fish pot	21.2	0.15	3.2
lobster pot-offshore	21.6	0.15	3.2
other	11.2	1.00	11.2
total discard mt	158.8		
total discard loss mt			111.4

Black sea bass 2012-2013 recreational catch, ME-NC

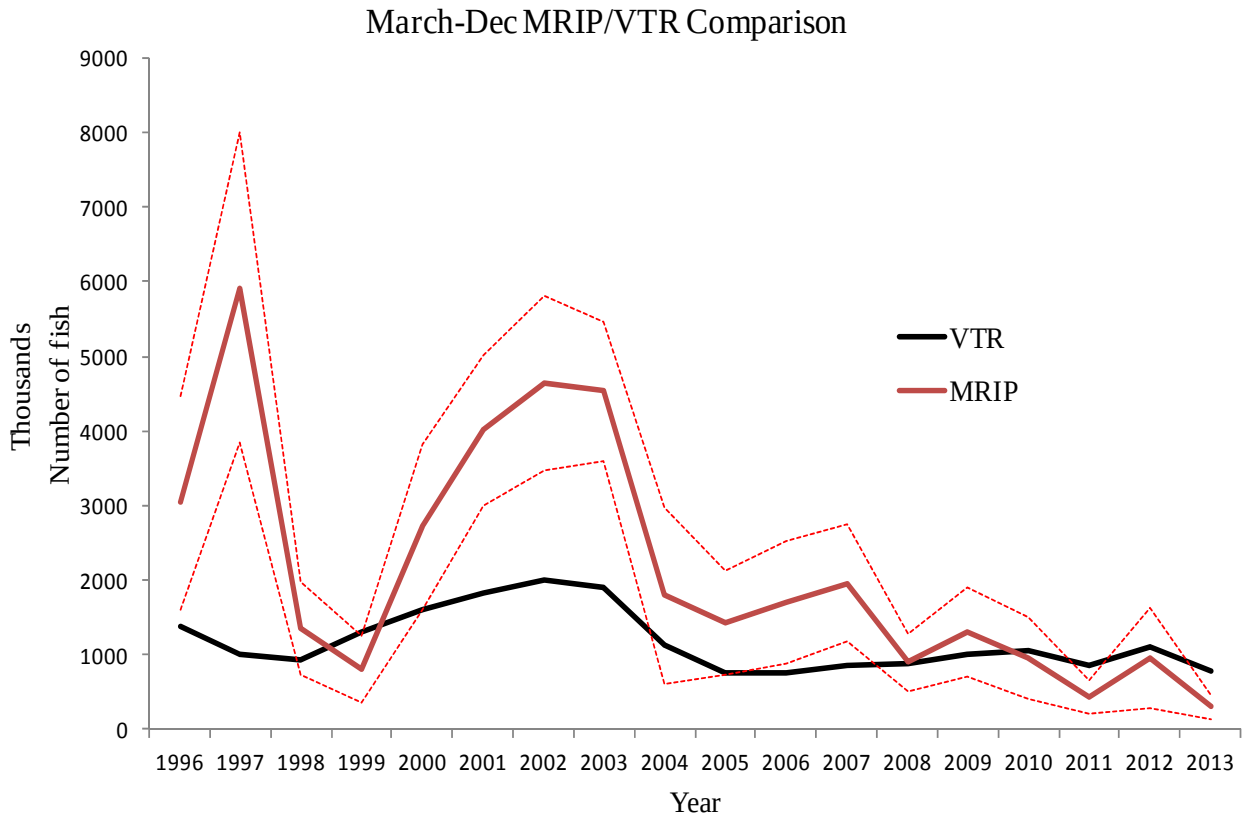
Number

	AB1	B2	B2 mortality
2012	1,874,267	10,606,249	1,590,937
2013	1,220,958	8,282,715	1,242,407

Black sea bass 2012-2013 recreational length frequencies for landings (AB1) and discards (B2)



Comparison of annual black sea bass landing estimates from MRIP for-hire survey and for-hire vessel trip reports, March-December



Black sea bass annual wave 1 catch and effort from for-hire vessel trip reports

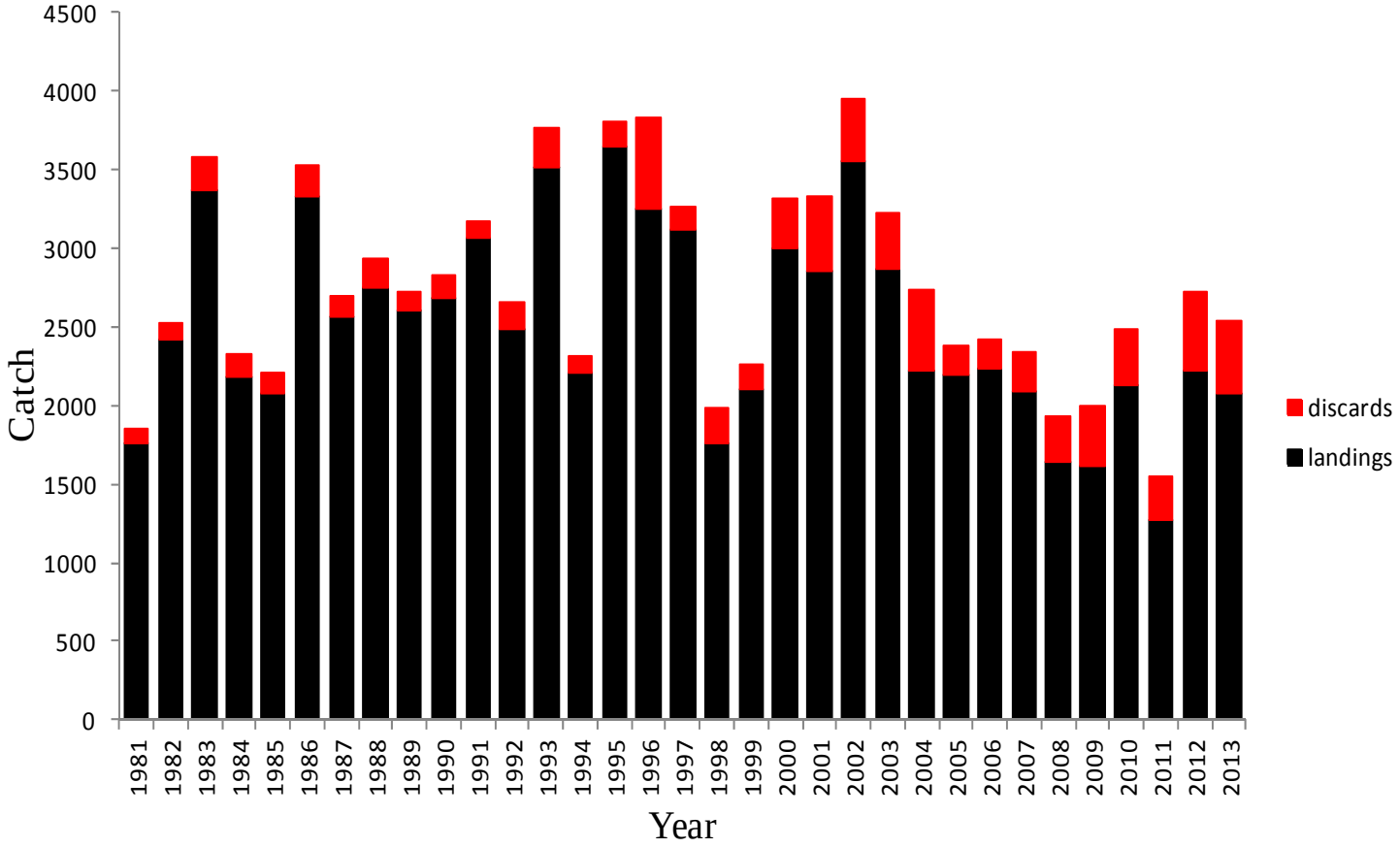
Jan/Feb sea bass catch- VTR results MA-VA

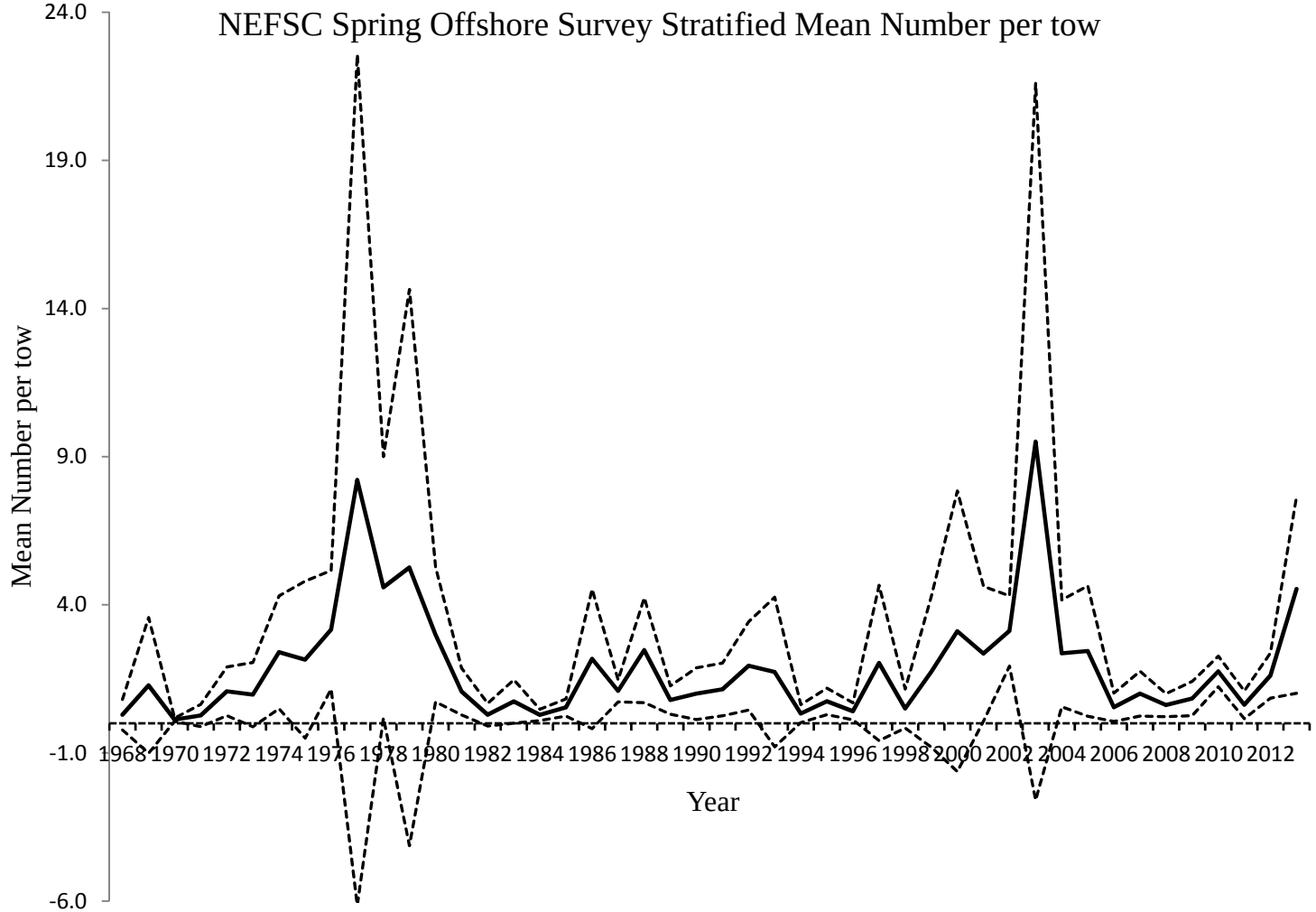
year	number trips	number anglers	number caught	number kept	number discarded	number kept per angler	kept/discard ratio
1996	13	435	3998	3866	132	8.9	29.3
1997	45	1233	10457	10342	115	8.4	89.9
1998	35	889	7089	6754	335	7.6	20.2
1999	34	786	11526	11019	507	14.0	21.7
2000	36	909	11761	10289	1472	11.3	7.0
2001	27	1036	31581	28016	3565	27.0	7.9
2002	70	2152	29478	25909	3569	12.0	7.3
2003	30	1200	22704	21451	1253	17.9	17.1
2004	36	1496	17849	16515	1334	11.0	12.4
2005	46	1709	18865	17680	1185	10.3	14.9
2006	63	2463	37408	35840	1568	14.6	22.9
2007	125	3092	39621	36045	3576	11.7	10.1
2008	103	2941	40539	37462	3077	12.7	12.2
2009	117	3032	44449	38960	5489	12.8	7.1
2010	15	394	2319	61	2258	0.2	0.0
2011	9	171	369	1	368	0.0	0.0
2012	160	3262	8612	1147	7465	0.4	0.2
2013	245	6353	98189	70533	27656	11.1	2.6

Black sea bass ME-NC commercial and recreational landings and discards (mt), 1981-2013

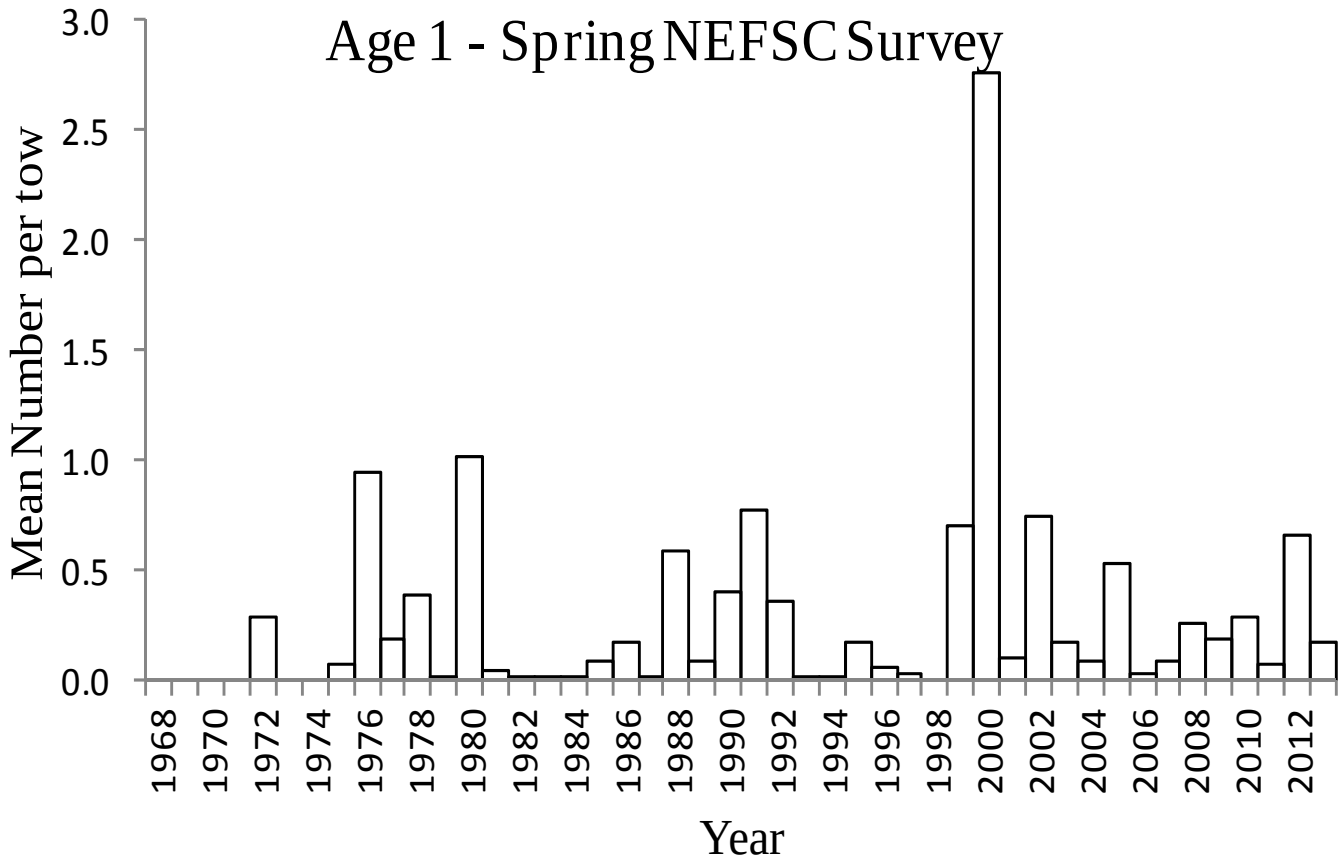
Year	Landings Com	Discard losses Com	Landings Rec (AB1)	Discard losses Rec (B2*15%)	Total
1981	1129	67	625	35	1,857
1982	1177	70	1243	40	2,530
1983	1513	90	1860	114	3,577
1984	1519	105	666	36	2,326
1985	1075	89	1002	45	2,210
1986	1508	101	1824	95	3,528
1987	1635	98	929	36	2,698
1988	1424	102	1324	90	2,940
1989	1105	82	1502	39	2,727
1990	1402	53	1283	92	2,830
1991	1190	19	1876	92	3,176
1992	1264	91	1219	82	2,657
1993	1353	179	2167	64	3,762
1994	848	34	1355	80	2,318
1995	889	36	2753	124	3,802
1996	1448	483	1804	91	3,826
1997	1198	31	1920	112	3,261
1998	1171	136	588	86	1,981
1999	1305	36	802	112	2,255
2000	1205	42	1800	263	3,310
2001	1299	187	1556	295	3,336
2002	1587	24	1968	372	3,952
2003	1359	58	1512	301	3,230
2004	1405	370	817	140	2,733
2005	1298	29	902	153	2,383
2006	1285	16	945	166	2,413
2007	1037	57	1052	192	2,338
2008	875	37	771	242	1,925
2009	523	165	1088	226	2,002
2010	751	110	1373	251	2,485
2011	765	135	512	133	1,546
2012	782	111	1444	387	2,724
2013	1027	158	1054	300	2,539

Black sea bass landings and discards, 1981-2013

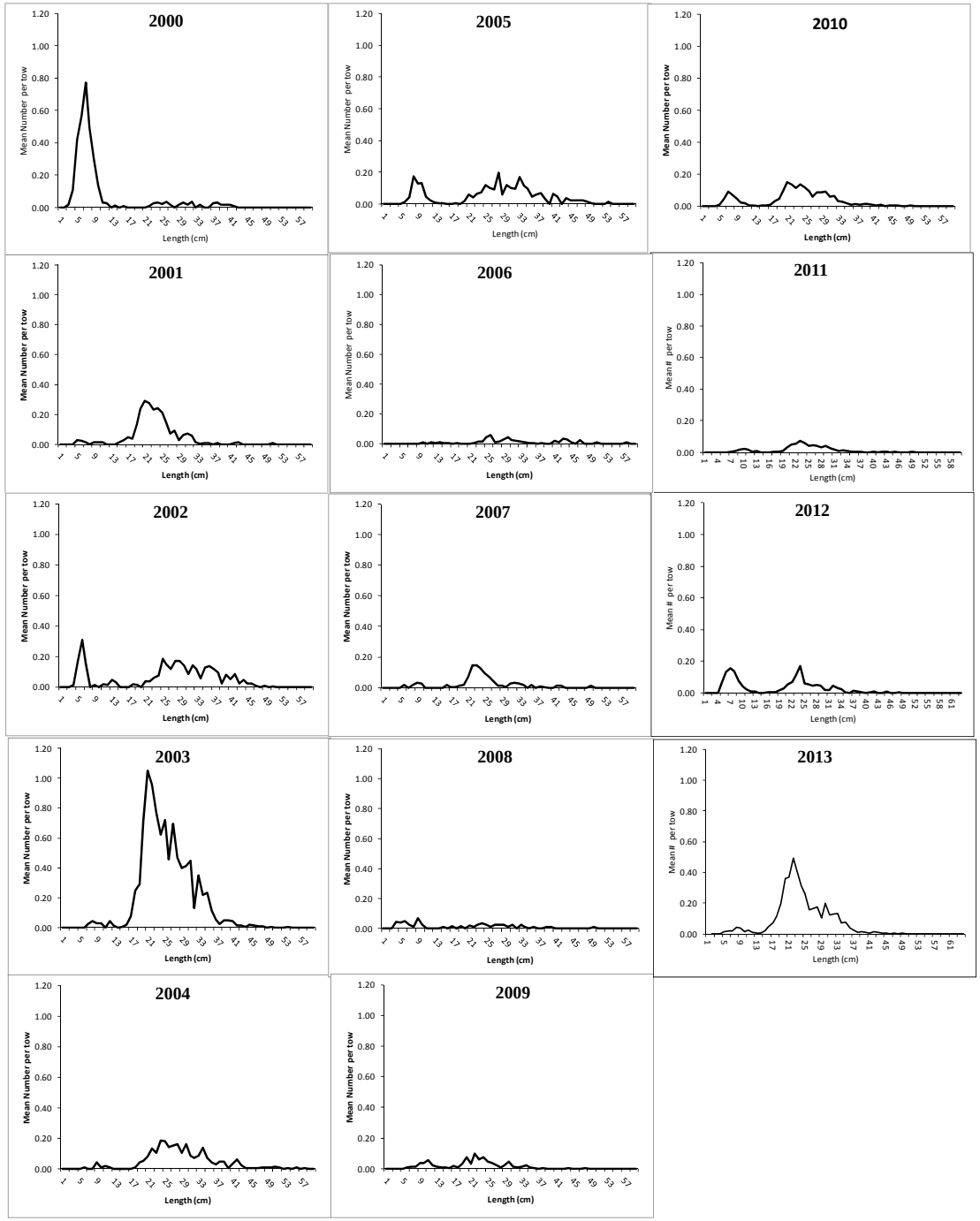



NEFSC Spring Offshore Survey Stratified Mean Number per tow
Mean Number per tow
24.0
19.0
14.0
9.0
4.0
-1.0
-6.0
1968 1970 1972 1974 1976 1978 1980 1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012
Year

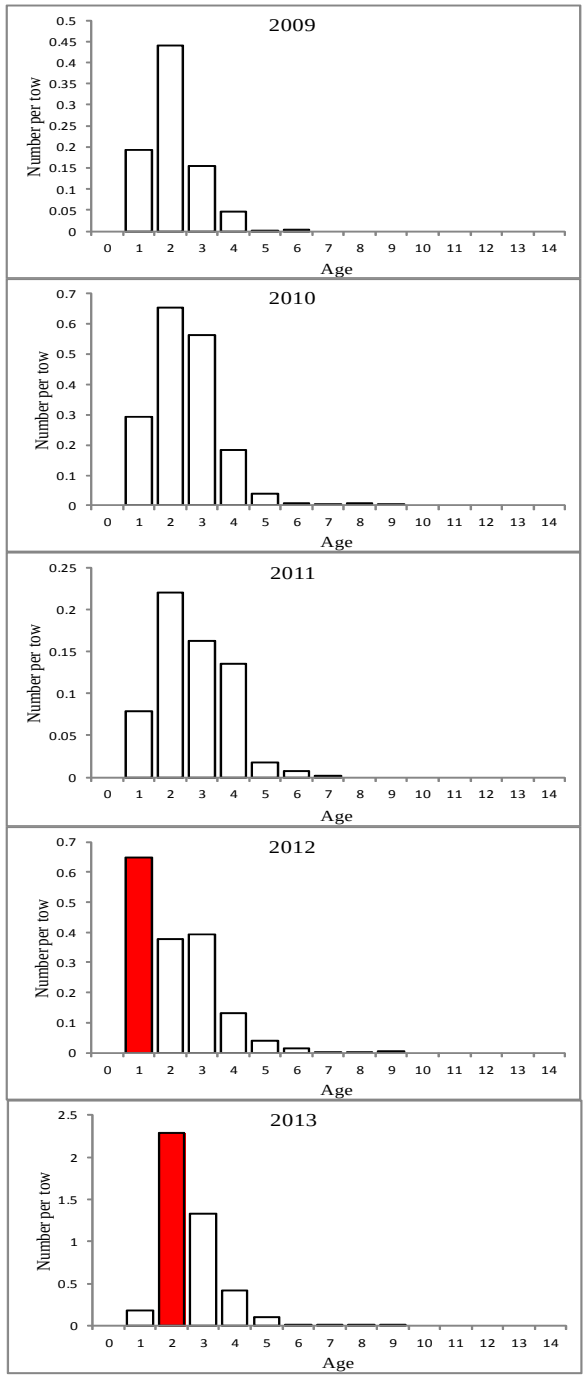
Black sea bass age 1 mean number per tow from NEFSC spring offshore survey



Black sea bass length frequencies from NEFSC Spring offshore survey, 2000-2013



Black sea bass mean number per tow by age from NEFSC Spring offshore



Black sea bass age 1 state and federal survey indices, standardized to series mean

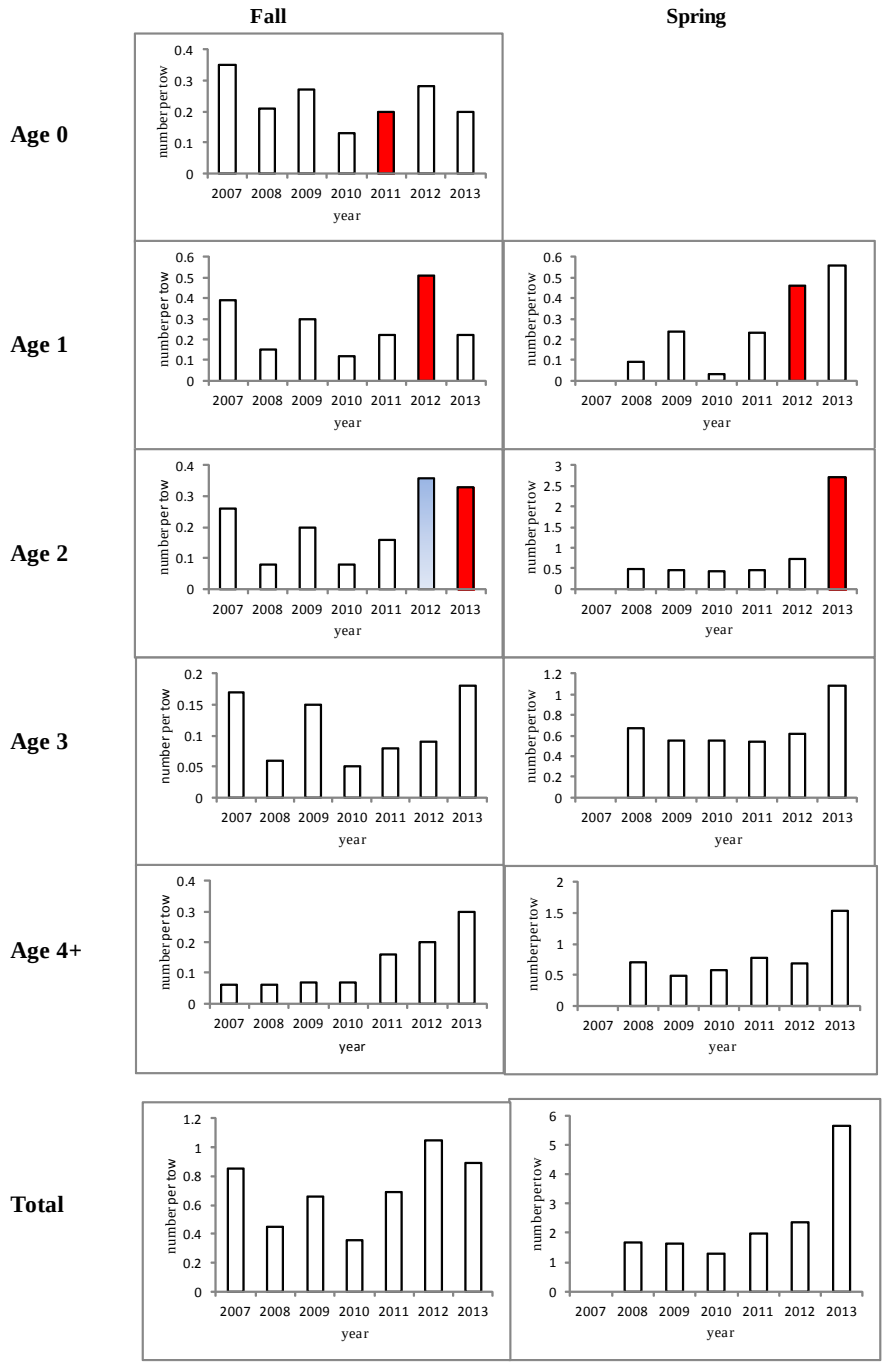
age 1 ***relative to series average***

	VA	MD spring age	NJ	CT <=14cm	RI	MA	NEFSC spring <= 14 cm	NEFSC winter	NEAMAP
1984					0.00	0.00	0.02		
1985					0.00	1.05	0.30		
1986					0.90	1.03	0.56		
1987					0.00	0.00	0.08		
1988				0.15	0.00	0.00	1.82		
1989	1.17	0.12	0.15	0.00	0.00	0.00	0.26		
1990	3.29	1.31	0.00	0.15	0.00	0.49	1.24		
1991	1.56	1.27	0.92	0.59	0.77	0.00	2.38		
1992	1.79	0.96	0.26	0.00	0.00	0.00	1.13	0.33	
1993	0.31	0.14	0.26	0.00	0.00	0.00	0.02	0.06	
1994	1.47	0.75	0.25	0.00	0.00	0.00	0.05	0.19	
1995	1.48	1.86	1.79	0.00	0.00	0.61	0.57	0.32	
1996	0.70	0.06	0.05	0.00	0.00	0.54	0.18	1.17	
1997	0.50	0.99	0.19	0.00	0.77	0.51	0.09	0.12	
1998	0.64	0.32	0.01	0.00	0.00	0.00	0.00	0.06	
1999	0.80	1.55	0.34	0.15	0.78	0.00	2.17	0.50	
2000	0.81	1.79	1.62	2.52	8.24	5.65	8.52	3.04	
2001	1.03	1.18	0.79	0.00	0.00	0.00	0.30	0.60	
2002	1.80	2.18	8.33	7.27	1.96	2.44	2.31	3.50	
2003	0.89	0.89	0.46	0.00	0.00	0.00	0.53	2.35	
2004	0.17	0.29	0.05	0.00	0.00	0.00	0.28	0.24	
2005	0.08	0.26	1.56	0.00	0.00	0.00	1.67	0.58	
2006	0.27	1.17	0.20	0.15	2.01	2.30	0.11	0.68	
2007	0.61	1.39	1.65	1.93	0.78	0.00	0.28	2.27	
2008	1.16	2.93	0.29	2.08	3.22	2.47	0.81		0.34
2009	0.57	0.60	1.26	1.34	0.45	1.29	0.60		0.89
2010	0.45	0.85	0.41	0.00	0.00	1.07	0.90		0.11
2011	1.55	0.44	0.54	0.30	0.38	0.00	0.24		0.86
2012	0.91	0.98	2.32	9.35	8.62	9.62	2.03		1.71
2013		0.70	1.32	1.04	1.12	0.94	0.56		2.09

Black sea bass mean number per tow at age from NEAMAP spring and fall surveys

NEAMAP

	Age					
fall	0	1	2	3	4+	all
2007	0.35	0.39	0.26	0.17	0.06	0.85
2008	0.21	0.15	0.08	0.06	0.06	0.45
2009	0.27	0.3	0.2	0.15	0.07	0.66
2010	0.13	0.12	0.08	0.05	0.07	0.36
2011	0.2	0.22	0.16	0.08	0.16	0.69
2012	0.28	0.51	0.36	0.09	0.2	1.05
2013	0.2	0.22	0.33	0.18	0.3	0.89

	Age				
spring	1	2	3	4+	all
2007					
2008	0.09	0.48	0.67	0.7	1.68
2009	0.24	0.46	0.55	0.49	1.64
2010	0.03	0.44	0.55	0.58	1.3
2011	0.23	0.45	0.54	0.78	1.99
2012	0.46	0.72	0.62	0.69	2.36
2013	0.56	2.71	1.08	1.54	5.66
2014					

Black sea bass mean number per tow at age from spring and fall NEAMAP surveys