

SEDAR 2 Southeast Black Sea Bass and Vermillion Snapper  
Data Workshop  
Life History and Reproductive Documentation

Black Seabass Data Workshop  
LHrepor.doc

Size and age at maturity of females (Sex codes = 2, 5):

**Immature:** maturity code = 1  
**Mature:** maturity code = 2, 3, 4, 5, 7, 8, B, C, D, E, F, G  
Eliminated maturity codes = 0, 6, 9, A  
See tables in MARMAP life history studies.doc.  
Raw data file: bsb05.mrg  
Excel file: sizemat.xls; agemat.xls  
Program files: sizemat.sas

All data are from fishery-independent sampling by MARMAP program. Fishery-dependent samples collected by MARMAP were not used as few immature specimens were present.

mm TL	H&L	H&L num	BFT	BFT num	FLT	FLT num	CHV	Chv num
101-125								
126-150	0.727273	11	0.875	8	0.777778	9	0.454545	33
151-175	0.744048	168	0.962963	81	0.806452	93	0.936	375
176-200	0.907348	626	0.961415	311	0.938144	291	0.992608	947
201-225	0.990485	1051	0.996205	1054	0.997354	378	0.999077	1083
226-250	1	869	1	1007	1	200	0.998839	861
251-275	1	447	1	485	1	61	1	474
276-300	0.990148	203	1	199	1	33	1	175
301-325	1	79	1	78	1	14	1	72
326-350	1	46	1	42	1	8	1	29
351-375	1	22	1	23	1	7	1	9
376-400	1	12	1	16	1	1	1	2
401-425	1	4	1	4	1	1	1	2
426-450						1	1	2

There were temporal decreases in the size at maturity during 1979-1983 and 1984-1989 for BFT, H&L, and FLT. There were no trends for CHV during the 1990s.

Age at maturity by gear type

mm TL	H&L	H&L num	BFT	BFT num	FLT	FLT num	CHV	CHV num
0								
1	0.752577	98	0.5	2	0.886792	53	0.901042	192

2	0.886691	534	0.956522	69	0.90604	149	0.989189	555
3	0.989583	887	0.967517	431	0.974194	155	1	374
4	1	288	0.998649	740	1	39	1	130
5	1	58	1	318	1	9	1	31
6	1	7	1	43	1	1	1	7
7			1	8				

There were also temporal differences in the age at maturity for BFT, FLT, and H&L. There were no trends in the age at maturity for chevron traps during the 1990s.

Sex ratio (Sex codes = 1, 2, 4, 5):

Eliminated maturity codes = 0, 1, 9, A  
 See table in MARMAP life history studies.doc.

Raw data file: bsb05.mrg; bsb50.mrg  
 Excel files: sexratiolength; sexratioage  
 Program files: sexratio.sas

In calculating the proportion of males, transitional specimens were also considered males because they will likely function as males within a few months. Calculations are also done for fishery dependent data.

Percent males and transitionals at size

mm TL	H&L	H&L num	BFT	BFT num	FLT	FLT num	CHV	CHV num
101-125		0	1	0	4	0	2	0
126-150		0	11	0	8	0	8	0
151-175		0	150	0	83	0	78	0.16
176-200	0.13913	690	0.160112	356	0.105611	303	0.112903	124
201-225	0.150231	1298	0.208302	1325	0.133641	434	0.131579	152
226-250	0.25421	1247	0.356182	1561	0.213439	253	0.28	175
251-275	0.454865	853	0.536398	1044	0.552239	134	0.531469	143
276-300	0.650662	604	0.731444	741	0.554054	74	0.833333	114
301-325	0.811236	445	0.868243	592	0.762712	59	0.932039	103
326-350	0.836806	288	0.906459	449	0.843137	51	0.842105	57
351-375	0.880829	193	0.931751	337	0.840909	44	0.941176	34
376-400	0.904762	126	0.90184	163	0.961538	26	0.933333	15
401-425	0.952381	84	0.96	100	0.888889	9	1	4
426-450	0.981818	55	0.980769	52	0.75	4	1	3
451-475	1	21	1	23	1	3	1	1
476-500	0.9	10	1	6	1	1		0
501-525	1	1	1	1				
526-550			1	1				

Percent males and transitionals at age

age	H&L	H&L num	BFT	BFT num	FLT	FLT num	CHV	CHV num
0	0		0		0		0	
1	0.122807	114	0.166667	78	0.229508	61	0.078212	179
2	0.188513	679	0.362385	654	0.219653	173	0.206442	683
3	0.332111	1364	0.493141	1458	0.209424	191	0.577401	885
4	0.626566	798	0.717082	1124	0.632075	106	0.819444	720
5	0.817073	328	0.903803	447	0.785714	42	0.900322	311
6	0.949275	138	0.962617	214	0.9375	16	0.9375	112
7	0.967742	31	0.964286	28	1	5	1	26
8	1	6	1	34	1	2	1	3
9	1	3			1	1	1	1

There were also temporal trends in the percent of males and transitionals for black sea bass caught with FLT and BFT.

Annual fecundity:

Fecundity data are not available for black sea bass.