

Table S1. SEAMAP sampling strata and their geographic extent. The area of each stratum was calculated by measuring the area between the 4- and 10-meter isobaths on the continental shelf of the eastern United States between the northern and southern latitudes defined by SEAMAP.

Stratum number	Latitude (°N)		Environmental region	Stratum area (km ²)
	Lower	Upper		
21	28.74416	28.93042	Far South	7
23	28.93042	29.18662	Far South	12
25	29.18662	29.55216	Far South	14
27	29.55216	29.94884	Far South	26
29	29.94884	30.38673	Far South	26
31	30.38673	30.79427	South	131
33	30.79427	31.09354	South	172
35	31.09354	31.3998	South	151
37	31.3998	31.7319	South	207
39	31.7319	31.987	South	102
41	31.987	32.3833	South	321
43	32.3833	32.58248	South	172
45	32.58248	32.7294	South	87
47	32.7294	32.9382	North	184
49	32.9382	33.2967	North	337
51	33.2967	33.65931	North	224
53	33.65931	33.8385	North	126
55	33.8385	33.752	North	121
57	33.752	33.9747	North	89
59	33.9747	34.3607	North	31
61	34.3607	34.628	North	39
63	34.628	34.5321	North	49
65	34.5321	35.085	Far North	67
67	35.085	35.2298	Far North	61

Table S2. Statistical test results from pair-wise comparisons of natural log transformed mean *S. meleagris* biomass (Holm-Sidak method).

Group	Comparison	Difference of means	<i>t</i> -statistic	p-value
Far South	Fall vs. Summer	3.7	4.1	<0.001
Far South	Spring vs. Summer	2.8	3.1	0.005
Far South	Fall vs. Spring	0.9	1.0	0.311
South	Spring vs. Summer	3.1	3.4	0.002
South	Fall vs. Summer	3.0	3.3	0.003
South	Spring vs. Fall	0.1	0.1	0.883
North	Spring vs. Summer	3.7	4.1	<0.001
North	Fall vs. Summer	2.0	2.2	0.054
North	Spring vs. Fall	1.7	1.8	0.067
Far North	Fall vs. Summer	3.0	3.2	0.004
Far North	Fall vs. Spring	1.9	2.0	0.094
Far North	Spring vs. Summer	1.1	1.2	0.240
All Regions	Fall vs. Summer	2.9	6.4	<0.001
All Regions	Spring vs. Summer	2.7	5.8	<0.001
All Regions	Fall vs. Spring	0.25	0.5	0.586
All Seasons	South vs. Far North	6.0	11.2	<0.001
All Seasons	North vs Far South	4.5	8.5	<0.001
All Seasons	South vs. Far South	4.0	7.6	<0.001
All Seasons	North vs. Far South	2.5	4.8	<0.001
All Seasons	Far South vs. Far North	2.0	3.8	<0.001
All Seasons	South vs. North	1.5	2.8	0.005

Table S3. Statistical test results from pair-wise comparisons of mean *S. meleagris* individual biomass (kg individual⁻¹) (Holm-Sidak method).

Group	Comparison	Difference of means	<i>t</i> -statistic	p-value
Fall	North vs. South	0.09	3.5	0.003
Fall	Far North vs. South	0.16	3.0	0.015
Fall	Far North vs. Far South	0.16	2.7	0.027
Fall	North vs. Far South	0.09	2.6	0.032
Fall	Far North vs. North	0.07	1.3	0.343
Fall	Far South vs. South	0.002	0.1	0.955
Spring	North vs. Far South	0.32	8.3	<0.001
Spring	North vs. South	0.17	6.4	<0.001
Spring	Far North vs. Far South	0.48	5.4	<0.001
Spring	South vs. Far South	0.15	3.9	<0.001
Spring	Far North vs. South	0.32	3.9	<0.001
Spring	Far North vs. North	0.15	1.8	0.069
Summer	Far South vs. South	0.43	7.7	<0.001
Summer	Far South vs. North	0.39	6.9	<0.001
Summer	Far North vs. South	0.23	2.6	0.036
Summer	Far North vs. North	0.19	2.2	0.091
Summer	Far South vs. Far North	0.19	1.9	0.109
Summer	North vs. South	0.04	1.4	0.156
All Regions	Spring vs. Fall	0.47	25.6	<0.001
All Regions	Spring vs. Summer	0.45	22.6	<0.001
All Regions	Summer vs. Fall	0.02	1.0	0.300